

# THE ARCHITECTS' JOURNAL



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

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Wanted and Vacant

No. 3332]

[Vol. 129

THE ARCHITECTURAL PRESS

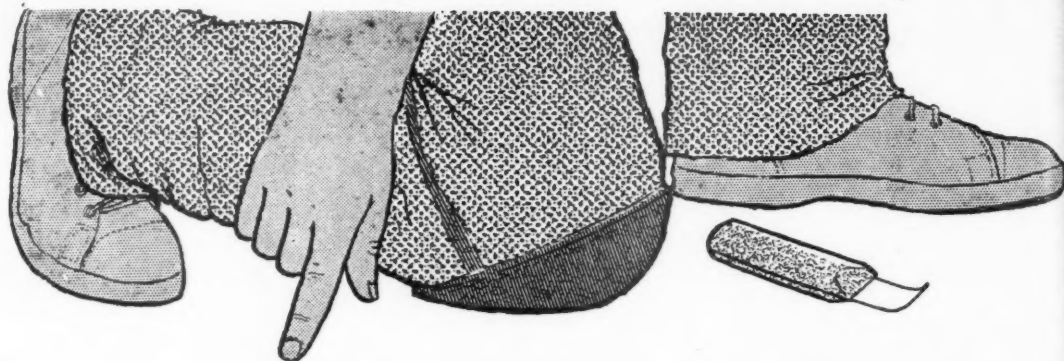
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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to H one week, H to Z the next. In all cases where the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

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. L. Stevenson, College of Art, Hope Street, Liverpool 1.	Royal 1826
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Langham 5533
ABT	Association of Building Technicians. 1, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James's Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Langham 5861
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BC	Building Centre. 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5.	Ealing 9621
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Fremantle 8494
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Whitehall Gardens, Horseguards Avenue, Whitehall, S.W.1.	Trafalgar 8855
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 4040
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. British Standards House, 2, Park St., W.1.	Mayfair 9000
BTE	Building Trades Exhibition. 32, Millbank, S.W.1.	Tate Gallery 8134
CABAS	City and Borough Architects Society. C/o S. A. G. Cook, A.R.I.B.A., Borough Architect and Director of Housing, Town Hall, High Holborn, W.C.1.	Holborn 3411
CAS	County Architects' Society. C/o S. Vincent Goodman, F.R.I.B.A., Shire Hall, Bedford.	Bedford 67444
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Belgravia 6661
CDA	Copper Development Association. 55, South Audley Street, W.1.	Grosvenor 8811
COID	Council of Industrial Design. 28, Haymarket, S.W.1.	Trafalgar 8000
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.1.	Sloane 4280
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
CVE	Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1.	Reading 72255
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 68, Gloucester Place, W.1.	Welbeck 9966
FASS	Federation of Associations of Specialists and Sub-Contractors, 14, Bryanston Street, W.1.	Welbeck 1781
FBBDO	Fibre Building Board Development Organization Ltd. (Fidor). Stafford House, Norfolk Street, W.C.2.	Covent Garden 3008
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	Regent 0221
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders., 33, John Street, W.C.1. Tel.: Chancery 7583 (6 lines)	
FPC	The Federation of Painting Contractors, St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4341
GPDA	Gypsum Plasterboard Development Association. 11, Ironmonger Lane, E.C.2.	Monarch 8888
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
GG	Georgian Group. 2, Chester Street, S.W.1.	Belgravia 3081
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 29, Belgrave Square, S.W.1.	Belgravia 3755
ICA	Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. 1, Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
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



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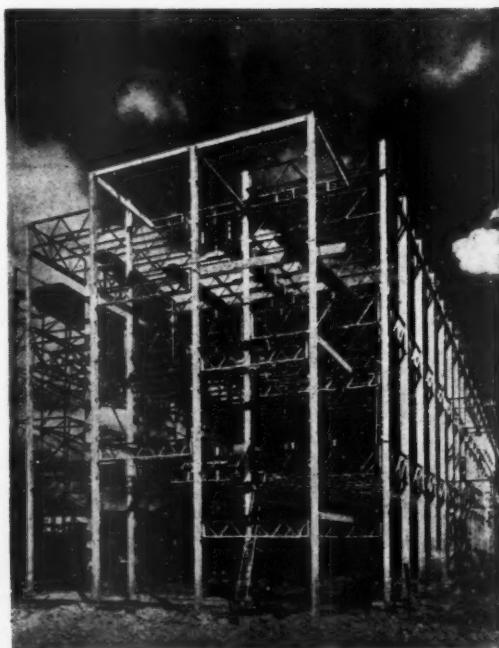
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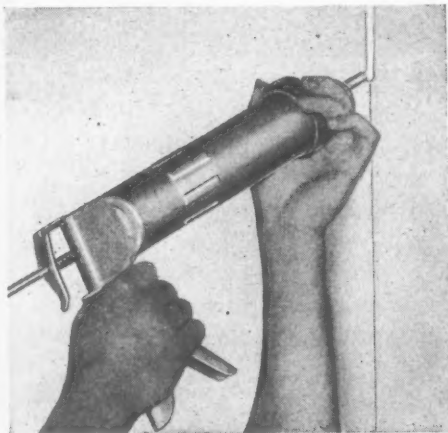
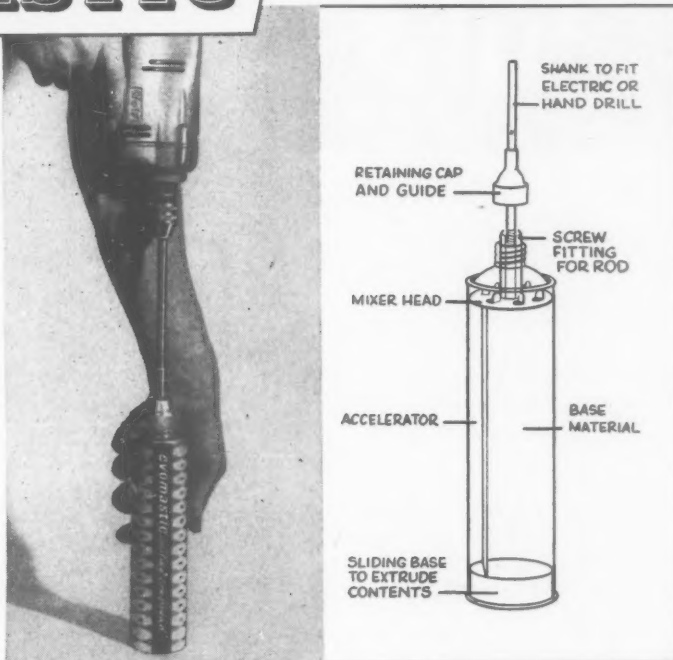
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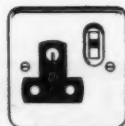
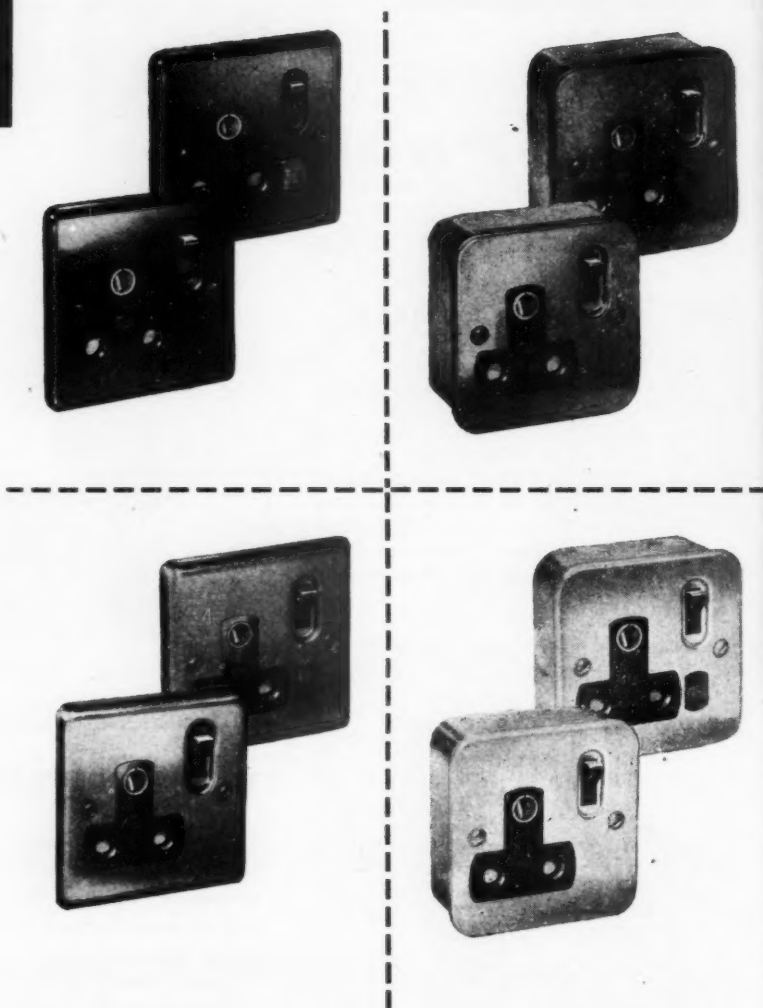
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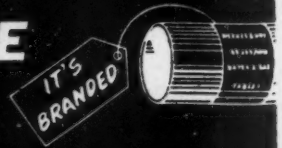
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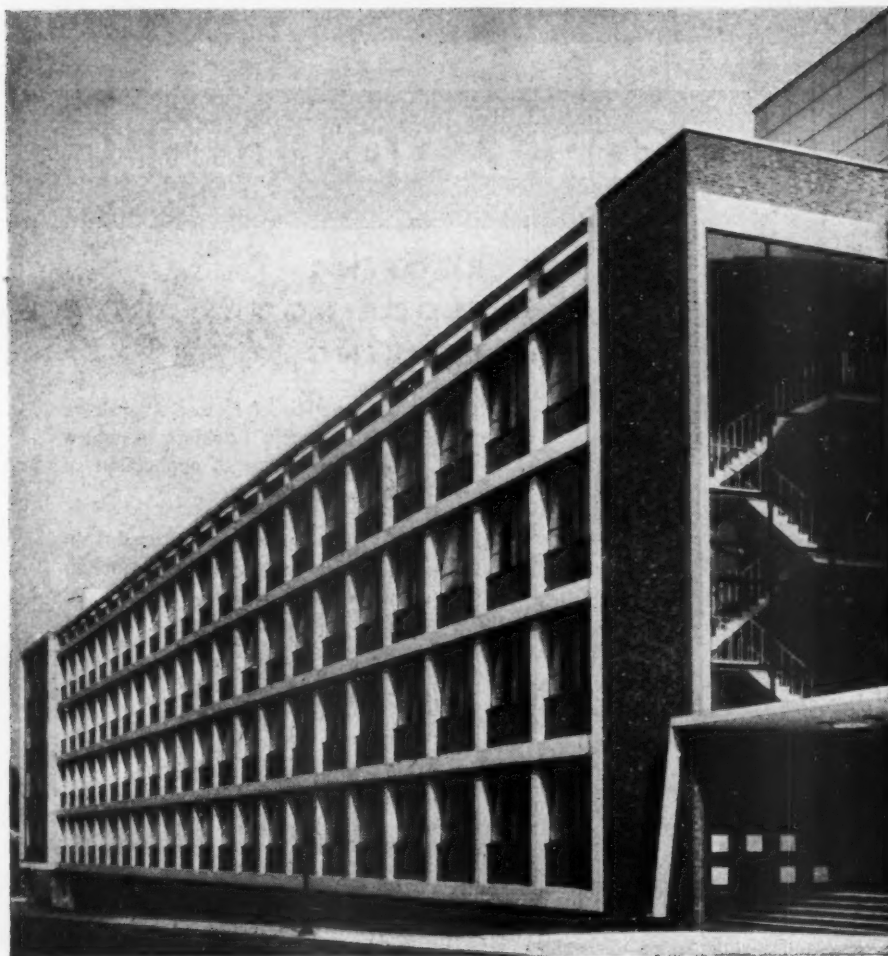


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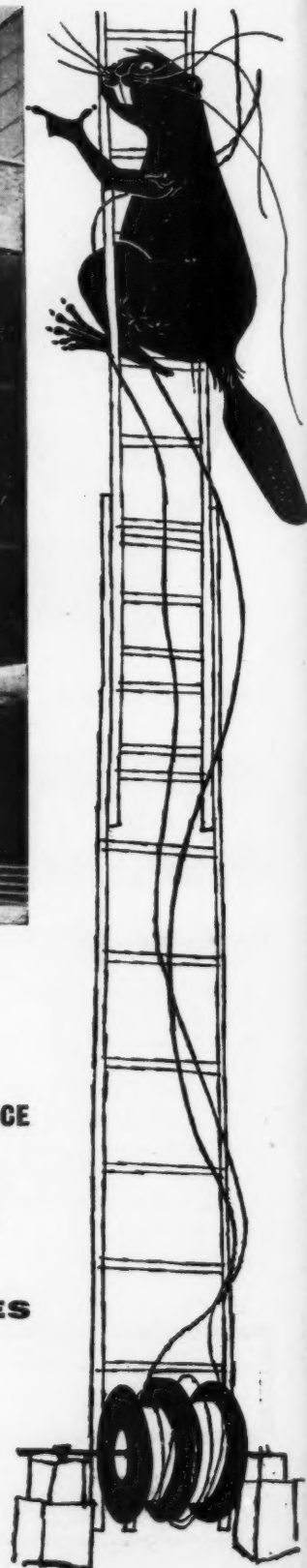
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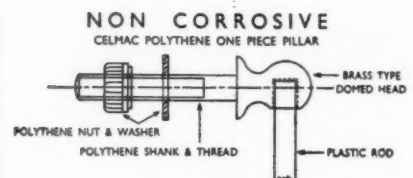
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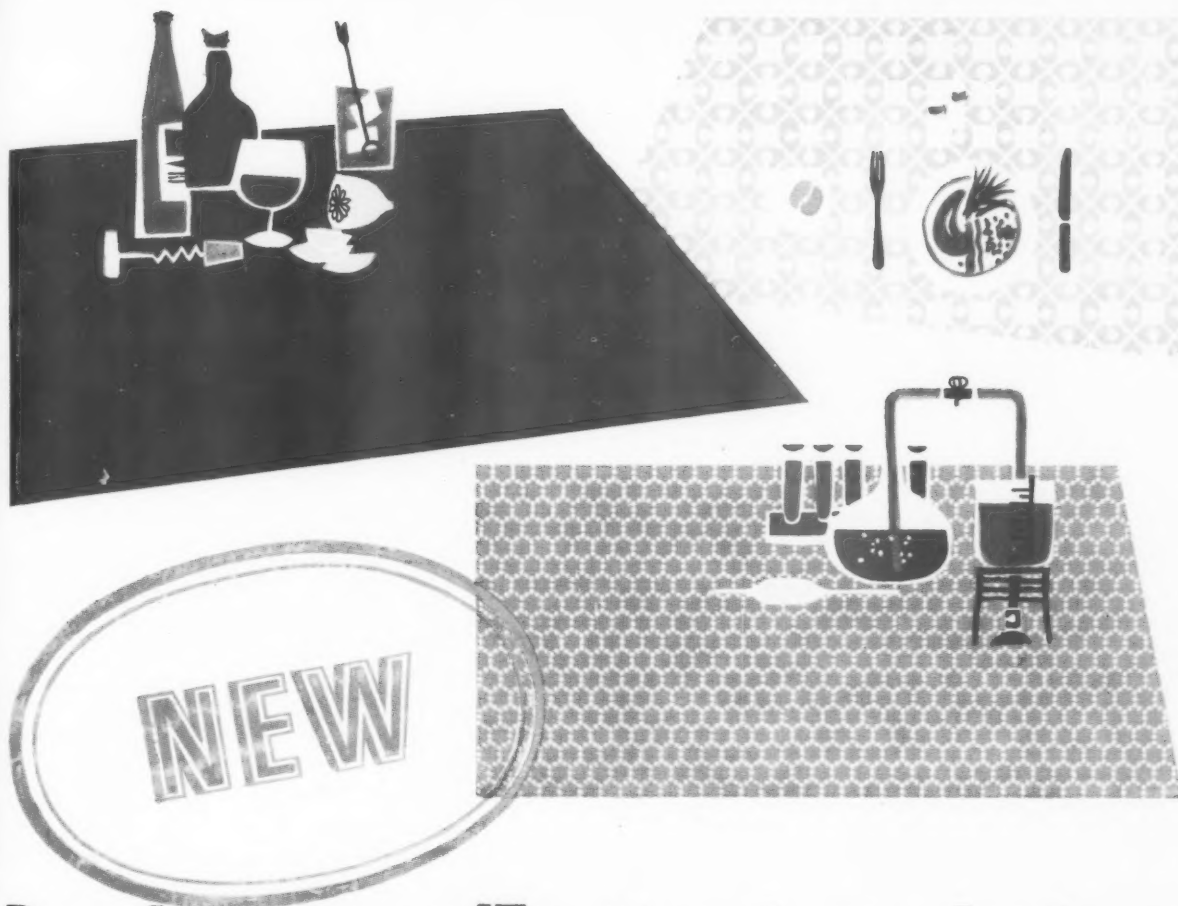
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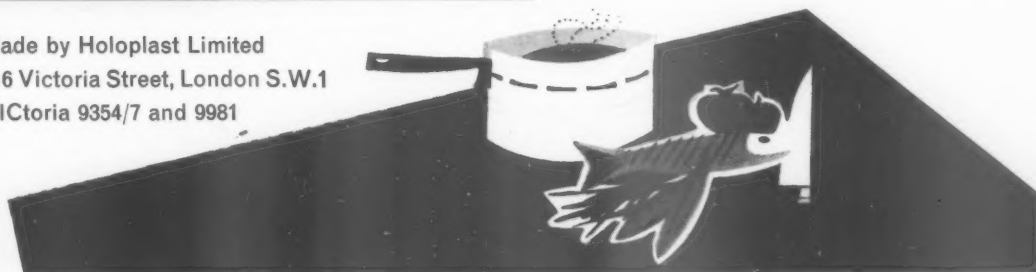
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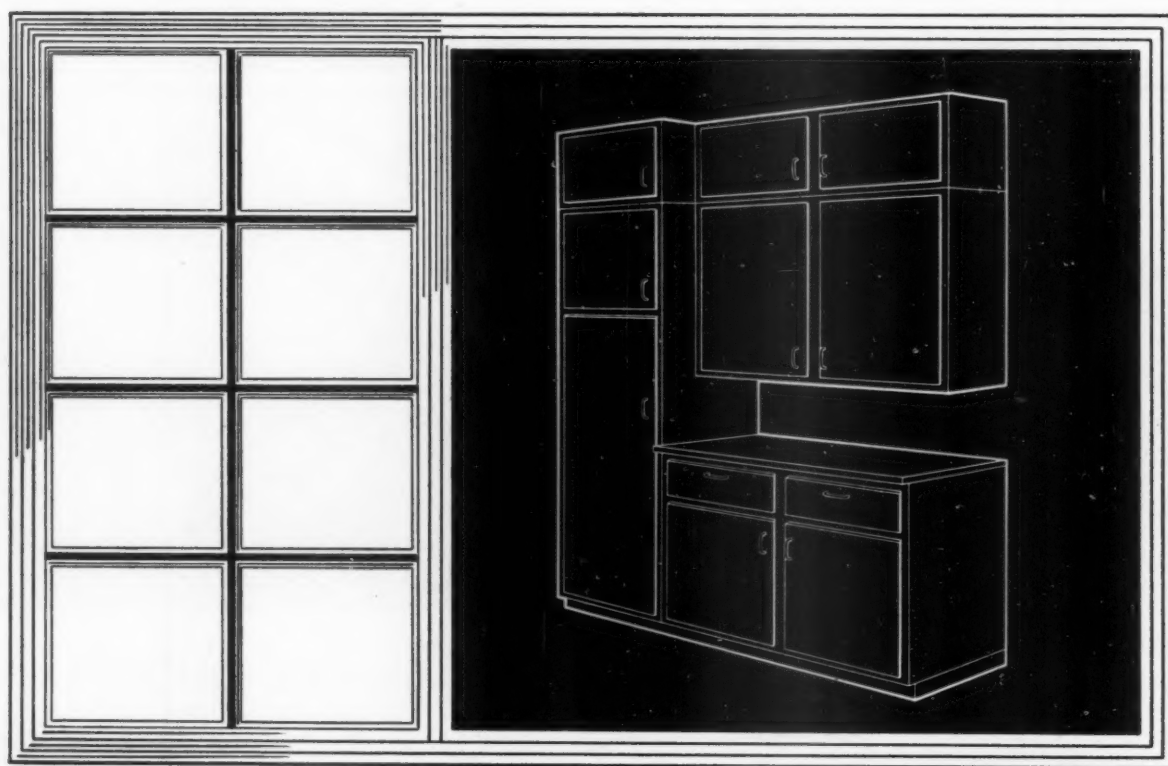
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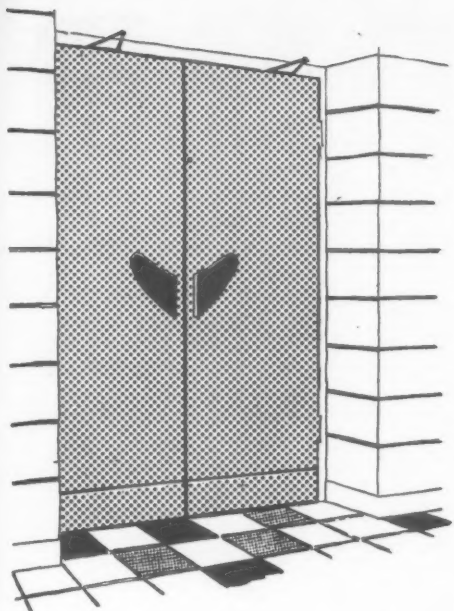
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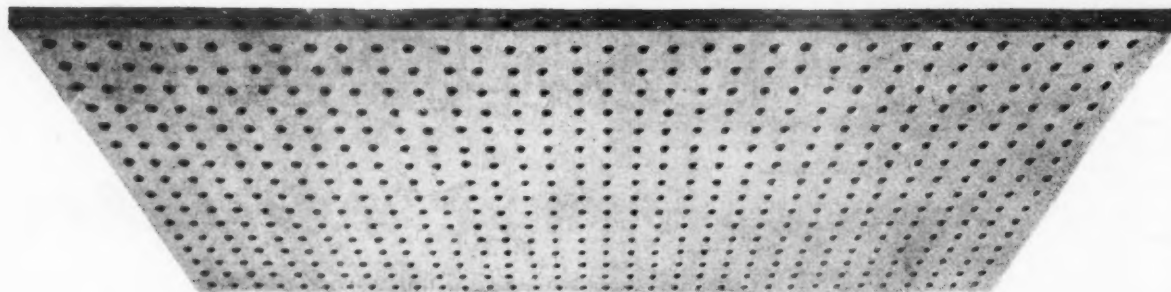
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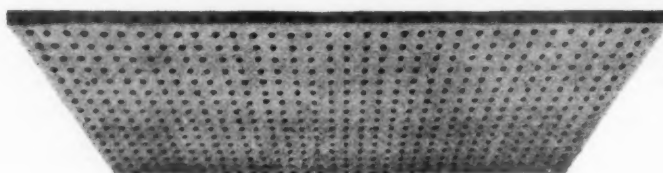
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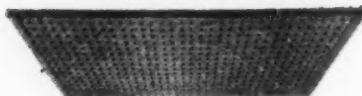
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**reduces noise to an**



**undisturbing**



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Newalls (Reg'd Brand) PAXBOARD presents the architect with a first-class medium for large-area acoustic insulation.

The modern tendency to use large rooms in office blocks results in an artificially increased noise level due to numbers of people working together, and makes acoustic treatment more essential than it would otherwise be. Similarly in factories, the provision of a sound-absorbent ceiling which reduces noise, and simultaneously insulates heat more effectively than any building board, is an attractive proposition, particularly in view of the reasonable cost for an all-asbestos product.

PAXBOARD has been produced especially for this class of work.

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PAXBOARD weighs less than 1-lb./sq. ft. and the larger than normal acoustic board size renders erection cheaper and more convenient.

With all these practical attributes it is small wonder that PAXBOARD is firmly established as the architect's first choice for large-area acoustic insulation.

*Full technical information available on request.*

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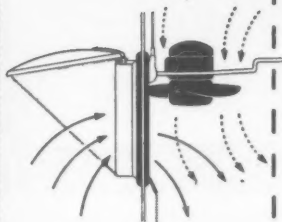
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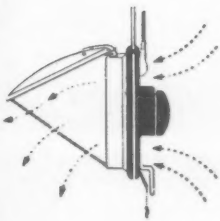
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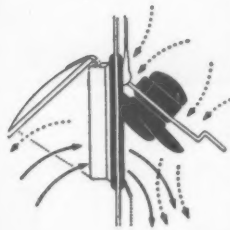
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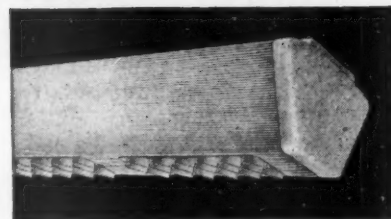
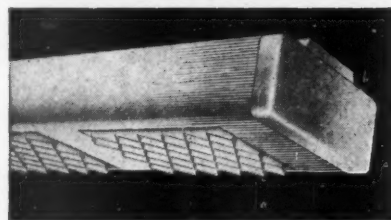
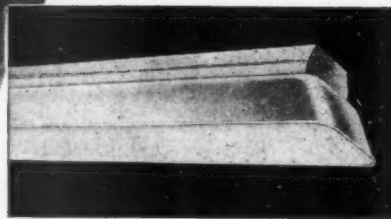
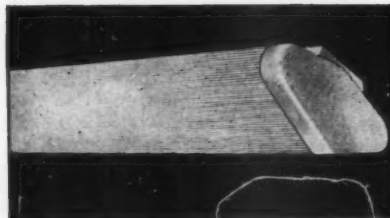
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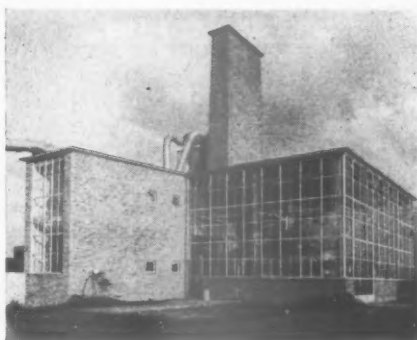


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## RADIANT PANEL HEATING

\* Continuous panel at high level and individual panels below eaves level give even distribution of heat. In the boiler house (on the right) an oil-fired Cochran boiler and a wood waste boiler together produce hot water which is circulated to the radiant heating units.



\* Extract from Publication No. 348, copies of which will gladly be sent gratis, on application to

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# Key Plan

## TO CUT YOUR BUILDING COSTS

**Outlay on pipes is only a fraction of the cost of a drainage installation.** In winter one out of every five days is lost when putting in conventional pipes. With Key pipes, however, the job still goes ahead cutting out unproductive labour, keeping down overheads and therefore cutting costs.


**Now you can keep to schedule** Delays are negligible with Key pipes, because they can be laid and tested in almost any weather, even despite bad ground. Pre-planning with Key can be done accurately, so that operations are smoothly sequenced and closely dovetailed. Snags are avoided and schedules kept or bettered.

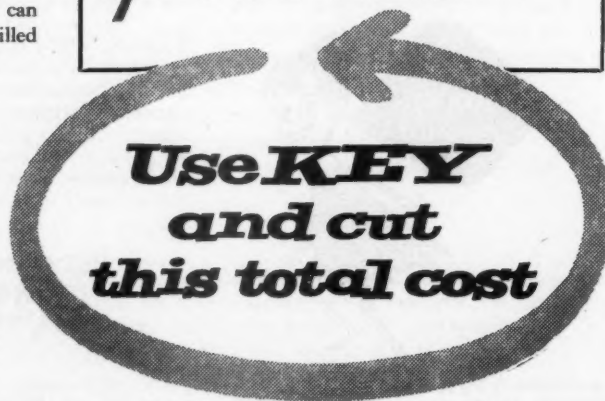
**Urgency on large projects** When your normal drainlaying team is too small for a big rush job, work can still go ahead successfully, by making up with semi-skilled men.



### BRITISH STANDARD KITE MARK

Key pipes comply with BS2760 1956. They are the first pitch fibre drainpipes to carry the British Standard 'Kite' Mark. This is a guarantee of quality and means that the Inspectors of the British Standards Institution have access to our pipe factory at any time.

COST OF A DRAINAGE INSTALLATION	
	COST OF LABOUR
	COST OF OVERHEADS
	COST OF HOLD-UPS
	COST OF SITE DISRUPTIONS
	COST OF MATERIALS



# THE JOB GOES AHEAD -against all odds

**Rain?** Driven taper joints give Key an immediate advantage over cement-jointed rigid pipes, which cannot normally be laid in waterlogged trenches. Runs can be prefabricated at ground level, lowered into prepared trenches and tested immediately.

**Frost and Snow?** Here again the taper joint means that work can still go ahead with Key. In fact frosty days are usually ideal for laying these modern drainpipes.

**Bad Ground?** Key pipes do not have to be laid in concrete, and haunched, on bad ground. Being resilient, they are better without concrete. The savings in skilled labour, time and cost are obviously considerable.

**Site Congestion?** Open trenches and pumping equipment normally cause hold-ups on site in wet weather. Immediate laying, testing and backfilling with Key pipes overcome this problem and keep traffic flowing.

**Hot Sun and Drying Winds?** Even good weather can be bad weather when pipes have to be mortar-jointed. This problem never arises with Key pipes.

## More advantages of KEY PITCH FIBRE PIPES

**No corrosion** Remarkably resistant to acids and alkalis

**No root growth** The close fitting tapered joints are machined to close limits.

**No cracking through settlement** Natural resilience means that pipes will not crack through normal earth movement.

**Faster laying—fewer breakages** 500 ft. an hour is a modest average with semi-skilled labour. A trench can be excavated, the drain laid, tested and backfilled in a day. Long lengths, toughness and resilience mean fewer breakages.

**Widely approved** Most public authorities and relevant professional bodies have given their approval.

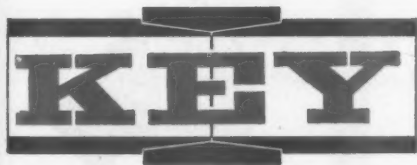
**Lower handling costs** Your unloading and handling costs will be cut by 75% because Key Pitch Fibre pipe is only one quarter the weight of salt glaze ware. It is available in the same diameters, in convenient 8 ft. lengths.

### Ask for a demonstration

A practical demonstration of the advantages of Key pipes can be arranged at any time through your merchant, who will also supply any quantity you require within a matter of hours.



**SPEED THE JOB—CUT THE COST WITH**



**PITCH FIBRE PIPES**  
THE WORLD'S FINEST AND MOST MODERN DRAINAGE SYSTEM

A PRODUCT OF **THE KEY ENGINEERING COMPANY LIMITED**

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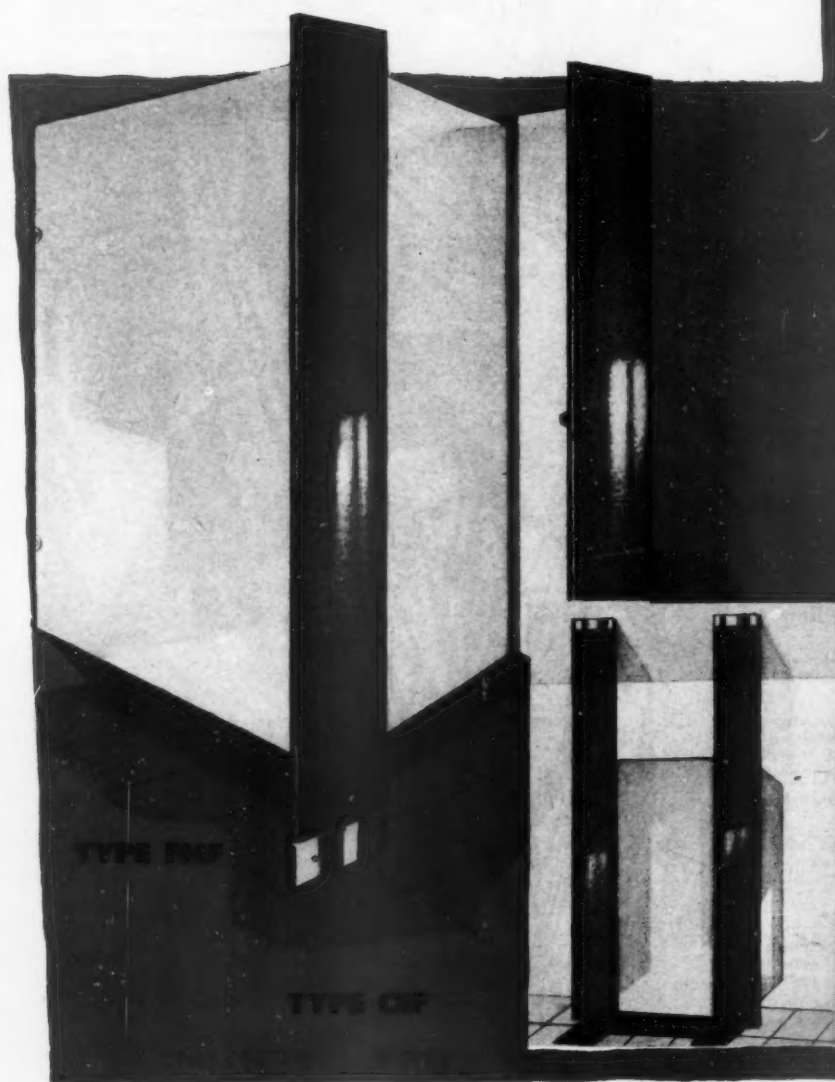


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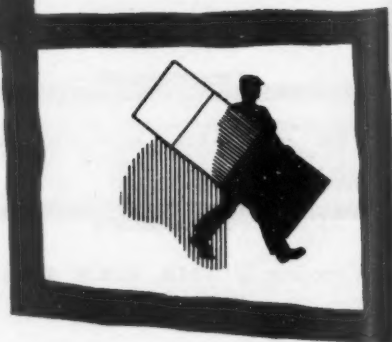
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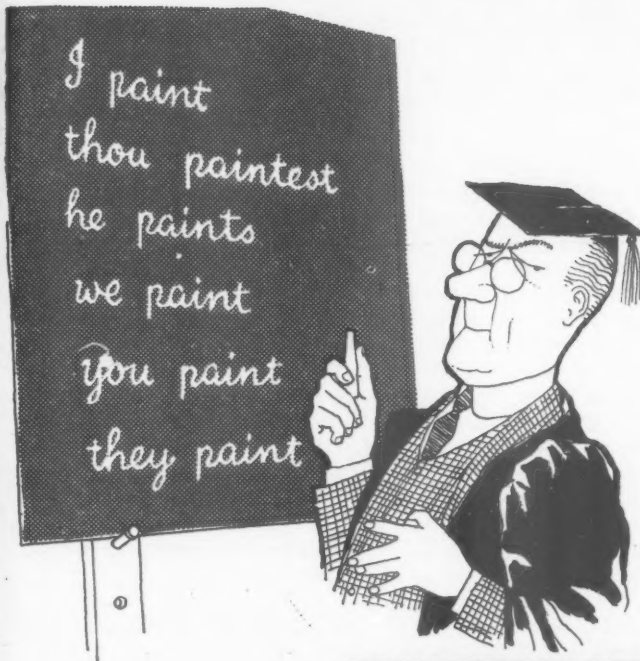
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# monthly review by

**WILLIAMS & WILLIAMS**

## 'WALLSPAN' FOR NEW B.O.A.C. WING HANGAR

**1** Both ends of this vast new maintenance hangar at London Airport are glazed by Williams & Williams—the 2-story central workshop block being emphasized by a panel of 'Wallspan' set in a projecting concrete frame. Aluminium windows are set in the 'Wallspan' grid and three types of opening lights—top-hung, projected, and vertical-pivoted are incorporated. The spandrel panels are Vitroslab.

The basic design is an interesting solution to a recurrent problem in the design of aeroplane hangars whose height, after allowing for high-level services, is dictated solely by the tail-fin height of the various aircraft to be accommodated. Airliner design in recent years has tended towards increasing tail heights, and the hangar designer has been faced with a difficult economic problem since every foot of increased height is reflected in increased capital cost and higher heating, lighting and maintenance costs. Whatever height is decided upon may still prove inadequate for some new aircraft a few years hence. But on the other hand a reversal of the present trend—airliners designed on the Delta configuration for example—would result in hangar height becoming so much wasted space.

The new B.O.A.C. Wing Hangar, as the name implies, is designed to accommodate only the wings and fuselage of the aircraft—the sliding doors are shaped to close around the rear fuselage leaving the tail unit outside. Engines, undercarriage, flight deck, passenger cabin, wing fuel tanks and wing control surfaces—the usual objects of routine maintenance—are all under cover.

The reinforced concrete structure consists of a pair of hangar pens, each with a completely unobstructed 565 ft. wide opening and depth of 110 ft. arranged back-to-back but separated by a central two-floor workshop block. The hangar pen roofs are suspended by ties from this central block.

## 'ALOMEGA' WINDOWS FOR CORNISH COMFORT

**2** This study flat is high up, midway between the coasts of Cornwall. The client wanted big windows for the

sake of the panoramic views across to St. Ives but had misgivings about draughts. The architects' solution to his problem was to install 'Alomega' double hung sashes—heads, sills, jambs, and meeting rails all designed with integral weather-stripping to keep draughts out, even in a blustery south-wester coming across thousands of miles of Atlantic! Other reasons for specifying 'Alomega'—**no maintenance**: no cords or counter weights or balances to go wrong; no painting because the windows are all-aluminium: **easily adapted to a 3 ft. building module**: the 2 ft. 8½ in. width was used—others from 1 ft. 2½ in. to 3 ft. 5½ in.: **ideal combination with picture window**—see illustration opposite.

Last (but not least in these Subtopian days), the sash window is considered in a special way to be the window for the West Country and 'Alomega' happily combines the technical resources of today with the graceful design of the eighteenth century.

A further advantage which was not applicable in this particular instance, but of considerable value in congested urban sites, is the fact that with 'Alomega' the building can come right up to the building line.

## NEW STANDARD WINDOWS CUT SITE COSTS—NEED ONLY ONE COAT OF PAINT

**3** Williams & Williams standard domestic windows to BS 990 in both 1 ft. 8 in. and 2 ft. ('Z' range) modules are now available galvanized, primed and painted. The windows are processed in an entirely automatic plant which is believed to be the largest of its kind in the world.

The assembled frames are loaded on to a conveyor—chemically cleaned, etched and electro-galvanized. Still on the same mechanical conveyor, the windows are dipped in a primer bath and stoved for 25 minutes at 350°F. They then receive a sandy-beige coat and are finally stoved a further 25 minutes—again at 350°F. The paint technology of the operation has been worked out in collaboration with ICI and the second coat is their beige No. B215/166/2.

This process offers four major advantages:

1. Since the human element is elimi-

nated, a much more even distribution of paint is assured.

2. All surfaces of the frames are painted, including those which will be in contact with the masonry and which in the ordinary course of events could not be painted.

3. The fact that both primer and second coat are stoved lends greater durability to the paint giving together with the galvanizing coat an efficient triple protection to the steel surface.

4. The second stoved coat can be regarded as an undercoat. Because of its light shade only one finishing coat need be applied on site.

## WILLIAMS & WILLIAMS

RELiance WORKS • CHESTER



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## 1 B.O.A.C. WING HANGAR, LONDON AIRPORT

Engineers for reinforced concrete structure: Sir Owen Williams & Partners.

New Works Manager, B.O.A.C.: L. B. Haley, M.ENG., A.M.I.C.E., A.M.I.H.V.E.

General Contractors: W. & C. French Limited.

**A** General view—note the tails of Britannia aircraft protruding from the hangar pen on the extreme right of the photograph.

**B** Detail of the 'Wallspan' on the central workshop block—3 types of opening lights can be seen in the aluminium windows. Note the permanent railway along the cornice for the cleaners' cradle.

## 2 'LITTLE TREFEWA', PRAZE, CORNWALL

Architects: Taylor & Crowther, Chartered Architects.

**A** Exterior.

**B** Interior of the study showing how the 'Alomega' sash forms part of the glazed corner.

**C** Draughtproofing plastic extrusions at head, meeting rail and sill of 'Alomega' double-hung window.

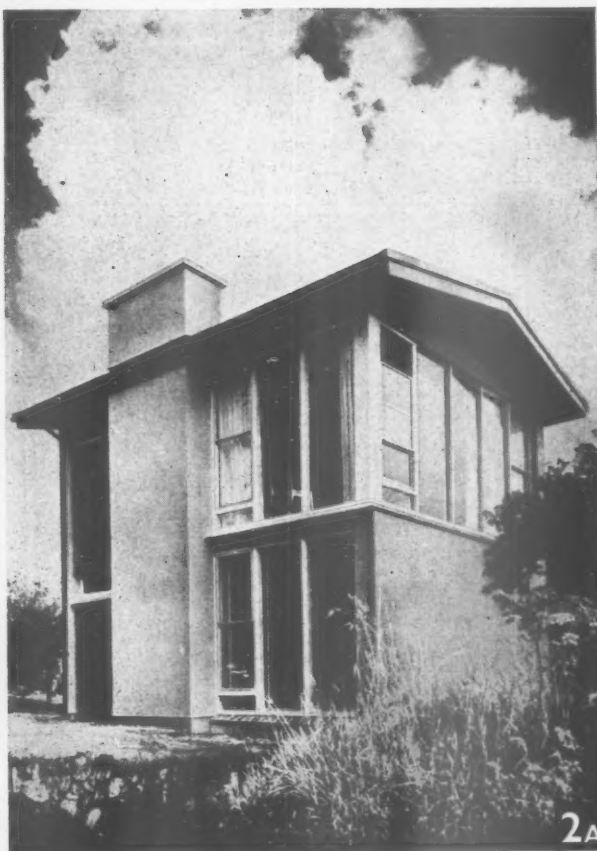
**3** Part of the automatic conveyor system on which Williams & Williams new standard paint-finished metal windows are processed.



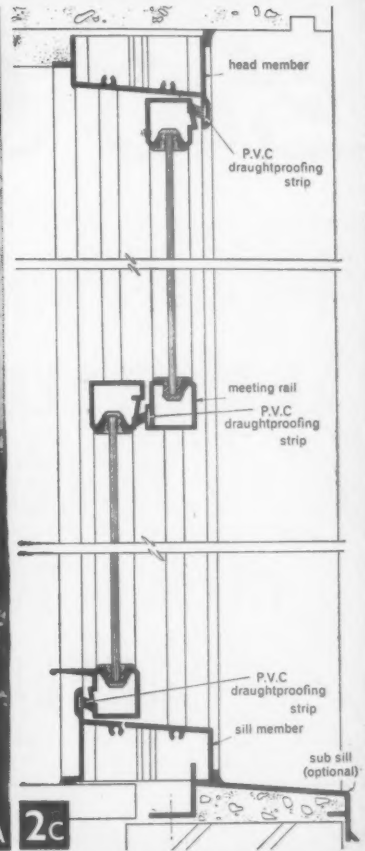
1A



1B



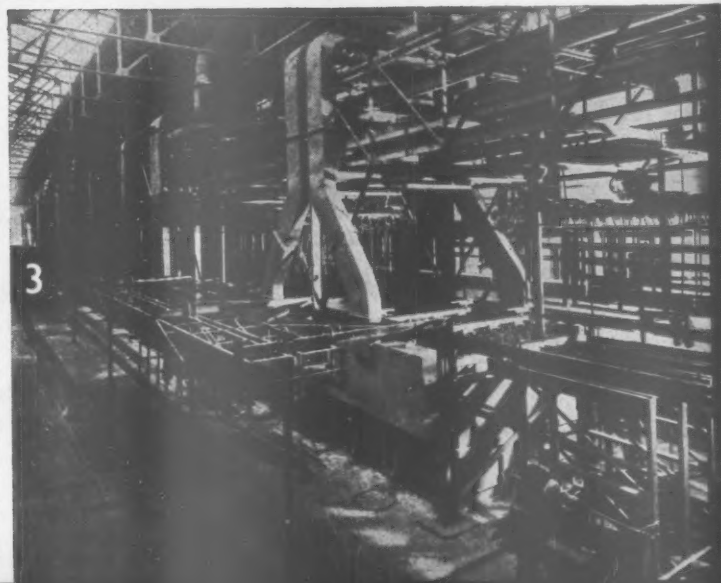
2A



2C



2B



3



Project for : National Physical Laboratory, Teddington.

Architect : A. S. Reid, A.R.I.B.A., of the Chief

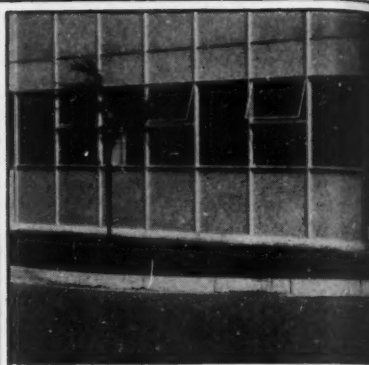
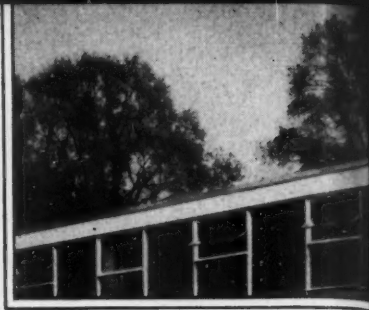
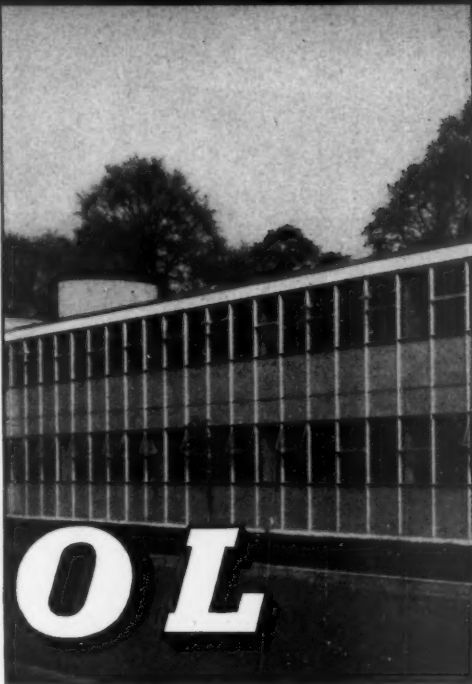
Architect's Division, Ministry of Works

Contractor : W. E. Chivers & Son.

The Type C Escol panels shown are in pale grey (B.S.I. 7-078)

and those on the north elevation in brown (B.S.I. 3-039)

and yellow (B.S.I. 4-055)



# ESCOL

## PORCELAIN ENAMELLED STEEL INFILLING PANELS

(Bonding Patent No. 790118)

Stewart and Gray are the patentees and sole manufacturers of ESCOL products.

The process has been entirely pioneered and developed in the U.K. for many years, and the Company, which is entirely British and has no connections with foreign manufacturers, are unrivalled leaders in the manufacture of porcelain enamelled steel infilling panels.

16 OR 18 GAUGE  
PORCELAIN  
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STEEL FACE



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### PANEL SECTION TYPE A

Composite panel consisting of 16 or 18 vitreous porcelain enamelled steel sheet to  $\frac{1}{2}$ " or  $\frac{3}{8}$ " asbestos board. The asbestos board may also be covered by an enamelled steel or galvanized sheet. Weight: 5 lb./sq. ft. U value: 0.40.

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# ANKARBOARD

## ACOUSTIC

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### SOUND construction



By courtesy of B.O.A.C.

ANKARBOARD has been chosen by many important companies because it provides the *correct* amount of sound absorption—so necessary in present day functional building. The pleasing effect of tiles or perforated boards offers limitless opportunity—in office, home, shop or factory—to interior decorators. ANKARBOARD can be supplied treated to Class 1 for spread of flame B.S.S. 476/53.

**Acoustic Boards**  $\frac{1}{2}$ " or  $\frac{3}{4}$ " thick, are available in 12" or 16" widths and in lengths up to approx. 18'. Grooved and ship-lapped for easy fixing. (Also available unperforated as insulation "longboards").

**Acoustic Tiles**  $\frac{1}{2}$ " or  $\frac{3}{4}$ " thick in sizes 12" x 12", 16" x 16", 24" x 24", 12" x 24", 16" x 32" and 32" x 32". Tiles are bevelled on all four edges.

**Perforations for Boards and Tiles** 4 m.m. holes at 15 m.m. centres. Depth of holes is arranged for maximum acoustic effect while corner holes are bored to half thickness, thus ensuring good grip when tiles are screwed or nailed to fixing grounds.



BOARD & PLYWOOD  
SUNDSVALL-SWEDEN

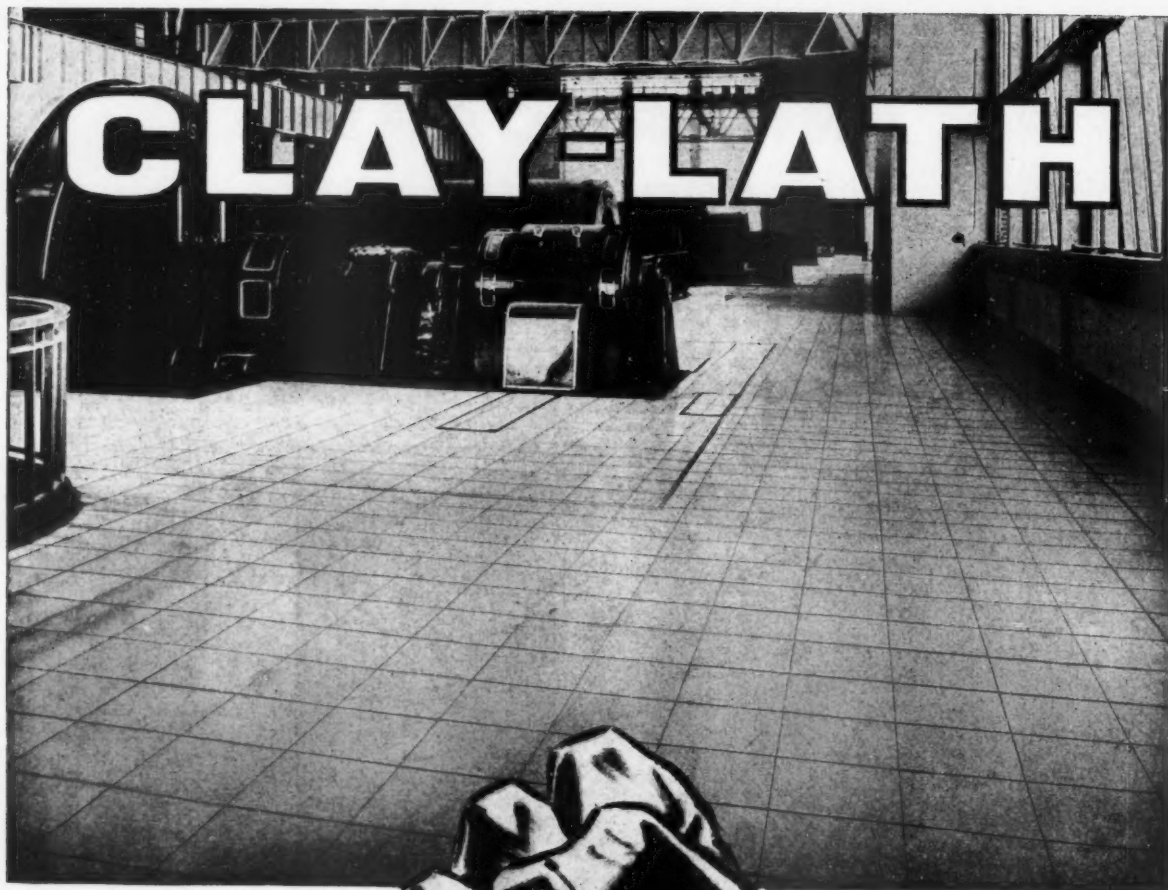
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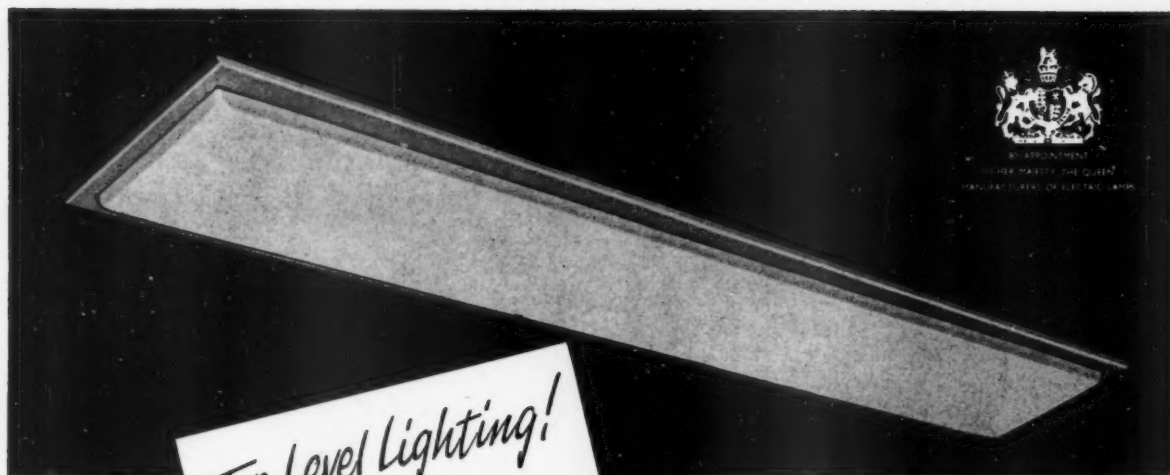
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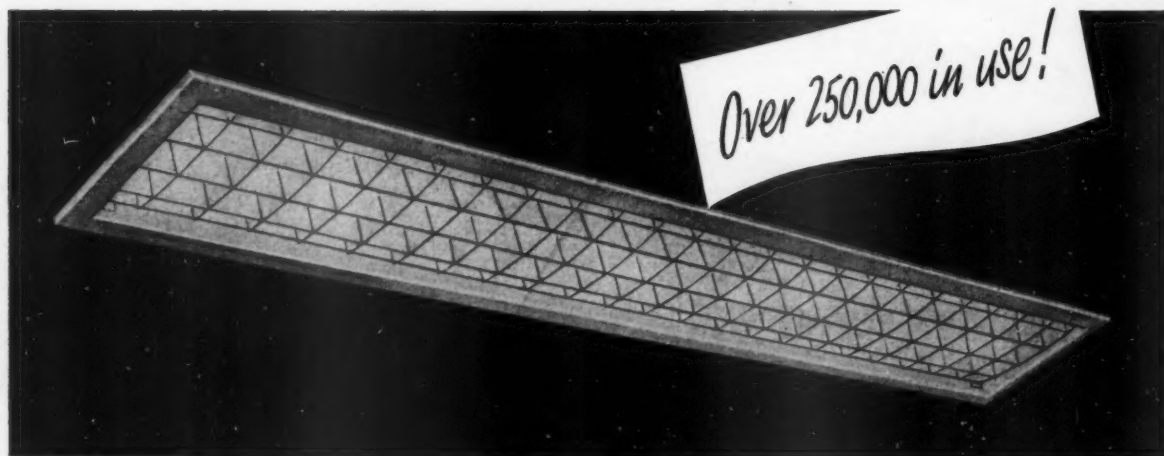
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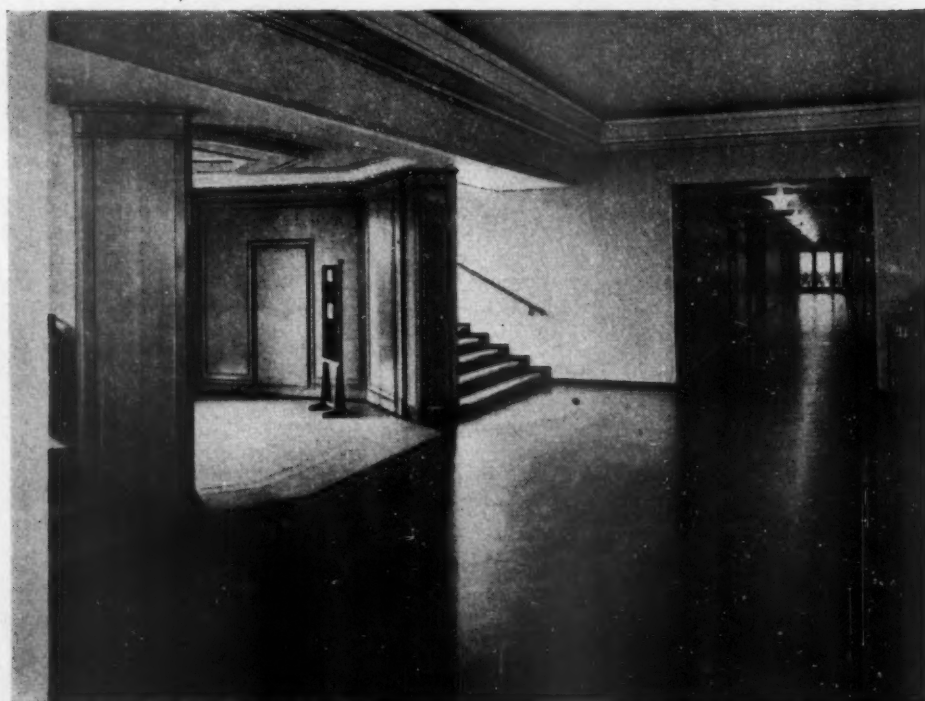


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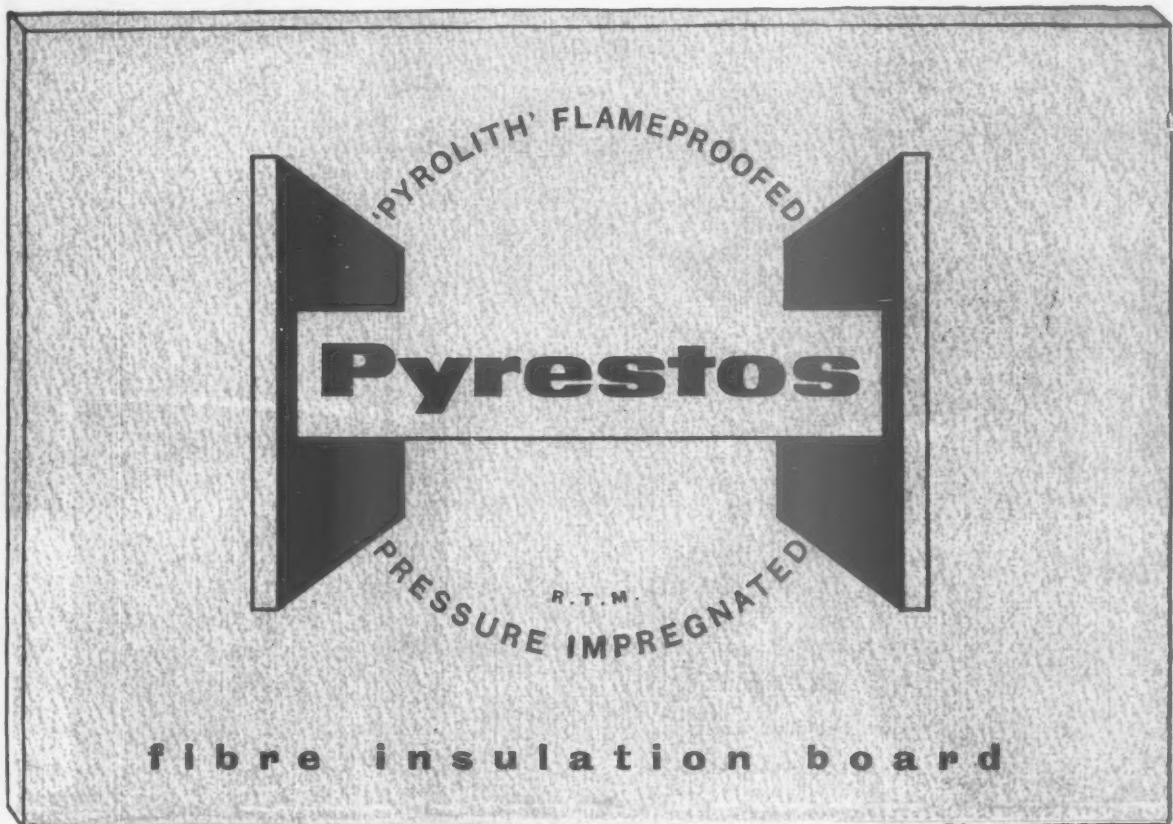
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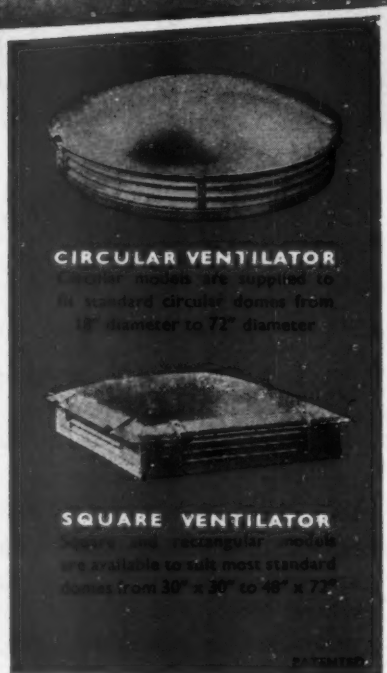
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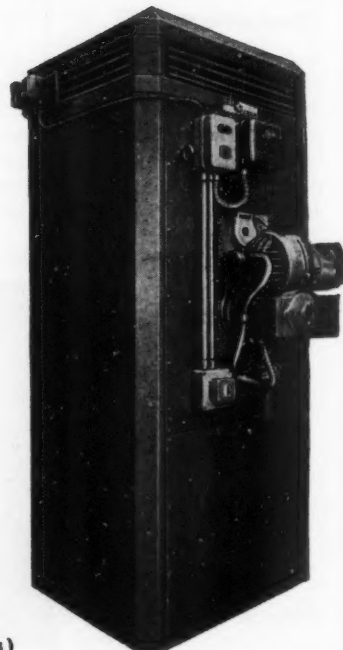
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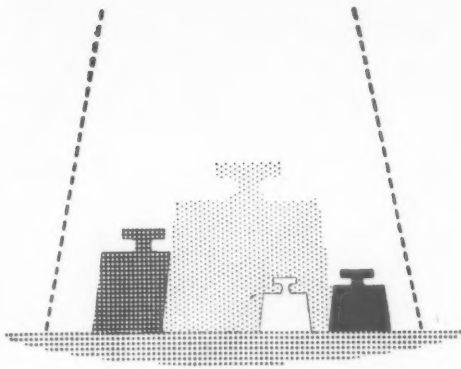


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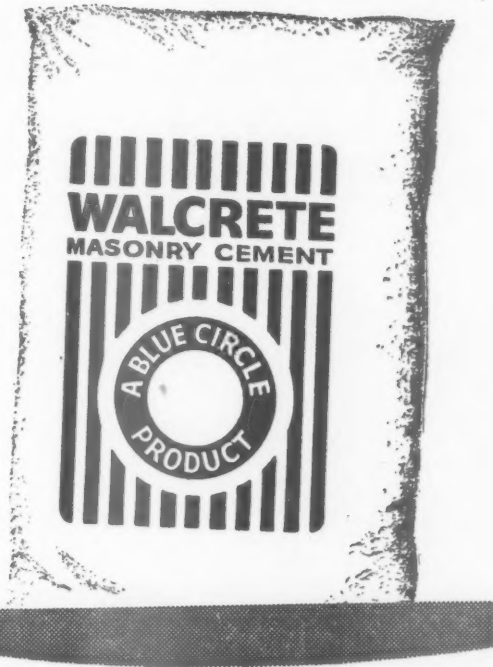


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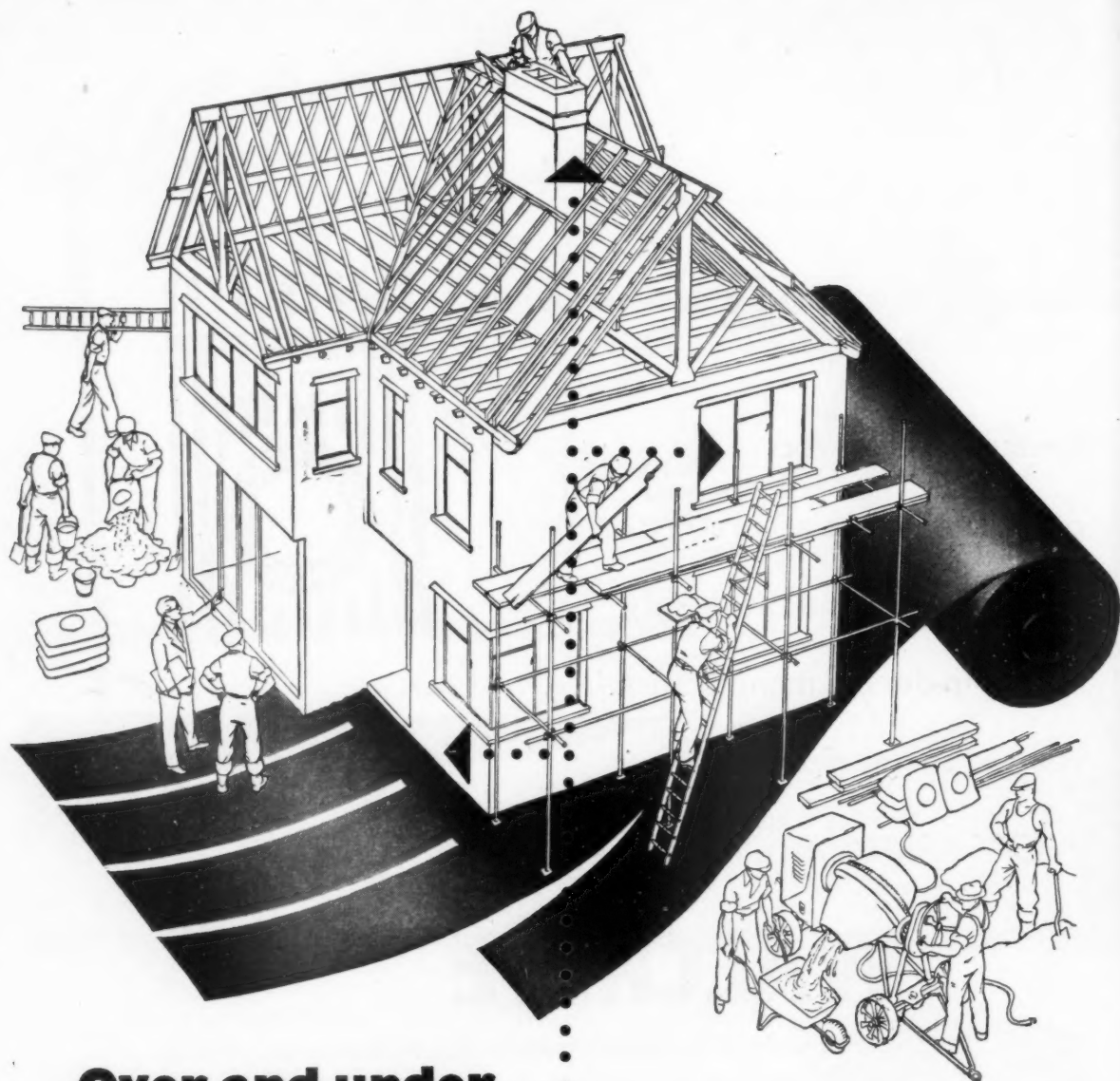
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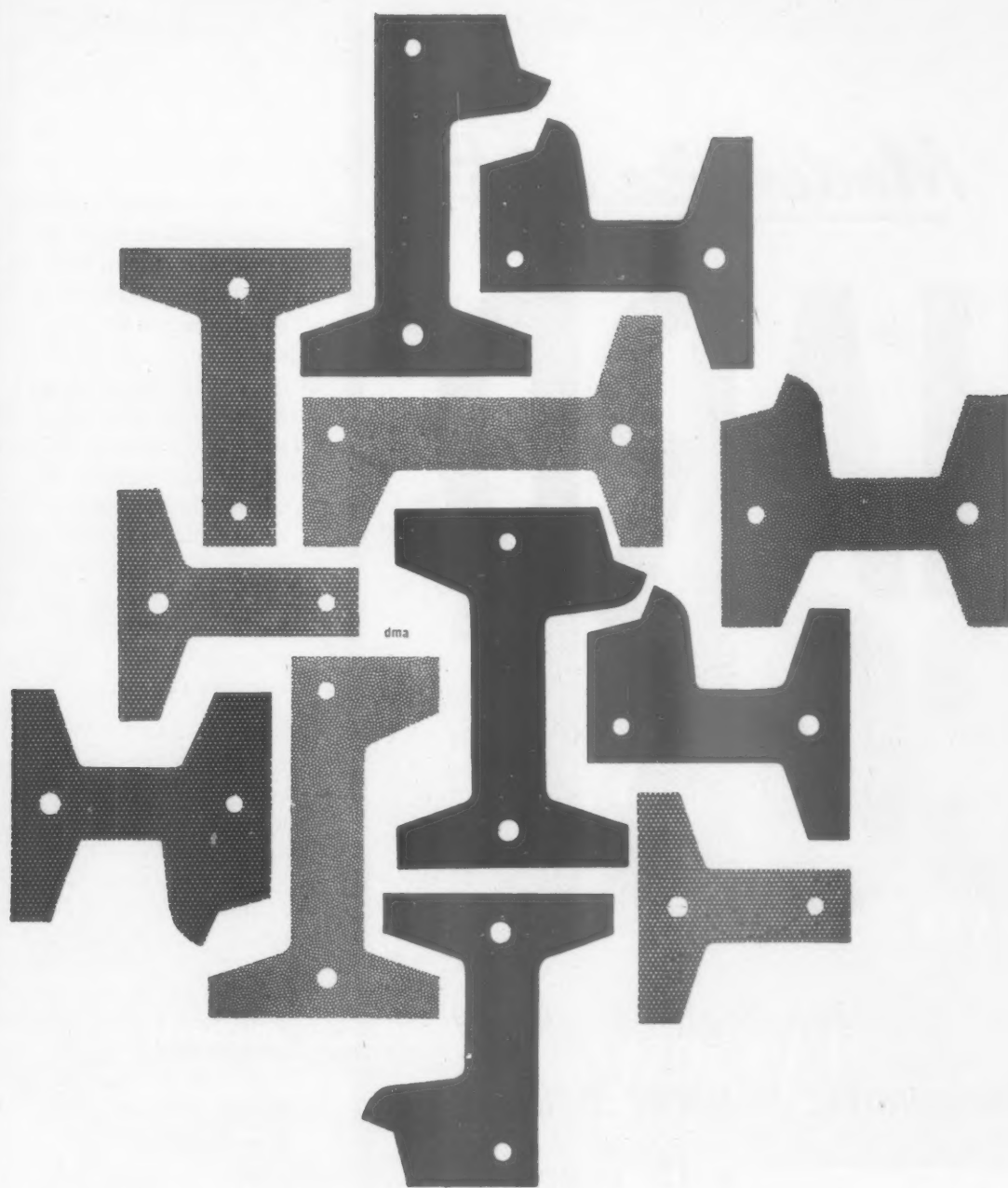
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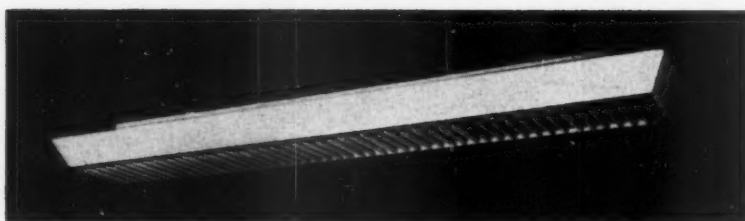
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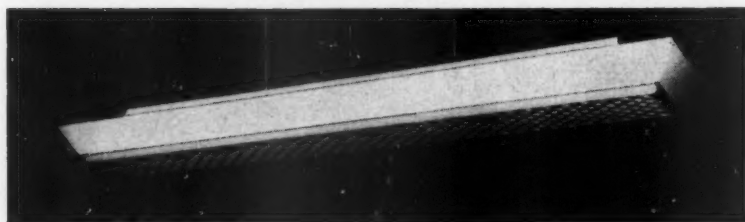
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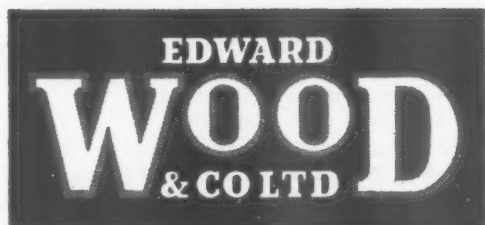
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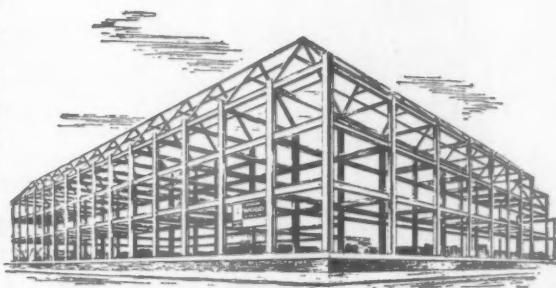


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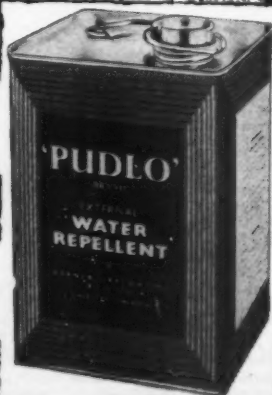
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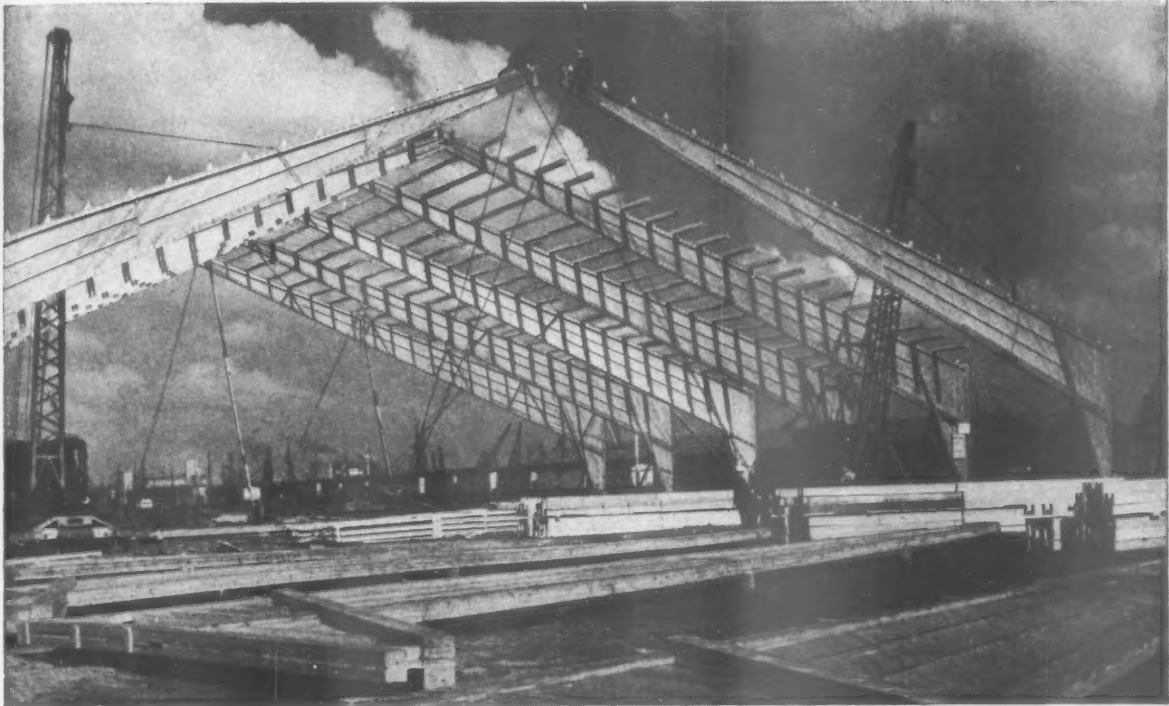
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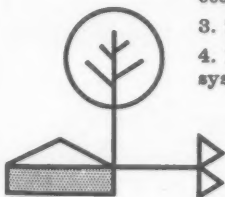
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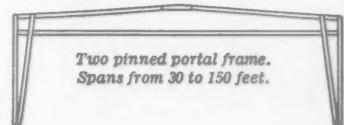
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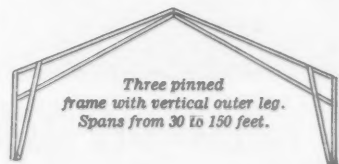
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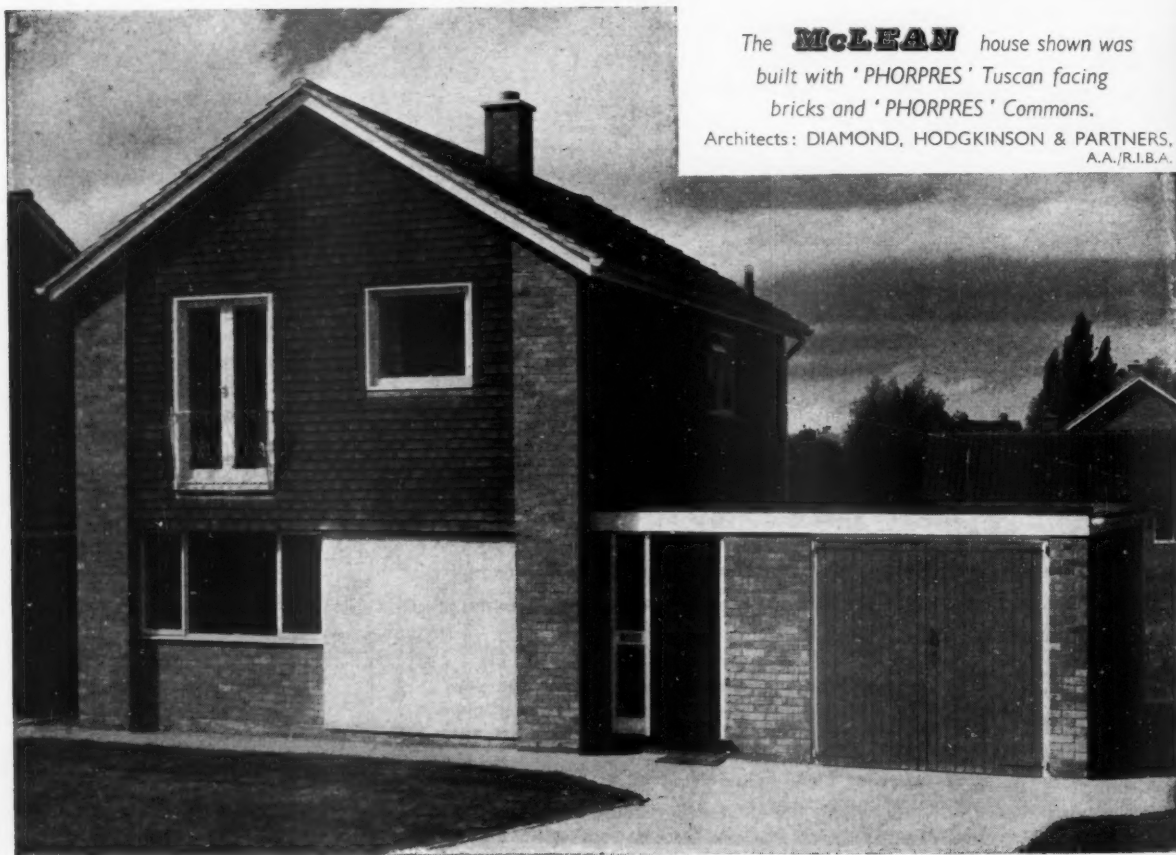
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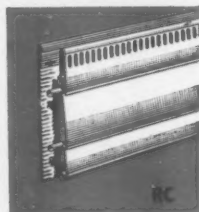
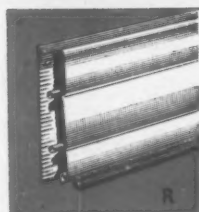
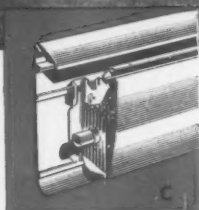




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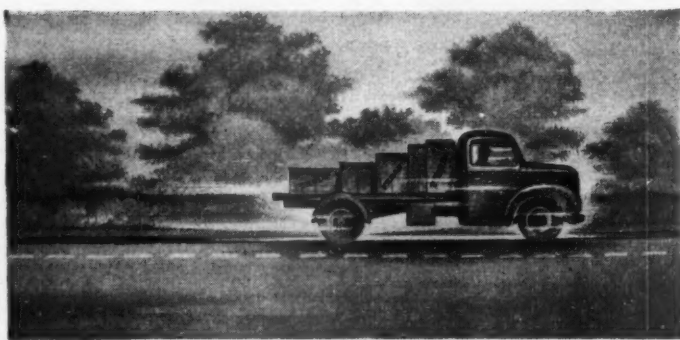
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The Architects' Journal

No 3332. Vol. 129. January 8, 1959

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NOT QUITE ARCHITECTURE

## BRIEF ENCOUNTER- ATTACK

"You, if you will forgive my intrusion into your meditation, deserve to be shot."  
The man sitting beside me looked puzzled.  
"Did you say shot?"  
"Purely as a suggestion of the means. I am mainly concerned with the end-product."  
"Do you realize to whom you are addressing your remarks?"  
"Alderman Smelt, citizen, pillar of Local Government and Chairman of the Town Planning Committee?"  
"That is so."  
"Then my proposed bullet is on target."  
"May I be permitted to know why?"  
"I have been sitting here for ten minutes, uncomfortable because this bench was designed by a sadist, helpless victim because there are no others. I have been absorbing the visual qualities of your new shopping centre, and am now in the midst of an acute depression which the Atlantic itself would not welcome."  
"Our shopping centre is the envy of all visitors."

I lit a cigarette. I did not offer him one.  
"I can only assume that they are lay visitors, mellowed by a civic luncheon into polite acceptance of sham, sweetened by social obligation into delusions of grandeur where cardboard dwells."  
"I feel we have achieved a dignity which expresses our ancient and noble traditions."  
"I feel the whole thing stinks."  
"I still cannot understand your objections. I shall be only too happy to explain what our aims were."  
"Your aim was deplorable. However, I object on visual grounds, because the build-



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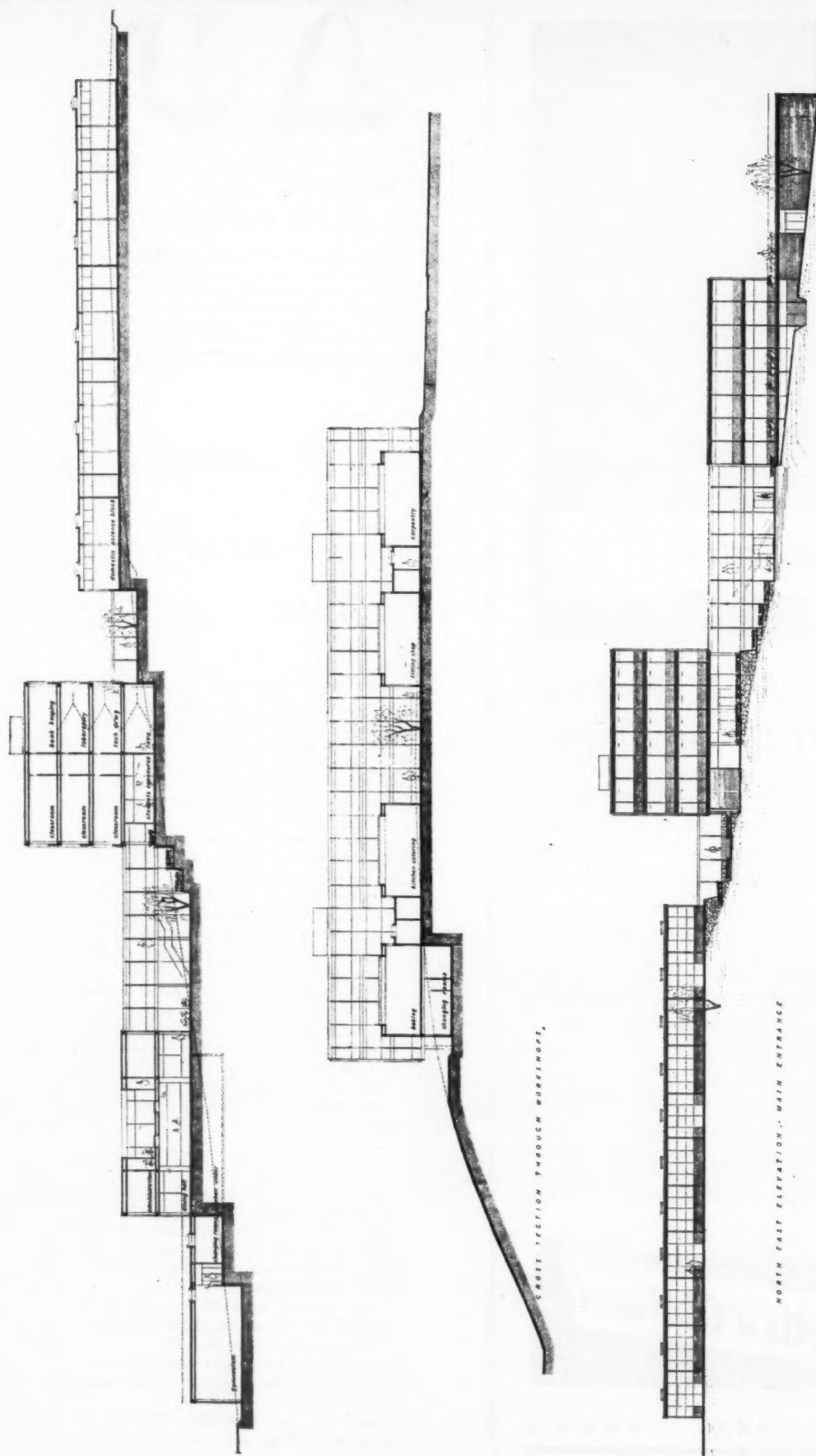
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# Langside College of Further Education Competition: The Prizewinners

First prize (£3,000) in the competition for the Langside College, of Further Education (assessor, F. R. S. Yorke) has been awarded to Boissevain and Osmond (Paul Boissevain and Barbara Osmond), London. Second (£2,000) are Alison and Hutchison and Partners, Edinburgh, and Third (£1,000) is Mervyn Handley, Wallington, Surrey.

The promoters were the City of Glasgow Education Committee. On this page and on page 43 we publish drawings of the first prize-winning design. The drawings above are, from top to bottom, a long section, a cross-section through the workshops, and the north-east elevation. We will publish the other prize-winning designs in a later issue.



ings are ugly, on philosophical grounds, because they are a betrayal of Truth, and on common sense grounds, because they could have been very much better, with no more trouble or expense. Your attempt to provide dignity has resulted in a disturbing, muttering rehash of things dead, revived with a cynical sneer and constructed with noteworthy hamfistedness by contractors who appear to have had a plentiful supply of thumbs."

He lit a cigarette. He did not offer me one. "I admire your honesty and sincerity, young man, but I wish you would be more specific."

"I will be specific. A man is a man, and a man trying to be a deity is a fool. A shop is a shop, and the office overhead is an office. In the devastation which you have sanctioned and actively encouraged, the shops are a clutter of chrome without reason squashed by the offices, a decaying mass of what is Classical in the vision of some anonymous bank-balancing architect whose Integrity has retired in the first round of the eternal prize-fight with Avarice. This late Artist has pandered to the taste of the half-timbered planning Soviet, the members of which have enough sensitivity to slip under a draughtproof door. Revival of a style is a season pass to the morgue, and when done badly is a tasteless jest, whereby Man sticks a tongue out at his own intelligence."

"I'm afraid your words are difficult for me to understand."

"You cannot understand. A man who by an ironic trick of democracy is in a position to sanction squalor and tread firmly into the earth the more worthwhile dreams of designers. You know not what you do. But I, for one, will not forgive you. You should relinquish your corrupting powers, and confine your efforts to the squabbles with the opposition over procedural matters at that weekly linen-washing, back-biting, eye-scratching old pals act which wears the solemn mask of Local Government."

We each lit a cigarette, using our own matches.

"You think I should resign?"

"Do anything. But don't monkey about with Art. You do not try to do the work of the butcher, the baker, or the shaving stick maker; and they are simple trades, alongside Art. The problems of Space are not in the Ionosphere. They are around us. And the more adjacent the space, the more its crucifixion bothers me. You are incompetent, lacking training, experience, feeling or interest. I don't want to talk to you any more."

I stood up and walked briskly away, glancing back at the little man, a sneer on my lips. I made up the conversation on the way back to the office.

ALAN PLATER

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\* To preserve freedom of criticism these editors, as readers in their respective fields, remain anonymous.

## The Editors

### WANTED: AN INFORMATION SERVICE

At any moment of change it is worth appraising the whole situation and querying accepted practice. Last week it was announced (see page 42) that DSIR was to become the sole Government department concerned with research, and that in place of the MOW's Advisory Council of Building Research and Development there would be a "Standing Conference" on building research under DSIR, responsible for maintaining liaison with all research departments and associations in order to avoid overlapping, and to make recommendations to BRS. The MOW will be left with its present task of providing advisory leaflets, lectures, and its technical information service. There is no doubt that the MOW work in this field has been admirable, within the limits of finance and manpower available, but it is nothing like an adequate service for the building industry as a whole. There are two dangers confronting the capital investment programme (such as it is) in building: first, not enough research; second, not enough awareness of the results of it. The AJs Research Board chose "Information for the Architect" as the first subject for study because research is valueless without the dissemination of results. The first report by the second holder of the award, Dargan Bullivant, will be appearing shortly. It seems to us that fully as important as the setting up of a Standing Conference on Building Research is the need to form an organisation to prepare and disseminate information resulting from research. Today too much bumb of a variety of sizes, types and indices is chasing too little reading time. And the results of development work, or practical experience by the informed, are not being passed on in an easily filable, easily findable and easily readable form to the industry. The building industry needs an organisation, of comparable standing with the Standing Conference, to undertake this all-important task of communication. It must have *direct* contact with both research workers and the users, but its ultimate loyalty must be to the last. It must understand the needs of all sectors of the building industry. Lastly it must be authoritative, which means having first-rate people running a first-class organisation, which, in turn, means that it must be well financed. This is always the rub. We don't want

page 43 we publish drawings of the first prize-winning design. The drawings above are, from top to bottom, a long section, a cross-section through the workshops, and the north-east elevation. We will publish the other prize-winning designs in a later issue.

assessor, F. K. S. Iorke) were awarded to Boissevain and Osmond (£2,000) and Alison and Hutchison and Barbara Osmond). London. Second (£2,000) is Mervyn Handley, Wallington, Surrey. Partners, Edinburgh, and Third (£1,000) is Mervyn Handley, Wallington, Surrey.

yet *another* source of information-bumf crippled by inadequate funds. We want an organisation, intelligently using existing channels, and supplementing them where necessary, which can be looked to as a certain source of sound facts. The government has never been able to squeeze any major sums out of the building industry for research, it is therefore unlikely to do so for this. The answer for both research, and for the communication of the results (what might be described as good building practice) probably lies in a compulsory levy of some small percentage on the cost of all building work.



#### NEW YEAR HONOURS

ASTRAGAL was delighted to see the name of a colleague, J. M. Richards, in the New Year Honours List. Everyone who knows him or his work will be pleased that he has been awarded the CBE. And no-one who knows him will be surprised that when he was congratulated he suggested that the compliment was intended for the Architectural Press as a whole. This is typical of the modesty of the man who has made, single-handed, as great a contribution towards a better general understanding of good design and architecture as anyone living.

Most of the other awards that will interest architects go to people concerned with the Brussels exhibition, notably James Gardner and Edward Mills who both get CBEs. Howard

Lobb, who designed the British government pavilion, has the CBE already, and you can't get a bar for it as you can for a DSO. Three other awards must be recorded here: the CBE to Victor Pasmore, an artist who believes in working closely with architects, the Companionship of Honour to Sir Kenneth Clark and a Knighthood to Dennis Proctor, until recently chairman of the trustees of the Tate Gallery.

#### TOWNSCAPIST IN INDIA

Next week's New Year number of the AJ will lack one of its regular features—an exercise by Gordon Cullen in his unusual form of humour. He is, in fact, on the way to India, to accept an invitation that is a well-deserved compliment to his reputation as a townscape and to the *Architectural Review*, in which his townscape studies appear. The invitation came from an American firm of architects, Myer, Whittlesey and Glass, who have been asked to prepare a plan (sponsored by the Ford Foundation and the Indian Government) for Old Delhi and its neighbourhood.

This is, I believe, the first time that Gordon Cullen has agreed to advise on a major job, though it is not the first time he has been invited. Students of post-war design will know what a lot of influence his work has had. He proves the saying that you can get anything done provided you are prepared to let the other chaps get the credit for it. It may be some time before his influence is really measurable; when it is it will be seen to be immense.

#### THE RUSSIAN PAINTINGS

You will probably not be either surprised or disappointed by the Russian paintings at Burlington House, though you may have to make a slight mental adjustment to get the best out of the

earlier stuff. The early ikons, for instance, with their faded gilt, seem more blond and less sumptuous than other Byzantine paintings. The Soviet works are a category on their own, and I imagine that most visitors will get most pleasure out of the middle section—the eighteenth century portraits (rather like French or English ones), and the Romantic nineteenth-century faces, which you can relate to what you know of Russian literature—faintly Pushkin young men or a keen young woman out of Turgenev or Gogol. There are also landscapes in most of the nineteenth-century Western modes, though these are often as much as 40 years later than you think.

The Soviet works don't include as many grandiose scenes as you might expect, and there is very little cult of personality—just one tiny painting of Lenin talking to some peasants. The much-boasted picture of the last days in Hitler's bunker is too much like something from a television Goon show to be taken seriously, but Doinika's "Defence of Petrograd" is rather more impressive than its photographs would suggest. Incidentally there is one painting, not mentioned in the catalogue, of a man leaning out of the control cabin of a tower crane on a building site. Just the thing for next year's ABS Christmas card.

#### URBAN RENEWAL AGAIN

"Nearly all inventions nowadays are in the engineering field, rather than the social field. What sort of social inventions are needed?" That, more or less, was a question put to the BBC television "Brains Trust" on Sunday. What would your answer be? Sir William Holford was there, and after Bronowski and Aldous Huxley had worried their way through some argy-bargy about the difference between handling human beings and inanimate objects, he put in a plea for a form of administration that would allow comprehensive replanning to be carried out properly. Unfortunately no one else on the panel seemed to know or care about urban renewal, so Sir William didn't have a chance of explaining what he was talking about to the Ordinary Viewer.

It's no good pretending this programme is *not* intended for the Ordin-

ary Viewer—however hard Bronowski may fight to keep popular entertainers out of it. And even the mere O V must have thought it pretty footling to ask Sir William what he would do if faced with the choice of living in an 18th. century house or a new and efficient one without any architectural merit. The questioner added, "provided you have no spare money for repair or maintenance." As Huxley pointed out it was almost as hard as the old question, "Have you stopped beating your wife." I really do think some effort should be made to provide questions that match the distinction of the "brains." Far better attempts were made to give the other guests something to say. There must be plenty of good questions to ask about architecture, even if they have to be cooked up in the producer's control cabin.

#### ALL FOR THREE POUNDS TEN

This is the time of the year for enormous picture-books, and some of them are even worth the large sums of money they cost. The oddest I have seen, *Masters of Modern Architecture*, is published by Batsford and compiled by John Peter. It costs 70s. and contains two hundred pages of beautiful photographs of modern buildings—including four English ones. Two of these are pre-war work (the Highpoint flats and the penguin pool, both by Tecton); the third is an LCC school, and the fourth is the Ackroyden point block.

It is odd that an architectural book should have no plans and no technical information; it is odder still that the few lines of descriptive text for the four English buildings contain more mistakes than it would seem possible to cram into such a small space. Publishers of Batsford's standing and scholarly reputation ought to do better than this even if a book is compiled, as this was, in America—a fact, incidentally that is not made clear in the book.

#### HOLIDAY WITH HITCHCOCK

On his holiday ASTRAGAL'S mind has been improving itself at an average rate of two chapters per evening of Professor Hitchcock's *Architecture*, 19th and 20th Centuries.† This thick volume of the Pelican History of Art is packed with facts—up to ten per sen-



The Co-operative Wholesale Society's new Universe range of unit furniture has been designed by George Fejer in conjunction with the CWS design team. The whole range consists of 64 basic units of which three—dressing chest (£36 13s. 6d.) and two drawer units (£8 9s. and £12 7s. 9d.)—are combined to make the dressing table above. Also shown is a chest at £19 17s. 6d., and a lounge chair (£7 6s.) which is hardly of the same standard.

tence—and occasionally blotted by such extraordinary terms as *Romanesquoid* and *rather Byzantinesque*. It was quite an experience to read it and see a hundred and fifty years of world architectural muddle organized and made comprehensible by a mind that clearly understands what has been going on, and an eye that clearly has seen most of the buildings that it describes, even when they are in Hawaii or other unlikely places.

The book has the stamp of authority, and that is probably just as well, because the calm Hitchcockoid appraisal, dispassionate and informed, does not see recent architectural history in the same terms as certain interested parties would have us do. William Morris takes a very back seat for a start; McKim, Meade and White come forward, the glorious French Academic tradition sinks without trace after 1840 or so, and there is a whole chapter on all those rather embarrassing Twentieth Century traditionalists it is fashionable to cry down. And—most surprising of all—Norman Shaw is brought forward as one of the heroes of his hour, with a chapter to himself and his influence.

But it is not just an exercise in revaluations—which would have been taking liberties with the Pelican pro-

gramme. The solid core of what happened, where and when, and who did it (if known) is all there.

#### ALL-IN SERVICE

Did you read about the 5 ft. 10 in. architect (complete with safety pins for broken shoulder straps) whose labours in the "men for hire" business were featured in the *Evening Standard* last week. Eileen Ascroft leased him for the night (no flirting allowed) for six guineas (of which he got three) from a London "male escort bureau." He does the job for the money ("the path of the architect is hard and long"), but also for the fun of it ("it makes a good contrast to a rather humdrum job"). Is this, ASTRAGAL would like to know, the ultimate destination to which the All-In Service is taking us?

Incidentally, architects do seem to be regarded more and more as typically middle (or should one say upper-middle?) class. Every day now we see them in the advertisements, reading the top people's paper, commuting back and fro as free-spending suburbanites, choosing the best materials, growing beards in left-wing coffee bars. What have we got that other people haven't? It's an intriguing question.

ASTRAGAL

†Penguin Books, 70s.





## HONOURS

## New Year List

*Companion of Honour:* Sir Kenneth Clark (Chairman, Arts Council of Great Britain).

*Knights Bachelor:* Alderman Isaac James Hayward (Leader of the LCC); John William Laing (President, John Laing & Son Ltd.); Robert O. Lloyd, Past President, NFBTE.

*Order of the Bath—Civil Division.* C.B.: A. A. Part (Under Secretary, MOE).

*Order of St. Michael & St. George.* C.M.G.: R. C. Cooke (Director, Exhibition Division COI, for service in connection with British Government Pavilion, Brussels Exhibition). C.B.E.: L. P. Ellicott (Deputy Chief Technical Planner, MOHLG); Uffa Fox (yacht designer, for services to yachting); James Gardner (for service in connection with British Government Pavilion, Brussels Exhibition); J. W. Pope-Hennessy (for services to fine arts); O. Kokoschka (artist and writer); A. E. Marrington (Assistant Secretary, MOE); Edward D. Mills (for service in connection with the British Industries Pavilion, Brussels Exhibition); Victor Pasmore (artist); J. M. Richards (Joint Editor, *Architectural Review*).

*Order of the British Empire—Civil Division.* G.B.E.: Sir John Balfour (Commissioner General for the United Kingdom, Brussels Exhibition 1958). O.B.E.: F. J. Anderson (lately Principal Registration Officer, Manchester Region, MOHLG); P. St. C. Ballenden (Director of Public Works, Swaziland); Clifford E. Culpin (architect, London); C. Gorrod (Superintending Architect, MOW); S. W. Hayter (artist and engraver); C. J. Lansdell (designer, British Industrial Pavilion, Brussels); J. H. Rans (Senior Quantity Surveyor, War Office); C. G. Rowlands (Secretary of the National Federation of Building Trades Employers); J. Shearer (senior partner, J. Shearer and Annand, architects, Dunfermline); C. J. Wood (Principal, MOHLG). M.B.E.: T. A. Bailey (Senior Architect, MOW); L. A. Grealey (Director, F. W. Clifford Ltd., for services in connection with the British Government Pavilion, Brussels); A. H. Guiver (Superintending Technical Officer, MOW); W. T. Hall (Personal Secretary to Architect to LCC); J. W. Pirie (Senior Assistant Dist. Auditor, MOHLG); H. W. T. Williams (Higher Executive Officer, MOHLG).

## MOW

## Building Research

The Lord President of the Council and the Minister of Works have decided that the Department of Scientific and Industrial Research should in future be the only Government Department with responsibility for Building Research. Hitherto, the Min-

istry of Works has shared this responsibility through the Advisory Council on Building Research and Development. This Council which was set up in 1947, and has made a most valuable contribution to the whole field of building research, will, therefore, not be continued after its present two year period expires in March, 1959.

To ensure continuity of the important work previously undertaken by the Advisory Council, the Department of Scientific and Industrial Research will invite the various sections of the building industry to nominate representatives to a "Standing Conference on Building Research and Development." The terms of reference and further details of the operation of this Standing Conference will be announced later by the DSIR.

The Ministry of Works will continue to provide the present service of Advisory Leaflets, Lectures and the Technical Information Service.

## AA

## RIBA Constitution

The AA took the admirable step last week of holding a meeting to discuss the implications of the interim report of the RIBA's Constitution Committee. It was well organized. Michael Austin-Smith presented in the neatest way the desirable future trend of the architectural profession: that is, a profession practised in management techniques, supplied with a proper feed-back of information from the building industry based on experience, and therefore equipped to look after the architect's responsibilities, which will in turn compel the builder to attend to his. Dr. Graham Turner, an assistant secretary of the BMA, then described what the BMA's rôle was (it is not strictly comparable with the RIBA, but never mind). He gave its duties as: scientific and educational (special reports and studies on matters of medical interest, evidence to Royal Commissions, awards of prizes and scholarship, publication of journal, library, etc.); ethical work (roughly equivalent to the RIBA's Professional Conduct committee); protective work and a miscellaneous section which covered an employment bureau, advice on travel, house-building, insurance, charity and social functions.

Richard Sheppard then spoke and pointed out that everything the BMA did could be paralleled at the RIBA. But though the comparison sometimes appeared a trifle far-fetched, no one in the audience ventured to challenge him. Emphasizing once again that the RIBA is now trying to come to decisions based on a study of facts, he described how, at the present rate of intake into the profession, there would be 30,000 architects by 1975—more architects per head of population than any other country—and they would be lucky to be earning £1,000 at the age of forty. He thought it almost certain that the educational standard of entry would be raised to two A level passes in GCE, which, it has been estimated, would ensure that even by AD 2000 the membership would still be only 18-20,000, as it is now. He was convinced that, although the amount of building work available could not be precisely judged, the supply could not be increased to any marked extent. Mr. Sheppard ended by emphasizing the need for architects to base their policy on facts, and to be part of a strong pressure group in modern society.

Cleeve Barr, the chairman of the Constitution Committee, then briefly related the main points of his committee's interim report (see the JOURNAL of December 4). When the chairman, President Denis Clarke-Hall, asked for comment from the members, surprisingly little was said. At least two speakers recommended that the RIBA copy the RICS and form a Junior Organization (with three representatives on the Senior Council) in order to train young architects in committee work and so forth,

and to procure "a strong, healthy association." Edward Playne recommended that the power to vote should not be given immediately on qualifying, as so many left the profession without practising. He suggested ten years as a suitable interim period before voting powers were bestowed on individual members. Michael Patrick recommended that subscriptions should be graded by ages: £5 at twenty-five and £20, say, at fifty years old. Richard Sheppard thought that "private architectural empires should carry the load" by paying subscriptions based on their volume of work.

One member complained that there was no London Society for architects, save the AA, which had the appearance of being a society for ex-AA students, and which was too small to cope with the thousands of architects in the London and Middlesex area. He thought there should be two or three more Allied Societies formed. John Brandon-Jones, Past President of the AA, recommended that the AA representative on the RIBA Council (who is the president only by custom and not by constitution) should be elected by the AA membership, should not be the president, and should be elected on a three-year basis. This suggestion was approved by President Denis Clarke-Hall, who agreed to put it to the AA Council. Such an action would bring the AA in line with the Constitutional Committee's recommendation for Allied Society representatives on the RIBA Council, and would seem to be an eminently sensible and democratic proposal.

The BMA representative, Dr. Graham Turner, was asked how the BMA was organized and financed, and he described how the majority of the Council was elected from geographical divisions, and financed by subscriptions (no figures given), profits from publications, and rents from leasing part of their headquarters. He warned the architects against making the mistake of imitating the BMA. Their members had been very dissatisfied with them, particularly around 1948 when the National Health Act was introduced, and efforts had then been made to ensure that the BMA was more democratic. The changes had not, however, made the slightest difference, and members were still "frightfully dissatisfied." He very appositely quoted Hilaire Belloc:

*"The accursed power which stands on Privilege  
(And goes with women and champagne  
and Bridge)  
Broke—and Democracy resumed her reign  
(Which goes with Bridge and women and champagne)."*

Thus, neatly, did the only doctor in the house cure the audience of their illusions.

## Obituary

The JOURNAL records with deep regret the death of Miss Rosalind Arnell who, for over 30 years has been a loyal and extremely capable member of the staff of the Advertising Department. Her efficiency and never failing courtesy has long been appreciated by our many advertisers and those who have worked with her at the Architectural Press will remember always her kindness and, latterly, her great courage during many months of ill health.

## DIARY

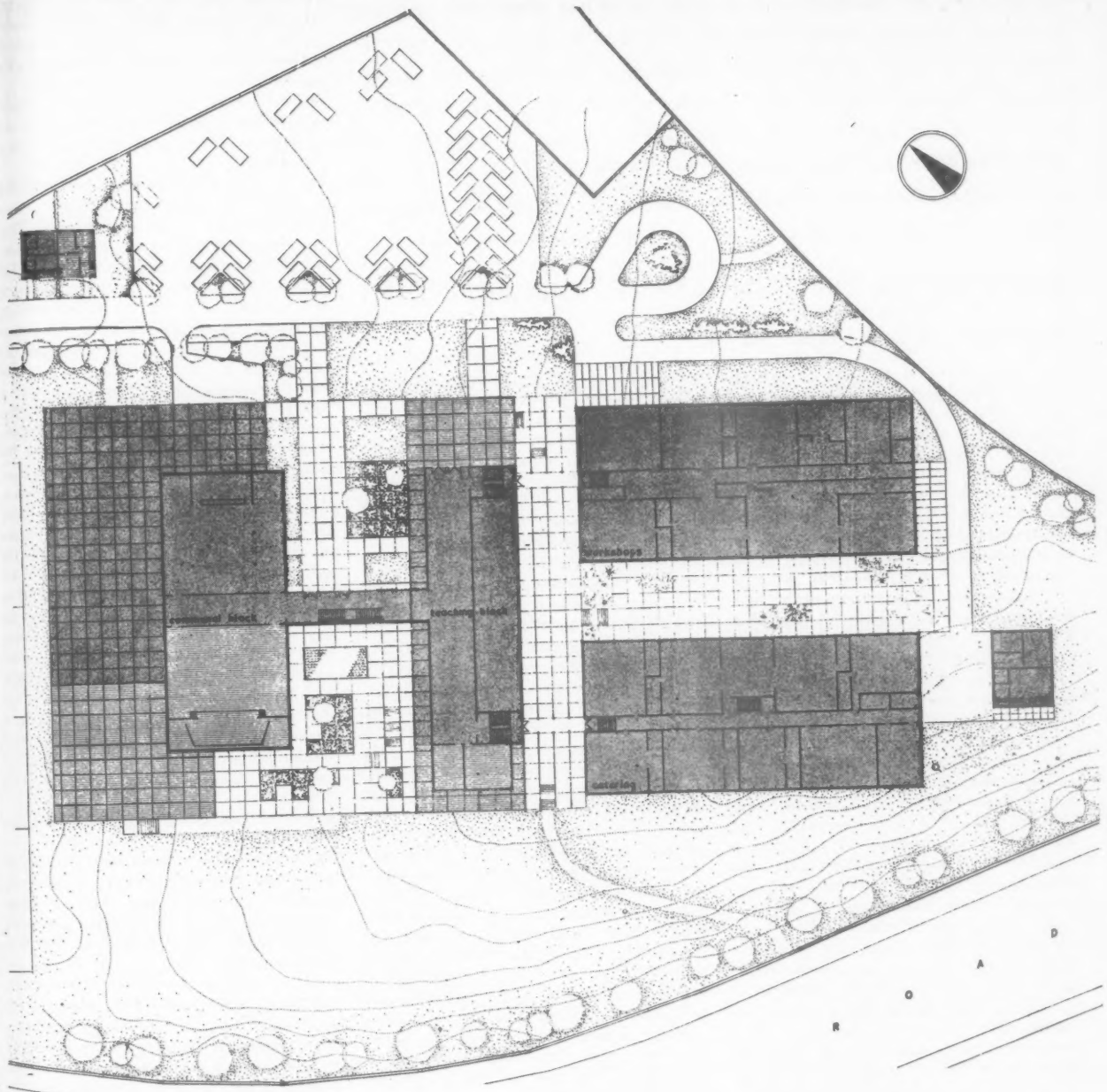
*RIBA Library Group Meeting.* Dr. Arnold Noach on Giuseppe Manocchi at 66, Portland Square, W.1. 6 p.m. JANUARY 12

*Suspended Ceilings.* Discussion at the RIBA, 66, Portland Place, W.1. 6 p.m. JANUARY 13

*The Maintenance of Modern Buildings.* Talk by H. J. Eldridge at the RICS, 12, St. George Street, S.W.1. 5.45 p.m. JANUARY 14



## LANGSIDE COLLEGE COMPETITION: BOISSEVAIN &amp; OSMOND'S DESIGN



The site plan of Boissevain and Osmond's first prize-winning design for the Langside College of Further Education. In their report the architects said: "The architects' purpose has been to design an integrated group of buildings with convenient and direct access to all the main elements of the plan on one level and so disposed on this steeply sloping site to form and enclose pleasant courts and landscaped areas. All those inherent advantages, in fact, that stem from good practice on a comparatively level site. The strong concentration of the building masses in spite of the low building heights in the centre of the site permits the greater part of it to be preserved as a landscaped recreational area. A feature of the scheme is the clear separation of the mechanical

and catering workshops from the teaching block with only short connections to the communal building that can be used in a variety of ways with a series of adjoining spaces and reading rooms. The architects have attempted to achieve a scheme that is comprehensively planned—resulting in functional excellence—and which is clear and rich in variety from a spatial architectonic point of view." The four-storey teaching block is steel-framed, with steel tube columns filled with vibrated concrete (interaction of the steel and concrete permitting the use of unusually slim columns) and r.c. floors. Hall and gymnasias are roofed with tubular steel trusses resting on steel columns, and workshop and domestic science blocks are roofed with portal frames.

*The result of the competition sponsored by Berkshire County Council for an infants school at Wokingham is as follows: First Premium (£300): Wells and Hickman, London (architect in charge F. H. Hartry). Second Premium (£175): Alan Goodman, Nottingham. Third Premium (£75): Kenneth Tasker, Liverpool. The assessors were E. D. Lyons, A.R.I.B.A., J. T. Castle, A.R.I.B.A., and T. D. Whitfield, M.A., LL.B. The 208 designs submitted are being exhibited in the Town Hall, Reading, from 10.30 to 7.30 daily until January 10. The school is for approximately 240 infants on part of a site of 5.75 acres to serve a new housing estate.*

## WOKINGHAM INFANTS SCHOOL COMPETITION

### Assessors' Report Summarized

The designs have, if anything, shown that there is little left untried in the planning of a two-form entry infant school. Certainly no entry combines in itself the qualities of originality, serviceability, and aesthetic merit. Where, moreover, the competitor has had originality as his main preoccupation, it has tended to be his main achievement. In general standard of architectural design many of the entries do not rise above the level of mediocrity. No competitor has been willing to impose on himself, consistently throughout his plan, such limitations as a pitched roof in order to ensure a trouble-free building. The result has been a gain in overall floor areas but it might be said that this prodigality of space has only been achieved by a frugality in construction.

The assessors have been influenced by educational, aesthetic and technical factors. On the technical plane the assessors have attached importance to simplicity and economy of construction. A few designs displayed a fantastic departure from the orthodox but gained but little thereby, although adding considerably to the cost. Some competitors allowed their pursuit of originality to impose the structural form on their schemes to such an extent as to work to the ultimate detriment of their plans. The assessors have reached the unanimous opinion that there are three competitors who succeed more than the others in solving or minimizing the problems inherent in the task set and in achieving the educational desiderata in a school for infant children.

#### Comments on the prizewinning designs

The FIRST PREMIUM has been awarded to design No. 3. Like most of those submitted, this scheme cannot be regarded as highly imaginative, nor does it make any new contribution to the planning of infant schools. Its outstanding merit lies in the ease and lucidity with which it resolves the major siting and planning problems. The placing of the school on the high ground at the north corner of the site using the natural enclosure formed by the existing trees is particularly advantageous, shutting the school off from that part of the site allocated to the future junior school. It also allows the best use to be made of the long views parallel with the

major axis of the site, and gives the best orientation to the teaching rooms. The relationship between the landscaping, the layout of the outdoor teaching areas and the play spaces is excellent. These merits outweigh the disadvantages of the additional length of roadway, which would not have been necessary had the school been sited further to the west.

The plan provides for a thoroughly workmanlike, straightforward school, without any complications. Its routes are clear-cut and direct, leaving the general activity and dining areas unimpeded. The administrative rooms are well grouped and so positioned in the plan as to facilitate control. The detailed planning of these rooms, however, could be altered with some advantage, in order to increase the size of the stock and stationery store. The teaching rooms although similar in plan, each have their identity, and are well related to their individual outdoor teaching areas. The echelon arrangement of the rooms will permit the outdoor areas to be used simultaneously without interference. The position of the pool in the partly enclosed court will require some further thought. At present it is a hazard and likely to claim a number of victims. The children's sanitary and cloak accommodation is well dispersed and easily controlled. The general activity area and dining space is simple in shape and is just saved from being intimidating by the lower ceiling over the dining area.

The conception as a whole is clear and competent, making the arrangement of the several components appear obvious. The structural design is simple and economical. The elevational treatment, both internally and externally, is most sensitively handled and has good continuity and a high appreciation of scale. It is pleasing to note that the elevations are entirely free from clichés. Without entering into the controversy over felt-covered roofs the assessors agree that the materials suggested would weather well, a particularly important consideration in the close proximity of trees.

Adverse comments which can be made are as follows: (a) The plan does not lend itself to other than a modest extension. (b) The aspect of the staff rooms is not ideal. (c) The doors from the covered way are too near the steps leading to classrooms 5 and 6. (d) The floor area of the school is such as to

make it doubtful whether it could be built within the permissible cost allowance, but the teaching area, which is well in excess of the Ministry of Education's minimum requirement, could readily be curtailed without detriment to the plan as a whole.

The quality of the drawings merits study, and the attention of competitors is drawn to them as an excellent example of clear presentation.

The SECOND PREMIUM has been awarded to design No. 71. Within reasonable practical limits, this is an imaginative scheme. It is modelled with much finesse and considerable appreciation of spatial values. The interior of the school would be interesting and intimate. The placing of the building on the site does not reach the same high standard as the plan. It is unfortunate that the scheme has defects which are so basic that they could not be remedied without a radical alteration to the design. These defects are: (a) The kitchen terminates the long axis of the dining area. From the serving counter to the end table is some 80 ft. This is excessive. (b) The change in floor level in close proximity to the serving counter might well be dangerous. (c) Because of the change in floor level between the assembly hall and the dining area, any attempt to extend dining facilities would be difficult. (d) The main route within the school to the second and third year rooms and the assembly hall is a little complex and likely to prove a bottleneck in practice. The dining tables and chairs when laid out would be difficult to negotiate. (e) It is doubtful whether the school could be built within the permissible cost allowance and the plan does not lend itself to easy reduction.

Structurally the scheme is well and economically conceived.

The THIRD PREMIUM has been awarded to design No. 128. Of the three prize-winning plans, this one has the best chance of being executed within the current cost limitation without modification. To achieve this it is possible that too wide a safety margin has been left with consequent sacrifice of space. The siting of the building has many of the defects and virtues of the design which has been awarded second prize. The modelling of the building with the main approach through a courtyard is attractive, but the author has failed to exploit this idea to the fullest extent, particularly in the elevations which are dull.

#### Notes on construction

Wells and Hickman's design uses external load-bearing brick walls up to 6 ft. 6 in., with 1 ft. 6 in. high timber posts behind. Continuous fascia in white stove-enamelled asbestos, plywood fascia in assembly hall. Timber posts support roof of dining room and covered way, laminated posts in assembly room. Roofs generally laminated beams, strawboard decking and built-up roofing, plywood space frame in assembly hall. Heating generally by hot air from oil-fired boiler. Alan Goodman's design is of brick cross-wall construction, supporting built-up plywood decking with copper roof, and heating is by re-circulated warm air.

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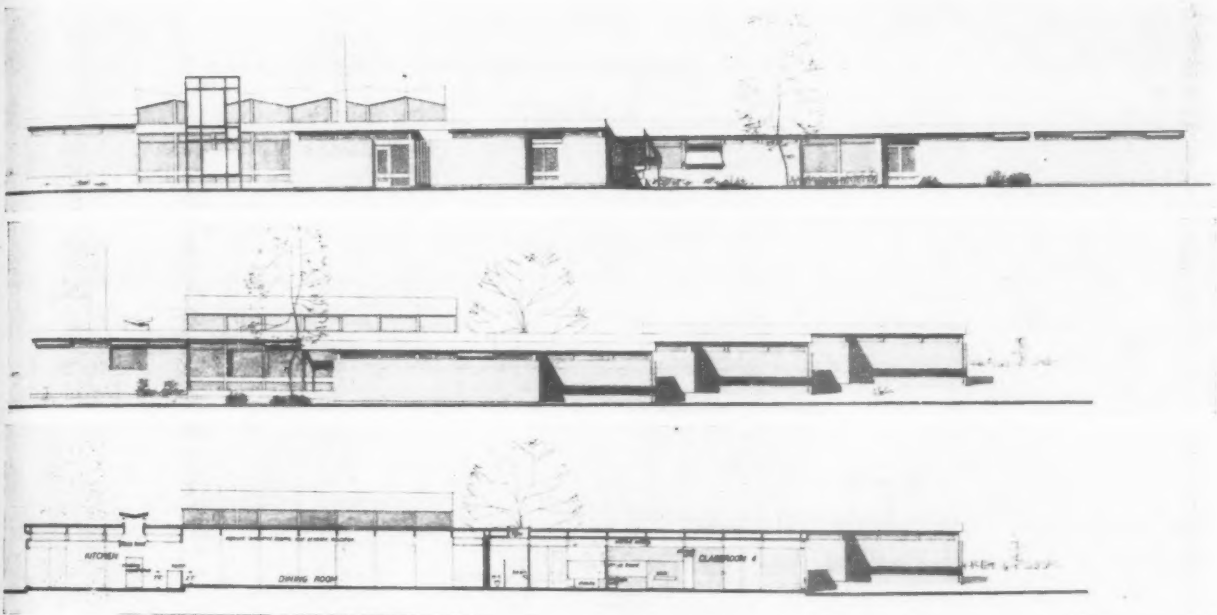
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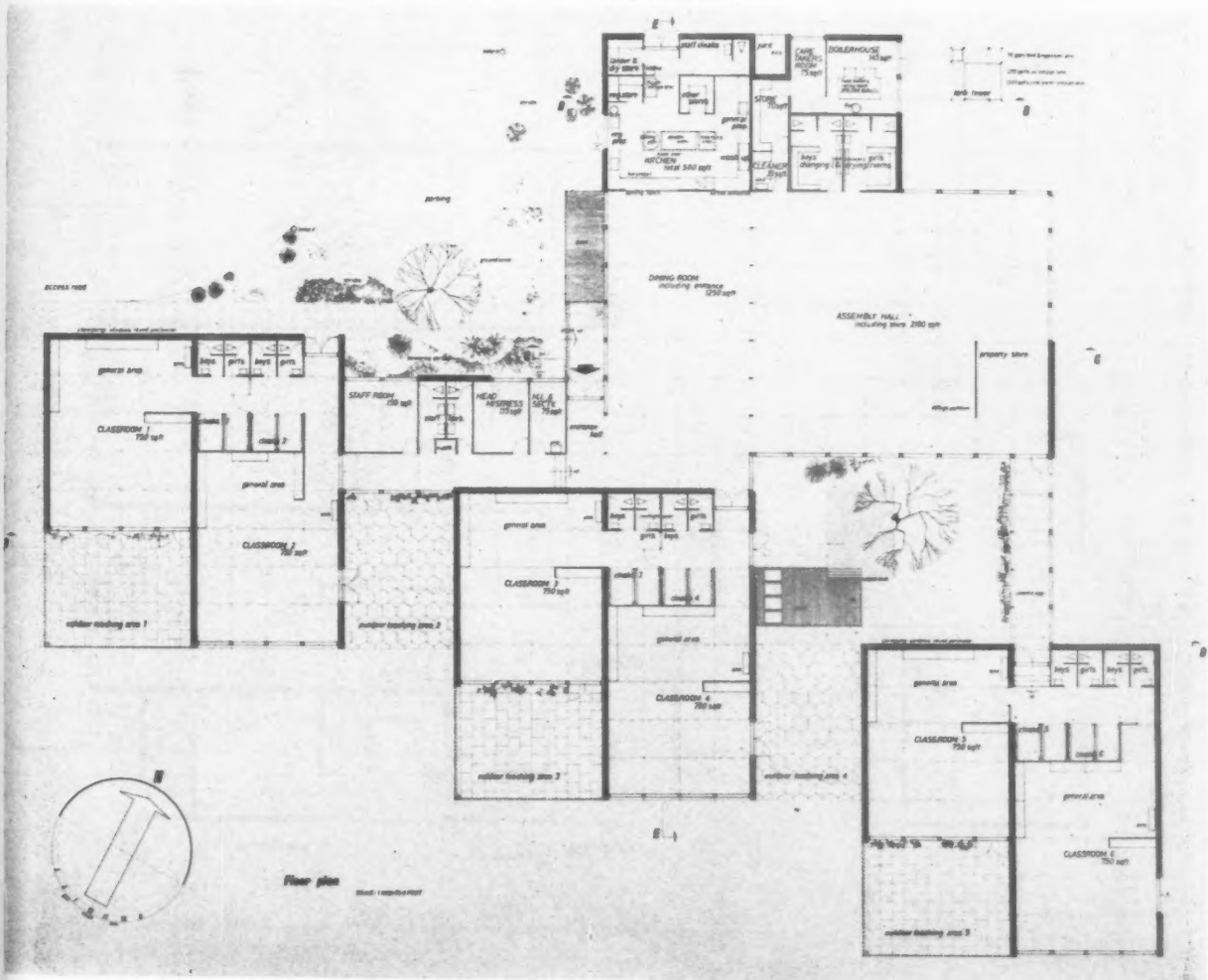


**Wokingham Infants School Competition:**

**FIRST PRIZE-WINNING DESIGN BY WELLS AND HICKMAN**

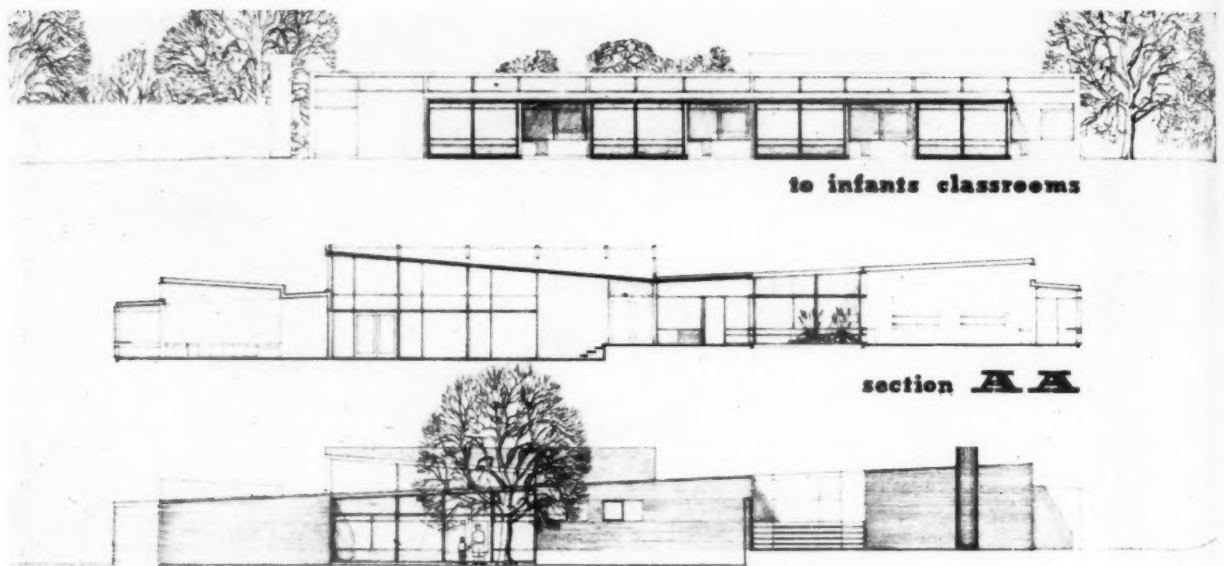


*Top, north elevation; centre, west elevation; above, section E-E; below, ground floor plan.*

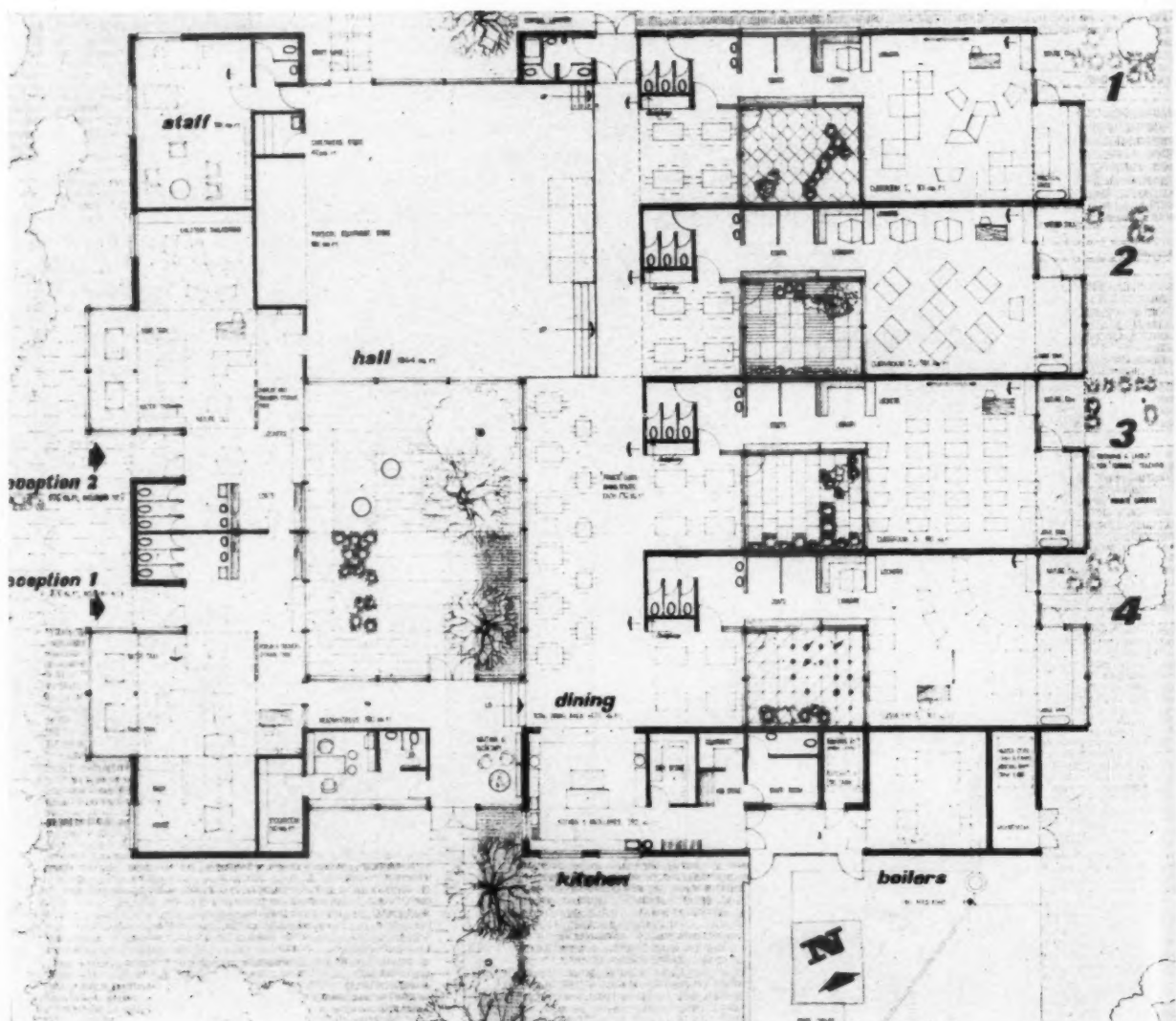


**Wokingham Infants School Competition :**

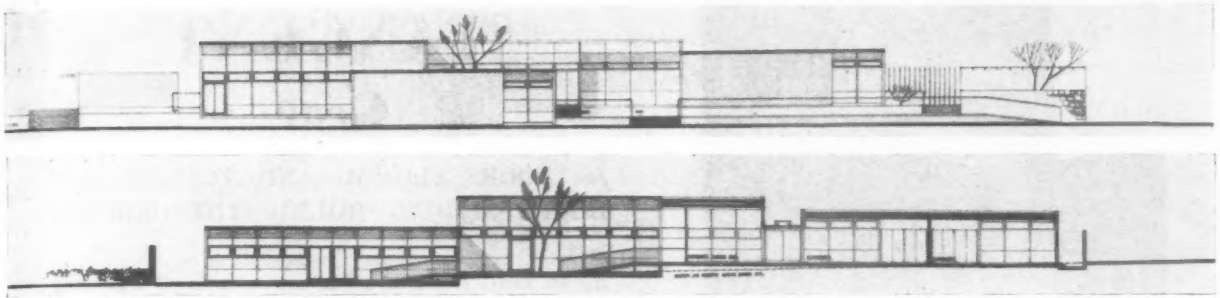
**SECOND PRIZE-WINNING DESIGN BY ALAN GOODMAN**



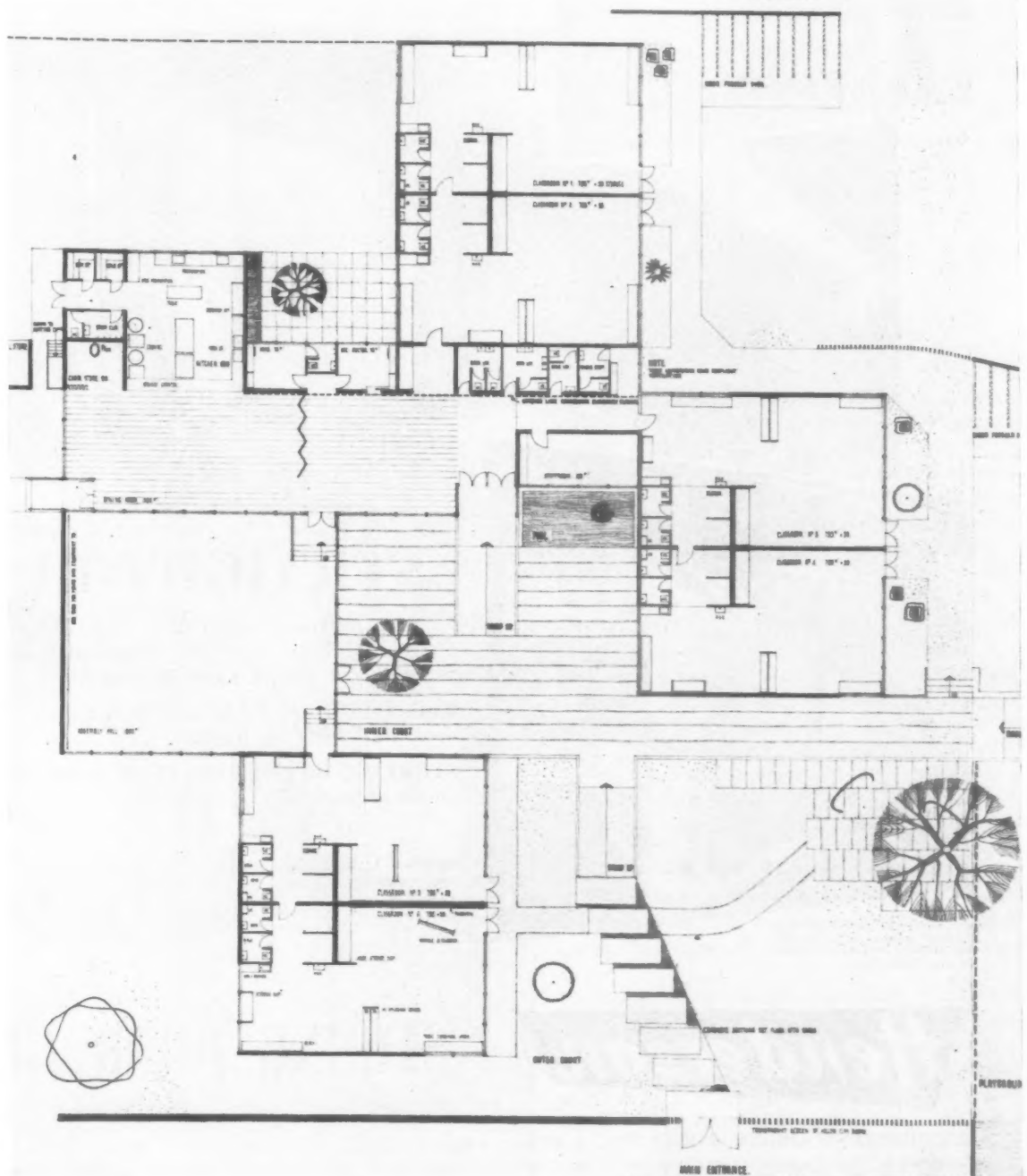
*Above, east elevation, section A-A and south elevation; below, ground floor plan.*



THIRD PRIZE-WINNING DESIGN BY KENNETH TASKER



Top, south-west elevation; above, sectional elevation through entrance; below, ground floor plan.



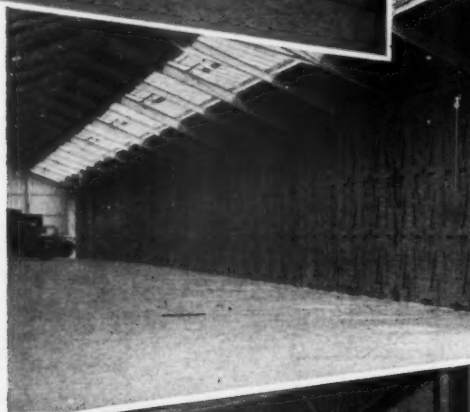


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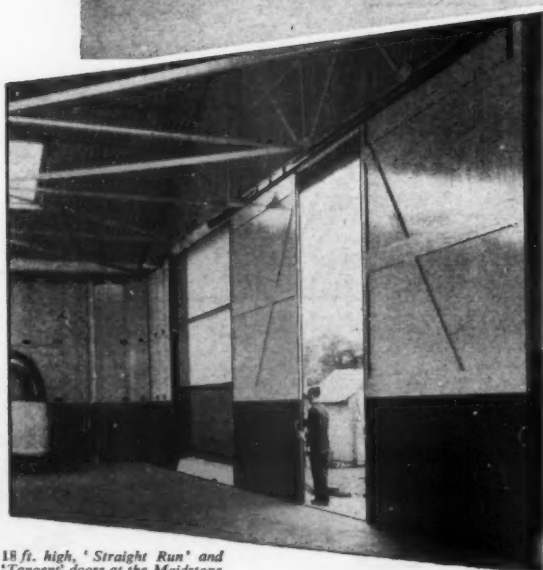
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H 124



## The new telephone kiosk

*The kiosk designed by Neville Conder, and chosen by the Post Office, was the only one to dispense with the traditional backboard.*

*We publish today the three designs for a new telephone kiosk submitted to the Post Office, at its request, by Neville Conder, Misha Black and Jack Howe. The design by Neville Conder has been accepted, and after further development in detail will be tried out at first in selected places, such as new towns and new town centres. There is no intention of replacing the existing cast iron kiosks, designed by Sir Giles Gilbert Scott over 30 years ago and modernized in the 1930s. Among the factors taken into account in selecting Neville Conder's design were the probable cost of production and maintenance, and its adaptability to many different situations. The design selected is the only one which has a similar appearance from all four sides, which makes it easy to identify from any angle and simplifies the problem of positioning the door in relation to pedestrians.*

### Design by Neville Conder

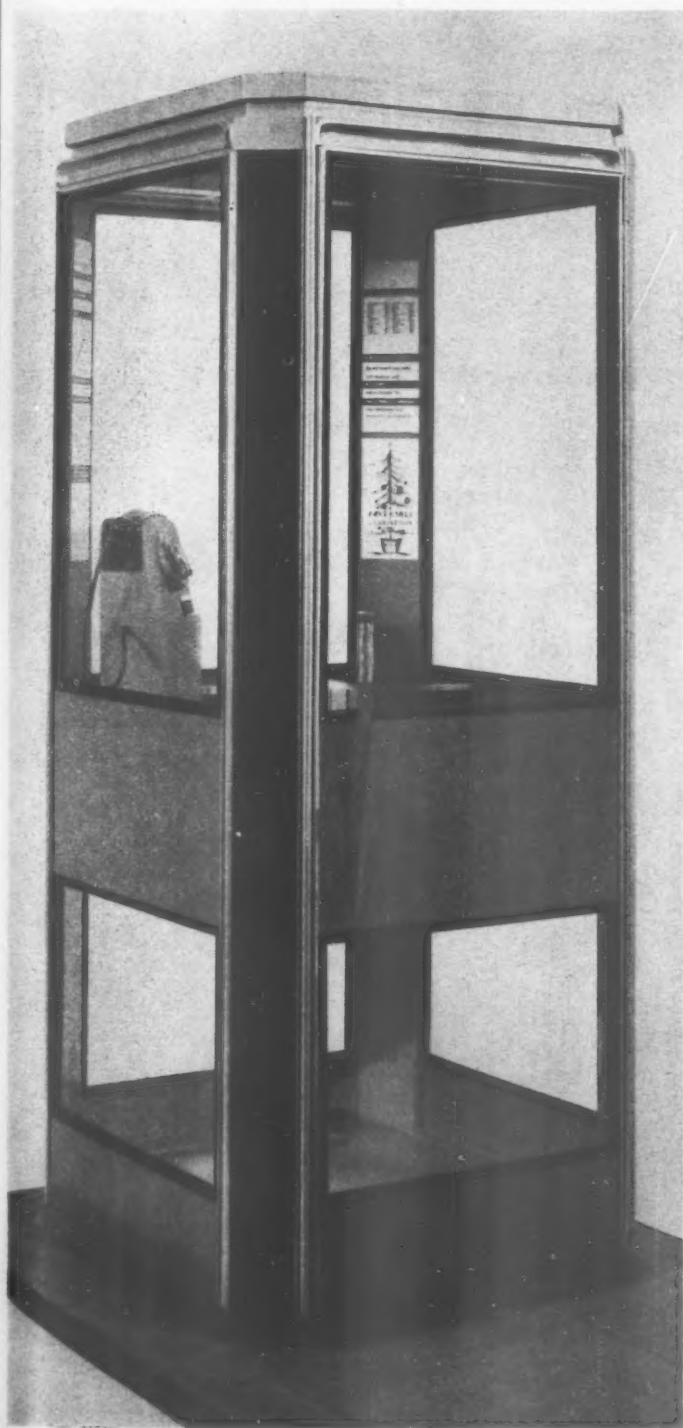
For the following two reasons the designer considered that the kiosk should preferably have a similar appearance on all four sides.

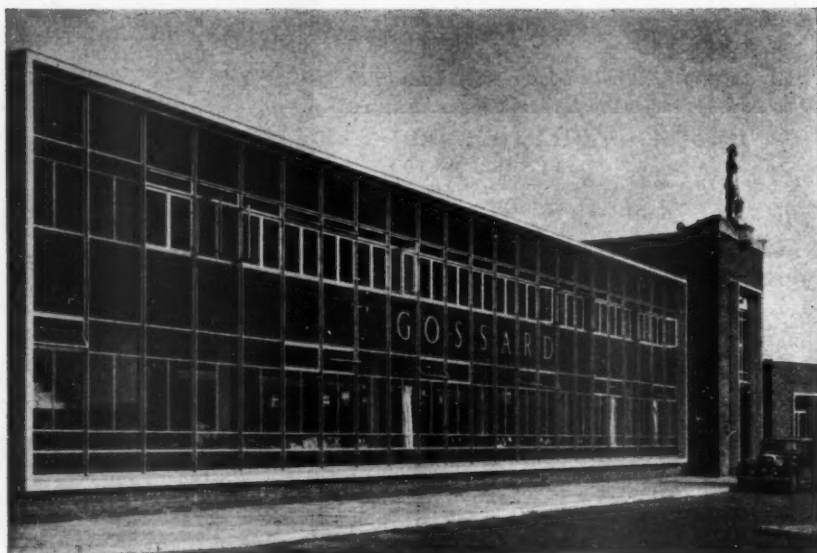
(a) Any strong differentiation between different sides will create a directional emphasis that may well cause architectural difficulties in some of the many types of positions in which the kiosk will have to be placed.

(b) As an object in the streets it will be more easily identified if all sides are similar. In practice the kiosk itself, rather than any lettering on it, is the means of identification.

The design departs from present practice by dispensing with the use of the traditional back-board and thus separates the two functions of (i) carrying the equipment, (ii) "blanking-out" in positions against walls. This allows the design to be built with or without a blind side and permits great flexibility in use, without introducing alternative door positions. The new conception is of a "telephone desk," rather than a back-board. This is felt to be very pleasant in use, neat in appearance (it secretly incorporates all fuse and switch gear) and is the most suitable design for incorporating the new type of instrument and the directory holder.

The design has cut-off corners on plan. This feature yields the following advantages: 1. It reduces the diagonal dimension and causes less obstruction in a busy street. 2. It provides a housing for the information panels. 3. It reduces the panel width to a size suitable for a door. 4. It makes strong "tubular" columns possible that can also serve as low-level vents, secret conduits, and rain-water pipes. 5. It allows a





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*J. Stuart Dilks, B.A., A.R.I.B.A., Chartered Architect*

# HOPE'S

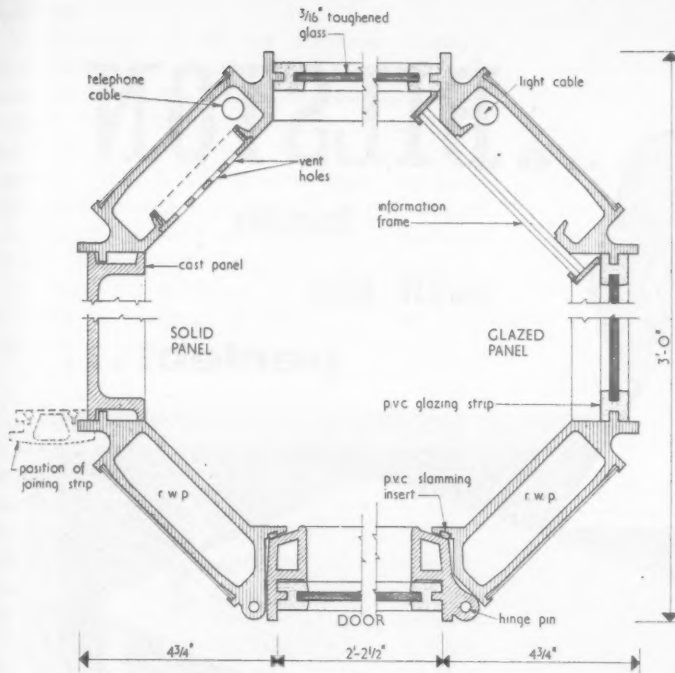
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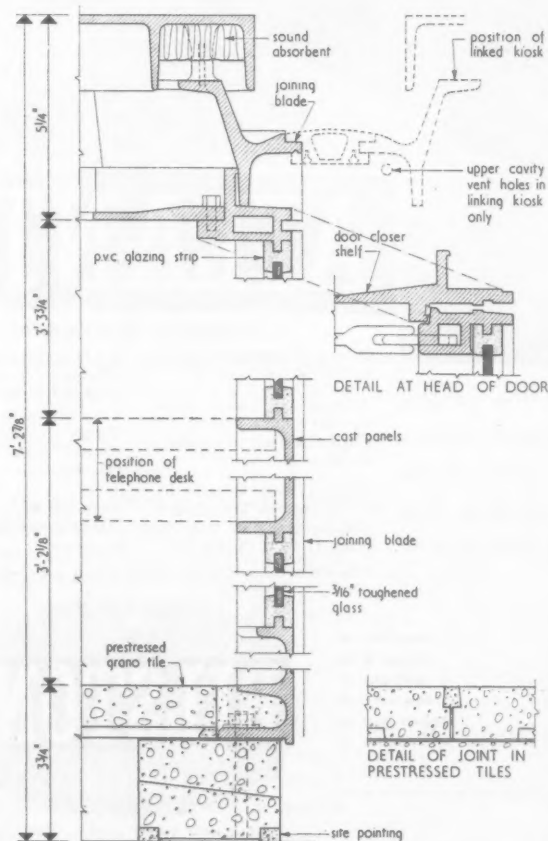
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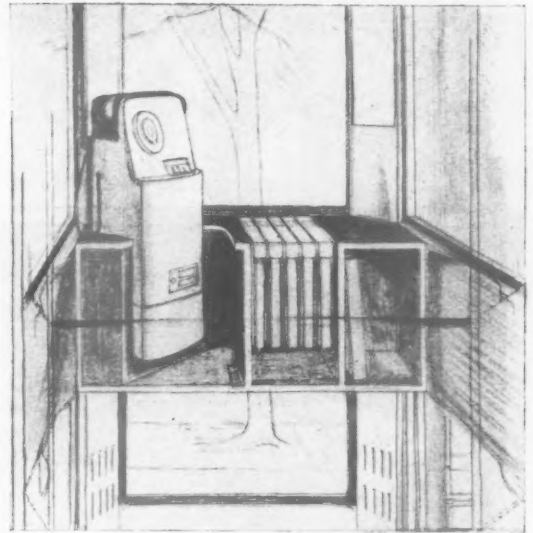
*Neville Conder's design. Above, sections through solid and glazed panels; below, vertical sections; right, interior layout of instrument and directory holder, below, right, linked kiosks.*



simple joining techniques for kiosks in series either as terraces or in "blocks" two kiosks thick.

#### Ventilation and sound proofing in single kiosks

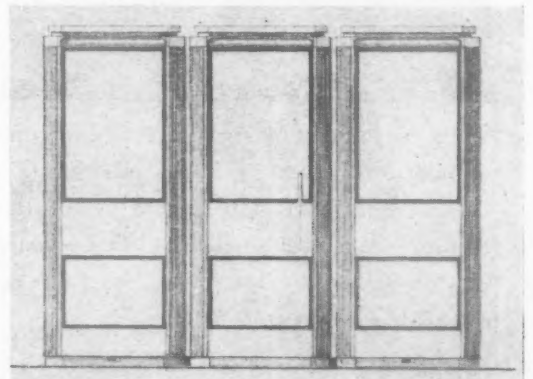
The area of high level opening for ventilation is in the form of a  $\frac{1}{2}$ -in. strip giving an equivalent of 55 sq. in. This is an increase on the present GPO kiosk (approximately 24 sq. in.) which is thought to be inadequately ventilated. Low-level vents are introduced to encourage upward movement of the heated air. It



is hoped that because of the positive seal of the door and the use of absorbents at the vents, the noise level will compare favourably with the present kiosk in spite of increased ventilation.

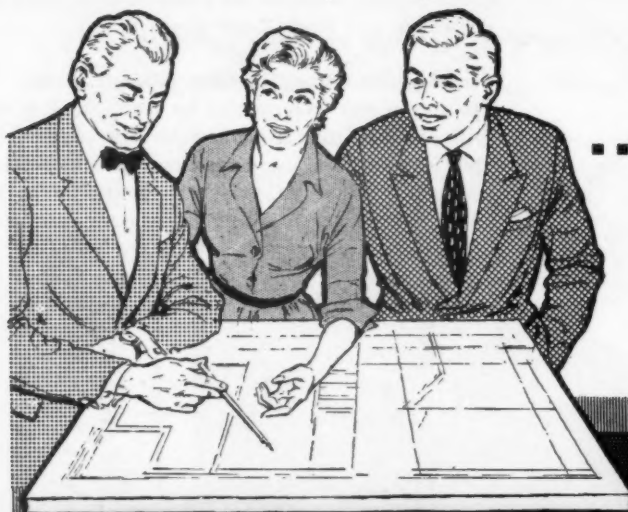
#### Linked kiosks and sound attenuation between kiosks

The kiosks used in terraces are exactly the same as those used singly except for the glazing between them. Second kiosks can be added to existing kiosks and the only change in the original kiosk required by such an addition is the substitution of one pane of rough-cast glass for a pane of clear glass. Second kiosks (or



alternative ones in a long line) will be equipped on the "party-wall" side with glazing in sub-frames for quicker removal for an annual cleaning of the glass in the cavity. The glass in these frames will be thicker to reduce noise penetration. The party walls are fully glazed to allow a feeling of openness and good light penetration to central kiosks in ranges.





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### Equipment

It is proposed to use the new telephone instrument and the new type of directory holder in a special telephone desk fitting. The light fitting is directly over the telephone desk and casts some light on the higher part of the ceiling. The tube is well protected and shielded from direct view to avoid glare. Two information panels are provided on the splayed corners. They provide together a total area for information of 230 sq in. The width of all printed matter is limited to a 5-in. sight size. The door closer is of a new pattern which can be mounted "up-side-down" and is incorporated on a bracing shelf over the door.

### Maintenance and colour

No ferrous metals are employed and maintenance is therefore for reasons of appearance and hygiene only. Cleaning costs should be reduced by the new design. (The present kiosk has 76 panels of glass: the new kiosk eight.) Colour is introduced for cosmetic purposes only and not for protection. The estimate of cost includes for the red panels being stove enamelled at works and in theory this kiosk needs no painting. But the designer wishes to state that he is not convinced that there is any long-term substitute for painting to achieve a permanent Post Office red. Many possibilities, including self-coloured plastic panels, have been explored and on specialist advice rejected. The ordinary framing members are in extruded aluminium and will be cleaned with the windows. This material looks well in narrow members but in a short time looks dull and tawdry externally in large flat areas. For that reason—and also in order to achieve visual strength and colour relief in the design—the corner members have slip-in thin plates of black anodized aluminium for cosmetic purposes only. The p.v.c. glazing beads are also black and form an important element in the design.

### The general structural system

In general the principle has been followed of extrusion meeting casting. In this way a great deal of machining is avoided as the castings can be formed to accommodate the extrusions and all necessary lugs, etc. It will be noted, for example, that the solid panels fix to the extrusions without requiring any mitre or machining of the extrusion.

A feature of the design is the way in which the "joining blades" of the extrusions marry with a similar blade in the roof frame casting and curve round to make the use of a continuous p.v.c. joining strip possible. The solid panels provide strong cross-bracing to the entire structure. The telephone desk provides a brace in the horizontal plane at the most probable impact level.

The kiosk is 3 ft. sq. on plan (as in the present design), and 7 ft. 2 in. in height (8 ft. 4 in. in the present kiosk), with a clear door opening of 6 ft. 6 in. by 2 ft. 2 in. The plinth is precast vibrated r.c. incorporating levelling screws and six conduit recesses. Floor tiles are pre-cast vibrated concrete, granolithic finish;  $\frac{3}{8}$ -in. toughened drawn glass throughout.



*Misha Black's design is assembled from seven aluminium alloy castings.*



*Jack Howe's design uses opaque glass to give a "permanent" post office red and a polyester glass fibre back panel.*

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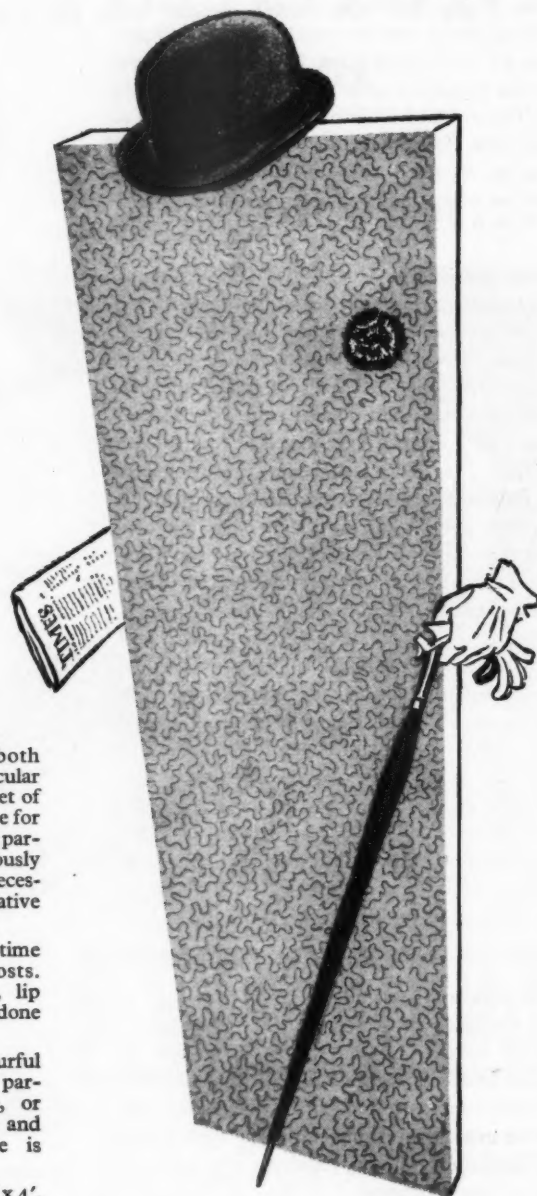
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## technical section

We print this week the first of a series of five articles on "Architectural Management." The authors, W. Sinclair Gaudie and Arthur F. S. Wright, are two of the principals of the Dundee firm of architects Gaudie, Hardie, Wright and Needham. Their aim is to describe in some detail what they have done to apply the principles of management to their own office. In the course of the series they describe the modifications they have made to the architect's traditional procedure in gathering his information, in preparing his drawings, in writing his specification and in controlling the job on the site; and in their last article they discuss how responsibility is to be distributed within the office. In putting the results of their experience before the profession, the authors wish to make it clear that these are tentative only, being the fruit of a short, though encouraging experience. When applying this experience to their own offices, readers should remember that it relates to Scottish practice (in which, for instance, contracts are often let out by trades, with no general contractor) and to a firm comprising an average of five architects, carrying out work to an average value of £200,000 per year. The Editors of the JOURNAL welcome these articles because they believe that the kind of reassessment described in them is long overdue. They hope that they will provoke readers to come forward with their own solutions.

## 7 PRACTICE

### architectural management: a method study 1, introductory, information handling

After outlining the problem, the authors, W. Sinclair Gaudie and Arthur F. S. Wright, begin their method study by considering "information" as it concerns the architect at the pre-contract stage. They propose the use of schedules for recording the client's brief, the use of "source" and "type" details to canalize information needed at the drawing board, and of "comparison tables" to speed the choice of products. They propose a drill for treating manufacturers' literature and another for handling cost information.

The public (in general) does not regard architects (in general) as efficient, a view which is shared by many contractors and surveyors: hence the current heart-searching within the profession. We are beginning to realise the futility of putting forward, as a plea-in-mitigation, the excellence of our design conceptions, since efficiency in this sense is something beyond the layman's judgment. He uses a simpler standard: *the extent of the client's satisfaction with the finished job from the point of view of performance and cost and erection-time.*

The architect's own assessment of efficiency must include the simple standard already stated *plus design quality.* It must also take into account the fact that good design quality needs deep, detailed and possibly prolonged thinking, while the time of architects and their assistants is a costly commodity. Additionally, therefore, we must recognize that an architect's handling of a project is not efficient (from his own standpoint) unless:

(a) he gives it adequate time and attention; and (b) he ensures that none of this time and attention is consumed by useless effort.

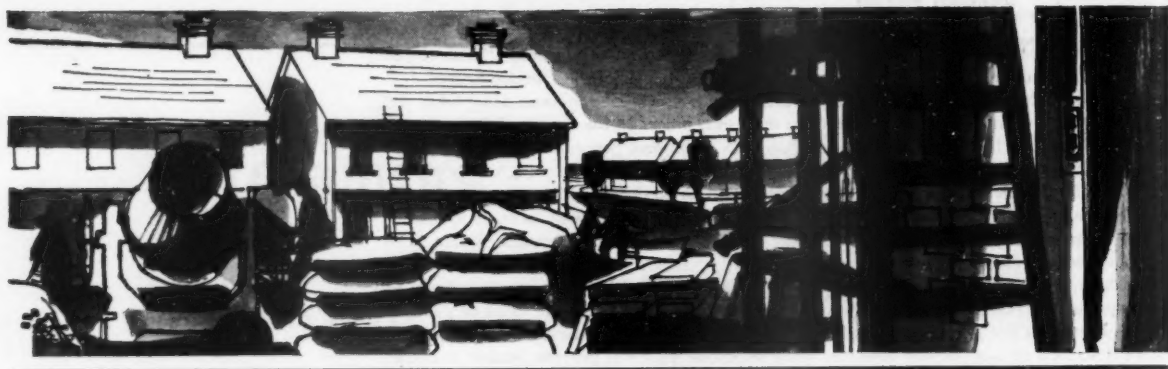
We ourselves have been examining these propositions very closely, in so far as they affect our own practice, a very general one which aims at producing decent contemporary design and has a long-established reputation for thoroughness in detail. These are qualities which we are anxious to preserve as the practice develops and expands, and the need to do this while maintaining a reasonable level of profit immediately brings one up against that elementary yardstick of managerial efficiency, the ratio of time-spent to fees-earned.

Being of the opinion that most published work on architectural management has dealt with treatment of symptoms rather than eradication of their causes, we have tried, for a start, to get right outside our job, looking at it with the unclouded eye of the "management consultant"—in other words, to think about our thinking. Our findings may be helpful to other architects, and we think they may have a particular bearing on the problems of the expanding practice and on the working of larger practices on a "group basis." Architecture is produced by a process of absorbing information, making decisions and communicating the decisions to the people concerned.\* This information-decision-communication sequence is basic to all aspects of the architect's work, managerial as well as creative. At the risk of generalizing, we would say that his training fails to inculcate this discipline of thought, as it should, all along the line.

In the field of planning, it is taught quite thoroughly: in the field of construction only superficially: and as regards all the rest of a practising architect's work, hardly at all. Untrained in systematic thinking, he too commonly proceeds by assumption, intuition and inspiration.

This is reflected in the nature of the commoner criticisms of his efficiency. His ability as a planner, æsthetic adviser or producer of design-drawings is relatively seldom called in question: but there is a

\*Cf. Clive Wooster's four categories (AJ, October 13, 1955), *management, investigation, design and instruction*: but in our view, as noted above, management can itself be considered simply in terms of these three elements, and must not be looked upon as 'a' separate 'mystery' outside the architectural curriculum



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## technical section

## PRE-CONTRACT STAGE—INFORMATION

## The architect's brief

This consists of:

## Sources

## (a) Client's instructions:

(i) General (accommodation, services, cost, etc.)

(ii) Detail (finishes, fittings, etc.)

## (b) Site data:

(i) Measured survey

(ii) Services available

(iii) Restrictions (T & CP, title deeds, etc.)

(iv) Subsoil

(v) Climate

## Solutions:

(a) The client is tactfully restricted to giving general instructions only, at the first discussion. These are set down, after the meeting, in a form not unlike a competition programme: graphical symbols for relationships of rooms or departments can be valuable if used sparingly and kept simple enough for the client to grasp.

A copy of the programme goes to the client. If there are modifications at sketch-plan stage, they are similarly noted (on a different colour of paper) as appendices to the programme.

Detail requirements are settled as soon as possible thereafter to avoid indecision over things like thickness of floor finishes which can cause surprising cumulative errors on working drawings. Simple standardized schedules (Fig. 1) are very useful for forcing decisions, possibly on account of the compulsive effect of "filling up a form." They are always completed by the architect on the spot, in consultation with the

## Problems

The most important information of all, but too seldom set down or confirmed in any formal or lucid way. Slackness here is a primary source of delay and expense.

Detail requirements often given either too early or too late.

Site data are too seldom collated in a form suitable for reference by the designer at all stages, e.g. if he has to consult two notebooks, an ordnance map, a letter file and the back of a cigarette packet, something will be forgotten.

client, never sent to the client for filling up himself: he has a "pending" tray, too.

Apart from being obviously businesslike, this drill gives the client at the outset, some notion of the complexity of the architect's job and the analytical faculty needed to deal with it. As a by-product, it therefore gives the architect a little of that "one-upness" which is built-in to the medical and legal professions but is badly needed by ours.

(b) The site survey is set out on a sheet of the same (standard) size as the other drawings for the job, and kept with them. In this sheet we show positions of services available, and also note the "clearing" of preliminary inquiries by planning and supply authorities and by solicitors (for covenants in the title deeds). This survey sheet contains all relevant site information, either in full or by listing references to documents; a separate print of it is filed with the Client's Instructions.

## Design data

## Sources

## (a) Available in office:

Byelaws

Supply authorities' regulations

"Planning"

Other source material

(AJ's "Buildings Illustrated," etc.)

## (b) Available outside office:

Development Plans

Factories Acts

Shops Acts

Fire prevention officer

Insurance companies

## Problems

No particular problems other than accessibility.

Existence of some of these factors is often quite unknown to new assistants and even the experienced can have a lapse of memory and fall foul of, say, the Factory Inspector at an unfortunate stage of the job.



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# technical section

## Solutions

We expect this ground to be covered by the AJ Research Fellowship so we are to some extent marking time on it. As regards (b) we have a cyclostyled check-

list (Fig. 2) on which the partner in charge ticks the items which ought to be consulted. The designer cross-ticks them as he goes and the list, initialled, goes on file along with the "brief."

## Construction data

### Sources

#### (a) Independent:

BSS & CP

BRS

#### Specification

ASC (part)

Published details

Own source-material

Experience

Consultants

Books

### Problems

(a) Chiefly selection, filing and readily accessible storage.

The most difficult sort of information to pass on is personal experience. A good deal of it is embodied in source-material such as previous details of comparable jobs, but these are commonly used haphazardly ("Hunt out that stair detail for the Whatsit factory and muck it about a bit. . .")

#### (b) Manufacturers:

ASC (part)

#### Specifile

Catalogues and leaflets

Travellers

(b) Again selection, filing and ready access, aggravated by the rising tide of unsolicited "literature" which tends to submerge useful and frequently consulted material. Reliability of travellers' statements varies enormously.

#### (c) Correspondence:

(c) Much useful information may emerge by question and answer on a particular job, only to be buried in the file.

## Solutions

Again we await the results of the Research Fellowship studies, but there are certain points which we should like to make even at this stage.

As regards (a), we are systematizing our use of "office source-details." These are not to be confused with "type-details," of which more will be said later. A "type-detail" is one which can virtually be taken out of file, titled, photo-copied and issued as it stands. A "source-detail" is only a proven solution which lends itself to adaptation, as a basis for a fresh drawing. We are trying to build up a library of such details, checking in each case that the original work was, in fact, carried out as drawn: this last point is important.

CLIENT: .....

JOB: .....

Partner:

Ass't:

### CONSULT:

Development Plan:

Factories Acts:

Shops Acts:

Police:

Fire Prevention Officer:

Client's Insurance Co:

Client's Law Agents:

Remarks:

Fig. 2. Cyclostyled check list for authorities to be consulted. Those relevant are ticked by partner.

technical section

For consistency's sake we are at present classifying these under the same heads as the AJ's Working Details, but we think that they will eventually be grouped by elements as for cost-analysis. This must await adoption of a consistent elemental classification by the profession, a job which must not be long delayed.

A good deal of practical experience can also be embodied in what we call "Comparison Tables" (Fig. 3). The object of these is to make broad comparisons by rapid visual means, so as to narrow a field of de-

cision. Three gradings only are used, shown symbolically on the table, thus:



The aggregate assessment in each case is of course not an *absolute*, it requires (in statistical language) "weighting": to put it simply, a product will not be chosen because its column shows a string of "goods" or "passables" if these only refer to properties not required on this particular job. The person consulting the table must therefore do this weighting mentally (in non-statistical language, "use his loaf"). The tables are *not* to be used for pinpointing final choices, but merely to clear the ground and prevent people bogging themselves down in particulars and prices of, say, 15 different suspended ceilings when, in fact, there are only four which meet the broad requirements of the job.

If built up from reliable information and used within

Fig. 3. Comparison table for commonly-used hardwoods.

CHARACTERISTIC REQUIRED:	AFR. MAHOAGANY	AFR. MOSSIA	AGUA	BORNEO CEDAR	IDIRBO	IROKO	KERUING	MAKORE	MIRANTI	OAK, EUROPEAN	OBECHE	SAPELE	TEAK, BURMA
STABILITY	●	●	●	●	●	●	○	●	●	●	●	●	●
NATURAL DURABILITY	●	●	●	●	●	●	●	●	●	●	○	●	●
HARDNESS	●	●	●	●	○	●	●	●	●	●	○	●	●
FINESS OF GRAIN	●	●	●	○	●	●	○	●	○	○	●	●	●
CONSISTENCY OF COLOUR	●	●	●	○	●	●	●	●	○	●	●	●	●
EASE OF WORKING	●	●	●	●	●	●	●	○	●	●	●	●	○
ABSENCE OF PRIMING DIFFICULTIES	●	○	●	●	●	●	○	●	●	○	●	●	○
LOCAL AVAILABILITY	●	●	●	●	●	●	○	●	●	●	●	●	○
CHEAPNESS	●	●	●	●	●	●	●	●	●	○	●	●	○
REMARKS:													

**COMPARISON TABLE:  
HARDWOODS 1**

# technical section

their limitations, these tables are most valuable as "accelerators of decision."

As regards information in category (b) we favour classification of trade literature by elements and subdivision of elements, but again we are marking time until a consistent elemental classification is within sight: rearranging one's catalogue files is not a job one cares to repeat at frequent intervals.

We are not in favour of listing and indexing trade literature, believing as we do that proper indexing is not a job for amateurs and that an imperfect index is worse than none at all: we may change our minds if we expand enough to employ a full-time librarian. In our view, the real and fundamental solution is simply to "clear the decks"—in other words, to accept the fact that the architect consciously or unconsciously groups manufacturers broadly in three classes:

1. *Preferred class:* Firms he uses frequently, either for good reasons or mere bias (good reasons include good service, adequate pre-contract information, etc.) Their literature is constantly consulted and often wanted in a hurry.
2. *Occasional class:* Firms whose products are occasionally used or are likely to be used and whose catalogue should be kept "on ice."
3. *Rejects:* Firms whose products are in the "once in a blue moon" category; or (even more definitely) in the "never-again" category or whose literature is out of date or otherwise useless (non-technical, impossible to file, etc.)

All catalogues should be assessed on this basis because this is in fact how they are used, and by accepting the fact it becomes possible to avoid submergence of the "often consulted" by the "seldom-consulted" without resorting to elaborate index systems.

For instance, "preferred" catalogues—index or no index—tend to find a permanent home under various people's drawing-boards; this is the individualistic approach to the submergence problem, and makes a bad situation worse so far as the rest of the staff are concerned. So we have simply rationalized this situation by wholly isolating the "preferreds" from the "occasionals." They are not numerous, and one subdivided drawer of a filing cabinet holds them comfortably. For obvious identification, to ensure their return to isolation, we just snip off the outer corners of the front cover.

The "occasionals" are kept in a large wall-cabinet, and lie flat on adjustable ply shelves: three-sided metal trays (Fig. 4) would be better, but we have not priced these.

As regards rejects, the important thing is to ensure that a product in the "never-again" class is not automatically re-admitted to the file when the next issue of its catalogue rolls in. This is done by keeping a foolscap "rejection-sheet" (stuck on a cardboard back) on top of each section in the "occasional" cabinet. It carries the name of the product and manufacturer and the initials of the partner responsible for the ban, who can be consulted about the reasons for it and, if good cause is shown, reconsider it. The chance of mere bias excluding a useful product is preferable to the chance of specifying a proven "dud" on the strength of persuasive advertising.

Information in category (c) consists of correspondence which amplifies information on performance or price, or both. In such cases, the partner or assistant in charge has a copy made which is attached to the catalogue and may also, when it concerns price, go into a separate file which is kept for "Prices of Materials."

## Cost data

### Sources

(a) *Quantity surveys:*

### Problems

QS are generally better at estimating from sketch plans than at giving general guidance before anything is on paper.

(b) *Manufacturers' quotations:*

Usually obtained for a specific job and buried in that file or in the head of the person in charge.

(c) *Cost analyses:*

Differences of opinion as to the demarcation of the various elements.  
Costs of elements can vary widely as between different localities, because of varying trade background and transport costs.

(d) *Own cost records:*

Must be clearly and consistently kept and should include own office costs.

## technical section

## Solutions

(a) The services of the QS can only be used properly if the architect is capable of asking the right questions and of giving quite a firm outline of the possible methods of construction. By the nature of his profession, the QS is concerned with the *minutiae* of building, almost to the point of obsession and to him an architect's initial conception can present such permutations of undecided materials and structural details as to make nonsense of the simple question "How much will it cost?"

This is partly a problem of communication, and will be considered later: but a good deal of frustration is avoided if the architect has thoroughly digested the information required under the heads already dealt with.

(b) Manufacturers' quotations, unless they cover fixing as well as supply, can be very misleading indeed. Those which are useful go into the "Prices of Materials" file, as already noted.

(c) Cost analyses of our own jobs seem to us at the moment to be more directly useful than published analyses, since we work in an area where transport

costs can virtually double the price of such exotic items as decent facing bricks. We believe that cost-analysis on a regional basis (possibly organized through committees of the Allied Societies) could be most helpful, if architects are co-operative enough to get down to it. But again a first condition is agreement on the demarcation of elements.

The deeply-ingrained Scottish habit of employing separate contractors for each trade on all but the largest jobs makes the elemental bill (whatever its merits or demerits) a very remote possibility.

For many purposes, our own cost records are still the most useful information we have, if only we know all the factors which influenced the cost one way or the other. At the end of a job we always prepare an abstract showing the final cost of all the trades as compared with the tender prices: it also shows our own and the QS fees. One copy goes to the client and another into the "Remeasurement Statements" file on that job.

The figures for the abstract are derived from a "visible record" file, on the Shannon System, which shows the certified, as compared with the estimated costs: this will be described in a later article.

The same "visible record" incorporates a note of: Square footage and cost/sq. ft.

Cubic content and cost/cub. ft.

Erection time.

Cost to us.

The last item is amplified by a detailed record of the time and expenses of our own office on the job, and of the instalments of fees paid.

This gives us some measure of our own efficiency, in so far as it can be gauged by profit, and also some idea of the extent to which a similar job will call on our manpower: it also serves on occasion as an Awful Warning.

## GENERAL

Information must not only be full and accurate; it must be very easily manageable, otherwise decisions will be delayed or shirked or faultily-based. We are convinced of the necessity of isolating the hard core of material which must be at hand for frequent consultation, and in practice have found no inconvenience from the separation of storage as between "preferred" and "occasional." We are toying with the idea of an "information unit" for the drawing office, which would comprise in one fitment (Fig. 5) bookshelves for the commonly-used reference books and for the bulkier "preferred" catalogues: filing cabinet with drawers for the remaining "preferred" catalogues, for published material (e.g. "Buildings Illustrated"), for cost analyses and our own job records: and perhaps storage for our own classified source-details hung vertically. It might be that in the larger office a number of these units would be preferable to a central "information room" with its attendant complexities of indexing, issuing and waiting for material to be returned.

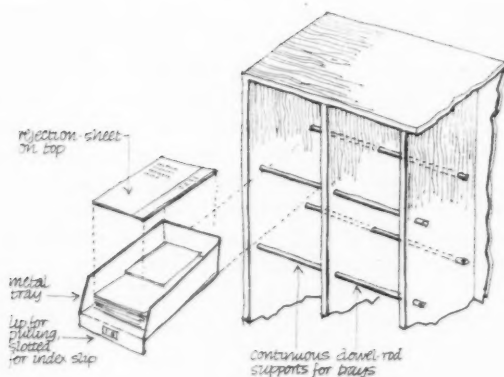
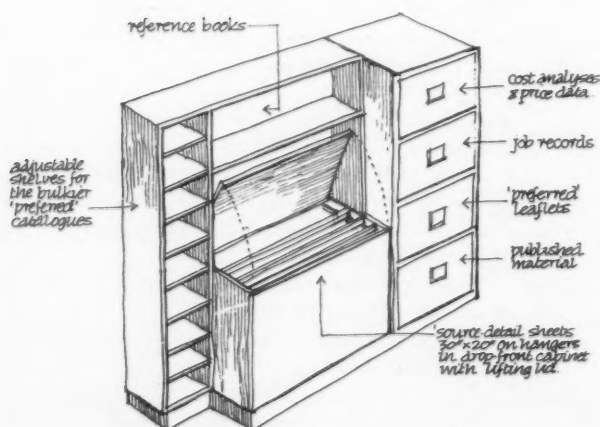


Fig. 4 (above). Metal trays in cabinet for filing "occasional" catalogues. Fig. 5 (below) suggested "information unit" for the drawing office.





*Police headquarters at Coventry*

**building illustrated**

## POLICE HEADQUARTERS

at COVENTRY; designed by ARTHURLING, city architect and planning officer, successor to DONALD GIBSON principal architect GEORGE SEALEY; project architect WILLIAM MANN; assistants H. J. ROBERTSON, J. W. KNIGHT; quantity surveyor R. F. LEAR; consultants (heating, ventilating and electrical) GRANVILLE BERRY, city engineer and surveyor

The planning of buildings for the police is largely controlled, if not beset, by Home Office Regulations. Many of these are perfectly sound, but others betray a prejudice founded on out-of-date building practice. At the new Coventry Police Headquarters the architects have achieved a considerable advance on previous buildings of this type by overcoming many of these prejudices; for instance, the opposition to buildings of more than three storeys.

*The two office blocks seen from the south-west, with the entrance to the assembly hall on the right.*



## building illustrated

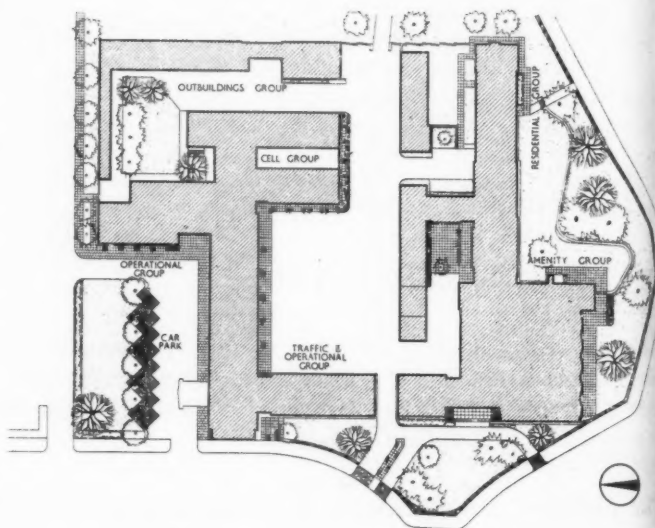
**APPRAISAL:** The main problem in the design of a police headquarters is the reconciliation of a number of functions of widely varying character. The resulting buildings must be recognisable as an entity, and must also reflect the special but rather indefinable character of the police in this country. The Coventry Police Headquarters had to provide offices for the regional headquarters staff, CID and traffic control offices, a parade room, cell block, a social club with a multi-purpose assembly hall suitable for letting out, a canteen, kitchen, residential accommodation for single policemen and caretaker, garages and workshops.

The problem is extremely difficult. One way of tackling it would be to decide first on the architectural character to be achieved, and then to maintain this consistently throughout, subordinating the character of individual functional components to it. At Coventry the opposite approach has been chosen and a number of dissimilar blocks have been set down one after another, each attempting to reflect the goings-on inside together with the structural economics which are involved in its design as an isolated problem. It could no doubt be argued that the various functions require different structures and treatment and therefore the buildings will all be different in character. Such a justification is perhaps an extreme rationalisation of a limited functionalism.

The variety of character at Coventry is accentuated by the use of a profusion of facing materials and of types of window opening. This is a common shortcoming of much recent architecture, and is usually a result of the many difficulties inherent in attempting to "express" the functional or structural nature of everything regardless of its hierarchic importance in the total programme.

Nevertheless, the Coventry Police Headquarters sets a new standard in the design of this type of building. The complicated circulation (of police, civilian staff, public, prisoners, and vehicles) works smoothly, and the buildings, even if a consistent character has not yet been achieved, have sounded the death-knell of that peculiar character, a combination of neo-Georgian and air-raid-shelter, which has predominated in police buildings for many years.

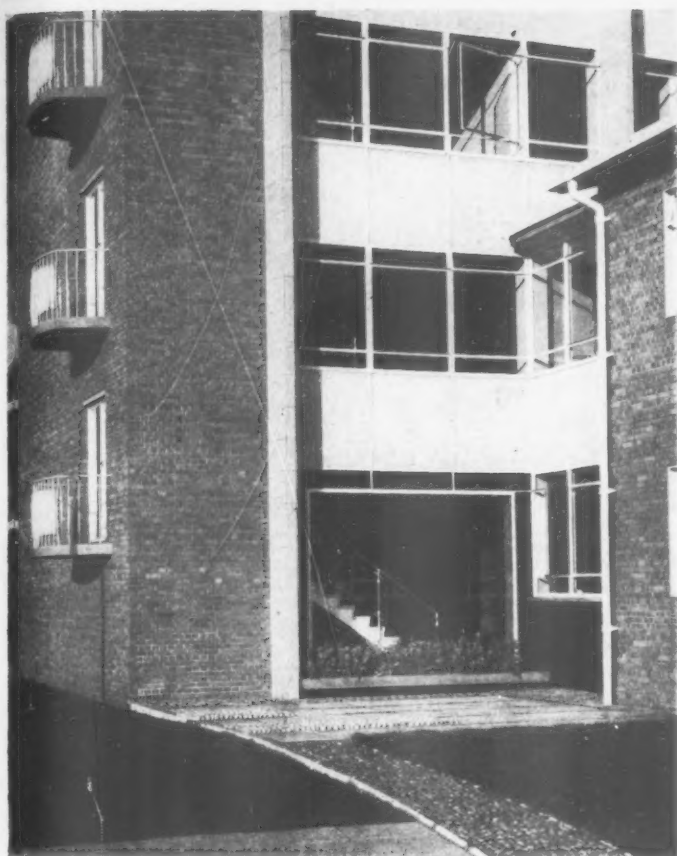
The site is on the projected ring-road and will be well placed for a rapid sally after the local desperadoes or erring motorists. At present vehicular entry and exit are through the opening in the two-storey office block on the west (see photograph, p. 59); there will be another entrance when the ring-road is built and circulation will be changed. The forecourt on the north side is temporary until a new processional way comes into being.



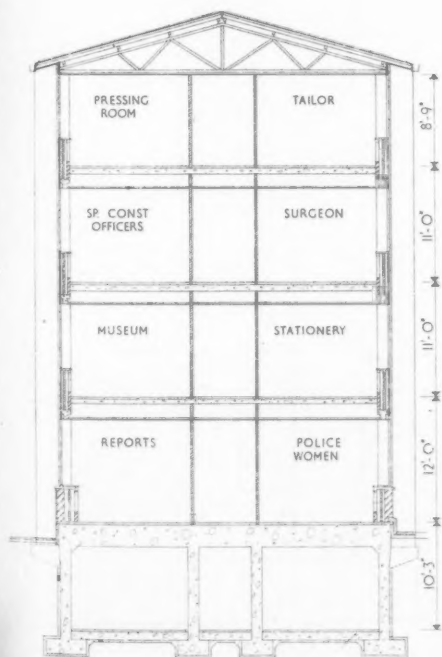
Site plan

The four-storey main administration block, seen below from the north-west, has two main entrances, that for the public being under the canopy. The other entrance, under the low roof, on the extreme left of the picture is the police entrance and also serves the parade room. The main administration block has a steel frame cased on concrete; along the sides concrete fins faced with Hornton stone have been attached to the columns. These serve no structural or other conceivable purpose and it must be presumed that they are meant for decorative effect. Between these are purpose-made metal windows and brick-backed spandrel panels, faced on the upper floors with travertine and on the ground floor with Serpentine marble. This darker colour at ground level is to disguise any splashes of mud. The block has brick "book-ends"; the brick being, as elsewhere, golden buff facings with raked joints. Three balconies project at half-landing levels from the end facing the road; these will eventually provide grandstand views of the processional way.





Above, the balcony end of the four-storey block from the south, together with the rather unsuccessful link to the smaller office block of load-bearing brickwork, which houses the traffic and CID groups. The main stair may be seen through the windows; the brick end also contains the lift and part of the lavatories.



Section through four-storey office block  
[Scale:  $\frac{1}{16}'' = 1' 0''$ ]



The plan of the four-storey block is generally that of a central corridor with offices on both sides. The main public entrance hall, above, has an enquiry counter facing the doors. The floor is of random marble and mosaic. The door behind the counter opens into the central corridor of the two-storey block.

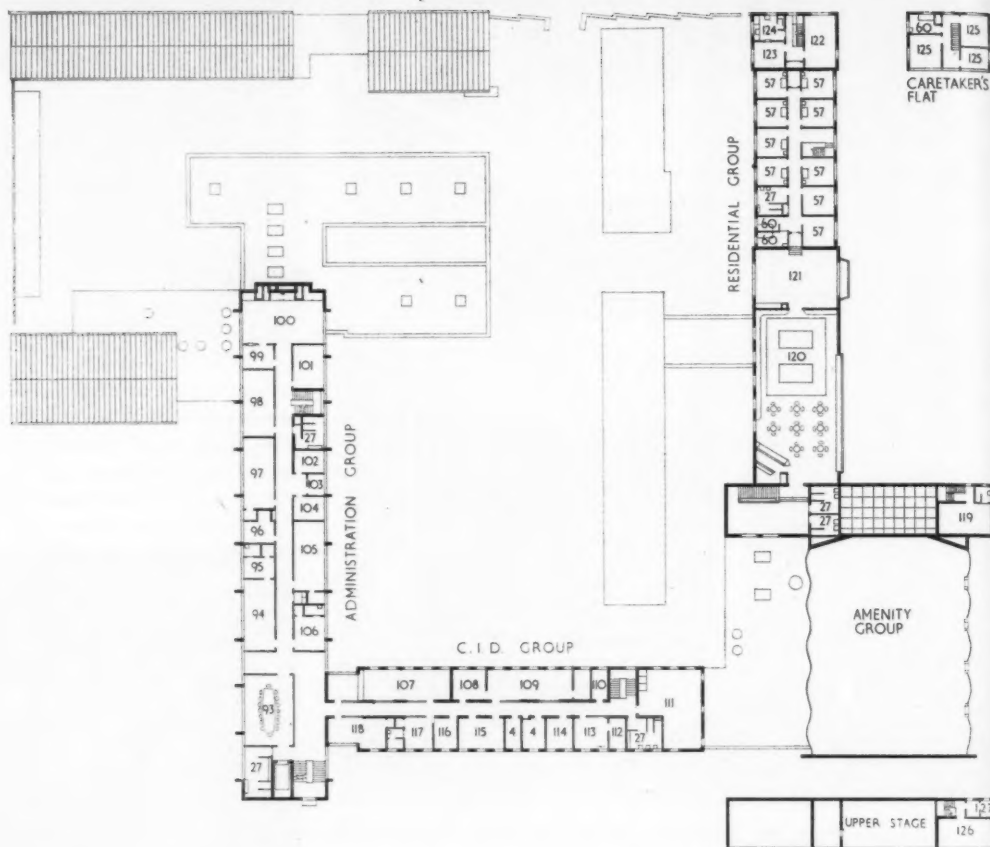


On the first floor there is a widened corridor outside the conference room, above. The floors of corridors and main offices are of cork tiles; those of other offices, thermoplastic. The main stair is of reinforced concrete with in-situ terrazzo treads and risers. The balustrade is of  $\frac{3}{8}$  in. toughened plate glass fixed to mahogany-sheathed balusters at 4 ft. centres, which support a mahogany handrail.

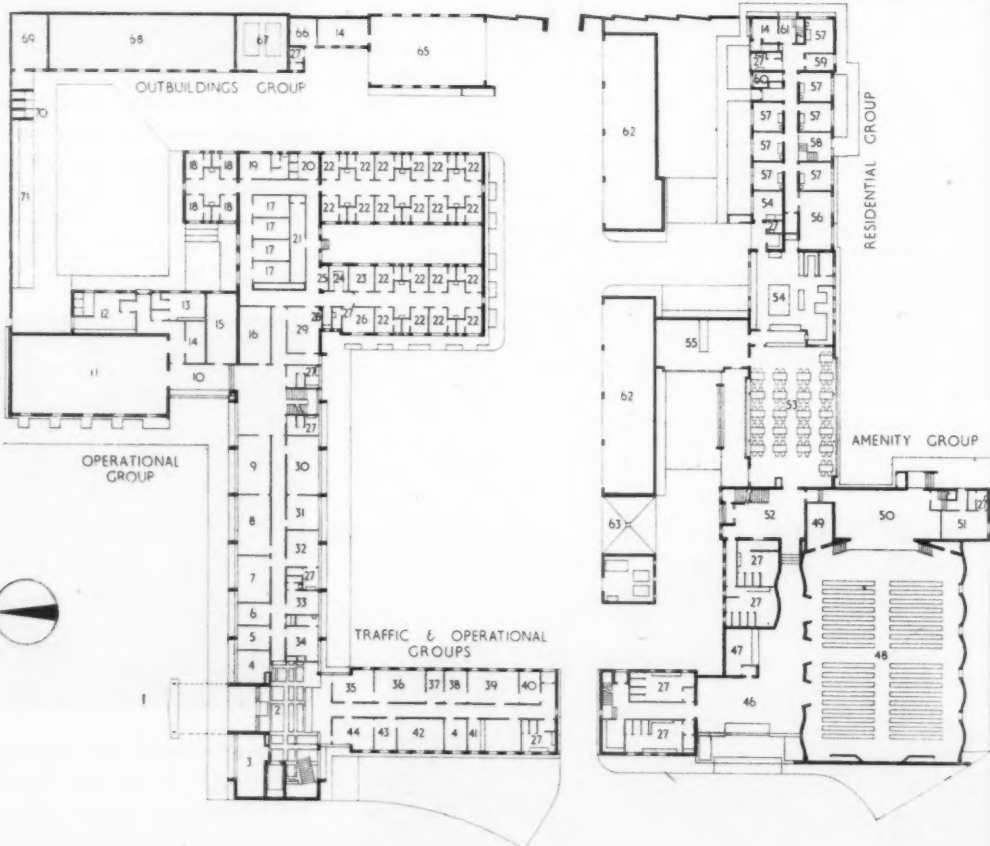


The conference room, above, is panelled in eucalyptus veneer with mahogany skirtings and cover beads. The furniture in this room was designed by the architects. Office partitions (to the corridor) have large clear glass panes with plywood panels below.

building illustrated



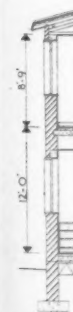
First floor plan



Ground floor plan  
[Scale: 1/8" = 1' 0"]



Second floor plan



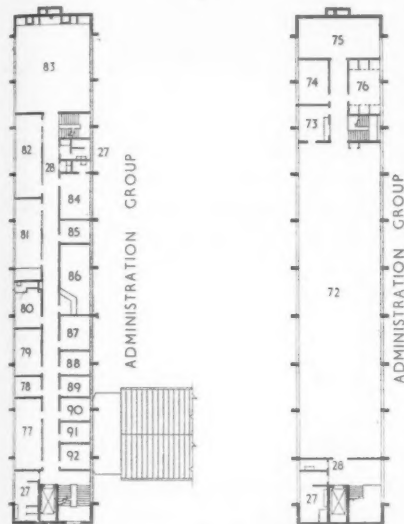
Cross section



## KEY

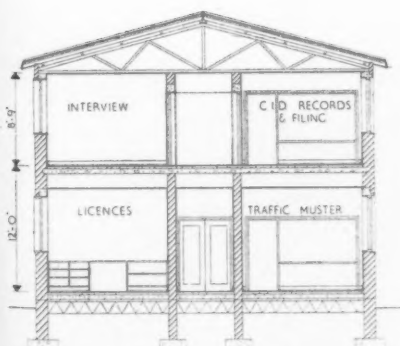
1. Canopy
2. Entrance hall
3. Aliens
4. Interview
5. Clerk
6. Chief inspector
7. Inspectors
8. Sergeants
9. Reports
10. Divisional entrance
11. Parade room
12. Male changing room
13. Female changing room
14. Store
15. Locker room
16. Drying rooms
17. Detention rooms
18. Female cells
19. Wardress
20. Showers

39. Traffic muster
40. Traffic reports
41. Licences
42. Lost property
43. Station sergeant
44. General enquiries
46. Foyer
47. Cloaks
48. Assembly hall
49. Chair store
50. Stage
51. Female dressing room
52. Entrance hall social
53. Canteen
54. Kitchen and ancillaries
55. Officers' mess
56. Residents' dining room
57. Single men's bedrooms
58. Entrance residential
59. Box room
60. Bathroom
61. Entrance hall, caretaker's flat
62. Garages
63. Car wash
64. Electricity sub-station (below 63)
65. Maintenance workshop
66. Cycle repair shop
67. Fuel oil store
68. Found property store
69. CID store
70. Dog kennels
71. Cycle store
72. Equipment store
73. Storekeeper
74. Pressing room
75. Tank room
76. Taylor
77. Typing pool
78. Duplicator
79. Filing
80. Special constables' commandant
81. Lecture room
82. Sp. const. officers
83. Special constables
84. Police surgeon
85. Training officer
86. Prosecution general office
87. Prosecution W.O.s
88. Prosecution typists
89. Prosecution inspectors
90. Coroner's office
91. Interview
92. Ladies' rest room
93. Conference room
94. Chief constable
95. Chief constable's retiring room
96. Chief constable's secretary
97. General office
98. Museum
99. R/T
100. Information room
101. Stationery
102. Finance office
103. Strong room
104. Chief clerk
105. Staff inspectors
106. Deputy chief constable
107. CID admin.
108. Modus operandi
109. CID records and filing
110. Cloakroom
111. CID constables
112. Dark room
113. Laboratory
114. CID women
115. CID sergeants
116. Security
117. CID superintendent
118. CID inspectors
119. Male changing room
120. Clubroom
121. Lounge and library
122. Caretaker's lounge
123. Caretaker's dining room
124. Caretaker's kitchen
125. Caretaker's bedroom
126. Plant room
127. Emergency lighting



Second and third floor plans, administration block.

21. Photographs
22. Male cells
23. Association cell
24. Blanket store
25. Plasters
26. Warder
27. Lavatories
28. HMC
29. Charge room
30. Police women
31. Police women sergeants
32. Police women changing
33. Police women inspector
34. Superintendent
35. Traffic enquiries
36. Traffic map room
37. Traffic inspector
38. Traffic sergeants



Cross section through two-storey office block (Scale:  $\frac{1}{8}'' = 1' 0''$ )

## analysis

## CLIENT'S REQUIREMENTS

A new police headquarters to accommodate a force with an establishment of 500 personnel together with a divisional station serving the central area of Coventry. The headquarters to contain the following: an administration building linked with a parade room and cell block, traffic and CID block, and a social wing containing assembly hall, canteen, kitchen, social club, residential quarters for single policemen, and a maisonette for a resident engineer/caretaker and family.

## SITE

The site, mainly a derelict bomb site, was chosen to give easy access to and from the proposed new inner ring road. There were a few cellars on the site and the ground was clay leading to sandstone at about 5 ft. below ground level.

## PLAN

The various blocks surround an internal parade square with the main, four-storey administration block on the north incorporating a divisional police station with a separate entrance to a parade room and cell block. Below this block a basement runs full length with the heating chamber at one end. Leading off the main entrance hall, at right angles to the administration block is a two-storey traffic and CID wing, forming the west side of the square. Exit for police vehicles is through this block. On south of the square is the social and residential wing including an assembly hall seating 600. Adjacent to this is the canteen seating 150, with kitchen and servery which also supplies an officers mess and residents' dining room. On the first floor is the social club with bar, billiard tables, etc., and adjoining the club a lounge and library for use by personnel off duty and residents. Accommodation is provided for 16 resident single policemen, who have their own dining room and usual offices. Incorporated in this block is a 3-bedroom maisonette for caretaker and his family. This wing is so placed that it can be cut off from the normal day to day running of the police HQ, and the assembly hall is self-contained, so that it can be let for outside functions.

On the east of the square are the vehicle maintenance workshops, oil fuel stores and lost and found property stores. Access is also provided for police vehicles on this side, which will eventually be the only vehicular access, from the ring road.

## SUMMARY

Ground floor area, cell block: 5,324 sq. ft. All blocks: 40,637 sq. ft.

Total floor area, cell block: 5,324 sq. ft. All blocks: 76,906 sq. ft.

Type of contract: lump sum as RIBA (LA) with fluctuations.

Tender date for Phase II: November 16, 1954.

Work began: April 4, 1955.

Work finished: September 9, 1957.

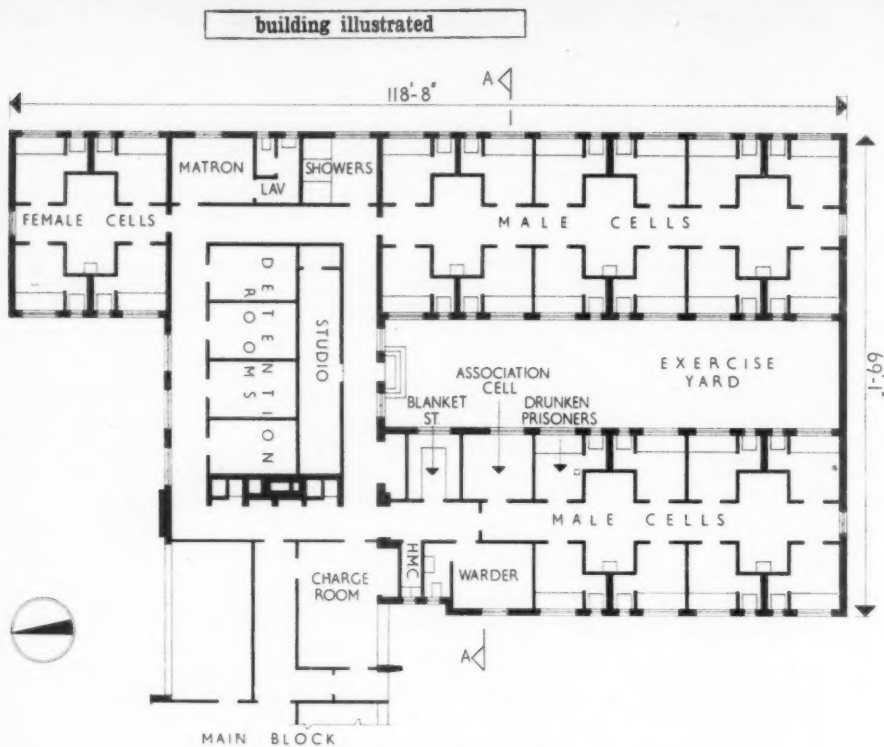
Tender price of foundations, superstructure, installations and finishes, Phases I and II, cell block: £21,332 13s 6d. All blocks: £275,976 5s 6d.

Final contract price (estimated), cell block: £21,470.

All blocks: £305,301 (including £17,593 for basement and £14,875 for ancillary buildings).

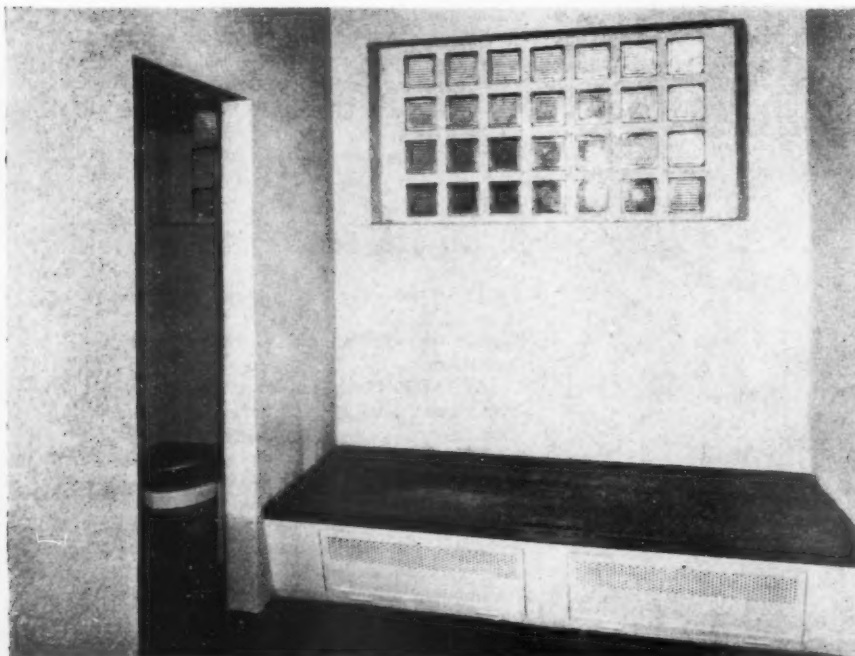
Final contract price (estimated) external works and drainage, £31,549.

Final total (estimated), cell block: £21,470. All blocks and external works: £336,844.



At the east end of the four-storey block are the parade room and cell block. The planning and construction of the cell block are controlled at almost every point by Home Office regulations. It has been decided to give a separate cost analysis of this part of the building because this specialised information has not previously been published. The cell block is a single-storey building with 11-in. cavity walls with a 9-in. parapet and a 6-in. solid concrete roof. The cell windows and rooflights are of concrete and

glass lens lights. Ventilation is artificial, heating by circulated warm air. Partitions are of 4½-in. brickwork and the finish to the cell and corridor walls is cement glaze. The Home Office regulations were changed during the contract and this treatment became permitted; previously a very expensive extra thick glazed tile was used and the change to cement glaze made a considerable saving. Each cell, below, has a corbel type w.c., which can be flushed either from inside or outside the cell.



## analysis

In the following cost analysis, the building is presented as a whole, with the cell block alongside, but excluding the boiler house below both. Costs are based on final contract price.

	All blocks		Cell block	
cost per sq. ft.	s	d	s	d
Preliminaries and insurances	3	9½	3	9½
Work below ground floor level	10	6½	13	11½

## Preliminaries and insurances

## Work below ground floor level

1-ft. reinforced concrete walls support a 2-ft. reinforced concrete slab roof over an 8-ft. basement below the main administration block, and support is also provided for the stanchions of the main block.

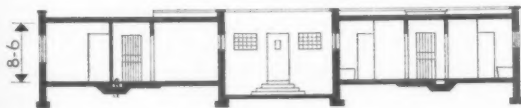
The boiler house at one end (not included in cost) is 12 ft. in height. The whole basement is asphalt tanked and used for storage, and in case of war half the area would be used for Civil Defence and half for police purposes.

Normal concrete foundations for all other blocks, 4 ft. 6 in. below ground floor level. 4-ft. × 4-ft. × 2-ft. deep stanchion bases provided for assembly hall and canteen.

The walls of the boiler room are 13½-in. brickwork with asphalt tanking and 4½-in. brick protective skin. A small beer cellar is provided under the social block.



The steel faced cell doors with grilles and apertures, above, are to Home Office pattern, as is the alarm system and cell lighting. If there is danger of air attack prisoners can be taken down to the heavily protected basement, and in the event of another war one could do worse than to get run in by the Coventry Police.



Section A-A, cell block [Scale: ¾" = 1' 0"]

## STRUCTURAL ELEMENTS

## Frame or load-bearing element

3 7½

Structural steel frame to the main block on a column grid of 18 ft. with spans of 30 ft. A box frame of 30-ft. span and a grid of 16 ft. was used to the two-storey canteen and club room, while stanchions at 15-ft. centres with a span of 60-ft. support steel trusses over the assembly hall. All steel stanchions and frame encased in concrete to give two-hour fire protection.

## External walls

11 11½ 5 8½

Brickwork generally is 2½-in. golden buff facings with raked out joints. Facing panels to the administration block of travertine marble slabs, 5-ft. × 4-ft. × ¾-in. thick, fixed to the main window walling (described below). Concrete columns to administration block are faced with 1½-in. thick Hornton stone. 1-in. thick dark green Serpentine marble is used below sill level on north elevation of the main block. The south wall of the assembly hall is faced with exposed aggregate slabs secured to brickwork with heavy galvanised steel cramps.

Cell block: 11-in. cavity walls with sand-faced facings.

9-in. parapet walls with artificial stone copings.

Ratio: cell block  $\frac{\text{solid wall}}{\text{floor area}} = \frac{0.535}{1}$

No ratios are given for the whole building as construction is so varied that an average figure would be meaningless.

The photograph below shows the exercise yard in the centre of the cell block.



## building illustrated



The large group of buildings on the southern half of the site contains the residential and social accommodation and two blocks of garages are used to screen the ground floor from the drill yard and vehicular area. The assembly hall is of generous proportions and well equipped. It is designed as a separate unit with independent access and is intended to be let for outside functions. The entrance is through a single-storey link between the CID and traffic office block and the gable wall of the assembly hall, top left. This gable wall is in brickwork with a diaper pattern of projecting headers. Between this and the large brick block of the stage and dressing rooms are the undulating side walls of the assembly hall, seen on the left of the view, left, from the south-east. On the south side these are faced with exposed aggregate slabs cramped with heavy galvanised steel to the brickwork. The undulating wall idea is an interesting one but it has hardly been exploited with boldness. Outside, yet another material has been added to the list together with another kind of window. Inside the undulations are disguised so that they are scarcely noticeable except from an oblique angle. The impression is one of a slight irregularity in the walls for which it is difficult to assign a reason.

The assembly hall, left, with its maple floor is excellent for dances. It is also equipped for stage performances and will seat 600 people, but these will be less happily housed, as is inevitable with flat-floored, multi-purpose halls. The stage is quite well provided with lighting. One does not expect flying space in this type of hall, but more room in the wings could have been provided and would have made a tremendous improvement to the usefulness of the building. The proscenium is lined with lacewood veneer with guarea vertical battens finished with two coats of sealer. The foyer is also connected to the canteen and clubroom which can be used in conjunction with the assembly hall. There is also a separate entrance from the interior courtyard onto which the canteen faces, bottom left.



## analysis

## Windows and external doors

Purpose made electro-galvanised steel in wood or travertine sub frames. All furniture is bronze with vertical pivot/lights secured with bronze friction hinges. High level windows have remote control gear.

Window wall to main block is constructed from standard heavy sections, the whole unit being tied back with Z brackets at each floor level. The travertine slabs are fixed into 1-in.  $\times$  1-in. angles set in the main frame as a sub frame. All glazing is internal with metal glazing beads.

Windows to cells are single 1½-in. lenses set in r.c. frame. There are 59 of these and 3 metal windows in the cell block. External doors: main entrance doors to all blocks are fully glazed, on floor springs set in glazed screens, the timber being mahogany. 1 external door only in cell block.

$$\text{Ratio cell block: } \frac{\text{Windows and external doors}}{\text{floor area}} = \frac{0.202}{1}$$

## Upper floors

All floors are of patent hollow clay block cast *in-situ* with concrete ribs and reinforcement to give a total thickness of 6½ in. with spans of 18 ft. A solid 9-in. reinforced concrete slab is used over the boiler room and to the west end of the main block.

## Staircases

Reinforced concrete with *in-situ* terrazzo treads and risers.

The main staircase to the administration block has a balustrade of ¾-in. toughened glass fixed to mahogany sheathed balusters at 4-ft. centres capped with a mahogany handrail.

## Roof construction

All pitched roofs are 15 degrees, constructed of light steel trusses and angle purlins onto which are bolted 4-in.  $\times$  2-in. timber bearers to which 4-in.  $\times$  2-in. rafters are fixed at 2-ft. centres. 2-in. woodwool slabs are fixed to the rafters and ½-in. thick hair felt is applied before laying the 24 s.w.g. copper roof complete with wood rolls at 2-ft. centres.

Flat roofs are reinforced concrete with foam slag screeded to falls and finished with 3 coats asphalt.

Cell block: 6-in. thick *in-situ* solid reinforced concrete.

## Rooflights

1½-in. lenses set in reinforced concrete frame to cell block.

No. of rooflights; 11. Total area:

308 sq. ft. overall.

Circular rough cast glass domes to other blocks.

All blocks	Cell block
s d	s d
2 5½	3 10½

All block	Cell block
s d	s d
10½	0½

## Glazing

Generally 32-oz. and ¼-in. plate glass with ⅝-in. plate glass to large picture window in the main administration block and the canteen windows. Windows to balconies, toughened glass.

Etched designs have been incorporated in the two entrances, one leading to the assembly hall and the other to the main entrance of the main block.

Cell block: glazing included under windows, except 32-oz. c.s. glass in 3 metal windows.

## Total of structural elements

29 2½	19 4½
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## PARTITIONS AND FITTINGS

## Internal partitions and screens

3-in. hollow clay block partitions with ¾-in. plaster both sides are used internally. Cell block: 4½-in. brickwork, 691 sq. yds.; 9-in. brickwork, 78 sq. yds.

## Internal doors

Doors to offices, 1½-in. finished thickness solid core doors faced with Indian silver grey wood veneer.

Doors to lavatories, cupboards, etc., 1½-in. thick skeleton core doors to BSS and painted.

Cell block: 42 single doors, including 25 steel cell doors with grilles and observation apertures to Home Office pattern.

1 pair double doors.

Ironmongery included under various elements.

## Fittings

All counters and built-in furniture in selected hardwoods, wax polished.

Cell block: 24 teak cell benches on steel framing.

Softwood shelving in blanket store.

## Total partitions and fittings

2 4½	2 8½
------	------

2 6½	6 0½
------	------

1 3½	3 6½
------	------

6 2½	12 3½
------	-------

## FINISHES

## Floor finishes

Type of finish	Area in sq. ft.	Price per sq. yd.
----------------	-----------------	-------------------

Corridors and main offices, ⅝-in. cork tiles	11,945	29s. 6d.
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Other offices, ⅝-in. thermo-plastic tiles	15,966	12s. od.
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Main entrance hall, random marble mosaic, divided with strips of regular marble mosaic	380	77s. 6d.
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	275	175s. 6d.
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5 0	3 10
-----	------

building illustrated



*The canteen, left, can seat 150 people (at a pinch); meals are collected on the cafeteria system from a servery which also serves the officers' lounge, centre left. The floor finish in the canteen is missanda. The kitchen also adjoins the residents' dining room at the other end.*



*On the first floor over the canteen is the social club room, left, which has a bar and billiard tables and a continuous seat around the wall; a curiously bleak room. The floor finish here is oak. Continuing on from the club and canteen block is the residential block, where there is accommodation for sixteen unmarried policemen and at the end a maisonette for the engineer-caretaker and his family. The bedsitting rooms of the residential block are on either side of a central corridor running east-west. Those who get rooms on the south side of the block will undoubtedly be the more fortunate.*

## analysis

			All blocks s d	Cell block s d		All blocks s d	Cell block s d
Club room, oak missanda	2,691	38s. 3d.			<b>Sanitary fittings</b> W.c.s, lavatory basins and urinals in white glazed fireclay. Electric incinerators in all female lavatories. Cell block: w.c.s, corbel pattern closet pan fitted with remote control flushing apparatus.	9 2	8½
Canteen, mahuhu	1926	38s. 3d.			<b>Heating and ventilation</b> Natural convectors in offices and forced air convectors in circulation spaces, parade room, canteen and assembly hall. The source of heat is 2 oil-fired boilers in the boiler room, and water is circulated by pumps. Hot water storage cylinders served from a similar boiler in the boiler room supplies hot water to basins, etc., and provides heating to the drying room. Cold water from the main storage tank in the main block serves all parts of the building. Cell block: Internal temp., 65 deg. F.; air change, 4 per hour; U of walls, 0.30; U of roof, 0.22.	7 8½	5 1½
Foyer and assembly hall, maple	4,680	34s. 9d.			<b>Gas installation</b> Gas is provided for cooking in the kitchen and a supply is run to the laboratory in the CID block.	1½	—
Cloakrooms, terrazzo tiles	5,580	38s. od.			<b>Ventilation</b> Inlet and extract ventilation with provision for heating incoming air is provided in assembly hall. Ventilation is provided over cooking and washing up areas in kitchen. Cell ventilation operates in groups of four cells and has been designed to comply with Home Office specification.		
Elsewhere:					<b>Electrical installation</b> Cost includes light fittings. Screwed conduit installation to lighting and power points and telephone system with a floor tray trunking in the administration and CID blocks. Emergency lighting provided in assembly hall A d.c. call indicator and fire alarm system operate from control panel in station sergeant's office. The stage of the assembly hall is equipped to standard required for fairly ambitious amateur concerts and theatricals. A passenger lift in administration block, serving five floors travels at 150 ft. per min. A small service lift carries goods from beer cellar to bar in the social club. Cell block: alarm system and cell lighting to Home Office specification.		
¾-in. red asphalt	2,772	22s. 6d.			<b>Total of services</b>	17 6	15 11
Carpet	797	81s. od.			<b>Drainage</b> Cost of cell block drainage included under all blocks.	1 8½	—
Granolithic	12,484	9s. 11d.			<b>Site works</b>	6 6	—
Wood composition	1755	31s. 10d.					
1½-in. quarry tiles	2,034	34s. od.					
In-situ terrazzo	466	47s. 3d.					
1-in. softwood strip	1,389	14s. 2d.					
¾-in. red asphalt	2,772	22s. 6d.					
¾-in. thermo- plastic	1,791	12s. od.					
Terrazzo	45	38s. od.					
<b>Wall finishes</b> All walls are of ½-in. hard plaster finish with the exception of the cell walls, which are in cement glaze, 15,113 sq. ft., plaster elsewhere, 2,214 sq. ft. The conference room is fully panelled in eucalyptus veneer with mahogany skirtings and cover beads, with purpose designed furniture to match. The wall lining to the proscenium opening in the assembly hall is lacewood veneer with guarea vertical battens finished with two coats of clear sealer. The rear wall of the assembly hall is panelled in 12-in. × 12-in. acoustic tiles.			3 4½	8 10½			
<b>Ceiling finishes</b> ¾-in. vermiculite acoustic plaster on expanded metal lathing to general areas and offices. Parade room ceiling is of 2-ft. square insulation board secret fixed. Cell block: Cement glaze, 4,500 sq. ft., plaster 621 sq. ft.			2 1½	1 10			
<b>Decorations</b> Walls and ceilings, emulsion paint. All hardwood, wax polished. Other wood, hard gloss paint. Cell block: plastered walls and ceilings, two coats emulsion.			1 7½	6½			
<b>Total of finishes</b>			12 1½	15 1½			
<b>SERVICES</b>							
<b>External plumbing</b> Cast-iron r.w.p.s. with cast iron box section gutters.			6½	2			
<b>Hot and cold water installation</b> Cost of boiler house is divided between this element and heating, below. Shown only in overall figure for all blocks, not in cell block. All main services in copper.			2 1½	2 11½			

## analysis

Cost per sq. ft. of floor area:

All blocks

£305,301 (net cost excluding external works)

76,906 sq. ft. (measured inside external walls)

£21,470

Cell block:

5,324 sq. ft.

## s d CONTRACTORS

*General contractors:* Gilbert-Ash Ltd. *Sub-contractors:* Asphalt tanking: Ragusa Asphalte Paving Co. Ltd. *Beer engines, upholstery and fittings:* Gaskell & Chambers Ltd. *Bixhead pavings and Serpentine marble:* W. H. Fraley & Sons Ltd. *Bicycle stands:* Le Bas Tube Co. Ltd. *Boilers:* Hartley & Sugden Ltd. *Bricks:* Blockleys Ltd. *Chain link fencing and cat ladders:* T. Sadler (Coventry). *Concrete rooflights:* Lenscrete Ltd. *Conference tables and chairs:* Heals Contracts Ltd. *Counter grilles:* Rely-a-Bell Burglar & Fire Alarm Co. Ltd. *Concrete floors:* Helical Bar & Engineering Co. Ltd. *Cork and thermoplastic floors:* Armstrong Cork Co. Ltd. *Decorative metalwork:* A. Jordan & Sons Ltd. *Domelights and metal windows:* Monk Metal Window Co. Ltd. *Doors:* Leaderflush Ltd. *Electrical:* Electrical Installations Ltd. *Emergency lighting equipment:* Nife Batteries Ltd. *Entrance doors, screens and joinery:* M. S. Bayliss Ltd. and Tarring Joinery Ltd. (Worthing). *Excavator:* J. W. Chorley Ltd. *Expanded metal ceilings:* Expanded Metal Co. Ltd. *Fans:* Woods of Colchester Ltd. *Fire alarm and signalling equipment:* Julius Sax. *Glazing:* Pearce & Cutler Ltd. *Glazed wall finish:* John Ellis & Sons Ltd. *Granwood flooring:* Granwood Flooring Co. Ltd. *Hardwood block and strip flooring:* Vigers Bros. Ltd. *Heaters:* F. H. Biddle Ltd. *Copperad Ltd. Flexairs Ltd. Heating:* Weatherfoil Heating Systems Ltd. *Hornton stone:* Hornton Quarries Ltd. *Internal telephones:* Reliance Telephone Co. Ltd. *Ironmongery:* James Gibbons Ltd. *Kitchen equipment:* Radiation Ltd. *Lightning conductors:* W. J. Furse. *Light fittings:* General Electric Co. Ltd. *Troughton & Young Ltd. Falk Stadelman. BTH. Lifts:* Waygood Otis Ltd. *Mosaic flooring and terrazzo:* Marbello and Durus Ltd. *Oil burners:* Quiet May (England) Ltd. *Paints:* Smith and Walton Ltd. *Painting:* Arnold Sharrocks Ltd. *Plastic lettering:* Drakard & Humble Ltd. *Plasterer:* McAleer & Co. Ltd. *Plumbing:* J. C. Toogood Ltd. *Plywood veneers:* Bakers of Wycombe Ltd. *Pumps:* Holden & Brooke Ltd. *Reconstructed stone:* Croft Granite, Brick & Concrete Co. Ltd. *Naybro Stone Ltd. Constone Ltd. Sanitary fittings:* S. G. B. Dudley Ltd. *Adamsez Ltd. Scaffolding:* Mills Scaffold Ltd. *Shutter doors and cell doors:* Potter Rax Ltd. *Special window gear:* Teleflex, Products Ltd. *Stage equipment:* Strand Electric Ltd. *Stage curtains and gear:* Advance Enterprises Ltd. *Street call box and "999" equipment:* Post Office Telephones. *Suspended insulation board ceilings:* Rudders & Paynes Ltd. *Switch accessories:* J. A. Crabtree Ltd. and Walsall Conduits Ltd. *Switchgear and distribution fuseboards:* Bill Switchgear Ltd. *Structural steelwork:* Edward Wood & Co. Ltd. *Tarmac finishes:* General Asphalte Co. Ltd. *Travertine facing slabs:* Anselm Odling & Sons Ltd. *Treatment of external hardwood:* British Bitumen Emulsions Ltd. *Under floor ducting:* General Electric Co. Ltd. *Venetian blinds:* The Coventry Blind & Shutter Co. Ltd. *Ventilation:* J. Nadin Ltd. *Veneers:* Bakers of High Wycombe.

## COST COMMENTS

The presentation of this police headquarters has one great advantage over previous examples in that the cost of the cell block is thrown into sharp relief. These cells are subject to stringent Home Office requirements and might well become a common factor among the differing requirements of police headquarters; one on which the Home Office might care to give some guidance on cost.

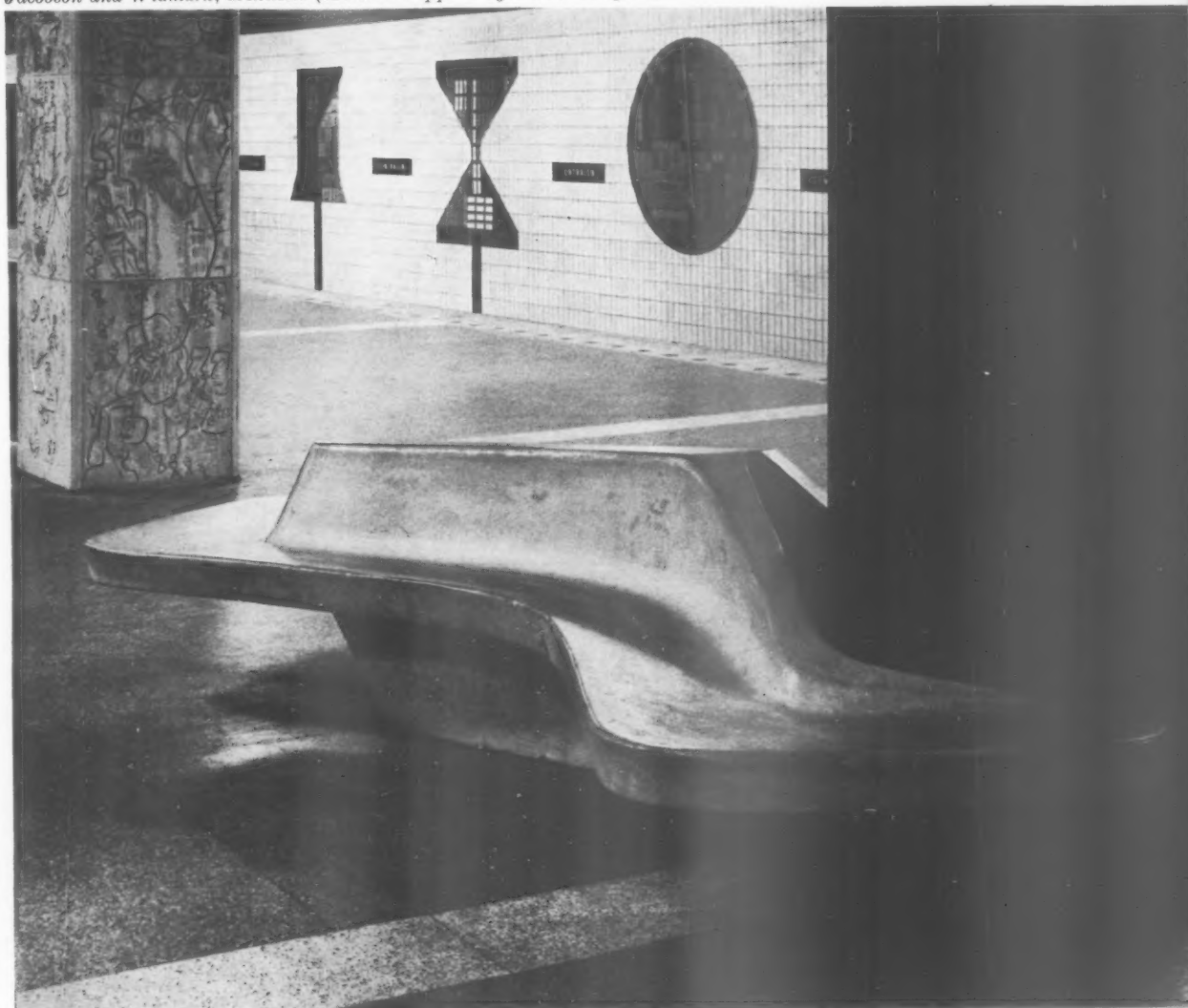
Reference to previous analyses will show a similarity of cell construction (Manchester, AJ, May 5, 1955; Wellington, November 11, 1956; Earls Court, May 5, 1957; Hull, October 3, 1957): e.g. lens windows and rooflights (where used) set in concrete frames, faience or some other impervious internal wall surface which can be hosed down and cleaned, steel doors with grilles and observation apertures, teak benches, low-cost hard-wearing floor finish, each cell with its own remote-controlled w.c., artificial ventilation, alarm system, cell lighting, etc.

At Coventry provision is made for 20 male prisoners and 4 female at a cost of £21,470, or approximately £895 per cell. The analysis for "all blocks" is of interest in giving an overall picture of the cost distribution, but as the elements represent an average of varying forms of construction, function and storey height, the element costs must be used with some reserve. The inclusion, for instance, of the lower-costing ancillary buildings has tended to deflate the actual cost per square foot of the main buildings.

Comparison of the main groups of elements with those of previously analysed police headquarters, summarised in the cost comments on Earls Court, shows a fair consistency, but additional money has been spent on finishings and services, the latter including lifts to the main block and emergency lighting and stage equipment in the assembly hall. The cost of external works at £46,419 appears at first excessive but this sum includes not only the whole drainage but site works necessary to clear cellars, wells and other bombed site obstructions.

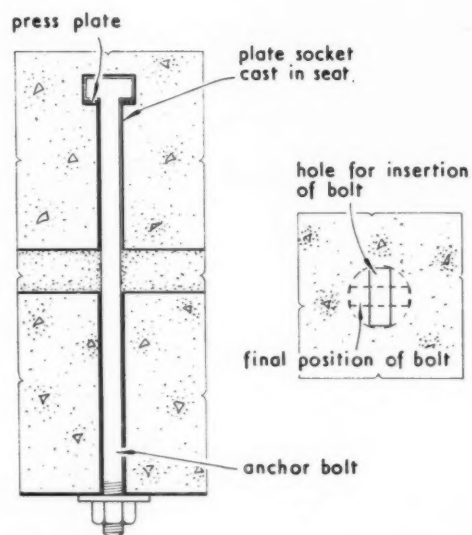
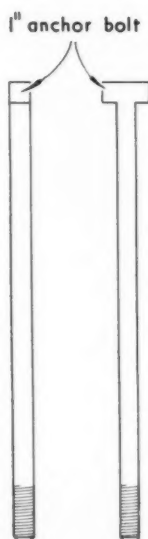
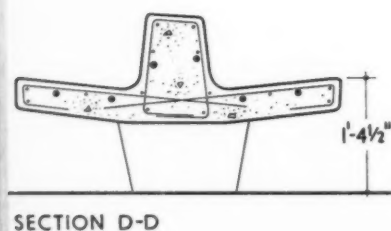
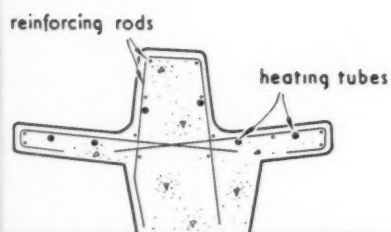
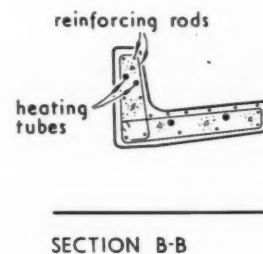
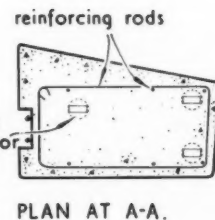
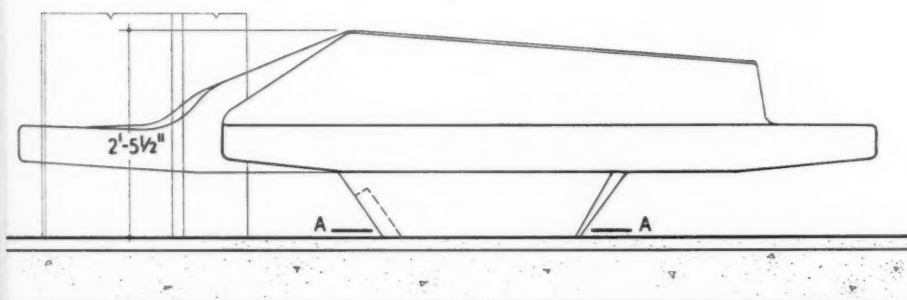
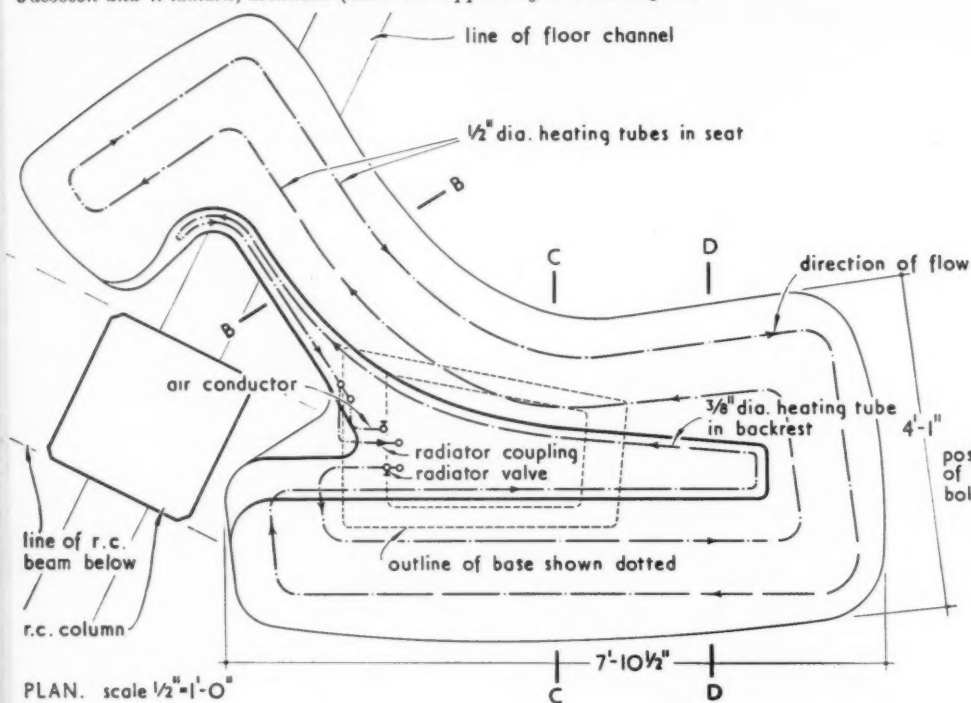


## HEATED SEAT: UNDERGROUND STATION, STOCKHOLM

*Jacobson and Widmark, architects (Material supplied by Brian Lamprell)*

This heated platform seat is illustrated as an ingenious application of the principle of "local heating." The seat stands in the open and beneath the platform is habitable accommodation.  $\frac{1}{2}$ -in. diameter copper hot water pipes connected to the general heating system of the building pass up through the platform and are connected to pipes cast into the seat.

HEATED SEAT: UNDERGROUND STATION, STOCKHOLM  
Jacobson and Widmark, architects (Material supplied by Brian Lamprell)



DETAILS OF ANCHOR BOLT.  
scale  $\frac{1}{2}$ " = 1'-0"

note: figured dimensions in feet and inches are approximate

## CURTAIN WALL: OFFICES IN NEW YORK

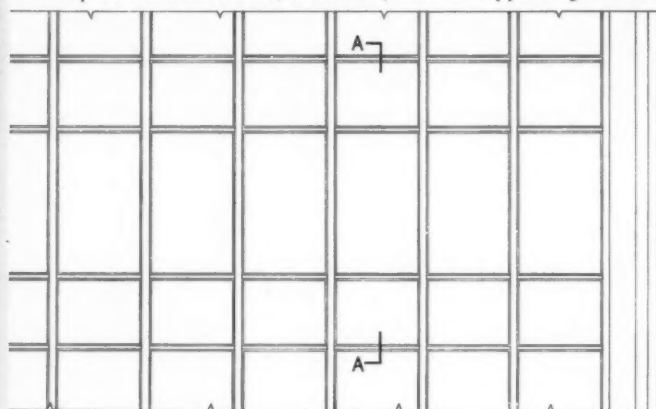
*Philip Johnson Associates, architects (Material supplied by Felix Moore)*



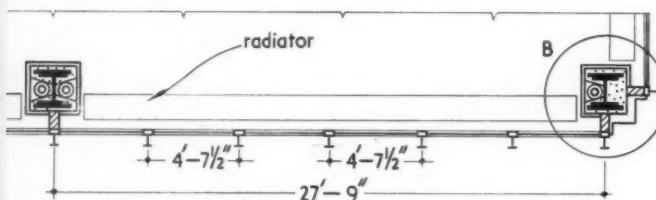
*This characteristic American curtain wall for very tall buildings employs an external 6 in. by 4½ in. steel mullion with a clamping box backing on to the inside flange. This box covers the brackets connecting the mullion to the steel edge beam and holds the prefabricated bronze framed panels and (at the corner) the bronze cladding.*

CURTAIN WALL: OFFICES IN NEW YORK

Philip Johnson Associates, architects (Material supplied by Felix Moore)



ELEVATION. scale  $\frac{1}{8}'' = 1' - 0''$



PLAN. scale  $\frac{1}{8}'' = 1' - 0''$

pressed metal panel

flashing and condensation channel

bronze moulding

$6 \times 4 \frac{1}{2}''$  continuous external mullion

$10 \times 27''$  r. s. beam

Venetian blind

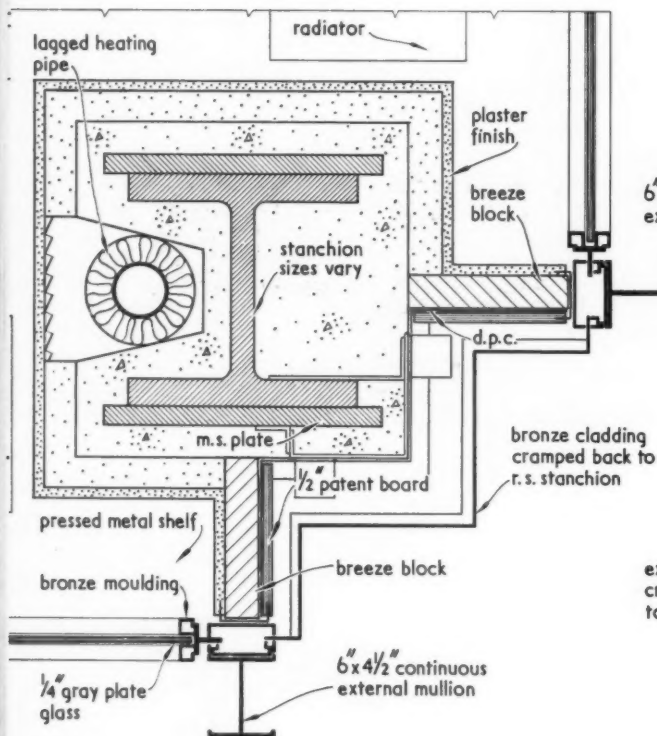
fixed light of  $\frac{1}{4}''$  gray plate glass

radiator

$6 \times 4 \frac{1}{2}''$  continuous external mullion

external mullion cramped back to r. s. beam

acoustic ceiling tile



DETAIL AT B. scale  $1'' = 1' - 0''$

SECTION A-A. scale  $1'' = 1' - 0''$





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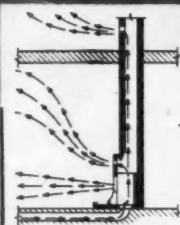


DIAGRAM A  
underfloor

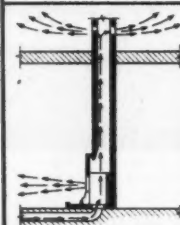


DIAGRAM B  
underfloor

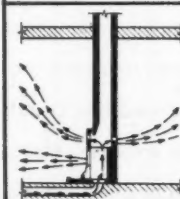


DIAGRAM C  
underfloor

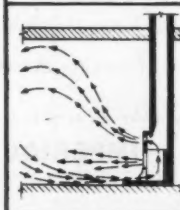
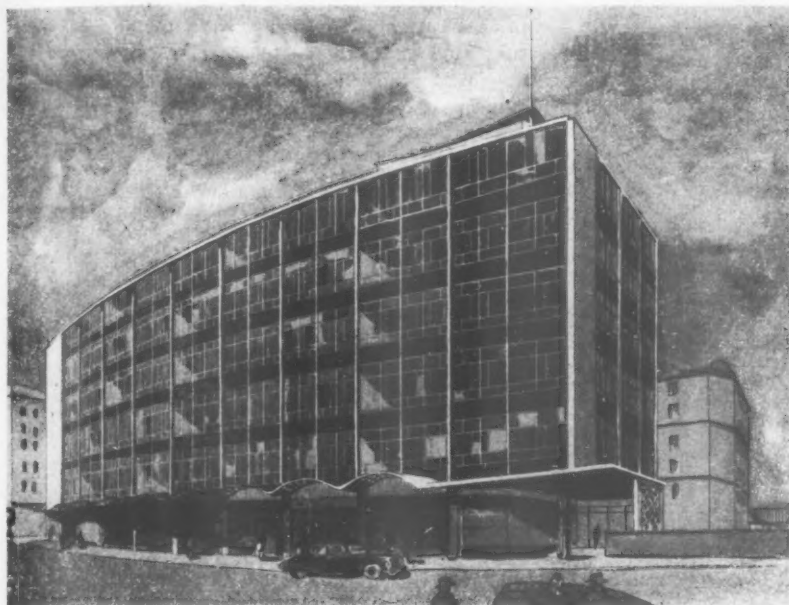


DIAGRAM D  
overfloor

## TWO OFFICE BUILDINGS FOR THE NORWICH UNION



glazed walls and marble facings. For all its curtain walling such a pile is very Birmingham. Another vast pile of offices, the Norwich Union's own headquarters (below), has been designed by T. P. Bennett & Son, and is also, surely, very Birmingham—but this time in the heart of Norwich. This is the first step in a 25-year expansion scheme by this vast agglomeration of insurance societies, whose employees are now spread in a variety of buildings over seven acres in the centre of Norwich. Clearly, an eight-storey block providing 150,000 sq. ft. of offices is the solution for them. But can our cities retain any character of their own under such pressure?

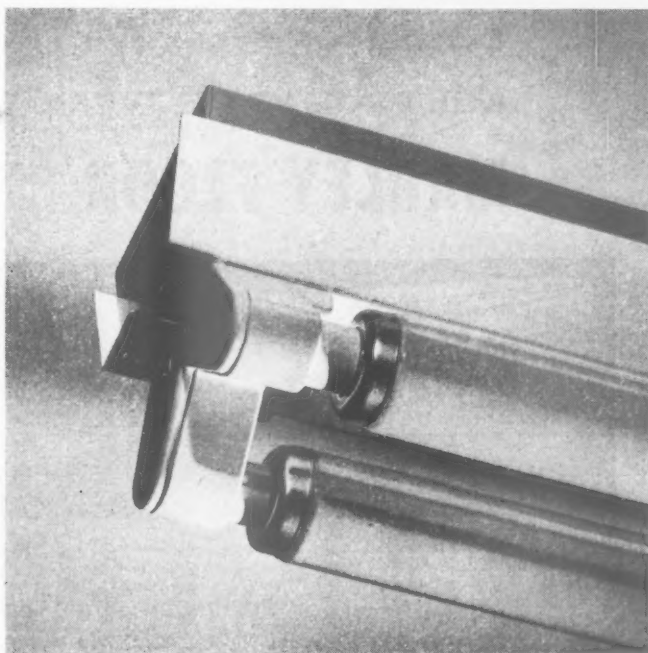
Post-war cliffs of offices in city centres provoked new ring roads and road-widening schemes, and now the new ring roads are provoking further cliffs of offices, of which Norfolk House, Birmingham, about to go up on Birmingham's new ring road, is typical. The eight-storey block (shown above) was designed by Hurley Robinson & Son for Norwich Union Insurance Societies, and is of reinforced concrete construction with



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## Announcements

### PROFESSIONAL

C. J. Cheale, L.R.I.B.A., F.I.A.A. & S., has accepted an appointment as Development Architect with the Public Works Department, Ghana. He took up his duties on January 5 and would like all further communications addressed to the Public Works Department at Accra.

J. G. Coppock, DIP.ARCH., A.R.I.B.A., has moved to new offices at 1, University Street, Belfast (telephone Belfast 27669).

R. G. Waterlow, a student at the Regent Street Polytechnic, would like any information on timber frame construction in domestic scale dwellings. This should be sent to 78, Peel Road, North Wembley, Middlesex.

Fry, Drew, Drake & Lasdun, F/F/A/F.R.I.B.A., are now practising from 63 Gloucester Place, W.1. and 3, Albany Terrace, N.W.1 (telephone Hunter 1822/6).

The School of Architecture, Crawford Municipal School of Art, Emmet Place, Cork, would be pleased to receive trade literature and samples.

S. H. & D. E. White, civil engineers, of 9, Victoria Street, S.W.1, have moved to 400, Abbey House, 2/8, Victoria Street, S.W.1 (telephone Abbey 4415/6).

The principal office of T. P. O'Sullivan & Partners, consulting engineers is now at 19, Old Queen Street, S.W.1 (telephone Whitehall 3693/4).

Bernard Lowe, L.R.I.B.A., has now moved to 8, Queen Square, Bristol 1, where he will be pleased to receive trade literature.

D. W. Tucker, A.R.I.B.A., has now moved to 158, Leicester Road, Loughborough. The telephone number remains the same.

F. J. Thompson, B.Sc., A.R.I.C.S., A.A.L., has resigned his appointment with Gilbert Luck of Northwood, Middlesex, and has commenced practice on his own account as a chartered surveyor, specializing in building surveying but with a general practice at 4, Little Green, Croxley Green, Herts. (telephone Rickmansworth 4775).

Hasker & Hall, L/F.R.I.B.A., have transferred their Solihull Office to Longdon House, High Street, Knowle, Solihull, Warwickshire (telephone Knowle 3502).

William Ryder A.R.I.B.A., A.M.T.P.I., Dip. T.P. (LOND.), has changed his address to 21 Bruton Street, Berkeley Square, London, W.1.

### TRADE

From January 1 W. R. Drury, 142, Oxford Road, Manchester 13 (telephone Ardwick 6540) will be acting as area representative of F. A. Borchardt Limited, for the distribution of DRUGASAR balanced flue heaters, as well as the Arnhem closed heating stove and the DRU oil heater in the West Midlands, North Wales and the Northern Gas Board Area, in addition to the North Western Area.

Plyglass Ltd. have moved their London office to 18, London Street, E.C.3 (telephone Royal 8511).

Simon-Carves Ltd. have now moved the London civil engineering drawing office of the Nuclear Power Division to 56, New Bond Street, W.1 (telephone Mayfair 4117).

Metropolitan-Vickers Electrical Co. Ltd. have now moved their London office to 33, Grosvenor Place, S.W.1 (telephone Belgravia 7011).

The partnership between Collins and Collins of Westland House, Chesterfield Gardens, W.1. and Rawlence and Squarey has been dissolved. The name of the firm is now Collins and Collins and Rawlence of the same address with Michael Rawlence as the sole Principal and Arthur P. Saunders as Consultant. Rawlence and Squarey will continue in practice from their offices in Salisbury, Sheerborne, Southampton, and Taunton.

Thermalite-Ytong Limited announce that their second factory at Hams Hall near Birmingham is now in full production.

The head offices of AEI Hotpoint Ltd. and AEI Gala Ltd. have now moved to 33, Grosvenor Place, S.W.1.

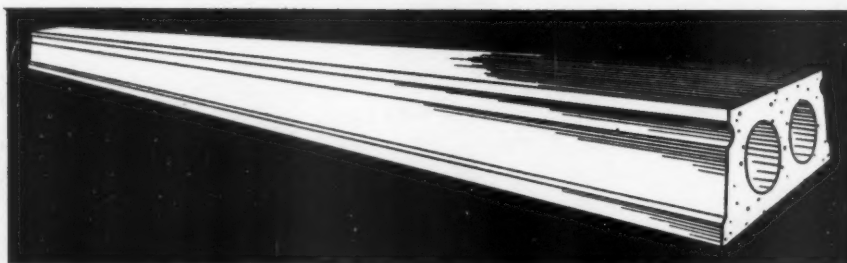
Haskell Robertson have opened a new office in Birmingham at 56, Milk Street, Birmingham 5. The address of their London office has been changed to Grafton Road, N.W.5, and the address of the Liverpool office is now 23, Greenland Street, Liverpool 1.

## Corrections

Names of floorings supplied by Messrs. Semflex Ltd. for the Wales Empire Pool were wrongly given in the list of sub-contractors published on November 27, 1958; these should have been listed as "Semastic, Vinylex, Rubber and Semflex floorings".

We regret that the Working Detail published on December 25, 1958 (Glazed Wall: Factory in Payerne, Switzerland) was incorrectly numbered as Walls and Partitions: 69, instead of Walls and Partitions: 70.

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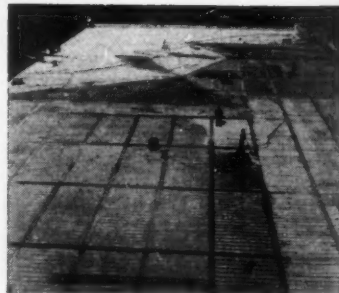
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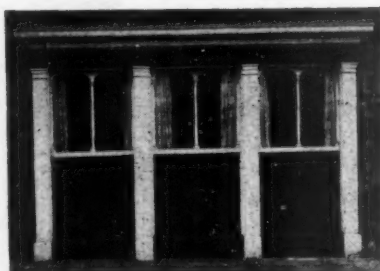
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ar

## DECEMBER



Workshop Annexe: new stores, paint shops, etc., for the Old Vic, ingeniously packed under some awkward daylighting angles by Lyons Israel and Ellis, and fully illustrated in this issue.



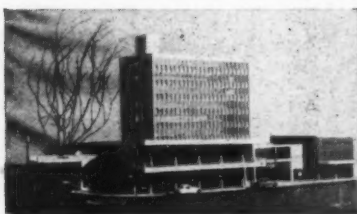
Pub Front: frame and fill on the facade of the Crown and Mitre, King's Lynn: one of the illustrations to an assessment of the aesthetic and functional aspects of pub exteriors and their future.



Seagram completed; and dwarfing even the Cadillac in foreground, the glass and bronze Seagram Building by Philip Johnson and Mies van der Rohe will be fully discussed and—tentatively—evaluated.

## JANUARY

### Special Preview Issue

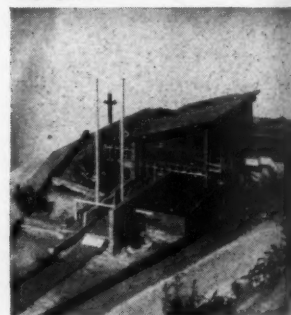


New Town Multi-storey: an office block for the town centre of Hemel Hempstead, designed by H. K. Ablett, chief architect to the Development Corporation.

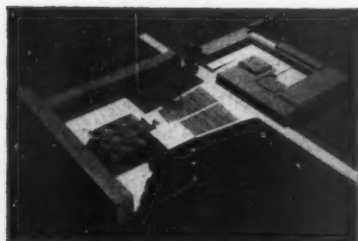
High Gorbals: a redevelopment area in Glasgow, by Robert Matthew and Johnson Marshall, one of a number of housing-schemes pre-viewed in this issue.



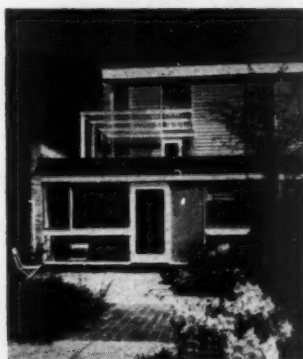
Northern Methodist: a projected church in Fulwell, Co. Durham, designed by S. W. Milburn and Partners for a Methodist congregation.



## FEBRUARY

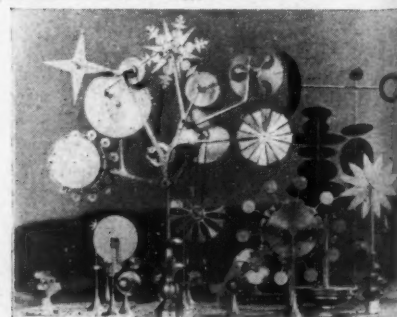


Nigerian University: Library, Arts Faculty, Administration and Students' Union buildings, and an open-air auditorium at Nsukka, Eastern Nigeria, designed by James Cubitt and Partners, and pre-viewed in this issue.



Spec and Span: this house at Teddington is among the buildings discussed in a full-dress survey of Eric Lyon's Span speculative developments by R. Furneaux Jordan.

Sun-Mill: the ingenious solar toy designed by the ever-inventive Charles Eames, to dramatise the potentialities of the sun as a source of energy, a cosmic mobile.



The Architectural Review's new standard binding, with alternate years bound in black and white, and alternate volumes initialled A and R, makes easier the identification of individual volumes, and their proper replacement on the

shelf. The binding is buckram, and the price of binding per volume is 25s. Copies to be bound should be addressed, with the appropriate index, direct to the Architectural Press warehouse, Abbey House, 8 Victoria Street, London, S.W.1.

The annual post free subscription rate payable in advance is £3.3.0 sterling; in U.S.A. and Canada \$10.50; elsewhere abroad \$13.10.0.

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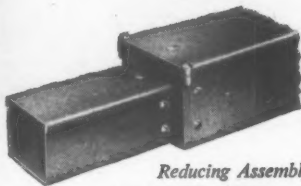
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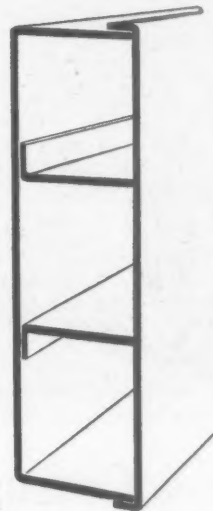
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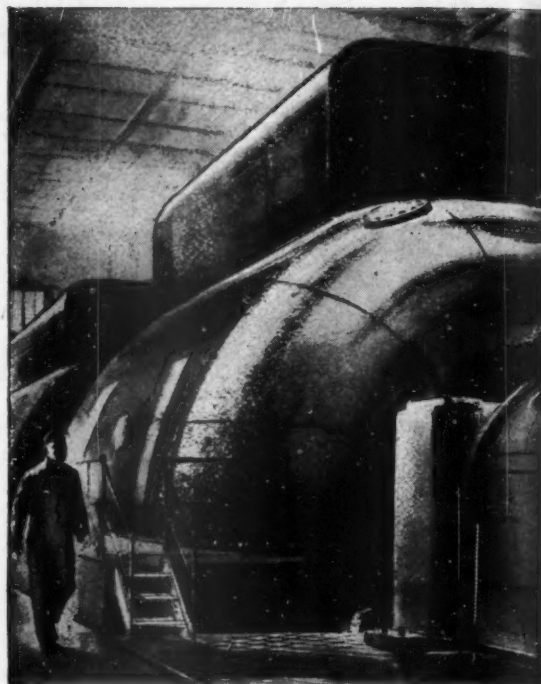
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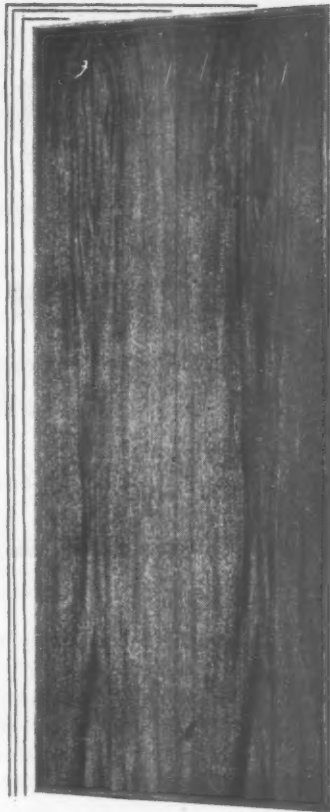
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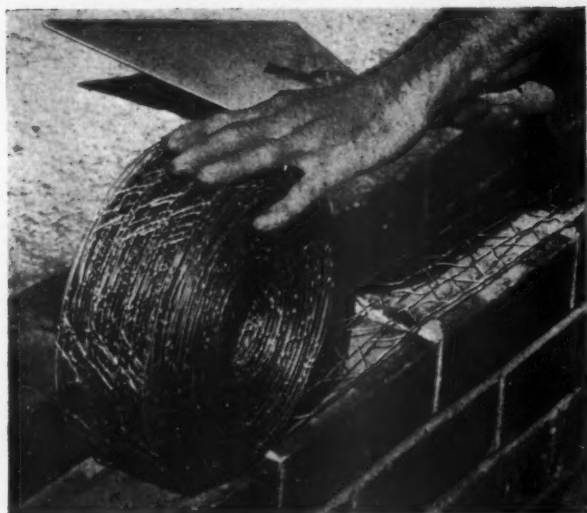
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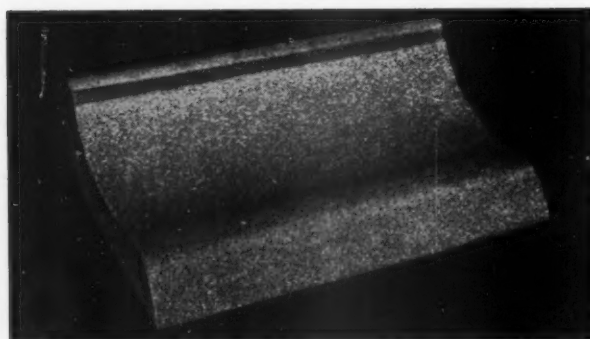
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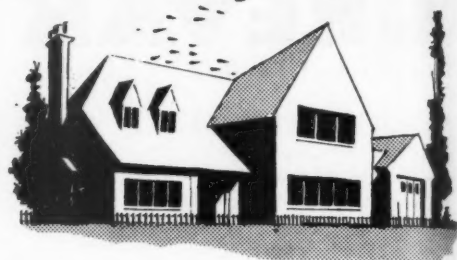
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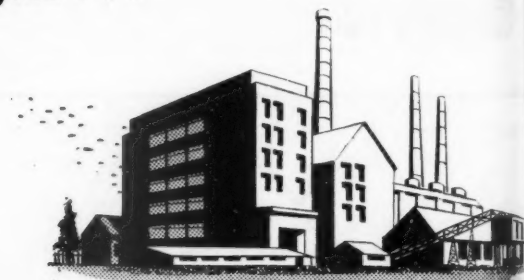
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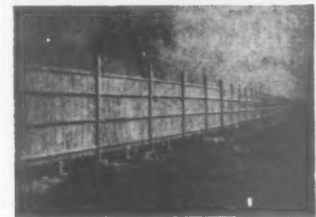
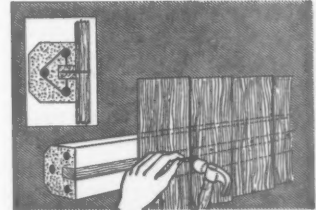
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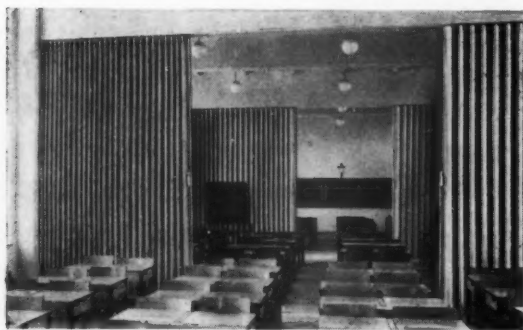


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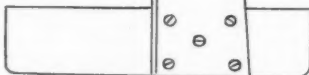
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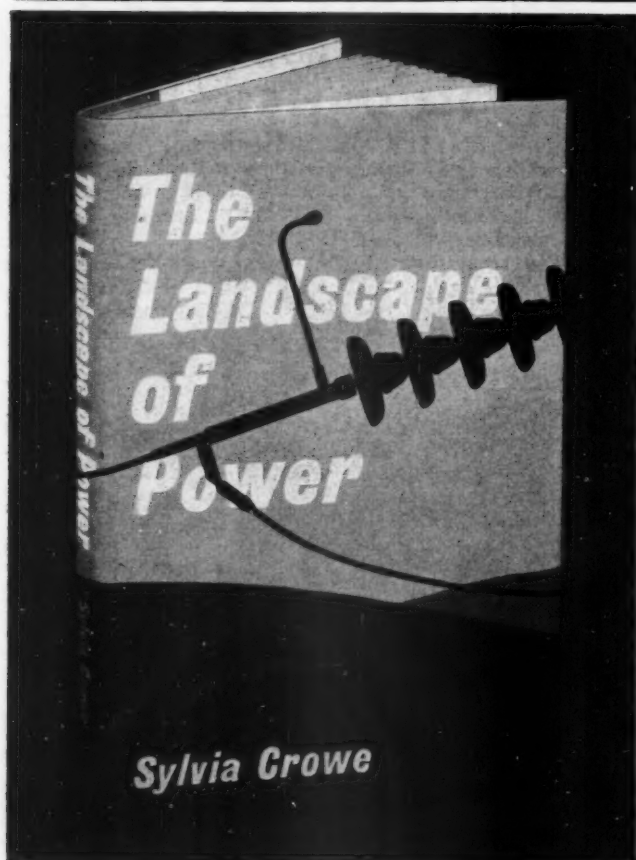


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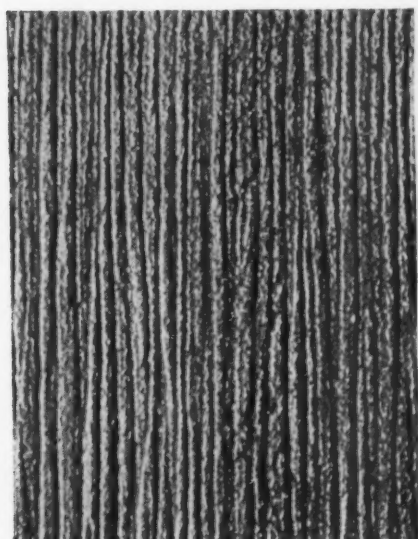
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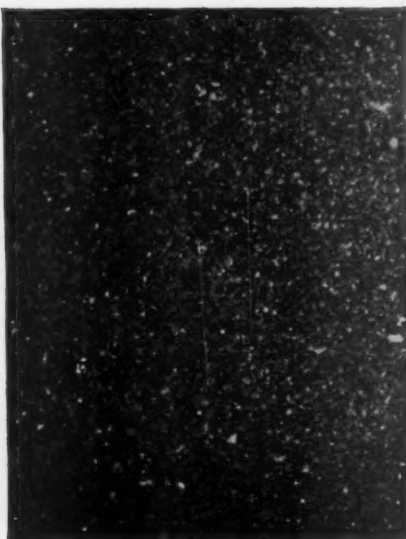
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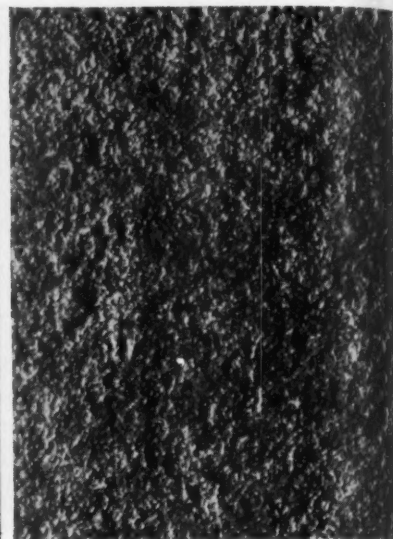
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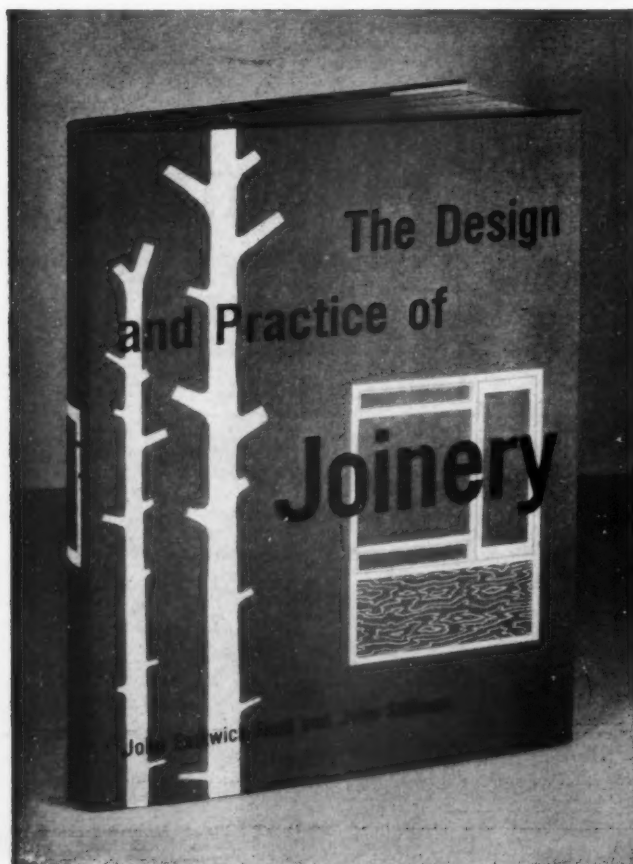
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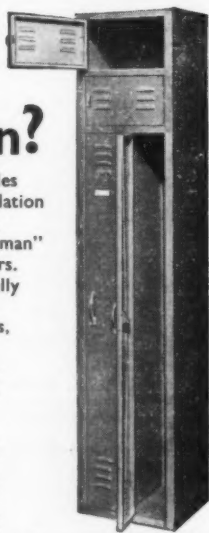
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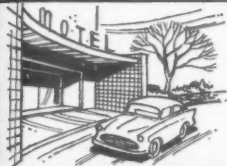

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## CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

**AIR-MAIL SERVICE** available on request: In response to requests from a number of Overseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appointments Vacant, we have been pleased to arrange that cuttings of all such classified advertisements appearing in the A.J., shall be despatched by air-mail on Wednesday of each week (one day prior to A.J. publication date). The cost of this special service to Overseas subscribers will be 5s. for four weeks (1s. 3d. for each additional week) and to take advantage of this service. The charge we are making represents only the actual cost of the postage involved.

## Public and Official Announcements

30s. per inch; each additional line, 2s. 6d.

### LONDON COUNTY COUNCIL ARCHITECTS' DEPARTMENT

Vacancies for (1)-ARCHITECT/PLANNERS. Tasks include three-dimensional planning within London's eight major comprehensive development areas (including Stepney/Poplar, the South Bank and Elephant and Castle) and other redevelopment areas. Work includes preparation of comprehensive proposals for all important areas of new development throughout County, including areas to be redeveloped in connection with road improvements.

(2)-TOWN PLANNING ASSISTANTS. Duties include investigation of development proposals, surveys, report writing, preparation of data for Public Inquiries.

Starting salaries in each case up to £260 according to experience and qualifications. Application forms and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (BK/51/58), County Hall, London, S.E.1. (2167.) 1950

### METROPOLITAN BOROUGH OF LAMBETH ARCHITECTURAL STAFF

Applications are invited from architects to assist in large programme of conversion and improvement of dwelling houses. Duties: Surveys of existing properties, preparation working drawings and specifications and supervision of works in progress, etc. Appointment will be on a temporary basis for possibly two or three years. Applications will be considered from older members of the Profession with suitable experience. Salary according to qualifications and experience within the range £275-£1,055 p.a.

Full details of experience and qualifications should be forwarded to the Town Clerk, Lambeth Town Hall, London, S.W.2. 2456

### COUNTY BOROUGH OF WEST HAM BOROUGH ARCHITECT & PLANNING OFFICER'S DEPARTMENT

Applications invited for the following permanent posts:-

(a) CHIEF ASSISTANT PLANNING OFFICER. J.N.C. Scale A-£1,185 x £50 (3) x £45 (1)-£1,380 p.a.

Must be A.M.T.P.I. and additional qualification A.R.I.B.A. or A.R.I.C.S. an advantage, preferably with experience in replanning urban areas. Will be responsible for Planning Administration generally.

(b) SENIOR GROUP ARCHITECT. A.P.T. Grade V, £1,175 x £50-£1,325 p.a., and L.A. Must be A.R.I.B.A. with experience of handling large Housing Contracts and controlling staff. Planning qualification an advantage.

(c) ARCHITECTURAL ASSISTANTS. A.P.T. Grade I, £575 x £30-£725 p.a., and L.A. Intermediate R.I.B.A. standard, with office experience.

Application forms and details from Borough Architect and Planning Officer, 70 West Ham Lane, Stratford, E.15, returnable by 17th January, 1959. 2441

### LONDON COUNTY COUNCIL ARCHITECTS' DEPARTMENT

Vacancies for ARCHITECTURAL ASSISTANTS, starting salary up to £260. Full and interesting programmes of houses, flats, schools and general buildings.

Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (BK/52/58), County Hall, S.E.1. (2168.) 1949

### EAST ANGLIAN REGIONAL HOSPITAL BOARD

ASSISTANT ARCHITECTS for work in connection with development and design of large new hospital at Peterborough, and general hospital work for whole Region. Candidates must be qualified and registered architects by examination and possess good general experience in design, construction and specification writing. Knowledge of hospital work desirable but not essential. Salary £700-£1,015 per annum; additional increments within scale based on experience and age may be granted.

Applications stating age, qualifications, experience, salary and details of present position with names of three referees to Secretary of Board, 117 Chesterton Road, Cambridge by 21st January, 1959. 2451

### LONDON COUNTY COUNCIL ARCHITECTS' DEPARTMENT

Vacancies for:-  
(1) PRINCIPAL ASSISTANT (Professional). Salary scale £1,422 10s.-£1,705.

(II) ARCHITECTS, Grade 1, salary scale £1,245-£1,482 10s.

Architects appointed would have charge of a section engaged on new building work in the Schools, Housing or General Division.

The Principal Assistant (Professional) would be required to take in addition some specialist divisional responsibility.

Full programme of interesting work.

Application form and further particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council, the County Hall S.E.1, quoting ref. AR/EK/62/58, returnable by 17th January, 1959. 2420

### COUNTY COUNCIL OF ESSEX COUNTY PLANNING DEPARTMENT

Applications invited for post of SENIOR PLANNING ASSISTANT, Special grade (£750-£1,030) at Wanstead. Applicants must have had practical experience in the preparation of development plans in urban areas and be able to take charge of a small section of staff. Experience in, and a fair for statistical and research work related to planning regarding population, industry, employment, education, etc., will be an advantage. Applicants should be Corporate Members of the Town Planning Institute or other comparable professional institute, or possess a University Degree in Economics or Geography. Five-day week; medical examination; superannuation. Application form from County Planning Adviser, Broomfield Place, Broomfield, Chelmsford, returnable by 12th January, 1959. 2418

### THE UNIVERSITY OF MANCHESTER

Applications are invited for two posts of LECTURER in ARCHITECTURE from candidates with professional membership of the Royal Institute of British Architects and not less than three years of practical experience. Salary on a scale from £900 to £1,650 per annum; initial salary according to qualifications and experience. Membership of the F.R.S.U. and Children's Allowance Scheme. Applications should be sent not later than January 31st, 1959, to the Registrar, the University, Manchester 13, from whom further particulars and forms of application may be obtained. 2401

### ARCHITECTURAL ASSISTANTS

Required by

### MINISTRY OF WORKS

For employment in London and Provinces on design and detailing work on construction and maintenance of all types of public buildings.

Salary range £550 (age 21) to £870 p.a. London (slightly less elsewhere).

Five-day week 31 weeks annual leave initially. Starting pay according to age, qualifications and experience. Good prospects of promotion with salaries of £1,015 p.a. and above.

Opportunities for permanent posts leading to pensions (non contributory).

Interviews at Regional Offices where possible. Applicants should be of Intermediate R.I.B.A. standard. State age, training and experience to Chief Architect, Ministry of Works, Room 435, Abell House, John Islip Street, S.W.1. 2444

### CITY AND COUNTY OF KINGSTON UPON HULL

### CITY ARCHITECT'S DEPARTMENT

Applications are invited for the following posts:- (a) ASSISTANT ARCHITECTS; (b) ASSISTANT QUANTITY SURVEYORS, Grade S.C.O. (£750 x £40-£1,030). There is an interesting and varied programme of work in the department. Housing accommodation may be provided for the successful married applicants if they are not already resident in the city. The point of entry to the scale will be determined by experience, and a suitable applicant may be offered a commencing salary of £950 per annum. (c) MEASURING ASSISTANT, Miscellaneous Division, Grade III (£505-£565 per annum).

Application forms may be obtained from Andrew Rankine, O.B.E., A.R.I.B.A., City Architect, Guildhall, Kingston upon Hull, and should be returned completed on or before Monday, 26th January, 1959. 2518

### COUNTY BOROUGH OF GREAT YARMOUTH GENERAL ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of a General Architectural Assistant in the Borough Engineer's Department at a salary in accordance with A.P.T. Grade II (£725 x £30-£855).

Applicants must have passed the Intermediate R.I.B.A. examination and be experienced in the design, construction and supervision of public buildings, houses and flats.

The Council is unable to offer housing accommodation.

The appointment is subject to one month's notice on either side, to the Local Government Superannuation Acts, and to the passing of a medical examination.

Applications in an envelope endorsed "General Architectural Assistant" giving names and addresses of two referees and stating age, professional training, qualifications, experience and present and previous appointments, with salaries, must reach me not later than Friday, 23rd January, 1959.

Applications in an envelope endorsed "General Architectural Assistant" giving names and addresses of two referees and stating age, professional training, qualifications, experience and present and previous appointments, with salaries, must reach me not later than Friday, 23rd January, 1959.

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### COUNTY COUNCIL OF SUTHERLAND COUNTY ARCHITECTS' DEPARTMENT DORNOCH

Applications are invited for two vacancies for TEMPORARY ASSISTANT ARCHITECTS in the County Architect's Department, Dornoch.

Applicants must be fully qualified A.R.I.B.A. and should have a good knowledge of school design and construction.

The salary scale for both posts is Grade VII of the A. & P. Division of the N.J.I.C. Scheme.

The appointments are subject to the conditions of service of the National Joint Industrial Council and to the provisions of the Local Government Superannuation (Scotland) Act, 1957, and will be terminable by three months' notice in writing on either side.

The successful candidates will require to pass a Medical Examination.

Applications, stating age, qualifications, present and past appointments, and details of experience, together with the names of three persons to whom reference can be made as to ability, should be forwarded to the undersigned not later than 17th January, 1959.

Canvassing, directly or indirectly, will disqualify.

A. J. MACRAE,  
County Clerk

County Offices,  
Golspie,  
30th December, 1958. 2520

### KENT COUNTY COUNCIL

The following staff are required for work at the Council's extensive building programme which includes schools, colleges, old people's and children's homes, clinics, ambulance, fire and police stations and other public buildings:- ARCHITECTS.

Candidates should be capable of accepting responsibility and displaying initiative, within a group system, in the design and control of building projects, and possess experience and ability in current problems of design and control of costs. Salaries within scale £750-£1,030 a year.

### QUANTITY SURVEYORS.

Candidates should have had experience in the preparation of estimates, bills of quantities and final accounts for building projects. Salaries within scale £750-£1,030 or £575-£725 a year. Applicants for appointment to the higher scale should have passed the Final Examination of the Royal Institution of Chartered Surveyors (Quantity Surveying Section) and be familiar with recent developments in cost analysis and cost planning.

Other applicants should have passed the Intermediate Examination of the Institution.

Commencing salaries according to qualifications and experience. N.J.C. Conditions of Service. Further details and application forms from County Architect, Springfield, Maidstone. Closing date 27th January, 1959. 2407

### AMENDED ADVERTISEMENT COUNTY BOROUGH OF DEWSBURY BOROUGH ARCHITECT & BUILDINGS SURVEYOR'S DEPARTMENT

Applications are invited for the following appointments:-

(a) PRINCIPAL ASSISTANT ARCHITECT (Education Section)-A.P.T. Grade IV.

(b) ASSISTANT QUANTITY SURVEYOR-Special Grade.

The commencing salaries will be fixed within the scope of the grades stated according to qualifications and experience, i.e. A.P.T. Grade IV, £1,025-£1,175 p.a., Special Grade, £750-£1,030 p.a. Applicants for appointment (a) must have passed the final examination of the R.I.B.A. and those for appointment (b) the final examination of the R.I.C.S. The successful applicant for appointment (a) will be responsible for the design, construction and supervision of new schools.

Housing accommodation may be made available if required.

The appointments will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Acts.

Applications, stating age, education, qualifications, full particulars of training and experience, together with copies of two recent testimonials, should be sent to the undersigned not later than Monday, 19th January, 1959, in envelopes endorsed "Appointment of".

A. NORMAN JAMES,  
Town Clerk.

Town Hall,  
Dewsbury.  
23rd December, 1958. 2470

### HARLOW URBAN DISTRICT COUNCIL

require an ARCHITECTURAL ASSISTANT on Grade A.P.T. II (£725-£845) or Grade A.P.T. III (£845-£1,025) according to qualifications and experience. Appointment subject to a medical examination.

Housing available, removal expenses paid where necessary. Car allowance will be made where appropriate.

Harlow, with a population of 45,000, rapidly expanding to 80,000, offers excellent experience to a keen and energetic applicant. The Department is actively engaged in the preparation of schemes for several major projects including a swimming pool and a crematorium as well as the normal development projects for local authority services.

Applications, naming two referees, to be received by the Engineer and Surveyor, A. W. Webb, A.M.I.C.E., M.I.Mun.E., M.R.S.H., Newell Hall, Harlow, Essex, by 21st January, 1959. 2507



## EDINBURGH COLLEGE OF ART

ANDREW GRANT REQUEST-FELLOWSHIPS FOR ADVANCED STUDY AND RESEARCH

A Fellowship of £500 per annum for two years may be awarded to enable a candidate of exceptional ability to undertake special study under the supervision of the College Authorities.

The Fellowship is intended for persons engaged in any branch of art, and is open to men and women, married or single, of any nationality. Applicants are expected to have not less than two years' professional and/or industrial experience.

The College comprises Schools of Architecture, Drawing and Painting, Design and Crafts and Sculpture.

Form of application and conditions may be obtained from the Secretary, Edinburgh College of Art, Lauriston Place, Edinburgh, 3, to whom applications should be returned not later than 28th February, 1959.

J. R. BROWN,

Secretary.

## BOROUGH OF SCUNTHORPE

**BOROUGH SURVEYOR'S DEPARTMENT**  
Applications are invited for the following appointments:—

(a) ASSISTANT ARCHITECT, Special Grade (£750 × £40—£1,030 p.a.) or A.P.T. III (£845 × £5—£1,025 p.a.).

(b) ASSISTANT ARCHITECT, A.P.T. II (£725 × £30—£845 p.a.).

The commencing salary of each post will be fixed according to qualifications and experience. The work will be of an interesting and varied character in an expanding town with a population of 60,000.

Housing accommodation will be available if required.

Applications, giving particulars of age, experience, qualifications and appointments, together with the names of two referees, should be submitted to the undersigned not later than 24th January, 1959.

T. M. LISTER,

Town Clerk.

## Municipal Offices.

34, High Street,

Scunthorpe.

24th December, 1958.

2468

## LINDSEY (LINCOLNSHIRE) COUNTY

## COUNCIL

**ARCHITECT'S DEPARTMENT**  
Vacancies on permanent staff for:—

(a) ASSISTANT ARCHITECT, Grade IV, £1,035/£1,175.

(b) Two SENIOR ASSISTANTS, Special Grade, £750/£1,030.

(c) ASSISTANT A.P.T. II, £725/£845.

(d) ENGINEERING ASSISTANT, A.P.T. III, £845/£1,025.

Applicants for (a) and (b) should be A.R.I.B.A. and capable of controlling large and interesting schemes, (c) Intermediate R.I.B.A., and (d) should be Graduate I.H.V.E. and capable of designing heating installations for large schemes.

Salary at a starting point within the grade dependent upon qualifications and experience. N.J.C. Conditions of Service. Canvassing will disqualify. Candidates must disclose in writing whether their knowledge they are related to any Member or Senior Officer of the Council.

Applications, stating post applied for, giving age, qualifications, experience, present post and salary, and the names of at least two persons to whom reference can be made, to be sent not later than 16th January, 1959, to the County Architect, County Offices, Lincoln.

2467

## EDINBURGH COLLEGE OF ART

Applications are invited for the post of ASSISTANT INSTRUCTOR in the School of Architecture. Candidates must be Associate Members of the Royal Institute of British Architects and of the Town Planning Institute. Duties will include teaching all aspects of Town and Country Planning. Salary Scale £850 × £50—£1,350.

Form of application and conditions of appointment can be obtained from the Secretary, Edinburgh College of Art, Lauriston Place, Edinburgh, 3, to whom applications should be submitted not later than 16th January, 1959.

2473

## JUNIOR ARCHITECTURAL ASSISTANT

required by HACKNEY BOROUGH COUNCIL. Salary grade A.P.T. I (£575—£725 p.a.). London weighting allowance £20 p.a. at age 21, £30 p.a. at age 25. Commencing salary according to training, qualifications and experience. Candidates must be Students of the R.I.B.A. or Probationers with a good architectural training and several years' experience in an architect's office. Apply Town Clerk, Town Hall, Hackney, E.8, for application form, returnable by 9 a.m., 19th January, 1959.

2511

## NOTTINGHAMSHIRE COUNTY COUNCIL

**APPOINTMENT OF ASSISTANT ARCHITECTS**  
Applications are invited from qualified Architects for posts within the following scales: A.P.T. Special Scale (£750 × £40—£1,030) and A.P.T. IV (£1,025 × £50—£1,175).

The work of the office includes a large programme of architect-controlled prefabricated construction, entailing continual technical development, work and research into planning requirements.

Forms of application from the County Architect, County Hall, West Bridgford, Nottingham, to whom they should be returned as soon as possible.

A. R. DAVIS,

Clerk of the County Council.

2481

## NORTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD

**ASSISTANT ARCHITECT** required—good experience of design and construction necessary preferably in hospital work. Applicants must be Associate Members of the R.I.B.A. Salary scale £700 × £25 (3) × £30 (1) × £35 (6)—£1,015 plus £20—£50 London weighting. Ref. 691.

**ARCHITECTURAL ASSISTANTS** also required. Applicants must have Intermediate R.I.B.A. Salary scale £525 (age 21) × £20 (4) × £25 (5)—£730 plus £20—£30 London weighting. Ref. 692.

Commencing salary above minimum may be paid according to relevant practical experience appropriate to the posts. Whitley Council conditions, superannuable. Apply, stating age, qualifications (with date) and experience, with names of two referees, to Secretary, North West Metropolitan Regional Hospital Board, 40, Eastbourne Terrace, W.2, by 26th January, quoting appropriate reference number.

2517

**GOVERNMENT OF THE FEDERATION OF MALAYA** has vacancies for ARCHITECTS in the Public Works Department on contract for three years in the first instance.

**Qualifications:** Either  
(a) Associateship of the Royal Institute of British Architects; or

(b) An Architectural qualification which is recognised by the Royal Institute of British Architects as an equivalent qualification to Associateship of Royal Institute of British Architects; and (c) at least five years' post qualifying experience.

**Basic Salary.**  
£628 rising to \$1,254 per mensem (£879 to £1,755 p.a.). Commencing salary according to experience. In addition substantial expatriation and cost of living allowances varying with family circumstances; lump sum gratuity; full pay vacation leave; free passages; free medical attention (except for a small charge for maintenance if in hospital).

Further details and application forms can be obtained from the Recruitment and Personnel Division, Malaya House, 57, Trafalgar Square, London, W.C.2.

2515

## CHIEF ARCHITECT IN THE MINISTRIES OF HOUSING AND LOCAL GOVERNMENT AND HEALTH

The Civil Service Commissioners invite applications for two pensionable posts of Chief Architect.

**Ministry of Housing and Local Government (one post).**

Applicants must be registered Architects and hold professional qualifications in architecture, and have had a wide experience of housing and other building development. Experience in the field of public authority housing would be an advantage.

The person appointed will be responsible for the organisation, direction and supervision of the Ministry's architectural advisory service on housing and local government building generally. The work of this service is being reviewed and extended and will afford increased scope for the study of design problems and constructional techniques. There will also be opportunity for carrying out selected demonstration schemes in the housing field. Salary (London) £3,750.

**Ministry of Health (one post).**  
Candidates must be registered Architects and hold professional qualifications in architecture. Experience of hospital building an advantage. All round experience and organising ability essential.

The Chief Architect will be in charge of the Ministry's Architectural Staff. He will be responsible for organising the examination of building schemes of Hospital Boards engaged in an expanding programme, as well as of schemes for other health and welfare services, and for a design group which it is intended shall undertake development work. His duties will include collaboration with professional staff of Hospital Boards and Local Authorities. Salary (London) £3,400.

Application forms and further particulars from Civil Service Commission, Scientific Branch, 17, North Audley Street, London, W.1, quoting No. 54925/59. Closing date 30th January, 1959. Applicants should state the post for which they are applying and if they wish to be considered for both appointments this must be indicated.

2536

## METROPOLITAN BOROUGH OF LEWISHAM

## ASSISTANT ARCHITECT

Salary Scale A.P.T. I or Special Scale, viz. £585 × £30—£755 p.a. or £750 × £40—£1,060 p.a. including London "weighting." Grade and commencing salary in the grade according to qualifications and experience. Particulars and form of application from Town Clerk (Dept. H), Lewisham Town Hall, Catford, S.E.6. Closing date 24th January, 1959.

2498

## CITY OF LEICESTER

## CITY ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of an ASSISTANT ARCHITECT. Salary within Special Grade £750/£1,030 per annum, who would be engaged on Educational Buildings.

Applicants must have passed Parts I and II of the Final Examination of the R.I.B.A.

Applications, with the names of two referees, should be sent to the undersigned not later than Saturday, 24th January, 1959.

J. H. LLOYD OWEN,

City Architect.

10 Loseby Lane,  
Leicester.

2547

## KUMASI COLLEGE OF TECHNOLOGY

Applications are invited for the post of ARCHITECT to carry out investigation for, plan, design and supervise the construction of College buildings which include halls of residence, houses, laboratories and teaching buildings under the direction of Mr. E. Williamson, A.R.I.B.A., A.M.T.P.I.

Candidates must be A.R.I.B.A. or equivalent and be sympathetic towards contemporary ideas.

The appointment will be on contract for two tours of 12 to 18 months each.  
Contract salary scale: £1,080 × £50—£1,580; £1,560 × £50—£2,060 p.a. plus gratuity payable at end of contract at rate of £12 10s. 0d. for each month of satisfactory service.

Point of entry to salary scale is related to previous experience; the second half of the scale is normally entered on completion of five years' approved professional experience after election as A.R.I.B.A.

Children's allowances are paid according to Government scheme at rate of £100 p.a. payable in respect of a maximum of three children up to age 18 provided they are attending an educational institution overseas.

Conditions of service include leave at end of each tour with free 1st class passages for member of staff, his wife and up to three children under 17. Bungalows with basic furniture at moderate rental provided.

Applications (six copies) should be submitted to The Council for Overseas Colleges, 12, Lincoln's Inn Fields, London, W.C.2, giving age, education, qualifications, experience and the names of three referees. Closing date 30th January, 1959.

2499

## THE NATIONAL COAL BOARD

## SOUTH WESTERN DIVISION

Invite applications for the post of ARCHITECTURAL ASSISTANT, Grade I, in their Divisional Production Department, Architects' Branch, Cambrian Buildings, Mount Stuart Square, Cardiff.

Applicants should have passed the Intermediate examination of the R.I.B.A., and have not less than three years' subsequent experience, or have passed the appropriate Final examination, and have had not less than one year's subsequent experience.

Salary scale: (Male) £715 × £25—£850 per annum. (Female) £610 × £21—£720 per annum.

Applicants of exceptional ability and experience may in special circumstances be given up to £150 above the scale maximum in the Grade.

Applications will also be considered from candidates who have not passed the Intermediate examination but have considerable practical experience.

Please quote Staff Vacancy No. 422/40.

Full particulars of age, qualifications, experience and positions held, together with details of present post and salary, should be sent to the Divisional Chief Staff Officer, National Coal Board, Cambrian Buildings, Mount Stuart Square, Cardiff, by 19th January, 1959.

2486

## CITY AND COUNTY OF THE CITY OF EXETER

Applications are invited for the following appointment in the City Architect's Department:

(a) SENIOR ASSISTANT ARCHITECT on the established staff. Salary within Special Grade (£750 to £1,030 per annum). Applicants must be Associate Members of the Royal Institute of British Architects and preference will be given to those with experience in the design and construction of civic buildings.

(b) JUNIOR ARCHITECTURAL ASSISTANT on the temporary staff. Salary A.P.T. Grade I (£575 to £725 per annum). Applicants must have passed the Intermediate Examination of the Royal Institute of British Architects.

The appointments will be subject to one month's notice on either side and the senior appointment will be subject to the provisions of the Local Government Superannuation Acts, 1937 and 1953. The successful applicants will be required to pass a medical examination.

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

Applications, stating age, qualifications, previous and present appointments and salaries, full details of experience and the earliest possible date when available, should be sent to H. B. Rowe, F.R.I.B.A., A.M.T.P.I., City Architect, Municipal Offices, Exeter, not later than 24th January, 1959.

C. J. NEWMAN,

Town Clerk.

Exeter.

January, 1959.

2495

## SALOP COUNTY COUNCIL

A SENIOR PLANNING ASSISTANT is required in the County Planning Office for work in connection with the Development Plan and re-development schemes. Salary within A.P.T. Special Grade, £750—£1,030 per annum. Candidates must be A.M.T.P.I. or A.R.I.B.A. with planning experience. Flat accommodation within 13 miles of Shrewsbury will be available if required. Applications, stating age, qualifications and experience, accompanied by names of two persons to whom reference can be made, to the County Planning Officer, Shirehall, Shrewsbury, by 24th January, 1959.

G. C. GODBER,

Clerk of the County Council.

2540

**COUNTY BOROUGH OF DERRBY**  
**BOROUGH ARCHITECT'S DEPARTMENT**  
(a) SENIOR ASSISTANT ARCHITECTS,  
A.P.T. Grade IV (£1,025-£1,175 per annum).  
Qualifications: A.R.I.B.A.

(b) SENIOR ASSISTANT ARCHITECTS,  
Special Grade (£750-£1,030 per annum). Qualifications: A.R.I.B.A.

(c) ASSISTANT ARCHITECT, A.P.T. Grade I (£575-£725 per annum). Qualifications: Intermediate R.I.B.A.

Commencing salary according to qualifications and experience.

Permanent superannuable appointments, subject to one month's notice and to medical examination. National Conditions of Service.

Application forms obtainable from and to be returned to the Borough Architect, The Council House, Corporation Street, Derby, not later than Monday, 26th January, 1959.

G. H. EMLYN JONES,  
Town Clerk.

17th December, 1958.

**COUNTY BOROUGH OF NORTHAMPTON**  
Applications are invited for the following vacancies in the Borough Architect's Department:-

(a) ASSISTANT ARCHITECT, Special Grade (£750-£1,030).

(b) ARCHITECTURAL ASSISTANT, A.P.T. II (£725-£845).

(c) TOWN PLANNING ASSISTANT, A.P.T. II (£725-£845).

Application forms, returnable by 19th January, and full details may be obtained from Borough Architect, Guildhall, Northampton.

C. E. VIVIAN ROWE,  
Town Clerk.

2482

**COUNTY BOROUGH OF ROCHDALE**  
Applications are invited for the post of QUANTITY SURVEYOR on Special Classes, Grade (£750-£1,030 p.a.).

The successful applicant, if fully qualified, will be offered housing accommodation.

Applications, including names of two referees, to the Borough Surveyor, Town Hall, Rochdale, by 26th January, 1959.

Canvassing or non-disclosure of relationship to any member or senior official of the Council will disqualify. Appointments subject to medical examination.

K. B. MOORE,  
Town Clerk.

2460

**COUNTY OF ESSEX**  
**BOROUGH OF WALTHAMSTOW**  
**COMMITTEE FOR EDUCATION**  
Applications are invited for the following appointments in the office of the Education Architect, Mr. T. L. Rampton, A.R.I.B.A., A.R.I.C.S.

(a) SENIOR ASSISTANT ARCHITECT, A.P.T. Grade IV, £1,025 to £1,175 per annum.

(b) ARCHITECTURAL ASSISTANT, A.P.T. Grade I, £575 to £725 per annum. London weighting of £30 (under 26 years of age £20) applicable to both appointments.

For appointment (a) applicants must be Associate Member of the R.I.B.A. Experience in design and construction of schools, and contract administration an advantage.

Forms of application to be obtained from and returned to the Borough Education Officer, Town Hall, Forest Road, Walthamstow, E.17, within two weeks of the appearance of this notice. 2463

**COUNTY BOROUGH OF CROYDON**  
**ARCHITECTURAL ASSISTANTS**

Applications are invited for two appointments under team leaders on general architectural work. Candidates should have reached about the standard of the R.I.B.A. Intermediate Examination.

Commencing salary between £585 and £875 per annum according to qualifications and experience; scale rises to £1,050 per annum subject to passing R.I.B.A. Final Examination.

Further particulars and application form from Borough Engineer, Town Hall, Croydon. Closing date 28th January, 1959.

E. TABERNER,  
Town Clerk.

2464

**CHELTSEY URBAN DISTRICT COUNCIL**  
**ASSISTANT ARCHITECT**

Applications are invited for the above position in the department of the Engineer and Surveyor at a salary in accordance with Grade IV of the A.P.T. Division of the National Scales (£1,025 x £50-£1,175 per annum).

Applicants must be Registered Architects. Preference will be given to those qualified as Associates of the Royal Institute of British Architects, with experience in local government.

Forms of application can be obtained from the undersigned to whom they should be returned not later than the 21st January, 1959.

A. REX HERBERT,  
Clerk of the Council.

Council Offices,  
Chertsey, Surrey.

2465

**WORCESTERSHIRE COUNTY COUNCIL**  
**ARCHITECT'S DEPARTMENT**

SENIOR ASSISTANT ARCHITECT required, A.P.T. Grade IV (£1,025-£1,175). Applicants should be A.R.I.B.A. and preference will be given to one with experience in School design. Application forms should be obtained from L. C. Lomas, F.R.I.B.A., County Architect, 14, Castle Street, Worcester, not later than January 24, 1959. (L5.)

2545

**BOROUGH OF ENFIELD**  
**BOROUGH ENGINEER'S DEPARTMENT**  
(Population: 109,200. Area: 12,401 acres)  
Applications are invited for established posts within the Grades shown:-

(a) SENIOR ARCHITECTURAL ASSISTANT A.P.T. IV (£1,025-£1,175 per annum).

(b) MAINTENANCE ASSISTANT (Architectural Section) A.P.T. I (£575-£725 per annum).

(c) JUNIOR ASSISTANT (Architectural Section) Higher General Division (£230-£560 per annum).

A London Weighting Allowance of £10-£30 per annum according to age will be paid in addition to the above salaries.

The Extended Higher General Division Scale applies to post (c) above.

Consideration will be given to the provision of housing accommodation for post (a) above, or for a loan to enable the successful candidate to purchase a house if required.

Saturday mornings are normally free of duty. Application forms, returnable by 3rd FEBRUARY, 1959, from H. Deryck Peake, M.Sc. (Eng.), M.I.C.E., Borough Engineer & Surveyor, 'Percy House', 7 Little Park Gardens, Enfield, Middlesex.

CYRIL E. C. R. PLATTEN,  
Town Clerk.

2530

**BOROUGH OF HENDON**  
**SENIOR ASSISTANT ARCHITECT-GRADE A.P.T. II**  
**SENIOR ASSISTANT ARCHITECT-GRADE A.P.T. IV**

Applications are invited for the above appointments in the Architects Section of the Borough Engineer and Surveyor's Department at a commencing salary, according to experience, within the grades A.P.T. V (£1,175 to £1,325) and A.P.T. IV (£1,025 to £1,175) as applicable, plus London weighting. Candidates must be Associate Members of the Royal Institute of British Architects.

The posts are pensionable, subject to National Scheme and medical examination. The Council is prepared to consider assisting suitable applicants with housing accommodation.

Applications with full details, together with names and addresses of two referees, must reach the Borough Engineer and Surveyor by Monday, 26th January, 1959. Canvassing will disqualify.

R. H. WILLIAMS,  
Town Clerk.

2532

**METROPOLITAN BOROUGH OF HAMPSTEAD**  
require an ARCHITECTURAL ASSISTANT (temporary) in the Housing Architect's Department. Grade A.P.T. II (£575-£845) or Special Grade (£750-£1,030) plus London weighting. Commencing salary according to qualifications and experience. (Grade I-II-Intermediate R.I.B.A. Special-Final R.I.B.A.).

Applications giving training, experience, previous appointments and the names of three referees, to the Town Clerk (AJ), Town Hall, Haverstock Hill, N.W.3, by 22nd January, 1959. No housing provided.

**BOROUGH OF YEIVIL**  
**ARCHITECTURAL ASSISTANT**

Applications are invited for the appointment of an Architectural Assistant in the Borough Surveyor's Department at a salary within Grade A.P.T.I. (£575-£725 p.a.).

The scheme of Conditions of Service laid down by the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services will apply.

Applications giving full personal details, present and previous appointments, qualifications and experience should be sent to the undersigned not later than Thursday, 22nd January, 1959.

A. HEAL, M.I.Mun.E.,  
Borough Surveyor.

Municipal Offices, Yeovil.

2544

**BOROUGH OF LEYTON**  
**BOROUGH ENGINEER'S DEPARTMENT**  
**ARCHITECTURAL SECTION**

ASSISTANT ARCHITECTS-Salary within Special Grade-£780-£1,050 per annum including London weighting.

ARCHITECTURAL ASSISTANT-Salary within Grade A.P.T. I-£575-£725 per annum plus London weighting.

Housing accommodation available. Applications to Borough Engineer, Town Hall, Leyton, E.10, stating appointment and names of two referees, not later than 23rd January, 1959.

D. J. OSBORNE,  
Town Clerk.

2541

**ASSISTANT ARCHITECT** required by POPLAR BOROUGH COUNCIL. Permanent appointment. Salary scale £750-£1,030 plus 'weighting.' Applicants must have passed the Final R.I.B.A. and have had town planning experience. Application forms obtainable from Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3. Closing date 31st January, 1959 (first post). 2528

**METROPOLITAN BOROUGH OF HOLBORN**  
**ARCHITECT'S DEPARTMENT**, Borough Architect's Department, R.I.B.A. Final. Salary within A.P.T. III (£845 rising to £1,025 plus London weighting) according to experience.

Application, with names of two referees, to Town Clerk, Town Hall, High Holborn, W.C.1

2514

**DEVON COUNTY COUNCIL** require four ARCHITECTURAL ASSISTANTS, A.P.T. II (£725-£845). Full and interesting programmes of Schools and other County Buildings. Previous Local Authority experience not essential.

In approved cases, loans for house purchase and removal expenses are available-also lodging allowance for married officers while seeking accommodation.

Particulars and application form, returnable by 26th January, 1959, from County Architect, 97, Heavitree Road, Exeter.

**DENBIGHSHIRE COUNTY COUNCIL**  
Applications are invited for the appointment of ARCHITECTURAL ASSISTANT, A.P.T. Grade I (£575-£725 per annum) in the County Architect's Department, Wrexham.

Further particulars with form of application can be obtained from me. Completed forms to be returned to me by 14th January, 1959.

W. E. BUFTON,  
Clerk of the County Council.

County Offices,  
Ruthin.

2523

**BOROUGH OF NUNEATON**  
**TWO ARCHITECTURAL ASSISTANTS**  
Applications for these posts are invited from suitably qualified persons not later than 26th January, 1959.

Salary Special Grade £750-£1,030. Housing accommodation may be provided. Particulars of the appointments can be obtained from me.

A. A. CRABTREE,  
Town Clerk.

The Council House,  
Nuneaton.

2543

**NORTHUMBERLAND COUNTY PLANNING DEPARTMENT**  
**SENIOR PLANNING ASSISTANT**  
**SPECIAL SCALE (£750-£1,030)**  
Development Plan Section

Salary according to qualifications and experience. Application forms and further information from County Planning Officer, County Hall, Newcastle upon Tyne, 1. Closing date 12th January, 1959.

2485

## Architectural Appointments Vacant

4 lines or under, 9s. 6d.; each additional line, 2s. 6d.

Box Number, including forwarding replies, 2s. 6d.

**A COMPETENT ASSISTANT**, with several years' experience and capable of working with little supervision, required in Branch Office, Birmingham, engaged on a varied and interesting programme of commercial projects. Applications, giving full particulars and salary required, to: G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester. 4.

1874

**ASSISTANT** required in busy West End Office. About intermediate level. Write stating age, experience and salary desired. Box 2081.

**ARCHITECTURAL ASSISTANTS**, preferably with office experience, required immediately for work on large and interesting projects. Vacancies occur in the following salary scales:- Intermediate standard, £450-£650; Final standard, £700-£850. Five-day week, pension scheme, good prospects. Head office of firm: Southsea, Hants. Box 2304.

**RONALD WARD & PARTNERS** require ARCHITECTURAL ASSISTANTS with contemporary outlook and willing to use own initiative. Salary range £500 to £900. Congenial working conditions. Five-day week. Apply 29, Chesham Place, Belgrave Square, S.W.1. Telephone Belgrave 3361.

2398

**INTERMEDIATE ASSISTANTS** required for Architect's Office, London. Salary £600 to £800. Industrial and commercial projects. Scope for initiative and responsibility. Box 2340.

**GOLLINS, MELVIN, WARD & PARTNERS** have vacancies for JUNIOR STAFF interested in the contemporary design of hospitals and educational buildings. Five-day week. Pension scheme. Quarterly bonuses. Telephone WEL 9991.

2408

**EXPERIENCED ARCHITECT** required to take charge Branch Office, West Africa. Minimum three-year appointment. Excellent prospects for person with all-round qualifications. Write Box 2374.

**NORFOLK** Office requires Single ARCHITECTURAL ASSISTANT of about intermediate standard. Experience in Local Authority Housing an advantage. Reply with details of age and salary required to Box 2370.

**INTERMEDIATE** and Final standard ASSISTANTS required. Minimum 2 years' office experience. Salary according to ability. Theo. H. Birks, 38, Portland Place, W.1. LAN 7236. 2453

**SCHERRER & HICKS** require in their London Office a qualified ARCHITECTURAL ASSISTANT with 3 years' office experience for a variety of interesting contracts. Salary by arrangement. Apply in writing giving full particulars to 19, Cavendish Square, W.1.

2457

**OPPORTUNITY** for ASSISTANT of Intermediate to Final standard to handle complete jobs-houses, schoolwork, church halls and alteration work-with minimum supervision. Very pleasant (Worcester) office, young staff, contemporary outlook. Salary according to ability. Box 2412.



**SENIOR, Intermediate and Junior ASSISTANTS** required by Guy Morgan & Partners in their London office. Phone SLOane 0624 for appointment. 2455

**ARCHITECTURAL ASSISTANT** required in Chief Architect's Office of large Company with offices in Central London. All staff facilities; five-day week. Please state age, qualifications, experience and salary required. Box 2402.

**ARCHITECTURAL ASSISTANT** required. Busy office, commercial and industrial work, excellent scope for design. Apply, stating experience, reference and salary required, to G. Yarwood, F.R.I.B.A., The Barnsley British Co-operative Society Ltd., Twibell Street, Barnsley. 2414

**AGRICULTURAL ESTATE** requires **ARCHITECTURAL DRAUGHTSMAN** for 12/18 months only. Must be experienced in preparing working and detail drawings. The post would suit a young qualified Architect seeking experience in layout and design of farm buildings. Apply in writing, stating age, experience and salary required, to The Agent, Estate Office, Edensor, Bakewell, Derbyshire. 2416

**BUSY** private practice has vacancy for **QUALIFIED ASSISTANT**, fully experienced and preferably car owner/driver. Varied and interesting works including Domestic, Commercial, Industrial and Ecclesiastical. Please apply, giving fullest details to A. R. Laing, Deacon & Laing, 65, Golding Road, Bedford. 2424

**GLASGOW ARCHITECTS**, young firm expanding to new offices early 1959, now seek (i) experienced **ASSISTANT**, (ii) keen **JUNIOR**. Five-day week. Pension Scheme. Busy but congenial atmosphere. Write basic particulars, in confidence, to S. Lothian Barclay, A.R.I.B.A., 75, West Regent Street, Glasgow, C.2, or telephone Douglas 3069 for appointment. 2426

**BURLES & NEWTON** require **ARCHITECTURAL ASSISTANTS**, aged 20-24, Intermediate standard. The appointments offer experience and opportunity. Reply 25, Bedford Row, W.C.1, or 36/3, County Chambers, Weston Road, Southend-on-Sea. 2428

**ARCHITECTURAL ASSISTANT** required from about Intermediate standard to recently qualified, for interesting and varied work in practice mainly concerned with commercial projects. Five-day week. Congenial working conditions. Salary by arrangement. Apply in writing, giving full particulars, age, to J. Alfred Harper & Son, Union Chambers, 63, Temple Row, Birmingham. 2447

**LEWELLYN SMITH & WATERS** require **SENIOR and JUNIOR ASSISTANTS** for a widely varied programme of work. Salary according to experience. Please write, stating qualifications, experience and age, to 103, Old Brompton Road, S.W.7. 2446

**ARCHITECTURAL ASSISTANT** required in small central London office, wide variety of work and good prospects. Salary £500-£550. Private study by arrangement. Applicant should be 3rd or 4th year student or 2nd year if adequate office experience. Write or phone: Michael Blampied & Partners, 63a, Great Russell Street, W.C.1. Chancery 7209. 2442

**TREHEARNE & NORMAN, PRESTON & PARTNERS** have vacancies for **SENIOR ASSISTANTS**. Salary according to experience and qualifications. Apply: 83, Kingsway, W.C.2 (EOL 4071). 2439

**ARCHITECTURAL ASSISTANTS**, Senior and Junior, required for large projects in Birmingham Office. Write, stating experience, age, and salary required. Box 2434.

**ARCHITECTURAL ASSISTANT** required by Construction Department of Leading Merseyside Commercial Organisation undertaking extensive development programme. The work is varied and interesting, covering building projects throughout the British Isles, and offers considerable scope for man with initiative who has attained Inter R.I.B.A. standard. Age not over 35. Five-day week. Staff Life Assurance and Pension Scheme. Commencing salary commensurate with experience. Applicants should in the first instance give full details of experience and salary expected to Box 2546.

**NEWMAN, LEVINSON & PARTNERS** require **SENIOR and JUNIOR ASSISTANTS** with experience of commercial and industrial work in the London Area. Good prospects for suitable candidates in busy but congenial office. Write stating experience and commencing salary required, to 9 Mansfield Street, London, W.1, or telephone LANGham 9253/4. 2548

**ARCHITECTURAL ASSISTANT** wanted. Intermediate to Final standard, with minimum two years' office experience, for small, busy (hectic) private West End practice. Quick, neat draughtsmanship essential. Write stating experience, salary required, etc., to Box 2526.

**ARCHITECTURAL ASSISTANT** with some office experience required for busy expanding Practice in Manchester. Should be keen and capable of doing various types of schemes under supervision. Opportunity for developing own ideas in interesting projects. Pleasant office, and good salary offered. Write with brief details, in first instance, to Box 2525.

**ARCHITECTURAL ASSISTANT** required, R.I.B.A. Intermediate to Final standard. All-round experience and initiative essential. Apply with full particulars of age, past employment and salary required to Geoffrey Bazeley & Barbary, 2/F.R.I.B.A., 5, Portland Square, Plymouth. 2529

**ARCHITECTURAL ASSISTANTS** required for several large projects. Excellent opportunities to suitable applicants. Five-day week. Please write giving full particulars of experience and salary required to Johns, Slater & Howard, F.A.R.I.B.A., 32, Foundation Street, Ipswich. 2531

**A YOUNG ARCHITECT** (24-30 years) is required in the Display Department of a large Shoe Manufacturing Company. Duties will include the design of shop fronts, interiors and promotional display material. Salary will depend upon qualifications and experience. Applications should be made to the Personnel Officer, C. & J. Clark Limited, Street, Somerset, marked "Private and Confidential." 2539

**ARCHITECTURAL ASSISTANT** with experience required for busy Dartford office. Applicant must be experienced in handling contracts and taking responsibility under minimum supervision. Write giving full particulars of experience and salary required to Box 2538.

**ARCHITECTURAL ASSISTANTS**, aged 28-45, required by London firm of architects with large and varied practice. Apply stating age, experience and salary required to Box 2537.

**LANCHESTER & LODGE** urgently require an **ARCHITECTURAL ASSISTANT** nearing Final standard to assist on large and interesting University project. Write full particulars, 10, Woburn Square, London, W.C.1. 2534

**LANCHESTER & LODGE** urgently require a **JUNIOR ASSISTANT** with minimum of 2 years' experience. Write full particulars, 10, Woburn Square, London, W.C.1. 2535

**ARCHITECTS' co-partnership** require qualified **ASSISTANT** with experience for University work. Write 44 Charlotte Street, W.1, or Telephone LANGham 5791. 2506

**YOUNG** qualified **ASSISTANT** required in Nottingham office. Position of responsibility in all aspects of private practice. Prospects of working partnership after probationary period. Salary according to age and experience. Box 2503.

**ASSISTANT** required in East Midland office. Scope for drive and initiative. Write giving age, experience and salary required to Box 2504.

**INTERMEDIATE** standard **ARCHITECTURAL ASSISTANT** with domestic and industrial experience, etc., required for appointment early in 1959, by Building Contractors and Development Company, South Bucks. Write in confidence giving full details including age and expected salary to Box 2502.

**NORMAN & DAWBARN** invite applications from **ASSISTANTS** with at least three years' office experience. Write to 7 Portland Place, W.1. 2501

**ENTHUSIASTIC ASSISTANT** required immediately for modern practice. Write to Messrs. Godsmark & Miller-Williams, 37A Twibell Row, Darlington. 2497

**JUNIOR ASSISTANT** required to Architect and Surveyor. Some experience and good draughtsmanship essential. Apply giving details of experience and salary required to Herbert Cox & Gear, Architects, 2 Harpenden Road, St. Albans, Herts. 2496

**NORTH-WEST MIDLAND BREWERY** Architect requires **ASSISTANT**. Previous Brewery experience an advantage but not essential. Good prospects for a man of tact and enthusiasm. Pension fund operating. Salary by arrangement depending on age and experience but applicants in giving full details are requested to state present remuneration. Box 2522.

**CHIEF ASSISTANT** required for Architect's Practice in St. Albans. Possibility of working partnership subject to satisfactory service. Write giving particulars to Box 2520.

**ARCHITECTURAL ASSISTANT**, Intermediate standard, required for Architect's Practice in St. Albans. Salary by arrangement. Write giving particulars to Box 2521.

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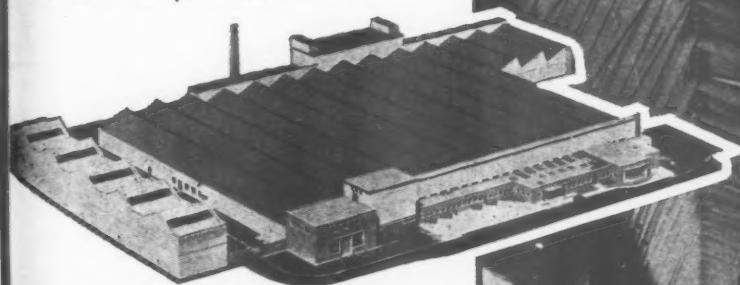
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