

# THE ARCHITECTS' JOURNAL



## standard contents

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

## NEWS and COMMENT

Astragal's Notes and Topics

Letters

News

Diary

Societies and Institutions

## TECHNICAL SECTION

Information Sheets

Information Centre

Current Technique

Working Details

Questions and Answers

Prices

The Industry

## CURRENT BUILDING

Major Buildings described:

Details of Planning, Construction,

Finishes and Costs

Buildings in the News

Building Costs Analysed

Architectural Appointments  
Wanted and Vacant

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[Vol. 124

THE ARCHITECTURAL PRESS

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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 Ie one week, Ih to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

IHVE	Institution of Heating and Ventilating Engineers.	49, Cadogan Square. Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers.	100, Park Street, Grosvenor Square, W.1. Mayfair 7086
ILA	Institute of Landscape Architects, 2, Guilford Place, W.C.1.	Holborn 0281
I of Arb	Institute of Arbitrators. Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders.	48, Bedford Square, W.C.1. Museum 7197
IQS	Institute of Quantity Surveyors.	98, Gloucester Place, W.1. Welbeck 1859
IR	Institute of Refrigeration.	Dalmeny House, Monument Street, E.C.3. Avenue 6851
IRA	Institute of Registered Architects.	47, Victoria Street, S.W.1. Abbey 6172
ISE	Institute of Structural Engineers.	11, Upper Belgrave Street, S.W.1. Sloane 7128
LDA	Lead Development Association.	Eagle House, Jermyn Street, S.W.1. Whitehall 7264/4175
LMBA	London Master Builders' Association.	47, Bedford Square, W.C.1. Museum 3891
LSPC	Lead Sheet and Pipe Council.	Eagle House, Jermyn Street, S.W.1. Whitehall 7264/4175
MAFF	Ministry of Agriculture, Fisheries and Food.	Whitehall Place, S.W.1. Trafalgar 7711
MARS	Modern Architectural Research Group (English Branch of CIAM). Secretary: Trevor Dannatt, A.R.I.B.A., 71, Blandford Street, W.1.	Welbeck 4713
MOE	Ministry of Education.	Curzon Street House, Curzon Street, W.1. Mayfair 9400
MOH	Ministry of Health.	23, Savile Row, W.1. Regent 8411
MOHLG	Ministry of Housing and Local Government.	Whitehall, S.W.1. Whitehall 4300
MOLNS	Ministry of Labour and National Service.	8, St. James' Square, S.W.1. Whitehall 6200
MOS	Ministry of Supply.	Shell Mex House, W.C.2. Gerrard 6933
MOT	Ministry of Transport.	Berkeley Square House, Berkeley Square, W.1. Mayfair 9494
MOW	Ministry of Works.	Lambeth Bridge House, S.E.1. Reliance 7611
NAMMC	Natural Asphalt Mine Owners and Manufacturers Council.	94/98, Petty France, S.W.1. Abbey 1010
NAS	National Association of Shopfitters.	9, Victoria Street, S.W.1. Abbey 4813
NBR	National Buildings Record.	31, Chester Terrace, Regent's Park, N.W.1. Welbeck 0619
NCBMP	National Council of Building Material Producers.	10 Storey's Gate, S.W.1. Abbey 5111
NEFMAI	National Employers Federation of the Mastic Asphalt Industry.	21, John Adam Street, Adelphi, W.C.2. Trafalgar 3927
NFBTE	National Federation of Building Trades Employers.	82, New Cavendish Street, W.1. Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives.	Federal House, Cedars Road, Clapham, S.W.4. Macaulay 4451
NFHS	National Federation of Housing Societies.	12, Suffolk St., S.W.1. Whitehall 1693
NHBRC	National House Builders Registration Council.	82, New Cavendish Street, W.1. Langham 4341
NPL	National Physical Laboratory.	Head Office, Teddington. Molesey 1380
NRDB	Natural Rubber Development Board.	Market Buildings, Mark Lane, E.C.3. Mansion House 9383
NSAS	National Smoke Abatement Society.	Palace Chambers, Bridge Street, S.W.1. Trafalgar 6838
NT	National Trust for Places of Historic Interest or Natural Beauty.	42, Queen Anne's Gate, S.W.1. Whitehall 0211
PEP	Political and Economic Planning.	16, Queen Anne's Gate, S.W.1. Whitehall 7245
RCA	Reinforced Concrete Association.	94, Petty France, S.W.1. Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland.	15, Rutland Square, Edinburgh. Fountainbridge 7631
RIBA	Royal Institute of British Architects.	66, Portland Place, W.1. Langham 5721
RICS	Royal Institution of Chartered Surveyors.	12, Great George Street, S.W.1. Whitehall 5322/9242
RFAC	Royal Fine Art Commission.	5, Cold Palace Yard, S.W.1. Whitehall 3935
RS	Royal Society.	Burlington House, Piccadilly, W.1. Regent 3335
RSA	Royal Society of Arts.	6, John Adam Street, W.C.2. Trafalgar 2366
RSH	Royal Society of Health.	90, Buckingham Palace Road, S.W.1. Sloane 5134
RIB	Rural Industries Bureau.	35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101
SBPM	Society of British Paint Manufacturers.	Grosvenor Gardens House, Grosvenor Gardens, S.W.1. Victoria 2186
SE	Society of Engineers.	17, Victoria Street, Westminster, S.W.1. Abbey 7244
SFMA	School Furniture Manufacturers' Association.	30, Cornhill, London, E.C.3. Mansion House 3921
SIA	Society of Industrial Artists.	7, Woburn Square, London, W.C.1. Langham 1984/5
SIA	Structural Insulation Association.	32, Queen Anne Street, W.1. Langham 7616
SNHTPC	Scottish National Housing.	Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen
SPAB	Society for the Protection of Ancient Buildings.	55, Great Ormond Street, W.C.1. Holborn 2646
TCPA	Town and Country Planning Association.	28, King Street, Covent Garden, W.C.2. Temple Bar 5006
TDA	Timber Development Association.	21, College Hill, E.C.4. City 4771
TPI	Town Planning Institute.	18, Ashley Place, S.W.1. Victoria 8815
TTF	Timber Trades Federation.	75, Cannon Street, E.C.4. City 5040
WDC	War Damage Commission.	6, Carlton House Terrace, S.W.1. Whitehall 4341
ZDA	Zinc Development Association.	34, Berkeley Square, W.1. Grosvenor 6636

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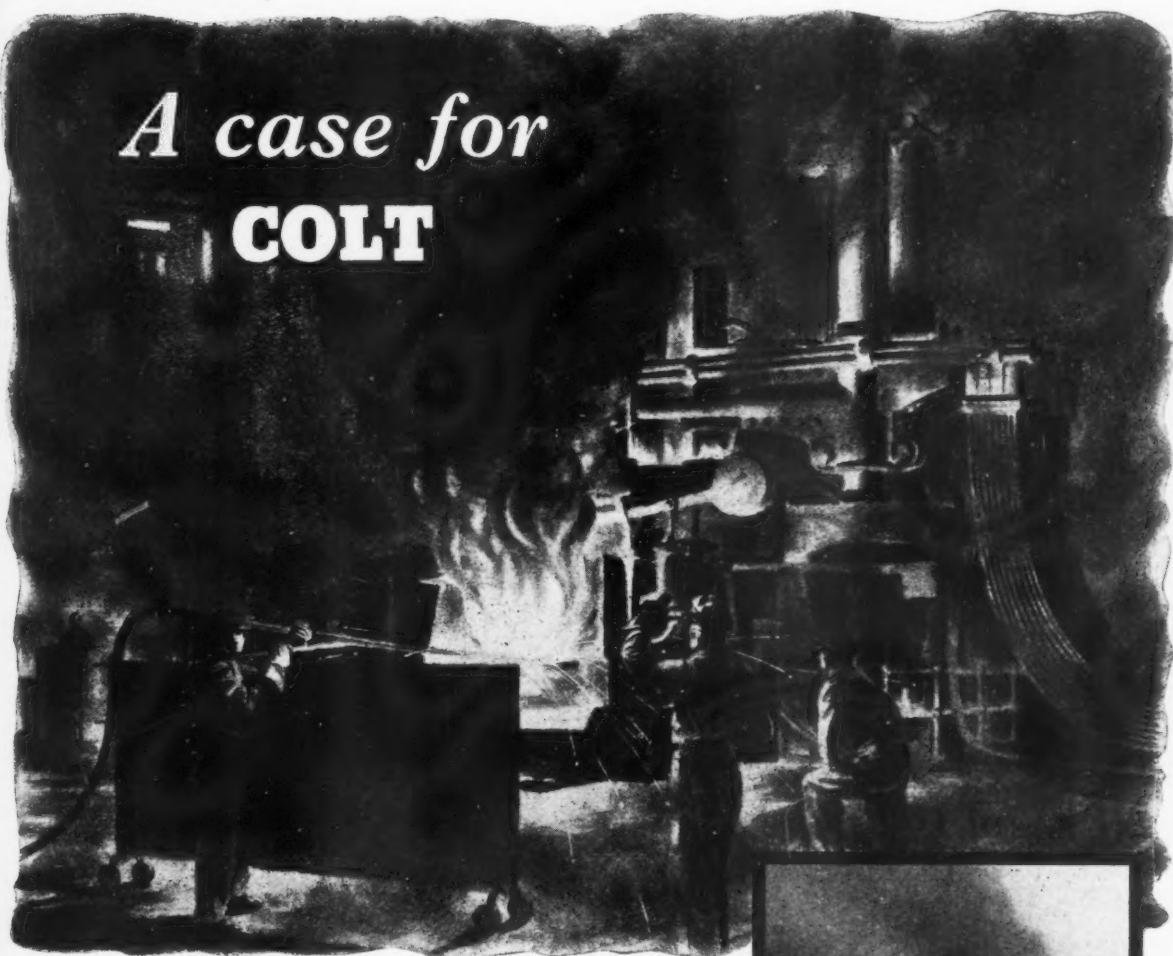
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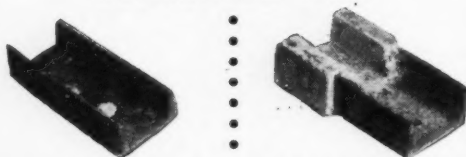
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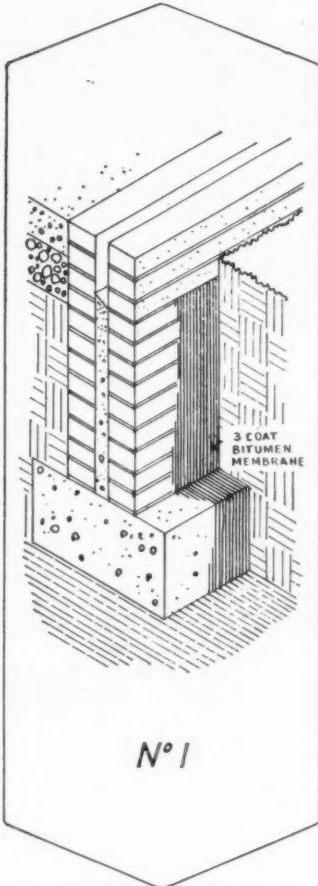
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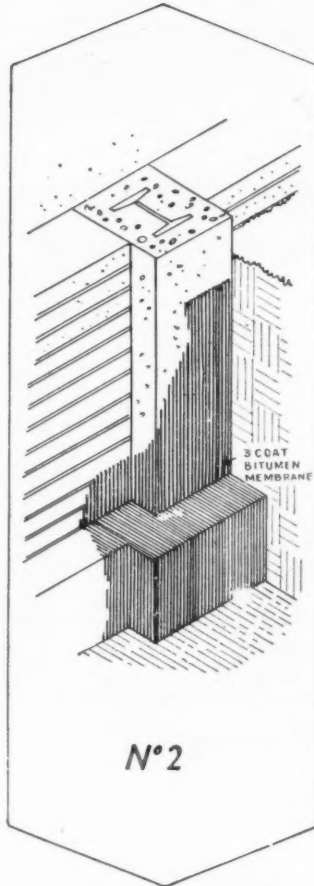
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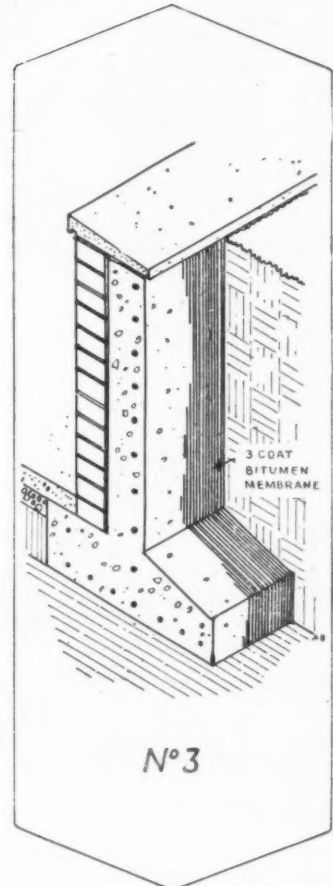
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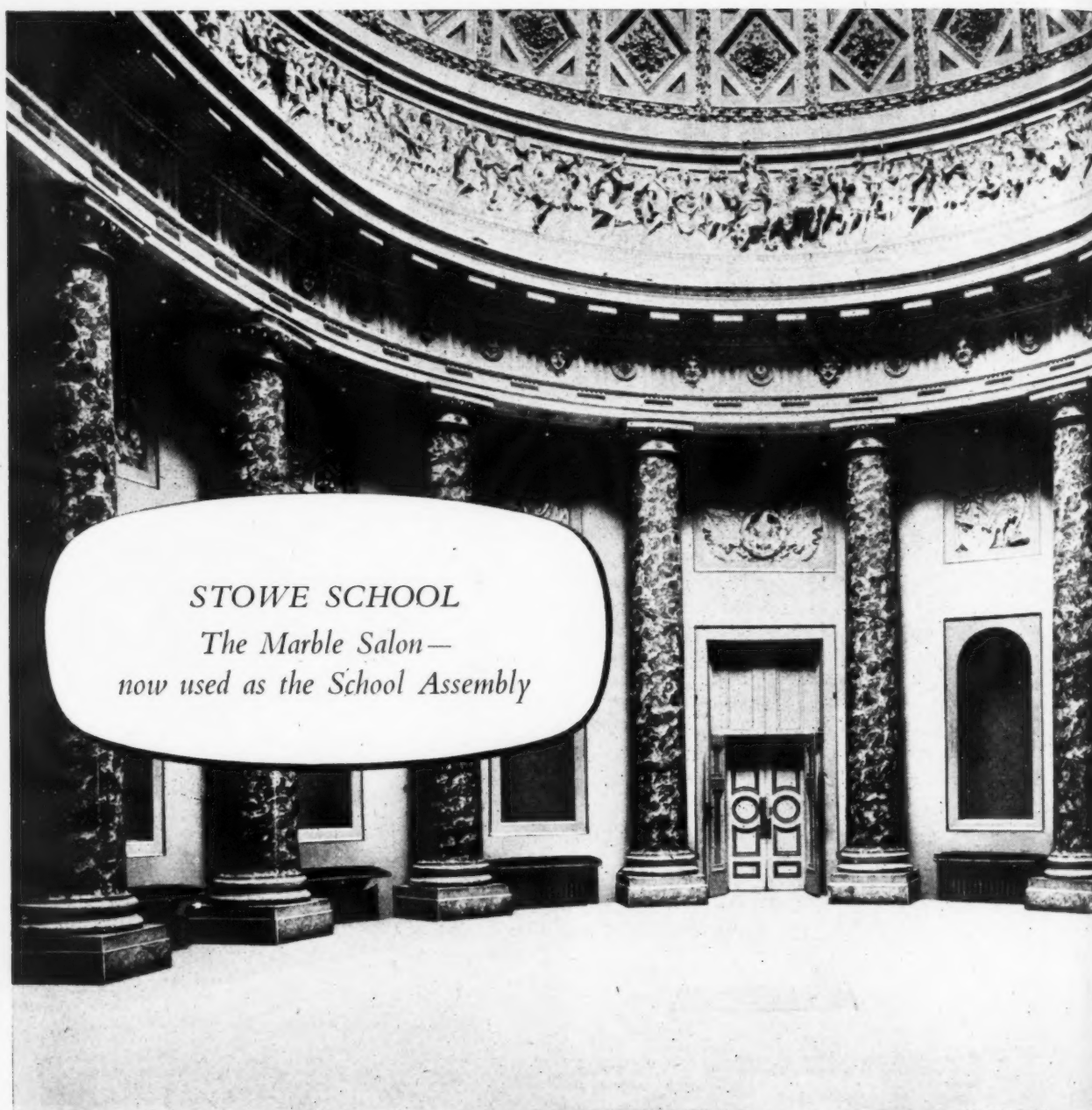
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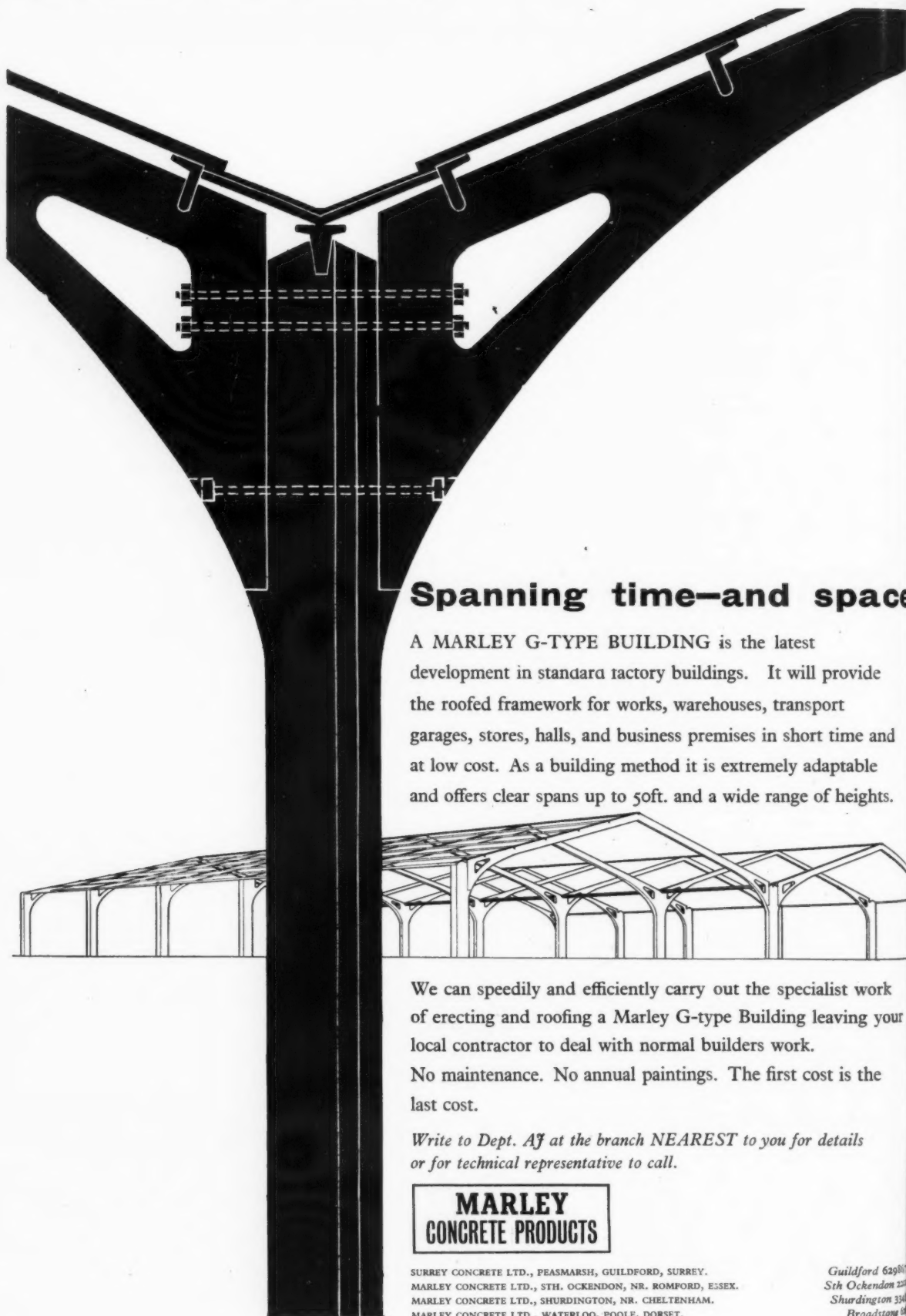


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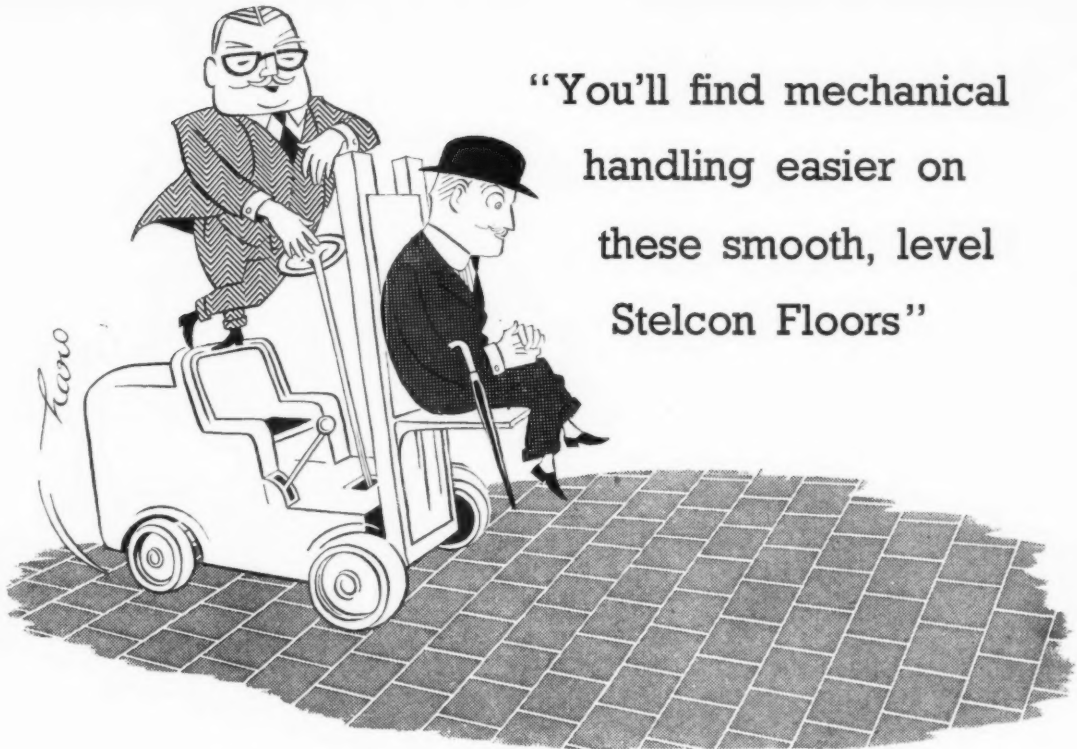
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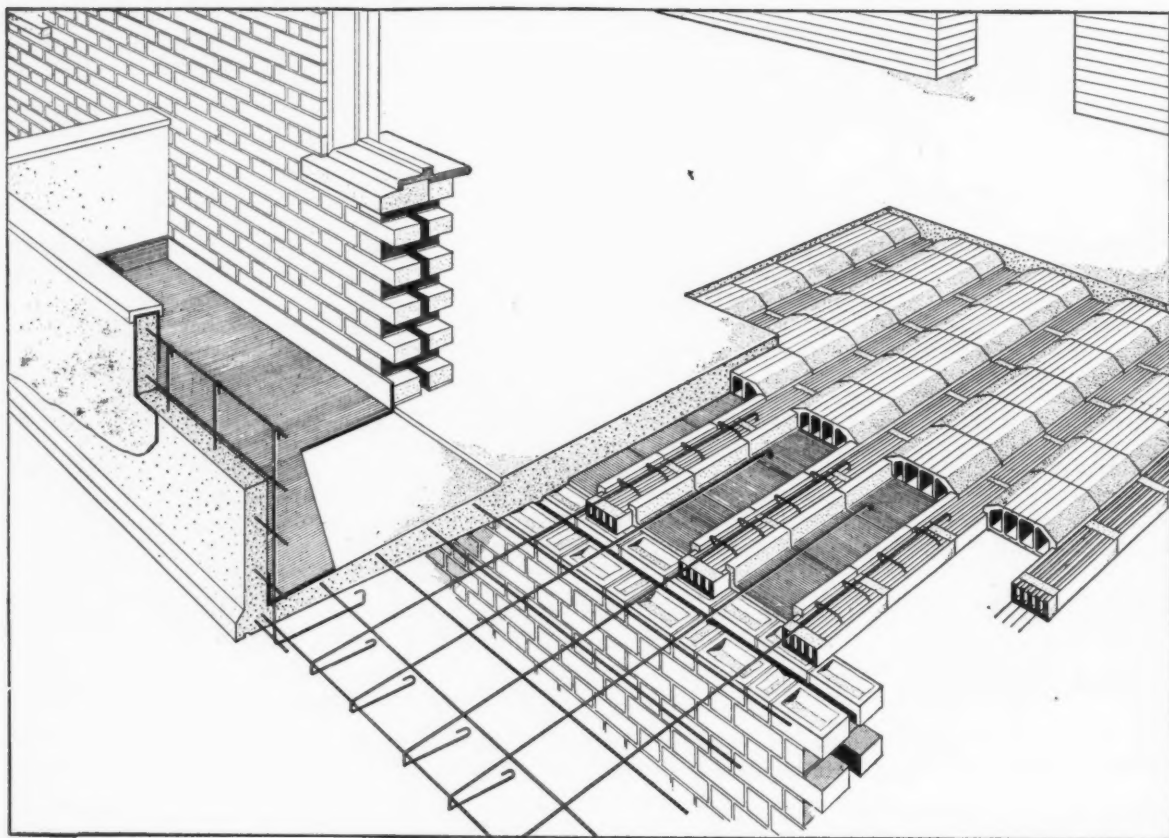
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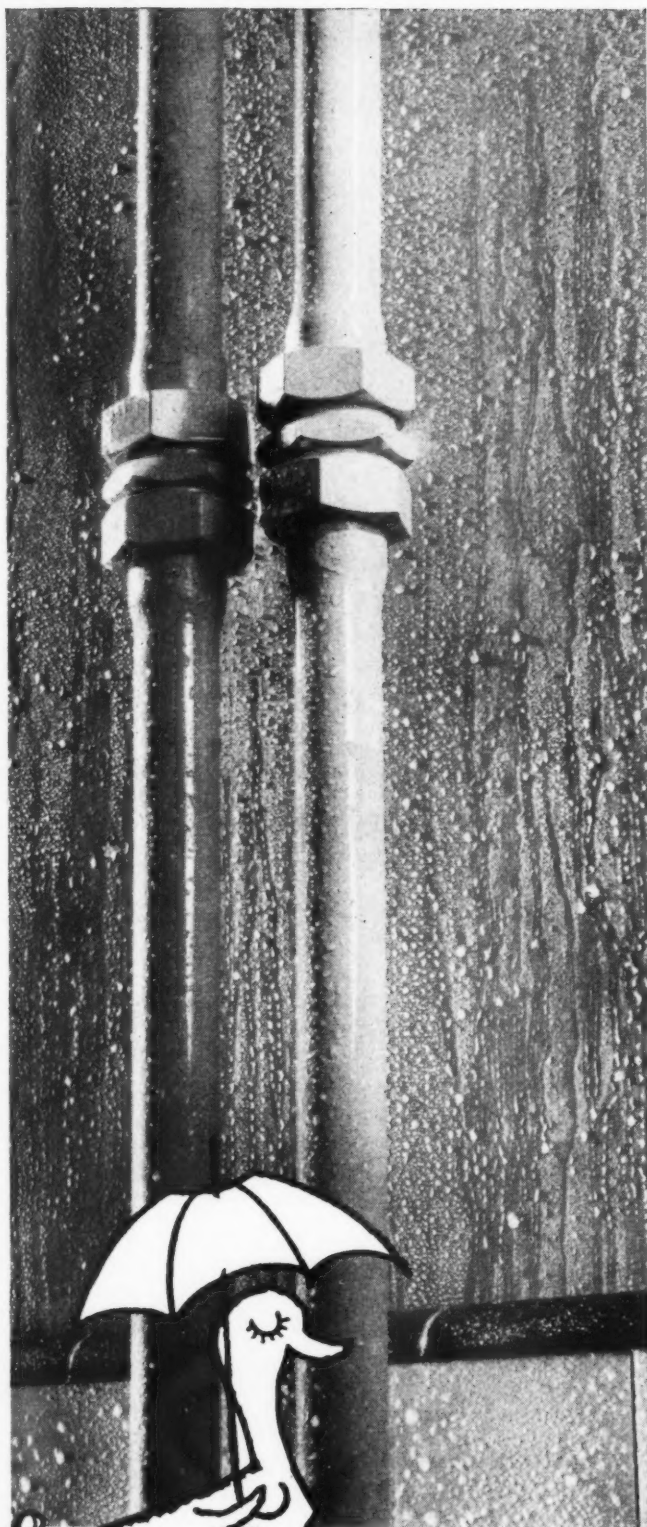
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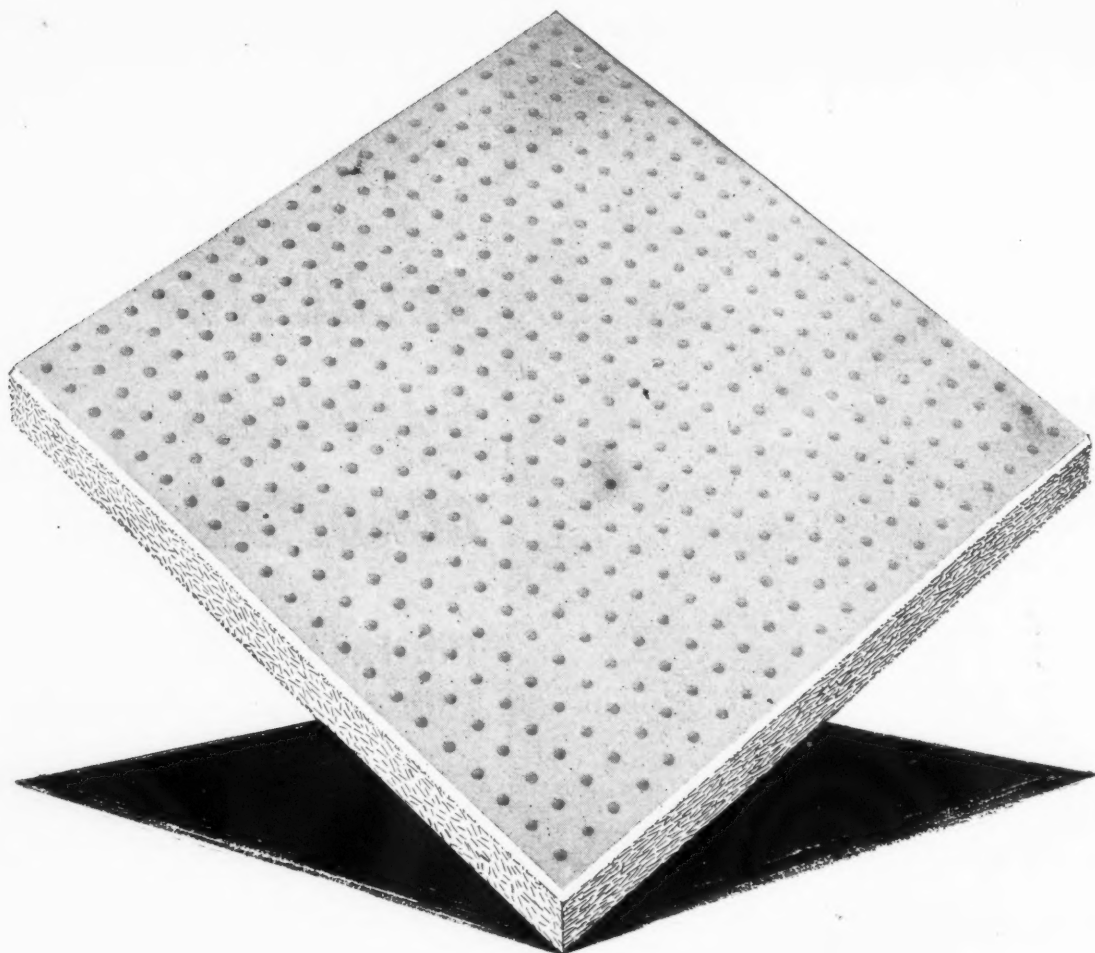
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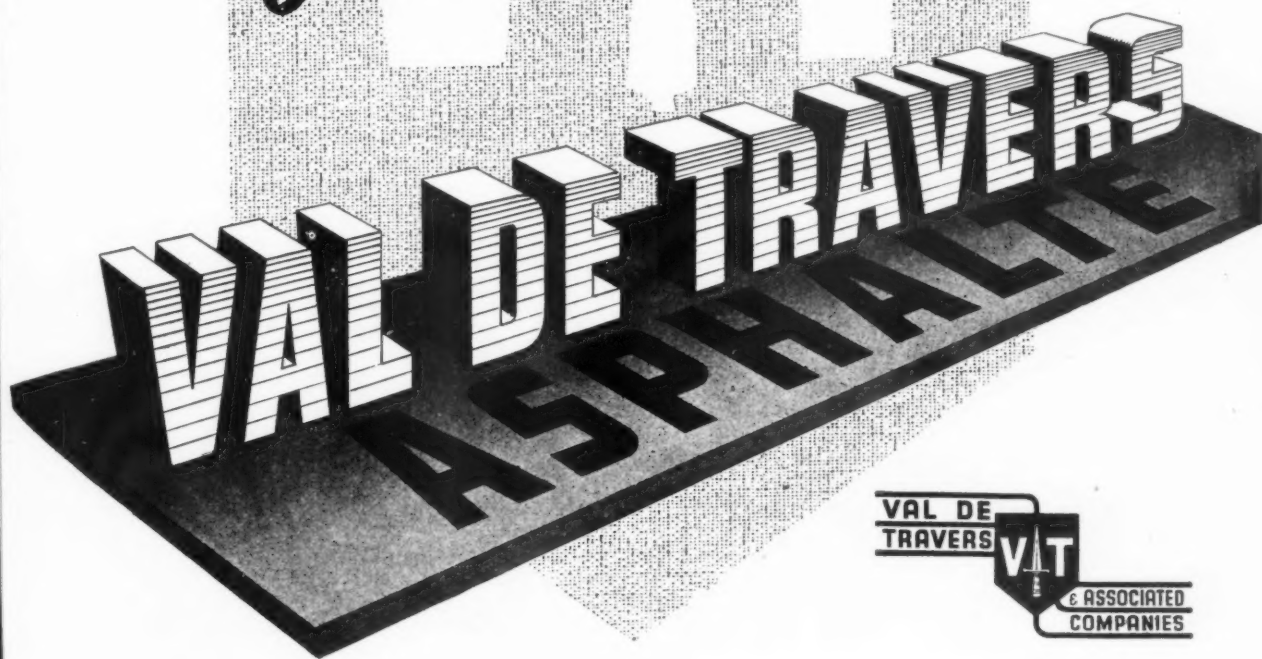
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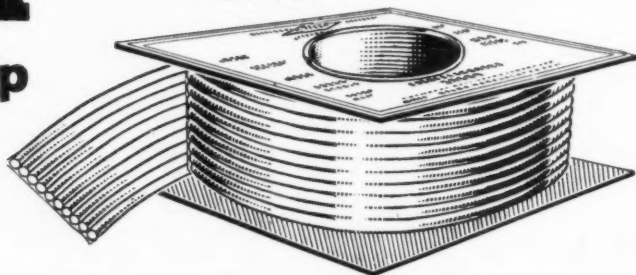
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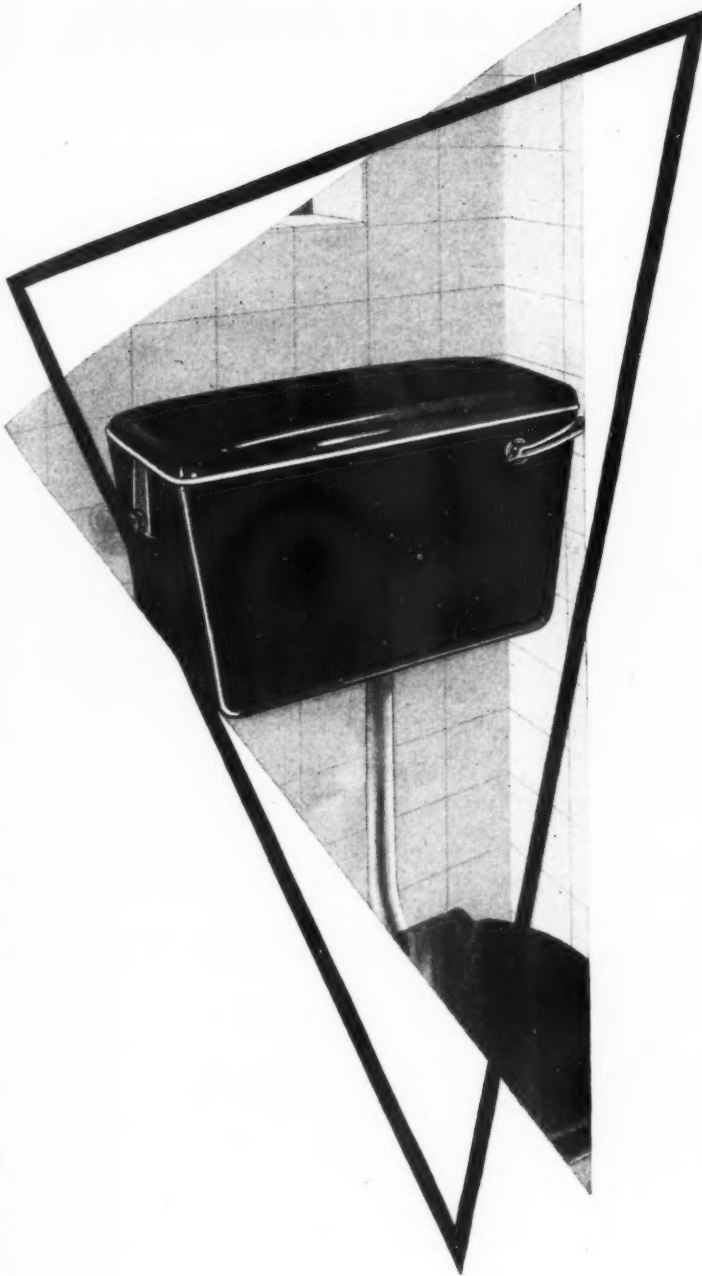
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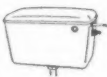
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*Important Revisions of British Standards for Lead Pipe*

Many permissible minimum weights greatly reduced

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**The new revisions  
of B.S.602 for Lead pipe  
reduce the minimum weights  
for flushing and warning pipes  
and represent  
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**32%**

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B.127









*Trinascolin Floor, Club Room, "Britannia" Public House, Edmonton, Messrs. Taylor, Walker & Co. Ltd., Bar Fitting Department.*

# DECORATIVE FLOORINGS

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Goddard Watts  
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***"Harefield"***  
**RUBBER FLOORING**

There's nothing like rubber flooring — Harefield rubber flooring — for hard wear and good looks. There is an exceptional range of colours to help you with interior design, which can be made so much more inviting. "Harefield" rubber flooring not only looks attractive, but lasts a lifetime, is quiet and easy to maintain.

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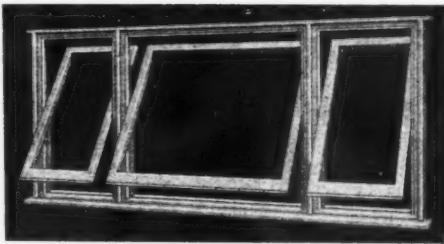
or  
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ODLESEX



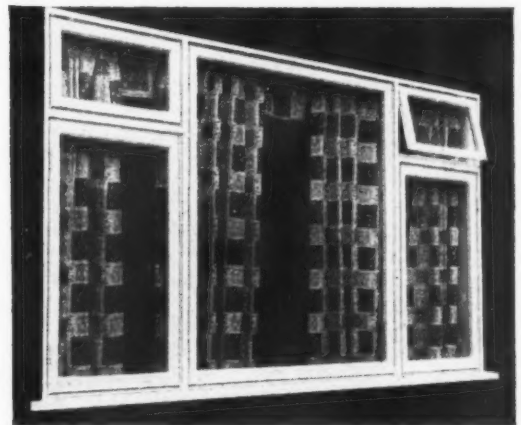


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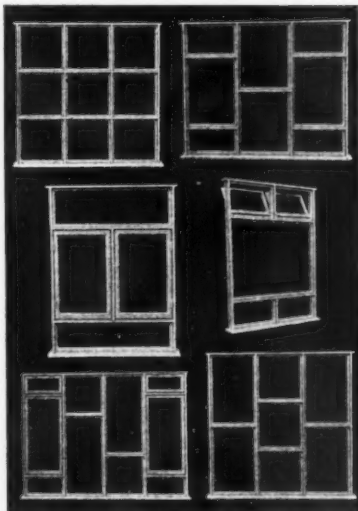


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Only the Modolite range can offer most known forms of opening and fixed lights, combined as required, within the same frame and giving complete freedom of choice in transome levels.



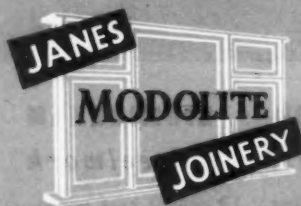
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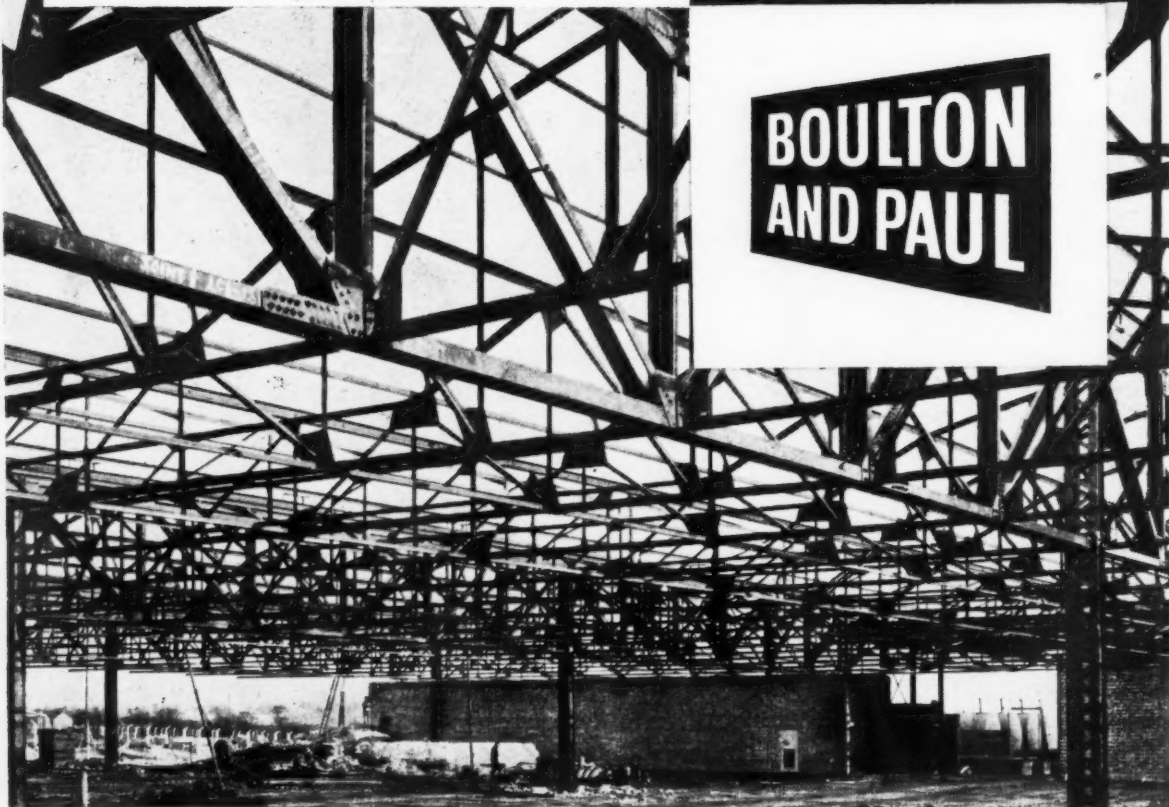
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Factory Development for Hardy Spicer Ltd.,  
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Architects: Harry W. Weedon, F.R.I.B.A.  
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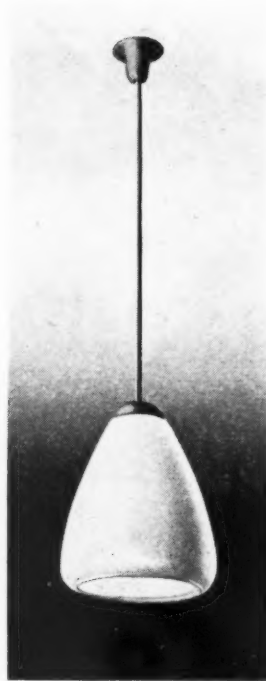


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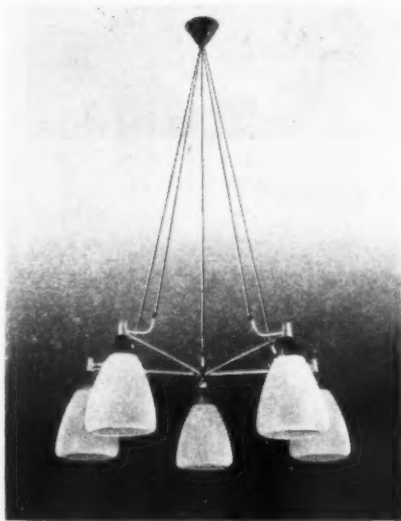
A satin finished opal glass fitting with open base for good light distribution and provided with concentric metal louvre if required



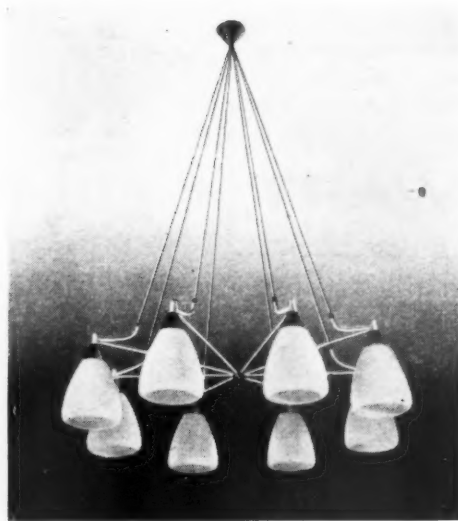
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PENDANT FITTING

## from the FALKS range of contemporary fittings



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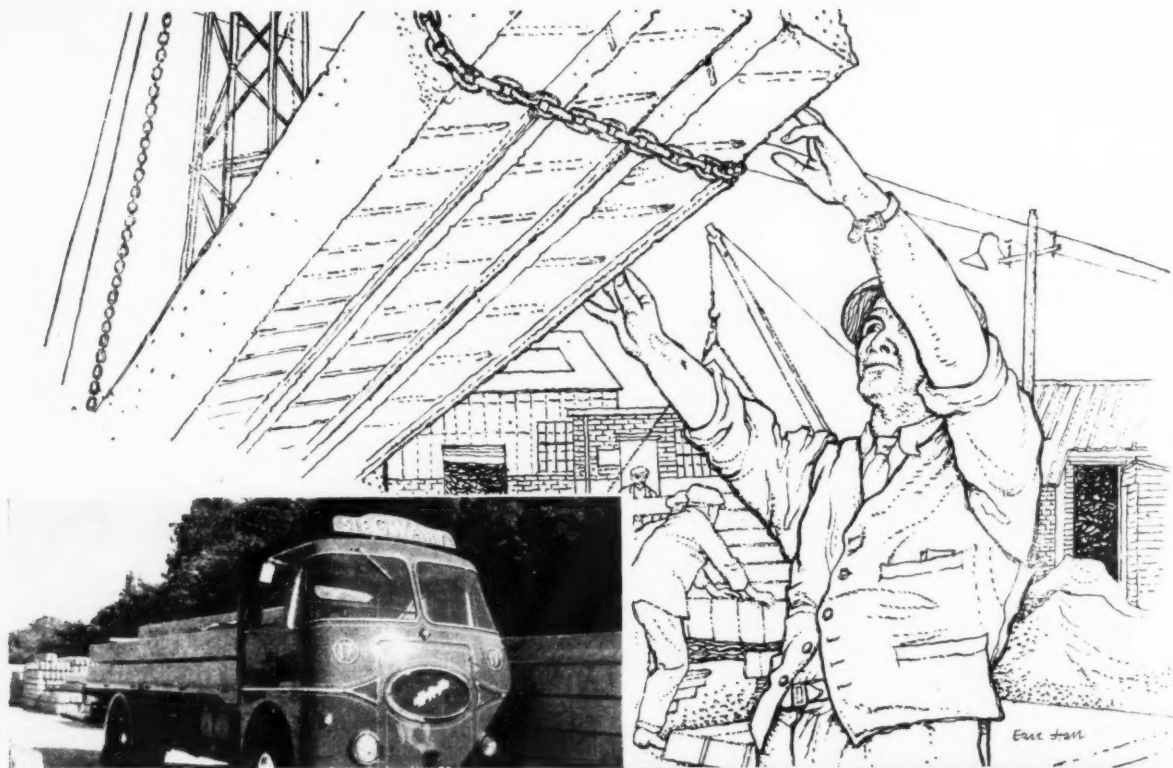


EIGHT LIGHT FITTING

## perseus

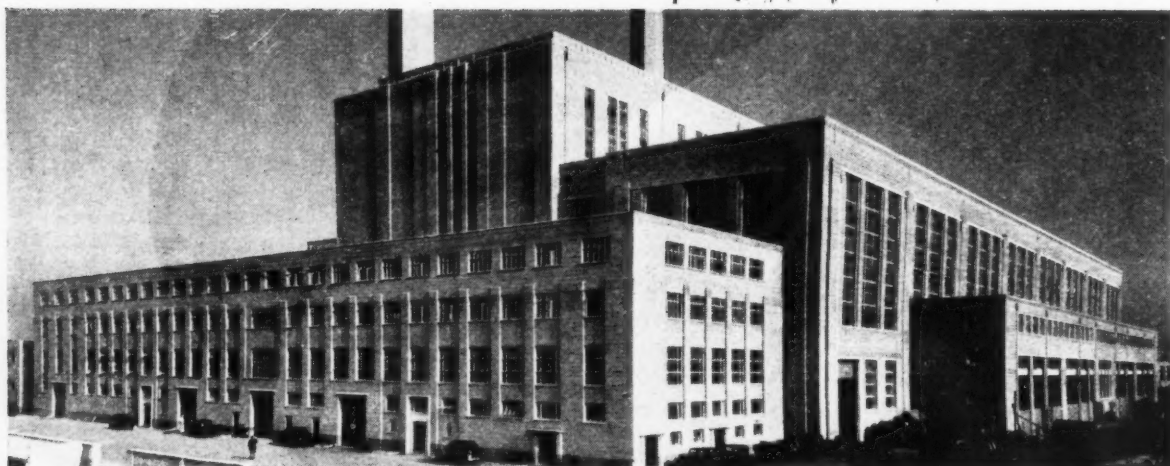
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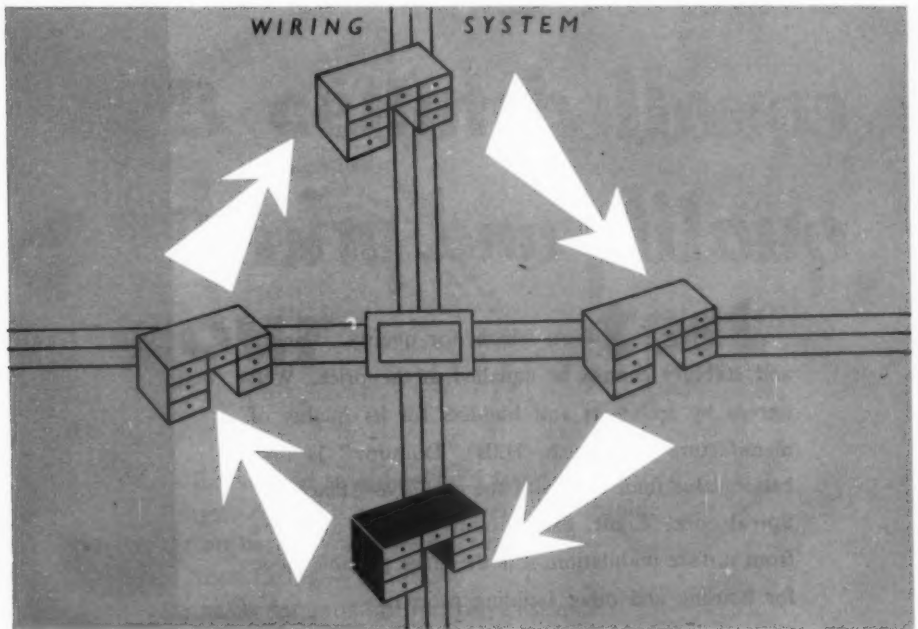
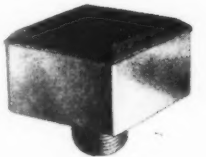
SIEGWART FLOOR COMPANY LIMITED

GABLE HOUSE, 40 HIGH STREET, RICKMANSWORTH, HERTFORDSHIRE  
AND AT BIRMINGHAM, LEICESTER, MANCHESTER AND GLASGOW



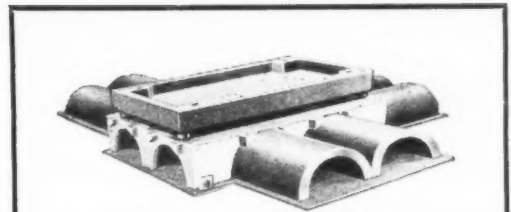


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- 1 GREATER ECONOMY
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- 3 GREATER ADAPTABILITY TO MEET FUTURE REQUIREMENTS



The illustration above shows a twin system junction box; complete systems are also available for single and triple wiring arrangements. Boxes are complete with baffles and tunnels in accordance with B.S.815.



*Our duct systems are designed especially to meet the requirements of modern shallow floors.*

**A** Locate duct. Cut hole of required size in floor covering with Tool T.1.  
**B** Chip away concrete fill.  
**C** Make centre for duct cutter T.8, with Tool T.6 (D).

**D** Duct cutter ready for use.  
**E** Use wrench T.10 to screw self tapping outlet into duct. After grouting, the outlet is watertight.  
**F** A direct outlet ready for use.

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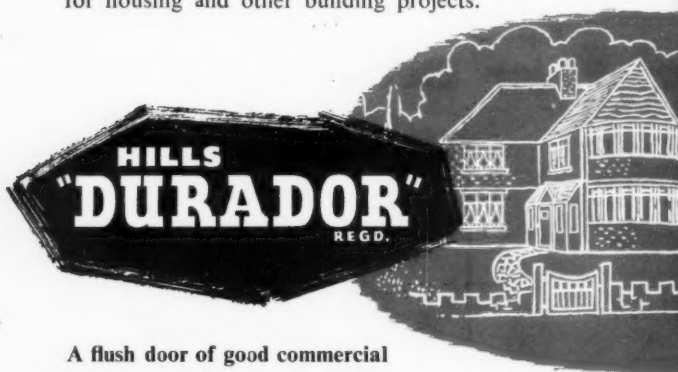
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**4 NEWGATE STREET, LONDON E.C.1**  
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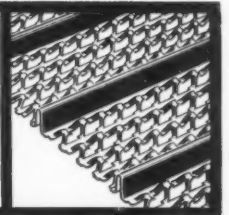
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**Whatever the floor, a Hy-Rib ceiling  
will much increase the fire resistance**

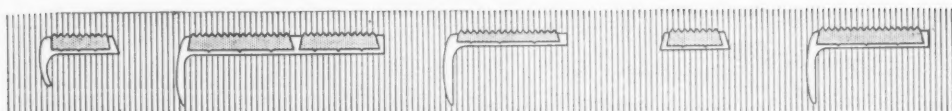


**HY-RIB**

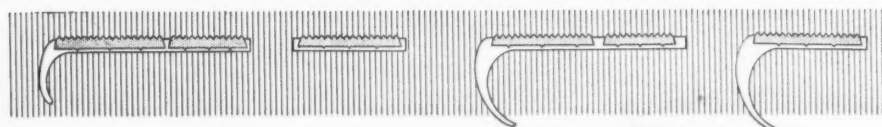


The Trussed Concrete Steel Company Limited, 35-41 Lower Marsh, London SE1 : WATERloo #922

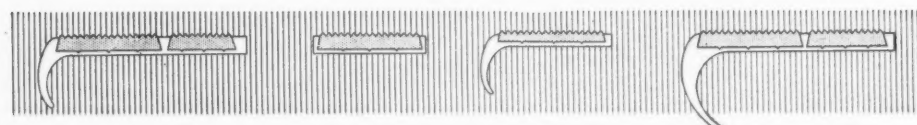
**There's no limit to the**



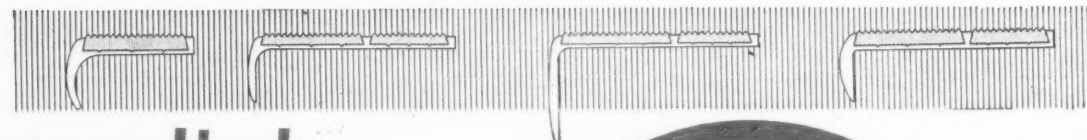
**curves and bends of**



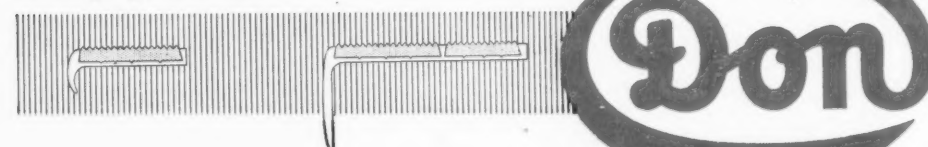
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PERMANENT  
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plastic-filled in 9 colours (brown, green,  
lino brown, blue, maroon, black, white, silver, red):  
also available fabric-filled:  
suitable for all types of stairway:  
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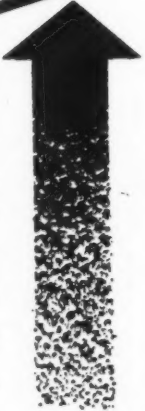
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Keep a building warm and dry between them

## ZYLEX Slaters' Felt

is a high-quality, bituminous felt with exceptional heat-insulation properties. It keeps warmth in, and draughts and weather out. In two grades: **Reinforced**, with a base of closely woven hessian, and exceptionally strong. Can be stretched directly over open rafters—saving the cost of a boarded roof. **Standard**, for boarded roofs, makes a clean, waterproof membrane under slates or tiles.

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### Asbestos Dampcourse



is the 100 per cent. permanent damp-course, an impervious and imperishable barrier against rising damp. Composed of asbestos fibre and bitumen, it is capable of withstanding normal foundation settlement without risk of failure. Complies with B.S.S. 743/1951. In two grades: **Standard** and **Leadlined**.

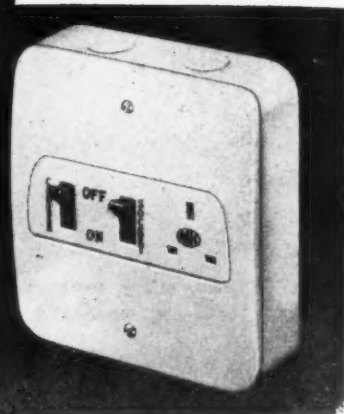
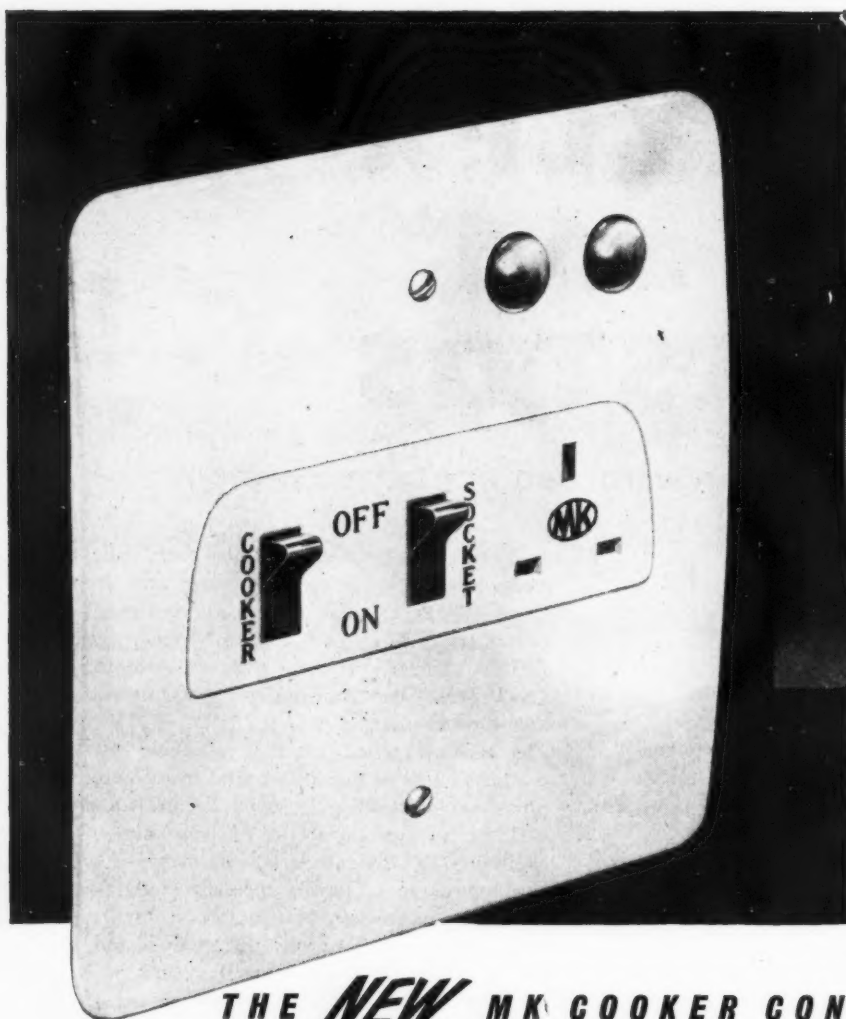
Well insulated above and protected from rising damp below, a building stays warm and dry longer. There is no more certain way of guaranteeing this protection than by specifying ZYLEX Slaters' Felt and ASTOS Asbestos Dampcourse—two Ruberoid products for two important positions.

The reliable, tested qualities of these two products make all the difference to the effective protection of buildings. Many architects and builders, all over the world, make a point of specifying ZYLEX and ASTOS by name, to be absolutely sure of having the best materials. Make sure of the very best protection for that building of yours—specify ZYLEX Slaters' Felt and ASTOS Asbestos Dampcourse.

*Further details, together with samples, will be gladly sent on request.*

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Send for new  
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## THE *NEW* MK COOKER CONTROL UNITS...

EIGHT COMPLETELY NEW DESIGNS IN ALL-IVORY FINISH

These beautiful new all-ivory units are the product of MK's long experience in this specialised field of design. Look at these outstanding new features:

- \* All types available with or without pilot-lamps.
- \* Removable chassis for easy wiring, fixing centres identical with preceding designs for interchangeability.
- \* Terminals positioned for straight-through wiring.
- \* Current-carrying and earthing circuits solidly riveted at all connecting-points and cannot loosen.

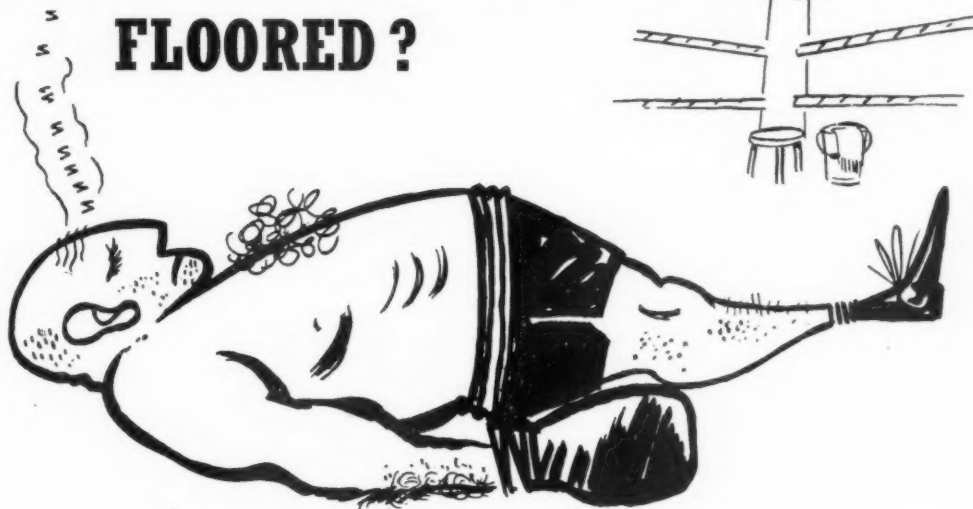
- \* Two heavy pillar-type earth terminals, each with two clamping screws.
- \* All mouldings of urea formaldehyde for resistance to tracking.
- \* Case and cover plate are of zinc-coated steel. The beautiful ivory stove-enamelled finish matches the moulded inserts.
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- \* Switch-handles are moulded in red for contrast. Both circuits are clearly identified.



...the mark of leadership

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## CANADIAN HARD MAPLE FLOORING

- extreme resistance to abrasion
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- the perfect flooring for schools, gymnasia, skating rinks, dance halls, factories, drill halls and all types of public building
- available for immediate delivery from our London stock: *prime quality, 1" x 3" nominal size, finishing 25/32" x 2 1/4" surface, kiln dried, tongued and grooved sides and ends, 3' and up long, average 4 1/4' at 23/9 a yard, finished measure.*

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Meet 'Butch' Bartholomew



He's just dropped a brick — or two or three. It was the leaning tower of Pisa. Then the atom bomber came . . . zo—om ! Now it's just another headache to Mr. and Mrs. Greenholsch in the flat below. Just one among many.

Crash, bang, thump : are these noises really necessary ? Fibreglass in the floor would reduce them all. Shouldn't *all* blocks of flats be insulated between floors with this inexpensive, easily-applied, ever-lasting material ! Flat-planning architects, please note !

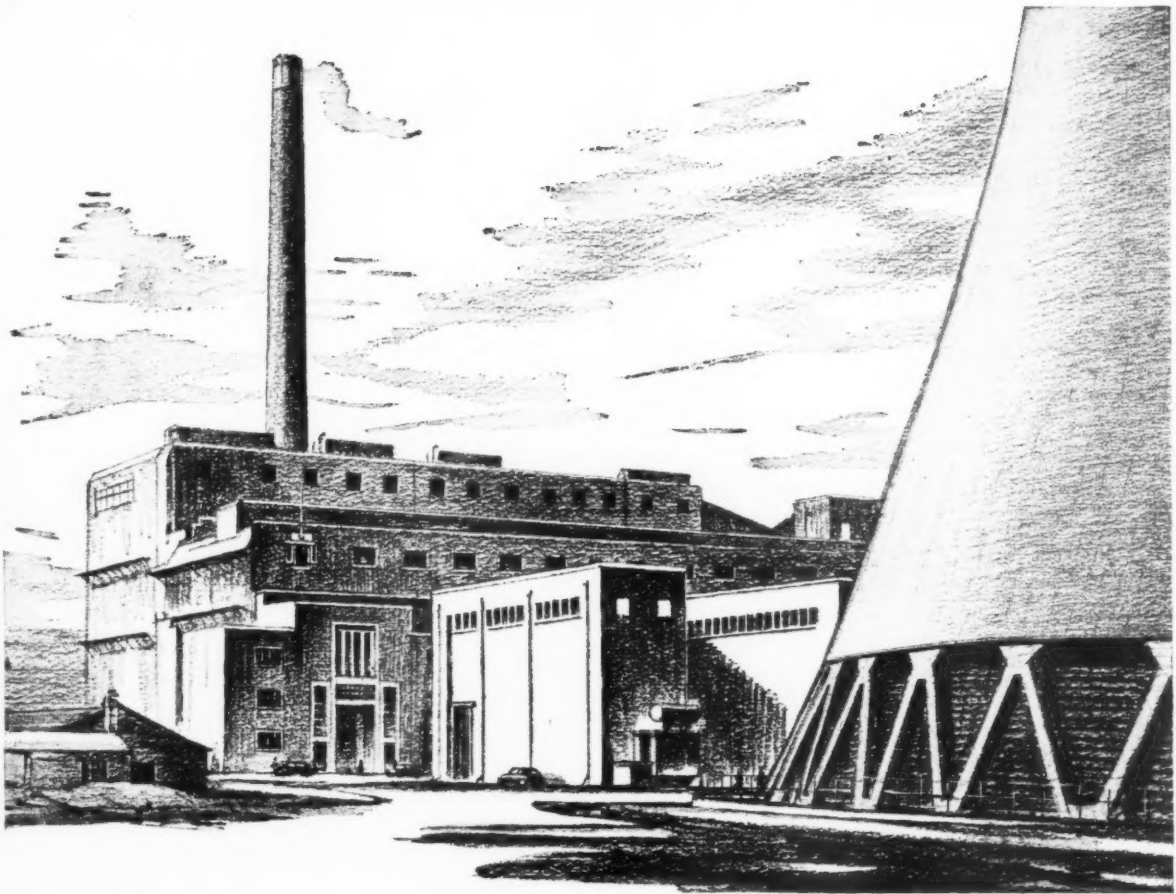
*wrap those flats in*

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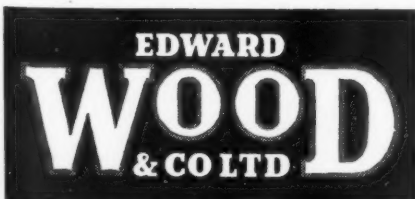


# LANDMARKS IN STEEL



## **STEELWORK** *for* **POWER**

AGECROFT—A vital link in the Central Electricity Authority's chain of Power Stations serving industrial Lancashire, with Steelwork by . . .



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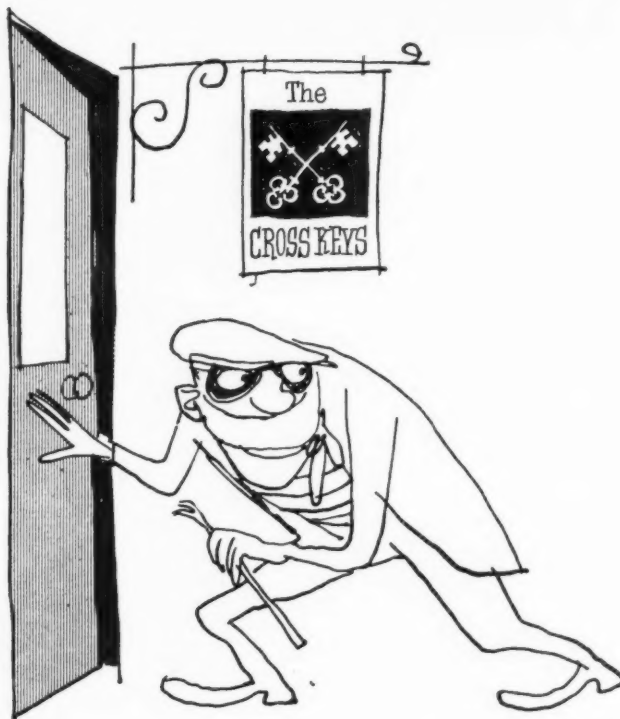


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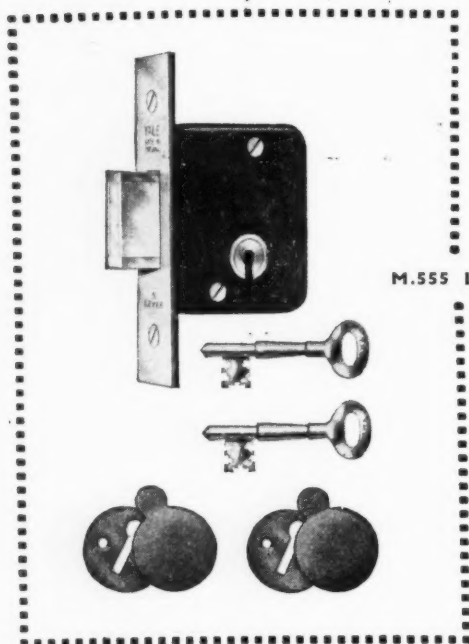
London Office: 68 Victoria Street, S.W.1. Telephone: **VICTORIA 1331/2**. Technical Offices: Birmingham and Nottingham

dmWD&I

## Free House!



It wasn't supposed to be an invitation. The trouble is so many old locks do no more than just keep the door closed (and sometimes not even that) whilst real security measures are non-existent. The safest course if you value your property is to re-equip all important doors inside and out with the world's most reliable locks — YALE. There are YALE locks and padlocks to meet every security risk. Here is an example:




**M.555 LEVER MORTICE DEADLOCK**

The latest lock for keeping out the uninvited 'guest' from lock-up premises. Designed to meet insurance requirements, it is a 5-lever deadlock operable by key from both sides. Differs are obtainable on levers only and not by use of wards, making it extremely difficult to pick. Its steel reinforced deadbolt and 10" steel striking plate make it almost impossible to force. Available ex stock; literature on request.

**Where there's a door there's a need for**

**YALE**  
REGISTERED TRADE MARK

*The Yale & Towne Manufacturing Company • British Lock & Hardware Division • Willenhall • Staffs • England*



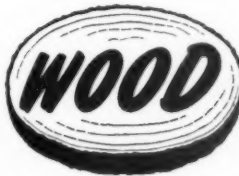
Greater  
insulation...

greater  
comfort

Wood floors are notably warm underfoot and help to produce the temperature gradient required for room comfort with maximum fuel economy. After experiments with warm air systems and various floor finishes, the Ministry of Education\* has concluded that by using wood flooring 1" thick the temperature of the floor surface could equal that of the air temperature 6" above it, whilst synthetic flooring by comparison, produces a floor temperature 2°F lower.

\* See M.O.E. Building Bulletin No. 13  
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There's nothing like **WOOD** for floors



Issued by THE TIMBER DEVELOPMENT ASSOCIATION LTD., 21 COLLEGE HILL, LONDON, E.C.4 and branches throughout the country  
IN CONJUNCTION WITH THE HARDWOOD FLOORING MANUFACTURERS ASSOCIATION

*New Cafeteria Restaurant  
of the Potteries Traction Co. Ltd.  
features*

**Ry d u r a**



The attractiveness of RYDURA as a counter decoration is clearly seen in these pictures of the new coach station restaurant of the Potteries Motor Traction Co. Ltd. at Newcastle-under-Lyme. Specially designed on a Cafeteria basis, the spacious new restaurant has been laid out to cope easily with the peak volume of passengers. RYDURA fabric has been used extensively round counters and for staircase sides. (Designed by W. E. Gott, Esq. (Architect). Constructed and fitted by Gaskell & Chambers Ltd. of Birmingham, Britain's Biggest Barfitting Organisation).

RYDURA, the cotton fabric with the 'PROFILM' finish is being specified for hotels, restaurants, shops, etc. everywhere, because it has established itself as the ideal fabric for counter decoration, walls (easily applied) and seating. RYDURA offers these outstanding qualities :

***Can be cleaned with a damp cloth • Virtually unstainable • Attractive contemporary designs and colours • 48" width • Hygienic, durable, modern, practical.***

Ask also to see RYJACK—the popular upholstery fabric for dining and occasional chairs. RYJACK is made from natural fibre, and has a soft lustre. Hygienic; does not absorb dust; water repellent; rot-resisting.

*For full details, please write to:*

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*The foundations of a fine job!*

Three long established super quality  
lines which give no anxious moments

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OIL BOUND WASHABLE  
WATER PAINT. For exterior  
work use MURADEK Petrifying  
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**SUPERGLOS**

ENAMEL FINISHING PAINT  
Covers well, dries with a full hard  
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SYNTHETIC GLOSS FINISHING  
PAINT Hard drying, full gloss,  
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For interior or exterior work.

Write for technical advice on your paint problems

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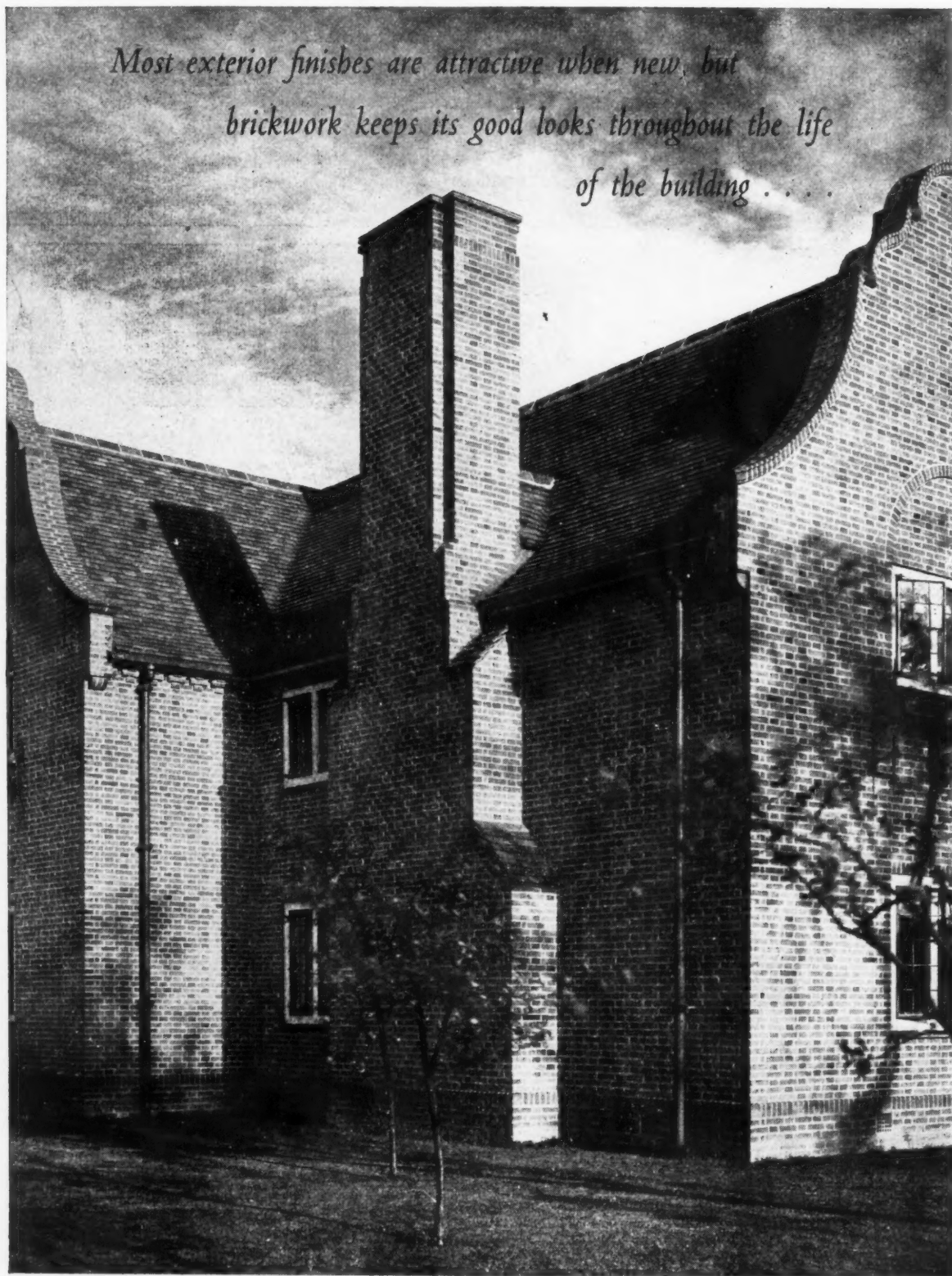
GLASGOW

CUMBERLAND LANE, C.5  
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NEWCASTLE-ON-TYNE

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*Most exterior finishes are attractive when new, but  
brickwork keeps its good looks throughout the life  
of the building . . . .*



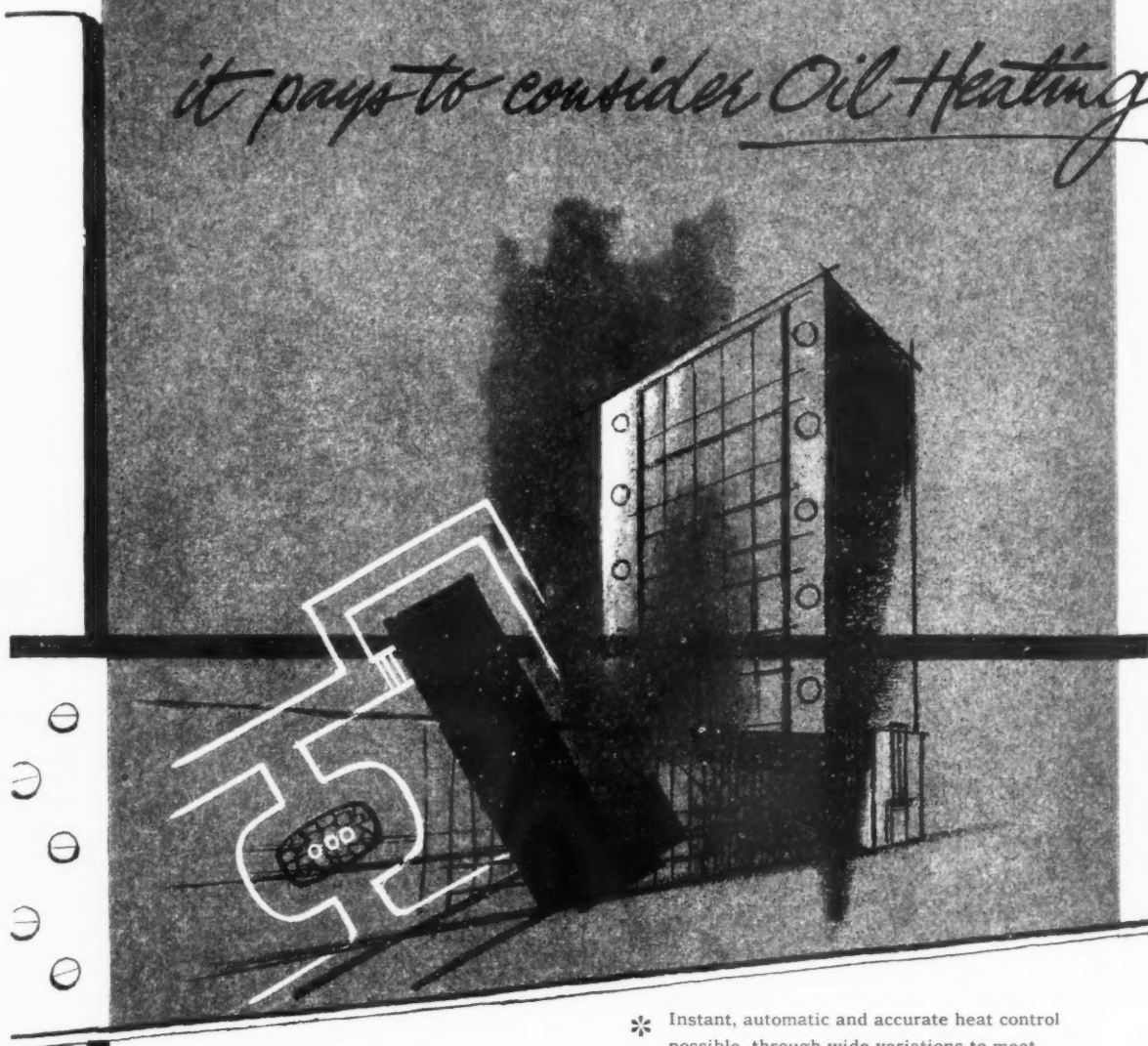
FAIRHOLME ESTATE, BEDFONT, MIDDLESEX. Architect: T. Cecil Howitt, D.S.O., O.B.E., F.R.I.B.A.

*For freedom from Maintenance* **BUILD IN BRICK**

*Issued by the National Federation of Clay Industries, Drayton House, London, W.C.1.*

# AT THE EARLIEST STAGE

*it pays to consider Oil Heating*



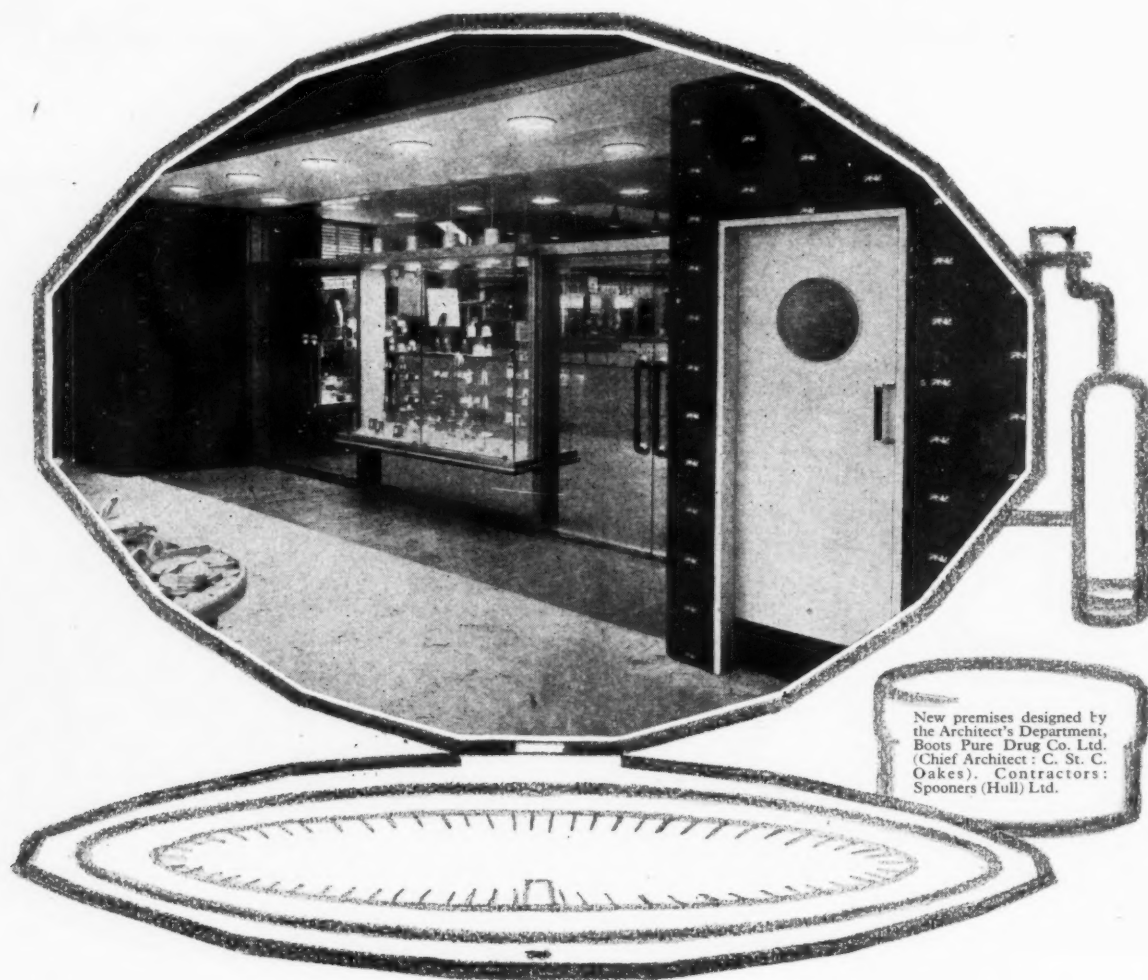
- \* No passages or chutes required for fuel delivery. Oil bunkering pipes are small: they need not interfere with the layout of the building.

- \* Instant, automatic and accurate heat control possible, through wide variations to meet fluctuating loads.
- \* Outstanding cleanliness in use, high burning efficiency and negligible ash content — resulting in reduced handling costs, storage space and ash disposal.

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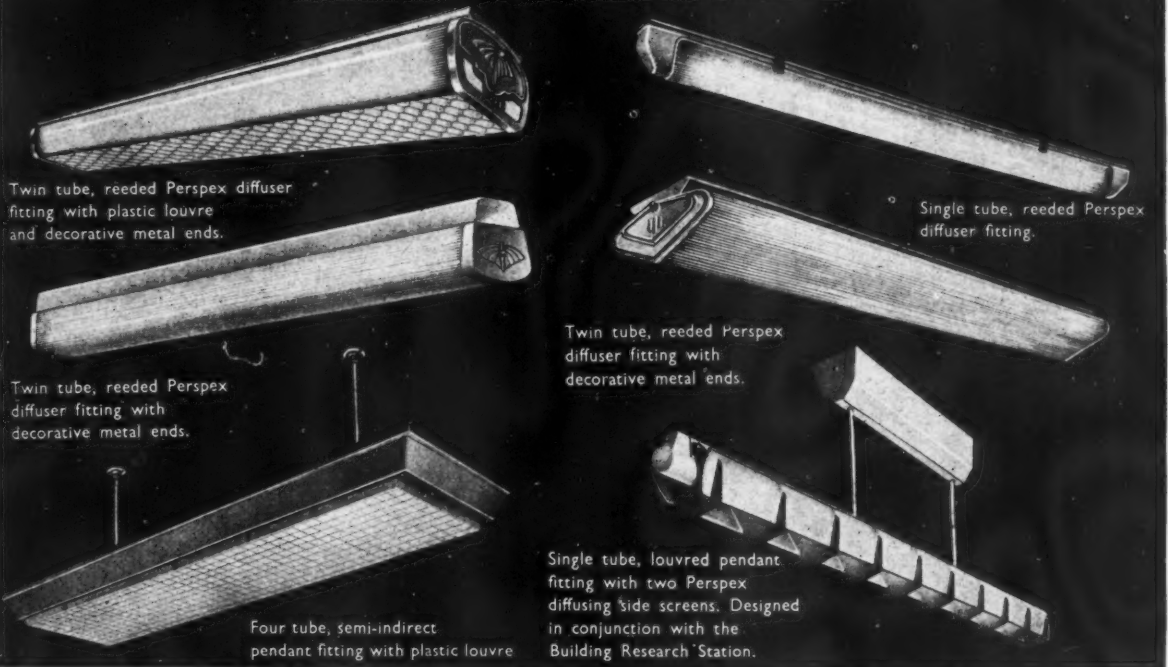
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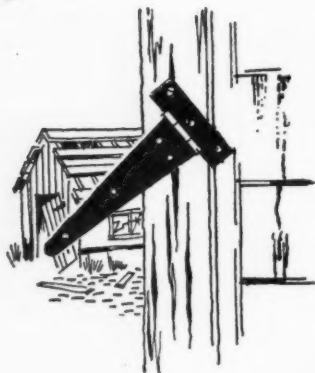
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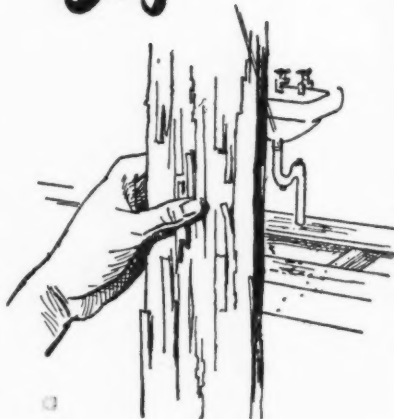
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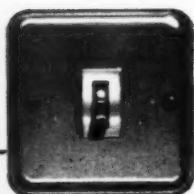
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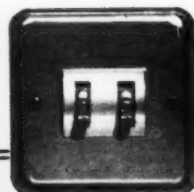
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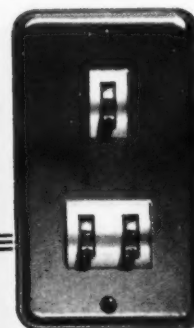
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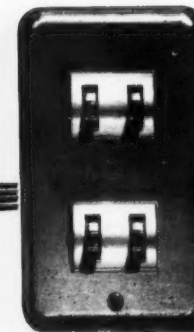
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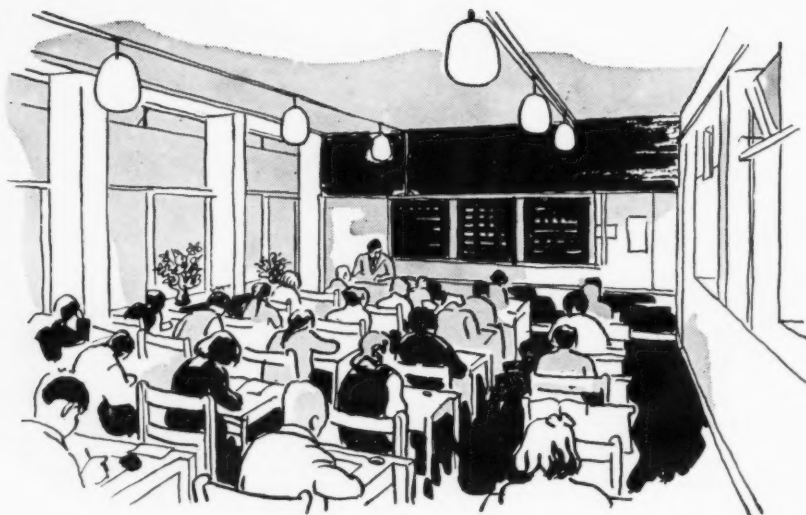
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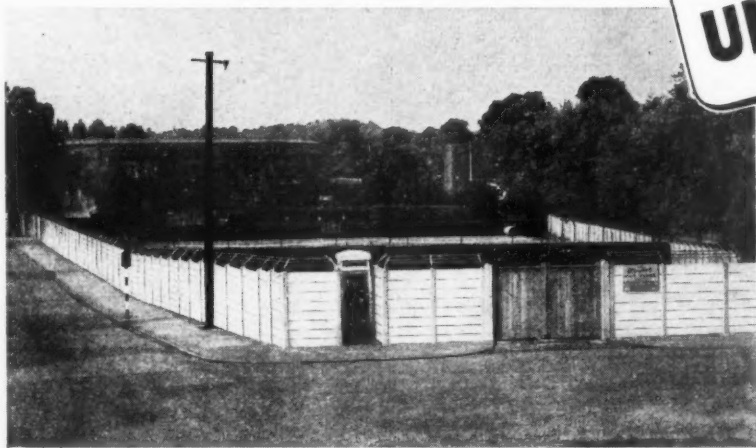






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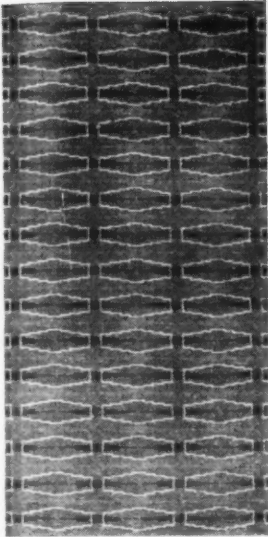
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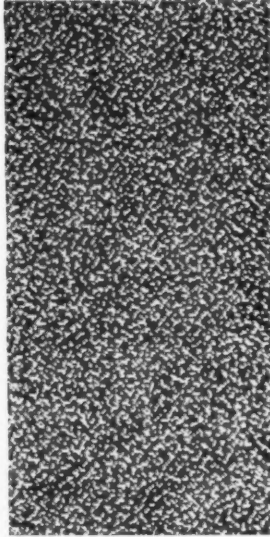
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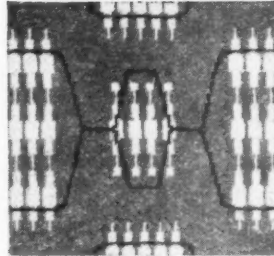
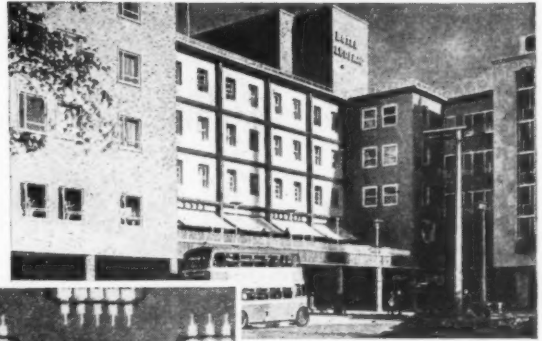




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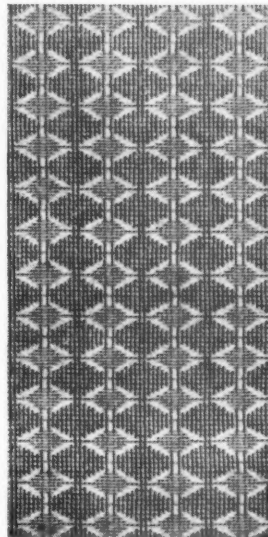


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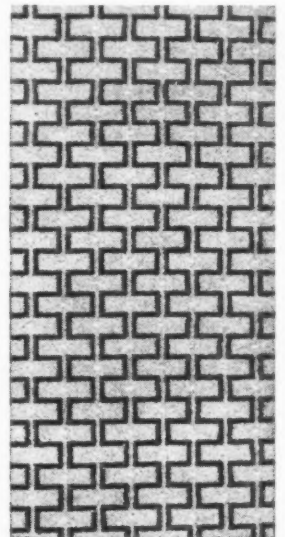
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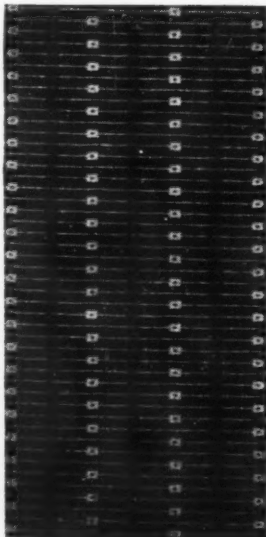


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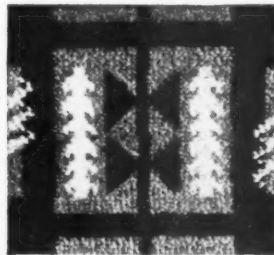
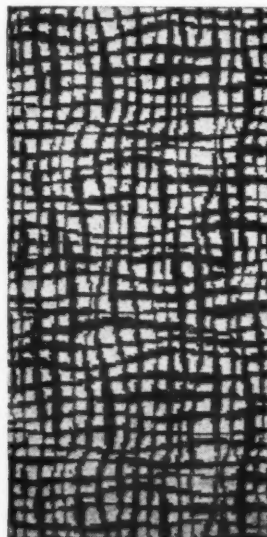


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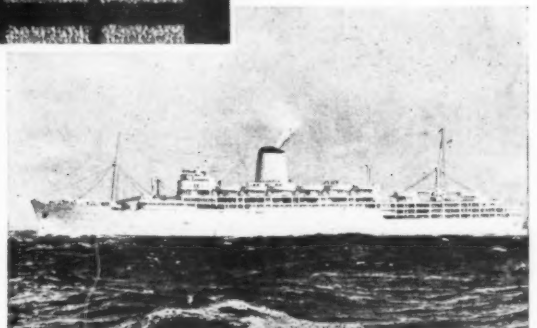


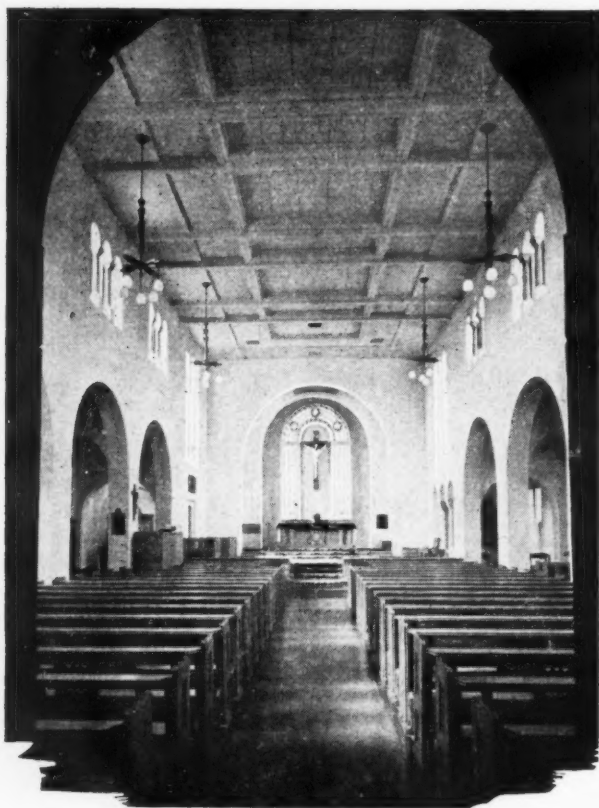
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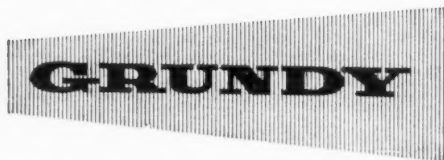
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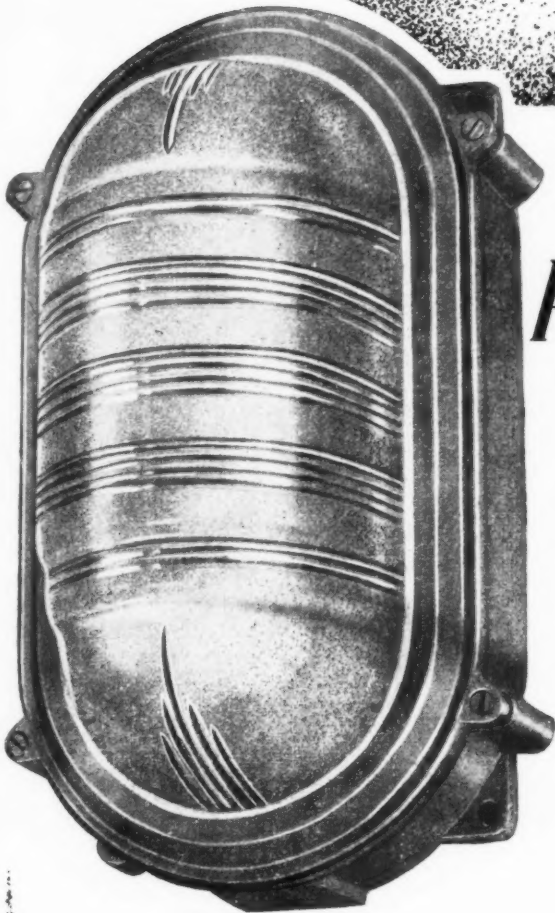
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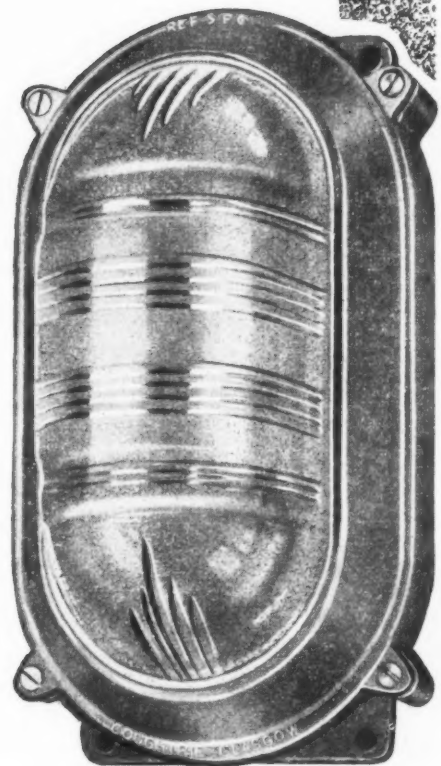


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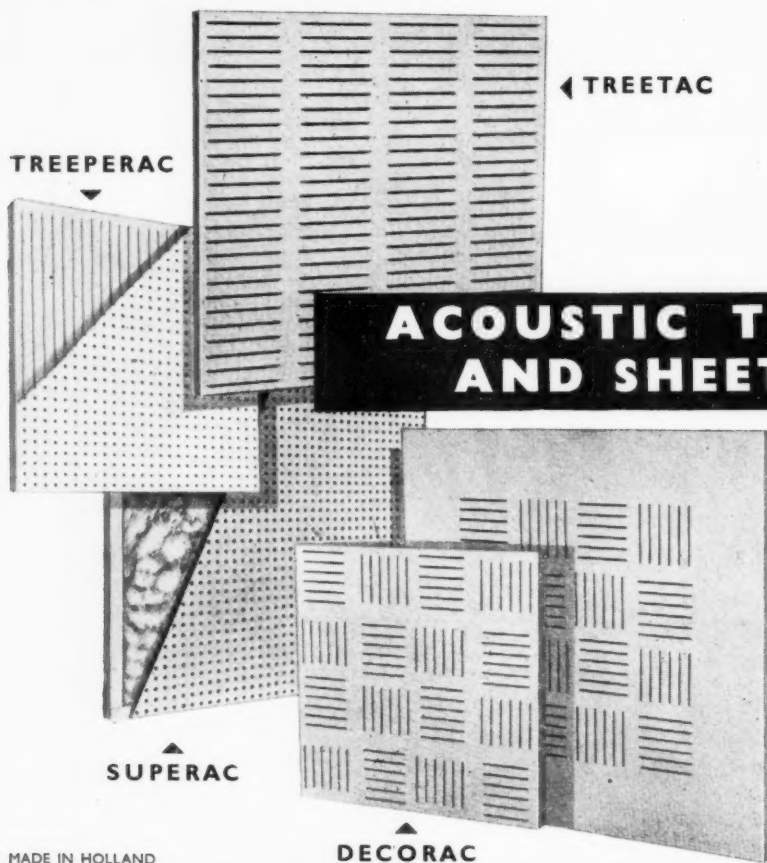


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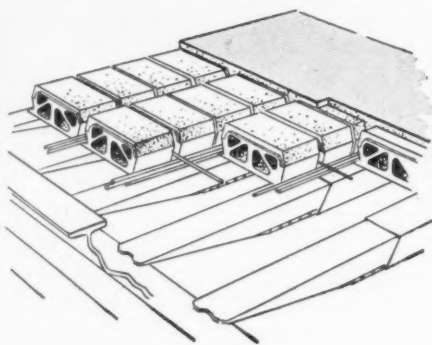
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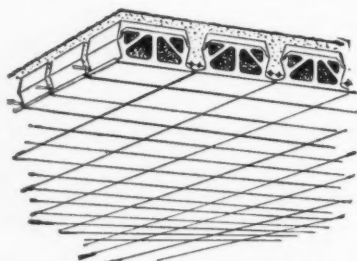
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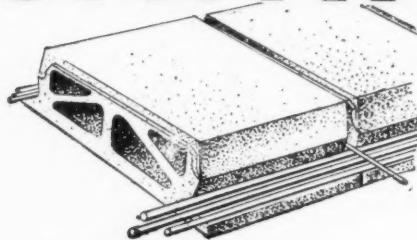
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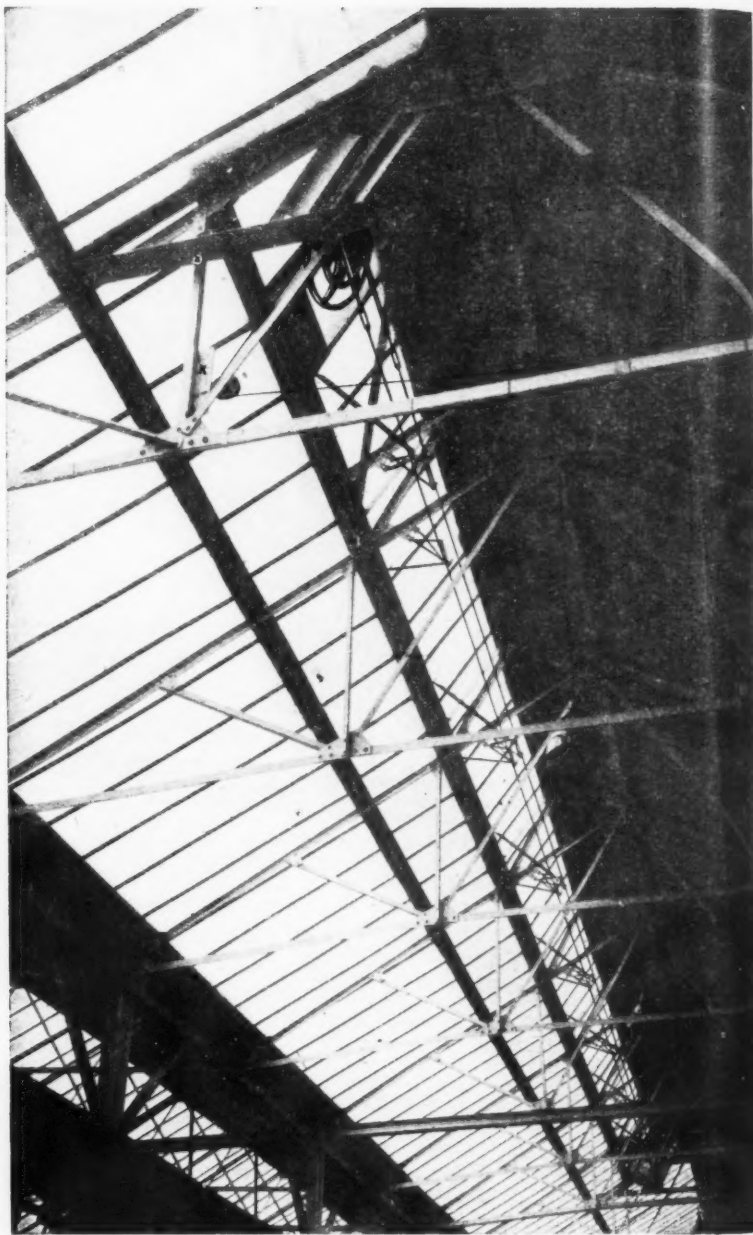
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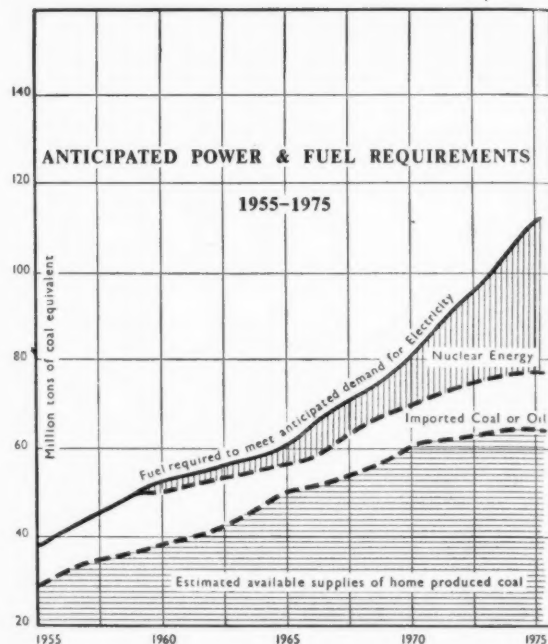
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The construction of two groups of four stations each will begin in 1960 and 1961/2 and they will be supplying electricity to the Grid by 1963/4 and 1965 respectively. The first group of stations will probably

have one gas-cooled reactor each. The second will probably utilise liquid-cooled reactors — one high-rated reactor each. These stations will add well over 1,000,000 kilowatts to the nation's power resources.

#### The Second Ten Years

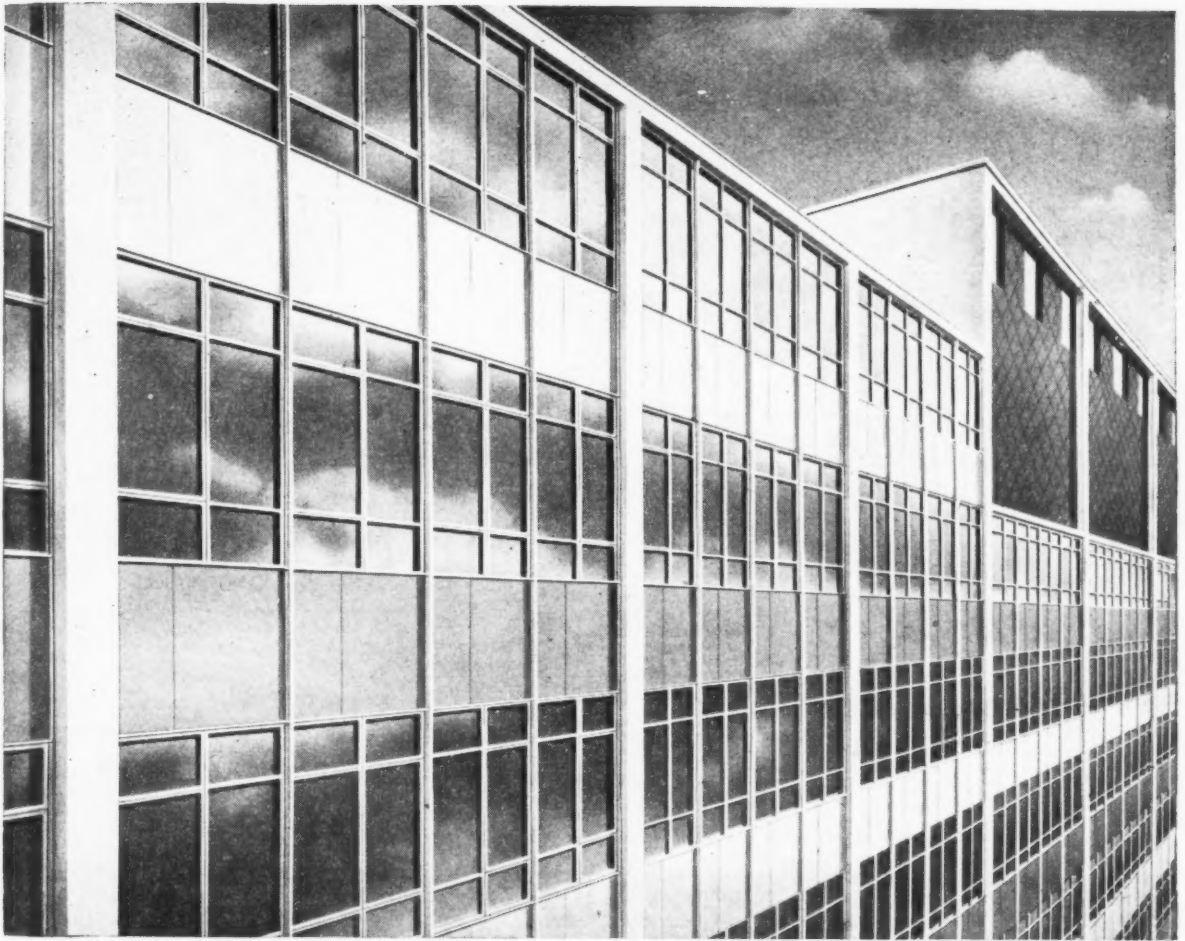
By 1975, it is anticipated that nuclear reactor power stations in Britain will have an aggregate installed capacity of between 10,000,000 and 15,000,000 kilowatts. Since these stations will be operated as base load stations working at full output for twenty-four hours a day they will be responsible for possibly half the units generated in the country.



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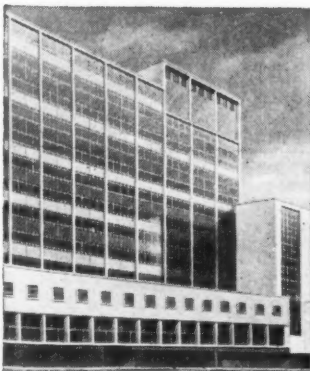




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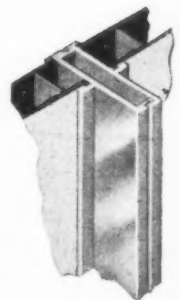
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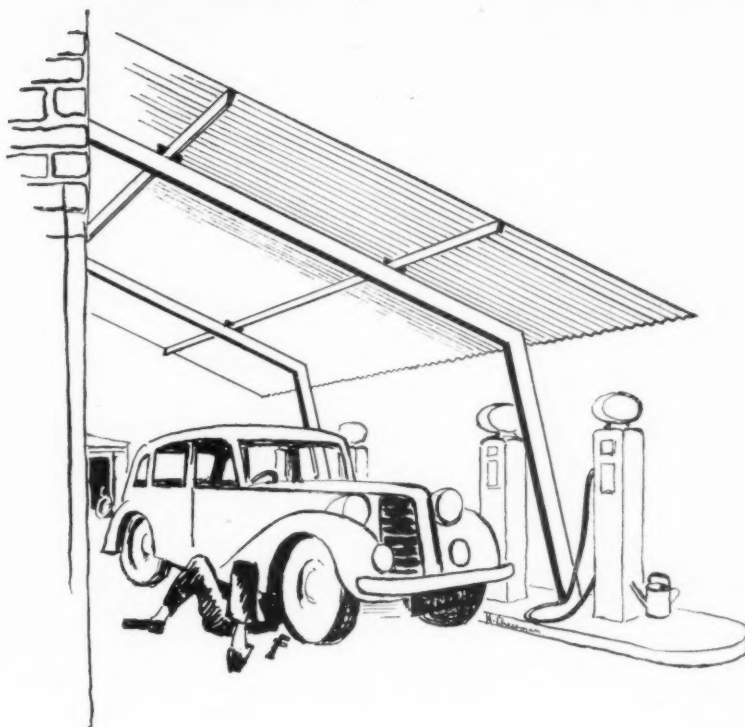


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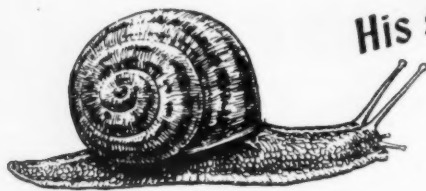
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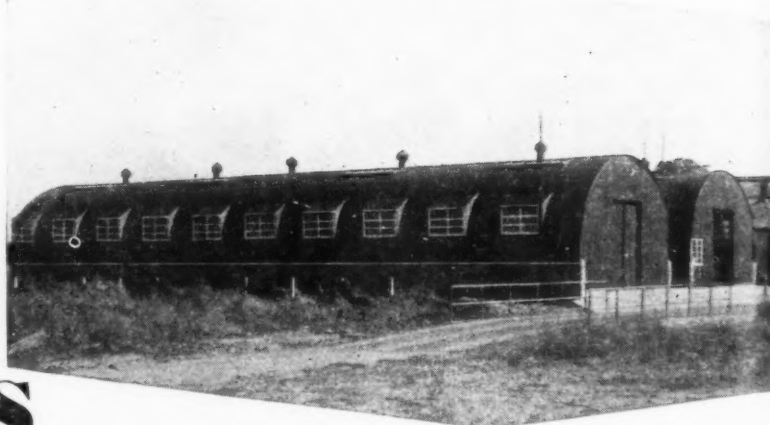


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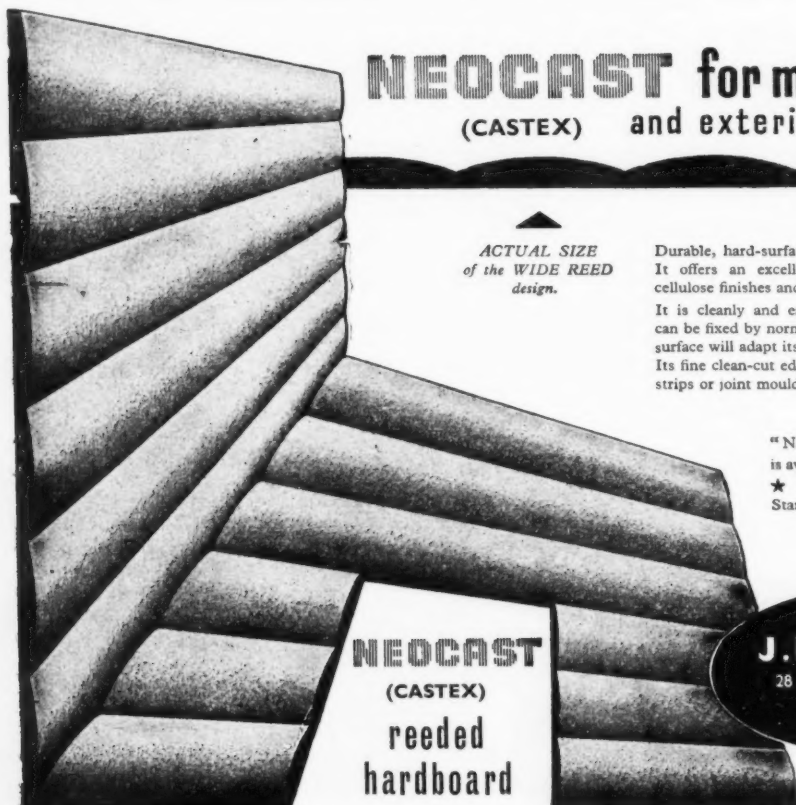
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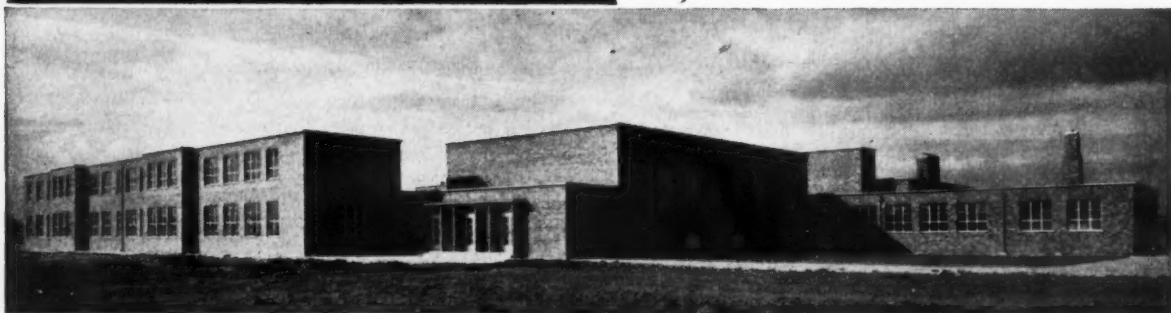
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### *A Fairy Tale for Architects.*

Once upon a time there lived a young apprentice sorcerer. His master was the most famous sorcerer in the land and his speciality was making things vanish into thin air. The young apprentice worked hard at his trade, and looked forward to the day when he too could make things vanish into thin air. One day the King called the sorcerer to his palace.

"Sorcerer" said the King, "I have decided to modernise my royal home. Nothing too brutalist you understand," he giggled, "but definitely contemporary. So get all this old Victorian stuff out of my sight." With a smile and a wave of his wand the sorcerer made it all vanish into thin air.

"And now," said the King surveying the empty shell of his palace, "I want you to do the whole thing in a really good demountable partition."

"Your Majesty," interrupted the sorcerer anxiously, but the King went on.

"I shall want these partitions to be quite flush, of course, no cover fillets or anything like that. They must be good for sound; all services must be concealed; they shall be strong and capable of having wall fixtures applied to them. As for finishes, I think I will have weathered sycamore veneered panels in my chamber, oak veneer panels in the banqueting hall, multi-colour plastic finishes in the corridors, hardboard in the secondary rooms, and plasterboard in the kitchens. I say, are you all right?" he added sharply, for the sorcerer had gone very white.

"Your Majesty," stuttered the sorcerer, "I cannot do it. You see, I can only make things disappear but not re-appear." The King was furious.

"Idiot," he roared, "If you have not rebuilt my palace in a month I will have your head off."

The sorcerer went back to his den and told the young apprentice what had happened. "Alas, my boy," he cried, "no sorcerer could do what the King has asked. I am doomed." But the young apprentice told him about

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and the problem was solved easily and cheaply to the King's satisfaction.

"You have saved my life," said the sorcerer, "how can I recompense you?"

"Show me how to make things disappear," replied the apprentice, and the sorcerer showed him. "You mean like this," said the young man waving his wand.

"Yes," groaned the sorcerer as he vanished into thin air.

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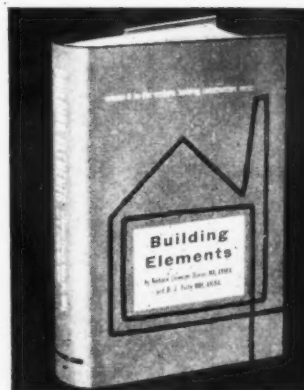
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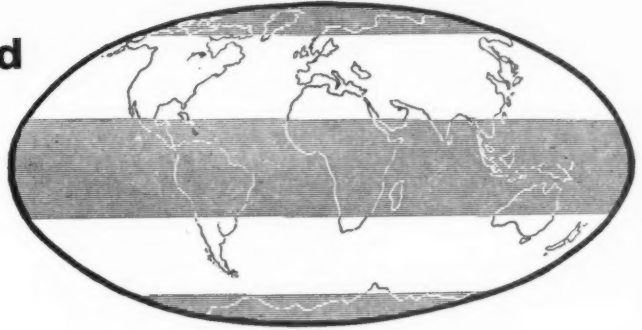


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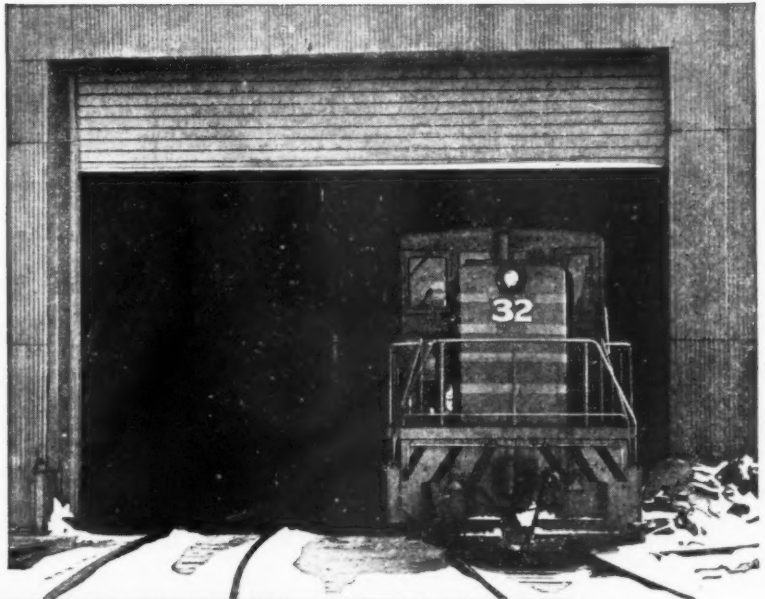
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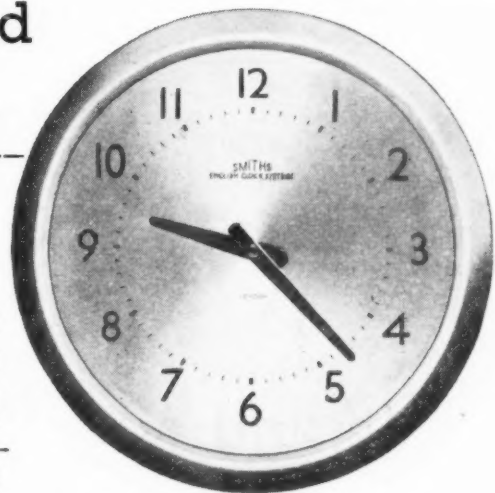
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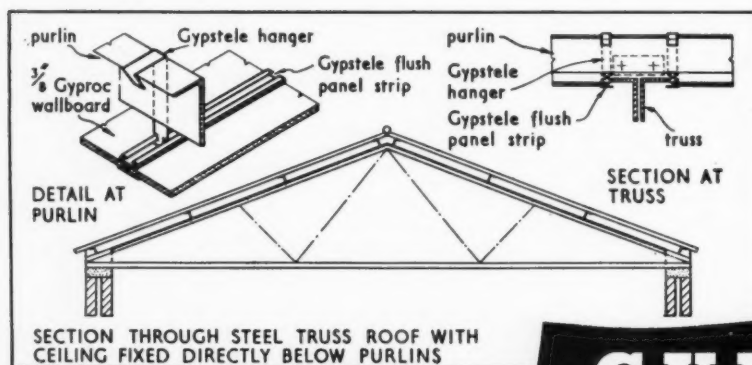
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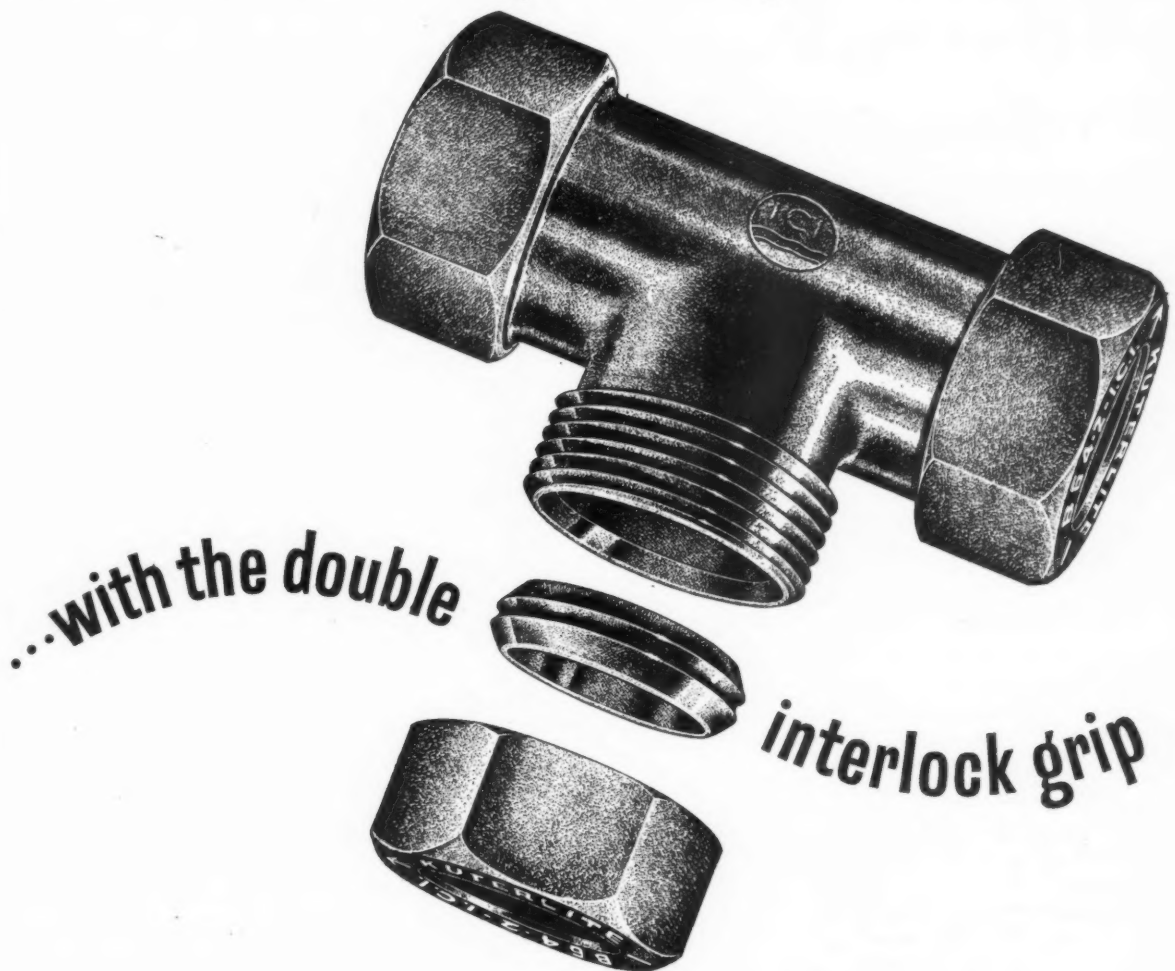
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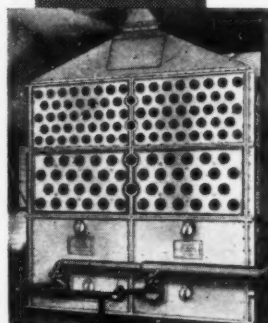
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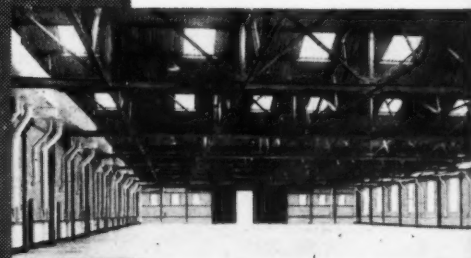
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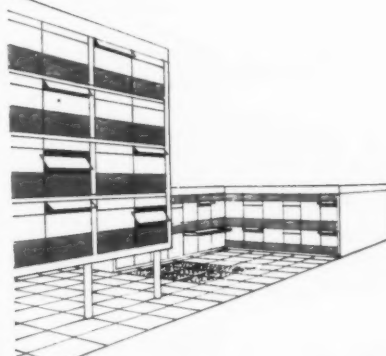




# "MUROGLASS"

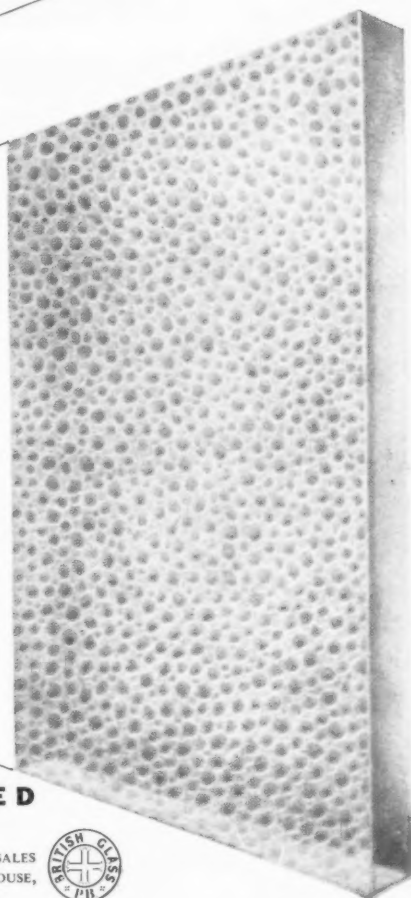
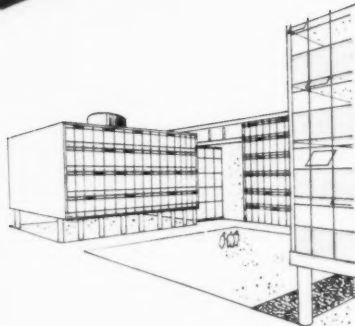
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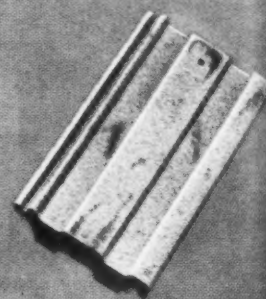
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THE ARCHITECTS' JOURNAL

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NOT QUITE ARCHITECTURE

## ROBIN MUDIE'S GHOST STORY

The telephone rings.

"Hardly seems worthwhile sending you the cricket scores. You never publish them."

"Sorry, Roger. Editors pressed for space perhaps. They're devoted to cricket."

"Well, look. I've got the details of the Conference\* game here ready for sending out. I thought the *Builder*, the *RIBA Journal* and the *A & BN*. Is it any use sending one to you?"

"Roger, you didn't beat them? I believe you did!"

"We did actually."

"We'll publish."

"By two runs in the last over. It's the first time."

"Nan Quack Ack. I'll try and ghost up a piece. You batted first, then?"

"They put us in."

"On a pudding?"

"Well, a bit slow. We were 97 for 2 at

\* The RIBA played their annual match against a Club Cricket Conference XI at Wimbledon CC on August 29, 1956. The Club Cricket Conference is the official body representing the majority of cricket clubs in the Greater London area.

RIBA XI

J. G. Batty (John Batty & Son)

A. E. J. Morris (London University)

D. J. Robinson (Ronald Ward & Partners)

J. Seward (Cruickshank and Seward)

G. Fyson (Ronald Ward & Partners)

M. K. Levy

T. Burrough (Burrough & Hannam)

R. Case (AA)

C. A. R. Norton (Hammett & Norton)

A. D. Wood (Ronald Ward & Partners)

R. Holmes (Hammett & Norton)

CLUB CRICKET CONFERENCE XI

A. H. Brown (Beddington)

P. V. V. Sherwood (Thames Ditton)

L. A. Sears (Reading)

G. Worthington (Wimbledon)

A. Goodall (Kennedy & Donkin)

B. Wicks (Kennedy & Donkin)

E. Pomeroy (Uxbridge)

T. Burton (Weybridge)

R. H. F. Hill (Beckenham)

C. S. Davies (Alexandra Park)

D. Bennett (Fareham)



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## *Salubrious Holborn*

According to the local authorities' published returns, the County of London, one of the largest urban areas in the world, has less slum dwellings than Leeds, under half the total of Birmingham's slums, one third of Manchester's and only one quarter of Liverpool's. Holborn, the smallest, but most densely packed borough in the county, claims only 36 slums and aims to demolish them in the next five years. In the same time Liverpool hopes to demolish 7,000 slum houses out of 88,000. At this rate of progress it is evident that the *grandchildren* of some of

the men and women now living in the squalor shown on page 417 will be born under the same, or similar, conditions. In the meantime, all will be well in Holborn. Or will it? These Peabody tenements in Wild Street, Holborn, are not defined as slums, although the Home Office criticized them when they were built, in 1875, because of their congested layout. The first of a series of articles on the problems of slum clearance and the urgent need for a better national policy starts on page 415. The authors are D. Rigby Childs and Jack Whittle.

lunch. Then all out for 123. Burton took 6 for 31."

"Devil bowler: Wimbledon Park. I remember."

"Geoffry Batty got 48 and Derek Robinson 36. Apart from them only Wood reached double figures. I got a blob, I'm afraid."

"For tall, lissom, blue-capped, private architect Geoffry Batty (partnered by co-hero Robinson) August 29th proved the day of days. Taking the hostile Conference attack by the scruff of the—by the way, last year's hero, John Seward, how did he do?"

"Well, John rather remains in that category."

"And who bowled the Conference out?"

"Roy Case took 6 for 54, Wood 2 for 51 and Robinson 2 for 5."

"Well, the figures are all right. Was Pat Sherwood playing?"

"Yes, he didn't cause us quite as much trouble as last year. We got him out for 49."

"And A. H. Brown, Surrey Seconds?"

"Oh, he fell very early."

"Not to Batty again?"

"No, to Roy. Roy bowled very well. I don't think I've ever seen him bowl so well. It was a very tight finish. In the last over they wanted 9. Con Davies made a great effort, they got 7 of them and then Con was bowled. Very sporting of them really. The light was bad."

"Congratulations, Roger."

"We are rather pleased about it."

"It's covered."

"You think you can?"

"I'll ghost something up."

"That would be kind. I believe it's almost standard practice, isn't it?"

ROBIN MUDIE



## FILE THIS WEEK

**Information Centre.** This includes reviews of a book about gardens by their designer, Percy Cane; an article on prestressed northlight shell roofs, and two British Standards—one on non-ferrous conduit and conduit fittings, and the other on castors for hospital equipment page 410

**A Cost Study** by John Eastwick-Field on the domestic running costs of oil, anthracite, coke and gas is published on page 411.

**A correction** to the cost analysis on the primary school, South Bolton Gardens, S.W.5 (published on September 13), appears on ... .. page 409

**Another correction**, relating to the cost analysis of the garage at Santry, Dublin (published on August 23) appears on page 431.

## The Editor

### BUILDING RESEARCH 1955

THE 1955 Report of the Building Research Station presents few excitements, but it shows that there is steady progress over an astonishing range of problems. The BRS, it appears, are to take part in an international study of site organization. They are experimenting with the waterproofing of lightweight aggregates to reduce water absorption, without loss of adhesion. The neglect of monolithic walls in concrete research is being made good—revealing so far that ultimate load per foot run increases with length. One of the major items is a broad investigation of high flats: plumbing, sound insulation, heating, structural design, finishes, fire precaution, site organization and costs are the points of attack. On cost, the report quotes the wide price range and the even wider range (1 : 3) of load-bearing concrete quantities per unit of floor area, revealed by their survey. Their remarkable conclusion is that combinations of the most economical forms and methods found in the survey could knock £500 off the price of a flat.

Finance, a recurrent worry in reports since 1951, appears now to be easier. The Building Research Board were told in 1952 that if they wanted more money they would have to seek it from industry, and this year a measure of success is reported, with various fellowships sponsored by companies and trade associations; £5,000 a year from the Midland Regional Board for Industry and now the NFBTE has dug into its pocket and presented £2,000 a year for five years.

The broad pattern of building research in the last few years clearly presents a change of emphasis from performance of materials, to method and function: in the work on lighting and colour, on the design of factories (partly financed by the Midland Regional Board for Industry) and on brick packaging and site organization.

Complementary to this change is the extending co-operation with industry; with individual builders, local authorities, trade associations and manufacturers, with University Departments, and not least with MOE, LCC and Nuffield Foundation. MOW and MOHLG, it seems, have yet to see the value of joining in. On the adequate presentation of its work to architects, BRS still falls rather short. The Digests continue to be fairly succinct and digestible, but there seem now to be fewer National Building Studies; and of the published articles and papers listed in the back of the BRS report only about one quarter were in journals normally read by architects. Is this because BRS only speak when they are doubly sure of their facts, or because the staff are too busy to speak?

## MIRACLES NEEDED

ONLY a miracle will now see Britain officially represented at the 1957 *Triennale di Milano*—the Olympic Games of architecture and design. In the two years that have



elapsed since the last one, the British Council and the Council of Industrial Design have both beaten their fists in vain on the iron doors of the Board of Trade's coffers. But the doors have not been opened, and BOT remain firm in their decision that they can only make grants for representation at trade fairs where order-books may be flourished and products sold over the counter.

The stupidity of this decision exceeds belief, it is a classic example of Government by rule of thumb. A general rule against casual representation at any old exhibition anywhere in the world is, no doubt, a sensible precaution, but fear of establishing precedents should not prevent cases being judged on their merits. Goods exhibited at the Triennale are seen by the most sophisticated and discriminating audience in the world, and will be illustrated in the leading magazines of six continents. Not only is the prestige value enormous, but—as is only too clear from the cases of our more enterprising rivals—a great deal of trading is done there, and none too discreetly. As before, British prestige will have to rest on the shoulders of private exhibitors, and while we salute their enterprise and devotion (and their business acumen) we must recognize that much of the blame for the absence of official representation must be laid at the feet of private persons—including some of those who have taken part in previous independent exhibits. After the last Triennale, there was an abundance of enthusiasm for better British representation, and a great deal of big talk about organizing a permanent pressure group, enlisting influential support, and instigating a live Triennale policy. But letters were not written to *The Times*, the FBI was not sounded, MP's were not approached. A single department of the British Council was left to battle on alone.

It failed, not only by reason of bureaucratic inertia, but by conspicuous private apathy as well—apathy on the part of those industries whose competitive margins lie in aesthetics, and not merely in the material qualities that are at stake at industrial exhibits and sample fairs. It may not yet be too late to repeat the effort that was made at Halsinborg, but that effort cannot be left to the same group of private persons. It would be unjust in the first place, and in the second place the terms of reference are different. The Triennale is the sort of exhibition where dazzling techniques and brilliant effects are needed, over and above solid worth. This will be more so than usual in 1957, with the control of the exhibition passing out of the hands of the orthodoxly-modernist group connected with Ernesto Rogers and Franco Albini, into those of a more adventurous body of architects.

A miraculously high level of imagination will be needed, as well as a miracle of organization. But the material is at hand, and if it is impossible to put the potential talent to work that has run to waste in some sections of the *This is Tomorrow* exhibition then we might remember that among well-designed British products of solid worth that might focus or highlight the exhibit, are some which have achieved the imaginative prestige of the ultimate speed records for land, water and air.



#### MEN AT WORK

When you think of the hours people will spend gazing at a hole in the road it seems strange that British contractors have been slow to imitate the Americans and provide windows in the close-boarded hoardings which make most sites so dull. But now, for the first time in London as far as I know, there is a building site near the Hyde Park Hotel where you can go on a "public observation platform" to watch men at work. Taylor Woodrow have provided a railed-off square about 8 ft. by 15 ft. in area, and 6 ft. above site level. There is quite a lot to see from this vantage point, including one of the largest of tower cranes, and three draglines, as well as all the mixers and other usual plant. But get there early in the day to avoid the rush. The platform has been full every time I have passed it.

#### DESIGNERS AT WORK

If, in your observations of men at work, your taste is less for the labourer bent on his shovel than for the designer's mind bent on a creative problem, you will probably have promised yourself a visit to "Designers at Work"—an exhibition which the COID is staging at the Design Centre. To ASTRAGAL this exhibition, which was organized to coincide with the COID's recent design congress, was disappointing. It makes its main point fairly well



—that all the work displayed (in illustrations, together with a few “live” exhibits) was designed for people who had consulted the COID’s Record of Designers. But in giving itself this well-deserved pat on the back the Council does not earn another one. No attempt is made to explain to the layman that there were *reasons* why a thermos jug or a refrigerator were designed this way and not that way. He is left to suppose that the fork-lift truck exhibited looks the way it does because—like the packets of biscuits nearby—the designer merely thought it looked better that way.

\*

Not that the layman will bother to linger for long in this rather dull little exhibition: he can see so many well-designed goods in the other sections of the Centre; and, after all, he doesn’t have to go to an exhibition to learn the only thing about designers that “Design at Work” tries to teach him. He could probably guess, without being shown, that a man designing a biscuit package produces two or three rough sketches before he makes his final choice.

\*

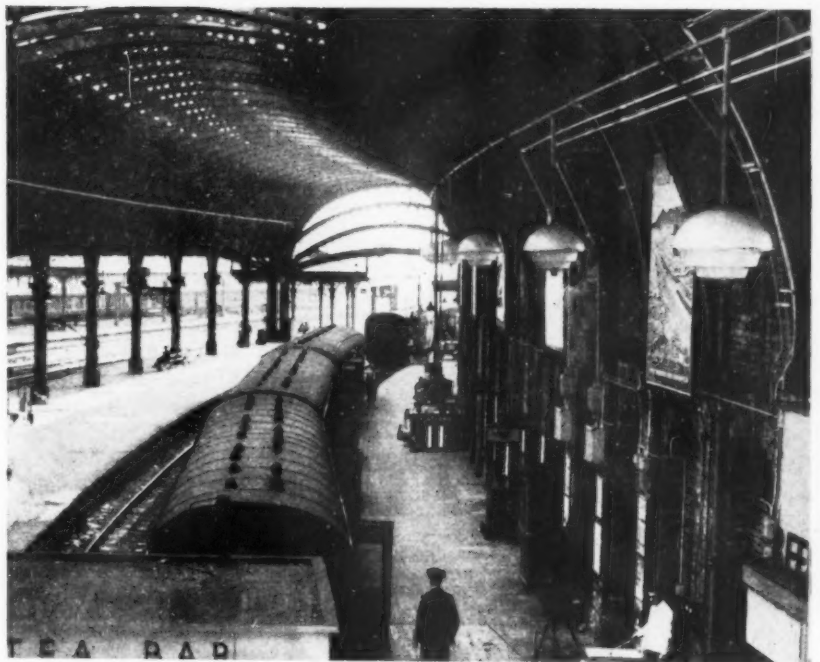
The best thing about the exhibition is that it may attract even more people to the now very popular Design Centre. And a man who spends fifteen minutes browsing amongst good designs is probably more influenced than he would be by any exhibition that told him what he ought to like.

#### HUMORISTS AT WORK

ASTRAGAL never feels less amused than when he is offered someone’s analysis of humour. So he went to the ICA’s exhibition of drawings from the *New Yorker* with the slightest twinge of trepidation. And the twinge was justified by the way the cartoons were presented.

\*

Isn’t it just a tiny bit precious to print the captions only in the catalogue, as if they were of little importance in relation to the drawings? Granted that the drawings themselves are interesting, but they are examples of good journalism not of great art, and they should be presented with a journalistic slickness. For ASTRAGAL the jokes lost their sharpness while he was doing a cross reference between the catalogue and the numbers on the pictures,



**SUBTOPIA COMES TO YORK.** A correspondent has written to ASTRAGAL begging him to do something about the subtopian light fittings which are being installed in the fine station at York. “When the whole of the famous York curve is filled with them,” he writes, “the effect will be monstrous.” This photograph shows a few of the fittings.



**ANTI-SUBTOPIA CAMPAIGN SNUBBED.** Unless a town planning decision is reversed a terrace of contemporary houses, like the one above, will not be built at Cambridge Road, Teddington. The terrace does not, it appears, “conform” with the unexceptional character of other houses in the road. It was designed by Eric Lyons for a speculative building firm—the firm which is advertising its excellent wares in the *Observer* and the *Sunday Times* as an anti-subtopia campaign.

and perhaps that is why he preferred the untitled works of Steinberg, Addams, and Mary Petty—and of Alan Dunn, “who focuses visual commentary upon the architectural and industrial aspects of life in America.” So reads the catalogue, and it was disappointing to find that of Alan Dunn’s four cartoons only two—jokes about modern furniture—had the remotest connection with architecture. But the catalogue writer seems to have taken some pains to call attention to the characteristics of several cartoonists which are not represented in the works shown. No doubt that is just one of the inevitable occupational hazards which bother people who are courageous enough to take humour seriously. Which is all right as far as ASTRAGAL is concerned—as long as he is left in peace to take his pleasures lightly. Robert Benchley was right when he said that “by the time you have humour analysed it will be found that the necessity for laughing has been relieved.”

#### DARK SATANIC MILLS

The rise and prosperity of Manchester were exclusively Victorian phenomena. In *The Stones of Manchester*\* Cecil Stewart has given us a useful little guide to the jewels that lie buried among the mills and warehouses; also a perceptive commentary upon a city which is really a kind of laboratory of Victoriana. Almost every great Victorian—Norman Shaw is a notable exception—has his Mancunian specimen piece. The range is over the whole 19th Century from Barry Gothic and Barry Italianate to the most full-blooded Waterhouse—and what an essentially Manchester man Alfred was—to Bodley with his fine church at Pendleton. Finally, Champneys’ Ryland Library is the most deathless building of Victorian England—almost a justification of its epoch, if not of its city.

#### MORE GROPIUS

The pious Gropiusite will doubtless rush to get *Scope of Total Architecture*.† In spite of the slightly tautological title he will get nothing very new for his money. Someone has been digging in the master’s files and has put together a book. Anything Gropius writes has some value—though nothing anybody writes is

above criticism—and there are things here worth having and difficult now to discover for oneself in the back numbers of this journal and that. It is only a pity that so much that is trivial was mixed with much that is fundamental. The reader must do his own weeding to find the flowers.

#### WORMS AND WORDS

Beetles and fungi continue to attack timber, and timber treatment firms continue to invent the best method of dealing with them. From time to time a highly organised publicity splash is made, and the latest of these was the Protim one-day congress in Westminster last week. The high points of the day were a film featuring a *Merulius Lacremens* fruit body in full colour and repulsiveness, and a character using a Protimeter, which looked suspiciously like one of those things ordinary folk call a moisture meter.

\*

There must be a point where trade names defeat their own purpose. ASTRAGAL can think of thirteen widely differing products beginning with Flex-, and twenty beginning with Perm-, for instance. Would it not be a good idea to call things what they are, for a change? Which reminds me: part of a talk by Derek Senior, a journalist, on the correct use of words in the planning world, is published on page 405. It is well worth reading, even though a ruthless sub-editor has cut out the most amusing paragraphs.

ASTRAGAL

## DIARY

*Rent Control.* Geoffrey Howe. At HC, 13, Suffolk Street, Pall Mall, S.W.1. 6 p.m.

SEPTEMBER 25

*A Story in Colour.* Exhibition at BCC, 13, Portman Square, W.1. September 25—27, 9.30 a.m. to 4.30 p.m. September 28, 9.30 a.m. to 12 p.m.

*Post-War Architecture: Built in USA.* Exhibition at BC, 26, Store Street, W.C.1. (Details on page 432.) 9.30 a.m. to 5 p.m. Saturdays, until 1 p.m.

SEPTEMBER 27—OCTOBER 13

*Designers at Work.* Display illustrating the work of the COID’s record of designers. At the Design Centre, 28, Haymarket, S.W.1. 9.30 a.m.—5.30 p.m.

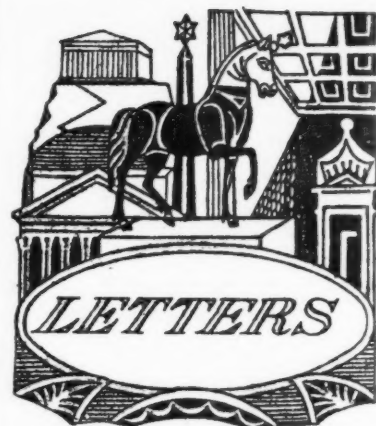
UNTIL SEPTEMBER 29

*Britain Builds for the World.* Exhibition sponsored by NFBTE. At Booking Hall, Charing Cross Underground Station, W.C.2.

UNTIL OCTOBER 9

*British Town Planning and the Neighbourhood Idea.* Peter Collision. At HC, 13, Suffolk Street, Pall Mall, S.W.1. 1.15 p.m.

OCTOBER 9



A. Jenkins, F.R.I.B.A.

P. E. Nichols

Jack Whittle, A.R.I.B.A.

Michael McLellan, A.R.I.B.A.

W. W. Ryder, A.R.I.B.A.

### Not Amused

SIR,—To see ASTRAGAL’s shafts falling on other targets is often entertaining: to find oneself the object, so to speak, of even a not-so-near miss is a different matter, and is liable to produce Queen Victoria’s traditional reaction.

I write as the partner of the Mr. Phillimore so light-heartedly dismissed by ASTRAGAL in a couple of flippant, class-conscious sentences in the paragraphs headed “Hollywood Does It Again” (September 6). I have no intention of commenting on the design illustrated, for which I was not responsible, but it is perhaps worth stating that this particular photograph of an unfinished model was never intended by the architect to be published.

There are also one or two inaccuracies which should be set right. The proposed building is an art gallery and not a civic centre. Mr. Phillimore is not a “consultant”: he is merely an architect whose practice happens to include a considerable amount of alteration work to country houses.

What, exactly, is the point of writing in this sort of way about any architect?

A. JENKINS.

London.

### Factory Fires: Walls Need Not Be Brick

SIR,—As a fire surveyor of an Insurance Company I was interested in the remarks made by your correspondent, F. C. Lee, in your JOURNAL of August 23, regarding the revision of certain of the bye-laws as they affect fire resistance of factory walls. I would first point out that the fire losses in the United Kingdom and Eire during the year 1955 were estimated at £27,645,000, including one fire at a Pottery factory estimated at £100,000 and for the present year up to July the estimated losses are over £16,000,000.

Following the publication of The Post War Building Studies No. 20 Fire Grading of

\* Arnold, £2.

† Allen & Unwin, 15s.

Buildings, prepared by a joint Committee of The Building Research Board and Fire Offices' Committee, efforts were made to have their recommendations incorporated in the proposed new model bye-laws.

The modern tendency is to build 1-storey factory buildings having very large open floor space with their walls of light construction, and when a fire has occurred the external walls have just collapsed. The whole essence of a solid brick wall called for is to confine if possible any outbreak of fire and not allow it to spread to any adjacent building. If a building is sited at least 20-30 feet from any other building there seems to be no reason why the external walls should not be of light construction, namely asbestos sheeting or metal.

PHILIP E. NICHOLS.

London.

## Open Mind On Open Tendering

SIR,—Unfortunately I missed the Third Programme talk by Ian Bowen referred to by ASTRAGAL last week. Whether the state that the MOHLG demands open competitive tendering was made by Mr. Bowen or is ASTRAGAL's own idea I, therefore, cannot say. What I do know, however, is that this is by no means true.

In my experience the ministry are concerned mainly with two aspects of housing—standards and price. Provided that a local authority builds to the housing standards that the ministry requires at a price they can approve, whether that price is obtained by open or selective tendering or by negotiation is, I repeat in my experience, not dictated by them.

Many local authorities have standing orders which require open tendering for articles ranging from paper clips to multi-storey flats, but the ministry cannot be held responsible for that, and the methods by which a local authority obtain tenders for building contracts is a matter largely for their own discretion.

JACK WHITTLE.

Essex.

## A Slab-Folder's Lament

SIR,—I am seriously considering abandoning the difficult and tedious task of design-

ing buildings, and applying for a post as architectural critic. It all seems so easy. We have two buildings illustrated in your issue for September 6. The first has "neo-Georgian trappings" and is therefore a subject for supercilious disdain. The second is clearly contemporary and automatically qualifies for the current OK phrase and "Good Architecture" seal of approval.

Although myself as adept with space frame, folded slab, and module as the next man, I am perversely irritated when I read judgements based on the superficial grounds of fashion rather than on whether or not a building is well designed within the architects terms of reference.

It would be so nice if we could dispense with the 50-year time lag which now seems necessary before we have an undistorted architectural assessment.

MICHAEL MCLELLAN.

Coventry.

## More Prefab Stonework—In Switzerland

SIR,—I was interested to read the letter from David Russell in your issue dated August 2, under the heading "Prefabricated Stonework," in which he described the use of metal sheeting as an external facing material in a Cornish village.

While passing through the Jura mountains into Switzerland recently, I noticed numbers of buildings faced with metal sheets in small panels approx. 12 in. wide by 18 in. high. In some cases the face was painted, but more frequently the metal, which appeared to be zinc, was exposed. In the instances that particularly caught my eye, the plates were decorated with simple geometric or floral patterns embossed in the metal, and the effect was most pleasing. I cannot recollect seeing this external facing elsewhere on the Continent though, for all I know, it may be quite common.

Although the visual effect of such wall cladding may be very different from the example described by Mr. Russell, the practical reason underlying its use is no doubt the same—the need for an efficient waterproof skin to keep out the driving rain which is so much more penetrating in coastal and mountainous districts than in more sheltered inland areas.

W. W. RYDER.

Surrey.



W. W. Ryder writes above about prefabricated (steel) stonework in Switzerland. Here is a photograph of the same sort of thing in Wisconsin, which a New York correspondent mentioned in our issue of September 6.



## AMERICAN EMBASSY

### Associate Architects Appointed

Yorke, Rosenberg and Mardall have been appointed associate architects for the new American Embassy building in Grosvenor Square.

The design for the Embassy was won, in a competition organized by the State Department, by Eero Saarinen, the American architect, early this year. Later he revised his original design. Work on the building is expected to start next spring.

York, Rosenberg and Mardall will assist Mr. Saarinen in carrying out his plans.

## ILA

### Peak Conference

This year's ILA conference was held at Bakewell, in the Peak National Park, on September 7 to 9. The host for the conference was the Peak Park Planning Board, who provided their headquarters, Aldern House, for the talks and discussions.

The main events of the conference, which was under the chairmanship of H. F. Clark, were discussions and visits to Chatsworth House and Park, the Peak National Park, the Spa town of Buxton, and Haddon Hall.

Patrick Monkhouse, vice-chairman of the Peak Park Planning Board, and editor of the *Manchester Guardian*, welcomed the conference to Bakewell and described the work of the Board. He thought the conference should consider the landscape architect's future contribution to the so-called "penny plain" areas of the Park, by providing more variety and incident in the scenery.

The president, Richard Sudell, reminded members that the surrounding industrial areas of the Park, contributed more than any other area to the Industrial Revolution, and could therefore be looked upon as one of the most important regions in the 20th century world. It was the president's hope that this Park, properly managed and supported, would provide aesthetic inspiration and creative impetus to the future generations who would live in the surrounding industrial centres.

Harold Abrahams, secretary to the National Parks Commission, spoke on the history and administration of National Parks in this country. In some ways the name National Park was misleading to the general public, he said. He told of a manufacturer of iron railings who had offered to fence the park.

At a discussion on National Parks and ILA affairs members came to the conclusion that landscape architects should be employed full-time at all the National Parks, as this



was the place, more than anywhere else, where the existing scenery should be studied on the spot continuously by a trained person, so that advice was always available, either for landscape preservation or enhancement. It was agreed that the proposal should go to the ILA council for consideration as to the Institute's course of action.

Brian Hackett, supported by many members, suggested that the Institute's scale of professional fees should include an optional clause for retaining the landscape architect for periodical visits after completion of a scheme, for giving advice and guidance on questions of maintenance. It was felt that many clients would welcome this possibility, and a clear statement of its cost in the Institute's scale of fees was needed.

## COMPETITION

### *Chicago Memorial*

A jury which will include Mies van der Rohe, J. L. Sert and Pier Luigi Nervi will judge designs submitted by "architects, engineers, draftsmen and students of all countries" for a memorial pavilion in Chicago. The pavilion, which will "unite Art and Science," will be a memorial to Enrico Fermi who, in 1942, initiated the controlled release of nuclear energy. It will project—the future governmental and institutional centre of Chicago.

Three main awards will be made: 5,000 dollars, 3,000 dollars and 1,000 dollars. There will be five other awards of 200 dollars. In addition to the assessors mentioned above there will be five others on the jury: Gordon Bunshaft, Dr. Lancelot Law Whyte, Joseph Barbera, Nicholas Dispenza and Dr. Samuel Allison. (The last three will be non-voting honorary members.) A non-voting professional advisor, John O. Merrill, architect, will act as chairman to the jury.

If the winner of the first award is a registered architect, he will automatically be selected as the architect for the building. If he is not an architect, or if he is a foreign citizen, he will be associated with an architect who is licensed to practice architecture in the State of Illinois. He will be free to modify the design within the approved architectural and engineering concept to conform to any changes in the conditions of the site or the programme.

Designs for this scheme, which must include both an exterior and an interior exhibition space, an auditorium and parking facilities within an area of 210 ft. by 210 ft. (volume not restricted), must be received by February 1. Applications should be made (without deposits for competitors outside the US) to John O. Merrill, 100, West Monroe Street, Chicago 3, Illinois.

The promoters of the competition are the Chicago Joint Civic Committee of Italian Americans of the Chicago Junior Association of Commerce.

## HIGH BUILDINGS

### *In Portman Square . . .*

The LCC's Town Planning Committee has granted planning permission on an outline application by L. Hannen and J. Markham, architects, of 7, Victoria Street, S.W.1, on behalf of Limestone Holdings, for the erection of a hotel on the site bounded by Upper Berkeley Street, Gloucester Place, George Street and Montagu Street, St. Marylebone, subject to the submission to the Council of detailed plans.

The proposed 190 ft.-high building, with 19 storeys above ground, comprises approximately 800 bedroom suites, each with its own bathroom. The ground floor extends beyond the general plan area of the upper floors and is surmounted by extensive roof gardens. A restaurant with lounge and roof gardens is planned on the top

(19th) floor, and a large ballroom, bars, restaurants, etc., are to be provided on the ground and lower floors. A perimeter road provides for traffic circulation within the site and parking space for 381 cars is provided in the basements.

In granting permission the Committee has asked that every effort should be made to preserve the maximum number of trees on the site.

### *. . . and in Piccadilly Circus*

Plans for a major rebuilding scheme which would alter part of Piccadilly Circus have been submitted to the LCC.

The scheme involves the big island block of premises on the north side of the circus. It includes property in Shaftesbury Avenue, Denman Street, Glasshouse Street, and Regent Street, and the erection of new shops and offices, a restaurant, banqueting rooms, and a cinema.

A new company is being formed to carry through the scheme. Behind it are City Centre Properties Ltd., and the Legal and General Assurance Society Ltd.

Mr. Charles Forte has considerable property interests on the site, including the Café Monico, which he took over three years ago. A number of shops, milk bars, a news theatre and offices are also involved, and the scheme would affect some of the neon and poster advertising sites.

## DESIGN CONGRESS

### *Low Standard of Industrial Design*

Among the speakers at the COID's Design Congress, which was held last week at the Victoria and Albert Museum and the Royal College of Art, was Professor R. D. Russell.

"What," asked Mr. Russell, "is holding the standard (of industrial design) down? The demand for better appearance certainly exists and so do the designers capable of providing it—both old hands already at work and young men and women trained and eager for good jobs."

"I am convinced that the root of the trouble is in the relationship between industry and its industrial designers—in the vicious spiral by which industry generally does not yet know how to use designers who have themselves not succeeded in establishing a satisfactory and easily useable status for themselves in industry."

"I should make it clear that my chief concern in these remarks is with the role of staff designers. I am sure that the quality of design depends in the main upon the quality of staff designers and upon their efficient application to the problems of manufacture. The main role of consultants is I think to bring in new ideas from the outside world and so stimulate staff designers and keep them on their toes, and this role will be achieved far more easily if staff designers are themselves efficient and happy. Generally a staff designer occupies a comparatively humble position in a big firm. If he is really successful with a good job in an enlightened company his ceiling rate may be about £2,000 a year. His work is at the mercy of top management, who probably have no training whatever in the field with which he is concerned. Important decisions ruining the whole character of a product may be made by some dictator with no better qualification than a disastrous intuition. Such a situation cannot be imagined in other departments, as for instance engineering, but then a chief engineer's status is very different from that of a chief designer and in any case his work is apt to have the overriding advantage of being subject to measurement."

"Certainly in the eighteenth century many competent and fairly humble designers

were pushed around and told what to do by their patrons, but then the patrons were extremely cultivated men with a grand tour or two behind them and knowledge of the principles of design at their finger tips. Even to-day, in my experience, by far the best use is made of designers by a few firms in which the final decision rests with a man who is really interested in the Arts and design."

"How does one set about bridging the perilous gap between designer and top management? There are, I suggest, two ways which may be used either independently or, (and preferably), in combination. Both will take time to develop but the sooner they tried the sooner they may be effective. I do think that this is a matter of great urgency."

"The first method is to follow the example of the eighteenth century and to make it at least possible for the top management of industry to have some limited training in the principles of design—training which stimulates interest in this subject and which provides the firm foundation for further self-education during the practical process of controlling designers. Please do not imagine that I am going to suggest a conducted grand tour of Scandinavia and Italy for chief Executives of industry. Nothing is further from my mind. But I do think that even a one-year course in design for young men destined for high positions in industry would be time and money very well spent. When Dr. Walter Gropius became Professor of Architecture at Harvard University he instituted on the Bauhaus model, for which he was of course also responsible, a foundation course of one year in the basic principles of design for all students entering that school. The effectiveness of this idea under Gropius' control was assured and now that he has retired from the chair of Architecture the institution of a similar course for all students entering Harvard is being discussed with him by the Governors. The purpose of this course is to equip the future top management of industry with the specialised knowledge necessary to use designers to the best effect and it will be most interesting to see what comes of it."

"This one-way Bailey bridge takes management down to industrial design. My second proposal, another one-way Bailey bridge, takes designers up to top management. Combined, these two allow for two-way traffic and the gap disappears."

"The industrial designer occupies a comparatively humble position in industry. This is mostly his own fault but partly industry's. There is an unfortunate confusion between the functions of an industrial designer and those of a creative artist, and only too often this is fostered by the designer himself. He likes to do his own work in his own way and in his own time and on his own; he likes to have it illustrated in the glossier magazines under his own name; he accepts the role of board room jester with all the popular attributes of a creative artist—a painter or sculptor—long hair, an unpredictable attitude to costs and programmes, the ability not to care less about other people's problems. This is all fine, and, if he really feels that way, good luck to him. He has his uses but he must, unless he is very brilliant indeed, pay for his carefree life, for his immunity from stomach ulcers, by accepting a low ceiling rate. There is a very small number of other and more ambitious industrial designers—men who develop their own creative ability as a means to an end of effectively controlling other designers and if they are good enough and bright enough the sky of top management should be their limit along with the engineers and other technicians, the economists, the salesmen. It is, I think, up to industry to accept this possibility and to advertise it. Directly this possibility is accepted the supply of young men with first rate brains and design training will be assured and the effectiveness of design in industry increased out of all present knowledge."



*What is wrong with planning? Most people have a theory or two on the subject, but here is a theory with a difference—from a journalist. Derek Senior believes that one of the chief things wrong with planning is the way we talk about it. We publish below extracts from his lecture—entitled "Words"—to the recent Town and Country Planning Summer School at Nottingham.*

## PLANNING

### *Be Careful What You Say About It*

At what point do aldermen and councillors stop reading the reports of their chief officers? Don't think they don't. How often have I attended council meetings at which it has been painfully obvious that not one member in ten has read the report under discussion; and how often have I sympathized with them. Local Government breeds a stylist who is austere, anonymous, impersonal—above all, dignified. "Consideration has been given," he writes; "consideration has been given to the question of the provision of additional residential accommodation of a multi-storey character in comprehensive redevelopment areas." He would not dream of writing: "We thought of putting more high flats on slum sites." To begin with, it seems to be a rigid rule in local government that every statement must be put in the passive voice, so that it can be admitted that something has been considered without divulging whether it was the committee, the chairman, the chief officer or the office boy that did the considering. Half the dilatoriness, the passing of bucks, the shirking of responsibility, the lazy-mindedness and the want of initiative in local government could be eradicated overnight by the simple expedient of forbidding the use of the passive voice in any official document. Moreover, if a chief officer were obliged to write "I thought of," instead of "consideration has been given to the question of," he would be in danger of saying to himself "Well, of course I did: what's the point of saying so?"—of realizing, in fact, that much of what he habitually writes is just a sort of verbal "vamp till ready"—a marking of time while he makes up his mind what he wants to say. Now, many of you are doubtless bursting to protest that "residential accommodation of a multi-storey character" may include maisonettes as well as flats, and that a "comprehensive redevelopment area" is not necessarily coterminous with a slum site. Of course; but does it matter? There are, it is true, occasions—rare occasions—when precision is justified. In a highly technical treatise on the calculation of housing needs, designed for a purely professional readership, one may need a term that comprises not only houses, flats, maisonettes and the like, but also hotel and hostel rooms, and some such horror as "accommodation unit" becomes unavoidable. But how

often has that term been used when "house" or "home" would for all practical purposes have done as well? And how often, even when no other term would exactly convey what the writer had in mind, has its use served only to bewilder and antagonize his readers?

If our object in writing is merely to convey information, directness is all. But it seldom is. Zeal to impart truth for its own sake is a passion rarely encountered outside the reporters' rooms of newspaper offices. For most of us, most of the time, the value of facts lies in their relevance to an argument; we seek to convey them in order to influence decisions or to induce action. In such a case it is worse than useless to ensure that what we write is read and understood if we do not also take care that our readers are influenced by it in the right direction. What we want to communicate is not only information, but an attitude of mind towards that information. Facts never speak for themselves; it's the way they are set out that makes them eloquent. But they are much more persuasive if they appear to be speaking for themselves, especially when they are addressed to a knowledgeable, critical and potentially hostile audience. The advocacy of the court-room, with its blatant appeals to sentiment and prejudice, would defeat itself in a technical paper written for professional readers. Here it is not emotional writing that carries conviction, but the restrained and skilful use of the unobtrusively loaded word. Compare these two sentences:

1. "If 25 per cent of your housing takes the form of flats, you will get a higher density than was general before the war."
2. "If 25 per cent of your housing takes the form of flats, you will achieve a higher density than was general before the war."

The first is a plain statement of fact; nobody could quarrel with it, but neither is anybody likely to be influenced by it. The second is also, to all appearances, a statement of fact: the fairly sensible reader says, "Yes, I suppose you will," and within a week or two he's talking about achieving higher densities himself. But if its meaning had been put into unloaded words—i.e. "... you will get a higher density and that will be something to be proud of," his reaction might well have been "Will it? Why will it? It won't." It was just half a dozen such words, judiciously slipped in here and there, that transformed *The Density of Residential Areas* from a really first-rate technical manual into the most influential policy document ever issued by the Ministry of Housing and Local Government.

### FIRST CATCH YOUR WORD

One of major difficulties in conveying information and ideas through the written word is that words have a life of their own. It's rather like Alice in Wonderland trying to play croquet with a live hedgehog for a ball and a live flamingo for a mallet. This difficulty becomes a total impossibility if we try to kid ourselves that the words we use are inert tools, constant in value, neither affecting nor affected by the course of events. We cannot begin to master their use until we recognise the power they wield over us. Because we apply one word, "planning," to what a planning officer does, we tend to assume that we are talking about one thing, whereas "health" and "education," for example, describe two distinct things. But when the province of the planning officer was extended from the housing estate to the country, it was idle to pretend that the change in his functions could be represented by extending their name from "town planning" to "town and country planning." Town planning, or civic design and development, is a job which has nothing in common with town and country planning, or land-use control, except that both are concerned with land, as health and education are both concerned with people. Civic design is an extension of architecture and calls for the talents,

training and temperament of a creative artist. Land-use control is that branch of applied economics which deals with the allocation among competing uses of the scarce resources (land, labour and capital) involved in development. Any problem that turns on the existence of conflicting claims for limited resources is an economic problem, regardless of whether or not the values at stake are material values expressible in monetary terms, and its solution calls for the intellectual qualities, training and attitude of mind of the professional economist. In short, the job of the civic designer and land-use controller overlap much less, and are much more difficult to combine, than those of the Director of Education and Medical Officer of Health.

### REGIONAL "RAKES PROGRESS"

"Regional," in this context, is another word with an interesting, if deplorable, life history—rather like the Rake's Progress. Before the war it had great promise and prestige. Regions like Tyneside, Merseyside, the Clyde Valley, and the area within twenty-odd miles of Manchester were becoming increasingly conscious of their identity and growing community of interests. The regional basis was commending itself as the right and proper basis for many public activities besides planning. When war threatened, someone in the Home Office who recognised the power of words decided to cash in on this prestige. It was necessary to provide for the exercise of the powers of the national government from a number of centres in case communications with London were cut. The units into which the country was divided for this purpose were, in every previously accepted sense of the word, provinces; but "provincial" was a word of low prestige. And so it was decided to use (or usurp) the prestige of the word "regional." When the central government found it could not continue to carry on from London, the regional commissioners had to be given something to do, and inevitably that entailed encroaching on the sphere of local government. When there was something to be opened, the Regional Commissioner opened it; the Lord Mayor only moved the vote of thanks, and the Lady Mayoress got the second-best bouquet. The result is that regionalism means one thing only to any wartime councillor—interference from Whitehall. He cannot for five minutes conceive of it as the reorganization of elective local self-governing authorities into units capable of doing a worth-while job. This degeneration of the word "regional" is now the main obstacle to local government reform. And I verily believe that unless the word can be rehabilitated before the wartime generation of councillors has died out this country's tradition of local democracy will in fifty years' time have joined the guilds and livery companies in the limbo of picturesque survivals. The only functions left to local government will be those which the Ministry considers too parochial to bother with itself, like side-street lighting and national parks. The prospect of rehabilitation is bleak, for when an international planning conference was held at Bedford College last year, the Home Office completed its corruption and debasement of the word. "Regional," in the planning context, is now just another dirty epithet, meaning communist.

Publicity, of course, costs money. So do motor vehicles and telephones. But local authorities do not, on that account, still regard the use of horseless carriages as incompatible with civic dignity; nor does the Treasury still insist that the Ministry of Housing and Local Government should continue to rely exclusively upon the well-tried pigeon post. In these days, indeed, publicity is a much more reliable investment than either motor transport or the telephone service. You get what you pay for and you pay for what you get. When the makers of a new detergent recently spent nearly one

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million pounds on the first five months of their major launching campaign they knew almost exactly how many housewives would become aware of the existence of their product and be persuaded to give it a trial. They spent that amount because they knew that more was unlikely to bring in a worthwhile amount of extra business, and that to spend less would probably mean a more than corresponding amount of business lost.

A few years ago the Ministry decided to abandon Lord Silkin's scheme for getting rid of the compensation-betterment problem—at what cost I cannot guess in work wasted, in the collection and repayment of development charges, to say nothing of present frustrations and perils ahead. Nobody pretended it was a bad scheme: Mr. Macmillan himself paid tribute in his White Paper to the soundness of its conception and the beauty of its logic. It was abandoned expressly because it was unpopular; it was unpopular because it was misunderstood; and that, so the White Paper implied, was just one of those things—an act of God, a regrettable misfortune, entirely unconnected with the shameful fact that the Government had never thought of attempting to give the scheme a thousandth part of the publicity required to create for it a favourable climate of opinion.

I don't know how much the necessary publicity would have cost, but any substantial advertising agency could have found out, and would have done so without charge if it thought the Government meant business. On the one hand, there was no need for comprehensive coverage: the required audience was a well-defined section of the community, easily accessible through a limited number of relatively inexpensive media. Moreover, it was an interested audience, predisposed to be attentive and receptive beyond advertising agent's wildest pipe-dream: many of its members actually went to the Stationery Office and paid money to find out what the Act was all about. On the other hand, the message to be delivered would have had to be broken down into a series of simple concepts, presented first singly and then in combination. I am not suggesting of course, that such a campaign would have enabled the average landowner to grasp intellectually the principles of the 1947 Act. There was no earthly reason why it should, any more than the average consumer of detergents needs to understand the chemistry of hydrocarbons. All that was needed was to plant a few positive ideas in the virgin soil of public opinion—not just in the one small corner where serious newspapers are intelligently read, but uniformly over the whole field—instead of letting it lie fallow year after year, until chance seedlings from wind-blown weeds had sprouted, reproduced themselves, taken possession and run riot, choking the life out of whatever came up from the belated scattering of a few seeds of truth.

#### NATIONAL PUBLICITY OFFICE

It might, I suppose, have cost anything up to a million to do the job properly. But what of it? What if it had cost two millions, or even five? The Labour Government was quite happy to fork out £300 millions in compensation, and the only serious criticism of this figure from the Conservative Opposition was that it ought to have been fifty million more. I very much doubt if Lord Silkin himself made it 300 rather than 295 or 305 for any better reason than that he preferred the rounder figure.

What is needed is a National Publicity Office, which would serve all Ministries, as the Stationery Office does, and whose research facilities and technical "know-how" would also be at the service of local authorities and other public bodies. I do not, I hasten to add, mean a glorified Central Office of Information. If there were

any risk of that it would be far better to use the commercial advertising agencies. It should be the first rule of the agency I propose that its staff should be forbidden to have any sort of contact with the news and editorial side of the press. The more contact they had with the advertising staffs of newspapers, of course, the better: but I believe that other media, especially television, would often prove more effective channels for the kind of message they had to put over.

I am well aware that the publicity and press relations work of the Ministry of Housing and Local Government is combined in one section—with its derisory budget of £30,000 odd a year, it has to be—and that this section does its job superlatively well within the limits its budget imposes: but only because its officers maintain a Jekyll and Hyde distinction in their own minds between their press and publicity functions. I don't for a moment wish to deny that they could do an enormous amount of good if their budget were merely trebled. Every little helps; and in the publicity business, where the law of diminishing returns operates, the first hundred thousand can do a lot more good than the marginal hundred thousand. Nor am I suggesting that any additional burden should be imposed on taxpayers or ratepayers. What I do want to suggest is that the Treasury and the local authorities realized what can be done with the help of words and images, and what cannot be done without it, and how much of the millions they do spend is inevitably wasted for lack of it, then the amount allocated to publicity in their estimates, taking the present total as given, would be not three times, but thirty times, what it is now.

#### SUPERTOPIA AND BEYOND

Up to this point I have confined myself to the respectable ways of making friends and influencing people. But it is only fair to point out that cruder tactics yield more impressive results. The art of swaying public opinion by the use of the written word has been revolutionized in recent years by the momentous discovery, for which credit is due to the late Adolf Hitler, that if a lie is big enough, and told often enough, it's surprising who you'll get to believe it. The classic example in the planning field is the NFU's fabulous 50,000 acres a year lost to agriculture. The technique is simple: you just think of a number, double it, and go on repeating it, ignoring official denials and inquiries about its source. Most people, including many who ought to know better, will take it on trust. Eventually, of course, it will be challenged, exposed, conclusively disproved. But it will go on determining policy, because by that time it will have become part of the national folk-lore—one of things that every schoolboy knows. It may, in the long run, be discredited in the eyes of reasonably sensible planners, but not before the policy it set in train has acquired a self-sustaining momentum. And if, in the end, its persistence is made embarrassing by some such event as a change in the compensation law, you have only to stop repeating it and let it die a natural death.

But in the use of words, as in aeronautics, technology never stands still. Hitler's invention of the big lie, incessantly reiterated, is already as obsolete as the Messerschmidt. We now know that if you want to fool all the people all the time—public, politicians and planners alike—you have to break right through the fact barrier. Then, for all practical purposes, you are free of restraint, immune to challenge, beyond the reach of question or criticism. Tell a reasonably sensible chap that in fifty years' time we shall have used up nearly a fifth of our countryside, and he is apt to be sceptical. You are talking in terms of facts that he can check and factual assumptions that he can query.

But break through the fact barrier—let him read, in *Outrage*, that "We are obliterating the whole countryside"—and he says "By Jove, you know, that's absolutely true."

The essence of this technique is twofold: first exaggerate all your quantitative statements to such an outrageous degree that factual criticism becomes pointless; secondly, mix sense and nonsense up together behind a dazzling screen of verbal fireworks, so that if the sense is taken in the nonsense will be swallowed with it. But, whatever you do, stay on the far side of the fact barrier. I once thought I had caught one of the *Architectural Review* boys on this side. We were taking part in a broadcast discussion, and in the course of a typical display of Supertopian pyrotechnics he referred to Harlow as a wilderness of *semi-detached* cottages. Here at last, I thought, was something one could get hold of and nail down. I didn't know off-hand how many of Harlow's houses were semi-detached, but I was quite sure it was less than 5 per cent. When I said so, he nipped back through the fact barrier in a trice. "That's not the point," he explained wearily. "The point is they *look* as if they were semi-detached."

*Outrage* marks a great forward leap in the technique of persuasion by the written word. But the spirit of Man is ever reaching out for new obstacles to overcome, for new bounds to break. After the sound barrier, the heat barrier; after the fact barrier, the logic barrier. Already there are signs that this, too, may fall. So far, it is true, persuasion by pure unreason has been achieved, in the realms of planning and architecture, only through the spoken word. Whether this triumph can ever be reproduced in cold print may be open to doubt. Of its potency there can, I think, be no question; but it is not a skill that can be acquired by study or deliberately exercised. Its practitioner must be utterly sincere in his conviction that he is a genius—an omnipotent genius—and at the same time that he and the common people are the victims of a sinister conspiracy. He must be, in a word, insane. For the avoidance of doubt I hasten to explain that the archetype I have in mind has no connection with *The Architectural Review*.

#### ABUSE OF VIRTUOSITY

I hope it will not be inferred from all this that I am in any sense an enemy of progress in the technology of verbal persuasion—that I cavil at the Ministry's use of loaded words or condemn the superfactual flights of the Supertopians. Nothing could be further from the truth. My admiration for the technical virtuosity of both *Outrage* and *The Density of Residential Areas* is unbounded; it is only the abuse of that virtuosity for misguided purposes that I deplore. I wholeheartedly agree with Mr. Ian Nairn that there is an awful lot of unnecessary visual mess littering our streets and countryside, and I am quite sure he is right in thinking that the only way to get it cleaned up is to rub people's noses in it; otherwise it will continue to go unnoticed. If *Outrage* had confined itself to that laudable purpose I should have had nothing but praise for it. My only regret is that this purpose has been obscured and in part defeated by his insistence on mixing up his onslaught on aesthetic criminality and negligence with an utterly irrelevant diatribe against dispersal and open development. The two objects of his invective have, of course, nothing whatever to do with each other. By using the same technique of visual juxtaposition and verbal sleight-of-hand, I would undertake, for a sufficient fee, to prove to the satisfaction of half a million *News Chronicle* readers that vice, gangsterism, and all the other social evils of our day were not only associated with, but caused by, the popularity of the art of ballet.



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*Maurice Lee, who attended the recent Congress of the International Federation of Landscape Architects, has written the following report.*

## FIFTH CONGRESS

### *The International Federation of Landscape Architects*

The Fifth Biennial Congress of IFLA (the International Federation of Landscape Architects) arranged by the Swiss Federation of Landscape Architects (BSG) was held in Zurich from August 19 to 24, and attended by over two hundred delegates from twenty-five nations. The Congress started with an inaugural session under the presidency of Walter Leder, followed by a banquet at the Congress House in the evening. The programme for the following three days included lecture sessions in the mornings at which fifteen papers were read on aspects of urban, industrial, agrarian and natural landscape. The afternoons were occupied by conducted excursions in the Zurich neighbourhood to housing estates, open-air swimming pools, schools, churches, hospitals and industrial plants landscaped by Swiss designers. Several examples were included of the work of the late Gustav Ammann who died early this year, whose sensitive use of plant material was seen possibly at its best in the grounds of the City Hospital on the Waidberg.

On one afternoon the Congress was entertained by the city of Winterthur to a well selected tour of industrial installations which included Walter Leder's restrained and simple landscaping of their elegant power station, followed by a tour of the town's parks and a civic reception.

An outstanding event of the Congress

which was both a statement of its aims and its summing-up, was the public exhibition "Landscape in Modern Life" arranged in the Zurich Helmhaus by P. Zbinden the City Parks Officer and the Congress Committee. Here a large proportion of the work submitted to the Congress by the countries participating was used to illustrate the main themes of the exhibition. These themes were outlined in a small handbook of commendable layout and typography, containing an introductory essay which made a plea for universality of outlook and approach in the planning and use of land in the modern world. It quoted the foreword by Bernard Baruch to "Road to Survival" by William Vogt, in which he observed that man's practice throughout history had been to exploit and impoverish the land for his own immediate gain and seldom to regard himself as merely an element in the landscape which imposed upon him the responsibility to abide by and maintain its laws. Only thus was it possible for him and his successors to establish a favourable biophysical relationship with the soil and the whole universe to ensure his own existence and to maintain a rising standard of living.

It was further argued in this essay that the four aspects of landscape research, landscape planning, landscape design and landscape use were the corner pillars of human existence, and that a vast amount of research remained to be done in order to discover more clearly the nature of the underlying order and laws of landscape evolution based upon the elements of soil, water, atmosphere and living organisms, including man.

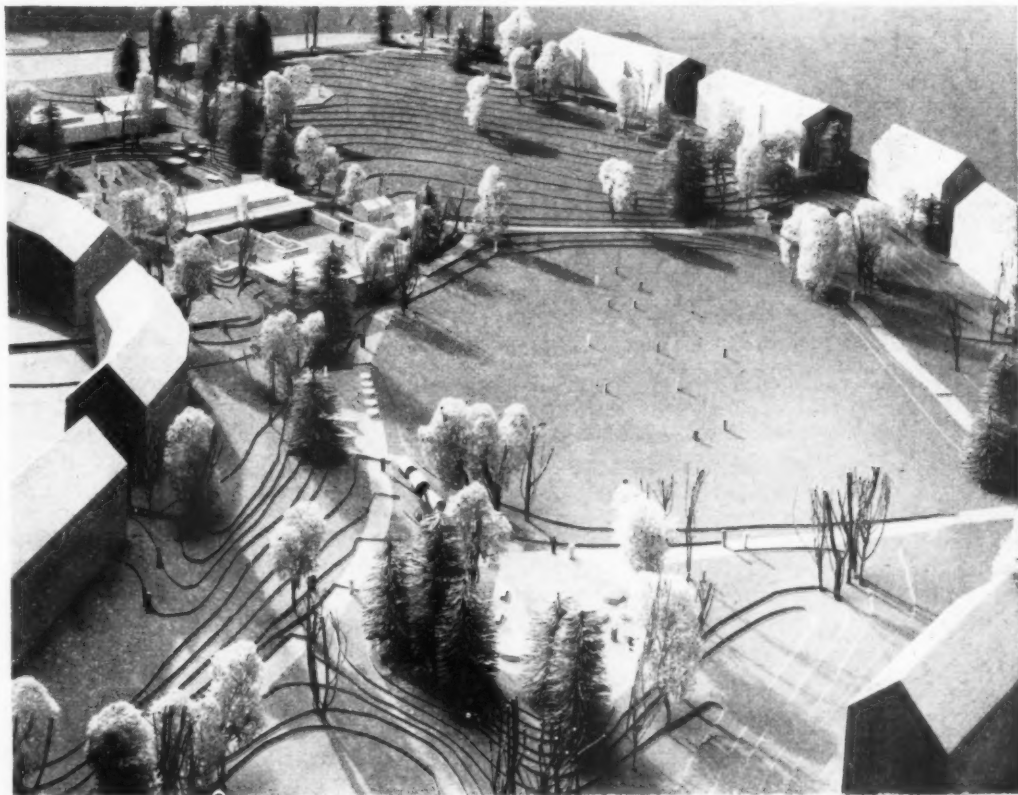
The first room of the exhibition illustrated with photographs and diagrams some of the directions which research should take. Planning based upon detailed landscape survey was illustrated by large charts of the Zurich development plan. The rest of the exhibition dealt with landscape design and evolution in sections devoted to urban, industrial, agrarian and natural landscape.

The urban section stressed the necessity of providing and maintaining green areas within the city, residential and trade zones and public amenities. Here England was strongly represented with contributions from the New Towns submitted by Sylvia Crowe, Sheila Hayward and Derek Lovejoy, and some photographs of a corner of Hammersmith Park designed by the LCC Parks Department. Photographs of a housing area at Torsvik, Lidingö near Stockholm, by Sven Hermelin and Inger Wedborn showed a sensitive articulation of space between buildings with a maturity of planting which could only be achieved by the adaptation of existing woodland (see plan and photo, on page 409). A project for an estate at Buchegg, Zurich, by Zbinden and Trachsel, designed with a great variety of play spaces contained within clump planting was exhibited as a model (see below).

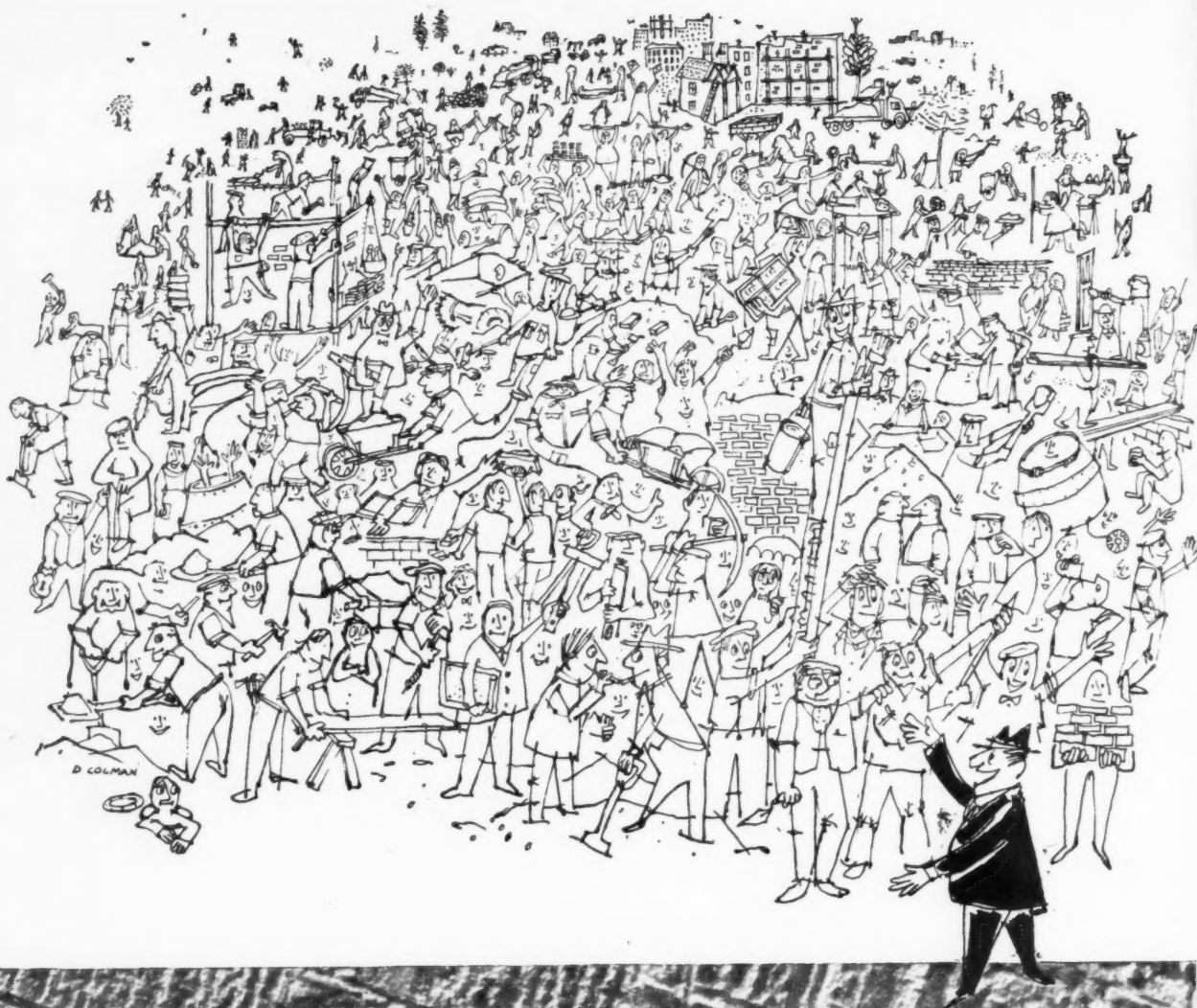
The industrial section dealt chiefly with remedying the disturbing and destructive effects upon the established landscape of mining and industrial activity. Here the German contribution was strong. It was reassuring too to find a panel by D. R. Harper showing the progress of rehabilitation of land scarred by the surface mining of iron ore in Northamptonshire.

The agrarian section dealt with such problems as the effects of mechanised farming upon the landscape, the treatment of rural housing areas, and the design of traffic routes and termini within the agrarian scene. Here an illustration of the unassuming and sympathetic landscaping of a German autobahn within its surroundings was in marked contrast to much of the well-meaning but ineffectual shrub planting of many of our own dual carriageways, planting which so often alienates where it sets out to blend (see photo on page 409).

In the section on natural landscape the problem of active preservation of the constantly decreasing areas of natural landscape was discussed in relation to their use for research and as a social amenity for holidaymakers.



*Project for an estate at Buchegg, Zurich.*



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Above: "planting which so often alienates where it sets out to please." Right: Lidinze, near Stockholm "a maturity of planting that could only be achieved by the adaptation of existing woodland." Below right is a plan of the area.



This exhibition, which remained open to the public until September 9, was possibly the most comprehensive international exhibition of its kind and it is hoped that when it travels, accommodation will be found for it in this country.

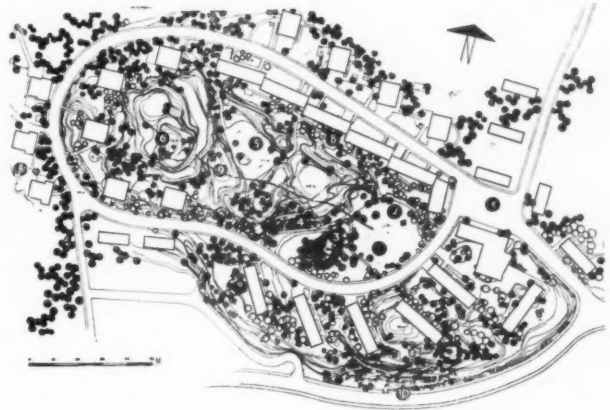
A further selection of the work of members was exhibited in the Federal Institute of Technology.

At the final session of the Congress René Péchère of Belgium assumed the office of President of IFLA for the coming session.

Many delegates continued with the three days of additional excursions to Lucerne, Berne and Geneva before dispersing finally on August 26.

The Swiss Congress Committee deserve considerable praise for the highly efficient way in which every aspect of this most valuable Congress was organised.

The next IFLA Congress will be in Washington, D.C., in 1958.



## PRIMARY SCHOOL

in SOUTH BOLTON GARDENS, LONDON, S. W. 5

Due to errors in calculating the floor area and overall costs, the elemental costs and contract figures supplied to us, and published in last week's AJ (page 389) were incorrect. The correct figures are shown below. This sheet should be attached to the original article in your file.

On pages 389 to 393 the cost analysis should read:—

Cost per sq. ft. of floor area (24,114 sq. ft.)		s. d.		s. d.	
preliminaries	2 4½	glazing	1 8½	kitchen equipment	4½
contingencies	3 3½	internal partitions	1 4½	gym lockers and benches	—
work below ground floor level	11 3½	screens	6	rainwater disposal	1½
external walls and facings	7½	w.c. doors and partitions	6½	plumbing internal, sanitary fittings	1 11
frame or load bearing element	6 1½	internal doors	8½	heating installation	7 4½
upper floor construction	9	ironmongery to internal doors	6½	gas installation	½
staircases	1 0	floor finishes	3 7½	drainage	2 4½
roof construction	3 2½	ceiling finishes including acoustic treatment	4 2½	kitchen ventilation	—
roof lights	1½	wall finish	7½	electrical installation	3 1
windows	4 9½	decorations	1 8½	paved areas	3 9½
external doors	2½	cloakroom fittings	8½	Net total cost per sq. ft. of floor area	70 0½
		other fittings	11	external works	14 6½
				gross cost	84 7

On page 394 the cost details should read:—

		Tender		Contract	
		£	s. d.	£	s. d.
Number of places	560	84,482	0 0	82,414	0 0
Floor area (sq. ft.)	24,114	150	17 2½	147	3 4½
No. of sq. ft. per place	43	17,505	0 0	12,359	0 0
		101,987	0 0	94,773	0 0
		182	2 4½	169	4 9





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## INFORMATION CENTRE

*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.*

### 6.55 planning: social and recreational GARDEN DESIGN

*The Earth is My Canvas.* Percy S. Cane. (Methuen & Co. 42s.)

This is a well produced book of descriptions of some thirty private and public gardens carried out by the author. It is illustrated by plans, perspective drawings and some excellent photographs taken by the firm of R. W. Luckins Ltd. The text consists largely of descriptive passages in which the theme is mainly about the values, of colour and form, of one group of plants seen in contrast with another. These are of interest and indeed value to readers with a sufficiently wide knowledge of plants to appreciate the sensitivity displayed by the designer and to students wishing to learn something about planting design.

Gardens are particularly difficult to describe except visually by photography and descriptively by detailed plans. One wishes that more photographs had been included, some planting plans, and less text. Mr. Percy Cane has now been designing gardens for some considerable time. He has over the years evolved a style which is as distinctive and personal, though of course different in context, as was the "gardenesque" style of John Claudius Loudon in the 19th century, with which Mr. Cane's work has some affinities. Just as J. C. Loudon translated the 18th century landscape park into a vernacular suitable for use in the new villa gardens of the 19th century so Mr. Cane has evolved, in his time, a design vocabulary admirably suited to the requirements of the "upper income brackets" of our own period. This kind of garden was first evolved when garden

designers were concerned with the claims and counterclaims of those arguing the respective merits of the "formal" or "informal" style and is a compromise between the two. It contains "formal" elements linked by walks or "informal" glades planted with trees and flowering shrubs. As can be seen in the photographs in this book and as those familiar with his work know, Mr. Cane's gardens display first rate craftsmanship, sensitive planting, good proportions. There is much to be learned about craftsmanship and planting from these gardens by professional garden designers working today.

### 18.182 construction: theory SHELL ROOFS

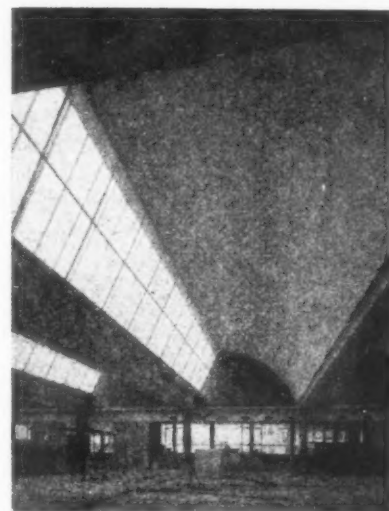
*Prestressed Northlight Shell Roofs.* (The Builder, 1.6.56, pp. 652-4). Problems of design overcome in a large roof area of a Swiss factory, of interest to architects and engineers.

A factory at Langendorf in Switzerland is nearing completion. An interesting feature is its roof, which consists of 12 north light shells surrounded by a flat slab. The shells are of 78 ft. span and, in order to suit the construction procedure employed, had to be built separately and quite independent of one another. The deformations due to the prestress (occurring at widely different times) precluded the provision of any connection between the roofs. It was therefore decided to design the shells without any supporting members in the plane of the glazing. Being probably the first of their kind at a span of 78 ft. the designers checked their theory by using a plexiglass model to a scale of 1:30. The curved shell was bent to its correct shape at a high temperature between two steel plates having the exact curvature. The other parts were glued into place. Vertical loads were applied in the usual manner, the prestress being simulated by a system of levers which applied a closely controlled compressive force to the shell. The tests showed that the theory was accurate to 10 per cent., and this was further confirmed by loading tests on the actual shells.

### 26.123 services and equipment: miscellaneous ELECTRICAL CONDUIT

*Non-ferrous Conduit and Conduit Fittings (Aluminium and Zinc Alloy).* BS. 2706: 1956. (BSI, 6s.)

This is a new Standard which has been based on BS. 31:1940 which is concerned with steel conduit. Not only as regards the format and the ground covered, but also (architects will be relieved to hear) as regards sizes: so that steel and non-ferrous conduit can be made to fit together. As though by way of a warning, the compilers

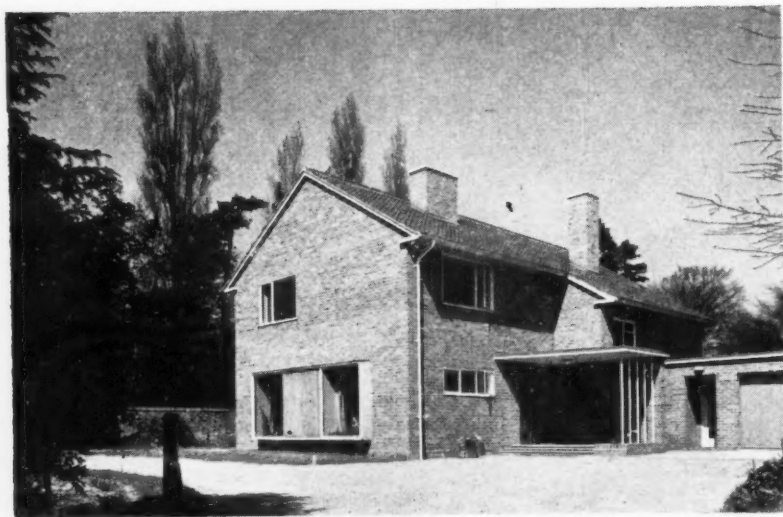


*A shell roof in Switzerland without supports in the glazing plane.*

of the Standard append the recommendations for the use of non-ferrous conduit given in the Code of Practice CP. 321 *Electrical Installations*, and these give, among other useful pieces of information, advice on what to do when steel and alloy meet. Another appendix which will be much appreciated by architects gives a guide to the correct names of the fourteen different kinds of box the trade uses.

### 27.16 furniture: fittings CASTORS

*Castors. Part 1. Castors for Hospital Equipment.* BS. 2099: Part 1: 1956. (BSI, 3s.) This is the first of three new Standards on castors, the main object of which is to ensure that if you buy a castor off the peg it will fit your socket. The other two will deal with castors for domestic and office furniture. Of interest to the trade. Architects may nod agreement and pass on.



## ARCHITECT'S OWN HOUSE

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## technical section

## COST STUDY

## Domestic oil heating

In the JOURNAL for October 6 last year, we published an article on domestic oil heating. At this time, rising solid fuel costs, and the improved supply of oil had awakened interest in oil for small installations, so we invited two heating engineers, L. J. Fowler and G. T. K. Dean to discuss the possibilities and technical problems of the method.\* Their conclusion was that while oil possessed many intrinsic merits, these would be fully realized only with the further development of appliances designed specifically for oil burners.

Since that time the number of such appliances available has increased. It is now easier for the architect to make fair comparisons with other methods and this week we print a study made by John Eastwick-Field in which he compared, for an actual house the running costs of oil, anthracite, coke and gas. Gas comes out highest, and oil lowest in annual running costs. For purposes of classification this article should be filed under 23—Heating and Ventilation.

\* See AJ for October 6, 1955, page 469, "The use of oil for domestic heating."

## Fuel Price

The present price of 35 seconds viscosity fuel is 1s. 2½d.\* It is expected that this price will be increased as a deterrent to the use of fuel oil since there is already difficulty in selling petrol, paraffin, etc., whose production is consequent upon that of fuel oil.

## Storage Tanks

These should preferably be within sight of the delivering tanker, to prevent overfilling. If they are out of sight they must be fitted with an alarm. Standard sizes of 650 gallon tanks are:

- 7 ft. × 4 ft. 6 in.
- 6 ft. × 4 ft. × 4 ft.
- 6 ft. × 4 ft. × 4 ft. 6 in.

**Vents:** Short vents are acceptable. There is a slight smell when filling because the vapour is heavier than air.

\* October 1955

**Level of tank:** It is preferable that the tank should be at least 2 ft. above the burner since a tank below the burner involves (1) double pipe runs; (2) the burner pump having to pump fuel as well as acting as an air pump, and (3) probably additional installation costs of the tank.

**Catchpit and drainage:** The householder's Insurance Company should be consulted as to whether this is necessary or not. If it is, then it must be equal to the tank capacity plus 10 per cent. (LCC have no provisions). A fire valve may also have to be fitted at the entrance to the boiler room. If a catchpit is provided below ground and the tank is enclosed in a chamber, there must be a drain and valve (or sump and sludge pump) since some sludge and water need to be drained from the tank before each delivery. The catchpit will have to be drained perhaps weekly if much water infiltrates into the chamber.

## Burners

**Semi-Automatic:** Burner and tank together may cost £100-£120 more than solid fuel appliances of comparable output. They will require lighting by hand, so that although an automatic clock may be used to cut down heat output, it is impracticable to have them turned off altogether, e.g. at night. The burners work on a vaporizing principle, and the vaporizing pot will need to be cleaned weekly by the owners. Gravity feed is essential—i.e., the bottom of the fuel tank must be 2 ft. above the burner.

**Automatic:** The cost of these may be up to £200 more than solid fuel boilers of comparable output. These figures also include provision of the fuel tank and piping, but not of builders' work in connection with installation. Gravity feed is not essential, but is always desirable whenever possible, for the reasons given under "Level of tank." Automatic burners may be switched on and off at will by a time clock; but there is some chance of the burner failing to light if it has grown cold and oil clogs the jet.

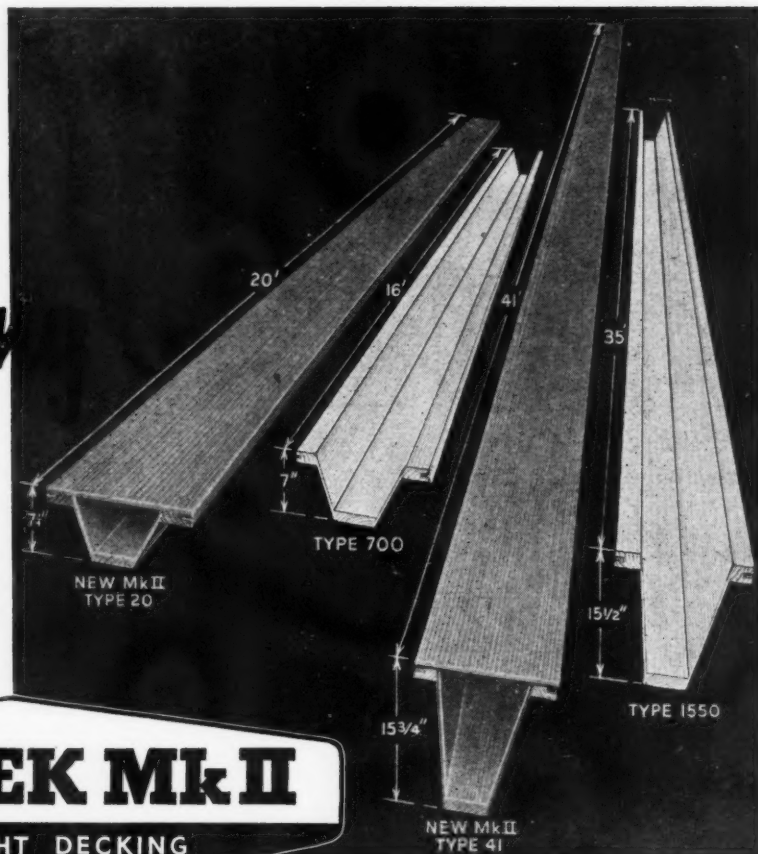
**Efficiency:** A small boiler running continuously to full capacity is more efficient than a larger boiler running only intermittently, since in the latter heat built up when the burner is in operation, e.g. in flues and pipe runs, is dissipated when it is switched off and must then be built up again. For this reason it might be wasteful to run the burner in the summer for heating only small quantities of water, although the temperature difference between the outside air and water in pipes is very much less than in winter and the loss is therefore not so great. The average efficiency of a burner in operation, we are told, is found in practice to be between 65-70 per cent. (theoretical figures given are 75-80 per cent., and for comparison the theoretical efficiency of a Janitor solid fuel boiler is more likely to be 70 per cent.). Owing to the different shape of the flame, etc., an oil burner and boiler designed as a unit is more efficient (at least initially, when the flue ways are clean) than a solid fuel boiler converted to oil firing.

**Noise and Smell:** The noise made by a burner may prove disturbing, and is always noticeable unless the surrounding

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### LOAD/SPAN TABLE FOR TROFDEK Mk. II

MAXIMUM UNIFORMLY DISTRIBUTED LOADS IN LBS. PER SQ. FT. (DESIGN LOAD = DEAD + LIVE LOAD)

Type	Depth Approx.	Wt. lbs. per sq. foot	Effective Span in Feet (Centre to Centre supports)																																					
			10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'	23'	24'	25'	26'	27'	28'	29'	30'	31'	32'	33'	34'	35'	36'	37'	38'	39'	40'	41'						
14	7½"	3.0	32	30	28	26	25																																	
20	7½"	3.5				74	59	48	40	33	28	26	25																											
24	9½"	3.75						77	68	57	48	40	35	30	27	26	25																							
28	11¾"	4.0										76	65	56	49	43	37	33	29	26	25																			
35	15¾"	4.75																	63	56	50	45	41	37	34	32	28	25												
41	*15¾"	5.25																										41	37	34	31	29	27	26	25					

\* Built up to give two-way falls

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## technical section

noise level is high. It is suggested that the burner be installed in a self contained boiler room. There is always a slight smell around the boiler although it is barely perceptible.

**Air Intake:** The air for the burner can come either from outside by ducting to the boiler house (efficient operation of the boiler requires a duct of 3 to 4 times the superficial cross sectional area of the flue) or from air already in the building which will be already warmed. With the latter the operation of the burner itself will be theoretically more efficient than with the former, since the air is preheated, but in either event the same amount of cold air will ultimately need to be heated either at the burner or in the rooms (since the air which passes up the flue must eventually be replaced one way or another), and the same amount of fuel will therefore be burnt.

## Maintenance and Repair

Semi-Automatic burners require weekly decarbonizing of the vaporizing unit whereas Automatic burner jets will need cleaning at anything between 1-3 monthly intervals. These are finely adjusted mechanisms, and inefficient maintenance will lead to choking, failure to burn, or at least a smoking chimney. The makers will provide maintenance at intervals, *e.g.* six monthly, but charge a service fee, perhaps £3 a visit. With new installations there will be some initial trouble with blockages of the jet by metal particles lying in the burner. It should be remembered that in the event of a breakdown, most likely at a time of heavy use in cold weather, there will be no means of providing heat until the makers can send repairers who will probably be very busy; whereas the possibility of a breakdown with a solid fuel boiler is very remote.

"Economizers" can be installed between the burner and the flue, but with efficient burners they lower the flue gas temperature and cause condensation and with other boilers their effect is probably not sufficient to warrant the extra work involved in "decarbonizing" them.

## Chimney Flue

This should be lined with moler bricks both because of the relatively high temperatures reached with continuous burning and because of the risk of deterioration from condensation when the burners are operating intermittently.

## Conclusions

The most desirable oil fired installation would consist of an automatic burner fed from a fuel tank of at least 600 galls. capacity at a level at least 2 ft. above the burner, and visible from the tanker delivery point.

Whilst an oil fired installation has the great advantage that it can be controlled automatically so long as it is in working order, it is evident that there are difficulties arising from an attempt to put such an installation into an existing house where accommodation for it is very limited.

For calculations of the yearly fuel costs shown opposite, see page 413.

## SUMMARY OF HEAT LOSSES PER HOUR

ROOM	°F.	Cu. Ft.	BTU's/hr.
<i>Basement</i>			
Kitchen	50	1,100	1,200
Dining Room	60	2,040	7,000
<i>Ground Floor</i>			
Study	60	1,700	5,200
Living Room	60	2,580	9,000
Hall and Stairs	55	3,000	7,500
Bathroom and Towel Rails	—	—	4,000
Workshop Coil			1,000
Total Heating load:			37,900
35 gallon calorifier (35 galls heated through 100°F. per day) in 2 hours			17,500
			55,400
Plus pipe losses 20 per cent.			11,000
			66,400
Boiler Margin 20 per cent.			13,280
			79,680
Proposed Boiler output			80,000

## COSTS BASED ON THE FOLLOWING ASSUMPTIONS

Winter heating period: 20 weeks.

Space heating and hot water combined with room temperatures given in "Summary of Heat Losses Per Hour" and 35 galls. of water heated through 100°F. per day. Summer heating period: 32 weeks. Hot water only, *i.e.*, 35 gallons of water heated through 100°F. once per day. (If water heated by electricity towel rails will not be heated).

Relative fuel costs (at 5th October, 1955).

Oil (35 sec.)	1s. 2½ d. per gallon (in 500 gallon deliveries and over)
Coke	£8 1s. 6d. per ton.
Anthracite	£9 11s. 0d. per ton (top grade).
Electricity	2d. per unit flat rate for power. Lighting 5½d. per unit (or alternatively, £8 yr. plus 1·10d. per unit. This basis is to be altered at the end of March quarter to a basis of sq. ft. instead of No. of rooms).
Gas	1s. 9·85 d. per therm.

Rates per 100,000 BTU'S  
(at 100% efficiency).

Oil	8·3d.
Gas	21·85
Electricity	58·8d.
Coke	7·5d.
Anthracite	7·3d.

## Comparative Calorific Values

Oil	170,000 BTU's per gall.
Coke	11,500 " per lb.
Anthracite	14,000 " per lb.
Electricity	3,412 " per unit
Gas	500 " per cu. ft.

## Relative efficiencies of conversion (per cent.)

Oil	70
Coke	65
Anthracite	70
Electricity	100 (immersion heater)
Gas	75

It is assumed for solid fuel boilers that:

60% of rated output used for 14 of the 24 hours.

40% of rated output used for 10 of the 24 hours.

For oil fuel burners the figures are respectively 60% for 14 hours and 20% for 10 hours.

## APPROXIMATE CAPITAL COSTS

Heating and Hot Water Service	Pipe work, etc.	Boiler	Boiler Installation	Total
Gravity fed solid fuel anthracite boiler	350	120	20	£490
Oil fired installation with tank in forecourt	350	206	300	£856

## SUMMARY OF YEARLY FUEL COSTS (excl. summer electric water heating)

	Oil	Anthracite	Coke	Gas
WINTER	£36 0s. 0d.	£36 6s. 8d.	£40 17s. 0d.	£88 0s. 0d.
SUMMER	£4 15s. 0d.	£14 18s. 4d.	£14 11s. 0d.	£11 17s. 0d.
	£40 15s. 0d.	£51 5s. 0d.	£55 8s. 0d.	£99 17s. 0d.

**technical section**

**ANTICIPATED FUEL CONSUMPTION AND COSTS****OIL****Winter****Heating**

Net heat losses excluding h.w. = 38,000  
 Pipe losses at 20% = 7,600

Total = 45,600 BTUs.

Hourly consumption at 70% boiler efficiency  $\frac{45,600 \times 10}{170,000 \times 7} = 3.23$  galls.

Daily consumption for 10 hr. at 20% load factor  $\frac{45,600 \times 10 \times 10 \times 20}{170,000 \times 7 \times 100} = 0.77$  galls.

Total daily consumption = 4.0 galls.  
 Weekly consumption = 28.0 galls.  
 20-week heating period = 560 galls.

**Hot Water**

35 galls. per day heated through 100° F.:

BTUs required = 35,000 BTUs per day  
 Pipe, cylinder, 20% = 7,000 BTUs

Total = 42,000 BTUs.

Daily consumption at 70% boiler efficiency  $\frac{42,000 \times 10}{170,000 \times 7} = 0.36$  galls.

Weekly consumption = 2.52 galls.  
 20-week winter period = 50 galls.

Total winter consumption, heating and hot water = 610 galls.

**Summer****Hot Water**

Hot water for 32-week period at 2.52 galls. per week = 80.6 galls.  
 Winter expenditure is 610 galls. at 1s. 2½d. = £36 0s. 0d.  
 Summer expenditure is 80.6 galls. at 1s. 2½d. = £4 15s. 0d.

**ANTHRACITE****Winter****Heating**

Hourly consumption at 70% boiler efficiency  $\frac{45,600 \times 10}{14,000 \times 7} = 4.65$  lb.

Daily consumption for 14 hr. at 60% load factor  $\frac{45,600 \times 10 \times 14 \times 60}{14,000 \times 7 \times 100} = 39$  lb.

Daily consumption for 10 hr. 40% load factor  $\frac{45,600 \times 10 \times 10 \times 40}{14,000 \times 7 \times 100} = 19$  lb.

Total daily consumption = 58 lb.  
 Weekly consumption = 406 lb.  
 20-week heating period = 8,120 lb.

**Hot Water**

Daily consumption  $\frac{42,000 \times 10}{14,000 \times 7} = 4.3$  lb.  
 Weekly consumption = 30 lb.  
 20-week winter period = 600 lb.

Total winter consumption, heating and hot water = 8,720 lb.

**Summer****Hot Water**

Daily consumption to heat water in 1 hr.  $\frac{42,000 \times 10}{14,000 \times 7} = 4.3$  lb.

Plus consumption at minimum burning rate for 23 hr. = 11.5 lb.  
 Total daily consumption = 16 lb.  
 Weekly consumption = 112 lb.  
 32-week period at 112 lb. per week = 3,580 lb.

Winter expenditure is 8,720 lb. at 1d. per lb. = £36 6s. 8d.  
 Summer expenditure is 3,580 lb. at 1d. per lb. = £14 18s. 4d.  
 Summer expenditure with electricity (minimum) = £16 0s. 0d.

**GAS****Winter****Heating**

Hourly consumption  $\frac{45,600 \times 100}{75 \times 500 \text{ (BTU per cu. ft.)}} = 121.6$  cu.ft.

Daily consumption for 14 hr. at 60% load factor  $\frac{45,600 \times 100 \times 14 \times 60}{75 \times 500 \times 160} = 1,025$  cu. ft.

Daily consumption for 10 hr. at 20% load factor (as for oil with automatic shut-off)  $\frac{45,600 \times 100 \times 10 \times 20}{75 \times 500 \times 100} = 245$  cu. ft.

Total daily consumption = 1,270 cu. ft.  
 Weekly consumption = 8,890 cu. ft.  
 20 week heating period = 177,800 cu.ft.

**Hot Water**

Daily consumption  $\frac{42,000 \times 100}{75 \times 500} = 112$  cu. ft.

Weekly consumption = 784 cu. ft.  
 20 week winter period = 15,680 cu. ft.

Total winter consumption heating and hot water = 193,180 cu. ft.

**Summer****Hot Water**

Hot water for 32 week period at 784 cu. ft. per week = 25,100 cu. ft.  
 Winter expenditure 193,180 cu. ft. at 21.85d. per cu. ft. = £88 0s. 0d.

Summer expenditure 25,100 cu. ft. at 21.85d. per cu. ft. = £11 17s. 0d.

**COKE****Winter****Heating**

Hourly consumption  $\frac{45,600 \times 100}{65 \times 11,500} = 6.09$  lb.

Daily consumption for 14 hr. at 60% load factor  $\frac{45,600 \times 100 \times 14 \times 60}{65 \times 11,500 \times 100} = 51$  lb.

Daily consumption for 10 hr. at 40% load factor  $\frac{45,600 \times 100 \times 10 \times 40}{65 \times 11,500 \times 100} = 24$  lb.

Total daily consumption = 75 lb.  
 Weekly consumption = 525 lb.  
 20-week heating period = 10,500 lb.

**Hot Water**

Daily consumption  $\frac{42,000 \times 100}{11,500 \times 65} = 6$  lb.  
 Weekly consumption = 42 lb.  
 20-week winter period = 840 lb.

**Summer****Hot Water**

Theoretical consumption for 32-week period equals 45 lb. per week. But in practice, because the fire must burn continuously and not only when heating water, this figure may increase by three times. Therefore: Consumption for 32-week period at 42 × 3 lb. per week = 4,030 lb.  
 Winter expenditure is 11,340 lb. at 0.865d. per lb. = £40 17s. 0d.  
 Summer expenditure is 4,030 lb. at 0.865d. per lb. = £14 11s. 0d.  
 Summer expenditure with electricity (minimum) = £16 0s. 0d.

**ELECTRICITY****Summer Only**

Hot Water at say 38,000 BTUs per day (loss through cylinder only)

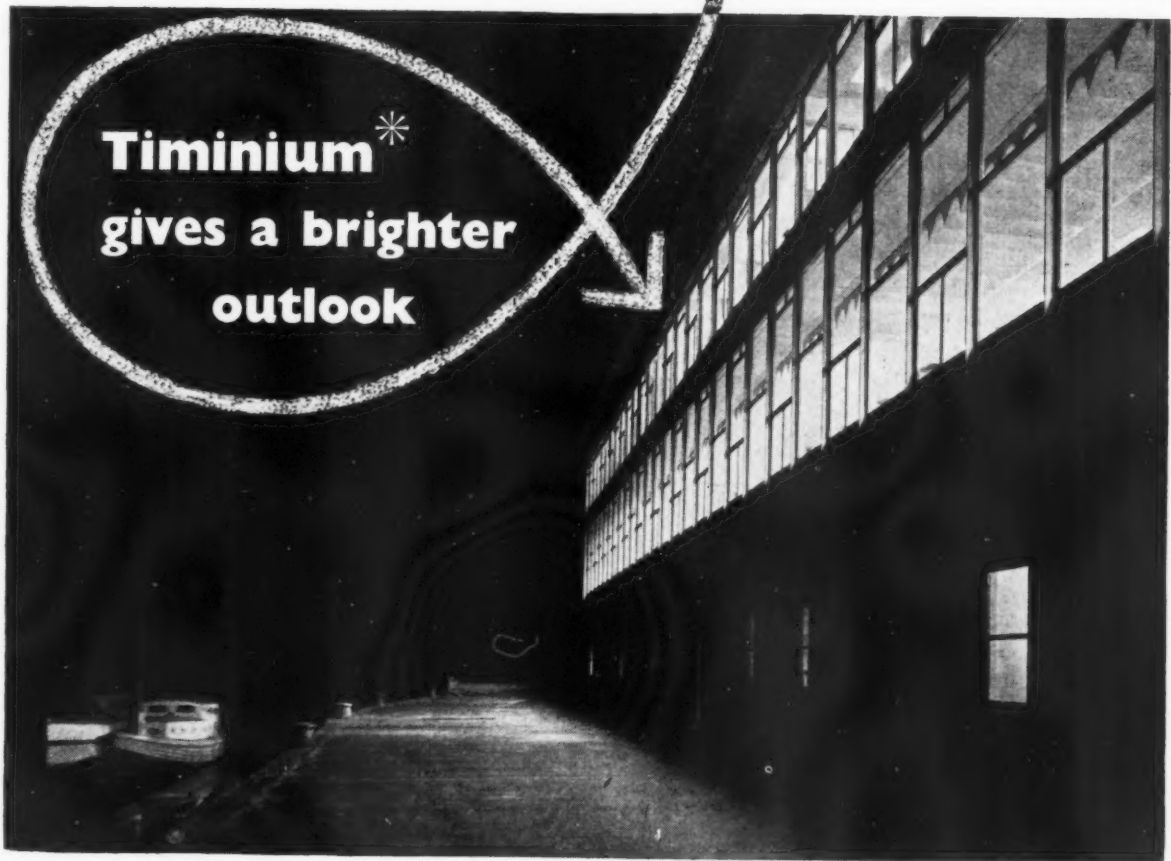
Daily consumption  $\frac{38,000}{3,412 \text{ (BTU per k.w. hr.)}} = 11.2$  units

Weekly consumption = 78.4 units  
 Hot water for 32 week period at 78.4 units per week = 2,510 units  
 Summer expenditure is 2,510 units at 2d. per unit = £20 18s. 0d.  
 at 1.10d. per unit = £11 10s. 0d.

Plus standing charge, say £4 10s. 0d.  
 £16 0s. 0d.

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*This week we publish the first of a short series of articles on the problems of slum clearance and urban redevelopment. In this article, authors D. Rigby Childs and Jack Whittle give a factual survey of the present problem, outline the legislation and conclude with an historical review. Next week, they provide a case study of the post-war residential redevelopment of an intensely urban area of blitz*

*and blight: West Ham. A further article will be on the cause and cure of slums, and will be based on the results of a questionnaire which has been sent to a selected number of people of many different interests. In their concluding summing-up article the authors will attempt to provide a basis for future policy for discussion by the JOURNAL readers.*

# SLUM CLEARANCE AND URBAN REDEVELOPMENT

By D. RIGBY CHILDS AND JACK WHITTLE

Britain in 1956 faces a challenge which is fundamentally new in the history of urban man: the challenge of clearing away and replacing the remaining first constructive attempts of earlier generations to provide standard housing to meet the sudden growth of population.

In 1933-39 the first effective start was made to attack the problem: 17 years later we start again. Do we resume where we left off in 1939? Or do we take up the challenge provoked by all the changes in the interim: changes which are aesthetic, economic, social and technical.

This is not a challenge here today, gone tomorrow. From now on it is likely to be with us, in one form or another for ever.

Why does Britain face this challenge? For towns the world over can show far worse housing conditions than even British slums; many are little better than urban conglomerations of shanty and shack. Their replacement is a relatively easy and simple problem.

But to redevelop a modern urban complex of which decayed housing is but a surface excrescence is a task altogether different. The challenge to Britain in 1956 is to produce an organic momentum of urban re-development—nation wide in its scope.

By an organic momentum we mean evolving principles and policies which will inspire men and women to overcome the frustrations and tedium of a redevelopment programme.

We must humanize the administrative and legislative machine, which will result in remoulding towns so that they are atuned to contemporary life.

Principles must be evolved, even though they are invalid during our own life, which will guide the carrying through of the redevelopment of our new towns and of those to come, and they must have the vital force of those historic institutions on which the nation's way of living is founded.

The purpose of this series of articles is to arouse people to the challenge, to show how it happens that we are without an adequate national policy, and to show how urban redevelopment cannot be the preserve of one profession; it calls for teamwork on a broad scale.

Though it is as architects and town planners that we create, and are writing we also feel the impact of the producer and consumer. In this dual capacity we have the advantage of standing at the cross roads, the meeting point of different opinions.



We maintain that the desired and essential organic force cannot be the product of one person's brain or inspiration: it must be the synthesis of many. A policy can only be the outcome of many people's views and experiences. It must be bedded in the needs of the time, for housing is at the root of a stable society. We have looked at the decay and the need for renewal; and what we have seen has moved us to this attempt to stimulate those who make policy, locally and nationally, also to look and to think afresh. The issue of slum clearance and urban redevelopment in essence appears simple: a programme of rehousing people from old worn-out houses to new dwellings.

The carrying through of the programme, however, is highly complex in every case. So much so that too frequently pre-occupation with administrative and legal machinery leads to concentration on methods rather than to results. Only too often the energy and time spent in covering the complicated process of clearing dwellings dampens enthusiasm and interest in the rebuilding stage.

To combat this, there is a tremendous need to arouse the general public from their lack of awareness to a real interest in the subject. There is also the need to stimulate a broadening of conceptions for slum clearance and redevelopment among those who are concerned professionally and among those who lead.

Our starting point is a study of the Government's own Blue Book on *Slum Clearance\** in England and Wales, Scotland having its own problem.

\*Slum Clearance (England and Wales). Summary of returns including proposals submitted by local authorities under section 1 of the Housing Repairs and Rents Act, 1954. London. Her Majesty's Stationery Office, price 3s. 6d. net.

ACKNOWLEDGMENTS: The Authors wish to acknowledge the assistance received from Miss E. Cann, Solicitor, and to thank the following for the illustrations to this article: The MOH for the photograph below. F. Shaw, Senior Sanitary Inspector, Lancaster, for photographs on pages 416 and 421. The Housing Director, Manchester, for the photographs on page 416 (bottom) and 417 (top). The City Engineer and Surveyor's Department, Liverpool, for a photograph on page 417 (bottom). Aero films Ltd. for photograph, page 425. The London County Council for the photographs on page 430.

*A slum kitchen in Nottingham.*



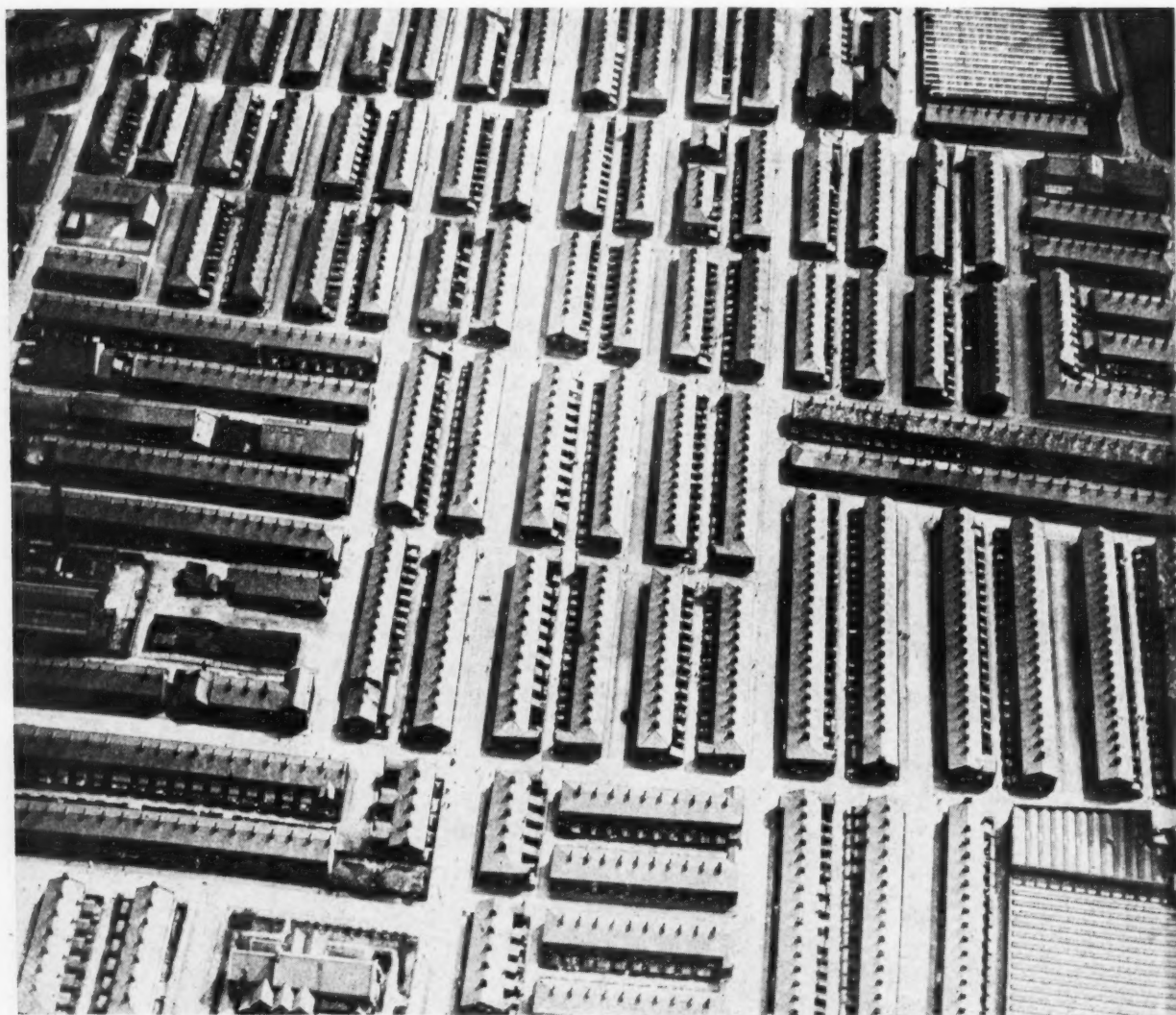
Slum clearance and urban redevelopment

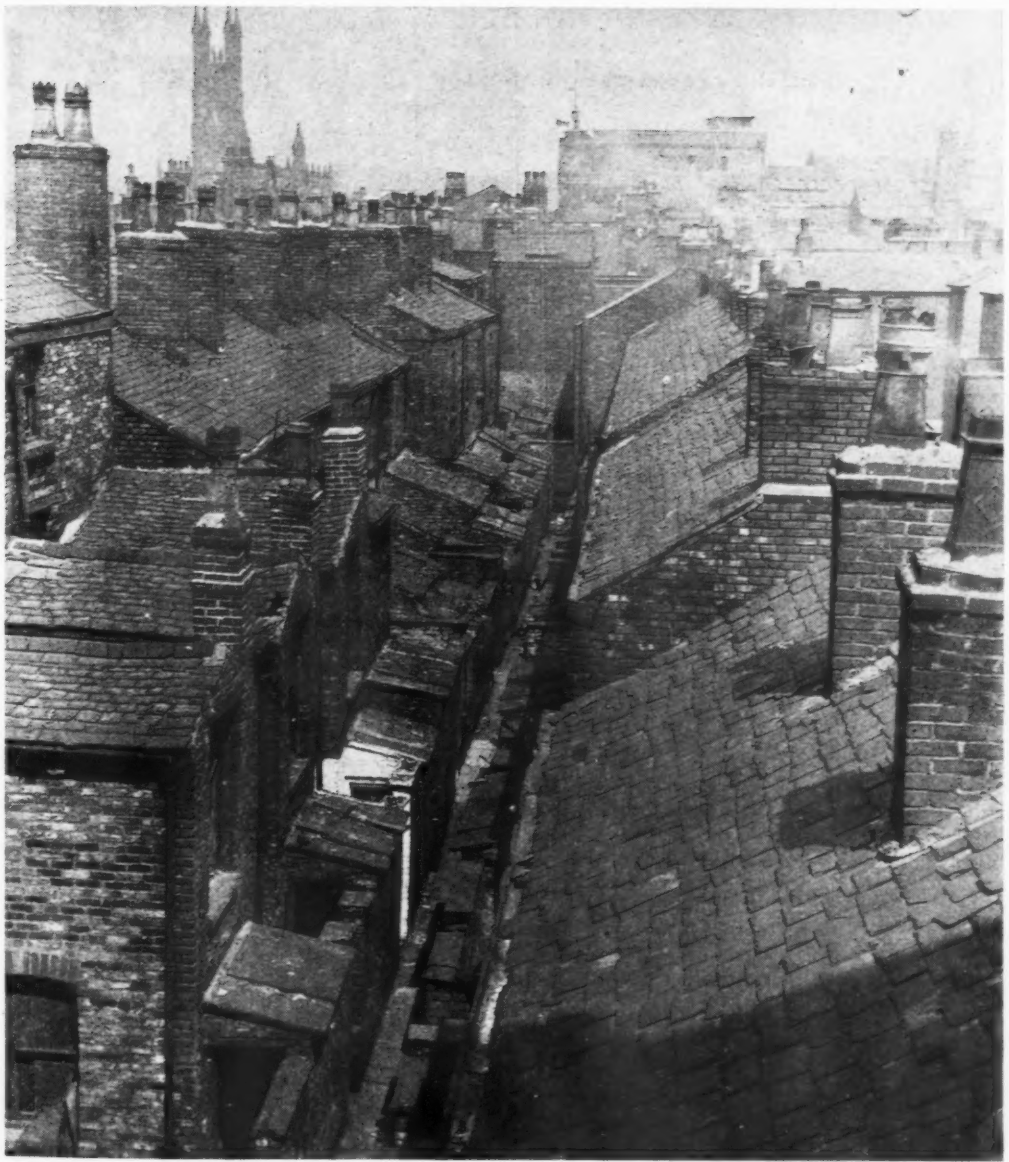
## TYPICAL URBAN SLUMS



*DETERIORATION IN  
LANCASTER . . . . .*

*. . . . . BYE-LAW REGIMENTATION IN MANCHESTER . . . . .*





... AND OVER-CROWDING  
AND DECAY .....



... AND DILAPIDATED  
TENEMENTS IN  
LIVERPOOL .....



## Slum clearance and urban redevelopment

### The problem today : its size

Imagine every house in London (County of London Plan area) condemned as a slum, then you have the size of the national slum problem in England and Wales. There are over 800,000 dwellings in London and the official figures for unfit dwellings in England and Wales are 847,112.

Slums are found almost everywhere in England and Wales. In this great area housing over 40,000,000 people, there is hardly a local authority with no slum problem.

To think of the problem in another way: 7% of the total dwellings in England and Wales are considered as unfit to live in.

To the statistician this may be small. But look at the problem in relation to the following: From the slum clearance programme of the 1930's, there remain—after the pre-war slum clearance schemes, war-time bombing, and post-war housing activities—140,000 dwellings, scheduled for demolition in the 1930's, which are still occupied.

It is also estimated that over 2½ million dwellings in England and Wales are over 100 years old; and another 1¼ million 75 to 100 years old. These figures, which between them represent four to five times the total of present unfit dwellings, show the dimensions of the redevelopment which will be necessary simply to cover housing built before the introduction of bye-laws.

To provide for families living in the 847,000 unfit houses covered by the present national survey, we estimate that about 1,100,000 dwellings will be needed. At the rate of building for 1955 (approximately 280,000 dwellings) the total output of the whole house building industry for about four years would be required to replace the existing slum dwellings. Such concentration of house building resources is impracticable, for it ignores all other needs.

An indication of the actual programme which it is hoped to achieve is that in the next five years local authorities propose to demolish approximately 375,000 dwellings. This target figure for demolition may require half a million new dwellings to provide adequate accommodation for the displaced families.

In 1955 all the local authorities combined built 162,000 dwellings. At this rate about five-eighths of local authority housing programmes must be devoted to slum clearance and redevelopment.

Taking into account the physical, legal and social complexities of urban redevelopment, this programme appears very optimistic. One of the fundamental questions which emerges is whether such a programme, even if achieved, will overtake the rate of decay at sufficient speed.



While slum dwellings are universal, about 62 per cent. (529,000 approximately) of all estimated unfit dwellings are concentrated in about one hundred towns, each having over 1,000 unfit dwellings. Out of these, a dozen towns account for 334,000 unfit dwellings. There are another hundred towns with between 500 and 1,000 condemned houses; these towns between them have a total of almost 70,000 unfit dwellings.

How these towns with varying sized problems are distributed about England and Wales can be seen best from the map, right. The map does not show the quarter of a million unfit dwellings in rural and other urban areas of which the rural accounts for 135,000. (This fact comes from a statement by the Minister of Housing and Local Government when addressing the recent Housing Centre Conference on slum clearance.)

It is in the industrial Midlands and the north-west that the problem is at its most intense and, in the total, great areas need to be cleared and redeveloped. This represents a tremendous task ahead for which present measures and planning and building techniques appear to be quite inadequate. We have titled this area a National Clearance Area.

Even London's vast general planning dilemma and, with it, its own slum clearance programme, pale into insignificance when one realises the scale of the National Clearance Area. In this, under slum clearance proposals for urban areas with over 1,000 unfit dwellings, it is estimated there are at present over 400,000 unfit dwellings. It will be seen from the diagram, right, that while London's programme is large (20,947 houses), it is widely spread. The symbols denote the percentage of unfit dwellings in each borough. It will be noted that there are no slums in the City of London.

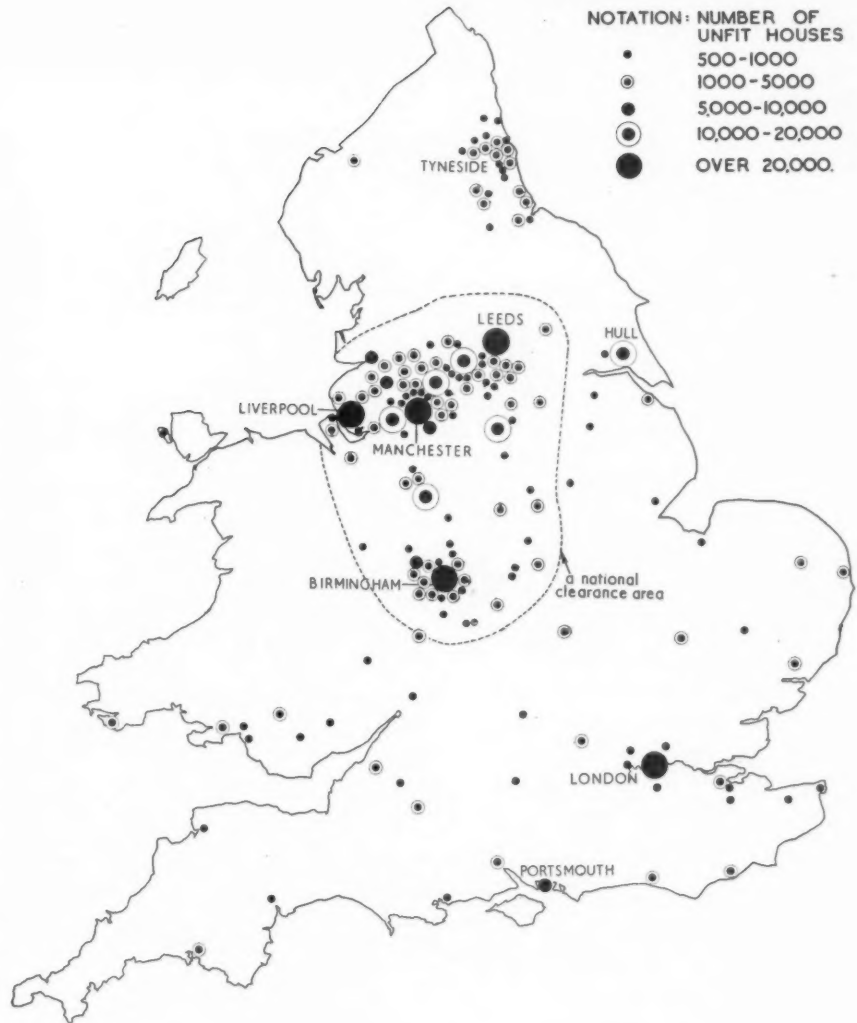
Key:

- |                  |                     |
|------------------|---------------------|
| 1. Battersea     | 17. Lewisham        |
| 2. Bermondsey    | 18. Paddington      |
| 3. Bethnal Green | 19. Poplar          |
| 4. Camberwell    | 20. St. Marylebone  |
| 5. Chelsea       | 21. St. Pancras     |
| 6. Deptford      | 22. Shoreditch      |
| 7. Finsbury      | 23. Southwark       |
| 8. Fulham        | 24. Stepney         |
| 9. Greenwich     | 25. Stoke Newington |
| 10. Hackney      | 26. Wandsworth      |
| 11. Hammersmith  | 27. Westminster     |
| 12. Hampstead    | 28. Woolwich        |
| 13. Holborn      | 29. City of London  |
| 14. Islington    |                     |
| 15. Kensington   |                     |
| 16. Lambeth      |                     |

# URBAN AREAS WITH OVER 500 UNFIT HOUSES

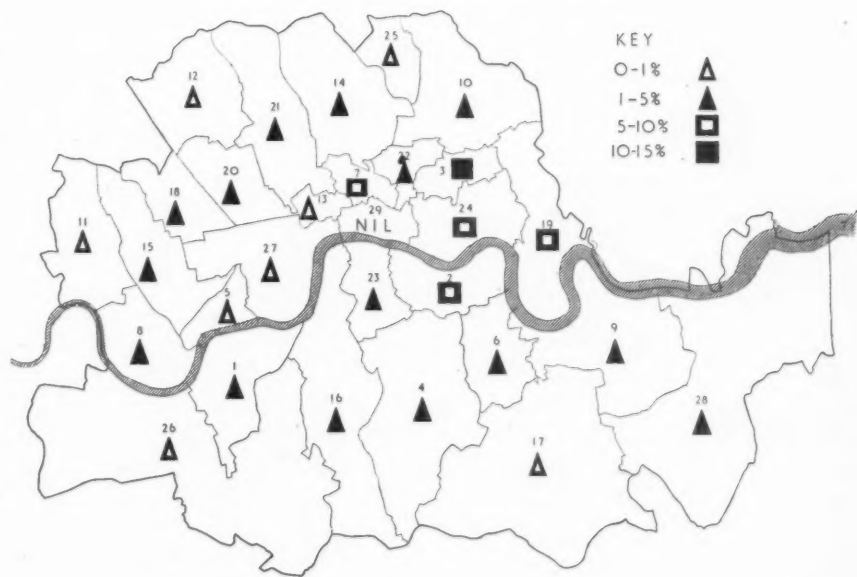
NOTATION: NUMBER OF UNFIT HOUSES

- 500-1000
- ◉ 1000-5000
- 5,000-10,000
- ◉ 10,000-20,000
- OVER 20,000



## KEY

△ 0-1%  
 ▲ 1-5%  
 ◻ 5-10%  
 ◼ 10-15%



## Slum clearance and urban redevelopment

## What the Blue Book survey tells

These five tables, based on the Government's Blue Book, show factually the distribution of slums. Table 1 gives the figures for the 12 places with the largest number; the total of column 2 gives an idea of the extent of their task ahead. Most of these places lie in our suggested National Clearance Area (see map on previous page). Table 2 shows the 12 towns with the greatest relative problem. The extent of the problem in the towns, it will be

seen, varies enormously from Liverpool's 88,000 unfit dwellings to Pembroke's little over 1,000. Table 3 shows how few are the towns which hope to tackle within five years more than a fraction of their problem. Tables 4 and 5 compare rural conditions in a southern and northern county. It will be noticed that the relative task is similar, though the numbers vary.

**TABLE 1: the greatest urban problems.**

Towns having over 1,000 unfit dwellings number more than 100; this table shows the twelve towns and cities with the greatest number of slum dwellings.

Town or City	1 Total number of permanent dwellings in area	2 Estimated number of unfit dwellings	3 Percentage of columns (2) to (1)	4 Total number of unfit houses to be demolished in five years	5 Percentage of columns (4) to (1)
Liverpool	204,486	88,233	43%	7,025	3%
Manchester	208,144	68,000	33%	7,500	4%
Birmingham	311,805	50,250	16%	6,000	2%
Leeds	164,478	22,500	14%	14,100	9%
County of London	—	20,947	—	19,457	—
Kingston-upon-Hull	101,616	14,768	14%	3,208	3%
Salford	156,614	13,500	9%	4,635	3%
Stoke-on-Trent	50,881	12,026	24%	2,733	7%
Oldham	82,393	12,000	15%	6,042	8%
Bradford	43,498	11,169	26%	1,150	3%
Bristol	94,983	11,148	12%	3,813	4%
Total	1,538,898	334,541	—	79,876	—

**TABLE 2. Exceptional local problems.**

Towns and Cities where over 20% of the housing is unfit, shown in order of relative size of problem.

Liverpool	204,486	88,233	43%	7,025	3%
Bacup	6,700	2,400	36%	150	2%
Barley	14,075	4,796	34%	630	5%
Manchester	208,144	68,000	33%	7,500	4%
Pembroke	3,903	1,250	32%	315	8%
Hartlepool	4,955	1,384	28%	385	8%
Kidsgrove	5,300	1,438	27%	465	9%
Oldham	43,498	11,169	25%	1,150	3%
Stalybridge	7,788	1,949	25%	700	9%
Salford	50,881	12,026	24%	2,733	5%
Crook and Willington	8,616	2,000	23%	410	5%
Bishop Auckland	11,011	2,290	21%	1,096	10%

**TABLE 3. Greatest Demolition Targets**

The towns having over 5,000 unfit dwellings which expect to achieve the greatest percentage of demolitions. Only towns planning to remove half, or more, of their total slum housing are shown.

County of London	—	20,947	—	19,457	—
Leeds	164,478	22,500	14%	14,100	8.6%
Stoke-on-Trent	82,393	12,000	14.6%	6,042	7.3%
Rochdale	31,317	5,000	15.9%	2,500	7.9%

**TABLE 4. Rural Slums. A Southern County.**

All rural district areas in Berkshire, an essentially agricultural county.

Abingdon	6,562	141	2%	141	2%
Bradfield	6,838	54	1%	54	1%
Cookham	4,258	137	3%	137	3%
Easthampstead	7,200	165	2%	77	1%
Faringdon	3,612	286	8%	286	8%
Hungerford	2,750	409	15%	110	4%
Newbury	4,274	150	4%	150	4%
Wallingford	4,432	87	2%	87	2%
Wantage	4,242	271	6%	271	6%
Windsor	4,250	80	2%	80	2%
Wokingham	10,607	386	4%	386	4%
Total	59,025	2,166	—	1,779	—

**TABLE 5. Rural Slums: A Northern County**

All rural district areas in County Durham, location of many mining communities

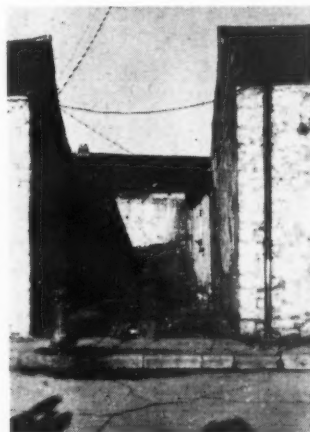
Barnard Castle	6,045	272	5%	168	3%
Chester-le-Street	12,240	1,200	10%	171	1%
Darlington	4,981	157	3%	119	2%
Durham	10,420	494	5%	494	5%
Easington	24,116	2,720	11%	20	0.1%
Lanchester	4,377	328	7%	297	7%
Sedgefield	10,447	329	3%	329	3%
Stockton	2,698	15	0.6%	15	0.6%
Sunderland	7,834	352	4%	352	4%
Weardale	3,292	79	2%	79	2%
Total	86,450	5,946	—	2,044	—

## What is a slum?

The law answers this question in Section 9 of the Housing Repairs and Rent Act, 1954. It is a dwelling which is either a back-to-back house, or any other dwelling "defective in one or more of the following":—

1. Repair . . . (top right)
2. Stability . . . (right)
3. Freedom from damp . . . (extreme right)
4. Natural lighting . . . (below right)
5. Ventilation . . . (ditto)
6. Water supply . . . (bottom left)
7. Sanitary conveniences and drainage . . . (bottom right)
8. Facilities for storage, preparation and cooking of food and disposal of waste water . . . (ditto)

This definition is the basis for slum clearance programmes. The application of this definition depends on personal assessment. There is no objective method of measurement. There must be a tendency for assessments to be relative to local conditions.



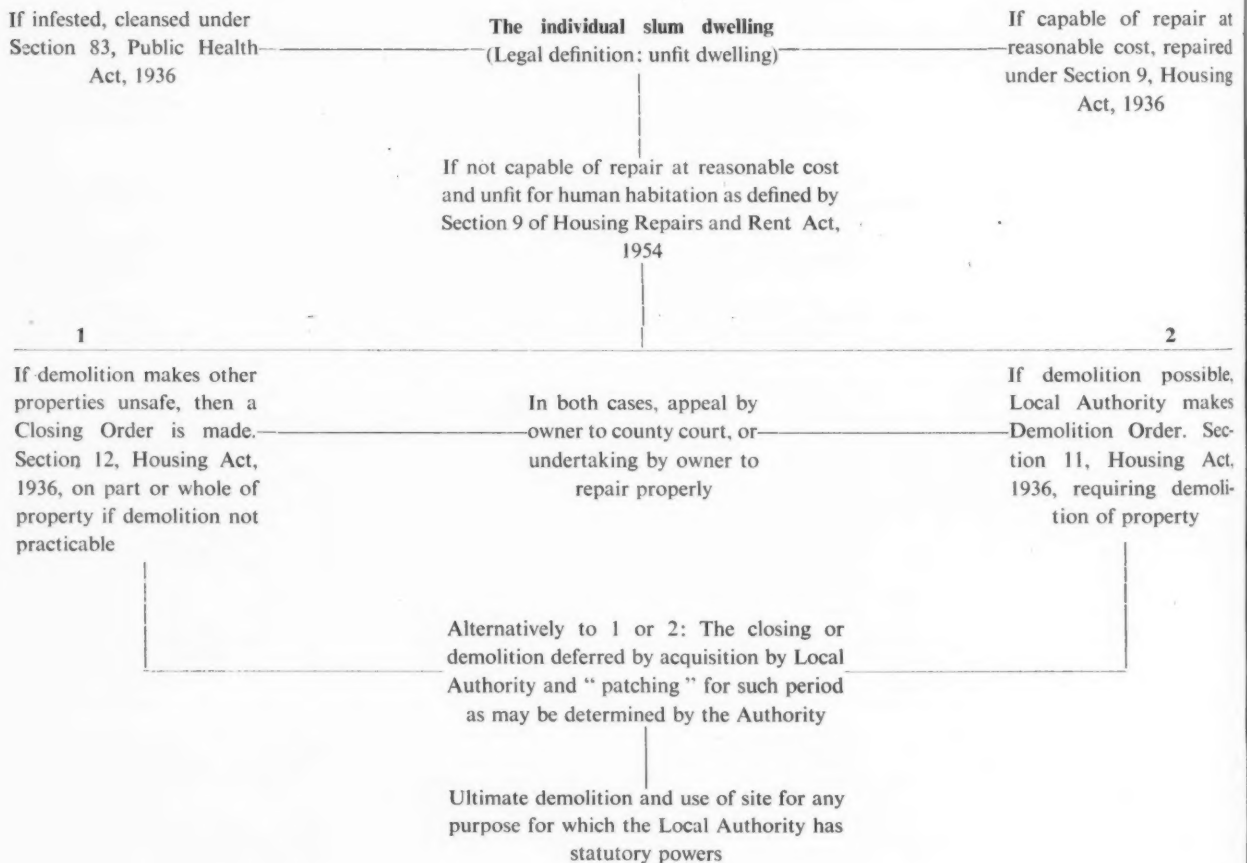
## Slum clearance and redevelopment areas

## Legal Procedure for dealing with one slum house

Legal procedure for dealing with slums begins, strictly speaking, with the powers provided by the Public Health Act, 1936, for dealing with the probably rare occasions nowadays where it is the tenant who is at fault. For dealing with the slum dwelling itself, there are two major methods, one for the individual slum, and another, in two forms, for slum dwellings collectively. Both methods are under the Housing Acts. The Planning Acts procedure can also be employed under certain conditions for slum clearance.

In all cases the procedure for slum clearance,

which is really only stage one of a redevelopment scheme, is elaborate and intricate, arising out of the tradition in this country for the protection of the rights of an individual, whether tenant or landlord. However, it is very doubtful whether such rights of protection have led to the present complex legal position for slum clearance and redevelopment. The underlying cause is that the legislation has come about through the passage of *ad hoc* laws to meet immediate problems, without having an overall planning policy.





## What is a slum area?

The Housing Acts provide two ways of dealing with a slum area. First, by the Clearance Area procedure under Section 25 of the Housing Act, 1936. This can only be an area of houses which are unfit or which are dangerous to health because of bad layout and narrow streets, and buildings other than houses which are also dangerous to health. It may be so small as to include only two unfit houses, and there is no limit to the size of the area. This method can only be used where the most satisfactory way of dealing with conditions in the area is the demolition of all the properties it contains.

Secondly, by the Redevelopment Area procedure under Section 34 of the Housing Act, 1936. This applies only to Urban Authorities and to areas:

1. containing at least 50 working class houses of

which at least a third must be overcrowded, unfit or congested.

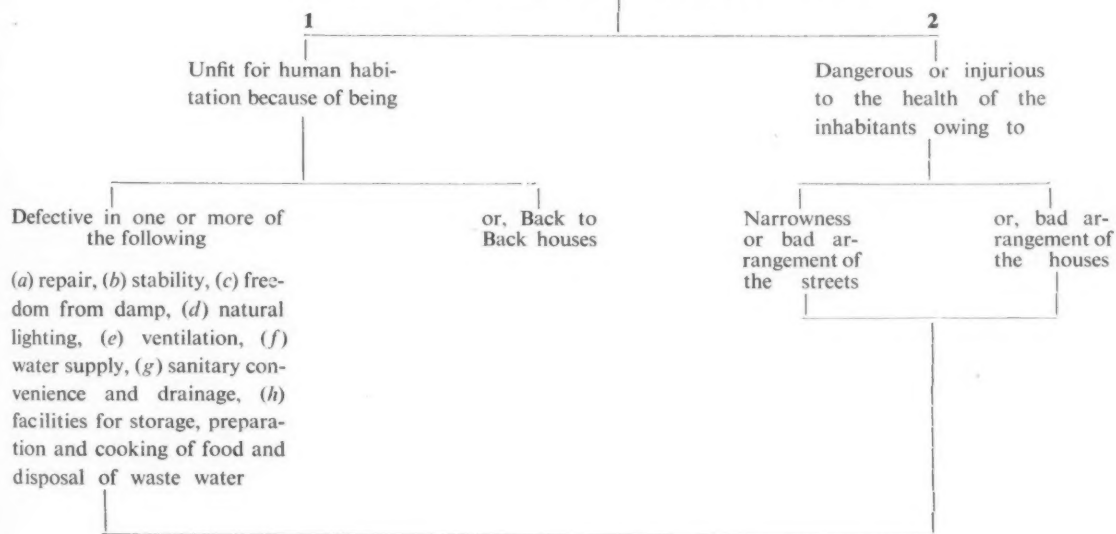
2. which, for industrial and social reasons, should be used for housing the working classes.

3. which it is expedient should be redeveloped as a whole for working class houses.

The procedure for promoting and redeveloping a Redevelopment Area is very cumbersome, inflexible and restrictive, and the reference to working classes in this Section of the 1936 Act makes it virtually obsolete. This method is not likely to prove popular.

The Clearance Area procedure, being the procedure generally in use, is shown below in broad outline only. It does not indicate the many detailed steps which have been taken at the various stages.

The starting point of legal procedure is:—the Housing Act, 1936, Part III as amended by Housing Act, 1954, Part I, which defines a Clearance Area as follows: conditions such that demolition of all buildings is the most satisfactory method of dealing with the area. Houses in this area must comply with one or other of the following classifications



*\*This last provision of obliging Local Authorities to provide suitable alternative housing accommodation for tenants of property in clearance areas is a governing factor in any timetable of slum clearance schemes*

*One of the difficulties of procedure is to define what is bad arrangement. We would say that this example is a bad arrangement; but is it dangerous or injurious to health?*



## Slum clearance and redevelopment areas

## Legal Procedure for removing a slum area

In this section on the legal procedure for getting rid of a slum area, no attempt has been made to be comprehensive; but the main provisions for dealing with the single slum and the slum area are explained—these seem complicated enough. These provisions deal with slum clearance as a problem on its own and, in general, they seem to have grown from the idea that slums can be cleared independently of the rehabilitation of our obsolete towns. They are nineteenth century in conception; and in them the idea of a city as a place for the full life is disregarded. It is a complicated, inconclu-

sive and primitive law designed to bury the corpse of bad housing; it reflects no faith in the New Jerusalem.

For demolition, there are compulsory powers. For requiring subsequent redevelopment there are none.

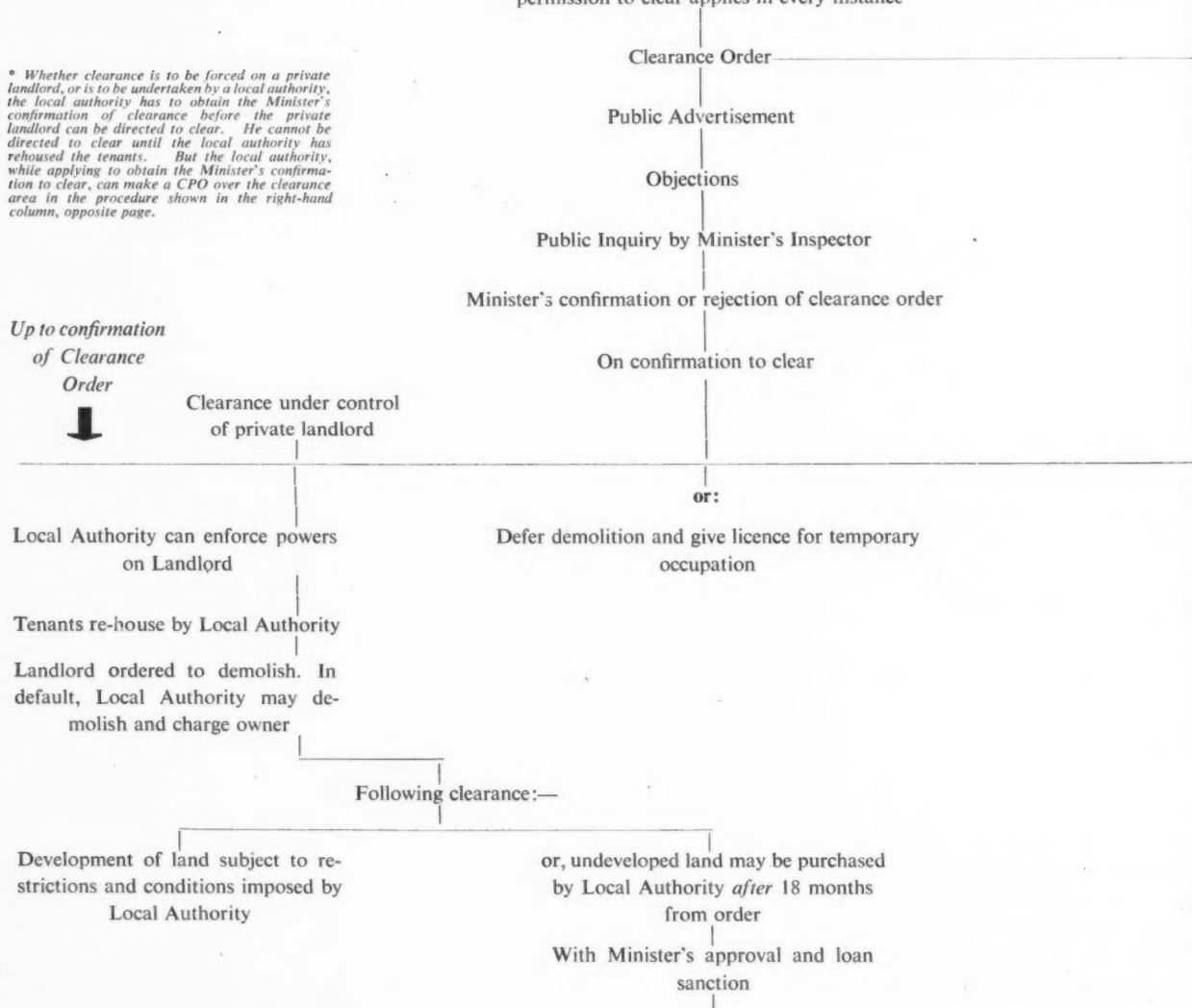
Idle sites are outside the law.

A local authority, having first defined a clearance area, and before any tenant can be obliged to leave a condemned house, has to embark upon the following, probably lengthy, procedure, before any clearance can be started.

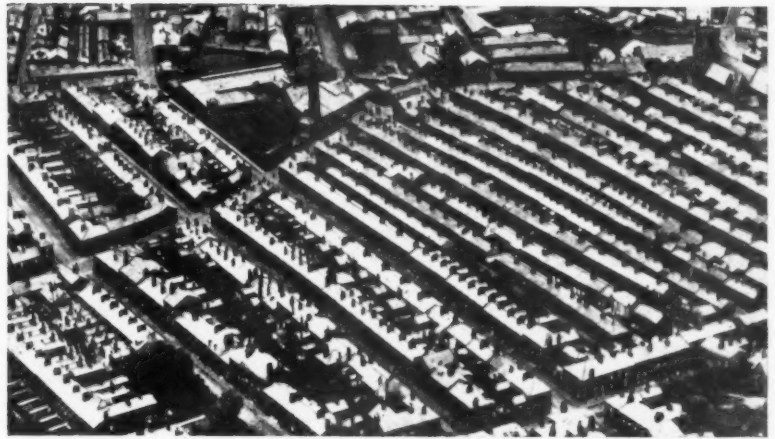
## A Local Authority's sequence of operations

Central Government required to be satisfied that a Local Authority has resources (financial and housing) sufficient for carrying into effect its resolution to proceed with clearance. This requirement applies whether clearance is carried out by a Local Authority or by a private landlord. The following procedure to obtain permission to clear applies in every instance\*

\* Whether clearance is to be forced on a private landlord, or is to be undertaken by a local authority, the local authority has to obtain the Minister's confirmation of clearance before the private landlord can be directed to clear. He cannot be directed to clear until the local authority has rehoused the tenants. But the local authority, while applying to obtain the Minister's confirmation to clear, can make a CPO over the clearance area in the procedure shown in the right-hand column, opposite page.



*A part of Preston, Lancs., showing an area of slums which might be suitable for a clearance order.*



Clearance under control of Local Authority. This entails compulsory purchase order powers. These are normally invoked at the time it is resolved to define a clearance area. Decision made on acquisition. If Local Authority to purchase by C.P.O., procedure runs parallel with clearance order. Local Authority can purchase Clearance Order area from landlord

By agreement

By C.P.O.

(may lead to objection and public enquiry)

C.P.O. may include

Land in clearance area ("pink land"—unfit houses or "pink-hatched yellow land"—property included on grounds of bad arrangement)

"Grey land"—land required to make clearance area convenient shape for redevelopment

Minister's approval and loan sanction

Land purchased by Local Authority.  
Local Authority now in a position to

Secure demolition by

Delay slum clearance by "patching."  
Exchequer assistance for 15 years

Sell or let subject to a requirement to demolish forthwith

Demolition by  
Local Authority

Redevelopment

By Local Authority immediately

By Local Authority after site left vacant for perhaps years on end

By sale or exchange to private developer

## Slum clearance and redevelopment areas

### Post-war Legislation on slum clearance

#### Town and Country Planning Acts, 1947/1954

Slum clearance can be carried out under these Acts provided that the properties are included in an area designated in an approved Development Plan as being subject to compulsory acquisition. The Local Authority are then in a position to promote a Compulsory Purchase Order over the land designated. The normal Compulsory Purchase Order procedure must be followed, and the acquisition must be directed towards one or more of the purposes specified in the 1947 Act; these, however, are very wide. In order to obtain the full "slum subsidy" for the rehousing of displaced tenants, the houses must be the subject of a confirmed Unfitness Order. This Order is made by the Local Authority under paragraph 9 of the 5th Schedule to the Town and Country Planning Act, 1944 (as re-enacted in the 11th Schedule of the Town and Country Planning Act, 1947) declaring the properties to be unfit for human habitation and not capable at reasonable cost of being rendered so fit. The Order must be made before, or simultaneously with, the Compulsory Purchase Order.

#### Housing Act, 1949

This Act, by removing most of the references to the "working classes" contained in the Housing Act, 1936, enables Local Authorities to extend their housing powers both in construction and slum clearance to cover all sections of the community. It does not remove the reference to "working classes" contained in those parts of the 1936 Act referring to redevelopment areas. It enables Local Authorities to give improvement grants for the conversion and improvement of houses and other buildings. These buildings must have a life of at least 30 years and comply with certain other physical conditions. If an improvement grant is made it carries with it certain restrictions as to rent and resale of the properties concerned.

#### Housing Repairs and Rents Act, 1954

This Act signalled the resumption of slum clearance after the war. All Local Authorities were charged with submitting for the Minister's approval by the end of August, 1955, proposals for dealing with slums in their areas.

Section 2 of this Act provides for the postponement of demolition and for the patching of houses in declared clearance areas owned by the Local Authority for a period decided by the Local Authority. These houses are to be, in the opinion of the Authority, dwellings which are, or can be, rendered capable of providing accommodation of a standard which is adequate for the time being.

Other powers to postpone the clearance of an area are included in the Act and provision is made for financial assistance in respect of the patching of houses. Section 9 of the Act defines more precisely

than the 1936 Act the matters which must be considered when determining whether houses are unfit for human habitation, that is, whether they are a slum.

Part 2 of the Act amends Rent Acts and, among other things, permits a limited increase in the rents of controlled dwellings, subject to certain conditions designed to ensure that the landlord has or will keep the property in good repair.

The repairs increase can be challenged by the tenant on obtaining a certificate of disrepair from the Local Authority.

#### Housing Subsidies Act, 1956

This Act is designed to facilitate slum clearance and to assist overspill.

It does this by first reducing and then providing for the abolition of the subsidy on houses built for general needs and in general retaining the full subsidy for the rehousing of former tenants of slums and for houses provided in New and Expanded Towns.

Circular 33/56 states that on slum clearance the full subsidy under this Act will be payable if the provision of new dwellings is made necessary by:

- (1) Demolition of insanitary houses by the Local Authority or by Landlord.
- (2) Dealing with clearance areas.
- (3) Closing the whole or part of a building.
- (4) Redevelopment being carried out in accordance with a redevelopment plan under the 1936 Housing Act subject to the limitations that it applies to
  - (i) all houses in such Plans approved before November, 1935.
  - (ii) unfit or congested houses only, in Plans approved after that date.
- (5) Demolition of houses included in clearance areas because of bad arrangement and houses included in a Compulsory Purchase Order to make a clearance area a reasonable shape for redevelopment (grey land). The restriction of "grey land" to land for the purpose of obtaining a convenient shape for the satisfactory development of the clearance area is emphasised by the Minister.
- (6) Demolition of unfit houses already owned by a Local Authority.

#### Slum Clearance (Compensation Act) 1956

This is to provide additional payments under certain cases which would otherwise suffer hardship under the previous financial provisions for compensation on compulsory purchase.

Previously the owner of a house declared unfit which was included in a Compulsory Purchase Order was paid site value, with a slender increase for well-maintained property.

This payment is to be increased and owner-occupiers of houses who have bought their property between



September 1, 1939 and December 12, 1955, and freeholders or appropriate leaseholders of business premises which they operate will, subject to certain conditions, be compensated, ignoring the unfitness classification of their property. This applies to houses compulsorily acquired at site value on or since December 13, 1955, and remains in force until December 13, 1965. These provisions are now extended to houses demolished by agreement with the Local Authority.

The weekly tenant with a business is still unprotected regarding compensation for the value of their business and the Minister has asked Local Authorities to have regard to the new provisions when they assess the payments for compensation for disturbance which they are permitted to make under Section 44 of the Housing Act, 1936.

### Housing (Form of Orders and Notices) (Amendment) Regulations, 1956. (S.I. 1198)

#### Circular 44/56—Procedure for Slum Clearance

The above outlines a simplified procedure for slum clearance. This revision, due to the recent increase in the number of Clearance Orders submitted, does not eliminate any of the statutory steps involved in making them but does, in some cases, remove Ministerial supervision over the work of Local Authorities.

The new method will undoubtedly reduce the administrative work of Central Government in connection with Clearance Orders and allied Compulsory Purchase Orders but puts more responsibility on Local Authorities.

Administration, therefore, has been slightly streamlined but the legislation is as complex as ever.

## Housing Subsidies:

Central Government financial assistance for slum clearance under the Housing Acts takes the form of annual subsidies paid over a sixty-year period towards the cost borne by the Local Authority where new housing is made necessary by the displacement of persons by slum clearance. The Housing Subsidies Act,

1956, has altered the basis of housing subsidies generally; and the present subsidies are set out in the table below, and compared with those previously in force.

The new rates differ from the old, firstly in that housing provided for general needs is now only to receive a

(continued on page 428)

### Exchequer Housing Subsidies: Subsidy rates

Housing subsidies forming the basis of many redevelopment schemes up to November, 1955

Basic	Prior to April 1, 1955	From April 1, 1955—November 2, 1955
General standard subsidy paid in every case for houses and all flats	£26 14s. 0d.	£22 1s. 0d.
<b>In Addition</b>		
Ordinary subsidy for flats on expensive sites: cost per acre of site as developed, including land costs, acquisition and certain site development costs.		
More than £1,500, but not more than £4,000	£52 16s. 0d.	£45 18s. 0d.
increasing to:		
More than £10,000, but not more than £12,000	£60 18s. 0d.	£53 5s. 0d.
More than £12,000: for each additional £2,000 or part of £2,000 in the cost per acre of the site as developed, subsidy increased by	£60 18s. 0d.	£53 5s. 0d.
	£1 19s. 0d.	£1 16s. 0d.

### Further Subsidy for Lifts

Special subsidy for flats on expensive sites in blocks of 4 storeys or more with lifts.		
More than £1,500 but not more than £4,000	£63 6s. 0d.	£56 8s. 0d.
increasing to:		
More than £10,000 but not more than £12,000	£71 8s. 0d.	£63 15s. 0d.
More than £12,000: for each additional £2,000 or part of £2,000 in the cost per acre of the site as developed, increased by	£71 8s. 0d.	£63 15s. 0d.
	£1 19s. 0d.	

The latest subsidy rates which have caused the revision of a number of schemes after November 3, 1955

Basic	General needs	Special subsidies for rehousing slum tenants anywhere and for new or expanded towns.
General standard subsidy for houses and 3-storey flats	£10	
For slum clearance		£22 1s. 0d.
For new towns, expanded towns, etc.		£24 0s. 0d.
<b>Flats Subsidy</b>		
Three-storey flats now rank only for the same subsidy as houses	—	—
Four-storey flats. General needs	£20	
Slum clearance, etc.		£32 0s. 0d.
Five-storey flats. General needs	£26	
Slum clearance, etc.		£38 0s. 0d.
Six-storey flats. General needs	£38	
Slum clearance, etc.		£50 0s. 0d.
Subsidy increased by £1 15s. 0d. per flat for each storey in excess of six.		

### Subsidy for Expensive Sites

Exceeding £4,000 per acre	£60 per acre
For each £1,000 or part of £1,000 in excess of £5,000 per acre an additional	£34 per acre

small subsidy, and this is to be stopped within the next year or so. The full subsidy will only be paid for slum clearance and planned overspill.

Secondly the subsidy towards the cost of expensive sites is now independent of the subsidy for dwellings. It takes effect when the cost of the land plus certain costs of development exceed £4,000 per acre and increases as that sum increases. Over and above £4,000 per acre, every additional £1,000 per acre brings in an extra annual subsidy of £34. However the increased annual loan charges at current rates of interest over 60 years would be about £57 per year. This situation does not encourage the redevelopment of expensive sites for housing.

Subsidies were previously paid for any new dwelling; but the present system is selective, and while the principle may be reasonable, the application can be strongly criticised. The RIBA has already protested to the Minister, and we are bound to say that the redevelopment of our cities has been dealt a severe blow by excluding from the full subsidy fit properties which may not be acceptable as "grey land" in clearance areas, but which stand in the way of comprehensive replanning.

In the old subsidies sound planning was not penalised; it may well be now.

There is no subsidy for clearance. The cost of clearance can be taken into account when estimating the cost of the site for subsidy payment for expensive sites, but in the initial stages the cost is to be borne by the private owner or the Local Authority; and it is unlikely that the small subsidy for expensive sites will cover the cost of clearance.

The subsidy is now used to influence design. Three-storey flats are now placed on the same subsidy basis as two-storey houses, thus making the cost of three-storey development almost prohibitive to the Local Authority. Within reasonable financial control, an Authority should be free to design in its own way to meet its own special requirements.

There is no subsidy to assist Local Authorities to meet the frequently very high cost of building on sites formerly occupied by other buildings.

In short, the subsidies only assist slum clearance in so far as they reduce or eliminate subsidies for general needs. Central Government financial assistance for slum clearance has not been increased.

### The History of Slum Clearance Schemes

The story of slums and the attempts to clear them starts with the 19th century. There was then an amazing increase in our population, which grew from 10½ millions to 37 millions between 1801 and 1901. This growth was mainly in areas around the factories of the new machine age, and in the already large centres of population. London, for instance, had under 1 million inhabitants in 1800, but by 1850 had over 2½ millions. To meet this demand for shelter, housing of appalling standards was built. We find in Liverpool, where the population quadrupled in 40 years, that people were living, in 1841, in densities of around 730 persons per acre, while in the same year Nottingham had nearly 500 persons per acre in areas developed with buildings of no more than two storeys high.

The preamble to the Report of the Health of Towns Commission of 1844 states: "We have especially turned our attention to the means for improving the worst and the most crowded districts in large towns, a subject of great importance and of very great difficulty. It may appear to be a comparatively easy task to provide against the occurrence in new districts of the evils which at present prevail in parts of old towns. In the heart, and even in the immediate suburbs of towns, not only of ancient but also of modern date where these evils chiefly abound, the value of property, the intricacy and variety of the interests involved and the occupations and callings of the inhabitants increase in a great degree the difficulty of devising measures which we may be able with confidence to

recommend as effectual and at the same time is capable of enforcing."

These difficulties were to prove very great. It was not until the last half of the century, as a result of the efforts of Chadwick and others, that laws to clean up the slums were established. At the same time efforts were being made by social workers to obtain improved housing conditions for the poorer classes, and various philanthropic trusts were formed to provide working class dwellings. For example, in London the Peabody Trust and Guinness Trust and others were established, and by 1881 the Peabody Trust had housed over 18,000 people in their buildings. Their first estate, still in occupation in Commercial Street, Spitalfields, E.1, was opened in 1864. The housing of these Trusts, however, had not really tackled the slums as many of the rents were then higher than the poorer classes could afford.

In 1868 legislation was passed enforcing the demolition of single unfit houses, the first move towards a Central Government policy of slum clearance, and in 1875 this power was extended to cover whole areas of unfit houses, the land so cleared having to be re-used for housing for the poor. Thus the Demolition Order and the Clearance Order, the present kingpins of slum clearance, are three-quarters of a century old.

The powers were at first not widely used, but towards the end of the century clearance became more common, despite the continued reluctance by many municipal authorities to exercise the powers available. Unfortunately the sites so cleared were often occupied by buildings which were embryo slums. It is true

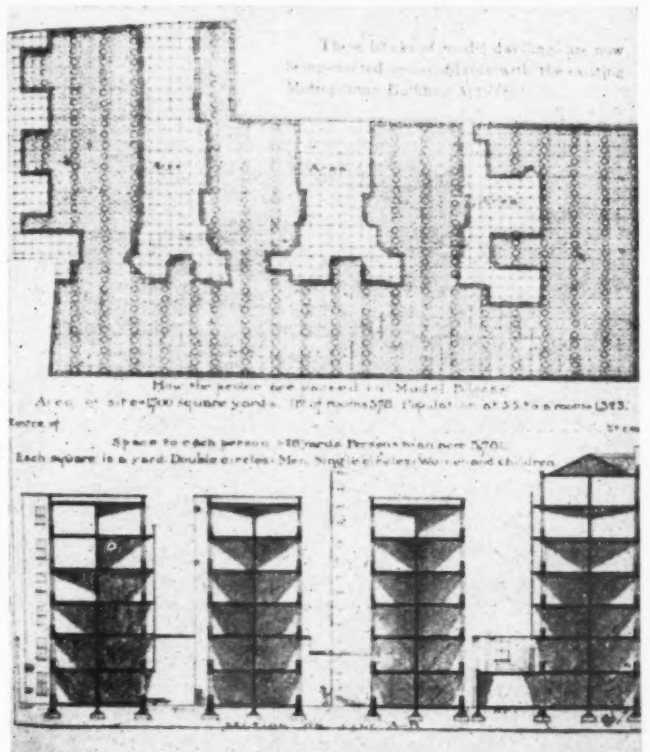
that these new workers' dwellings improved the living unit, but the "model housing" for the working classes which were built in London and elsewhere grossly over-crowded the sites. One example, built in London about 1875, had what we should call now a net density of over three thousand persons per acre based on an occupancy rate of 3.5 persons per room. This over-crowding of the site was an effort to overcome high land values and to obtain a high rent return for the landlords, many of whom were the philanthropic trusts. The six-storeyed Peabody Trust scheme in Wild Street near Covent Garden, opened in 1875, was criticised at that time by the Home Office for its congested layout.

The Royal Commission on housing of 1884/5 took voluminous evidence and their findings clearly indicated the need for national action to meet the problem of the vast slum areas of the 19th century towns. Although only a few of their recommendations were acted upon, 1890 saw the passing of the Housing of the Working Classes Act, which consolidated previous legislation for dealing with clearance and the provision of new tenements. Modern housing legislation can be said to spring from this Act, under which the Public Works Loan Commissioners were empowered to advance money for the building of working class houses.

But the years up to the outbreak of the first world war saw little effort to erase the slums. For instance, in London, between 1902 and 1913, about 172,800 rooms for working class families were built as against the demolition of only 69,000 rooms. The early part of the century saw the expansion of many urban areas, but the prospect of our industrial towns hardly improved. It is true that they were better drained and more healthy, but the substantial slums remained. With the first world war house building stopped; it was followed by the same emphasis on the provision of additional houses which the country has again recently experienced. Subsidies were introduced by the Housing, Town Planning Act of 1919 and the powers of Local Authorities strengthened. The slums were virtually ignored until the 1930's—between 1919 and 1930 only 17,000 persons were rehoused under Slum Clearance schemes.

It was not until the Housing Act of 1930 that post-war slum clearance was seriously tackled, only to be delayed by the economic crisis. Between 1930 and December, 1933, only 11,796 houses were cleared. In 1933, however, the Housing Act implemented the Government's emphasis on slum clearance. Public effort and money was to be concentrated on the clearance and improvement of slum conditions. Other housing was to be non-subsidised.

The Ministry of Health Circular to Housing Authorities of April, 1933, instructed that complete programmes for the abolition of slums within five years were to be made at once. The proposals put forward by the Local Authorities were for the demolition or closing of about 260,000 slums. This was to be achieved by 1938. This target figure was revised in 1937 to about 378,000, and in March, 1938, to 472,000. It was not, however, until 1934 that the



These cottages, in Preston, top, lining a central, open, sewage drain, were illustrated and criticised by the first Royal Commission inquiring into public health in towns in 1844. Above, a plan and section of a block of model dwellings erected in 1894 in accordance with the Metropolitan Building Act of 1855. Density: 3,781 to the acre. Space standards (indicated by grid and circles denoting people) 1.28 square yards per person. (From "More Light and Air for London," by Robert Williams, 1894). Below, part of a Peabody scheme still standing in Wild Street, Holborn, criticised by the Home Office on completion, in 1875, for its congested layout.





replacement programme, not necessarily on sites cleared of slums, started to gain impetus. Legislation was once again consolidated, this time by the Housing Act of 1936 and between 1930 and 1939 about 273,000 dwellings were cleared. It is also estimated that between 1930 and 1939 about three quarters of a million houses had been repaired and rendered fit for human habitation. The first real national effort to clear the slums, spread over ten years, had resulted in the clearance of a yearly average of about 30,000 dwellings.

More important still, few of the housing schemes up to 1939 showed imagination and "Council housing" became a term of contempt. Moreover, a large proportion of the building to rehouse displaced slum dwellings was peripheral building of the cottage type. As late as 1937-1939 flats only represented about one eighth of all the dwellings approved by the Ministry of Health.

With the second world war demolition of unfit houses again ceased, apart from the unsolicited demolition by bombing. It is only now, in 1956, that the Government is again directing resources towards tackling the slum problem of the nation.

We stand therefore at the point where clearance left off in 1939 and it is fair to say that during the past 100 years, there has only been ten years of concentration on the slum problem. Have we learnt the lessons of history or are we treading the same route as before? To us the answer is apparent, later we shall say why.

### An Interim Summing-up

In this article we have attempted to unfold a broad panorama of the slum clearance and redevelopment which confronts Britain in 1956. We have presented an indication of the variety of the slum-type dwelling and of the size of the gigantic task ahead. We have given the definition of a slum house in legal terms; and indicated the complex pattern of the legal apparatus which has been established, and its complement in terms of national policy-exchequer subsidy contributions. And finally, we have briefly traced the pattern behind the history of this nation-wide blight. We have tried to express in simple terms the instantly recognisable aspects of this complex social issue. Even if we have achieved this much, we shall have only touched the surface.

To move forward, to think of slum clearance and redevelopment in the context of our time, we must strike deeper.

Anyone reviewing these events would have the sensation that "they had been there before". Some of the earlier slum clearance schemes have themselves fallen into slums by now: we realise therefore that although we must repeat our attempts at slum clearance we must at all costs not repeat former mistakes. To try to find out whether we are equipped with sufficient experience and statutory powers to avoid these mistakes, we have invited a number of people to a questionnaire. How they replied we shall review in a later article.



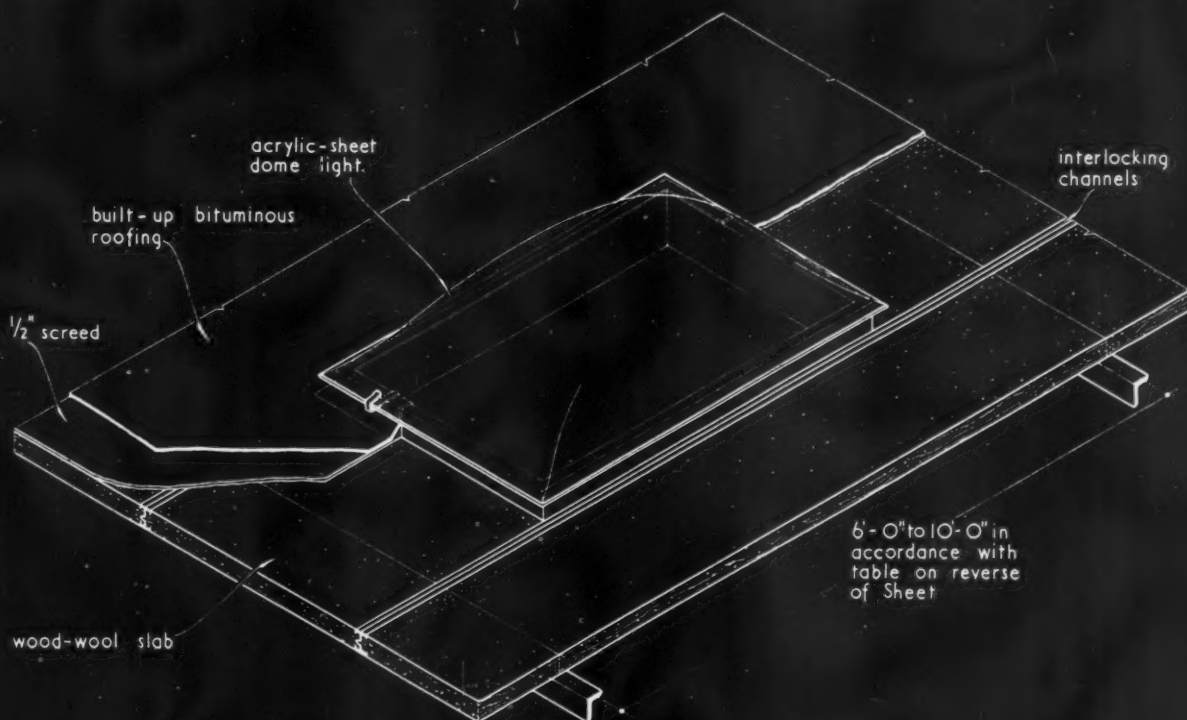
The London County Council's endeavours to combat slum conditions are of comparatively recent origin. Top left, the first housing to be built by the LCC in 1895. Top right, a block of flats by the Council on the Collingwood estate, built in 1929. Centre, above, the White City estate, Hammersmith, a major scheme completed in 1939. Above, the Flower House estate, typical of early post-war schemes, which was completed in 1950. Below, one of the most recent examples of the work of the LCC's Architect's Department: maisonettes in Loughborough Road, Lambeth, completed in 1955.



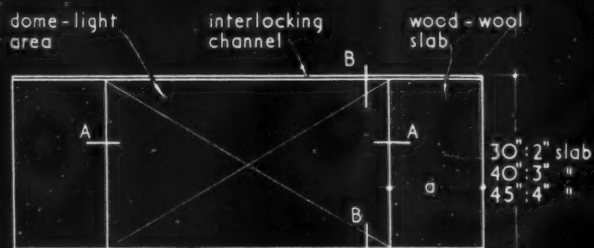


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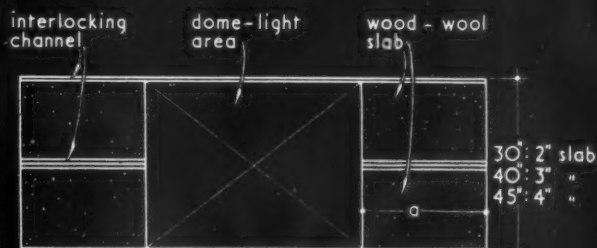




ISOMETRIC SKETCH OF TYPICAL ARRANGEMENT.

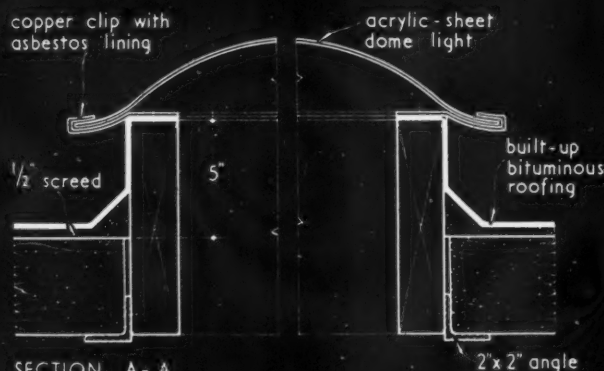


TYPE A (where dimension 'a' is 2'-0" or less).



TYPE B (where dimension 'a' is greater than 2'-0").

DIAGRAMS OF ALTERNATIVE ARRANGEMENTS.



SECTION A-A.  
TYPICAL FIXING DETAILS.



SECTION B-B.

## 24.L2 DOME LIGHT UNITS : ACRYLIC-SHEET DOME ROOFLIGHTS COMBINED WITH HALCRETE INTERLOCKING WOOD-WOOL SLABS

This Sheet describes the fixing of rectangular "Perspex" dome rooflights in Halcrete Interlocking Wood-wool Slabs.

### General

The "Perspex" dome lights for use with Halcrete units are manufactured by William J. Cox Limited to special sizes at no additional cost (for full details of the dome lights see Sheet 24.L1).

The Halcrete Interlocking Wood-wool Slabs are manufactured under licence (British Patent No. 715770). They consist of wood-wool slabs with the jointing edges contained in steel channels which interlock with similar channels on adjacent panels.

### Sizes

The following table gives the available sizes of dome light and the thickness of the wood-wool slabs used with each. The table shows Type A assemblies only. Type B assemblies are those where the width of wood-wool slabs on either side of the dome light exceeds 2 ft. 0 in. (see drawing on face of Sheet headed *Diagrams of Typical Arrangements*).

Length of unit (ft. and in.)	Length of dome light (in.)	Width of dome light (in.)	Type of slab	
			Thickness of wood-wool (in.)	Gauge of steel interlocking channel
6-0 6-8 7-0	28 36 40	30	2	18
8-0 8-3 8-6	52 55 58	40	3	15
9-0 9-6 10-0	64 69 76	45	4	16

### Fixing

The dome light units are designed for fixing in ceilings or roof linings of Halcrete Interlocking Wood-wool Slabs. The unit spans the distance between purlins or main beams. The ends of the wood-wool slabs abutting the timber kerb of the dome light rest on a 2 in. by 2 in. angle. At the sides of the dome light the interlocking channel is packed with timber to keep it rigid, and the joint stiffened by a 2 in. by 2 in. angle placed against the kerb above the slabs, as shown in the drawing on the lower face of the Sheet headed *Section B-B*. A  $\frac{1}{2}$ -in. screed is laid on the wood-wool slabs and is formed into a fillet at the angle between the dome light kerb and the wood-wool slabs. The built-up bituminous roofing is carried straight up and over the top of the kerb.

### Finish

The underside of the wood-wool slabs may be plastered if required, but they give an excellent surface for sound absorption when left untreated or painted with distemper or plastic emulsion paint. The upper surface provides a finish which is ready to receive the  $\frac{1}{2}$ -in. screeding and built-up bituminous roofing.

### Further Information

The manufacturer maintains a technical advisory department available to answer questions dealing with this subject generally.

Domelights may be obtained in sizes other than those listed above: prices can be supplied on application.

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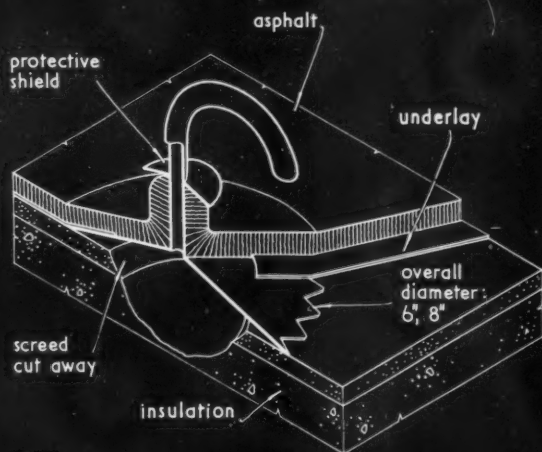
Halcrete Panels Limited.

Address : Stockley, West Drayton, Middlesex.  
Telephone : West Drayton 2051, 3484.  
Telegrams : Halcrete, West Drayton.

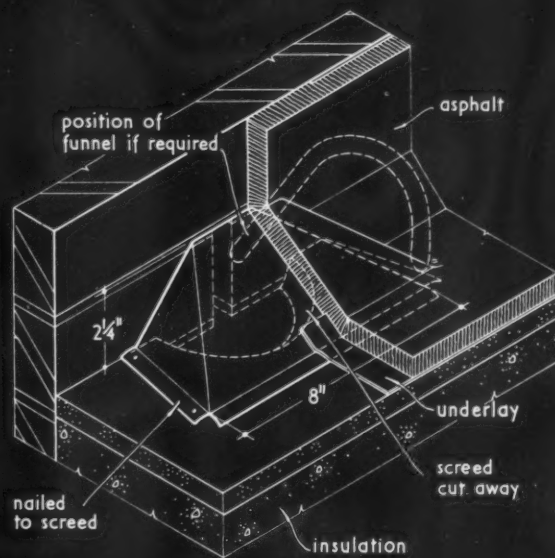




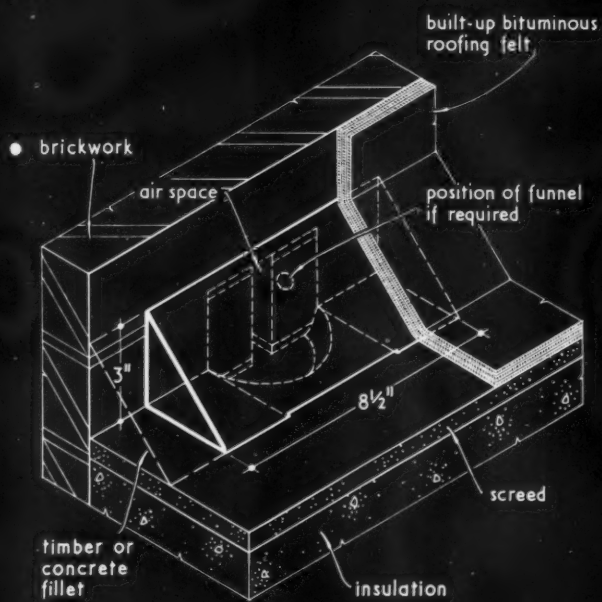




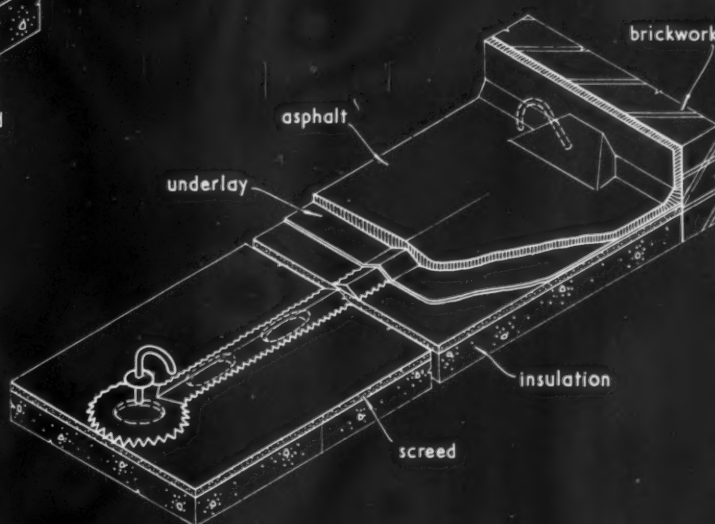
TYPE 1.



TYPE 2.



TYPE 3.



VIEW SHOWING USE OF TYPE 4.

## 26.Z1 · PAROVENT · COPPER FITTINGS FOR USE WITH ASPHALT OR BUILT-UP BITUMINOUS ROOFING *(British patent pending)*

**This Sheet** describes Parovent copper fittings which are designed for insertion in asphalt or built-up bituminous roof coverings to enable air or water-vapour to escape: the expansion of the latter under the effects of a rise in temperature transmitted through the impervious membrane might otherwise rupture it.

### Principle

With the increasing use of thermal-insulating materials both organic and inorganic, in roof construction, there is considerable danger from the large amounts of air or water-vapour trapped in these materials expanding in the heat of the sun which is transmitted through the asphalt or felt membrane. The expansion of the water-vapour causes a direct pressure on the underside of the waterproof layer which, being slightly more flexible when heated, is consequently lifted. With the subsequent lowering of the temperature, the membrane tends to resume its original position, and over a period of time the continual lifting and lowering causes the surface to crack. The pressure is greatest at the higher points in the roof structure, as it is here that expanded vapours accumulate and it is at these points, therefore, that Parovents should be installed.

### Construction and Types

Parovents are constructed from 16 gauge copper, the funnels being in 17 gauge: all joints are bronze-welded. Several types have been designed for differing applications, as described below:

**Type 1:** This is available in two sizes, as shown. Type 1 (small) has a base cone 6 in. in diameter and is for use in an asphalt roof covering. Type 1 (large) has a base cone 8 in. in diameter and is for use in a built-up bituminous roof: the larger base ensures that the device is held rigid in the flexible material. Type 1 should be used where the roof is cambered from the centre, if necessary in conjunction with Types 2 or 3.

**Type 2:** This type is available for use against walls. It may ventilate into the cavity where such exists or otherwise it is available with a funnel penetrating the sloping front surface of the vent.

The vent measures 8 in. in length at the front and 6½ in. at the back: it is 2½ in. high and measures 3½ in. from front to back, with ¼-in. flanges at the base.

**Type 3:** This type fulfils the same function as Type 2, but is for use with built-up bituminous roofing felt and replaces a portion of the 3 in. by 3 in. wood or concrete fillet at the junction of the flat roof with a wall. It may be fitted with a funnel if required. The vent measures 8½ in. in length, 3 in. in height and 3 in. in depth at the base: the aperture at the rear is 4 in. wide.

**Type 4:** This inverted vee channel is used in conjunction with one of the other types described above: it is never used entirely by itself as it cannot expel water-vapour through the impervious membrane to the outside air. Where it is impracticable to insert Types 1, 2 or 3 in any specific position, Type 4 is incorporated to collect the air or vapour along a line and lead it to a spot where one of the other types may be conveniently fixed. Type 4 is particularly useful where conditions do not permit the placing of other Parovents at the highest point or line of the roof.

### Fixing

A covering screed over the thermal insulation is not recommended unless absolutely necessary as it not only adds to the moisture in the insulating layer but also seals it in. Where a screed is used it should be perforated at intervals to allow for the passage of escaping water vapour.

**Type 1:** Where a covering screed exists or is laid it must be cut or dished to expose the underlying insulation. The bent-over portion of the funnel should lie down the direction of the prevailing wind for preference.

**Type 2:** The top of the vent will be level with the top of the first course of bricks in the wall against which it is placed. Where there is a cavity wall, the bricks behind the vent should be laid so that there is a space through which expanded vapours may be expelled into the cavity (see drawing on the face of the Sheet): a funnel is not required in this case. Where there is no wall cavity, the vent with a funnel is required. In both cases, the covering screed and/or thermal insulation must be dished beneath each vent, forming a semicircle against the wall. The flanges at the base of the vent can be lightly nailed and they should be turned down at the corners before fixing to give more space beneath for the rapid expulsion of gases. The underlay to the asphalt should just lap the base of the vent to ensure that the asphalt will not clog beneath the flanges, preventing the release of pressure. Several Type 2 vents should be used at intervals around the roof perimeter, each ventilating an area of approximately 20 square yards.

**Type 3:** This vent must be set tightly in a gap in the normal 3 in. by 3 in. wood or concrete fillet at the roof perimeter. The conditions relating to the spaced brick in the cavity wall and dishing of the insulation or screed which are stated for Type 2, also apply to Type 3. For use where there is no cavity wall, this type is supplied with a funnel. The built-up bituminous roofing felt should run up over the vent and be well secured at the top to the wall. It is the general practice of some contractors to lay the first layer of roofing felt loose upon its support, and only seal it down on the edge at the completion of each day's work. Succeeding layers are then bonded continuously in hot bitumen. All flashings are well sealed and the sealing is usually carried over at least 1 ft. 0 in. on to the flat: in some cases it will be necessary to bond to the screed to a greater width at the perimeter. The roofing, when complete, thus forms a number of "frames" and pressures arising beneath the membrane will be general pressures within the frames, which can be relieved easily by including Parovents in the system.

**Type 4:** The channel can be lightly nailed to the insulation or covering screed (see drawing on the face of the Sheet) which should be dished at points within the serrated edges. The Parovent Type 1, 2 or 3 is cut to receive the end of the channel and this point should always be well lapped by the roofing underlay to prevent any mastic material seeping in and blocking the channel. It is a simple matter to cut the copper in the necessary inverted vee shape. With Type 1 it is recommended that the general direction of the wind be ascertained so that the funnel of the Parovent lies down-wind before the cut is made.

### Further Information

The manufacturer maintains a technical advisory department, which is available to answer questions dealing with this subject. If roof plans (indicating surface falls) are submitted, together with details of roof structural formation, the manufacturer will indicate the position, types and number of Parovents required.

*Compiled from information supplied by:*

**Paramount Asphalte Limited.**

Address: 149, Kennington Park Road, London, S.E.11.

Telephone: Reliance 2373, 2191.

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working detail

WALLS AND PARTITIONS: 36

GLAZED SCREEN: SCHOOL IN LONDON, S.W.5

Chamberlin, Powell and Bon, architects



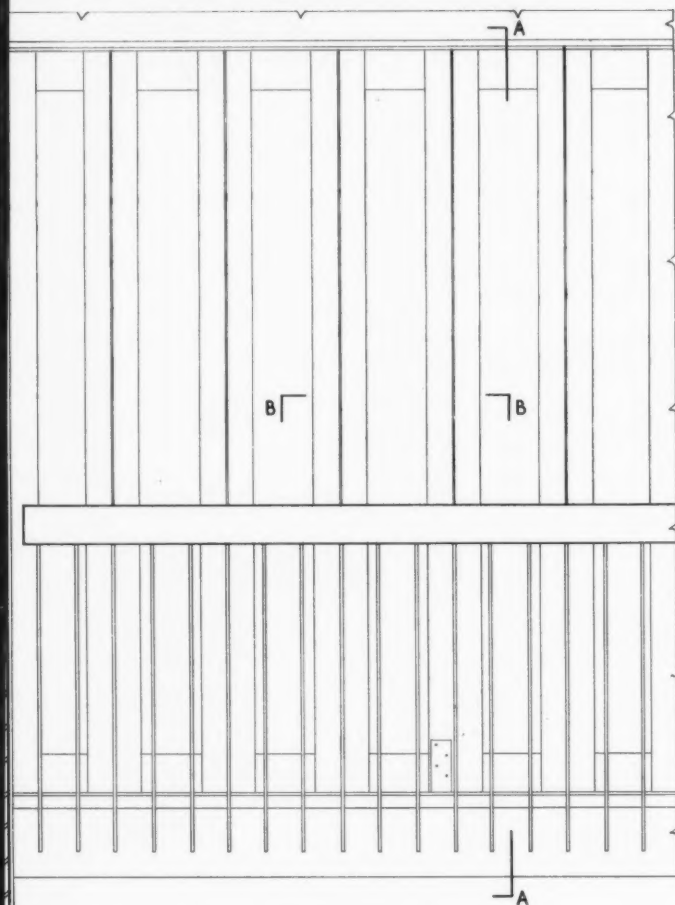
*The sliding folding screen makes it possible to convert the gallery of the assembly hall into an enclosed dining space.*

working detail

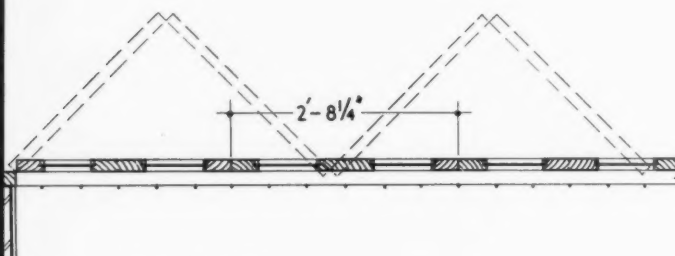
WALLS AND PARTITIONS: 36

GLAZED SCREEN: SCHOOL IN LONDON, S.W.5

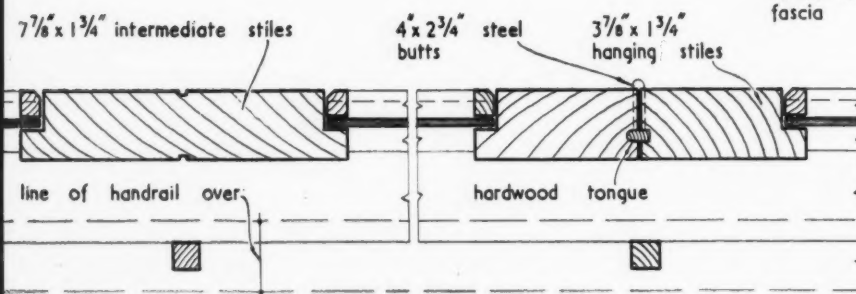
Chamberlin, Powell and Bon, architects



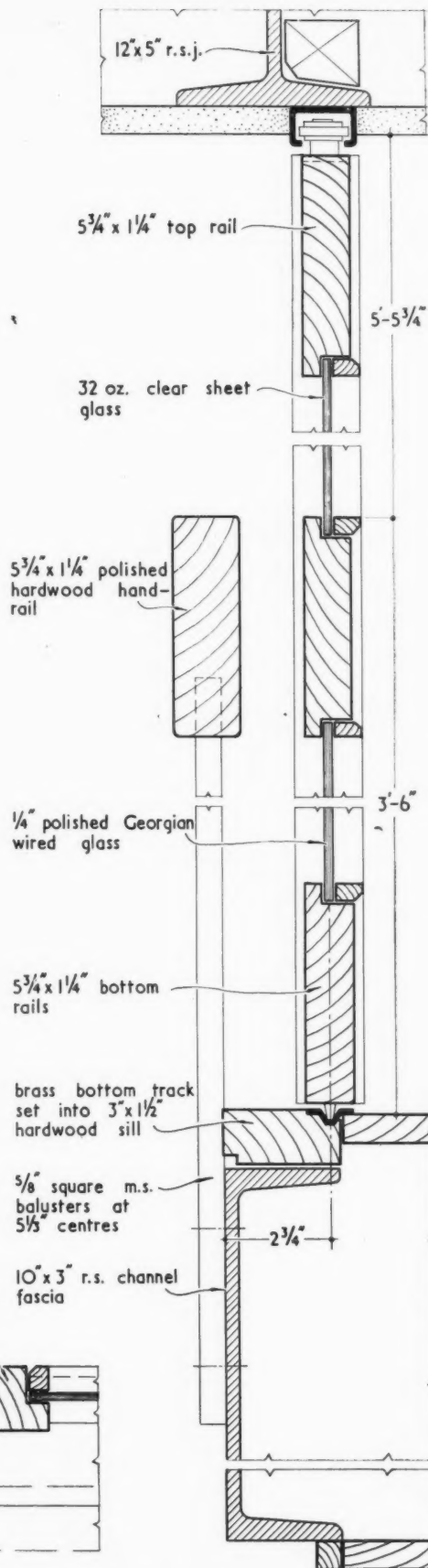
ELEVATION TO ASSEMBLY HALL.



PLAN. scale  $\frac{1}{2}$ " = 1'-0"



PLAN B-B. scale  $\frac{1}{4}$  full size



SECTION A-A. scale  $\frac{1}{4}$  f.s.







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## Announcements

### PROFESSIONAL

A. H. Brotherton, L.R.I.B.A., A.M.S.A., of Matley, Brotherton & Mills, has opened a branch office at 5, School Road, Sale, telephone Sale 8164, where they will be pleased to receive trade catalogues, etc.

The Department of Agriculture for Scotland have changed their address from 18, Blythwood Square to 71, Renfield Street, Glasgow, C.2.

Philip Raymond Bee, A.R.I.B.A., of Great Missenden, Buckinghamshire, has become a joint senior partner in the firm of Fuller Hall & Foulsham of 212, High Holborn, W.C.1. Mr. Bee has been Deputy Chief Architect to the Hemel Hempstead Development Corporation since 1947 and has been responsible under the Chief Architect for most of the development of the New Town of Hemel Hempstead. Messrs. Fuller Hall & Foulsham have also taken into partnership John Foulsham, A.R.I.B.A., who has had considerable experience with Sir Robert McAlpine and later with the firm in which he has now become a partner.

### TRADE

Pilkington Brothers Ltd. announce that T. A. Markus, A.R.I.B.A., has joined their New Products Application Department where a start is being made on cladding and curtain wall problems.

The Natural Asphalt Mine-Owners & Manufacturers' Council announces the appointment of L. G. Watkins as its director. Mr. Watkins was for the past twelve years one of the head officials of the British Standards Institution, and prior to

his joining the B.S.I. had had many years' experience as secretary of trade associations. This appointment has been made by the Council in view of the extension of its technical and advisory services to architects, to engineers and to others engaged in the building industry.

Mr. D. Dickenson has been appointed to the position of Sales Manager to Lovell & Hanson Ltd., Hanlo Works, Spon Lane, West Bromwich, to handle the development and sales of their "Hanlo" and "Hanlite" Copper Tube Fittings. Mr. Dickenson was with Samuel Gratrix Ltd., of Manchester, for 21 years.

## Corrections

The leading article in the JOURNAL of September 6, and the footnote to the article on tax-free pension schemes of the same issue (page 340) contained statements which were, we have been informed, incorrect. The ABS Insurance Agency, Limited, have asked us to publish the following:—

The Finance Act 1956 offers an important Tax relief in the case of self-employed tax payers, or those in employment which is not pensionable. Subject to certain conditions and limits, the premiums in respect of a deferred annuity of approved type will rank as a charge upon income both for Income Tax and Surtax.

The conditions laid down by the Finance Act provide that the contract may not be assigned or dealt with in any way, all premiums paid being refunded to the policy holder's estate in the event of his death before pension age. The Income Tax concession is particularly attractive in the case of the Surtax payer, but necessarily will carry less weight where a lower rate of Tax applies.

The ABS Insurance Agency, Ltd., has made arrangements with a number of leading Life Offices undertaking this business. The requirements of each enquirer will be considered in the light of all the circumstances referred to above, and the appropriate contract recommended.

The ABS Insurance Agency, Ltd., invites enquiries from Architects for any type of Insurance cover which may be required from time to time. The resources of the leading Companies and well-known Lloyds Brokers are available.

The Architects' Benevolent Society benefits as a result of all Insurance business arranged through the ABS Insurance Agency, Ltd.

A manager, E. D. Kinnish has recently been appointed to the ABS Insurance Agency, Ltd., and is available to give assistance and advice on insurance problems.

The photograph, used to illustrate Glazed Walling, for the Doctor's House at Detroit, Michigan, in the Working Detail on September 13, should have been credited to the photographer Lionel Freedman, of New York City.

We regret that three errors appeared in a news report on page 367 of last week's JOURNAL. Paul Mauger's name appeared as Paul Manger, and Howard Lobb's as Howard Thobb. F. G. Frizzell was described as a partner of "Howard Thobb and partners." He is, in fact, an architect in private practice.

The floor areas for the garage at Santry, Dublin, which was illustrated on page 286 in our issue for August 23, were incorrectly given. They should have read: Total ground floor area of superstructure 72,000 sq. ft. Total floor area, excluding basement, 87,300 sq. ft.

## A solid case for a sliding principle



'A solid has three dimensions.'  
'Elementary.'  
'We have a solid reputation.'  
'Proof, please?'  
'Donkeys' years ago, when ye olde wooden mullions first slid-and-folded along ye brazen track, Esavian experience began. No similar reputation has such length.'  
'You're just shooting an imaginary line.'  
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'Your reputation, if you'll forgive the pun, still looks a little "plane".'  
'When I draw your attention to our fourfold policy of exhaustive research, modern design, impeccable manufacture and painstaking service—you'll see our reputation has considerable height. Q.E.D.'  
'I am, as they say, solid. Please supply a gross of your folding and sliding porches.'  
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Individual Sheets may be ordered (3d. each). Readers requiring sets or individual Sheets should fill in the form below. Sets in classified order (without binders) are available as follows, and the publishers will quote for sets not detailed below.

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## NEWS IN BRIEF

The most important architectural exhibition held in recent years at The Museum of Modern Art, New York, *Built in USA: Post-War Architecture*, will be shown at the Building Centre from September 26 until October 13. The exhibition consists of 43 buildings selected by a leading historian of modern architecture in the United States, Henry-Russell Hitchcock, as the most significant examples of architecture in the United States since 1945. These examples of 32 architects "are not a demonstration in support of the battle for modern architecture which has long been won, but were chosen for their importance in developing story of American architecture and for their quality as individual works of art."

The LCC town planning committee have granted planning permission on an outline application by Messrs. L. Hannen and J. Markham, of Victoria Street, S.W., on behalf of Lilestone Holdings, for the erection of an hotel on the site bounded by Upper Berkeley Street, Gloucester Place, George Street, and Montagu Street, St. Marylebone, subject to the submission to the council of detailed plans.

The proposed 190 ft.-high building, with 19 storeys above ground, comprises approximately 800 bedroom suites, each with its own bathroom. The ground floor extends beyond the general plan area of the upper floors and is surmounted by extensive roof gardens. A restaurant with lounge and roof gardens is planned on the top floor, and a large ballroom, bars and restaurants are to be provided on the ground and lower floors. A perimeter road provides for traffic circulation within the site, and parking space for 381 cars is provided in the basements.



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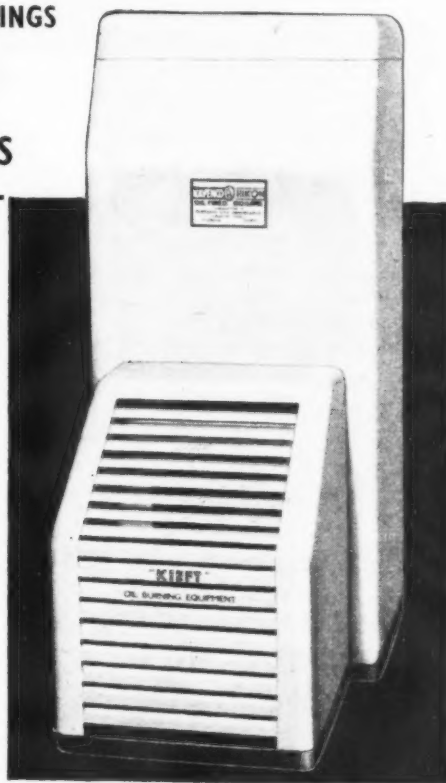
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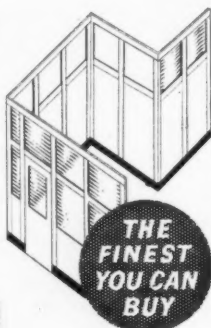


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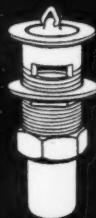
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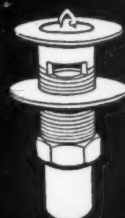
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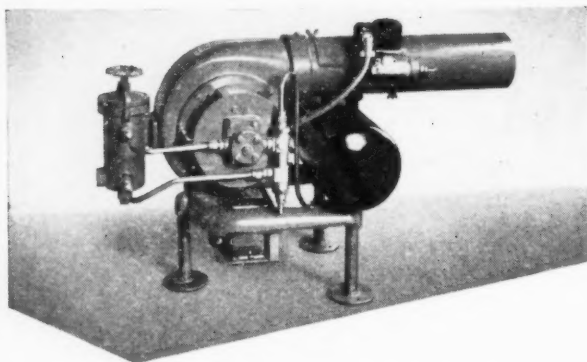
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every comfort on her . . . and what now?

*What now indeed?*

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*Good heavens — Reed Millican\*?*

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*And jolly good grounds too!*

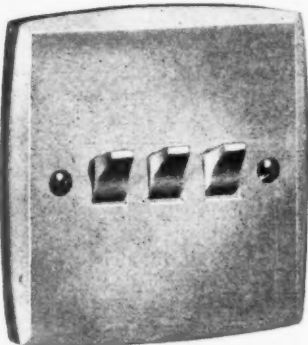
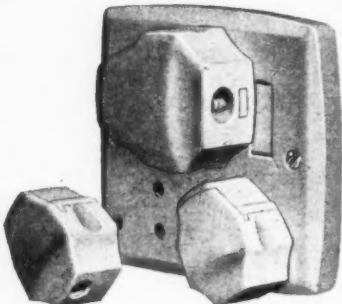


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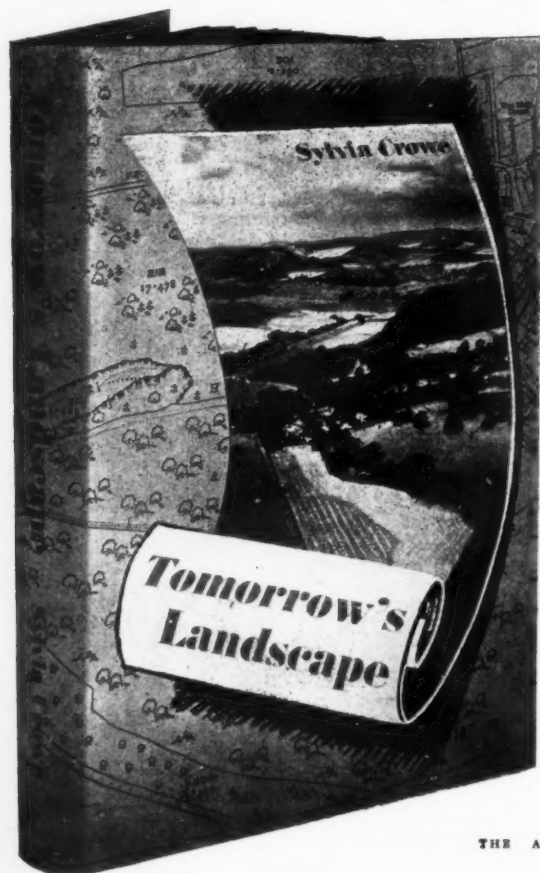
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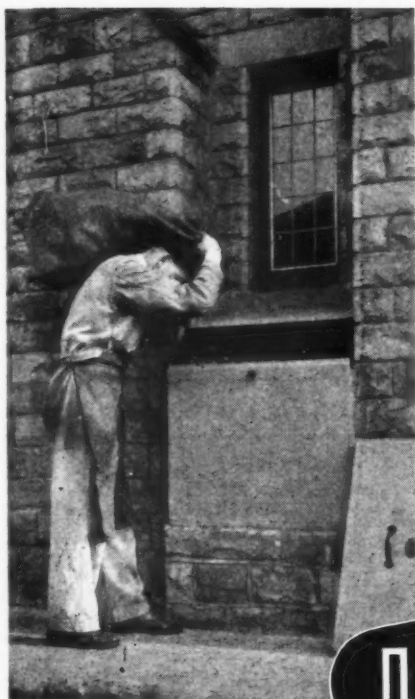
THE RECENT PUBLICATION of *Outrage*, by Ian Nairn, focussed attention on the creeping blight of Subtopia which threatens to engulf the whole countryside. *Tomorrow's Landscape*, the result of many years' research into the root causes of the problem and its cure, follows as the first constructive and positive attempt to show how that blight can be arrested by prompt, resolute, creative action.

Miss Sylvia Crowe provides a lucid study of the formation and development of urban, suburban, rural and wild landscapes in relation to the two comparatively new factors which are rapidly modifying them all: the growing density of population and the sheer scale of industrial undertakings.

She draws attention to what remains of the natural beauty of the English scene and offers very practical advice on ways and means of preserving it. In particular she shows how the essential apparatus of the modern industrial world—trunk roads, reservoirs, power stations—can be incorporated in the landscape without ruining it. Her text is supported throughout with drawings and photographs.

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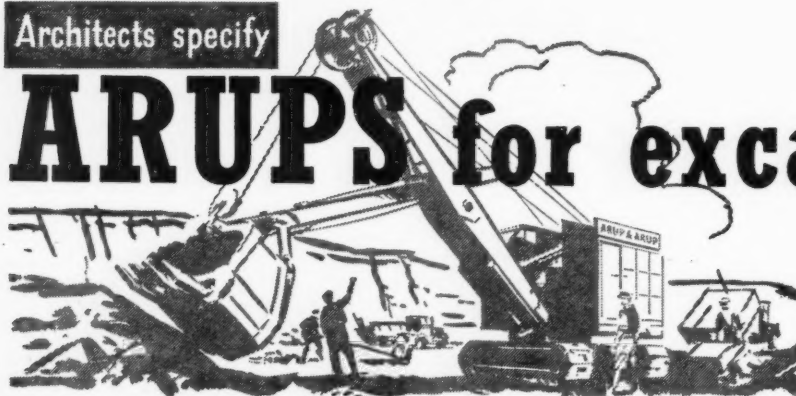
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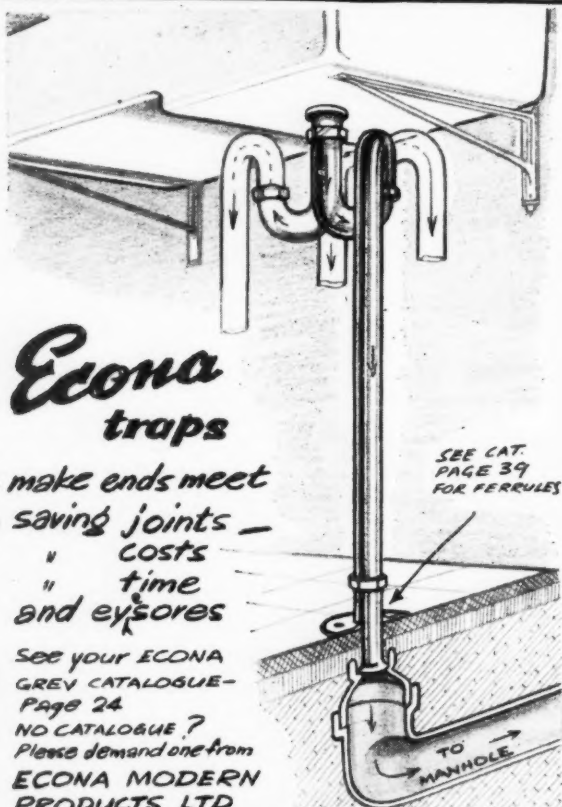
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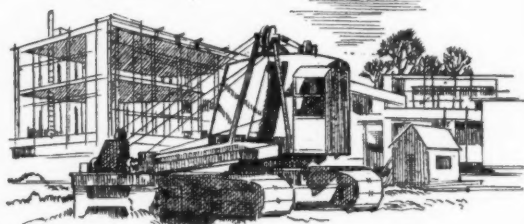
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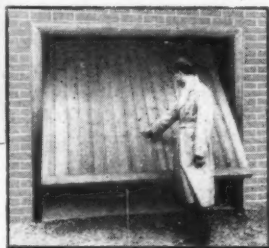
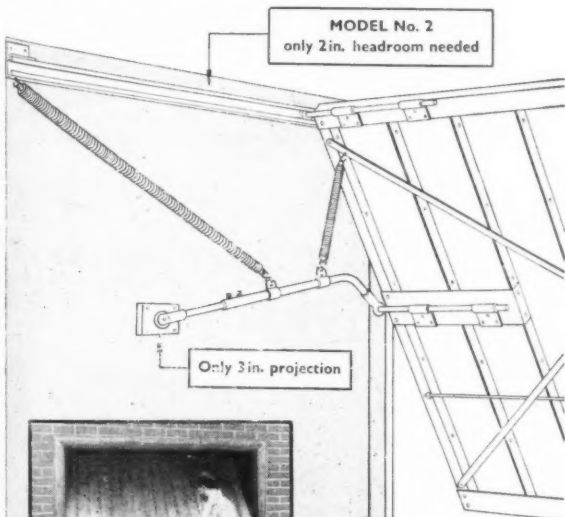
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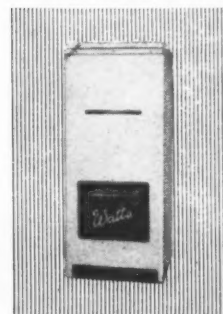
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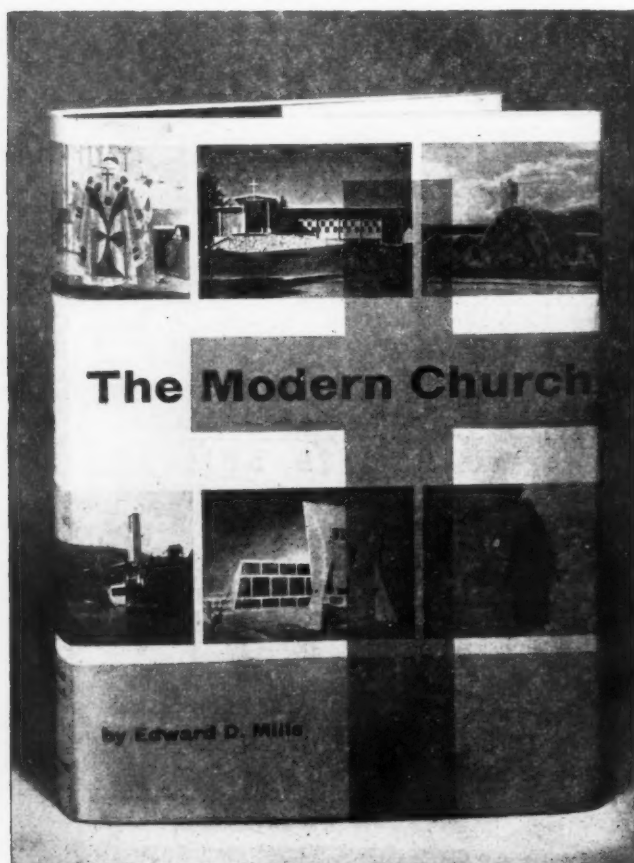
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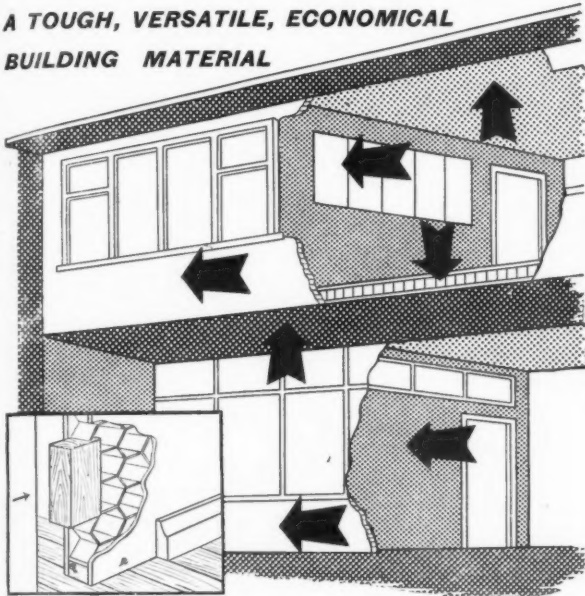
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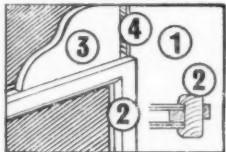


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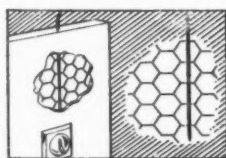
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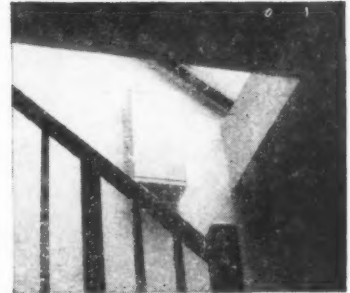
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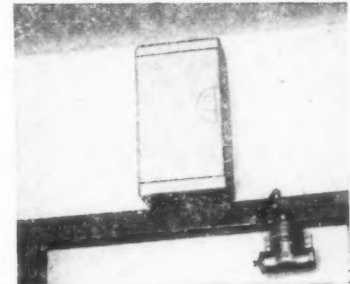
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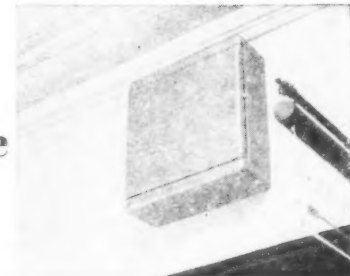
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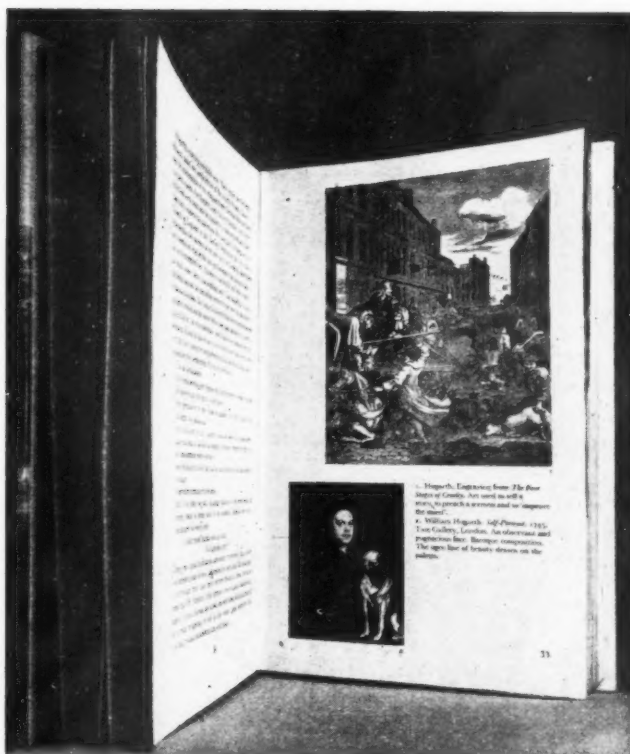
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(b) Applicants should have had considerable experience in all duties of quantity surveying, including site measurement and final accounts.

(c) Applicants should have had experience in abstracting, billing, and site measurement. Preference will be given to applicants who have passed the Intermediate stage of the R.I.C.S.

The appointments are subject to the Local Government Superannuation Acts, 1937 to 1953, the National Scheme of Conditions of Service, a satisfactory medical examination, and termination by one month's notice on either side.

Applications, stating age, present salary, present and previous appointments, details of training and experience, together with one recent testimonial and the names and addresses of two referees, should be submitted to the undersigned, not later than 27th September, 1956.

CHARLES PHYTHIAN.

Clerk of the County Council.

Shire Hall, Cambridge. 3158  
5th September, 1956.

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The conditions of service will be in accordance with the recommendations of the Joint Negotiating Committee for Chief Officers of Local Authorities: medical examination; superannuation, and terminable by three months' notice on either side.

Applications with full information, including age, qualifications, experience, particulars of present and past appointments and salaries, and the names of three referees, are to be received by me by 13th October, 1956.

Canvassing will be a disqualification.

W. H. BENTLEY.

Town Clerk.

Town Hall, Paddington, W.2. 3165  
5th September, 1956.

## WARWICKSHIRE COUNTY COUNCIL COUNTY PLANNING DEPARTMENT

Applications are invited for the appointment of a PLANNING ASSISTANT, A.P.T. Grade III/IV (£640-£885 per annum). Commencing salary will be according to experience and qualifications.

Applicants should hold a technical qualification, preferably in planning, and the appointment is subject to the provisions of the Local Government Superannuation Act and to the National Scheme of Conditions of Service.

The successful applicant will be required to pass a medical examination and to provide and maintain a motor car. Travelling and subsistence allowance will be paid in accordance with the National Scale.

The appointment is in the Development Plan section and experience in Town Map work is essential.

Applications, together with the names and addresses of two referees, should be sent to J. J. Brooks, County Planning Officer, Northgate, Warwick, not later than Friday, 28th September, 1956.

Canvassing will be a disqualification.

L. EDGAR STEPHENS,

Clerk of the Council.

Shire Hall, Warwick. 3194

## BOROUGH OF CHELTENHAM APPOINTMENT OF TWO ARCHITECTURAL ASSISTANTS

Applications are invited for the appointment of two Architectural Assistants on the Capital Works Establishment of the Borough Engineer's Department, at a salary within Grade A.P.T. IV (£710-£885).

Applicants must be Associate Members of the R.I.B.A., or equivalent, and experienced in the design of Public Buildings, Housing and Ancillary Buildings in connection with Estate Development.

The appointments are subject to the National Joint Council's Conditions of Service; to one month's notice in writing on either side; and to the successful applicants passing a medical examination and contributing to the Corporation's Superannuation Fund.

The Council will provide housing accommodation, if required, for the successful applicants.

Applications, endorsed "Architectural Assistant," stating age, training, qualifications and experience; present and previous appointments; and giving the names of two referees, are to reach Mr. G. Gould Marsland, M.B.E., B.Sc., M.Inst.C.E., Borough Engineer, P.O. Box No. 12, Municipal Offices, Cheltenham, not later than the 29th September. 3187

## METROPOLITAN BOROUGH OF WANDSWORTH ARCHITECTURAL STAFF

Applications invited for posts of:-

- SENIOR ASSISTANT ARCHITECT (A.P.T. VII, £1,075-£1,230 p.a.).
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Applicants for (a) must be Assoc. of R.I.B.A. and have had experience in design and planning of multi-storey blocks of flats, and supervision of their erection.

Applicants for (b) must be Assoc. of R.I.B.A. and/or the R.I.C.S. (Building), with architectural experience. Practical knowledge required in preparation of working drawings and in details for multi-storey blocks of flats and/or other framed buildings, and supervision of their erection.

Applicants for (c) must have passed parts I and II of the R.I.B.A. Final or Special Final Examination of their equivalent at one of the recognised schools of architecture, and had at least 5 years' experience, including training.

Application forms from Borough Engineer, Surveyor and Architect, must reach me by 3rd October.

R. H. JERMAN.

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## LONDON COUNTY COUNCIL ARCHITECTS' DEPARTMENT

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## NORTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD

Applications are invited from Associate Members of the R.I.B.A. for the following newly created post. The Board are engaged on a number of new building projects including a new hospital at Welwyn.

SENIOR ASSISTANT ARCHITECT-Salary scale £975 + £35(1) + £30(5)-£1,160 plus £40-£50 London Weighting. Applicants must have had considerable experience in design and construction, preferably in hospitals and associated buildings.

Apply, giving age, qualifications and experience, together with names of two referees, to Secretary, North West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, by 1st October.

## CWMBRAN DEVELOPMENT CORPORATION APPOINTMENT OF JUNIOR ASSISTANT ARCHITECT

Applications are invited for the above superannuable post in my Department.

The salary range is £690 + 3 @ £25 + 1 @ £15 + 3 @ £35-£885 and the point of commencement will be £690.

Applicants should be graduate Architects or have passed the final examination of the R.I.B.A. Office experience will be an advantage.

Housing accommodation will be made available in suitable cases, or otherwise lodging allowance will be paid to married men for a limited period. Applications stating age, experience, details of present and former employment (together with applicable salaries) and the names and addresses of two referees must reach the undersigned by 1st October, 1956.

J. C. P. WEST, A.R.I.B.A., M.T.P.I., Chief Architect.

Victoria Street,

Cwmbran,

10th September, 1956.

3204

## COUNTY BOROUGH OF WEST HAM BOROUGH ARCHITECT AND PLANNING OFFICERS' DEPARTMENT RE-ADVERTISEMENT

Applications are invited from Architects and Planners for the following permanent appointments at salaries shown (including maximum London allowance):-

ARCHITECTS  
Senior Group Architect, Grade VII, £1,005 + £45-£1,230.

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Deputy Group Architects (4 posts), Grade V, £825 + £35-£1,000.

Assistant Architect, Grade IV, £740 + £35-£915.

Architectural Assistants (2 posts), Grades I/II, £560 + £20-£705.

PLANNERS  
Senior Assistant Planning Officer, Grade VI, £910 + £40-£1,110.

Assistant Planning Officer, Grade V, £825 + £35-£1,000.

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Planning Assistant, Grades I/II, £560 + £20-£705.

The County Borough has an extensive reconstruction and slum clearance programme, and offers varied and interesting work.

Application forms and details from the Borough Architect and Planning Officer, Thomas E. North, O.B.E., F.R.I.B.A., Dist. T.P., M.T.P.I., 70, West Ham Lane, Stratford, E.15 (returnable by 9th October, 1956). 3206

## COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

## OFFICE OF THE COUNTY ARCHITECT

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ASSISTANT ARCHITECTS, Grade A.P.T. III and A.P.T. IV. Salary ranges (A.P.T. III) £640-£765, (A.P.T. IV) £710-£885. Applicants should be Registered Architects and preferably have had experience in the maintenance and repair of buildings and minor adaptations thereto.

The appointments are subject to the provisions of the Local Government Superannuation Acts and to the successful candidates passing a medical examination.

Applications, on forms obtainable at this office must be delivered not later than the first post on the 24th September, 1956.

HUBERT BENNETT,

County Architect.

3209

## HAYES AND HARLINGTON URBAN DISTRICT COUNCIL

Applications are invited for (a) ASSISTANT ARCHITECT, Grade A.P.T. IV, i.e., £710-£885 per annum; (b) ARCHITECTURAL ASSISTANT, Grade A.P.T. III, i.e., £640-£765 per annum, plus appropriate London weighting in each instance, 21-25 years £20 per annum, 26 years and over £30 per annum. Candidates for (a) must be a Registered Architect and have a good general experience in design and construction relating to municipal housing and other works and capable of supervising large building contracts, (b) must have passed R.I.B.A. Inter. exam. and have good experience of housing work with a local authority. Housing accommodation will be made available for (a) and (b) if necessary. Five-day week. Further particulars and form of application obtainable from the undersigned, which when completed must be returned by 8th October 1956.

GEORGE HOOPER,

Clerk and Solicitor.

Town Hall,

Hayes, Middlesex.

3217



# COUNTY COUNCIL OF NORTHUMBERLAND COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the post of ASSISTANT QUANTITY SURVEYOR on the permanent staff of this Department. Salary on A.P.T. scales Grade IV—£710 per annum rising by five annual increments of £35 to a maximum of £885 per annum.

Applicants should have experience in the preparation of bills of quantities, measurement of work on site and preparation of interim valuations and final accounts and preference will be given to those who have passed the Final Examination of the Royal Institution of Chartered Surveyors (Quantities Sub-Division).

Applications giving full details of age, education, qualifications, and previous experience, together with the names and addresses of two referees to whom reference can be made, should reach this office not later than 29th September, 1956.

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

C. C. BROWN, A.R.I.B.A.,  
County Architect

County Hall,  
Newcastle-upon-Tyne 1. 3215

## DURHAM COUNTY COUNCIL PLANNING DEPARTMENT

AREA PLANNING OFFICER. Salary £975—£1,200 (A.P.T. VII). Must be Member or Associate Member of the Town Planning Institute and should have had wide experience in all aspects of planning work since qualifying, including control of staff. The post gives scope for initiative and the successful applicant will be responsible for all development control and town map work in the East Durham area.

SENIOR PLANNING ASSISTANT. Salary £795—£970 (A.P.T. V). Applicants must be Associate Members of the Town Planning Institute. Preference will be given to those holding an architectural qualification and having design ability and experience. The successful applicant will work as a member of a small team dealing with the preparation of housing and redevelopment layouts, central area layouts, village layouts, etc.

RESEARCH ASSISTANT. Salary £710—£885 (A.P.T. IV). Must hold a degree in Geography from a British University and should have had experience of research work preferably in a Planning Office. The successful applicant will work on population and industrial problems, mineral workings, etc., and on research work in connection with the review of the County Development Plan.

Housing available, Peterlee 12 miles; Newton Aycliffe, 12 miles from Durham. Forms and particulars from County Planning Officer, 10, Church Street, Durham. Closing date, 29th September, 1956. Canvassing members of the Council is prohibited.

J. K. HOPE,  
Clerk of the County Council. 3220

## COUNTY BOROUGH OF HASTINGS ASSISTANT ARCHITECT (SCHOOLS)

Grade A.P.T. V (£795—£970 p.a.). Applications are invited for the above appointment in the Borough Engineer's Department. The Architect appointed will be the Leader of the section dealing with the design and erection of new schools and should be suitably experienced and an A.R.I.B.A. Future schemes will probably include a College of Further Education (value £500,000).

The provision of housing accommodation will be considered if required.

Applications, stating age, qualifications, present and previous appointments and salary, and the names of three referees, to be sent to the Borough Engineer, 37, Wellington Square, Hastings, not later than 6th October, 1956. Canvassing will disqualify.

N. P. LESTER,  
Town Clerk. 3197

## CITY OF PETERBOROUGH APPOINTMENT OF ARCHITECTURAL ASSISTANT, Grade A.P.T. II

Applications are invited for the above appointment in the City Engineer's Department. Applicants must possess a sound knowledge of building construction and be capable of preparing working and detail drawings under supervision. Previous experience on school buildings will be an advantage.

Applications stating age, experience, details of qualifications, together with copies of three recent testimonials should be sent in envelopes endorsed "Architectural Assistant" to Mr. L. H. Robjohn, M.B.E., A.M.I.C.E., City Engineer and Surveyor, Town Hall, Peterborough, to reach him not later than 29th September, 1956.

Consideration will be given to the provision of Council housing accommodation.

Canvassing, directly or indirectly, will disqualify. Candidates must disclose whether they are related to any member or senior officer of the Council.

C. PETER CLARKE,  
Town Clerk. 3202

Town Hall,  
Peterborough.  
11th September, 1956.

## THE GLASGOW SCHOOL OF ARCHITECTURE DEPARTMENT OF TOWN AND COUNTRY PLANNING

### POST-GRADUATE COURSE for the DIPLOMA IN TOWN PLANNING

The Diploma may be taken either as a Full-time Day Course of one session (5 terms) or as a Part-time Course of two sessions. The Part-time Course involves a minimum attendance of two afternoons and three evenings per week. Both courses have been approved by the Town Planning Institute.

Only candidates who have qualified for an "approved" Degree or Diploma in Architecture or who have passed a recognised Final Examination in (a) Architecture; (b) Engineering or (c) Surveying; or who are graduates of a British University with an Honours Degree in Geography or a first or second class General Degree with Geography as principal subject, are eligible for admission.

The Course will commence in the College on Monday, 1st October, 1956, at 5.30 p.m., when prospective candidates should attend for enrolment.

Further particulars may be obtained from The Secretary, Royal Technical College, George Street, Glasgow, C.I. 3233

## SHEFFIELD REGIONAL HOSPITAL BOARD

Applications are invited for the post of ARCHITECTURAL ASSISTANT. Candidates should have passed the Intermediate Examination of the R.I.B.A. or an examination recognised as equivalent.

Salary scale £510 (at age 21 or over) × £20 (5) × £30 (1) × £20 (1) × £25 (2)—£710. The appointment is subject to the Whitley Council terms and conditions of service, to the National Health Service (Superannuation) Regulations, and to one month's notice on either side. Applications together with the names of three referees should be sent by the 6th October, 1956, to the Secretary to the Board, Fulwood House, Old Fulwood Road, Sheffield, 10. 3224

## SOUTH AUSTRALIA SCHOOL OF MINES AND INDUSTRIES, ADELAIDE

LECTURER in the DEPARTMENT OF ARCHITECTURE. Salary £A1,525 to £A1,676 according to qualifications. Applicants should hold a degree or diploma in Architecture and be a corporate member of an appropriate professional body.

Family fares paid to Australia and housing guaranteed. Applications close 16th November, 1956.

Agent General and Trade Commissioner.  
South Australia House,  
Marble Arch,  
London, W.1. 3228

## COUNTY COUNCIL OF ESSEX COUNTY PLANNING DEPARTMENT

Applications are again invited for the post of AREA PLANNING OFFICER J.N.C. Scale C (£1,295—£1,515) in the East Central Area Office at Chelmsford.

Candidates must be Corporate Members of the Town Planning Institute and should possess an additional recognised professional qualification. They should have had considerable and wide experience in the planning of both urban and rural areas and be experienced in the administration of an office and the control of staff.

Application forms from County Planning Adviser, Broomfield Place, Broomfield, Chelmsford, returnable by 27th September, 1956. Canvassing disqualifies.

Applicants who answered previous advertisement should notify the above if they wish to be considered. 3203

## URBAN DISTRICT COUNCIL OF EAST BARNET

Applications are invited for the following permanent appointments:

- (a) SENIOR ASSISTANT ENGINEER, Grade A.P.T. IV (£710 to £885 per annum).
- (b) ARCHITECTURAL ASSISTANT, Grade A.P.T. II (£595 to £675 per annum).
- (c) ENGINEERING ASSISTANT, Grade A.P.T. I (£530 to £610 per annum).

All salaries will be increased by London weighting of £20 or £30 per annum according to age. Housing accommodation will be provided for appointment (a) if necessary.

Conditions of appointment and forms of application, returnable by the 8th October, 1956, may be obtained from the Engineer and Surveyor, Town Hall, Station Road, New Barnet, Hertfordshire. 3227

## BOROUGH OF RICHMOND (SURREY) ARCHITECTURAL DRAUGHTSMAN

Applications are invited for the appointment of an Architectural Draughtsman on the established staff of the Borough Engineer and Surveyor, at a salary in accordance with A.P.T. Grade I (£530—£610 p.a.), plus the appropriate London area weighting.

The applicant should be a neat and expeditious draughtsman. The work will be on housing, including multi-storey flats and public buildings.

Full particulars regarding age, experience, and appointments held, with the names of two referees, should be forwarded to the Borough Engineer and Surveyor, Hotham House, Heron Court, Richmond, Surrey, on or before 8th October, 1956. Canvassing will disqualify. Relationship, if any, to members of the Council of senior officers must be stated. No assistance with housing. 3245

## SURREY COUNTY COUNCIL

Applications are invited for following appointments:

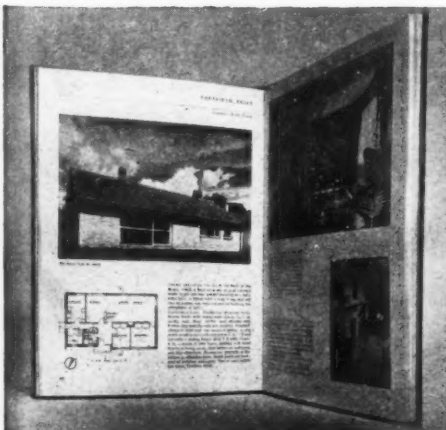
1. ASSISTANT ARCHITECT, Grade IV-VI, minimum £710, maximum £1,050 plus £30 London allowance p.a.
2. ARCHITECTURAL ASSISTANTS Grade I-III (minimum £530, maximum £765 p.a. plus London allowance).

Salary range of appointment and commencing salary will depend on experience and qualifications.

Full details, present salary and three copy testimonials to County Architect, County Hall, Kingston, as soon as possible. 3237

## LONDON COUNTY COUNCIL

Brixton School of Building, as soon as possible. ASSISTANT, Grade B, for Building Construction and supervise Studio work in Architecture and Surveying. Should be Fellows or Associates of R.I.B.A. or R.I.C.S. and have good professional experience. Teaching experience an advantage. Burnham F.E. salary scale £686 × £25—£1,235, commencing and maximum salary according to age, qualifications and experience. Application forms from Secretary at School, Ferndale Road, S.W.4, returnable by 6th October, 1956. (1786a) 3247



# 50 modern bungalows

EDITED BY FELIX WALTER, F.R.I.B.A.

THIS BOOK ILLUSTRATES AND DESCRIBES in detail a selection of examples of the most successful and interesting recently-built single-storey houses, all of them examples which show the latest developments in small house planning and design. It is edited by a practising architect with considerable experience of small house design. In his introduction and descriptive notes he pays special attention to new heating methods and to the latest ideas in planning, kitchen arrangements and so on which these facilitate. Costs are stated for each house illustrated. Size 10 ins. by 7½ ins. 112 pages, over 200 illustrations in halftone and line. Price 18s. 6d. net postage 1s.

THE ARCHITECTURAL PRESS, 9 Queen Anne's Gate, S.W.1.

# EAST RIDING OF YORKSHIRE COUNTY COUNCIL

Applications are invited for the appointment of ASSISTANT ARCHITECTS on the permanent staff of the County Architect. The salaries to be in accordance with Grade IV (£710-£885) and the Special N.J.C. Scale (£690-£840) according to qualifications and experience.

Applications giving particulars of qualifications, experience, age, past and present appointments with salaries, together with the names of three referees, should be sent to the County Architect, County Hall, Beverley, not later than Friday, 5th October, 1956.

THOMAS STEPHENSON,  
Clerk of the Council.

## GOLD COAST

Vacancies exist in the Town Development Corporation for the post of QUANTITY SURVEYORS and ASSISTANT QUANTITY SURVEYORS.

Qualifications: Candidates for the post of Quantity Surveyor must be Fellows or Associates of the Royal Institution of Chartered Surveyors (Quantity Surveying Division), or possess comparable qualifications entitling them to membership of the Institution. Candidates for the post of Assistant Quantity Surveyor must have passed the intermediate examination of the above Institution or possess comparable qualifications and must have sat for the final examination. In addition, all candidates must have had a minimum of three years' experience in the office of a Chartered Quantity Surveyor of the Quantity Surveying Section of a Local Authority.

Duties: The preparation of bills of quantities and specifications in respect of works connected with the development of a New Town consisting largely of residential houses, special buildings and civil engineering works; analysis of prices from Civil Engineers' and Architects' plans; the preparation of approximate estimates for development works; and the administration of contracts.

Terms of Service: Appointment will be on contract/gratuity terms for two tours of 18-24 months in the first instance. Salary: Assistant Quantity Surveyor, £1,030-£1,600 consolidated. Quantity Surveyor, £1,030-£2,020 consolidated. Point of entry according to age, experience and qualification. Gratuity at the rate of £12 10s. per month of satisfactory service will be payable on final termination of the contract.

Apply, stating qualifications, to the Secretary for Recruitment, Gold Coast Office, 13, Belgrave Square, London, S.W.1, for a form of application. Closing date for receipt of initial enquiries, 12th October, 1956.

## COUNTY COUNCIL OF NORTHUMBERLAND COUNTY ARCHITECT'S DEPARTMENT

Applications are invited from qualified Architects having some previous office experience for post of ASSISTANT ARCHITECT on the staff of this Department. Salary with A.P.T. Grade IV, £710 rising to a maximum of £885 per annum, with prospects of promotion to higher grades within the office in due course.

The appointment will be subject to the provisions of the Local Government Superannuation Acts and the successful candidates will be required to pass a medical examination.

Applications in writing stating age, qualifications and previous experience together with the names and addresses of two referees to whom reference can be made to be forwarded to the County Architect, County Hall, Newcastle-upon-Tyne, 1, not later than Monday, 1st October, 1956.

## FIFE COUNTY COUNCIL PLANNING DEPARTMENT-CUPAR

Applications are invited for the following appointments:

- (a) SENIOR PLANNING ASSISTANT, salary scale £710 to £805.
- (b) PLANNING ASSISTANT, salary scale £580 to £700.
- (c) PLANNING ASSISTANT, salary scale £550 to £625.

Applicants for post (a) should have the Intermediate Examination of the Town Planning Institute and should have had practical experience in a planning office. Applicants for posts (b) and (c) should have had appropriate training and experience in a planning office. Medical examination for admission to Superannuation Scheme. Consideration may be given to meeting housing requirements of successful candidates. Applications stating age, experience and qualifications to be lodged with the undersigned not later than 26th September, 1956.

MATTHEW POLLOCK,  
County Clerk.

County Buildings,  
Cupar, Fife.

## Architectural Appointments Vacant

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

**CROYDON.** ARCHITECTURAL ASSISTANT required immediately for interesting and varied work. Inter./Final standard; capable of running small contracts.—Write age, experience, and salary required, to George Lowe & Partner, 4, High Street, Croydon, Surrey. 1951

**ARCHITECTURAL ASSISTANTS** required in Architects' Department dealing with new office buildings, alterations and adaptations.—Write, giving details of age, experience, and salary required, to Chief Architect, Co-operative Permanent Building Society, New Oxford House, Bloomsbury Way, London, W.C.1. 3226

## CO-OPERATIVE WHOLESALE SOCIETY, LTD. ARCHITECTS' DEPARTMENT, MANCHESTER.

APPLICATIONS are invited for the following appointments:—

(a) SENIOR ASSISTANT ARCHITECTS, with experience of work on commercial and industrial projects.

(Salary range £820 to £975 per annum.)

(b) ASSISTANT ARCHITECTS, capable of preparing working drawings from preliminary details.

(Salary range £550 to £820 per annum.)

There is a five-day week in operation, and both appointments offer prospects of upgrading.

Applications, stating age, experience, qualifications and salary required, to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 3871

**ASSISTANT ARCHITECT** required by West End firm for important airport, industrial and office schemes. Salary according to experience. Box 1891.

**TREHEARNE & NORMAN, PRESTON & PARTNERS** have vacancies for SENIOR AND JUNIOR ASSISTANTS. Salaries according to experience and qualifications. Apply: 83, Kingsway, W.C.2 (HOL 4071). 3028

**BARTLETT & GRAY** require ASSISTANT ARCHITECTS and JUNIOR ASSISTANTS. Salary up to £650 per annum.—Castle Gate Chambers, Castle Gate, Nottingham. Telephone No. 53214/5. 3235

**ARCHITECTS** and Engineers require young DRAFTSMEN who have completed N.S. Generous salaries, according to age and experience. Five-day week, luncheon vouchers. Opportunities for overseas employment.—Apply, giving details of past experience, salary required, and date available, to Box 3196.

**ARCHITECTS' CO-PARTNERSHIP** require qualified ASSISTANTS, with experience.—Write 44, Charlotte Street, W.1, or telephone Langham 5791. 3205

**ARCHITECTURAL ASSISTANTS**, all grades, required by Monro & Partners for their Watford office.—Apply 32, Clarendon Road, Watford. 3208

**ARCHITECTURAL ASSISTANT** required, about Intermediate standard, with office experience, capable working drawings. Busy practice, Berkeley Square, W.1.—Box 3215.

**ARCHITECTURAL ASSISTANTS** required, of Intermediate R.I.B.A. standard, for work on contemporary industrial buildings. Good salaries and plenty of opportunity for initiative. London office.—Write, giving details of salary, experience, to Box 3210.

**ARCHITECT'S ASSISTANTS** required, London. Salaries £500-£750.—Box 3200.

**WORCESTER OFFICE.**—Llewellyn Smith & Waters invite applications from ASSISTANTS of R.I.B.A. Inter. standard, with 3 years' office experience. Preferably with experience of job supervision and specifications. Salary according to experience and ability.—Write 103, Old Brompton Road, London, S.W.7. 3199

**CLERK OF WORKS** is required by British Insulated Callender's Cables, Ltd., for duties connected with extension to their factory premises at Prescott, Lancs. It is anticipated that this work will extend for a period of 2½ years. Candidates should be suitably qualified, with previous experience in factory and office type buildings and finishes. The successful applicant will be remunerated in accordance with age, qualifications and experience.—Applications in writing, quoting Ref. P/57/55, should be submitted to the Staff Office, B.I.C.C., Ltd., Prescott, Lancs. 3198

**QUALIFIED ARCHITECTURAL ASSISTANT** required.—Write full particulars to T. Mitchell & Partners, 20, Bedford Square, W.C.1. 3219

**S. MORRISON AND PARTNERS** require ASSISTANTS, of ability and initiative, for interesting work in various parts of country. 5-day week. Interview travelling expenses paid.—103, Belper Road, Derby. 3225

**LONDON** Surveyor's Office.—ASSISTANT (Inter. Building standard) required for alteration works and maintenance. Must be capable of writing specifications, simple estimating, preparing drawings, checking builders' accounts, writing reports, etc., and of driving car. Working knowledge of London Building Acts and By-Laws an advantage. Commencing salary £690 per annum.—Applications in writing, stating age, qualifications, experience, and any other relevant information to Box 3222.

**LONDON** Brewery Company requires SENIOR ASSISTANT in Architect and Surveyor's Department for work in connection with industrial and administrative buildings. Applicants, aged 30-45, must be well versed in the preparation of detail working drawings, possess a sound knowledge of building construction, surveying and specification writing. Successful candidate will be considered for permanency and pension scheme on completion of six months' probationary period. 5-day week, luncheon allowance, and cost-of-living bonus at present in operation. Basic salary £800-£900 p.a., according to experience.—Reply, stating age, experience, and past and present appointments, in chronological order, to Box 3218.

**ARCHITECTURAL ASSISTANTS** of Intermediate R.I.B.A. standard required for Coswood Office with varied practice. State age, qualifications, experience and salary required, Fyfe & Saint, Chartered Architects, Thomas Street House, Cirencester, Glos. 3155

**ARCHITECTURAL ASSISTANT** required for London Office. Varied and interesting work in connection with industrial and commercial schemes. The vacancy offers good opportunity for the right man. Applicants must be capable of preparing details with minimum supervision. Good draughtsmanship essential. 5-day week. Full particulars of experience to Box 3156.

**SENIOR ASSISTANT, A.R.I.B.A.** or equivalent, with experience of Domestic Design, used both to office and site working, and supervision. Required by Architect dealing with houses and shops in the London area. Salary to £250 per annum, according to qualifications. Apply to: H. L. Mead, A.R.I.B.A., No. 1, Cromwell Road, South Kensington, S.W.7. 3175

**PRIVATE** Office has several vacancies for ARCHITECTS interested in new building techniques. Previous experience not essential and work will include the research and development of standard structural and building elements. Apply A. M. Gear, F.R.I.B.A., 12, Manchester Square, W.1. 3190

**STRUCTURAL ENGINEERING DRAFTSMAN.** experienced in the design and construction of high-class industrial buildings, in steel and reinforced concrete, required. Accommodation will be available. Write stating age, qualifications and salary required to E.M.A., Cadbury Brothers, Ltd., Bournville, Birmingham. 3186

**ARCHITECTURAL ASSISTANT** required in busy London office with varied practice. Good salary and prospects for suitable applicant. 5-day week. Write, giving particulars of age, qualifications, experience, etc., to Box 775, c/o 7, Coptic Street, W.C.1. 3213

**LONDON** Consultants require immediately ASSISTANTS of Intermediate and R.I.B.A. standard for varied and interesting contemporary industrial projects. Responsibility given to applicants with good design sense and constructional ability. Apply, giving full particulars and salary required, to Box No. 401, Glovers Advertising Ltd., 351, Oxford Street, London, W.1. 9341

**CO-OPERATIVE WHOLESALE SOCIETY LTD. ARCHITECTS' DEPARTMENT, MANCHESTER** SHOPFITTING DRAFTSMAN required, experienced in shop equipment and modernisation of interiors.

The position calls for the preparation of layouts and perspectives with a modern approach to store fitting problems.

The post is pensionable, subject to medical examination and there is a five-day week in operation.

Applications giving age, details of previous experience and salary required to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester 4. 3056

**DESIGNING** experience in the working out of projects for large buildings is offered to a young qualified ASSISTANT with real ability. London office.—Apply, stating qualifications and salary required, to Box 3080.

**ARCHITECTURAL ASSISTANT, Inter.** standard, required by Birmingham firm. 5-day week; concessions for study.—Box 3121.

**SMALL** West London office, with varied practice, urgently requires ASSISTANT of 2 years' minimum office experience.—Details and salary required to Pollen & Jebb, 8, Pembroke Square, W.8. Tel. No. 1, W.8. 4974. 3096

**ARCHITECTS (SENIOR or ASSISTANT)**, qualified or to the standard of the R.I.B.A. Final examinations. Two positions vacant in the office of a firm of Architects in Melbourne, Australia. Salaries (sterling p.a.): Senior £1,500 upwards, Assistant £1,200-£1,500. Good conditions; 5-day week. Responsible work, with encouragement to advance.—Reply to Box 3097. Selected applicants will be interviewed in London on the 4th October.

**SMALL** West End office, undertaking a wide range of work, urgently requires ASSISTANT. Must have at least 2 years' office experience.—Reply with details of experience and salary required. Box 3090.

**ARCHITECTURAL ASSISTANT, Inter.** to Final standard, required in small contemporary office.—A. F. Bennett, 35, Queens Gate Mews, S.W.7. K.N. 6937. 3102

**VACANCIES** occur for two ARCHITECTURAL ASSISTANTS (Intermediate R.I.B.A. standard) in Architect's Department of multiple shop Company, with offices in West London. 5-day week, staff dining room and pension scheme. Applicants should state salary required, experience and age. Box 3137.

**ARCHITECTS and ARCHITECTURAL ASSISTANTS** are offered interesting and remunerative work on large industrial multi-storey and housing contracts with long established Company of contractors in the Manchester area. The positions offered are of a permanent nature, with good working conditions. A contributory pension scheme is in operation. Only Intermediate standard or recently completed Finals applicants considered. Salary £700/£750 with advancement according to proven ability. Apply Box 3149.



**ASSISTANT** required in small but busy Architect's Office on South Coast. 5-day week. Write, age, experience and salary, etc., to Egerton W. Owen, Chartered Architect, 33, Beach Road, Littlehampton, Sussex. 3127

**CONSTRUCTION DEPARTMENT** of a large multiple retail concern with offices in London require:—

**JUNIOR ESTIMATOR.** There is a Pension Scheme and a five-day week in operation. Applicants should write giving full particulars of age, experience and salary required. Box 3135.

**ARCHITECTURAL ASSISTANT** required, Final Standard, for variety of work in connection with exhibition and ancillary buildings. Good salary and working conditions. Write, in first instance, giving details of age, training and experience, if any, to Staff Architect, Olympia Limited, Kensington, W.14. 3150

**POST-INTERMEDIATE ASSISTANT** required, in large London Office with widely varied practice. Lewis Solomon, Son & Joseph, 21, Bloomsbury Way, London, W.C.1. Telephone HO3 7082. 3152

**PRIVATE** practice office has vacancy for **ASSISTANT** willing to take control of jobs. Work includes domestic, ecclesiastical, commercial and industrial, modern and traditional. Urgent. Send details age, experience and salary suggested to: Forsyth Lawson, Cunningham & Partners, 30, Horse Fair, Banbury, Oxon. 3180

**ASSISTANTS** required for London office on interesting West African projects. Prospects of overseas tours. Experience in tropical work preferable to qualifications. Salary by arrangement.—Apply Box 3241.

### Architectural Appointments Wanted

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

**NEWLY** qualified, married, female **ARCHITECT**, Edinburgh diploma, requires minimum one year's office experience in London. Salary not a consideration.—Box 3234.

**A.R.I.B.A.** (age 43), extensive experience on large and small projects, seeks responsible position, possibly leading to Partnership. Car owner. S.W. preferred.—Box 3231.

**A.R.I.B.A.**, A.M.T.P.I., 12 years' varied Architectural and T.P. experience, seeks Partnership or position leading thereto. South of England or West Country.—Box 3230.

**HONOURS** Graduate in Engineering, with Drawing Office experience, offers to design and prepare detail drawings for E.C. work. By post only. Moderate charges. Accurate work.—Box 3229.

**ASSISTANT**, passed part of R.I.B.A. Special Final, varied experience in London and Middle East, seeks evening and weekend work in London area.—Box 3207.

**ARCHITECT AND SURVEYOR** (aged 40), selling own practice, seeks responsible position abroad. Married, two children. 24 years' architectural experience. Preference Government service.—Box 3201.

**SENIOR ASSISTANT** (A.R.I.B.A.) requires position with prospects in London area. Ten years' experience with architects in London area. Capable of running jobs, including drawings, consents, site supervision, and final accounts. Age 36. Salary required £1,100 per annum.—Box 3212.

### Other Appointments Vacant

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

**OLD-ESTABLISHED** Mutual Life Assurance House wants a few men of initiative and integrity to act as **AGENTS**. Architects and Surveyors have the necessary knowledge and contacts to make business most profitable to us and them. Further details from Box 123.

**IMPERIAL CHEMICAL INDUSTRIES, LTD.**, requires a **REPRESENTATIVE** to advise clients on colour treatment of factories and other large buildings. Applicants must have had Art and/or Architectural training and possess outstandingly good colour sense, with ability to convey ideas clearly and enthusiastically to others. Good presence and speech are essential. Age 23-30. Salary according to age and experience. Pensionable post.—Apply, giving full particulars of experience, to the Staff Officer, Imperial Chemical Industries, Ltd., Paints Division, Wexham Road, Slough, Bucks. 3214

**WATER COLOUR ARTIST** required for employment in the Colour Service Studio, Paints Division, Imperial Chemical Industries, Ltd., to prepare drawings showing colour schemes for buildings. Exceptional skill in draughtsmanship and a well-developed colouring technique, adaptable to the speedy production of freely drawn and coloured sketches, are essential qualities. Some knowledge of architectural design is desirable. Pensionable post.—Apply, giving full particulars of experience, to the Staff Officer, Imperial Chemical Industries, Ltd., Paints Division, Wexham Road, Slough, Bucks. 3213

**SECRETARY**, highly competent and experienced, required by busy and progressive firm of Architects as private secretary to the Principal and to take charge of the other secretarial staff. Write giving relevant particulars. Box 3189.

### Competition

6 lines or under, 12s. 6d.; each additional line, 2s.

#### CITY OF CARLISLE

**A TWO STAGE COMPETITION** The Corporation of the City and County Borough of Carlisle invite architects registered under the Architects (Registration) Act and resident in Great Britain, Northern Ireland or the Republic of Ireland to submit in competition designs for a new Assembly Hall and Municipal Offices to be erected in Carlisle. Assessor: Professor W. B. Edwards, M.A., B.A.R.C.H., M.T.P.I. (P).

**PRELIMINARY STAGE.** Six competitors will be selected to proceed to Final Stage. Each will receive the sum of £300. Last day for submitting designs, Friday, 31st January, 1957.

**Final Stage.** The author of the design placed first will receive £1,000. Last day for submitting designs, 1st July, 1957.

Last day for questions, 27th October, 1956. Conditions may be obtained from the Town Clerk, 15, Fisher Street, Carlisle, on or after 17th September, 1956. Deposit £2 2s. 0d.

Applicants for the conditions must state their registration number or the number of the receipt issued to him by the Architects Registration Council in respect of the admission fee.

H. D. A. ROBERTSON.  
Town Clerk.  
3112

### Services Offered

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PAGE  
109  
109  
100

37  
110  
97  
96  
52  
20  
29  
36

78  
95  
110  
45  
103  
24  
28  
60  
93  
110  
102  
11  
53  
81  
43  
10

69  
68  
110  
88

35  
56  
5  
27

70  
60

15  
113

57  
110  
101  
110  
36

34

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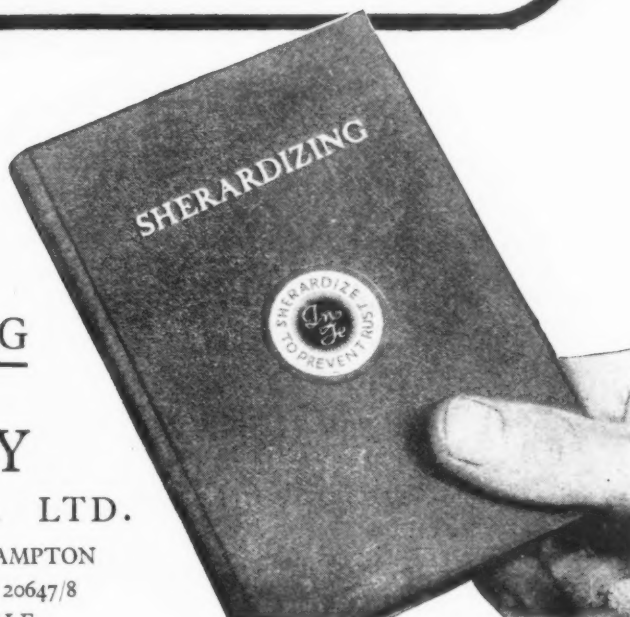
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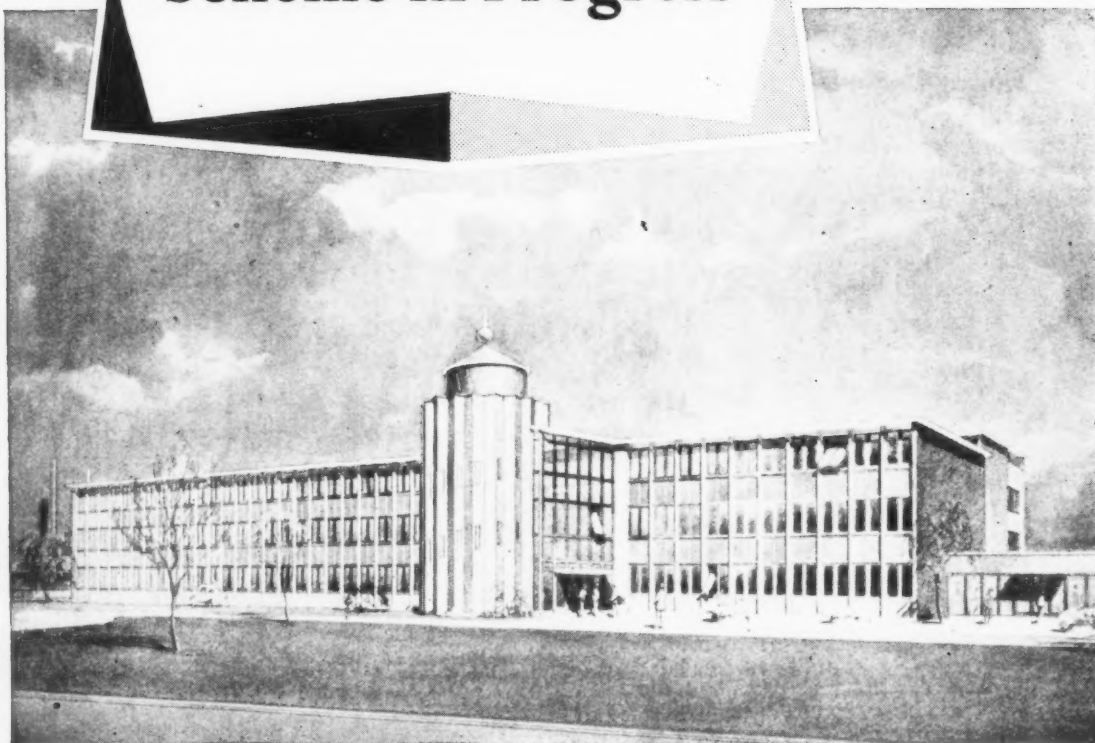
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