The Architects' JOURNAL for October 23, 1958

THE ARCHITECTS' JOURNAL

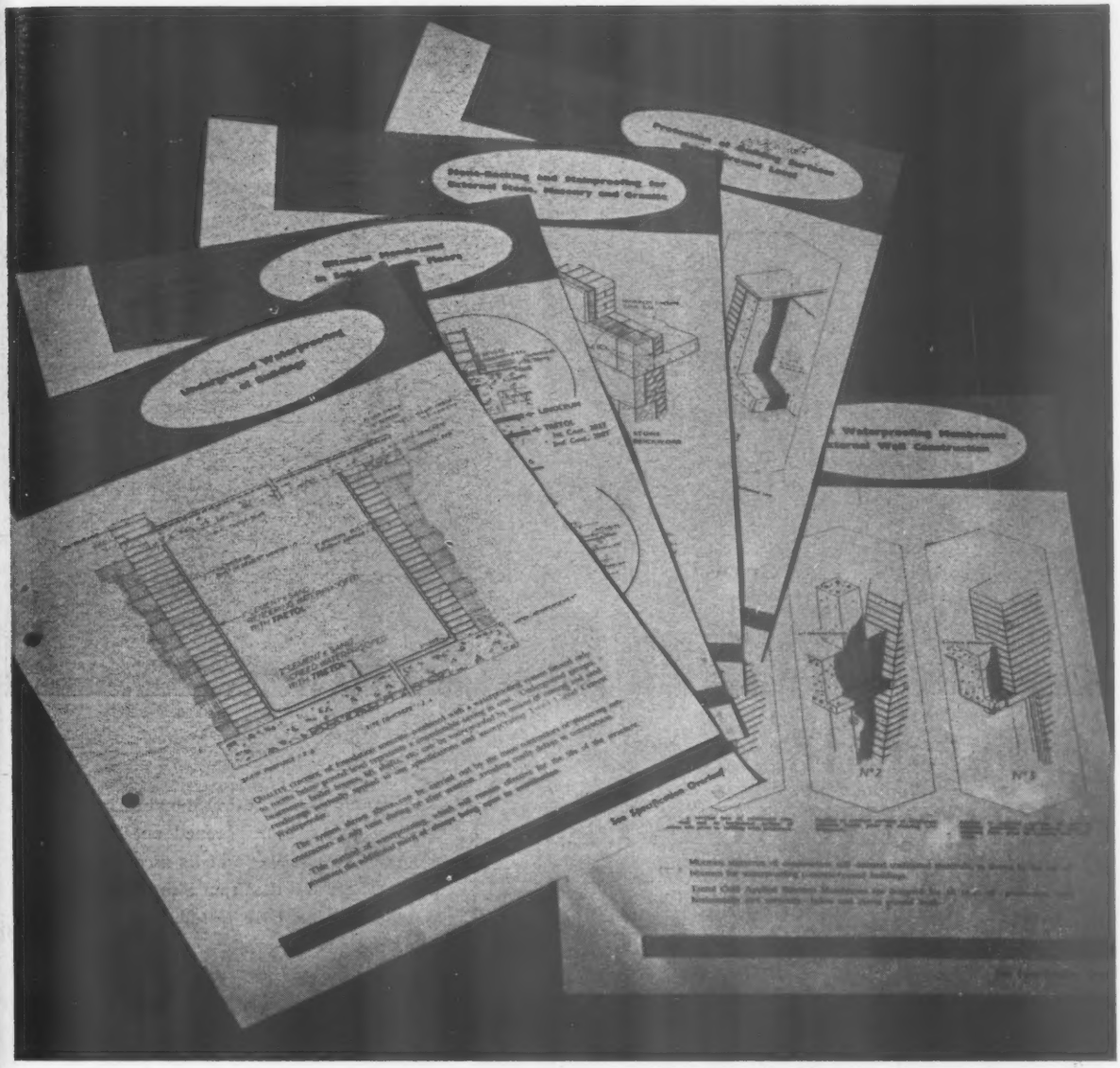
. 3321] [Vol. 128

HE ARCHITECTURAL PRESS
11 and 13, Queen Anne's Gate, Westminster, W.1. *'Phone: Whitehall 0611*

Price 1s. 0d.
Registered as a Newspaper.

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

ILA	Institute of Landscape Architects. 2, Guildford Place, W.C.1.	Holborn 0281
I of Arb	Institute of Arbitrators. Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7179
IQS	Institute of Quantity Surveyors. 98, Gloucester Place, W.1.	Welbeck 1859
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 68, Gloucester Place, W.1.	Welbeck 9966
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
JFRO	Joint Fire Research Organisation (DSIR & Fire Offices' Committee). Fire Research Station, Boreham Wood, Herts.	Elstree 1341/1797
LDA	Lead Development Association. 18, Adam Street, W.C.2.	Whitehall 4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MAFF	Ministry of Agriculture, Fisheries and Food. Whitehall Place, S.W.1.	Trafalgar 7711
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. 23, Savile Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, W.C.2.	Gerrard 6933
MOT	Ministry of Transport, Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine Owners and Manufacturers Council. 94/98, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 4813
NBR	National Buildings Record, 31, Chester Terrace, Regent's Park, N.W.1.	Welbeck 0619
NCBMP	National Council of Building Material Producers, 10, Storey's Gate, S.W.1	Abbey 5111
NEFMAI	National Employers Federation of the Mastic Asphalt Industry. 21, John Adam Street, Adelphi, W.C.2.	Trafalgar 3927
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives. Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4451
NFHS	National Federation of Housing Societies. 12, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 58, Portland Place, W.1.	Langham 0064/5
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NRDB	Natural Rubber Development Board. Market Buildings, Mark Lane, E.C.3.	Mansion House 9383
NSAS	National Smoke Abatement Society. Palace Chambers, Bridge Street, S.W.1.	Trafalgar 6838
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Fountainbridge 7631
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5533
RICS	Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1.	Whitehall 5322/9245
RFAC	Royal Fine Art Commission. 5, Old Palace Yard, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSH	Royal Society of Health. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, E.C.3.	Mansion House 3921
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	Langham 1984/5
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1.	Langham 7616
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 75, Cannon Street, E.C.4.	City 5040
WDC	War Damage Commission. 6, Carlton House Terrace, S.W.1.	Whitehall 4341
ZDA	Zinc Development Association. 34, Berkeley Square, W.1.	Grosvenor 6636



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THESE five specification sheets deal with various aspects of waterproofing structures. They cover the use of cold-applied bitumen solutions as both horizontal and vertical damp-proof membranes. One sheet is devoted entirely to the correct application of internal waterproof renderings as an alternative to tanking. When used in conjunction with the wide range of Tretol specialised building products, the treatments described will ensure an effective solution to many waterproofing problems.

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If these sheets are not already in your files, we shall be glad to send you a set and also place you on our mailing list for further sheets which will be issued from time to time. Filing will be no problem, since they are designed to the recommended British Standards size for technical literature.

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The new Montague Burton shop in Kirkgate, Wakefield, has been planned on the most modern lines. And one of its most contemporary features is the Crane Skirting Heating system that has been installed. This offers enormous advantages for any modern building. It is inconspicuous, merely taking the place of the normal skirting. It does not take up valuable floor area—it heats evenly. Radiant/Convector type 9 inch panels were installed throughout together with No. 3 Series 'L' Whitehall Cast Iron Sectional Boiler—oil burning. The other type of Crane Skirting Heating is Type R (Radiant) **which has recently been made available in the 9-inch size as well as the 6-inch size.** The panels are in 1-foot and 2-foot lengths, are made of cast iron and will not buckle or yield under the most arduous duty.

B 22

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BUILDING CONSTRUCTION: Montague Burton Construction Co. Ltd., Leeds.

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By courtesy of H. J. Heinz Co. Ltd.
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Partner in charge, M. Ryan, A.R.I.B.A. Dip. A.A.
Main Contractors: A. Monk & Company Limited

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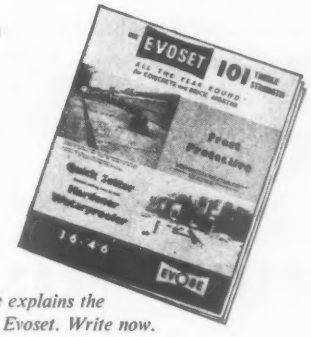

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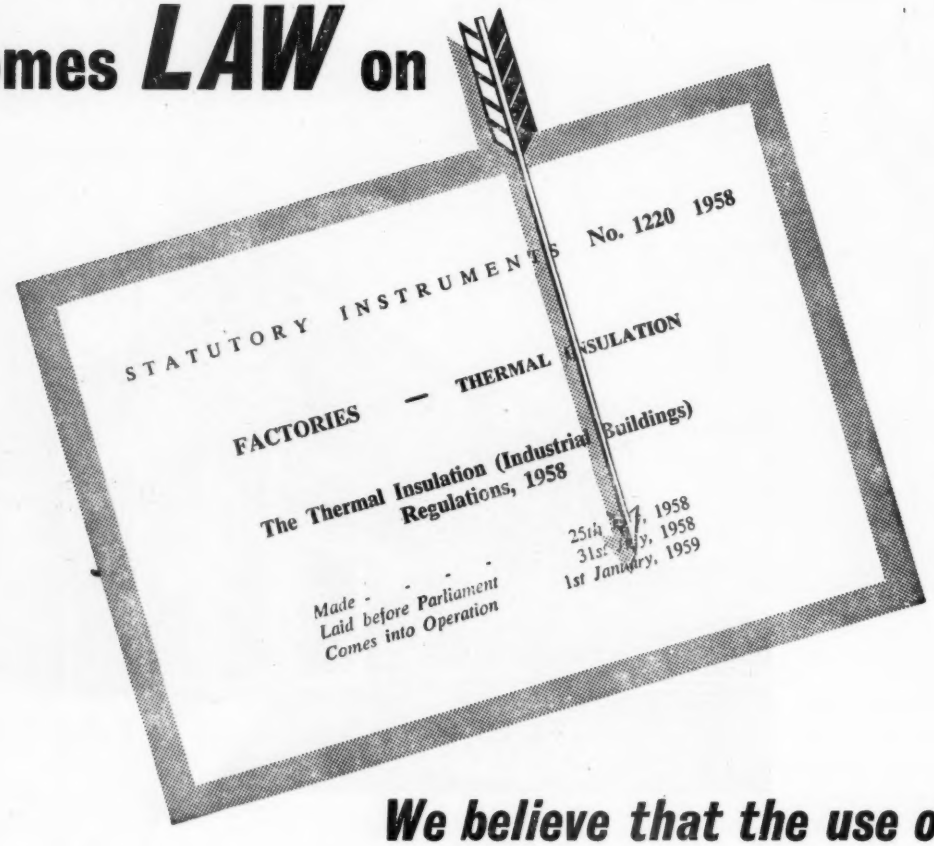

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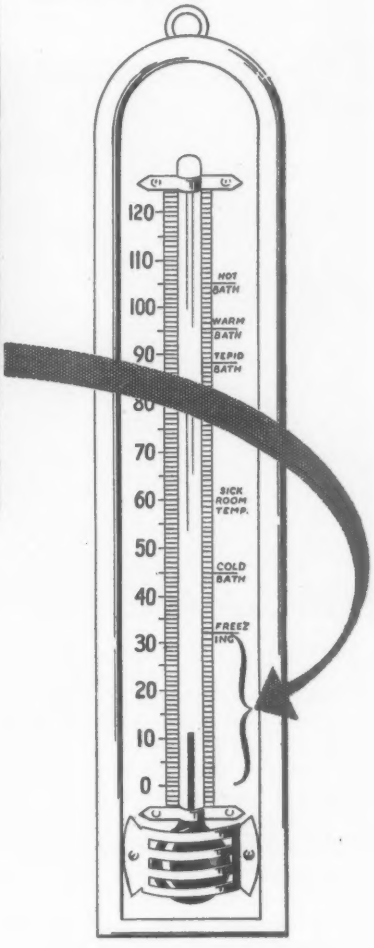
AP130

Cold Facts

Small Estate Private Houses, Stanstead Abbots, Hertfordshire. Contractors: Gray Conoley & Co. Ltd. London, E.16.



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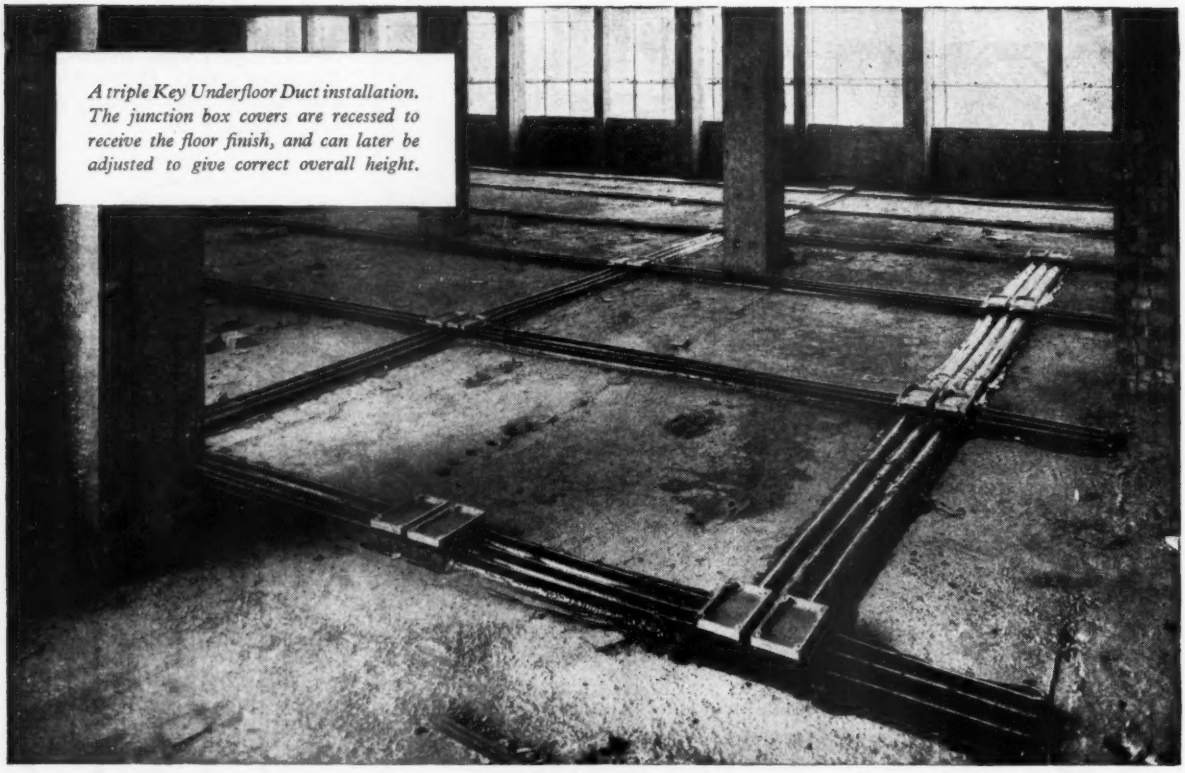
Key Underfloor Duct
solves wiring problems economically



A triple Key Underfloor Duct installation. The junction box covers are recessed to receive the floor finish, and can later be adjusted to give correct overall height.

Electric power and telephone outlets can be installed and added as necessary when Key Fibre Underfloor Duct is used. On a materials plus labour basis the cost of installations is lower than any metal system. Because of their light weight and ease of cutting and fitting, Key ducts can be quickly laid. Since there is no necessity to pre-position outlets, the architect can install an underfloor duct scheme, and later fit outlets to suit the occupant's requirements. The fitting of these outlets is a quick and simple matter and the most complete range of fittings is available for lighting and telephone systems.

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Speed the job—cut the cost with the

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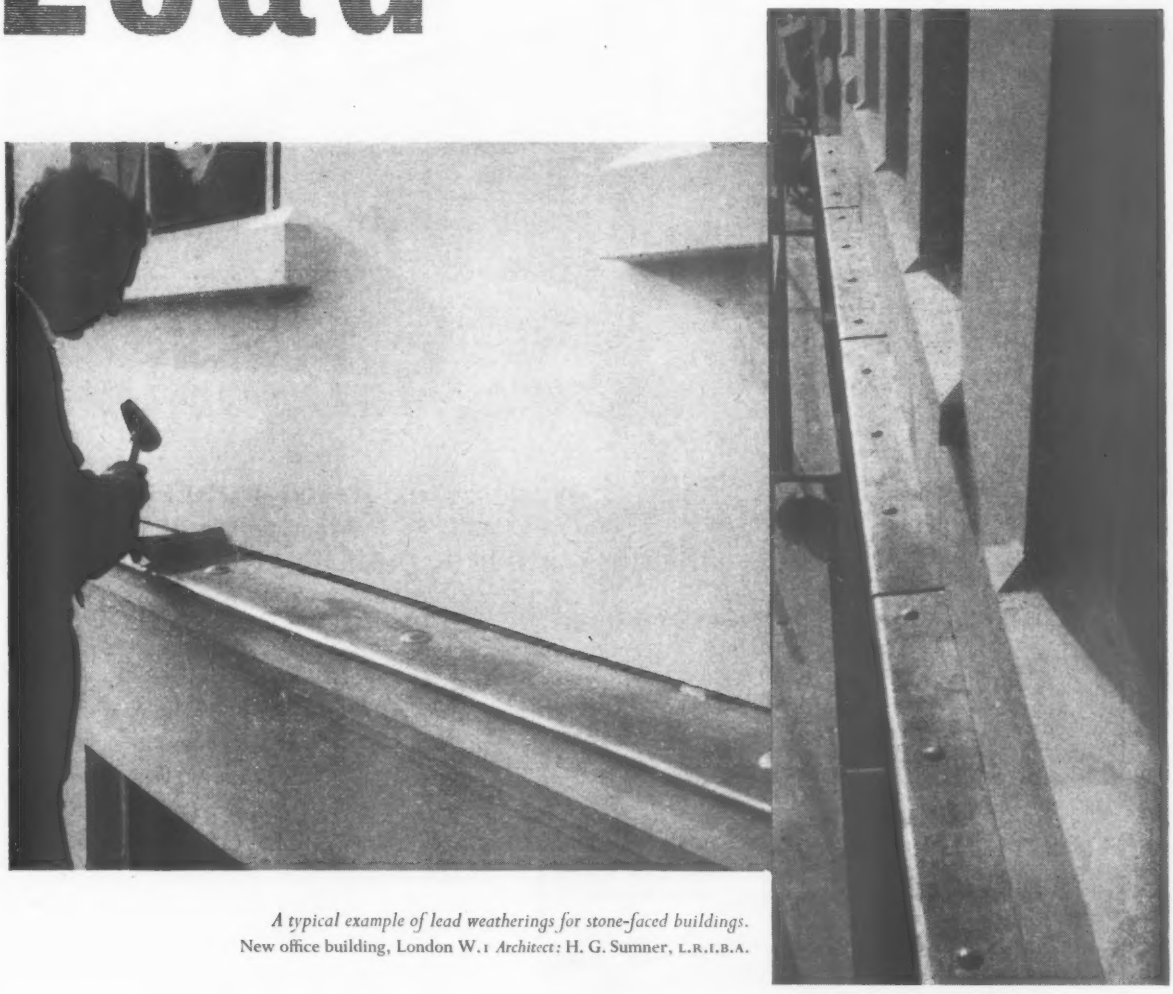
Lead weatherings...



A typical example of lead weatherings for stone-faced buildings.
New office building, London W.1 *Architect:* H. G. Sumner, L.R.I.B.A.

A FAMILIAR JOB to the plumber is fixing lead weatherings to cover cornices and similar projections of stone-faced buildings.

Lead is extensively used for such weatherings, because experience proves it to be the best material for the purpose—it does not stain adjoining masonry—it gives

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The Association's Technical Information Bureau will gladly help with problems on the use of Lead Sheet and Pipe in building work. Details of the main uses are given in a series of information sheets and bulletins, which can be obtained by applying to the Association.

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B. 151

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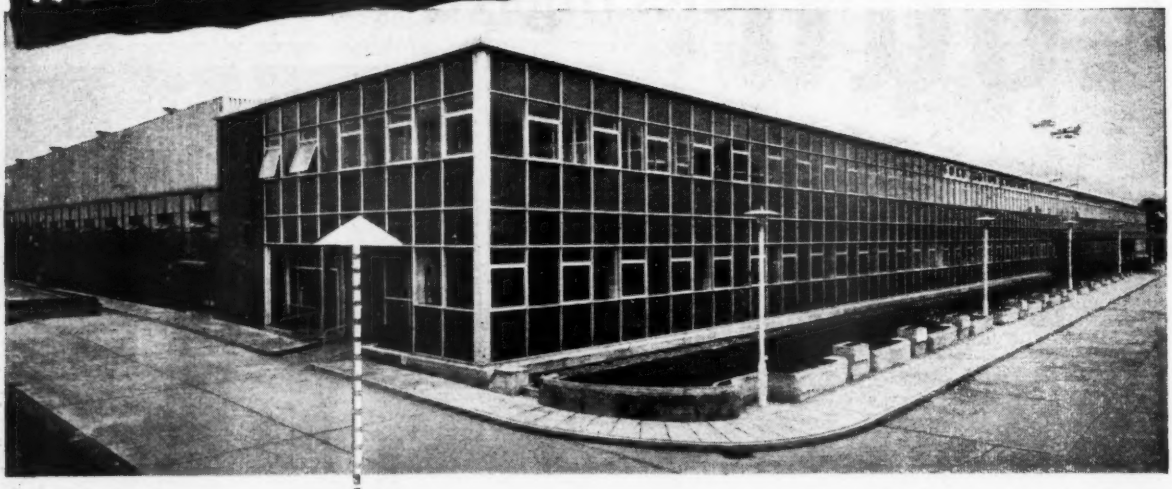

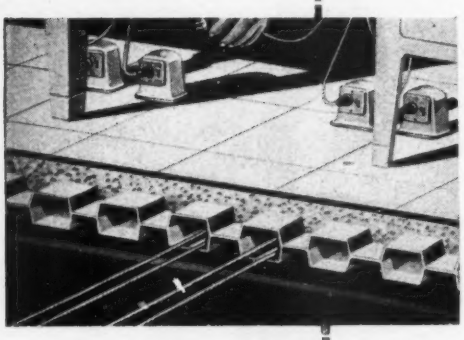

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In addition to serving as a structural load-bearing floor, Q-FLOOR provides a network of electrical wiring ducts over the entire floor area. This comprehensive system of ducts permits complete flexibility of partitions, desks and office machinery and enables new outlets to be installed at any time with the minimum of trouble.

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General Contractors: James Crosby & Sons Ltd.
Electrical Contractors: T. Clarke & Son

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THE VERSATILE ATLANTA

The Atlanta can be specified for any bathroom, large or small! As well as the 66", the Atlanta comes in 54", 60", 61" (available in two widths), and 72" lengths.

The Atlanta 54, 60 and 61 must be preferred to any other baths of these sizes because they are exact replicas of the full size bath, scaled down to small proportions.

Atlanta flat bottom helps to prevent slipping . . . ensures comfort.

Atlanta shallow step is safe for young and old. The Atlanta can be fitted to give an overall height of only 16".

With the Atlanta, taps can be fitted in three different positions to meet all possible requirements.

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The Atlanta is supplied with or without overflow . . . with or without handgrip.

No matter how many homes are involved, standard specification of the Bilston Atlanta ensures constant satisfaction. Its brilliant enamel finish remains unimpaired year after year! The Bilston range includes the exact colour required for any decorative scheme. Specify the Atlanta — it costs no more than an ordinary bath.

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— the bath *SPECIALISTS*

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Pyrodek

Trade Mark

poured in place gypsum concrete roof

An entirely new lightweight roof construction in which Gypsum Concrete is poured into place to a depth of 2 in. on bulb tee sections, formboard and reinforcing fabric to form an incombustible roof economical for areas of over 500 square yards.

VERSATILE CONSTRUCTION

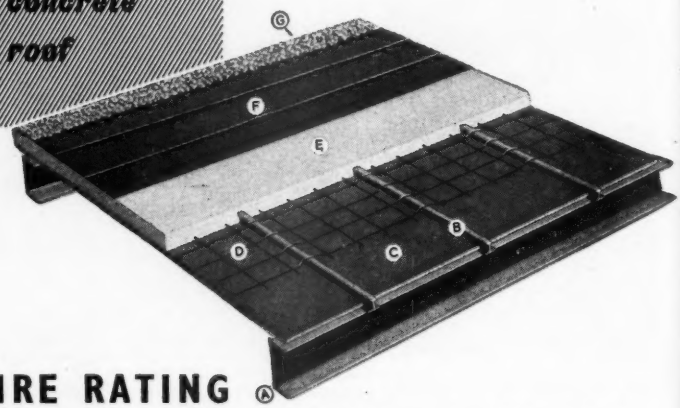
The system permits versatile design and can be adapted for use whether the supporting structural frame is steel or reinforced concrete, or whether the roof is flat, low pitched or curved.

HIGH SPEED CONSTRUCTION

The Gypsum is pumped into place from an automatic gauging and pumping equipment sited at ground level which enables up to 1000 square yards of Gypsum to be poured in one day. The set of Gypsum concrete is approx. 15 minutes after pouring and the roof will take light roof traffic after 1 hour.

1000 square yards of Pyrodek was specified for Maville Works, Nottingham, after it was gutted by fire. The building, which was modified from pitched to flat roof design, was re-roofed by ten men in ten working days including laying steelwork and formboard thus assisting in the early re-occupation of the building.

Ⓐ *Purlin.*
Ⓑ *Bulb tees.*
Ⓒ *Formboard.*
Ⓓ *Galvanised reinforcing fabric.*
Ⓔ *Pyrodek gypsum concrete.*
Ⓕ *Built-up roofing.*
Ⓖ *Gravel finish.*



FIRE RATING Ⓐ

The Department of Scientific and Industrial Research and Fire Offices' Committee Joint Fire Research Organisation subjected 'Pyrodek' to a standard fire resistance test. An extract from their report reads:—
"A 'Pyrodek' gypsum concrete roof approx. 3 inches thick was subject to a fire resistance test in which the soffit was exposed to the heating conditions specified in British Standard 476: Part 1. The specimen roof provided a barrier to the passage of fire for 2 hours 15 minutes when tested without imposed load on its upper surface. No collapse occurred, no cracks and holes formed through the specimen and the insulation provided by the deck prevented ignition of the bitumen on its top surface. The roof therefore provided fire resistance of the 2 hour grade."

D. ANDERSON & SON LIMITED

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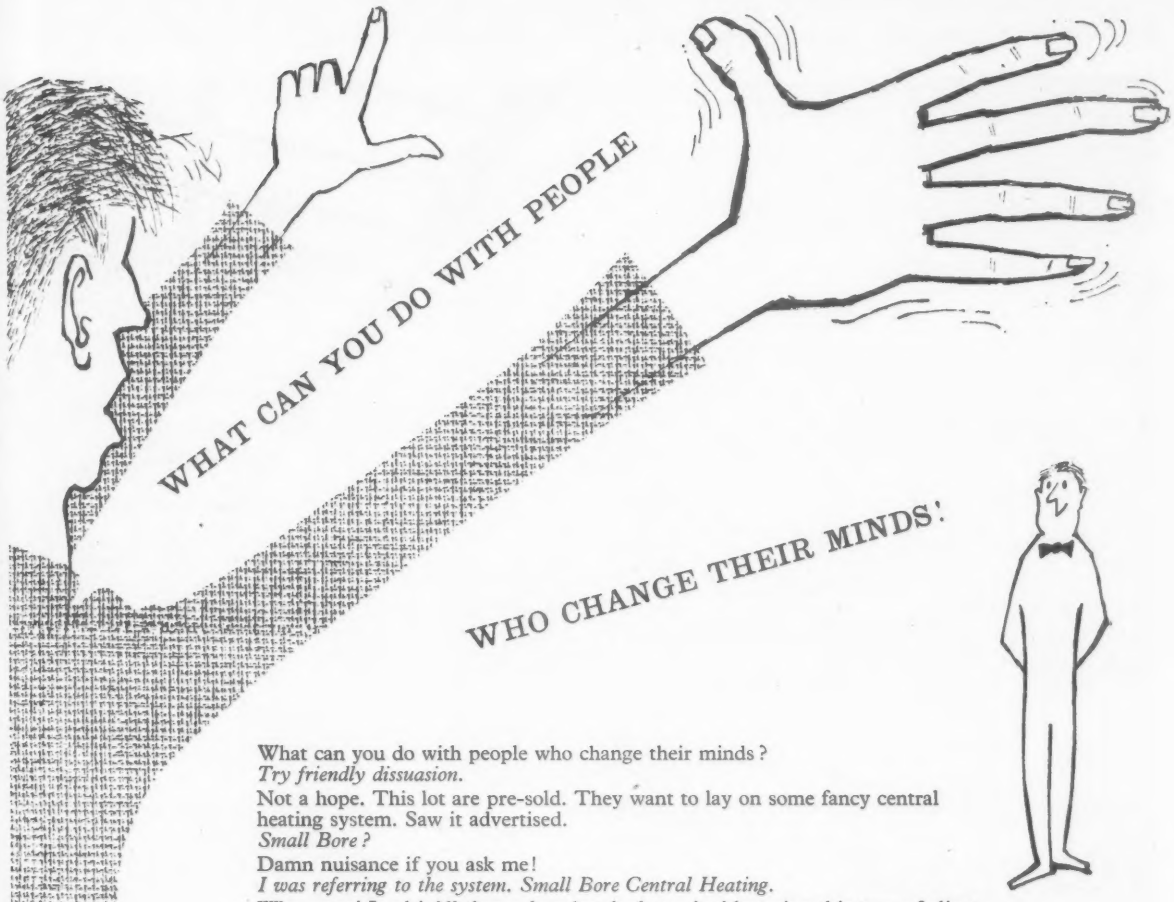

What can you do with people who change their minds?
Try friendly dissuasion.

Not a hope. This lot are pre-sold. They want to lay on some fancy central heating system. Saw it advertised.
Small Bore?

Damn nuisance if you ask me!
I was referring to the system. Small Bore Central Heating.

Who cares! Look! All these plans botched up. And knowing this type of client, they're bound to moan about the cost after the job's done.
Look here! What exactly do you know *about Small Bore?*

Absolutely nothing! But I've got a delicious set of prejudices—that it's a nine-day wonder, that it costs the earth . . . and that I might as well use these plans now for wrapping up fish-and-chips!
Well, let's uninhibit you . . . in the first place, Small Bore Heating was developed by the British Coal Utilisation Research Council and has thousands of successful installations to its credit. Secondly, it costs a fraction of what you would normally estimate for Central Heating. Thirdly, it can be installed with almost no alteration to your plans whatsoever except for the saving of chimney breasts and the odd flue or two.

Oil Firing, Solid Fuel, or what?
Yes, just that—or gas if you want it. And you lay on radiators, convectors, skirting panels, just whichever suits the job best.

What about the Small Bore bit?
That refers to the diameter of the pipes. That's why they're so neat—only about as thick as your little finger.

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The water's pumped round the system by a small electric pump. They call it the Sigmund ThermoPak, I think.

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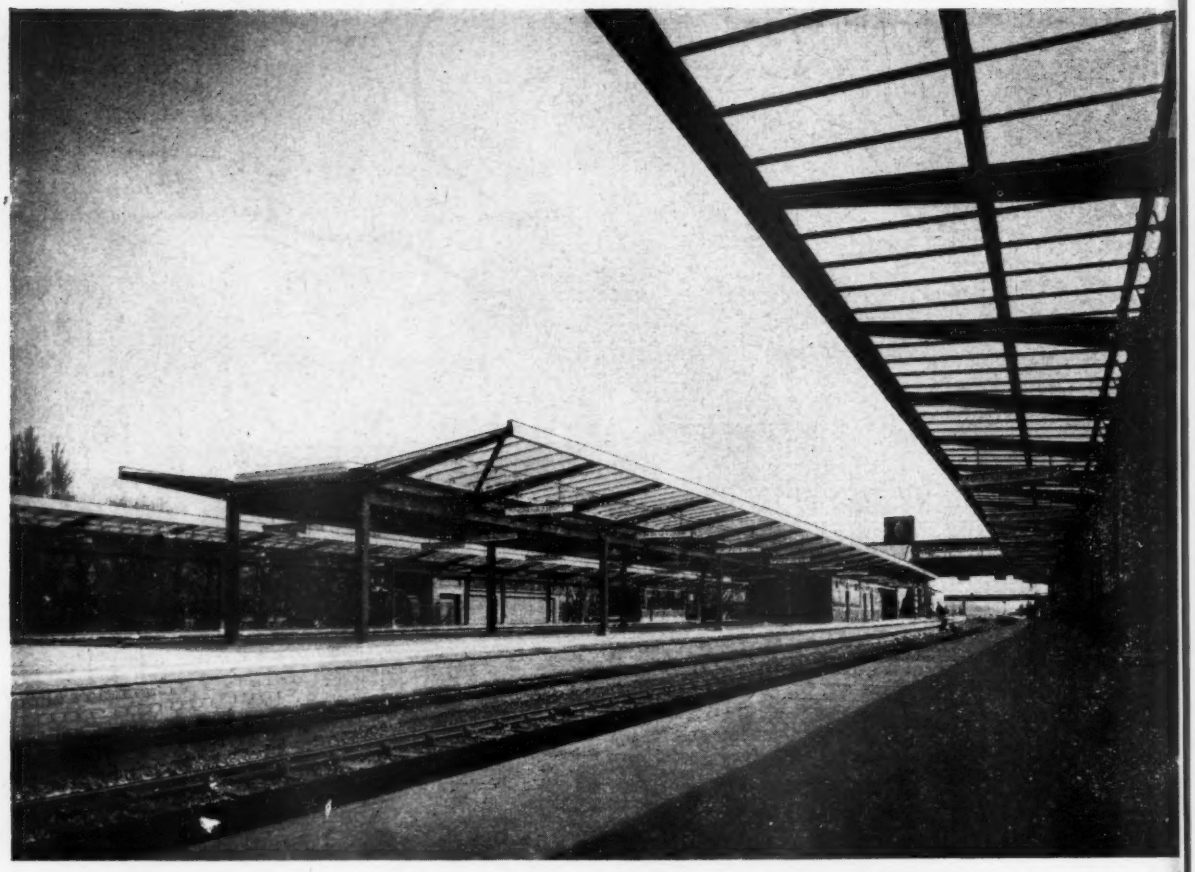
Yes, but not half as bad as when the client catches you bending . . .

Our Architect's Advisory Service will supply you, by return of post, with full technical details of the Small Bore System of Central Heating if you simply send your letterheading marked "Architect's Journal", to the address below.

SIGMUND PUMPS LIMITED

TEAM VALLEY TRADING ESTATE · GATESHEAD 11



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Architects:
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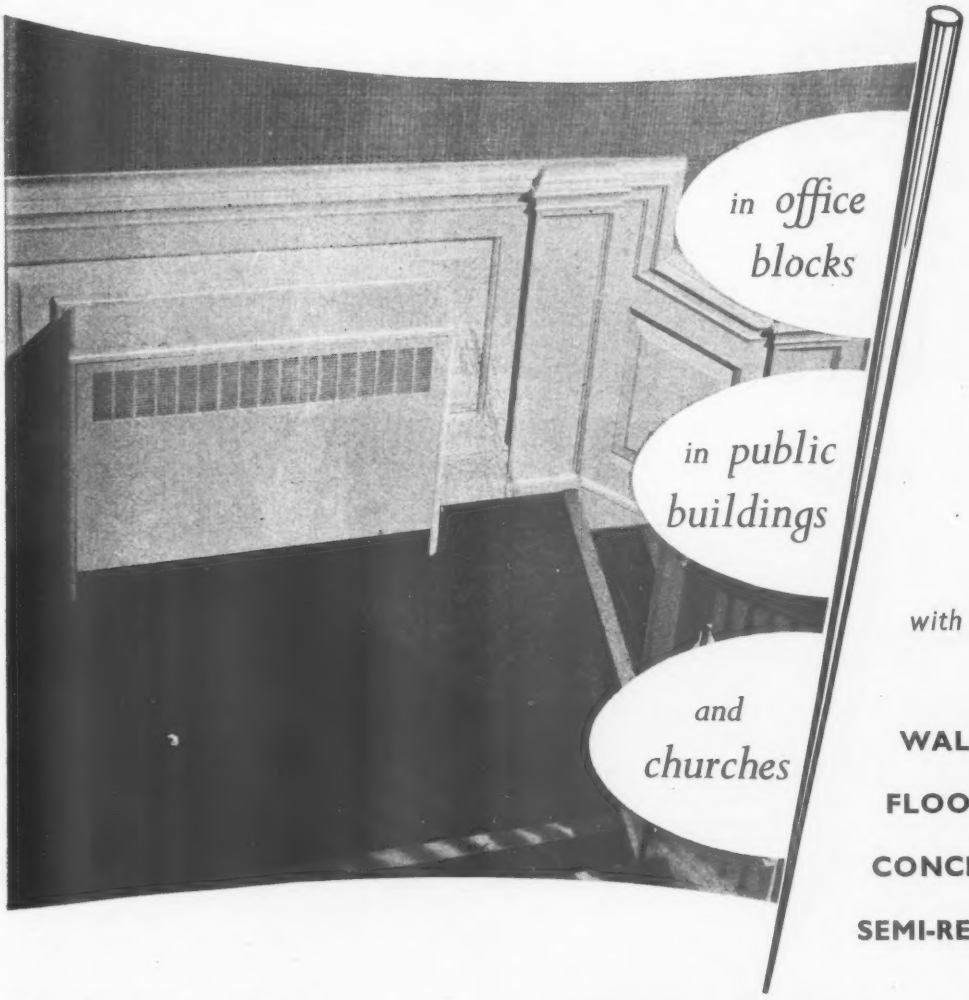
Fitting into the scheme of things . . .



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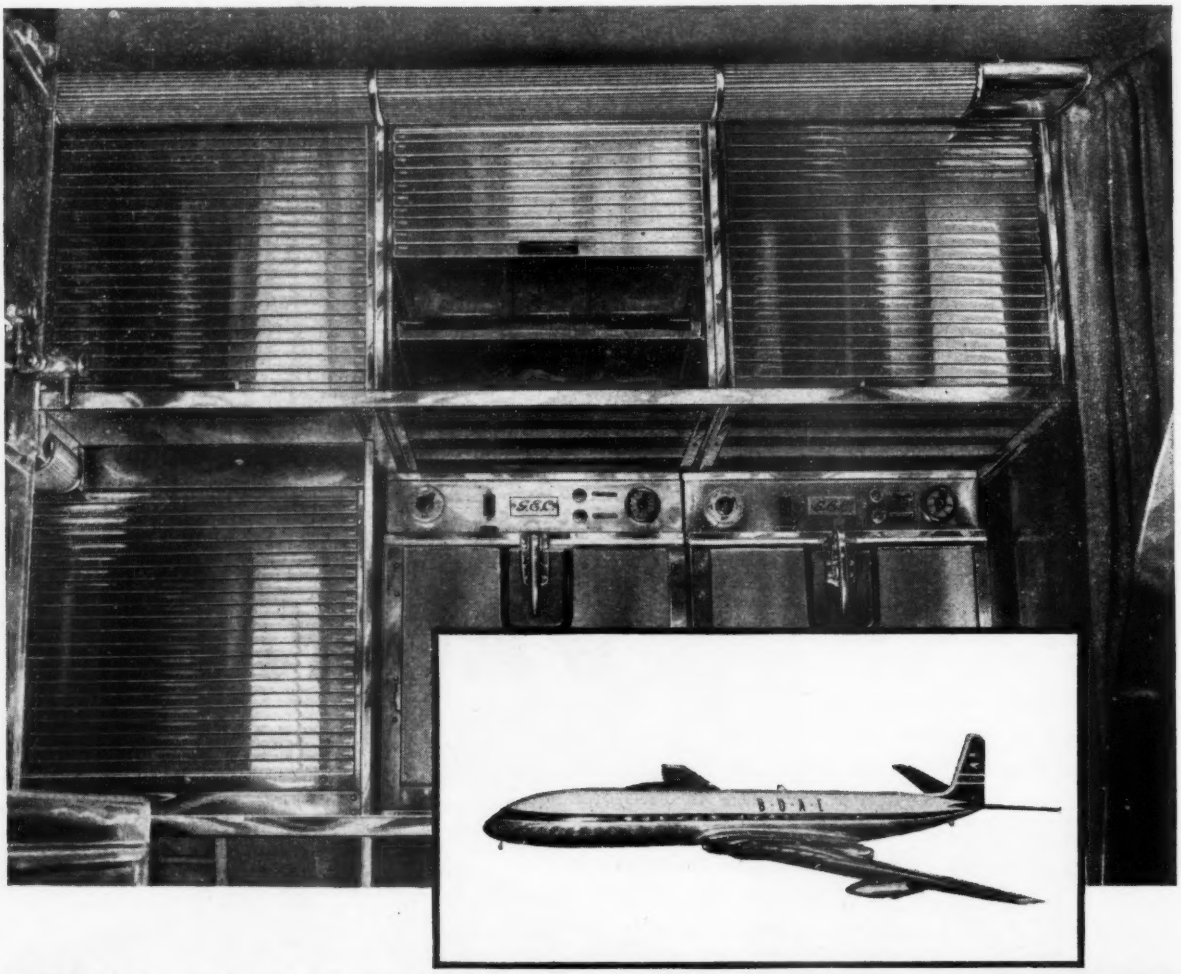

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It is agreed everywhere that tomorrow's buildings must be protected against fire. How best to achieve this? The use of factory-hung Lindoco Fire-Check doorways is an obvious starting point. These craftsmen-built doors have a core of solid Stramit which defies fire vigorously. They are available, complete with frames, in two types, Half-Hour and One-Hour. Both can be supplied in any size to suit individual requirements. Please write to us for further details.

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Lindoco patent factory-hung doorways are highly-efficient fire-barriers which fulfil all Fire-Check requirements as laid down by B.S. 476—1932 and BSS.459, Part III, 1946. Tests by the Department of Scientific and Industrial Research and Fire Offices Committee Joint Research Organisation indicate that the "half-hour type" door also passed for the GRADE "E" fire-resistance.

National Physical Laboratory tests show that the Lindoco Fire-Check door, with its core of solid Stramit, provides better insulation against airborne sound than a solid timber door Official test report forwarded on request.

There's an open-and-shut case for

Lindoco FIRE-CHECK DOORS

ALSO AVAILABLE: HIGH QUALITY FLUSH DOORS, PANELLED DOORS, GLAZED DOORS, GARAGE DOORS, ETC.

LINDEN DOORS LTD · *COWLEY PEACHEY · UXBRIDGE · MIDDLESEX · TELEPHONE: WEST DRAYTON 3751*

Trusconversations 5

SCENE: An architect's office
TIME: One of quiet concentration

"Jimmy"

(No answer)

"James!"

"What's that? . . . Yes?"

"Sorry to interrupt—how would you set about the concrete steppings for this sports stand?"

"Hy-Rib, old boy!"

"I'm afraid I . . . ."

"Can't go wrong! Good stuff—saves a lot on shuttering. What's more, they'll do all the drawings for you."

"I haven't got much to spend—you know how tight . . . ."

"Not to worry. I've used it lots of times—works out very well and they cut the price recently—10%, I think. Truscon make it."

"Do you think . . . ?"

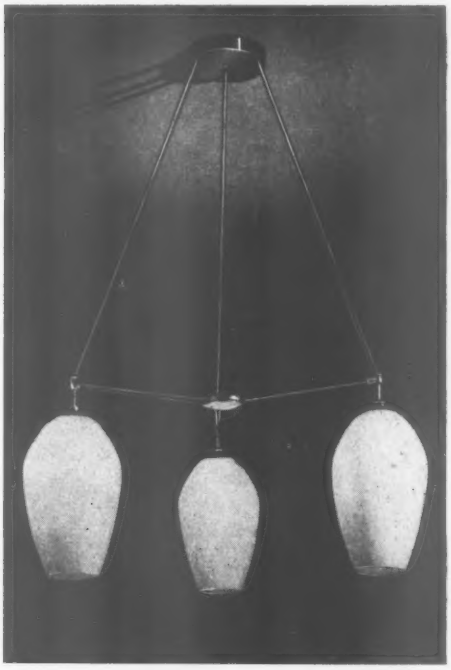
"Ring 'em up, old boy, ring 'em up."

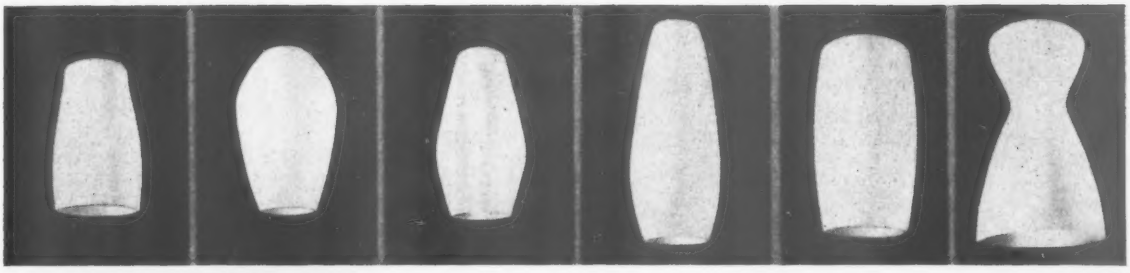
Satina

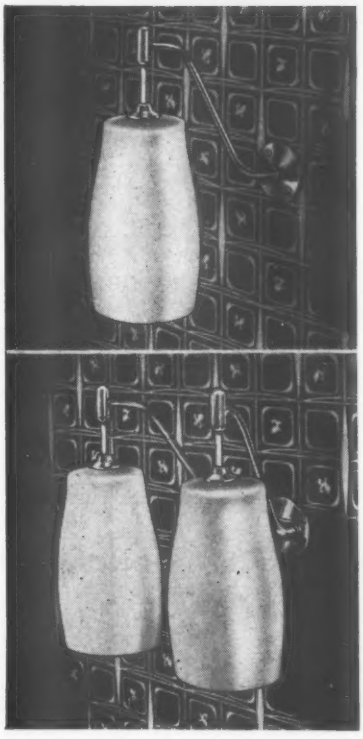
A range of lighting pendants with wall brackets to match, available with satin etched, white, opal or pink glass.

British Design

British Manufacture







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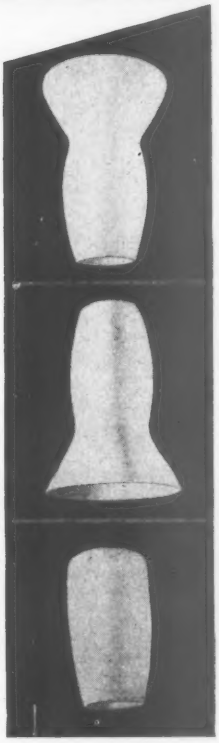
LONDON, S.W.1

TELEPHONE: SLOANE 0471-2

Please send for Catalogue



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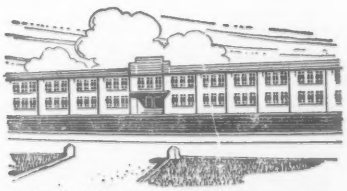

A Standard Maclean Metal Window Installation: Boots Pure Drug Co. Ltd., Airdrie, Lanarkshire Architects: Boots Pure Drug Co. Ltd. *Architectural & Engineering Dept.*

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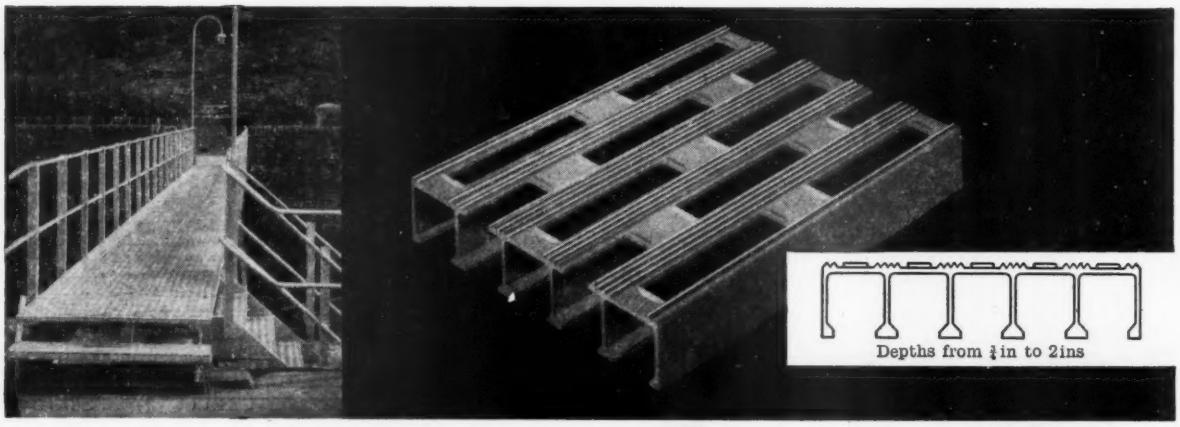
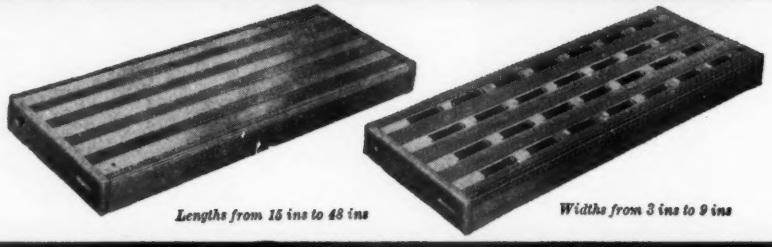
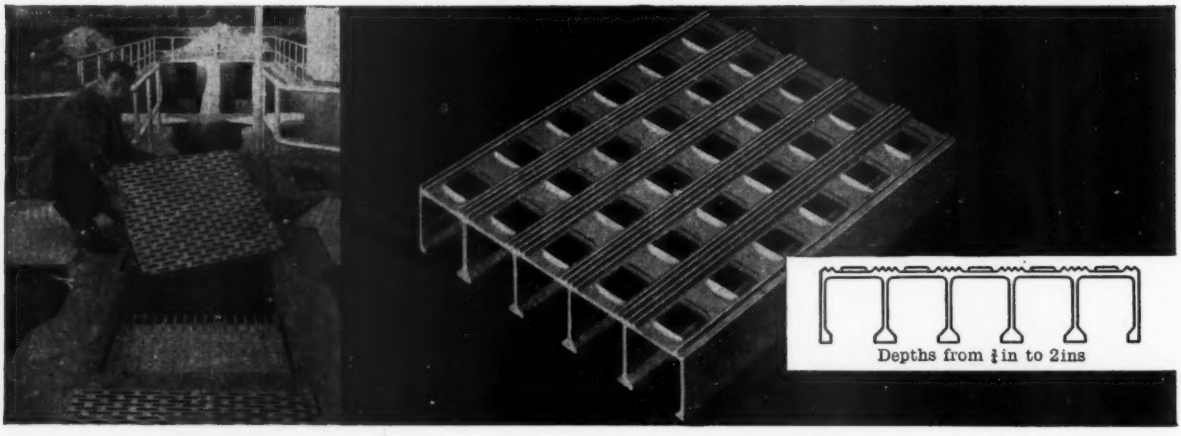


'ALAFLOR'
Treads Plain or Punched





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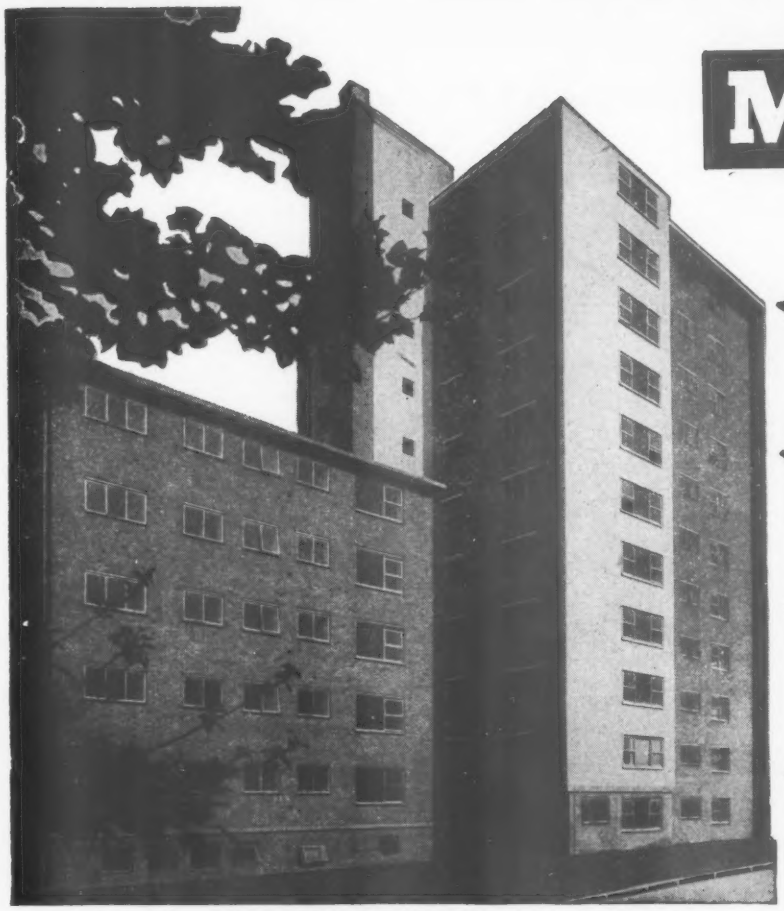

ARCHITECTS: MESSRS. REDGRAVE & CLARK, A.R.I.B.A., F.R.I.B.A.

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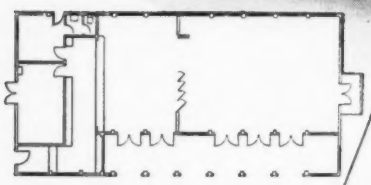

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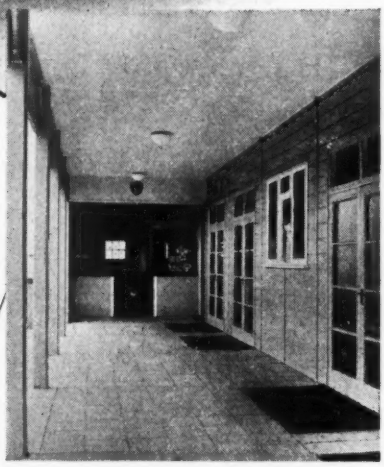

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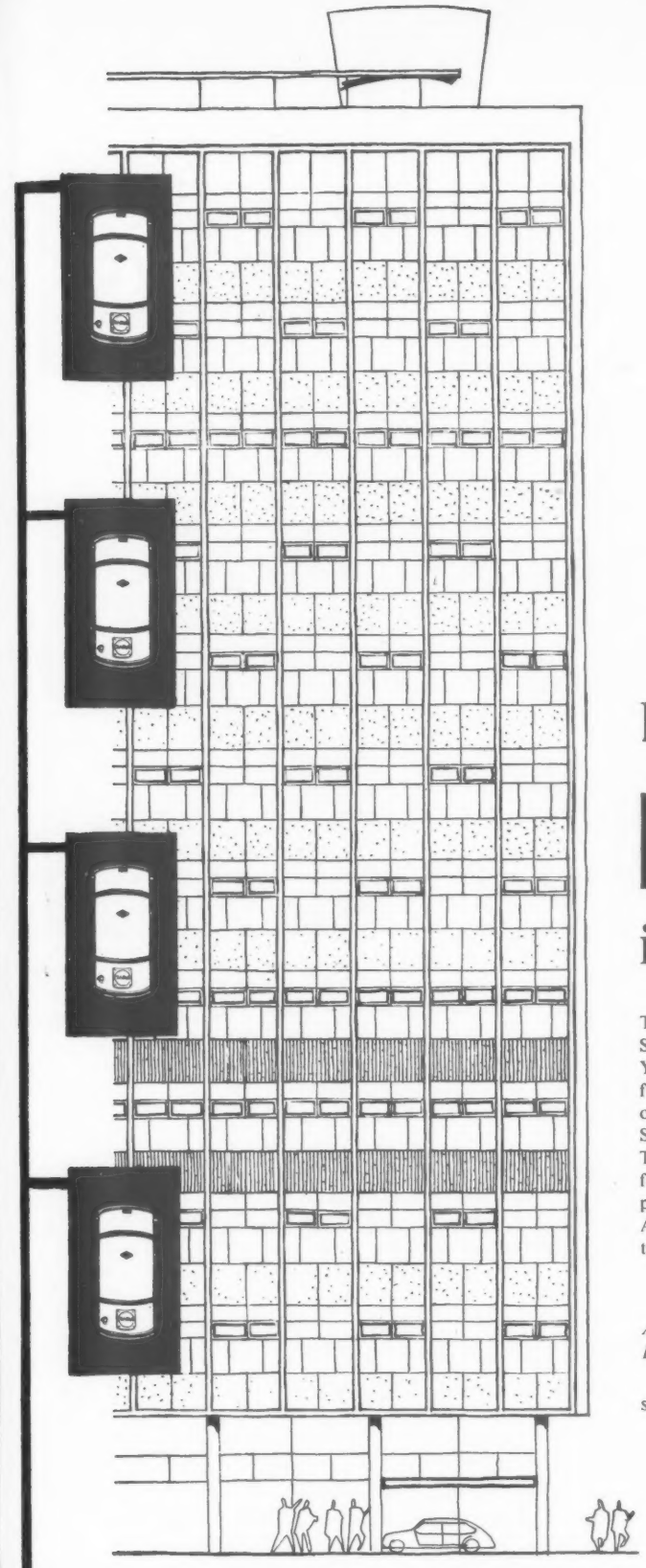

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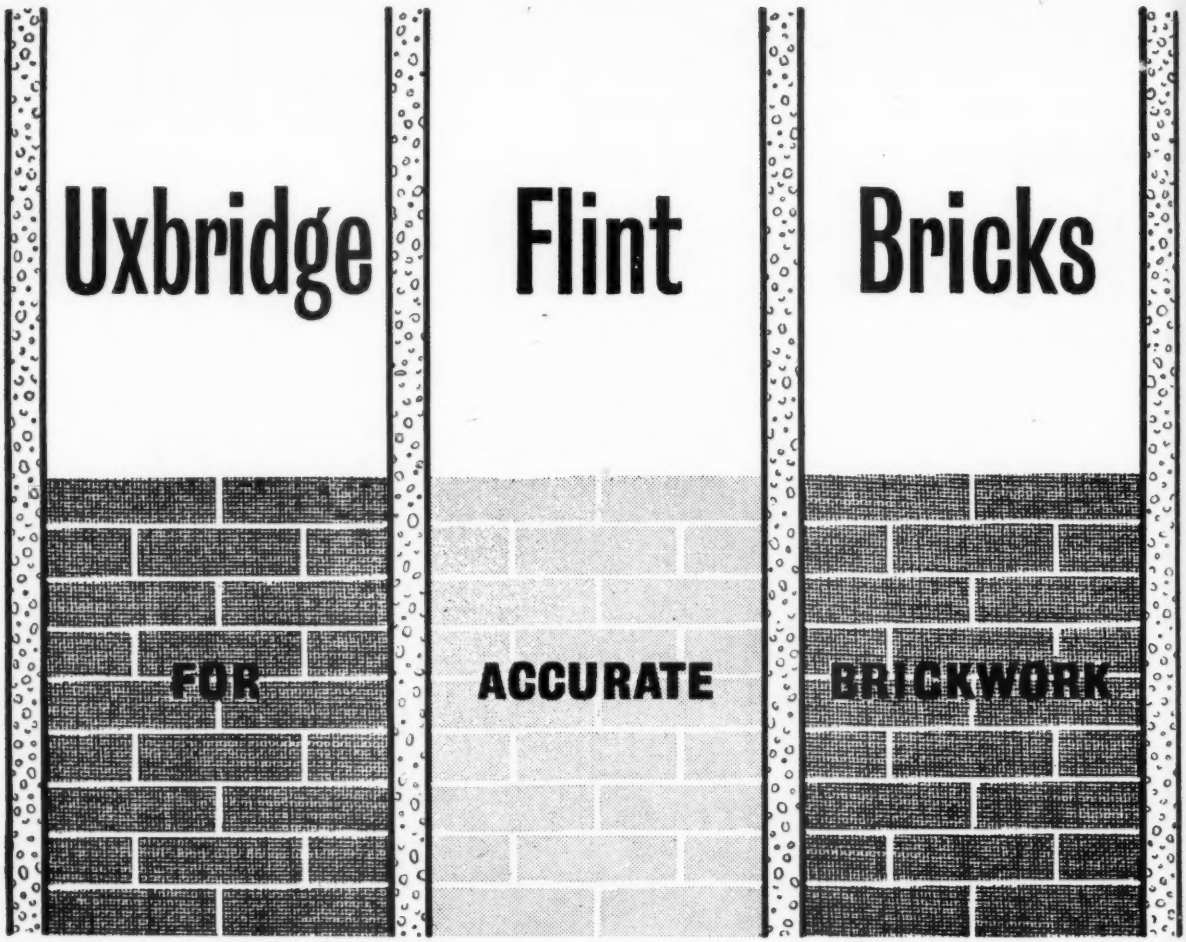

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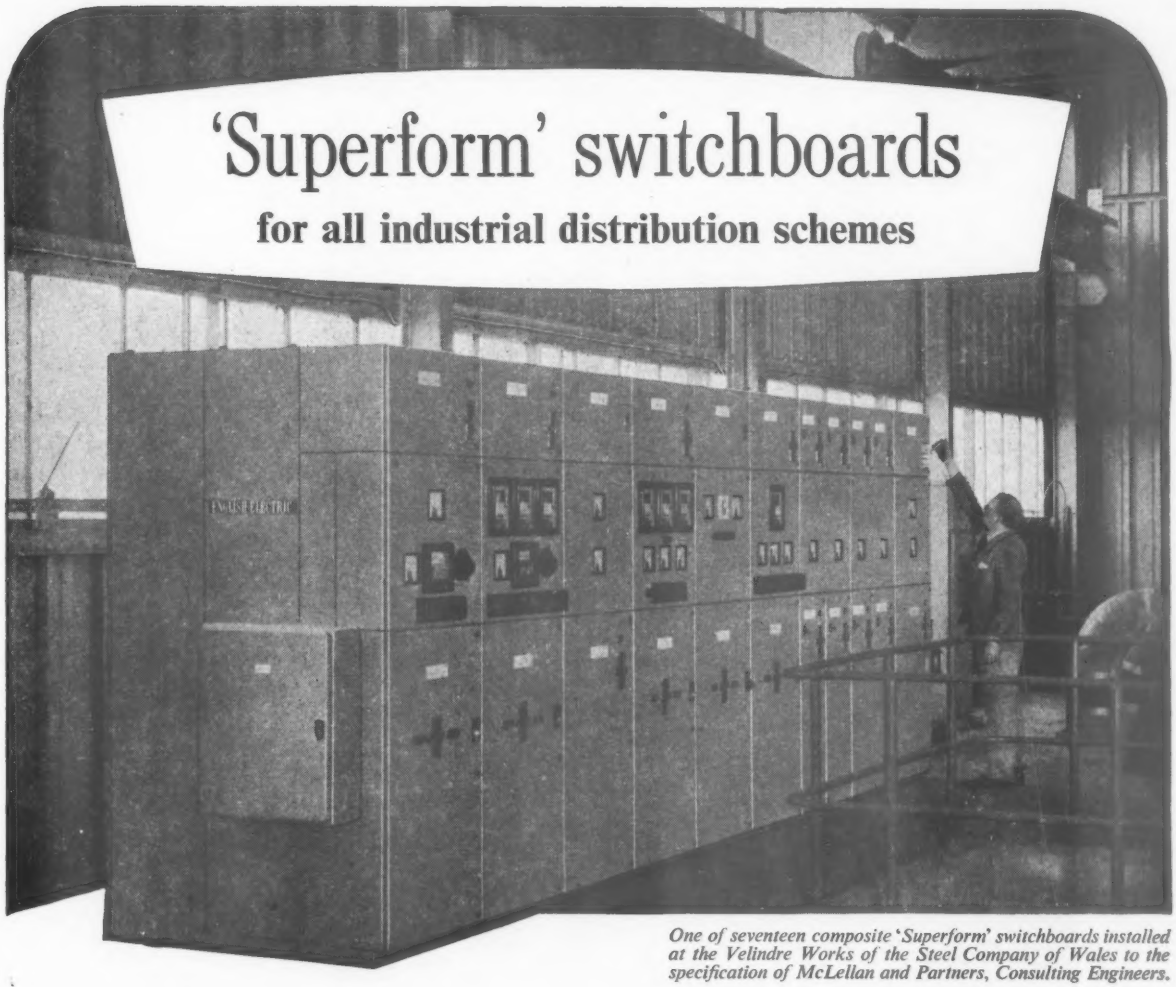

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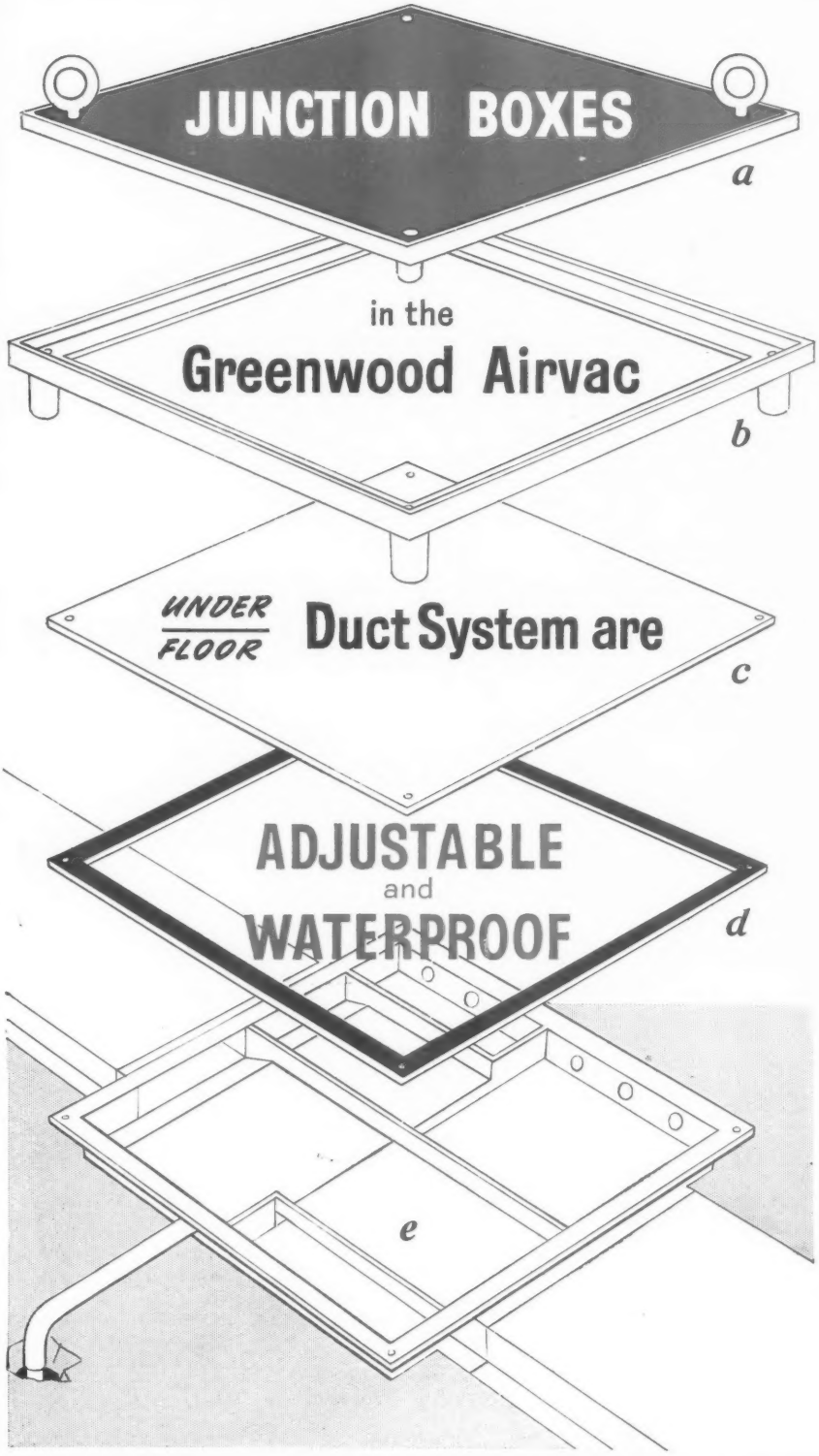

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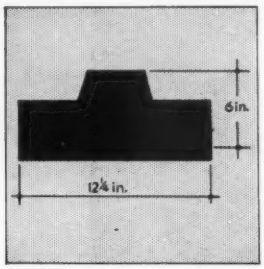

one of many decorative designs

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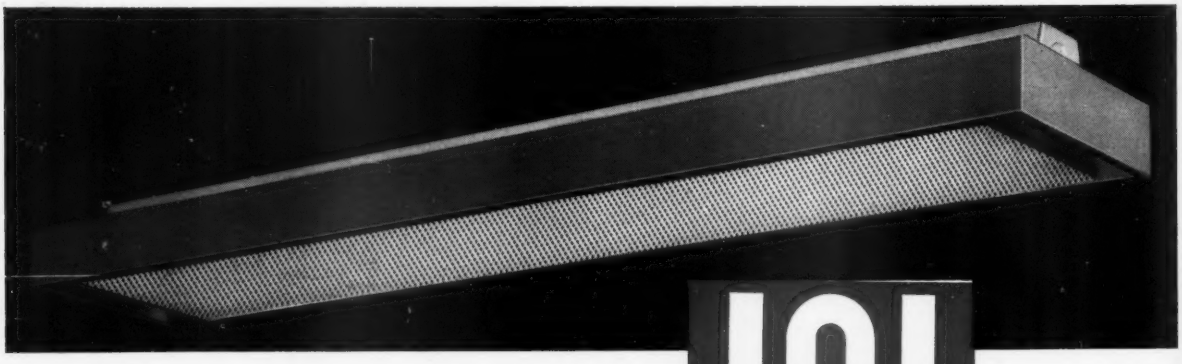

101 range

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G.E.C.

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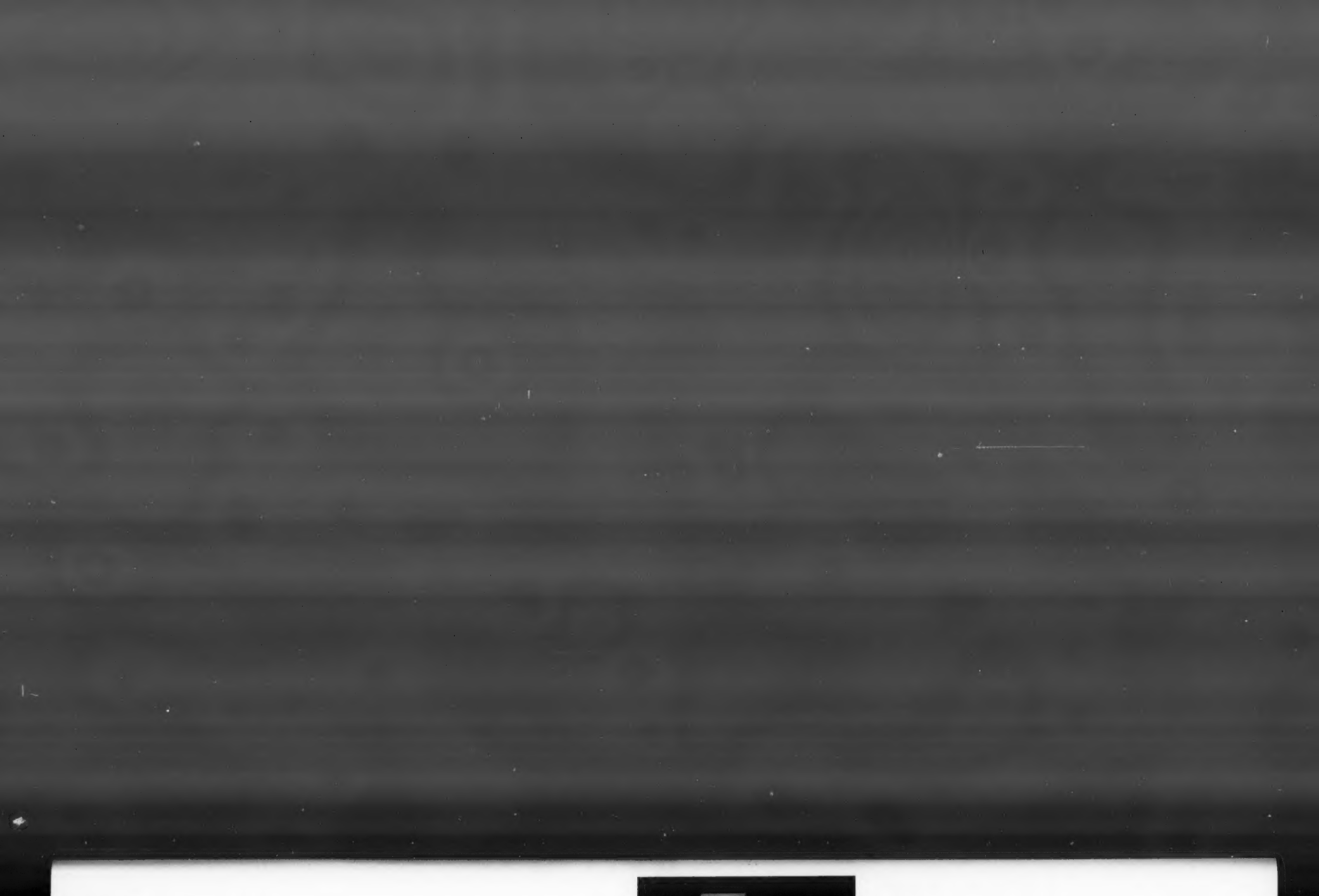

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Showing the partition sliding behind a leaf in the false wall.

Interior construction and furnishing by

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Bowater T/A Panels

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can cost as little as

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LOW cost—HIGH efficiency

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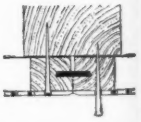

1 By simply nailing to joists through the outer perforations, using 2-inch galvanized lost-head nails.
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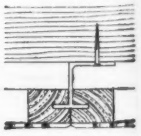

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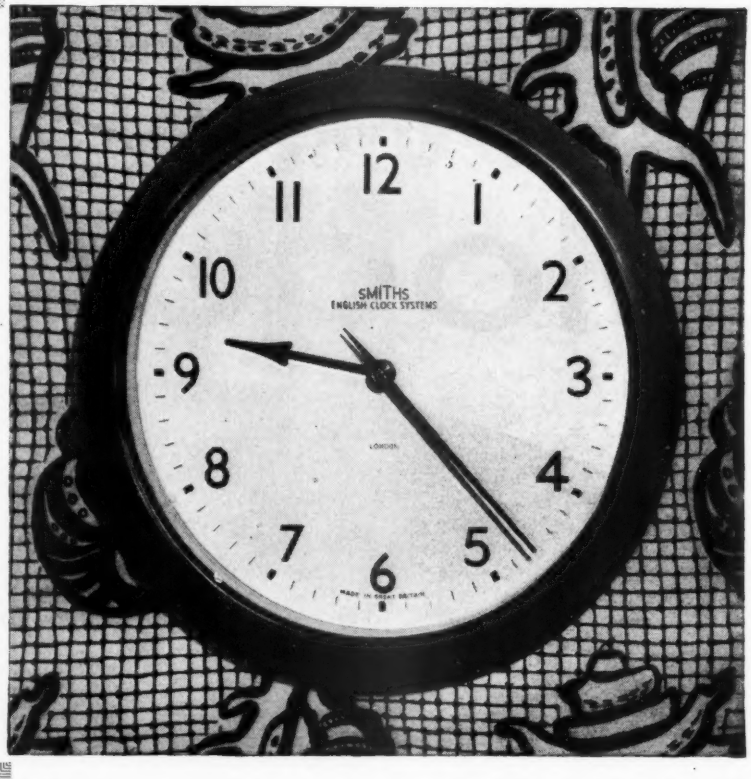

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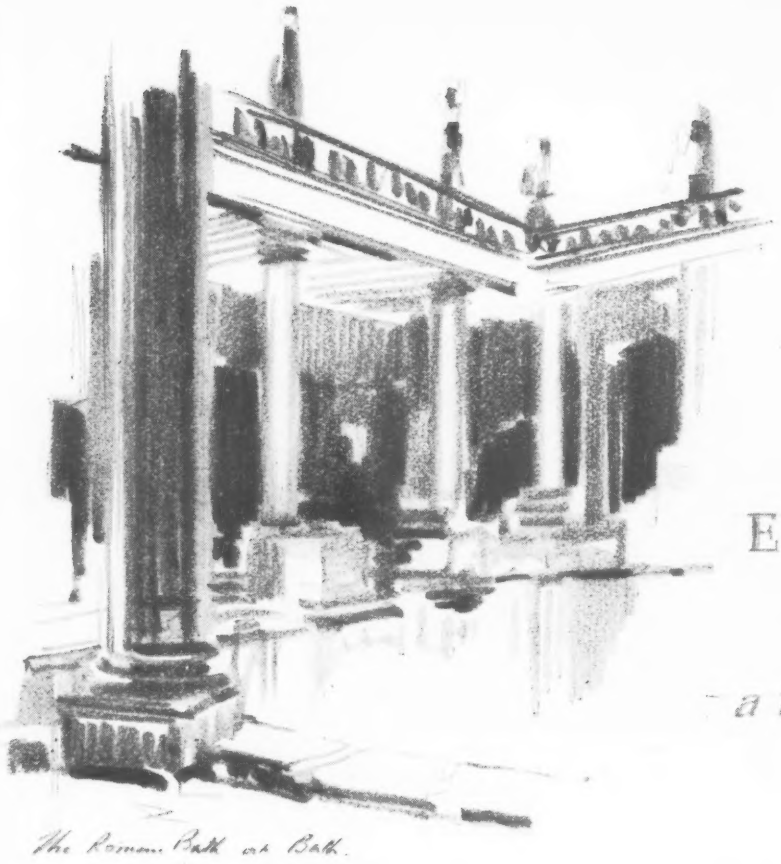

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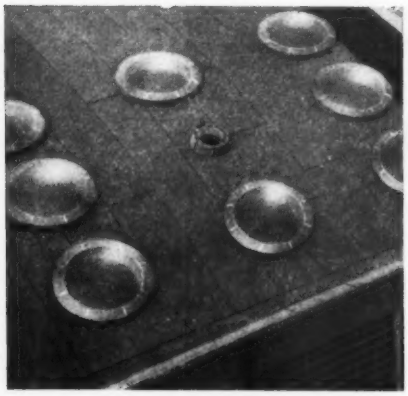

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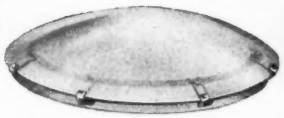

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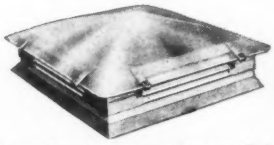
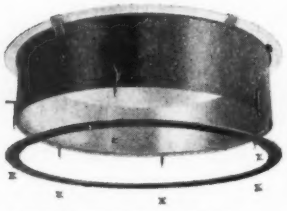
Rectangular domes from 24in. to 175in. length X 36in. to 72in. width.



Rectangular glass dome ventilators supplied, also circular ventilators from 18in. to 72in. diameter.



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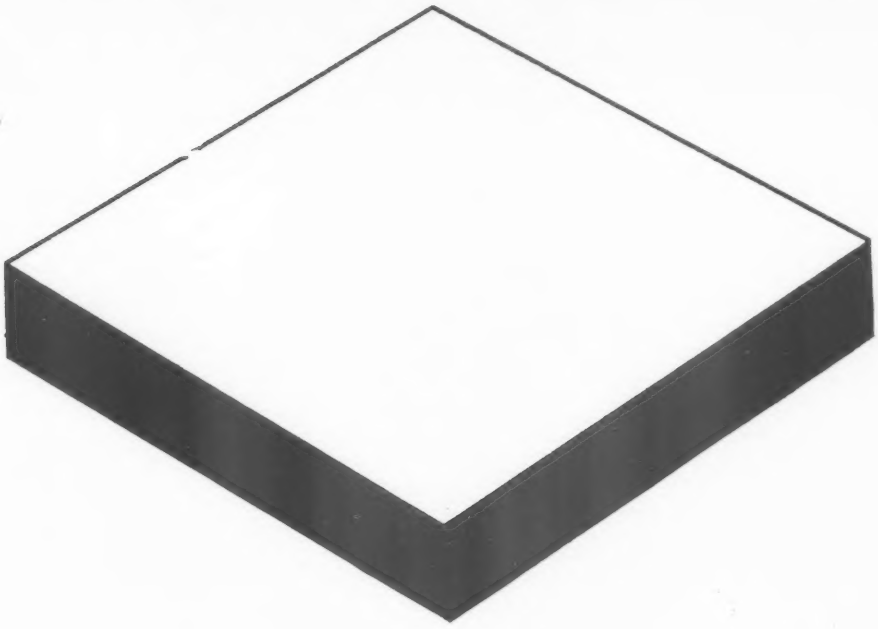

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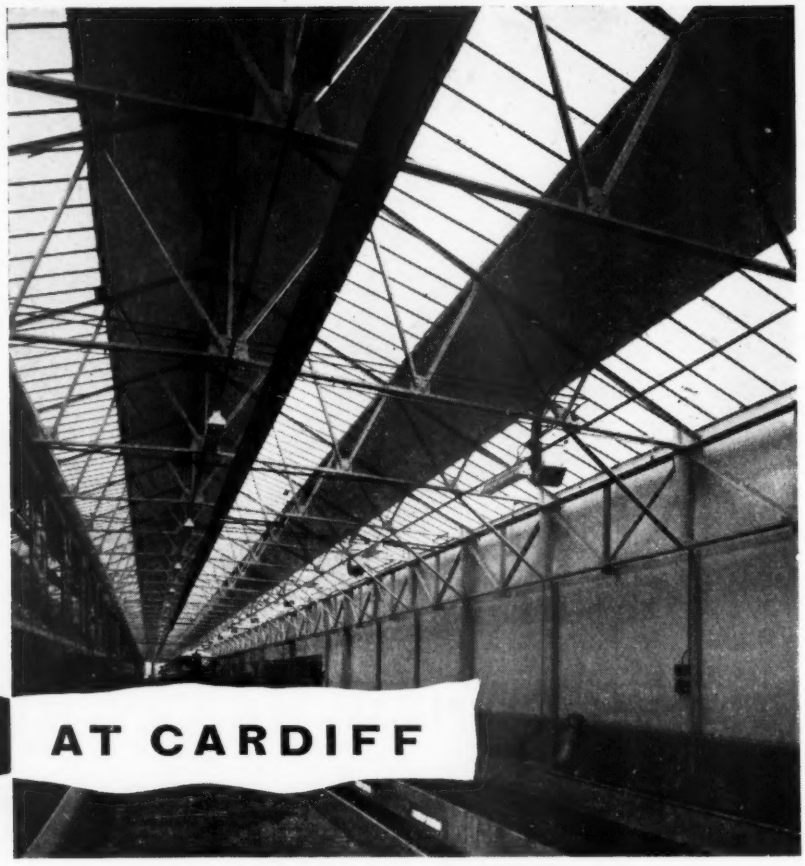

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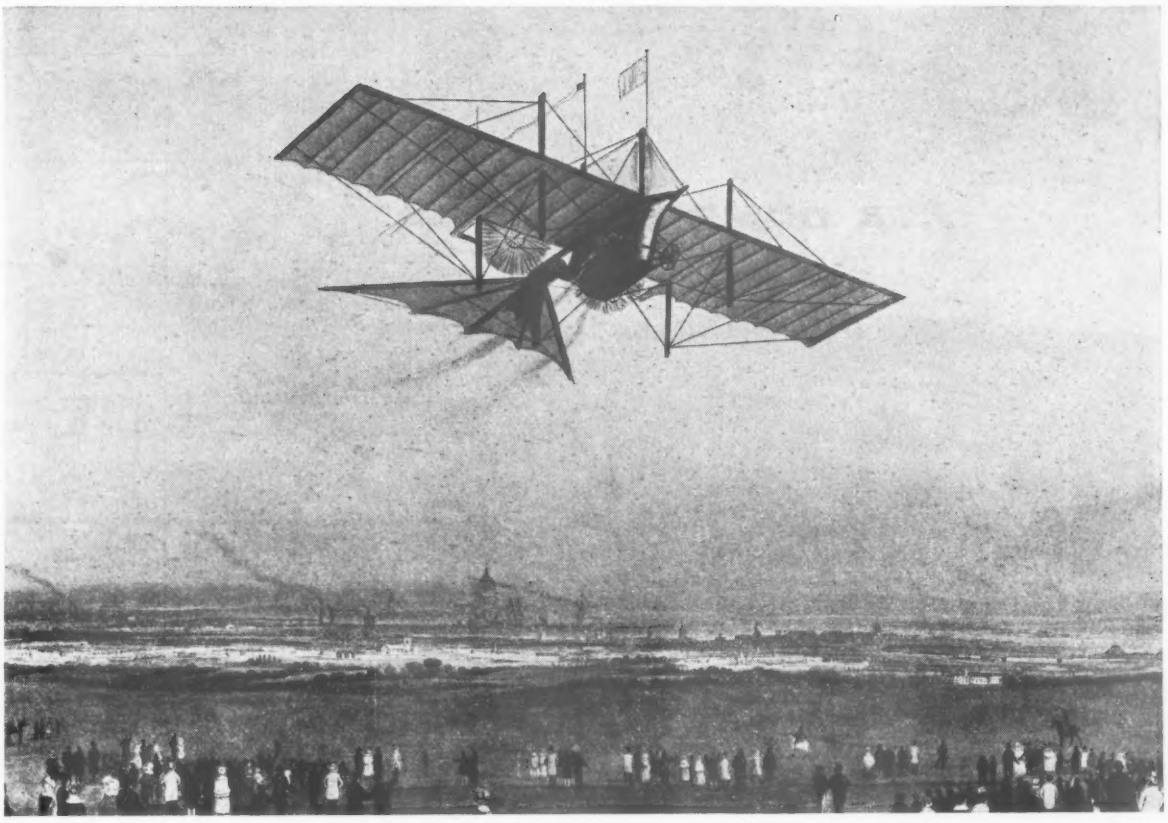

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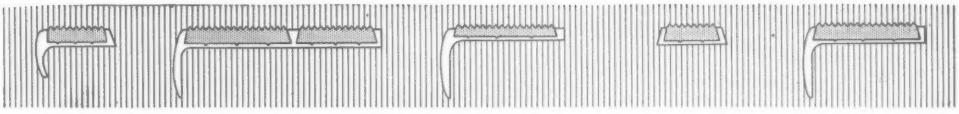
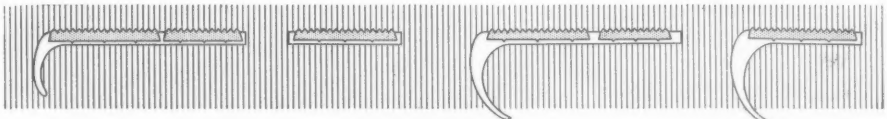
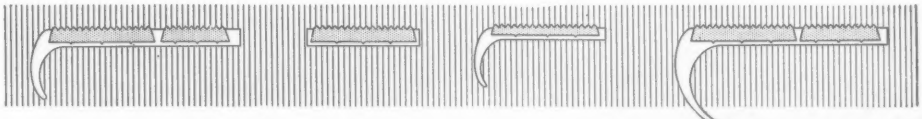


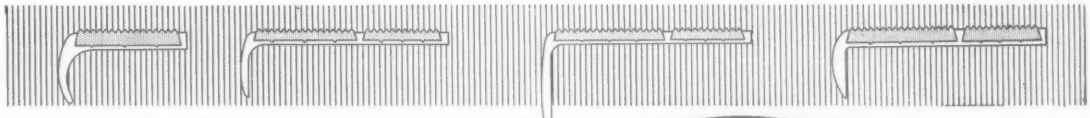
(wood metal or stone)



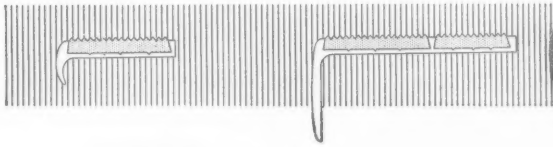
there's a DON non-slip



tread (colour or fabric-filled)



and nosing



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Architects: Westwood Sons & Partners, F/F.R.I.B.A.

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DOUBLE GLAZED WINDOWS
—BY TEST, † THE BEST!

The natural choice for this fine new hospital building in Walton-on-Thames was TOMO double-glazed WINDOWS. Shown here are horizontal-pivot-hung and hopper-type windows and double-glazed doors in Utile framing. The spandrel below the window is in vertical cedar boarding.

The excellent thermal-efficiency achievement of TOMO double-glazing (amply demonstrated in the report of the recent B.R.S. Tests quoted below) was one good reason why these superb windows and doors were chosen for Walton Hospital.

Noise is an enemy of hospital life and in this instance TOMO double-glazing was especially suitable because of its remarkable sound-reduction properties. (The amount of reduction in sound level depends, of course, on the thickness of glass and the space between panes—32-ounce glass spaced at 1⅞ in. gives a reduction of approximately 40 decibels.)

TOMO double-glazed WINDOWS afford all the advantages of finely-controlled ventilation and total indoor window-cleaning. They are suitable for inward or outward opening and can be top-hung, bottom-hung, side-hung or pivot-hung.

† **BUILDING RESEARCH STATION TESTS**

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The U-value of the window-area only was found to be 0·38 which, with TOMO pleated blinds down, became 0·35. At 0·38, TOMO double-glazed WINDOWS are substantially (29%) better than the U-value of 0·47 quoted for conventional double windows in the I.H.V.E. Guide to Current Practice, 1955.

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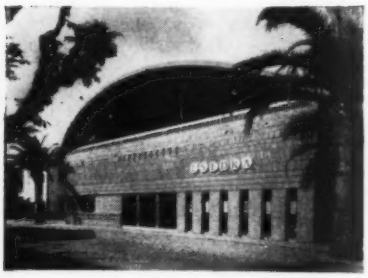
OCTOBER

Cinema in the Pineta; designed by Eugenio M. Rossi, and sited near the Roman Coast, its design involved some ingenious thinking about late-night ventilation in a close, damp climate.

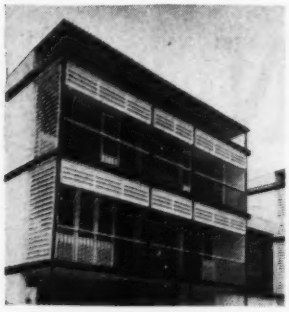


Brick and Concrete at Ham; a detail of wall, floor-slab, ventilator and gargoyle from a new flatted development at Ham Common by James Stirling and James Gowan.

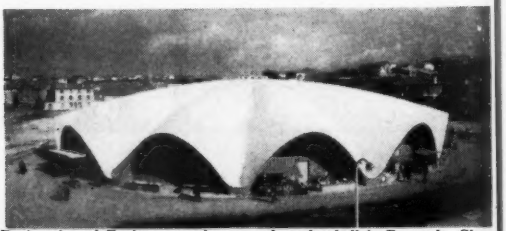
Air Line Office; a tall black column in the new booking offices of Air France in Bond Street; designed by Charlotte Perriand (in collaboration with Peter Braddock), the first work in England of a designer who assisted Le Corbusier on some of his most famous interior work.

NOVEMBER

Sun-screens in Apapa; housing for the Nigerian Ports authority—this, and other recent work in West Africa by Architects' Co-Partnership will be described and illustrated in the October issue



Toronto Modern: the centra gallery of the Parkin House, Toronto, one of a group of buildings by the outstanding Canadian design office John B. Parkin Associates, illustrated in this issue.



Engineering of Excitement; the covered market-hall in Royan by Simon and Morisseau, one of the buildings discussed by Robin Boyd in his article on the impact of new structural shapes on the architectural imagination.

DECEMBER

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

Workshop Annexe: new stores, paint shops, etc., for the Old Vic, ingeniously packed under some awkward day-lighting 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.

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 £3.10.0.

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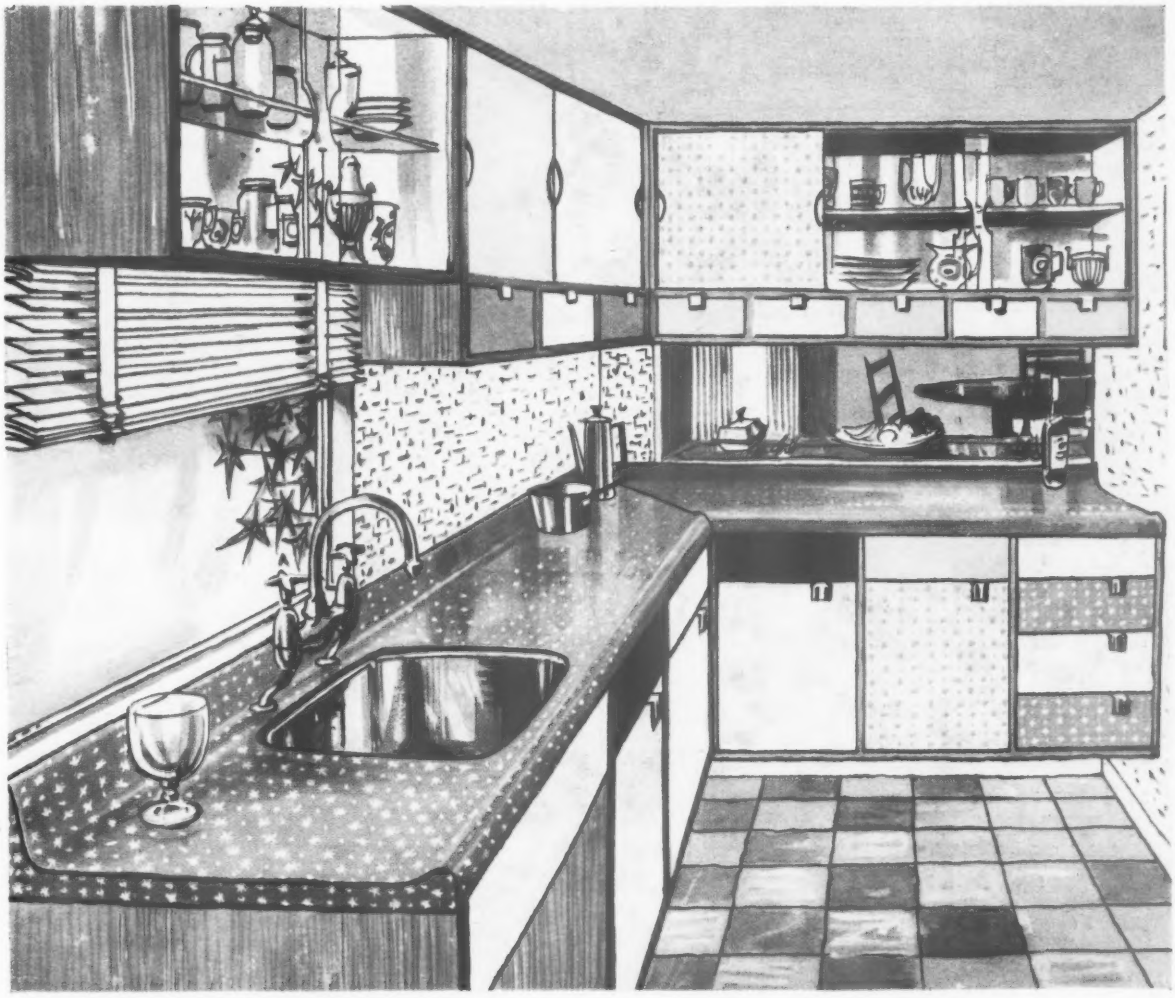

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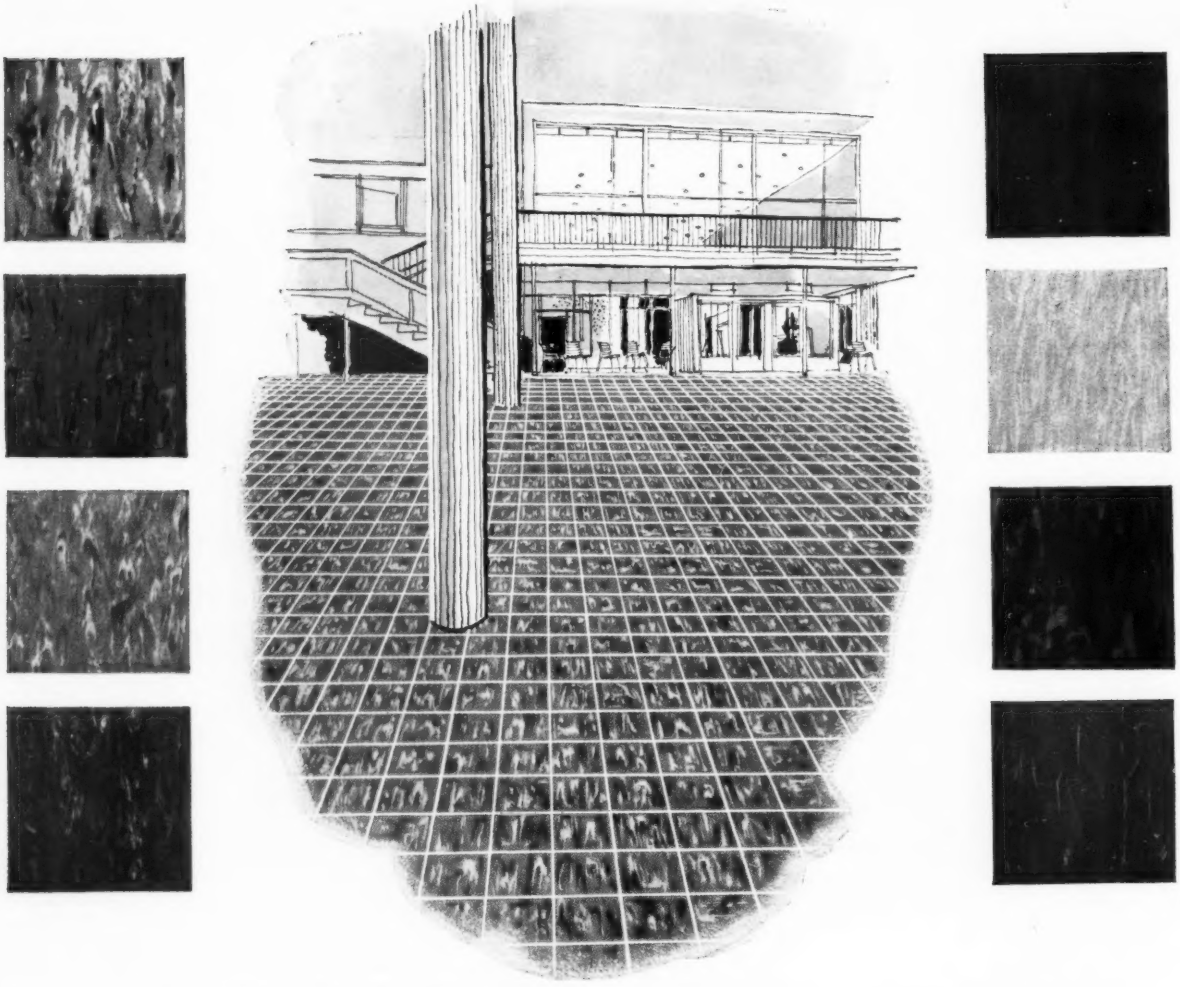

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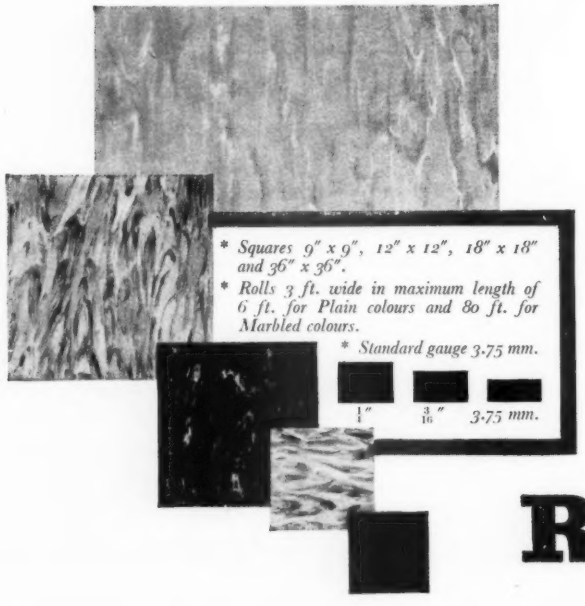

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THE ARCHITECTS' JOURNAL

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NOT QUITE ARCHITECTURE

NOT QUITE DEAD RECKONING

Newcastle to Edinburgh on a Saturday—a dull journey, with a lot of traffic: whether by the coast or Carter Bar, nothing but Zephyrs pushing seventy (on the straight) and Austin Big Sevens pushing twenty-five (downhill). Not dull, however, if you go by air, as long as you fly your own aeroplane and not go in one of those big airliner things.

*

Mine, by courtesy of the Surrey Flying Club, was a Percival Prentice; it looked and flew exactly like a London bus, which was very comforting in the weather of late summer 1958. We had just got up to Newcastle on the Thursday by following gleams of light on the roofs of lorries on the Great North Road: thereafter the weather changed from partial clamp to complete clamp. Fellow-aviator Bill Toomey went back to London for a quick weekend; I sat it out amongst drizzle and sooty Dobson columns. Come Saturday morning I was out at the aerodrome in improved weather (only moderate rain); unexpectedly Turnhouse would let me in without radio if I chose to come over, so after extracting the machine from a hangar it was really too big for, Birdman set out intending to go round the coast.

*

First a quick look at Newcastle—no good; thick industrial haze. Then a lunge at the coast: no good at all, cloud right on the deck as it had been all the way up from Flamborough Head. Yet all this time, Westward, look, the land really was bright: the Pennines were clear from Cross Fell northwards. Not being one of those fearless types I kept to landward of the clag and my course went from 010 to 315, by which time I was heading for the Cheviots with several incipient storms ahead.

Progress at the Elephant

Nearly three years ago the JOURNAL printed the view, above, of the LCC's planning department's proposals for the "gateway to central London from the south"—the Elephant and Castle area. Since then, the housing, schools and general division of the architect's department have made their contribution, see left, and the out-dated corridor-street approach of the earlier scheme has disappeared where the LCC has designed a group of housing (foreground) and buildings for the London School of Printing and Graphic Arts (background, left) and a much more successful and exciting design has evolved, if all too slowly. It is only to be regretted that the LCC engineer's department have been content to keep such an inadequate road system. If two-level traffic circulation was impossible it should have been possible to have made a combined roundabout and service road round the periphery of the area with a pedestrian precinct in the centre. See also page 595.

This was clearly the time for road work, so out came the 3-mile to an inch road book (invaluable for steering from one country house to another) and the journey up A68 began with one eye on the spot heights on the map and the other rotating between altimeter and cloudbase. At Byrness the ground was 1,300 ft., I was at 1,800 ft. and in and out of cloud: at Carter Bar I slipped through like a letter through the slit of a pillar box with 200 ft. to spare. The A.A. nearly got a *most* unusual request for help from member 801644: can you clear enough of the road for me to take off on?

*

After I had landed, up came two cheerful souls from the Edinburgh Flying Club. Their second sentence invited me to a party which began intermittently in Robert Matthew's terminal, the only human airport building I've ever seen apart from the nostalgic Nissen huts, and went on until 3 the next morning. At 8 a.m. I was wakened up by a bleary-eyed Bill Toomey who in a rash moment I had called up by the overnight train too late for him to book a sleeper. Strange encounter; hazy and ill-remembered eggs and bacon; gentle and indeterminate take-off. By the end of the day I had flown another four hours and been right up Loch Lomond looking up at the hills on either side; it was me birthday.

*

Fun? Of course. And—for anyone niggled by office routine or a stream of people complaining that someone had interfered with *their* view by building a shack half a mile away—worth two months in the South of France.

IAN NAIRN.

DIARY

Three Architects and Photographs. Exhibition of photography by Peter de Souza, Humphrey Lukyn Williams and David Critchlaw. At the AA, 34, Bedford Square, W.C.1. Monday to Friday 10 a.m.-6 p.m. Saturday 10 a.m.-1 p.m. UNTIL OCTOBER 24

A Room of Our Own. Exhibition of furniture and furnishings designed by the Royal College of Art. At the Tea Centre, 22, Regent Street, S.W.1. Monday to Friday 10.30 a.m.-6 p.m. Saturday 10.30 a.m.-1 p.m. Admission free. UNTIL OCTOBER 28

Jago v. Swillerton and Toomer. I. of Arb mock arbitration by H. B. Creswell. At the RIBA, 66, Portland Place, W.1. 6.15 p.m. OCTOBER 27

Building Contracts Today. A course of six weekly lectures by Donald Keating, B.A. Organized by the Brixton School of Building in collaboration with the Building Centre. At the BC, 26, Store Street, W.C.1. 6 p.m. Fee for the course, £1. Applications to the Secretary, Brixton School of Building, Ferndale Road, S.W.4. FIRST LECTURE OCTOBER 29

The Editors

THE RIBA AND THE IDEAL HOME

AFTER much hard work, and none too soon, the RIBA has produced a scheme to attempt to counter the mass of appalling spec houses which Harold Macmillan —with a typical politician's aesthetic blindness—unleashed over the countryside. Details of the RIBA's small house design competition appear on page 593, and while the overall intention is good, and much of the scheme would appear satisfactory, there are certain broad aspects of the proposal which are potentially dangerous and merit further study.

We understand that the three architect assessors are going to call in quantity surveyors to help judge the probable costs of the designs. It is to be hoped that a firm can be found who are very familiar with the rather specialized field of small house-building. But, in addition, it would surely be worth while calling in representatives of the builders (such as the NHBRC) who are familiar with estimating building costs—and the building societies, so as to have support to the venture from these very important quarters. It is also important that the MOHLG give qualified approval of the winning designs, so that local authorities would only need to consider them as regards layout and not in terms of design.

We understand that it is the RIBA's hope that prototypes of the winning designs will be built before the scheme is launched on the public so that really accurate costing should be achieved. This is a most important step towards gaining public approval and confidence. It is to be hoped that the RIBA and the *Ideal Home* magazine (who are so enterprisingly financing the competition, a book of type-plans, and an advice bureau) will do everything possible to accomplish this.

Two other points remain. The assessors are judging the designs from $\frac{1}{8}$ scale drawings, and only $\frac{1}{4}$ in. to the ft. scale drawings are finally required. We do not believe that designs of the quality needed for the satisfactory execution of this venture can be assessed—and certainly not built—from such small scales. Finally, while this is a brave step on the part of the RIBA, taken deliberately for the public good and at a risk to the financial well-being of some peculiarly vulnerable members of the Institute, this whole venture only tackles a part of the design problem. Equally as important as the design of individual houses is their disposition on the site. Has anyone any ideas on how to encourage good estate layouts?

CHANGES IN THE BYELAWS

There is little that is controversial about the MOHLG's proposal* to insert a clause in the Model Byelaws requiring a specific standard of thermal insulation. In fixing this standard, regard had to be paid to matters which have little to do with good building; the chief among these being, of course, the MOHLG's own willingness to face the increased

* See News note on page 593.

cost involved in local authority housing. It was natural that the highest standard (and the lowest U value—0·23) should be that proposed for the roof as this is the cheapest area to insulate. The standard for the floor (U = 0·40) seems low, having been proposed, apparently, to countenance the suspended timber ground floor—a form of construction which must be on the way out. Architects will be relieved that windows are left out of this, and that they will not, therefore, have to spend exasperating hours trying to convince the District Surveyor that their proportion of glazing was not excessive. It was wise, too, for we do not know enough about the effect of window size on annual fuel consumption. If these proposals can be accepted by the architect, we are not sure about certain other proposals which concern the fire precautions to be taken in installing flue pipes. Whenever there is a possibility of life being lost, English legislators lose their heads and insist on counsels of perfection. Flue pipes have been projected through structures for many years now and have resulted in few catastrophes. As appliances become more efficient flue gases become cooler and, therefore, presumably, the risk decreases. If there is need for some additional precautions, must they be so stringent as those now put forward?

WRONG DEBATE

The LCC debated this week the future of Piccadilly as the centre of London "with plenty of coloured lights." What the Council did not discuss was the far more important question of replanning in such a way that pedestrians and vehicles are separated—either by the provision of pedestrian precincts at ground level, or by the construction of pedestrian platforms at first-floor level.

*

It is obvious that everyone would want a gay, neon-lit Piccadilly (except the old guard of the *Daily Telegraph*, who are fascinated by the idea of continuing Blomfield's ponderous, impractical phoney classicism). It is equally obvious that in these days of curtain walling some magnificent neon effects could be produced if architects and advertisers got together early enough. But why isn't someone thinking less of the icing on the cake and more of the terrible jam in the centre? One of the troubles is that commercial developers are notoriously obtuse. Apparently none of the potential developers is prepared to accept the idea of an upper pedestrian level. Why ever not? What's wrong with *two* shop windows and *two* entrances?

*

Is there no one in the Government who can think big?

GIFT HORSE OF ANOTHER COLOUR

No one in the Government thought it worth Britain's while to provide a room in the Unesco headquarters in Paris. But a present of furniture and furnishings has been made in the name of "the people of the UK." The donors—a group of manufacturers—were prompted in their action by Leslie Julius, of Hille's, and their generosity is commendable even if it has brought them quite a bit of publicity. ASTRAGAL, who doesn't like presents to be given in his name without knowing something about them, nipped along to Heal's and saw them. They were all in impeccable taste—some Robin Day light wood furniture, a Ben Nicholson painting, a colour scheme in grey, blue-black, orange and black leather—and they were all quite un-English. How well, and how anonymously, we have slipped into the international style.

NICE AT A PRICE

The new £30,000 council offices for Depwade, Norfolk, will be designed by the local engineering surveyor. Why no architect? "The extra costs," said the council's chairman (according to a newspaper report), "might be about £1,500." Anyhow, what *is* an architect? The local "design" subcommittee has a chairman with interesting ideas on the subject. Architects, he is quoted as saying, were "concerned with drawing out something they thought 'really nice' and which led to extra cost, but which in fact one could do without." Is this unabashed philistinism or plain ignorance? Or is there some reason why architects are so unpopular in this part of the world? Only eight of the council of thirty-nine wanted an architect. Perhaps the RIBA or the local architects' society could try to find out why.

*

Incidentally, three alternative plans were produced by the engineer's department before a site had been chosen. This fact speaks for itself. As local authorities have to spend public money, isn't it time they were required by law to employ architects—either whole- or part-time—for their building projects?

MAN BITES DOG

The Seagram building "has the æsthetic impact that only a unified work of art can have." So says the writer of a perceptive article in the *New Yorker*. He speaks of its "ambience" and "detachment," compares it with the Monadnock building

and concludes: "one must almost go back to Palladio's St. Giorgio Maggiore for anything like the same quality of mind and expression." All good solid praise to warm the cockles of the Miesian art.

*

Not very exciting news? You haven't heard the pay-off line. The writer is a man who has never been an enthusiast for this sort of architecture. His name is Lewis Mumford.

LAWMANSHIP

At last someone has turned (it was Marghanita Laski) on Stephen Potter, hinted that further books on Lifemanship will not be welcome and expressed our gratitude for the good joke that we have long since extracted from thousands of words. It is still a little early to be equally tough about Parkinson's Law*—though one of these days someone will be courageous enough to say that one good joke was wrapped in a lot of post-prandial donnish padding. For the time being let me simply deal with Professor Parkinson's remarks on architecture.

*

To illustrate the theory that perfection of planning is a symptom of decay, the Professor picked some buildings at random—or out of Bannister Fletcher. He selected St. Peter's, Rome; the League of Nations; Versailles; Blenheim; the Houses of Parliament; Buckingham Palace; New Delhi and a few others. He hinted that they were "ideally planned" and that all were completed after their purpose had ceased to exist. His inaccuracies are surprising and his argument is irritating. The recipe is familiar: you take a lot of unrelated objects with one common factor, slightly distort the facts about them and propound an apparently valid theory. Having drawn his conclusions about the uselessness of these buildings, he drags in the United Nations building: "The experts among us shake their heads sadly, draw a sheet over the corpse and tiptoe quietly into the open air." Is the Professor an expert on architecture as well?

DON'T LET'S PAN AMERICA

ASTRAGAL doesn't want to join the British Press in gloating about the Boeing, but he has heard a story about it that is worth passing on. Apparently the 707's that are being hustled into transatlantic service are only the medium-range version and will have to take in fuel *en route* quite as much as the Comets. And because they don't climb very steeply when loaded they will probably have to take off with some empty seats to be sure of getting to required heights over built-up areas near airports. My informant tells me there is another reason why the giant pressure cabins will have empty seats. It seems that the whole economic philosophy of jet airliners is built on a predicted peak of traffic that hasn't yet been reached.

*

So you see, architects are not the only people who make costly mistakes —and at a reputed delivery cost of over five million dollars a Boeing would be a costly thing to make a mistake about.

ABOVE BLOOMSBURY'S HEADS

London University has—at last—an art gallery of its own. It is situated on top of one of those academic superblocks which, for better or worse, are altering the scale of Bloomsbury. At present it houses two collections of pictures that have been on view before —the Courtauld pictures and the Roger Fry collection of pictures and *objets d'art*—and two that haven't been visible; a selection from the late Sir Robert Witt's stupendous collection of drawings, invisible before because there was nowhere to show them, and the magnificent Lee collection which has only recently come into the University's possession.

*

This is a must for all exponents of artmanship. Even if you don't much like the galleries (the ceiling arrangements are rather oppressive) the works on show are a notable addition to the London scene and to the University's amenities.

*

Two oddments about all this. One: The Omega Workshop furniture shown with the Roger Fry collection is really appalling stuff to have been produced by the hand of so distinguished an aesthete—it makes you wonder if Fry was such a man of taste as he is cracked up to be. The other: immediately on your right as you come out of the lift at gallery level is a slit-shaped picture window giving a view along the serried ranks of chimney pots in Gordon Square. Whether or not it was deliberately put there for the view, someone is to be thanked for giving us a new slant on Georgian London.

This is the proposed sculpture by T. B. Huxley-Jones for the central circular garden at the BBC's Television Centre at Shepherd's Bush. The reinforced concrete obelisk supports a bronze figure representing Helios the sun god. The concrete bowl, with jets above eye level, pours water round the base of the column. Two reclining figures, studying a flower (vision) and holding a shell (hearing) recline over a mosaic-lined pool at the base.

FALLING WATER, BY HUXLEY-JONES

ASTRAGAL was apprehensive when he learnt that the BBC had asked Charles Wheeler to nominate sculptors for the new television studios at Shepherd's Bush. The reason for his apprehension is all too clear after studying the sketch above. The figures are banal enough, but the composition and the play of water is a pitifully amateurish job.

ASTRAGAL

* Parkinson's Law. C. Northcote Parkinson. John Murray 12s. 6d.

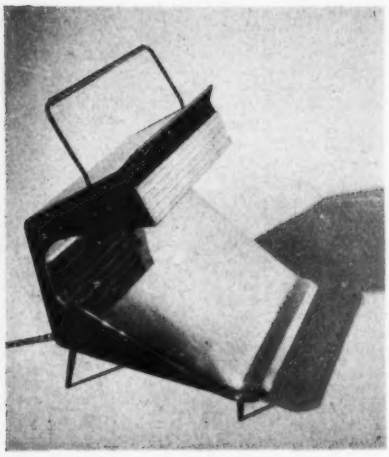


Fig. 1, above, electric fire by L. Summers. Fig. 2, right. The dining room of the RCA's exhibition "a room of our own," showing a vulgar pendant light fitting, but elegant laminated-leg table (by H. El-Hayani), a bread bin, charcoal grill and "tachiste" carpet.

RCA'S ROOM OF OUR OWN EXHIBITION

An appreciation by Peter Whiteley

The exhibition, "A Room of Our Own," at the Tea Centre, Lower Regent Street, until October 28, consists of a furnished drawing room and dining room with a small terrace, designed by a team of Royal College of Art students, led by George Freeman, under the direction of Lady Casson of the School of Interior Design and Professor R. D. Russell of the School of Furniture Design. The actual objects in the room—furniture, textiles, china, glass and silver—have all been designed by RCA students, and almost everything on show has been designed for actual production. The exhibition is in the nature of a celebration of the tenth anniversary of the reorganization of the College under Professor Darwin into a College where designers are trained for industry. In many cases the objects shown are already in production, the prototypes having been made by the manufacturer at his own expense. This is a most valuable example of the manufacturers' co-operation and of initiative by the RCA.

Spatially the subdivision of the Gallery at the Tea Centre is quite interesting, although the background surfaces are so overwrought as to destroy most of the architectural unity which the rooms might have had. In spite of the intention that the exhibition should be one "in which all the components should be designed to marry one with

another and unite in a special setting" the only unity apparent is the rather superficial one that the common furniture timber used was rosewood, a general air of no expense having been spared (so much for "everything in the exhibition has been designed for production and for sale in the contemporary market") and an oppressive colour scheme of muddy greens, browns, purples, orange, pink, black and white.

To quote again from the introduction to the catalogue by Professor Darwin: "experiment for its own sake has therefore been eschewed, and where students have been working with a particular manufacturer his own market requirements have been borne clearly in mind. To some critics this attitude may lend to these rooms too sober and unadventurous an air; but for my part I had rather students were pre-occupied with finding better means to do ordinary things in our native way than with an indiscriminating pursuit of novelty based on international idioms."

The overwhelming impression of this exhibition is, however, one of eclecticism and nostalgia; an obsession with decoration and pattern-making on any and every surface, as opposed to a real concern that simplicity and appropriateness of form should follow sound functional design. Whilst there is no objection to pattern used judiciously and with point, the vast majority of so called contemporary patterns are puerile in their effort to be different, and the ones shown here, for example the tired tachist splatterings on the dining room carpet, are no exception.

One could say that in this exhibition there is something for everyone, whatever his taste, whether Georgian, Victorian, Art Nouveau, or "contemporary": a music stand with a Baroque base surmounted by a straight-Regency music rest; a pottery water heater, barbecue, and bread bin all with distinctly classical trimmings; china of which the shapes are designed by one set of designers and the patterns by another (why, for heaven's sake?); an unbelievably hackneyed coffee table in teak, steel, glass and vitrolite (!) (in Fig. 3); and a downright vulgar pendant light fitting (Fig. 2). The designers seem to have been most successful in those objects which are predominantly engineering problems, such as the electric fire (Fig. 1); the desk lamp in brass (Fig. 4), the wall clock in brass and black and white enamel, the charcoal grill in mild and stainless steel; and least successful in those objects where tradition seems to be most stifling; glass, china, metalware, pottery, and to a lesser degree, furniture.

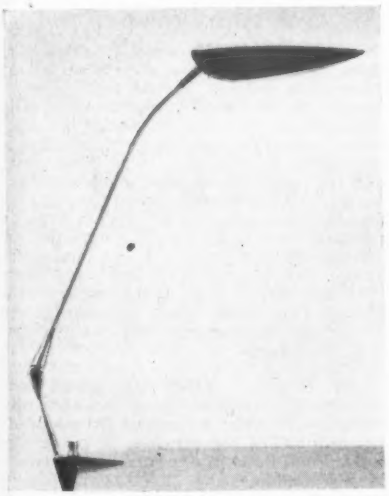
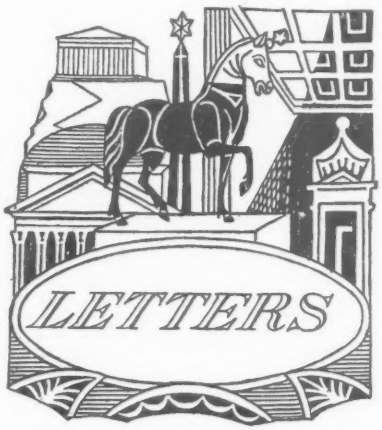


Fig. 4. Desk lamp by L. Summers. Opposite page, Fig. 3, the sitting room, where can be seen a glass topped coffee table (by W. C. McCartney); a neat ceiling track light (by K. Sadler), a mannered sofa (by W. S. Chenery) and pine wall fitting by Margot Geddes with routed plastic decoration by George Mitchell (on the top left cupboard door).



Peter G. Elphick, A.R.I.B.A.

D. O. Sands, F.R.A.I.A.,
A.R.I.B.A., President West Australian Chapter, R.A.I.A.

H. G. Edwards, F.R.I.C.S.

Derek Wren, A.R.I.B.A.

John Brookes, A.I.L.A.

Peter Jay, M.A.

L. A. Hackett,
General Secretary, National Association of Almshouses

The Supplanting Developer

SIR,—I read Mr. Colin Samuels' letter in the Architects' Journal for October 2, 1958. He hits the nail on the head when he refers to "the architect having a greater opportunity for expression when the developer holds the purse strings."

My firm gave advice and prepared a scheme for private clients for a new office block (estimated cost £64,500). Along comes a "developer" and offers to finance my clients and put their building up for them. Our clients asked if their own architects could act for them but the "developer" refused on the grounds that there was already an architect in his team.

My firm has been supplanted and the developer's scheme is probably going ahead (at what cost I do not know)—how does Clause 10 of the Code of Conduct affect the "developer's" architect?

Is not all this most unfair to the private practitioner? The "developer" can advertise and push his services to his heart's content—he is not faced with Clause 6 of the Code of Conduct as is the architect. But the "developer's" tame architect is brought in on the heels of his master's touting and ousts my firm!

The "developer" can publish illustrations in circular or book form of any building for which his tame architect was responsible *and distribute the publication to potential clients!* What price Clause 8 of the Code of Conduct?

What does the "developer's" architect do when there is a dispute between his boss and the client. Can he act in an impartial manner? (Clause 13 of the Code of Conduct.)

I hope that all responsible members of our profession, having read these comments, will support me in rejecting wholeheartedly Clause 11 of the report of the RIBA Joint Sub-Committee of the Practice and Salaried and Official Architects' Committee report on the Employment of Architects published in the RIBA Journal of August, 1958, which read "Rejecting legislative action to combat the all-in service, the sub-committee see the problem as a simple case of direct competition to be frankly faced," etc.

To be frankly faced! ! How can we face such unfair and blatant competition and act in accordance with our Code of Conduct?

My firm has now lost this commission but I am writing this letter as a warning to other architects who may find themselves victims of similar unfair competition.

I am also writing in the forlorn hope that the RIBA will change their attitude towards this iniquitous practice.

PETER G. ELPHICK.

Newcastle-upon-Tyne.

"Down Under"

SIR,—I was interested to read ASTRAGAL'S paragraph "Going Ahead Down Under" in your issue of August 28, 1958. He was surprised to find the Eighth Australian Convention was held in Perth.

The Royal Australian Institute of Architects hold its Annual Conventions in the capital city of each of the Australian States in succession. Perth is the capital of Western Australia, a State with an area of one million square miles embracing one-third of the Australian mainland. It is a fast growing city of over 350,000 people so that it is a little ahead of Stornoway in size.

It is also a city which has had the foresight to employ Professor Gordon Stephenson, in conjunction with Mr. J. A. Hepburn, its Town Planning Commissioner, to prepare a very able and comprehensive plan for the development of the whole of the Metropolitan Region of Perth and its Port of Fremantle, and this is being implemented.

The 1962 Empire Games are to be held here and it is also the home of Herb Elliott.

We appreciate ASTRAGAL'S notice, for our architects who are active members of the community and almost all our younger men have travelled and worked in Great Britain, Europe and America at various times to broaden their experience.

THE ARCHITECT is the journal of the West Australian Chapter of the Royal Australian Institute of Architects and not of the Federal body.

D. O. SANDS.

Perth, W. Australia.

Toronto City Hall

SIR,—Architects may well find the winning design for the Toronto City Hall to be "dramatic" and "exciting" (AJ October 9). As a layman, I would not presume to comment on its artistic value, but I do deplore the implications of the layout.

For whom is this City Hall to be constructed? Certainly not "the public": their convenience is not considered (although they will pay for it). The Council? —they will have to switch on the lights before they can see the agenda. No: this is the bureaucrats' dream materialized. There they will sit, hundreds of feet up, looking down on the public on their route march; looking down on the Council

Chamber far below; cut off from the outside world by solid unbroken concrete walls, looking in on their own little world weaving miles of red tape.

Too many people already believe that "the man in Whitehall knows best": the State is all: the individual matters not. We should not encourage them by housing them in buildings which imply that they are right.

H. G. EDWARDS

London.

Don Mills

SIR,—I was somewhat surprised to see in the article on "Timber Construction in Canada" in your issue of October 2 photographs included of the shopping centre and a bank at Don Mills. I hope it was not intended to imply that these were timber framed buildings, and that the purpose of the photographs was only to fill up a vacant space.

Having just returned from a two week visit to Don Mills, I would like to suggest that some of the buildings there, particularly the work of Messrs. John B. Parkin Associates, deserves better treatment.

Don Mills is, of course, a complete entity, designed as a new town, and has besides housing, schools, churches and the shopping centre, some of the best small factories to be seen anywhere, and should not, therefore, be described as a "residential suburb."

DEREK WREN.

London.

[The Editors write: lack of space compelled us to omit a part of Kenneth Wood's article briefly reviewing the work of Canadian architects in materials other than timber, but we thought the Don Mills buildings worth publishing on their merits.]

Garden Design

SIR,—As a landscape architect I feel that the critique of Sylvia Crowe's book "Garden Design" by Sheila Lynd should not go unanswered.

In an architectural magazine of this type the full story behind this new landscape as championed by Miss Crowe should be explained.

British landscape architects are very conscious of flower colour and do not neglect the flowering period in their designs, but as by far the majority of British shrubs and herbaceous plants have a flowering period of, at the outside, a month, isn't it time the other 11 months were considered also? Hence the apparent emphasis on foliage and form—witness the slated Bergenia: good flower colour at a very welcome time in Spring and good bold foliage throughout the remainder of the year.

While there is a current emphasis on economy in both time and money, it is only in city parks that bedding can be afforded in the way appreciated by Miss Lynd, but it is surely time that even they had some design in their schemes. The age of Calceolarias, Geraniums, Alyssum and Lobelia invariably seen went out 50 years ago.

May I suggest that the often seen "spotty" planting of foliage subjects around new buildings is the work of no doubt well-intentioned people who have perhaps read just such out-of-context snippets, not fully understanding the underlying principles, but endeavouring to follow the current trends.

JOHN BROOKES.

London.

Sheila Lynd replies: I do hope nobody will content themselves with reading my "out-of-context snippets": indeed as "the full story of this new landscape" could not be told in 700 words, my main purpose was to induce everyone to read Sylvia Crowe's book for himself. Nevertheless I am afraid that many will read it with less sympathy than they should because of the undercurrent of antipathy to flowers which runs through it. Miss Crowe by no means emphasized foliage plants because most plants' flowering season only lasts a month anyway: on the contrary she wishes that some plants—as in the passage I quoted—would never flower at all. And while she gives many warnings of colours that "clash" with the vivid green of grass, does not discuss at all how one may relieve the dank dark green of an autumn garden in a wet year, or the burnt brown of a dry one.

However, "Garden Design" is, as I said, a propagandist work, and therefore devoted to the new ideas that have to be put across.

The Belgrade Theatre, Coventry

SIR,—When Mr. Ling, in replying to my first criticism of this theatre, stated that the forestage is no more than a cover over the orchestra pit, I was surprised. I have been even more surprised by Mr. King and Mr. Beaton who make the same assertion.

I have not visited the theatre, but my attention was drawn to the matter some weeks before the building was illustrated in the AJ (by a friend who has worked there). Before taking the matter up I took care to check what I had been told from other sources.

In fact, this question of the pit is a secondary one. My principal contention is that actors are too far from the front row of the audience if they remain within the stage picture.

However, on the point raised by Mr. King and Mr. Beaton, I refer to the drawings published in the AJ, especially the section on page 209 and the photograph on page 208 of the current volume. It has not been suggested that the drawings or photograph are misleading, so that I can conclude only that we are arguing on a question of nomenclature.

In theatrical practice, the mainstage ends at the *setting line*. This is a line parallel to the proscenium wall usually about one foot or eighteen inches upstage of the house curtain, and is the forward limit of the scenery. Allowing for the fire curtain the setting line will be at least two feet upstage of the inner face of the proscenium wall, and sometimes as much as three.

In fact, the wide proscenium opening at Coventry has necessitated the use of a "false" or inner proscenium in many productions in order to narrow it again. This carries the setting line even further upstage.

When an actor comes downstage of the setting line he is stepping out of the stage picture and therefore entering the forestage. On the basis of the section published I submit that the forestage at the centre line is at least nine feet deep (possibly ten) of which only four feet in the orchestra pit. Although I have reason to believe that the section is to a smaller scale than the 1/24 in. to 1 in. given, this should not affect the proportions, which are in any case confirmed by the photograph. The matter is complicated but not essentially altered by the convex stage front which results in less permanent forestage at the sides.

The provision of an orchestra pit is, of course, amply justified, and Mr. King and Mr. Beaton have no need to justify it again, but the problem of maintaining a close relationship between the actor and audience where there is such a pit is a very difficult one.

The standard Victorian solution was twofold. The boxes above stage level were carried right through to the sides of the opening, and the orchestra pit was made to be part of the auditorium from which it was separated only by a low brass rail and curtain. In addition, the pit was extended under the stage to make its projection as small as possible. The disadvantage of the stage boxes was their sight lines, while it was not possible to cover over the orchestra pit and make a forestage without a good deal of structural work. Neither of these factors was thought to be serious at the time when this stage form was developed.

At Coventry the boxes have been retained, with attendant sight line problems, while the orchestra pit is made to be part of the stage area, and not part of the auditorium, whether it is covered or not. In fact, it would be fair to say that the pit is a hole in the stage, rather than that the forestage is a cover over the pit.

This means that all members of the audience are liable to be conscious of the separation between themselves and the actors although extreme care in production may serve to conceal this at times.

On the other hand, the Sadler's Wells Theatre, which has a proscenium width comparable with that at Coventry, omits the boxes but still keeps the orchestra pit as part of the auditorium. The visual link between the stage and auditorium is thus preserved for those sitting at the front of the stalls, but is lost for those sitting further back, who can see a large area of blank wall on either side of the proscenium. For opera and ballet, to which this theatre is chiefly devoted, the results are not so serious as they are for straight plays.

The ideal solution in modern terms does not yet appear to have been found. I know of several repertory theatres provided with orchestra pits which have been covered over to make forestages. In all cases the forestage is at least six inches lower than the mainstage, thus forming a clear break so that the forestage when not used in a particular production does not appear simply to be a section of stage on which actors seem unwilling to stand. A solution on these lines might have been preferable at Coventry.

PETER JAY.

London.

Almshouses

SIR,—May I trespass upon your space to elaborate upon the brief description of my Association given in Donald Insall's article on the Repair and Preservation of Old Buildings in your issue of September 4?

The Association is a Charity whose objects are to help trustees of existing Almshouses to solve any problems with which they may be faced, to encourage them to improve the accommodation up to modern housing standards and to foster the foundation of new Almshouse Trusts. The National Association has been in existence only since 1951 and, while it aims at the creation of a Central Fund from which to make grants for the repair and improvement of its members' Almhouses, the total amount so far collected is small compared with the total of over £100,000 which it has secured from established charitable sources and the Ministry of Works for specific Almshouses. The trustees of the Association are incorporated and have received substantial funds for the building and endowment of new almshouses.

Although we are anxious to preserve all old almshouses of architectural importance and are proud of the part we have played in helping to save so many such buildings which were threatened with demolition, our aim is to see all almshouses, irrespective of their architecture, preserved and more built because we believe that they offer the ideal solution for old people who have the ability and desire to lead independent lives.

L. A. HACKETT.

Wokingham.

RIBA & *Ideal Home*

Small House Competition

A competition for designs for small houses is being sponsored by *Ideal Home* magazine in association with the Royal Institute of British Architects. The competition is open to corporate members of the RIBA and conditions are available from *Ideal Home* Architectural Competition, 96, Long Acre, London, W.C.2.

The assessors will be: Clifford Culpin, Peter Dunham, and Eric Ambrose. The last day for submission of entries is 12 noon on January 30, 1959.

Because of the low standard of much speculative and some private housing the RIBA and *Ideal Home* magazine are launching a scheme to assist those who for one reason or another—often financial—are not in a position to employ an architect to design a house for their individual needs and it is hoped that this scheme will encourage the widespread erection of better designed houses. The assessors will select 30 designs covering a variety of categories, size ranges and prices, the maximum floor area being 1,100 sq. ft. and the maximum price £4,500.

The 30 designs chosen will be issued by *Ideal Home* magazine in a special publication and the working drawings will be available for purchase by the public and by private enterprise builders for whom there will be special terms.

In place of the premiums usually awarded to the authors of the winning designs in competitions, fees will be paid to the 30 successful competitors. The fees will be made up of a cash payment of £75 plus a royalty of £10 for each set of prints of working drawings sold.

Ideal Home magazine will run a Service Bureau to deal with enquiries and to advise on suitable designs for particular localities.

To encourage the employment of local architects for siting houses, supervision if required, selection of materials and to deal with other matters needing local knowledge and advice, a list of the RIBA Allied Societies will be incorporated in the publication. There will also be chapters explaining the advantages of employing architects at full scale fees and the advisability of using architects' services for the design of layouts for estates.

The RIBA hopes that members will enter the competition and that the scheme will provide an opportunity of demonstrating to the public the advantages of architect-designed houses.

ARCUK REPORT

Ban on Certain Partnerships

At its meeting last week the Architects' Registration Council of the UK had before it a recommendation of the Professional Purposes Committee, which it adopted, that the Code of Professional Conduct embody a prohibition upon architects on the register (*a*) entering into partnership in the practice of architecture, or (*b*) entering into employment in the practice of architecture, with a person whose name has been removed from the Register under Section 7 of the Architects' Registration Act, 1931, for conduct disgraceful to him in his capacity as an architect or for having been convicted of a criminal offence.

Architects Can Form A Limited Company

The Council accepted, with some misgivings, a recommendation from the Professional Purposes Committee that there was no valid objection to a scheme put forward by a firm of solicitors on behalf of an architect client, whereby the latter would form a limited liability company which would purchase from him his office premises, office furniture, fittings and equipment, and give him shares to the value of the assets so purchased. The Company would not employ the architect, who would continue his practice in the normal way, personally entering into contracts with clients and rendering his accounts to them for professional work done.

To quote the solicitor's letter: "In consideration of the company providing the architect with office accommodation, staff, motor cars, equipment, stationery and so on, the architect would then pay over to the Company by way of rent a substantial proportion of the fees he earned, retaining for himself an adequate reward for his work, and upon which his tax liability would not be so great as at present. We shall be glad to know as soon as possible whether there is any objection to this course from the professional point of view, as it is not desired to incur substantial costs in carrying out either of the schemes if in the end it is found to be impracticable by reason of valid objections from the ruling body."

Included in the scheme as originally presented was the proposal that the Company should also employ the staff working for the architect, but on the Registrar's pointing out to the solicitors that such an arrangement would enable the architect to divest himself from many of his responsibilities in respect of his employees, and in effect substantially limit his liability to his professional clients, the solicitors replied that if that was the real objection, the architect would personally employ the staff.

Since it appears to the Committee that the scheme would not be in contravention of Principle V (in other words, the formation of the proposed company would not result in the architect carrying on his architectural practice in the form of a limited liability company or in his avoiding his responsibility to his clients), they see no valid objection to it; but, nevertheless, in view of its possible implications they would welcome the general views of the Council.

DOMESTIC INSULATION

The Draft Regulations

MOHLG is circulating some proposed alterations to the Model Building Byelaws, the effect of which would be to establish definite criteria for thermal insulation in dwellings (including flats) and to tighten up the regulations governing flues and flue-pipes.

The first of these proposed alterations arises from the discussion created by Mr. Nabarro's Thermal Insulation (Dwellings) Bill, which the government opposed on the grounds that the objects aimed at would be better obtained in the Building Byelaws. The standards now proposed are U-values of 0.23 for roofs, 0.30 for external walls and 0.40 for ground floors. They relate only to the general construction and do not take windows into account, an omission which is theoretically unsatisfactory but practically wise. The standards themselves are modest: the roof value is that represented by a tiled roof with felt and 1-in. fibreboard over the ceiling; the wall value by that of an 11-in. brick cavity wall; and the floor value by a suspended timber floor with tongued and grooved boarding.

The second proposed changes concern flues and, more particularly, flue-pipes from solid and oil-fired appliances and seem to have been suggested by a case which occurred some years ago when some babies were burnt to death as a result of heat from a flue-pipe igniting timber in a partition. The proposed changes require that no flue-pipe shall pass through any floor*, any ceiling other than that of the top storey, or any internal wall. They specify minimum distances which must separate flue-pipes from surrounding structure and describe permissible methods of construction where flue-pipes must pass through structure. These are detailed and very stringent, as witness the proposals which we print below which relate to the passage of flue-pipes through walls, ceilings or roof:

"(3) Where the flue-pipe passes through an external wall, the ceiling of the highest storey of the building, or a roof (other than a wall, ceiling or roof constructed of non-combustible material throughout), the pipe shall be—(*a*) distant not less than three times its overall diameter from any combustible material in the wall, ceiling or roof through which it passes; or (*b*) separated from any combustible material in a ceiling or roof by solid non-combustible material at least nine inches thick; or (*c*) separated from any combustible material in a wall by solid non-combustible material at least nine inches thick if the combustible material is below or beside the pipe or at least twelve inches thick if the combustible material is above the pipe; or (*d*) enclosed in a sleeve of metal which complies with the requirements of paragraph (6) of this byelaw."

Paragraph (6) reads as follows:

"(6) A sleeve to which sub-paragraph (*d*) of paragraph (3) of this byelaw refers shall—(*a*) be carried through the wall, ceiling or roof and project for at least nine inches beyond any combustible material in or on the surface of the wall, ceiling or roof; (*b*) have between it and the pipe a space of not less than one inch left empty and open at the ends; and (*c*) where the wall, ceiling or roof is of hollow construction so that there is an air space between the outer surface of the sleeve and any combustible material in the wall, ceiling or roof, be so fitted that—(i) there is a space of at least one inch between such material and the outer surface of the sleeve; and (ii) such material is distant from the outer surface of the pipe not less than one-and-a-half times the diameter of the pipe; or (*d*) where the wall, ceiling or roof is of solid construction, be so fitted that—(i) any combustible material in the wall, ceiling or roof is separated from the outer surface of the sleeve by solid non-combustible material not less than four-and-a-half inches thick; and (ii) the said combustible material is not less than seven-and-a-half inches distant from the outer surface of the pipe.

It will be noticed that the proposed regulations require a thicker cover for a flue pipe than for the same pipe if it were serving as a lining inside a brick chimney.

* "Floor" must mean the floor of any habitable room, for there are special conditions applying to pipes which pass through space used for storage purposes between the top storey ceiling and the roof.

STRUCTURAL ENGINEERING

Leighton House Exhibition

The exhibition of photographs of Structural Engineering at Leighton House consisted of a mass of photographs and one or two models, supplied by cement, steel, timber and aluminium interests. They were arranged haphazard, with a vague classification by subject; there was no theme. The effect was that of an ironmonger's shop window: everything was there; give the eye time to wander over the richly diversified surface and one finds what one wants.

Here, then we had the products of one of the major folk-arts of the twentieth century, all jumbled together and heaped up: an art quite unselfconscious, and all the more so for being subordinate—no cathedrals, no jet aircraft, the purposes were not only utilitarian but in general little regarded. Anonymous too; great names were there, but with no catalogue one had to know one's book to pick out their works from those of their unknown colleagues.

The whole range was covered, from industrial plant structures, bare as a worm, at one extreme, to the interesting interference effects at the fringe of the different discipline of architecture, where now one hid behind the other, now they stood starkly side by side and now there was fusion, with interesting spectroscopic effects.

There were few signs of looking over the shoulder. Such as there were could be found, oddly enough, in bridge-building, where the obsession with the masonry arch remains so strong that the most unlikely materials are constrained to imitate it, with varying degrees of stultification.

If one were seeking the very type of structural engineering, perhaps one would find it in the steel power line pylons. The problem is simple in the sense of being uncomplicated; enough bone just to carry a maximum of bare nerve high in the air in the worst conditions of wind and ice, and able to be put into the right shape, with the minimum of effort, on the side of a mountain, if need be.

Elsewhere the problems were more confused. We have used the word "subordinate." Was the structural engineer subordinate to another's mind? Was he designer or was he calculator? Originator or executive? The relations between architect and structural engineer are well trodden, if undefined, ground; what of those between structural and chemical, structural and civil engineers? Alas, we were given no help. Perhaps it is as well, for the photographs and the models could thus stand simply as a witness to construction, to what we are doing to the face of the earth, to an effort so stupendous as to be almost a force of nature.

A. J. HARRIS

"IDEAL HOME"

Birmingham Exhibition

Once again it appears that in the minds of the organizers the Midlands "Ideal Home" thrives on novelty—of every variety of the odd and the banal (writes a correspondent).

The largest scale novelty was the adoption by the trade of the "contemporary style" both for the stands and the furnishings, frequently coarsened and vulgarised in their colour and outline. The last strongholds of "godwottery" and the mock antique are now in a small minority and stand out more clearly than they did a few years ago.

The central display of the exhibition was an encouraging one, a life size demonstration house erected by a Midland firm of speculative builders; the original, selling at between £2,325 and £2,600, shows the logical planning and clean detailing, up to now associated with the "one-off" architect-designed house. The brochure associated with this house, by omitting the name of the architect, deceives the public into believing that houses like this design themselves.

Useful technical displays were those of the Coal Utilization Council, who showed a small bore pipe heating installation with outside air temperature control; and the Gas Board's whole house heating scheme—with three hot air circuits, each separately controlled by thermostat. The importance of roof insulation was also put across, but there is disappointingly little evidence, on the whole, of post-war technical advances, to make the "ideal home" a more efficient, warm and more comfortable machine to live in.

The Exeter Branch of the Devon and Cornwall Society of Architects organized a successful exhibition, below, showing examples of the work of local architects under the title "More Than Building."

SPAB

Scholarship

The Society for the Protection of Ancient Buildings has awarded the first Banister Fletcher Scholarship to Mr. H. J. M. Green, of St. Ives, Hunts. This is to enable him to study the treatment and repair of old buildings under the society's technical experts.

BOOK REVIEW

The Decipherment of Linear B: John Chadwick (Cambridge University Press, 18s. 6d.)

Those of us who were fortunate enough to have known Michael Ventris as an architect will remember, in addition to his skill as designer, his brilliant powers of analysis and his positive genius for method in design.

When the news broke of his successful decipherment of the Minoan "Linear B" Script which had baffled experts for fifty years we were as much surprised by the revelation of the obscure subject of his spare time hobby as by the magnitude of his achievement. Unfortunately for most of us, both the problem and the methods he used to solve it were pretty much above our heads.

John Chadwick, the young Cambridge philologist who collaborated with him in the final stages of the decipherment, has now come to our rescue with an excellent book for the layman on the subject which combines lucid explanation with all the thrills of a first-class detective story.

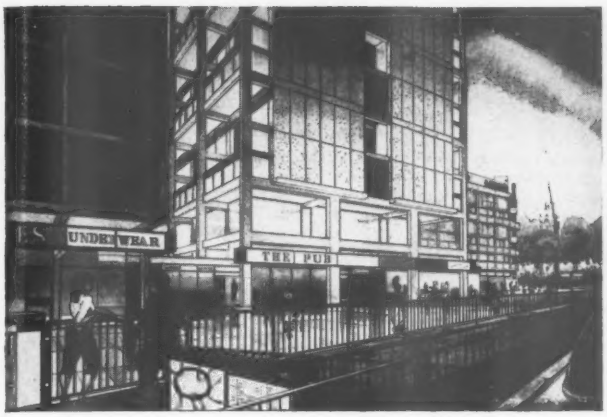
It is clear that Michael Ventris's visual training made a powerful contribution to the decipherment—for example, in his conception of a two-dimensional "grid" with consonants vertically and vowels horizontally into which the syllabic signs were gradually fitted and in the production of a beautifully drawn "normalized" script which excluded the errors and aberrations of the originals.

Equally fascinating are the extracts from his reports and "work notes" immaculately presented on foolscap sheets and circulated to scholars all over the world which are clearly descended from the methodical design notes he developed at the AA school.

As an architectural student in 1948 he wrote these words:—"Put down conceitedly every requirement, argument, inspiration and mind's eye picture that occurs during the design process, and put it down as concisely, enthusiastically and *pictorially* as possible."*

This was the method he used in his Minoan work notes, where all the rough working and all the mistakes were included for all to see and profit from. In 1952 he circulated a work note introduced as a "frivolous digression" and entitled "Are the Knossos and Pylos tablets written in Greek?" He knew that he was flying in the face of accepted history, and excused his heretical suggestion by introducing it as a bit of a joke. But in the end it was history rather than Michael Ventris's thesis that had to be rewritten. OLIVER COX.

* "Plan 2, 1948." p. 17.



ELEPHANT AND CASTLE MARK II

High Towers and Looser Development

The architectural composition of the Elephant and Castle comprehensive development area, which the LCC intends to transform into "the Piccadilly Circus of South London," is now beginning to emerge with the publication of the designs for the first two groups of buildings. These are a group for houses, offices and shops at the southern end of the area, designed in the Housing Division of the LCC's Architect's Department, and the new London School of Printing and Graphic Arts adjoining the Metropolitan tabernacle south-west of the main roundabout.

The housing group is on a 2¼-acre site, forming part of a larger area to be developed later as a second stage, the overall density being 175 persons to the acre. Two hundred flats and maisonettes, with stores, lock-ups, shops, offices and a pub are in three six-storey blocks (one for offices), flanking a 25-storey tower block (the highest residential block proposed for London) and intended to emphasize its verticality. There is also a two-storey block of garages and workshops flanking the railway viaduct.

The shops on the ground floors of the three blocks constitute a virtually continuous frontage which is complementary to the main shopping area opposite. Following the lines of this frontage, the prominent horizontal fascia emphasizes and unifies the different kinds of shops throughout the group. At night the fascia will be brilliantly lighted. With shop windows and the illuminated sky signs suggested for the north face of the tower the group is intended to provide a dramatic climax to the whole complex (illustrated top left).

Access to the flats and maisonettes in the tower block is obtained across a paved piazza flanked by shops with a fountain basin at its centre and a suggested sculpture group (illustrated top right).

The London School of Printing and Graphic Arts groups its workshops in a large four-storey block, forming a podium for the 170-ft. high glass and aluminium clad teaching tower.

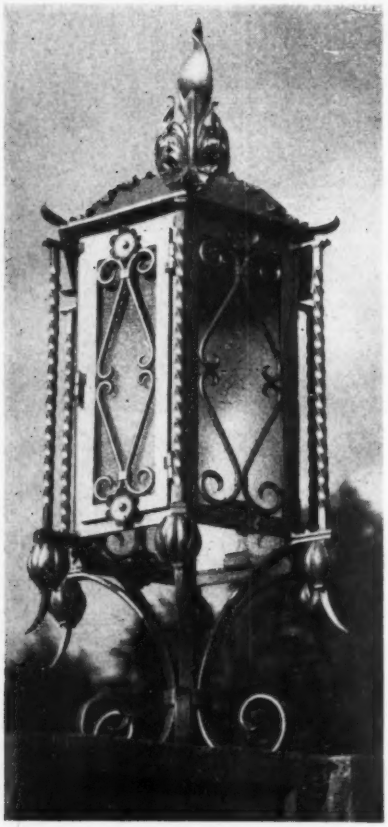
The most significant change from the original project is that by placing the towers in depth on their enlarged sites the layout has been loosened up, the buildings have been freed from the line of the main roads to which originally they rigidly adhered, and public forecourts have been formed at selected points.

In the design of the subways by the LCC General Division an effort has been made to encourage their use by making them inviting and attractive by means of adequate lighting from fittings set flush in a specially developed sound absorbent ceiling; glass mosaic tiling with small areas of brightly coloured patterns on the subway walls, and on the ramp walls a textured surface of green granite chips in precast concrete blocks. The design of railings, directional signs and paving has also had special attention.

The building shown in the larger island is a new transformer station for the LTE, with transparent walls to make the electrical equipment visible to the public. It is suggested that it could be a memorial to Michael Faraday who was born in the borough. The Minister of Transport rejected the LCC's earlier proposal to incorporate a sunk car park in the major island, and the treatment now suggested for the two islands is still under consideration.

The scheme for the C.D.A. was prepared, and the projects designed, under the direction of the Architect to the LCC, Hubert Bennett, and the Deputy Architect, F. G.

Above: perspective at the northern end of the Elephant and Castle, of the School of Printing and Graphic Arts Below: model of the revised scheme, looking south towards the 25-storey residential tower block, with the School of Printing on the right, The structure on the major roundabout, whose treatment is provisional, is a fully glazed transformer station, suggested as a memorial to Michael Faraday.



PLANNING—OR SNOBBERY?

A Peculiar Decision by the Minister

The Minister of Housing and Local Government, in the decision reported on this page, has upheld the right of a group of neighbours to veto "contemporary" designs. A young engaged couple instructed an architectural student, David Dry (who has passed his RIBA finals apart from professional practice), to design a house for them on a plot which they had bought on The Ridge, a private road on Epsom Downs. All the houses in the road (except one) have been built since the war, and these are illustrated on the opposite page.

The clients wanted an "excitingly modern" design. But, wisely anticipating trouble, Mr. Dry advised them to avoid extremes, and he attempted to "keep in keeping" with the diverse styles in the road by the use of discreet materials in a traditional manner (brick facings, and a pitched tiled roof). To take advantages of the view to the west, which is interrupted by some trees lower down the slope, he placed the living rooms on the first floor. The character and plan were allowed to develop naturally from this requirement; an outside staircase gave access to the garden from the balcony, and another outside stair on the east wall, facing The Ridge, gave direct access to the kitchen from the ground. The design was approved (as it had to be) by the architect to the RAC Country Club, who were the vendors of all the sites. This did not prevent the Club, of which some of the Council's officers are members, from objecting to the appeal.

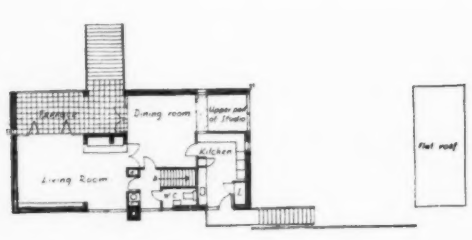
The Borough Council objected that the house would "adversely affect the amenities of the locality, as its design and appearance would be completely out of keeping with the existing properties in this good class residential area." It objected particularly to the fenestration, the central chimney stack and the external staircases. The borough engineer, surveyor and planning officer, C. G. Cobbett, who holds no planning or architectural qualifications, said at the enquiry that the existing development was "of a very high standard of quality and comfort," and not much influenced by "contemporary" design. The neighbouring householders objected that the external staircases made the house look as if it was two flats, and would facilitate its division in this way in the future.

The inspector, J. H. Markham, noted in his report "that all the residents on the estate are unanimously opposed to the introduction of a type of house which betokens æsthetic standards different from their own. In his view, the argument that this building, with its external stairs, looks like a building containing two flats is not without considerable force. He thinks the design cannot be considered neighbourly from an architectural point of view, and he recommends therefore that the appeal be dismissed." The Minister agreed with these findings, and dismissed the appeal.

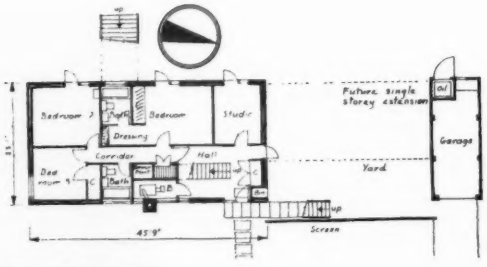
What has the Minister achieved? After waiting a year, a young couple are unable to build their home; Mr. Dry is deprived of one of his first commissions; the right of unsympathetic neighbours to veto a "contemporary" design, and to impose their "æsthetic" and snobbish prejudices against outside stairs, has been upheld. Is this what Ministers mean by "freedom"?

Above, Beacon of Progress, or one of The Ridge's Lamps of Architecture. Below, plans and perspectives of Mr. Dry's rejected design. Opposite, all the post-war houses in The Ridge, whose aesthetic standards the Minister has decided to preserve.

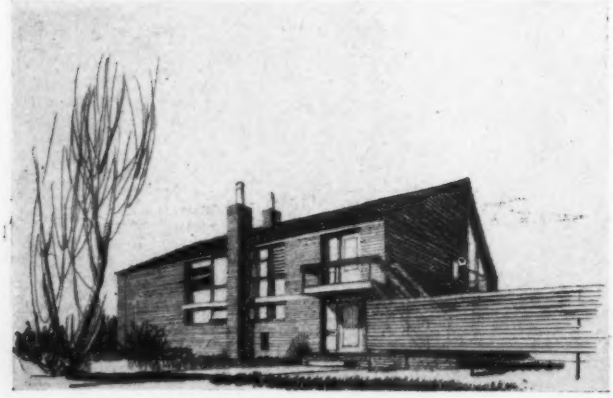
Why Should This *House . . .*

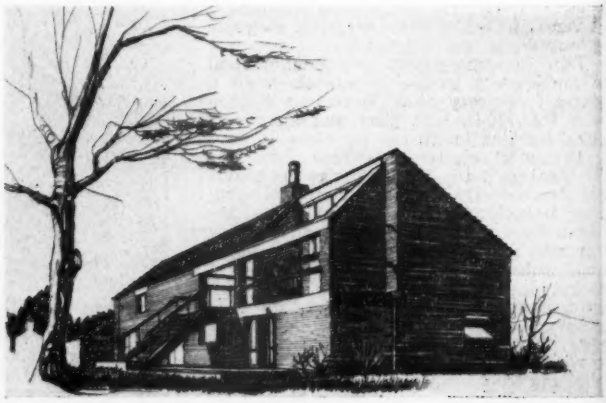


First floor plan [Scale: $\frac{1}{8}$" = 1' 0"]



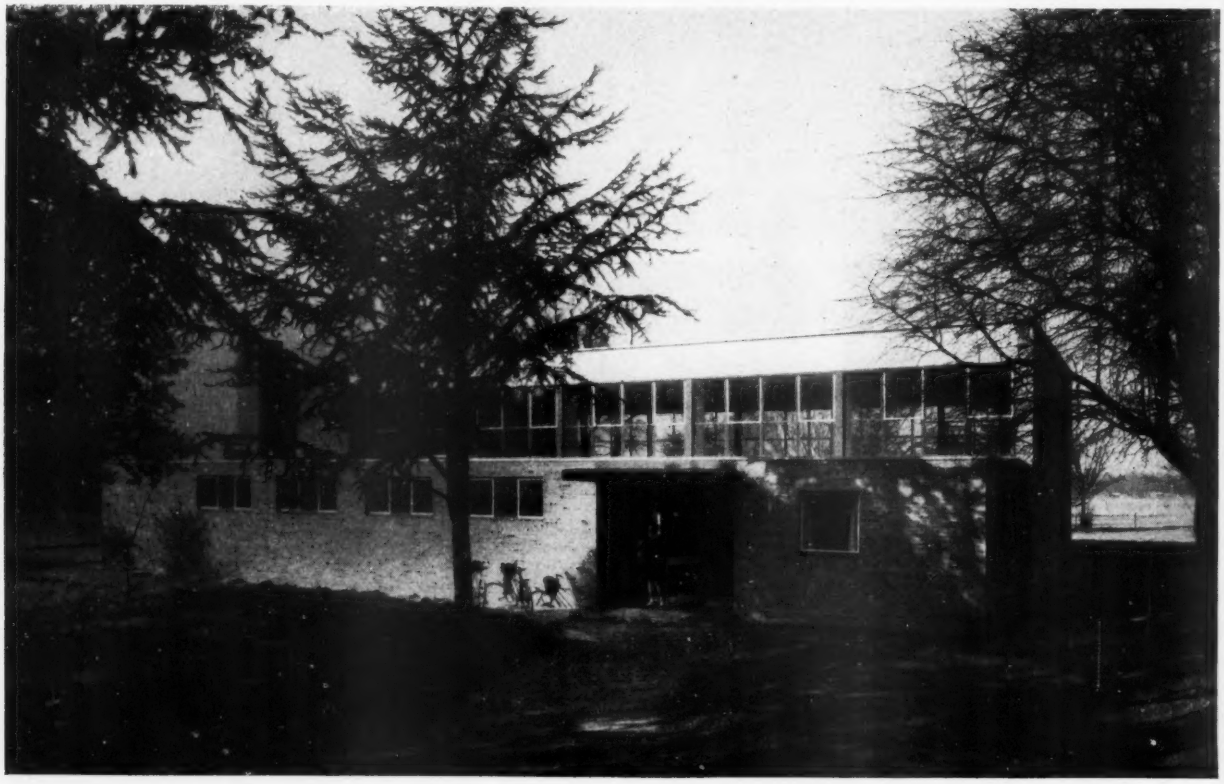
Ground floor plan



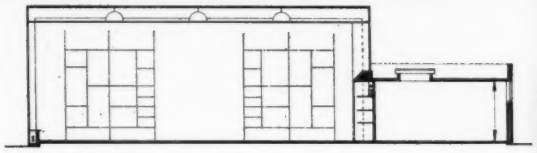


Be Considered Unworthy of these ?

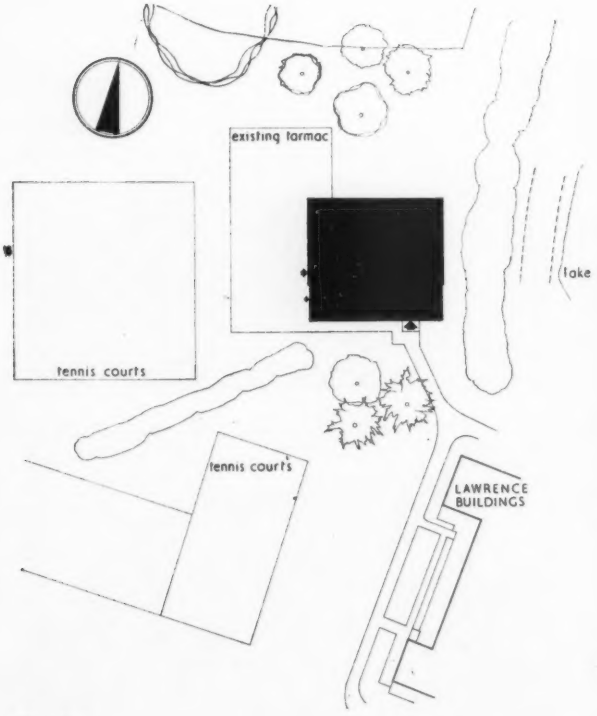
GYMNASIUM FOR TRAINING TEACHERS OF PHYSICAL E



This gymnasium, built in the extensive grounds of the Froebel Educational Institute at Roehampton, was designed by Norman and Dawbarn to provide a self-contained hall for the instruction and demonstration of teaching practice. A primary object of the hall was to develop a type of demountable apparatus, at present for the training of teachers, but later, it is hoped, for use in primary schools, which are not normally provided with gymnasia. As the hall is also used to some extent for end of term functions, the small amount of conventional apparatus had to be as inconspicuous as possible, seats for an audience were required and ample cupboard storage space. The building, seen above from the south, consists of a main hall running east and west with a clear ceiling height of 17 ft. The clerestory windows light the south side above a lower block containing changing rooms, lavatories, entrance hall, tutorial rooms and boiler house. The structure of the hall is a light steel portal frame with brick gable ends and aluminium roof decking. The lower portion of the building is load bearing cavity brickwork with a reinforced concrete roof, both roofs being covered with roofing felt. Above right, opposite page, is the hall from the north, with its blank end wall where ball games can be played, and existing outdoor apparatus in the foreground. Right, is the interior, with a class in progress, using the "Southampton" type climbing frames on the

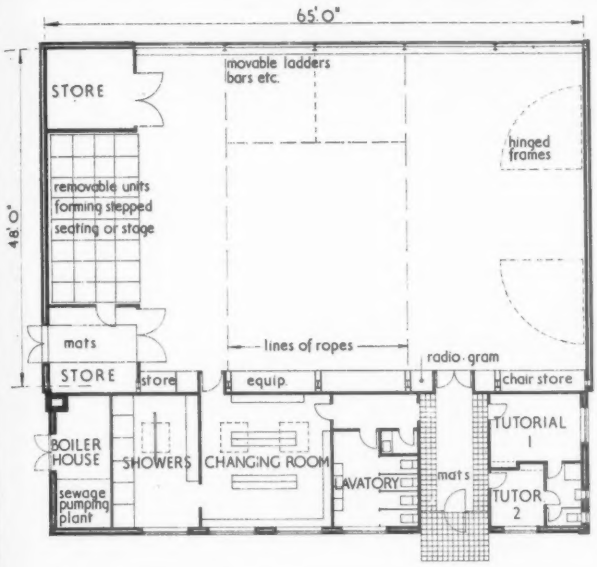


Cross section [Scale: $\frac{1}{64}$" = 1' 0"]



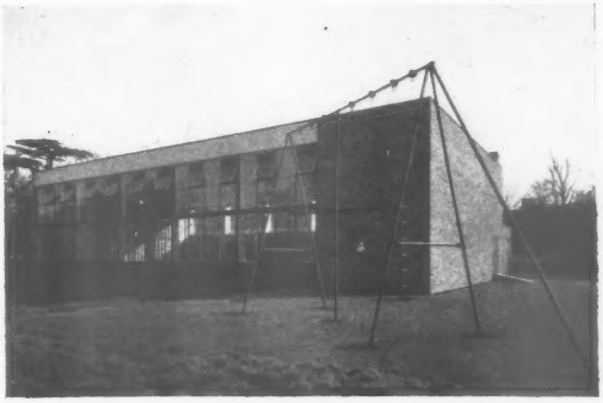
Site plan

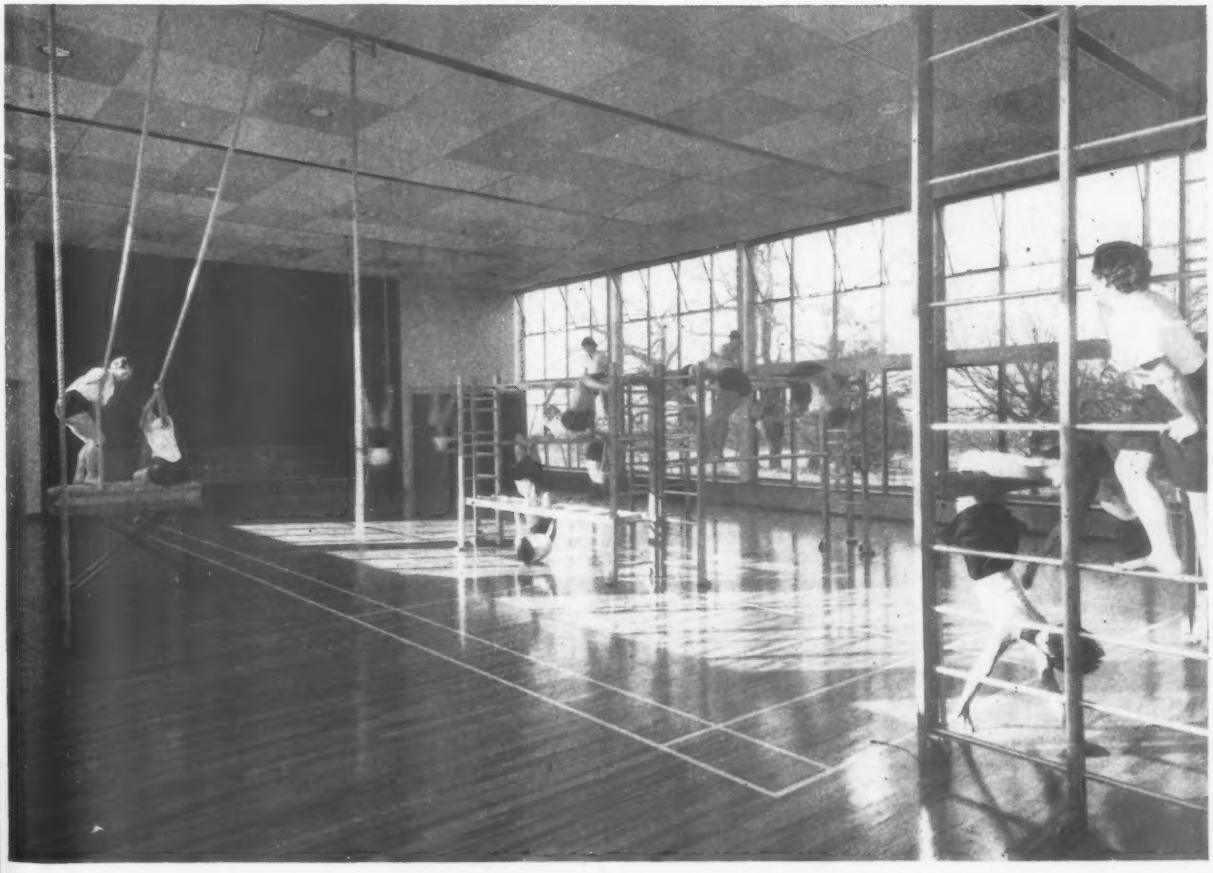
EDUCATION AT THE FROEBEL EDUCATIONAL INSTITUTE, ROEHAMPTON



Ground floor plan [Scale: $\frac{1}{24}$" = 1' 0"]

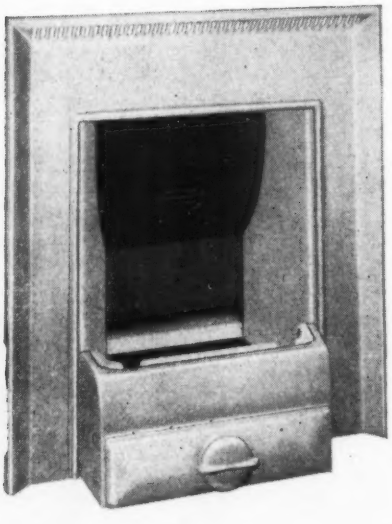
east wall, movable apparatus and ropes. The floor is loliondo hardwood strip, and, in ancillary rooms, heather brown quarry tiles. Large areas of mats at entrances to the hall protect the gymnasium floor from damage by dirty shoes. The suspended hall ceiling is panelled in fibreboard with recessed light fittings. Heating is by a low pressure hot water system with an oil-fired boiler, with warm air convectors and a pipe coil under the window seat in the hall, and radiators elsewhere. Owing to the proximity of a lake in the grounds, soakaways could not be used for rainwater, and this had to be widely distributed by agricultural drains, while, as the site is below the level of the existing foul drainage system, a sewage pump had to be installed. The general contractors were W. H. Gaze and Sons Ltd.; for sub-contractors see page 620.

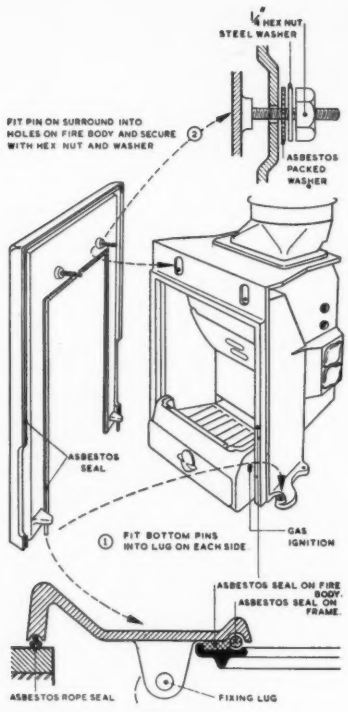




Elegant new convector surround
for the high output MARVEC fire

The Marvec heats up to 2,500 cu. ft. by radiation and convection and — if it is needed — will heat the water too.





SECTION THROUGH FRAME

The NEW CONVECTOR SURROUND is far and away more pleasing to look at than the usual hot air grilles. From the illustration (left) you will see that the new surround is an extremely neat frame which does away with the necessity for grilles: its removal allows access to the flue adaptor and convection chamber.

The surround, for use with boiler or non-boiler models of the Marvec, is fitted after the tile surround is in position, thus making installation exceptionally easy.

If the air for the convection chamber is required to be taken from outside the room in which the fire is fixed, the convector surround can be supplied without the cut-outs in the return of the jambs.

SPACE HEATING CAPACITY

Using the convector surround to introduce convected air to the same room, 2,250 cu. ft. can be heated (or 2,500 cu. ft. with the non-boiler model). If convected air is used for warming other rooms, full heating up to 1,750 cu. ft. is provided, and background warmth for other rooms up to a total of 2,000 cu. ft.

Note: These figures apply to rooms of normal construction.

BOILER OUTPUT

Provided the system is compact the boiler can heat a towel rail in addition to supplying domestic hot water, or alternatively 45 sq. ft. of radiation surface (including unlagged piping) can be heated.

The fuel saving RESTRICTABLE THROAT

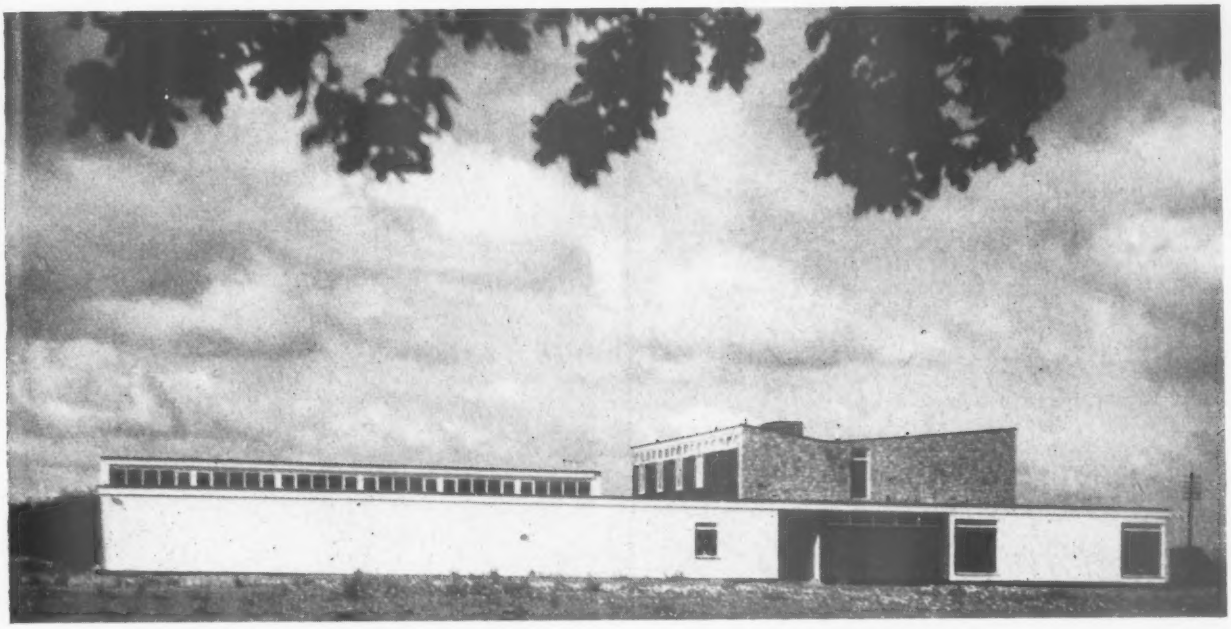
. . . a curved plate in the flue outlet, adjustable so that chimney throat can be wide or narrow, effectively controls room ventilation, saving heat and eliminating draughts.

For further details of the Marvec fire write to the Housing Division of:—

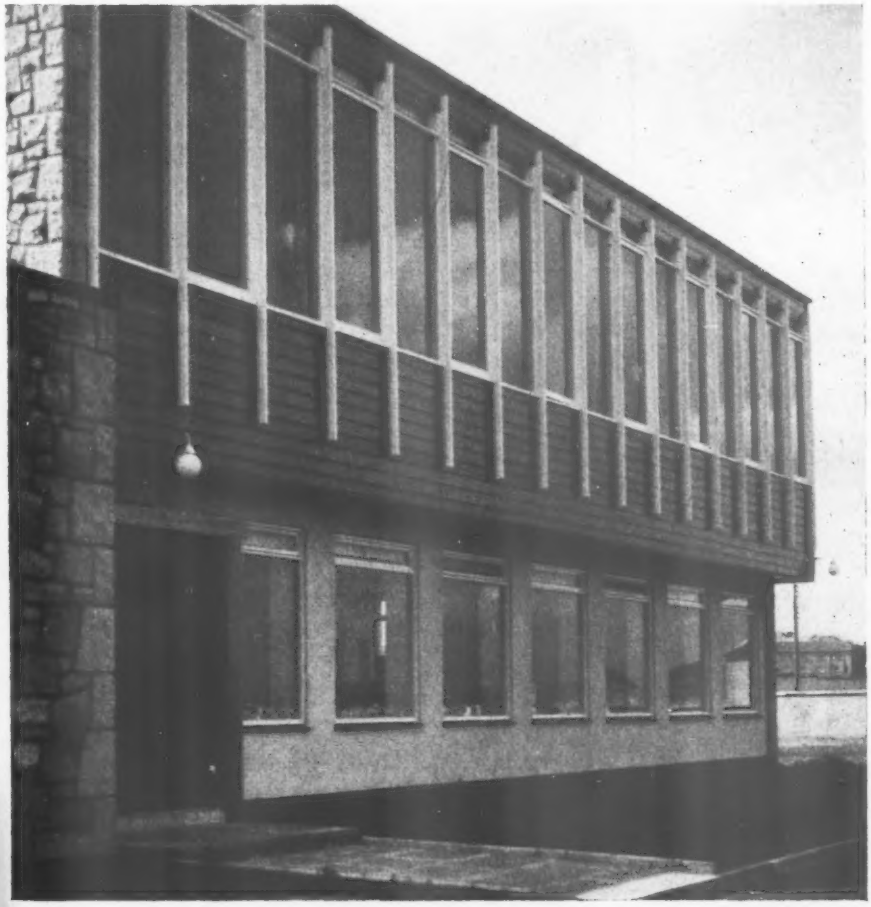
ALLIED IRONFOUNDERS LTD

Makers of cookers, boilers, fires and baths

DRUMMORE MOTEL, WALLYFORD, SCOTLAND



This, the first motel to be built in the east of Scotland, designed by Alan Reiach, is strategically located in a triangle of land between the Great North Road and the main coast road to local resorts from Edinburgh, at a point seven miles outside the city. So far, only the restaurant, bar and public lounge have been built. It is intended to proceed with the remaining portion in the coming year. The motel is divided into two parts, public rooms open to passing visitors, and bedroom accommodation, well away from the "day rooms," for quiet and privacy. As a railway abuts one side between the two main roads, all the bedrooms face away from this side and look onto gardens. Motel patrons arrive at the east end of the site and proceed by car to the parking lot at the rear, from which the bedrooms open directly. A small coffee bar and paper shop are provided for overnight guests. A restaurant, bars and skittle alley are placed on the ground floor with lounge and ballroom planned on the first floor (left). The last has its own under-cover access with parking to the rear. Construction is of steel frame in the public rooms and load bearing brick cross-wall in the bedroom wing. Stone, timber and rendered brick are the external finishings. Less than a dozen motels exist as yet in Britain, whereas in the US there are said to be over 80,000.



CONGREGATIONAL CHURCH AT HOOLE, CHESTER

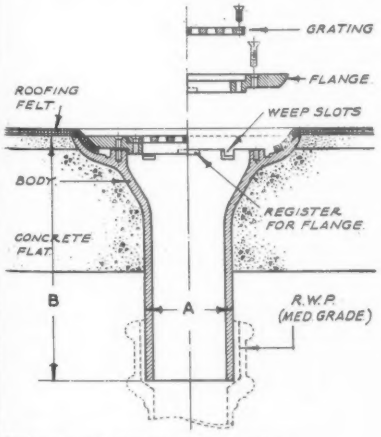
This new Congregational Church at Hoole, Chester, was designed by K. W. Paterson and J. S. Macaulay: it is only the first part of a larger project, and two additional halls will eventually continue the line of the present building. The church is constructed with simple laminated timber frames supporting purlins at 2-ft. centres, battens and counterbattens and interlocking pantiles. The internal ceiling is of slotted insulation board fixed directly to the purlins. Side aisles and porch, and rear block with vestry and kitchen, are roofed in asbestos cement decking and bituminous felt with an inner ceiling finish of diagonal mahogany boarding. External woodwork is oiled western red cedar. Flooring is of cork tiles. Heating is by electric convector heaters and infra-red overhead heaters. The cost of the church, apart from seating, was £10,300. General contractors, Henry Jones & Sons.

THE INDUSTRY

From the industry this week Brian Grant includes an outlet for felted roofs, coloured cladding, an oil-fired space heater, a catalogue of sanitary fittings and two domestic boilers.

Draining felted roofs

Broad's new Feltseal outlet is a simple answer to the problem of providing drainage to flat roofs with a felt covering. As can be seen from the section, the fitting has a flange to receive the felt, and once the screw-down top flange has been fitted the joint is watertight and does not have to be disturbed if it should be necessary to remove the grating, which is an entirely separate unit. A domed grating is made for use where leaves would be liable to collect over a flat grid,



Section through Broad's Feltseal outlet.

and there is an adequate length of spigot to allow a joint to be made with a rain water pipe below the roof structure. This seems a neat and effective fitting, as there is positive pressure all round on the roofing to ensure an effective seal and also weep slots to take care of any water which may penetrate between the fixed flange and the felt. The fitting is made in 3, 3½ and 4 in. sizes, and costs about £3. *(Broads Manufacturing Co. Ltd., South Wharf, Paddington, London, W.2.)*

Coloured factory cladding

As most readers know, Robertson Thain's Galbestos roofing and cladding sheet has a protective asbestos felt layer which is pressed into the molten zinc when the sheet is being galvanized and is then impregnated with liquid bitumen. The sheet is now available in four colours, red, grey, buff and green, and the colour can be applied to one or both sides of the sheet: the colour is a pigmented resin and is also available on ventilators and flashings. *(Robertson Thain Ltd., Ellesmere Port, Wirral, Cheshire.)*

Industrial space heating

The new John Thompson Beacon oil-fired air heater has an output of 595,000 B.Th.U. per hour and occupies a floor space of only 9 square feet. The unit is entirely self contained and needs only a supply of electricity and oil, while the manufacturers claim an overall efficiency as high as 87 per cent. Air is drawn into the base of the heater by an axial fan and forced over the heating surfaces of the combustion chamber, after which it is circulated through a bundle of spiral tubes which carry the flue gases. The warmed air is then discharged through louvres at the top of the heater at the rate of 320,000 cu. ft. an hour, but the louvres are of large area and the air velocity is only 15 ft./sec. Air temperature rise in passing through the heater is 122 deg. F. Control is by thermostat and there are also safety devices to cut off the burner in the event of flame failure or if the fan should stop. *(John Thompson Beacon Windows Ltd., Wolverhampton.)*

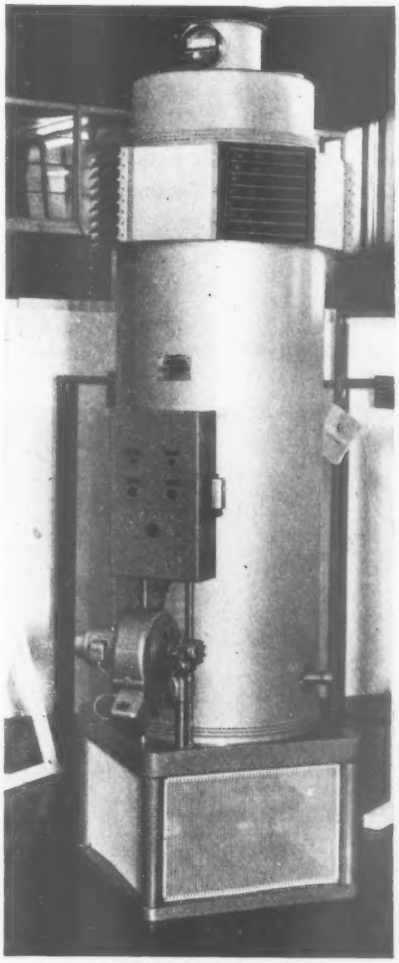
Plugs for baths and sinks

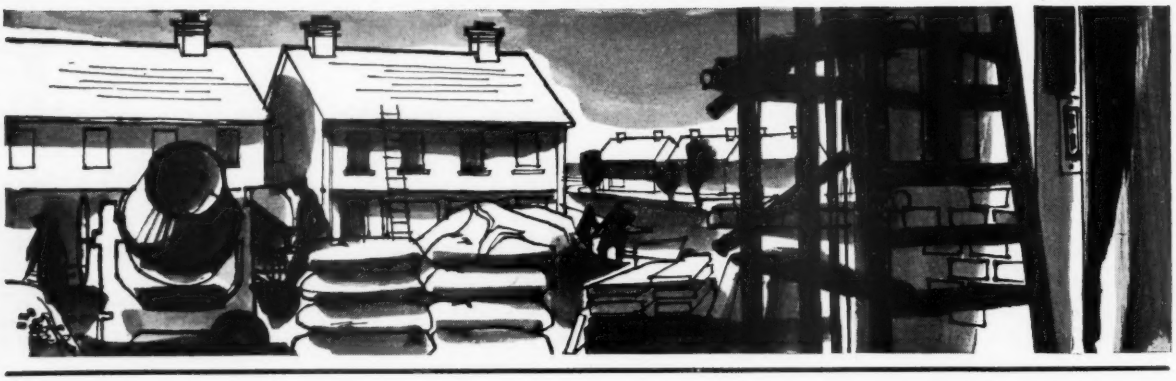
For something like a year and a half I have been using self-registering plugs in a bath and a sink, and find them very satisfactory. They are of the usual type with a flat washer slightly rounded on top and with a conical projection below, so that they centre themselves almost automatically when dropped into the outlets. This type of plug is particularly recommended for old people's housing, as they do not have to reach down into the bottom of the bath in order to insert the ordinary type. Prices start at 3s. *(Dexter Products Co., Oakland Road, Handsworth, Birmingham,* 21.)

Sanitary fittings

A truly monumental publication from Twyfords lists, in nearly 350 pages, mostly in colour, all the patterns in regular production for every class of building and to meet the requirement of most countries throughout the world. The catalogue is divided into sections dealing with each type of fitting, and there is a separate section at the end devoted entirely to hospital fittings. There are some useful notes on the number of fittings required by different types of building with typical layouts for bathrooms and

The John Thompson Beacon air heater.





Redfyre Bacboilers provide low-cost water heating in new housing schemes at Aycliffe, Peterlee and Stevenage

A Redfyre Bacboiler supplies ample domestic hot water, and heats one or two radiators as well. (Or it will heat up to four radiators if hot water isn't needed.) Installation is simple and quick and maintenance costs low. Two new Ministry approved Redfyre grates with Bacboilers are now available — the new Hearth Redfyre with sunken grate and underfloor draught; and the Redfyre 60, a new low-cost controlled-burning fire with exceptionally clean modern lines. All Redfyre fires are fitted with 30% chrome, semi-steel bottom grates for longer life.

Bacboilers like this are being installed in new homes at Aycliffe.
Chief Architect : G. A. Goldstraw, O.B.E., B.A. (ARCH.), A.R.I.B.A.

REDFYRE

Full technical information from

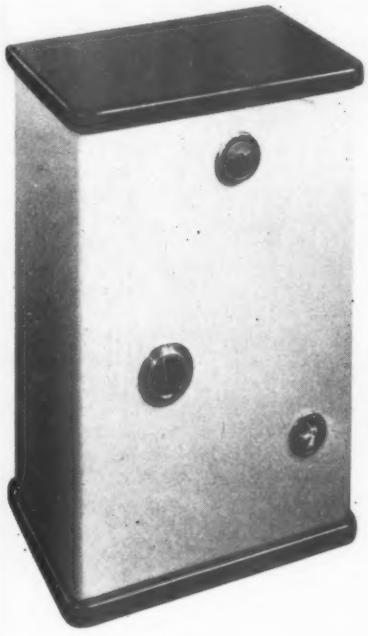
NEWTON CHAMBERS & COMPANY LIMITED
REDFYRE PRODUCTS, THORNCLIFFE, SHEFFIELD

technical section

lavatories. Twyfords make fittings in three main materials, Vitromant, a white or colour glazed earthenware, Ceramant vitreous china, and Adamant enamelled fireclay, and the illustrations in the list have different coloured backgrounds to identify the material of which the fitting is made. *(Twyfords Ltd., Stoke on Trent, Staffs.)*

Oil-fired domestic boiler

The illustration below shows the Unicorn oil-fired boiler which contains a 2½-gallon oil tank so that it can be used in flats or other dwellings where there is no room for a larger storage tank. Dimensions are only 17 by 18 in. on plan with a height of 25 in., and the fuel used is any light distillate such as BP Domesticol. The blue flame burner is controlled by a thermostat to



The Unicorn oil-fired boiler.

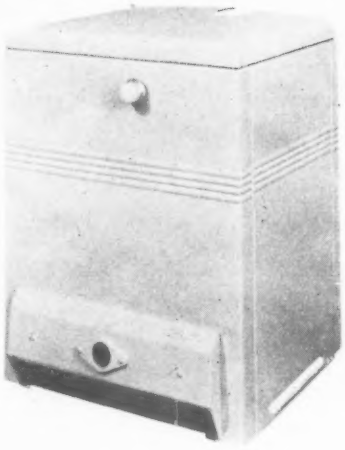
give any water temperature between 120 and 160 deg. F., and the makers claim an efficiency of 81 per cent. with a heat output of 15,000 B.Th.U. per hour. Retail price, with all controls, is £48 6s. *(Mackay Bowley (Steelworkers) Ltd., 21, Caledonian Road, London, N.1.)*

Gas-fired boiler

The Vulcan No. 1 gas-fired boiler has an output of 33,000 B.Th.U. per hour and costs only £35 14s. complete with all controls. The unit has an insulated casing in stove enamelled mild steel, and is, of course, thermostatically controlled, with a flame failure safety device. Boiler sections are cast iron with access doors for cleaning waterways, and all valves and other gear are reached through an access panel in the casing. *(Hattersley Bros. Ltd., Swinton, Mexborough, Yorks.)*

New floor tile pattern

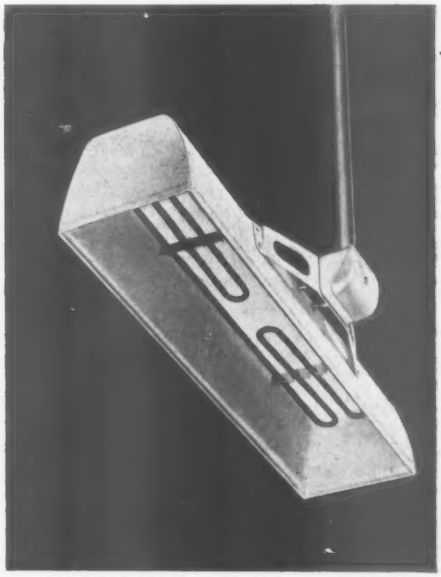
The Armstrong Cork Co. has just announced



The Vulcan gas-fired boiler.

a "Straight Grain" addition to the range of Accotile patterns: this has been designed to give a strong directional pattern as opposed to the usual somewhat indeterminate marbling and should make it possible to design floors with a more interesting pattern. *(The Armstrong Cork Co. Ltd., Bush House, Aldwych, London, W.C.2.)*

Above, a guard for down pipes. Below, the Atlas fluorescent corner-fitting. Below right, Metrovick's space heater.



To keep gutters clear

The illustration below, left, shows the new Harco guard which should prevent gutters and downpipes from being blocked by leaves and rubbish. It costs between 6s. and 7s. and consists merely of an extension from the r.w.p. nozzle up into the trough of the gutter outlet. The top of the outlet is below the rim of the gutter so that water will flow, even if the sides of the outlet are stopped up. The guard is now standard on Harco outlets in 4, 4½, half-round and ogee sizes. *(G. A. Harvey & Co. (London), Ltd., Woolwich Road, London, S.E.7.)*

New Atlas fluorescent fitting

A new diffusing fluorescent fitting specially designed to fit into corners has recently been introduced by Atlas. Similar in appearance to the Domino series, the new fitting (KCQ Series) is rectangular and consists of a one-piece diffuser of opal Perspex, with matt black metalwork, stove enamelled white internally. Conduit entry is provided in the rectangular metal end plates so that units can be mounted end to end if required. *(Thorn Electrical Industries Ltd., 105/109, Judd Street, London, W.C.1.)*

Radiant space heater

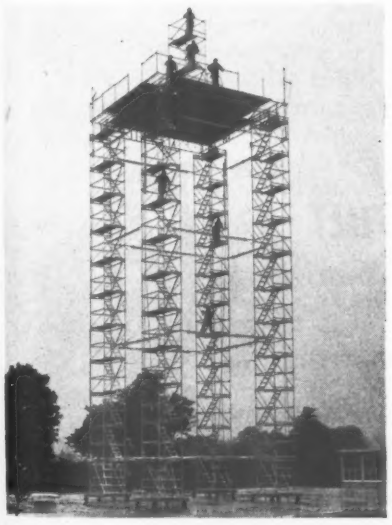
Metrovick have just introduced a new 1½ kW radiant space heater which is much the same as the existing 3 kW model. It consists of an anodised aluminium reflector, tubular metal sheathed heating element, stainless steel element supports and a weather proof terminal box. The element ends have special waterproof seals with screwed terminals and are themselves sealed into the terminal box with rubber bushes. The heater weighs only 5 lb. complete so that it can be hung from the terminal box by a single 1-in. diameter conduit. A fixing bracket for angular adjustment in one plane is available as an extra. *(Metropolitan-Vickers Electrical Co. Ltd., Trafford Park, Manchester 17.)*

Inexpensive baths

Glass reinforced polyester resin baths which sell at comparatively low prices are now being produced by Monks & Company. The baths are 66 in. long and are available either in white or in a series of seven colours which have been chosen to match the standard colour ranges of vitreous china and earthenware sanitary fittings and suites. The baths weigh less than 50 lb. so that they are easy to handle and should not be liable to suffer much damage on site or during fixing, and the resin from which they are made has a special filling to give extra resistance to scratching. Two types of side panel are produced, either in black or in colours, and with or without a toe recess. Prices are £17 10s. in white and £21 12s. 6d. in colour: side panels are about £3 10s. according to type and end panels 30s. (*M. Monks & Co. Ltd., Bridge Road, Woolston, Warrington, Lancs.*)

Access to ceilings and roofs

As a footnote to the issue of the JOURNAL which dealt with the repair of old buildings, readers may be interested in a mobile 100-ft. tower recently made for Cemesto NV, an Amsterdam firm which specializes in the cleaning and restoration of cathedrals and churches all over Holland. Lofty interiors are always difficult to reach, and standard Zip-up stairway sections were used to form four 68-ft. towers braced and guyed together to give a 700 square foot working platform on which is mounted a 30-ft. wheeled tower with lockable casters. The whole structure can be erected in four hours by a team of eight men and will stow in one pantechnicon for moving on to the next job. Zip-up sections are assembled with spring loaded pins and nut bolts at the joints, and rapid assembly or dismantling is obviously a very considerable advantage in buildings which are needed regularly for religious services and where the time available for working is strictly limited. (*Access Equipment Ltd., Maylands Avenue, Hemel Hempstead, Herts.*)



Mobile tower for cleansing buildings.

INFORMATION CENTRE

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

22.91 sound insulation and acoustics
ACOUSTIC TEXTBOOK

Acoustics, Noise and Buildings. By P. H. Parkin and H. R. Humphreys. (Faber and Faber Ltd. 70s.)

This excellent book, though it is not only intended for architects, will prove very useful to them. Written by a member and a one-time member of BRS, it is without doubt the best book to be published on this subject since Bagenal and Wood's *Planning for Good Acoustics* (1931) and architects will be comforted to notice that Hope Bagenal has written a foreword to it. Its contribution to our knowledge is of two kinds. On the one hand it treats certain acoustic problems which hardly existed when *Planning for Good Acoustics* was written or which have since changed their complexion. An example of this is the chapter on the design of studios, both sound and television. Secondly, it records and summarises the very considerable body of field work which has been undertaken of recent years, work of which the BRS study of noise in flats is a good example. Two of the chapters, on the design of high quality speech-reinforcement systems and on sound measurement and calculation, lie outside the direct sphere of interest of the architect and are mostly incomprehensible to him; but the authors have wisely designed their book so that he can skip them without losing the thread. On the other hand (and this is important), in suggesting acoustic remedies the authors are careful to keep all the architect's problems in mind, and not merely the acoustic ones. There is thus a very practical air about their findings and suggestions, which will be much appreciated. One particularly useful class of information which is supplied repeatedly is that which gives the desirable standards of insulation between one type of room within a building and another: between say a library and a classroom in a school, or between a typists' pool and an executive suite in an office building; and another gives the degree of sound reduction which is to be expected from different types of construction in different building contexts. Ready comprehensibility is a characteristic of this book. There is, however, one section in which this quality is not maintained, namely the one dealing with "Speech Communication" (page 288 *et seq.*). This seems an inherently straightforward subject and it is a pity that it should be inadvertently clouded in specialist's fog. It would be worth the authors' while to interpolate a few more explanations (what, in heaven's name are NCA and NC curves?) and perhaps a worked example in their next revision.

This is one of the very few *books* (as distinct from pamphlets) which we have seen since the war which we can class as an indispensable office reference.

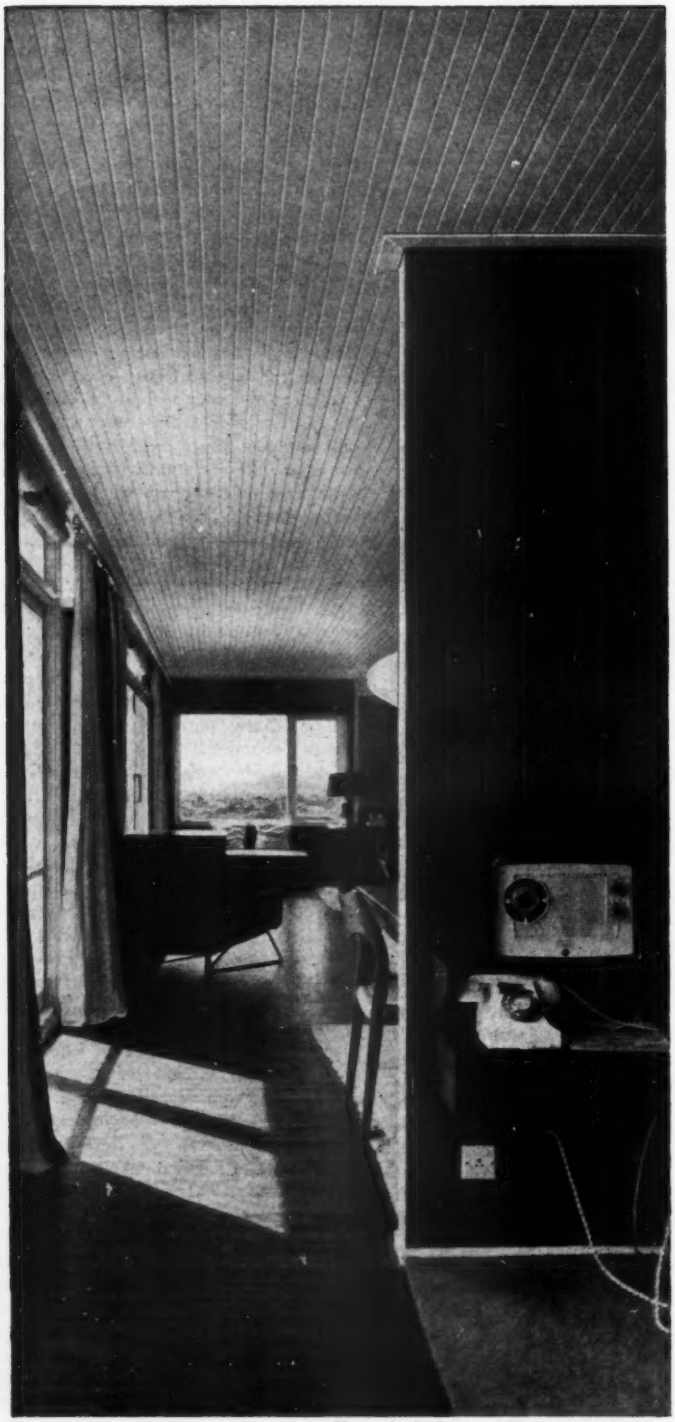
23.229 heating and ventilation
AMERICAN DATA FOR HOUSE DESIGN

The Weather Conditioned House. By Groff Conklin. (Reinhold Press, obtainable through Chapman & Hall. 118s.)

The interest of this book for English architects lies, not in its value as a reference, but in the picture it gives of how far Americans have got in grappling with their many climates. Written by an architectural journalist who is a frequent contributor to *Progressive Architecture*, it sets out to present the technical data needed to bring scientific knowledge to bear on house building. Unfortunately, the Americans have a different concept of comfort to ours: they work to different standards and, in many cases, use different sets of data to obtain them. Thus for the Americans a fully insulated house is a building with a "house U-value" not of 0·21 or 0·17 (which is as little as we aspire to), but of about 0·068. This lower figure is justified not only because they work to an internal design temperature of 70 deg. F. in place of our 65 deg. F., but because they are equally concerned with the summer cooling load and insulation, therefore, pays off not seven but twelve months in the year. The greater inside/outside temperature differences give them more trouble with humidity: for not only do they have to provide a higher percentage of humidity indoors (*i.e.* by artificial means), but they also have much more trouble with interstitial condensation. With them, therefore, the effectiveness of vapour barriers is a very live issue indeed and they have had to propose a special unit, a "perm," to cope with it (one perm equals one grain of moisture per square foot per hour for one inch difference of mercury). English architects who find it enough bother to consider U-values from the point of view of heat passing from the inside outwards may sympathize with American architects who have to make a separate set of calculations for heat passing the other way: but, we wonder, how many in fact do this? Other problems are accorded less importance in America than over here. Thus the problem of intermittent heating in the house and the consequent interest in how quickly a house will heat up does not worry the American who apparently keeps his house at a steady temperature, day and night. The problem of noise again is evidently viewed very differently: the American is not greatly bothered by the thumps of the people next door; what makes him go to pieces is the oppressive silence which ensues when the air-conditioner cuts out.

DESIGN IN TIMBER

INTERIOR FINISHES



Photograph: By Courtesy of the 'Architectural Review'

In this design timber has been used for windows, flooring, ceilings and partitioning —all with pleasing effect reflecting the warm, liveable qualities of wood.

ARCHITECT	Sir Hugh Casson
ASSOCIATE ARCHITECT	R. A. Green
FINISHES	
FLOOR	Tongued and grooved boarding
WALLS	Vertical V-jointed boarding
CEILING	Close boarding V-jointed
WINDOWS	Timber frame and sashes

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technical section

10 DESIGN: BUILDING TYPES

MOE bulletin : Junior School, Amersham*

MOE Bulletins rank among the primary architectural documents of our time. The latest of these—No. 16—deals with Amersham Junior School, a job which is interesting on three counts: as an educational study of the uses to which a primary school is put, as an essay in the rationalisation of traditional construction and as an experience of job programming with a small builder. To give a fair hearing to these very diverse interests we have called in the services of two reviewers: an educationalist (Christian Schiller) and a schools architect (Henry Swain).

* Building Bulletin 16. Development Projects: Junior School, Amersham. HMSO 7s. 6d.

1. THE EDUCATIONALIST'S VIEW

This Bulletin describes how two architects designed a school for Junior children. They began by exploring the needs of their clients. In exploring any field it is more important to ensure that the questions asked are the right ones than it is to secure an answer; indeed to the right question there is sometimes no answer but only several suggestions. These architects asked many unusual questions, and often to their questions they gained no precise answer. But from what they found in their questioning they gained an insight into Junior education which is implicit throughout the Bulletin, and with this insight they designed a school, now in use, which more nearly meets the educational needs of children at this stage of their development than any other school in England known to the present writer. The originality of their work has its roots in the questions they asked, three must suffice as illustration.

Changes in the junior school

Those closely engaged in the work going on in the classroom are well aware that during the last decade internal changes in the Junior school have been considerable and are still in full progress; in schooling at this stage we are not faced with a fixed pattern of behaviour but with an evolving process. To the question "what are the children doing?" there is always a precise answer, though varying from school to school. To the question "what will the children be doing?" there is no exact answer. But it was this latter question which the architects asked; and although they could gain no more than intelligent anticipations, they succeeded in designing a building which avoids displaying its date in every detail and presents to children and teachers a stimulating prospect of new and relevant possibilities.

Furniture dimensions

Secondly, school is a place inhabited by children, with a few adults; and a commonly agreed objective of school design has long been to work on a scale appropriate to children. This is not difficult if children are regarded as small scale adults—as when, for example, area of floor space is allotted to them in increasing quantity according to their age. But not only is a boy of nine more active than his grandfather of ninety, at each stage of growth children have their own proportions which are different from those of adults. To the question "what is the scale appropriate to children?" there is no precise mathematical answer. But in seeking a solution to this problem of design the architects found they must begin from a new starting point. "It was necessary to consider the dimensional aspects of furniture design before those of the building itself" (para 28, p. 11). And through this consideration they came to the conclusion that "a scale appropriate to the scale of children . . . would have nothing in common with an arbitrary 'scaling down' or the sentimental 'dwarfing' commonly seen in design for young children" (para 36, p. 13). The outcome is a school which has the characteristic and comfort of something which fits its user.

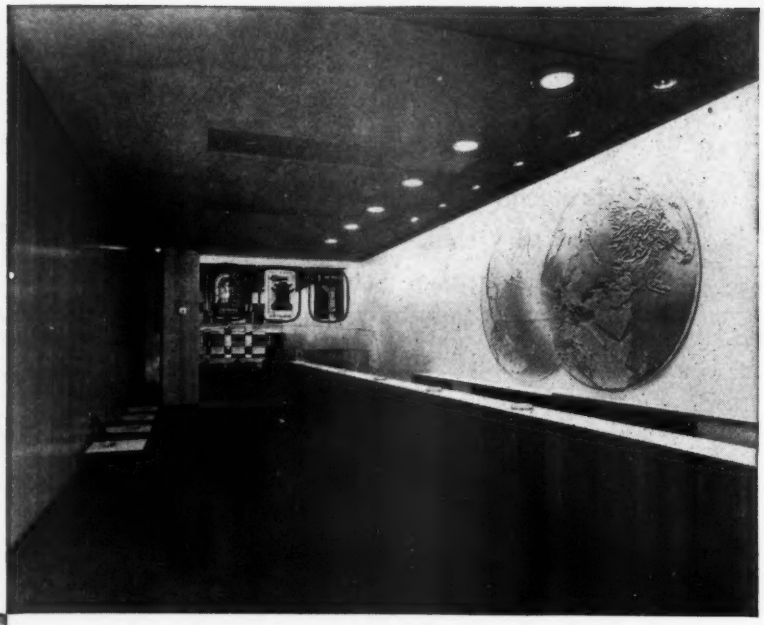
The architect found that "surveys have shown that only 5 per cent. of the children measured had desks and chairs which were correctly dimensioned for good posture" (para. 38, p. 16). This is a shameful situation. But there is now no need for this situation to continue since this school shows how children can be provided with furniture that fits them. It shows also the dimensions of all equipment, fittings, etc., appropriate to a scale of children of this age. Above all, it gives to those who use it, or watch its use, that quality of feeling which comes when all things are of the right size and proportion.

The school environment

Lastly, school is a place to which children come to learn; that is its purpose. But young children learn in a variety of ways with a variety of material; and in a class which is only too often 40 or more in size, the variety of ways and the variety of material in use at any time can be almost unlimited. To the question, "In what way will the children be learning and with what material?" there is no exact answer. But in pursuing this question the architects were led to concentrate their attention on the idea of "the learning area" as the whole of the school environment, rather than as a series of individual rooms each with a limited and specific purpose. Each class has its own large teaching space with its own entrance and with cloak, etc., accommodation adjoining. This is an

AIR FRANCE

The front and interior of these premises in New Bond Street London were carried out by our organisation to the designs and under the direction of Charlotte Perriand, Chief designer Air France and the consultant Architect, Peter Braddock, A.R.I.B.A.



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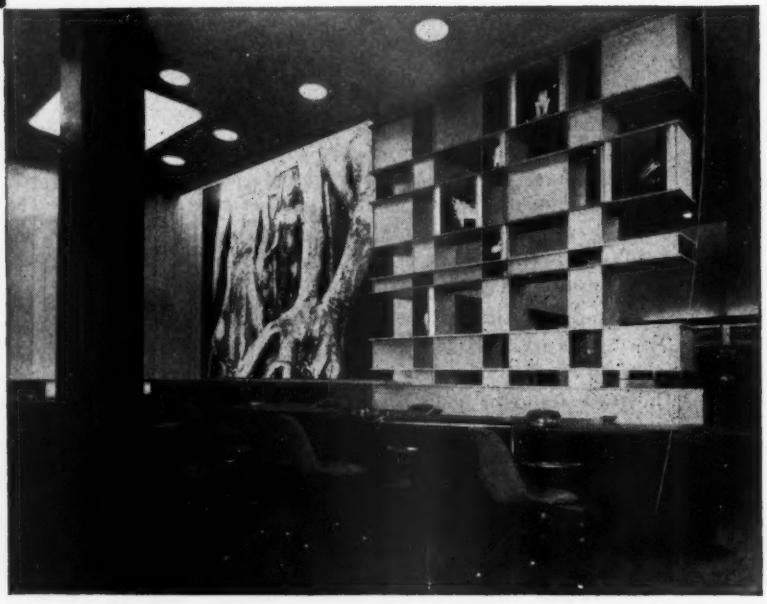
OUR DESIGN AND TECHNICAL SERVICE IS READILY AVAILABLE TO ASSIST IN THE DEVELOPMENT OF ALL TYPES OF DECORATIVE SCHEMES



technical section

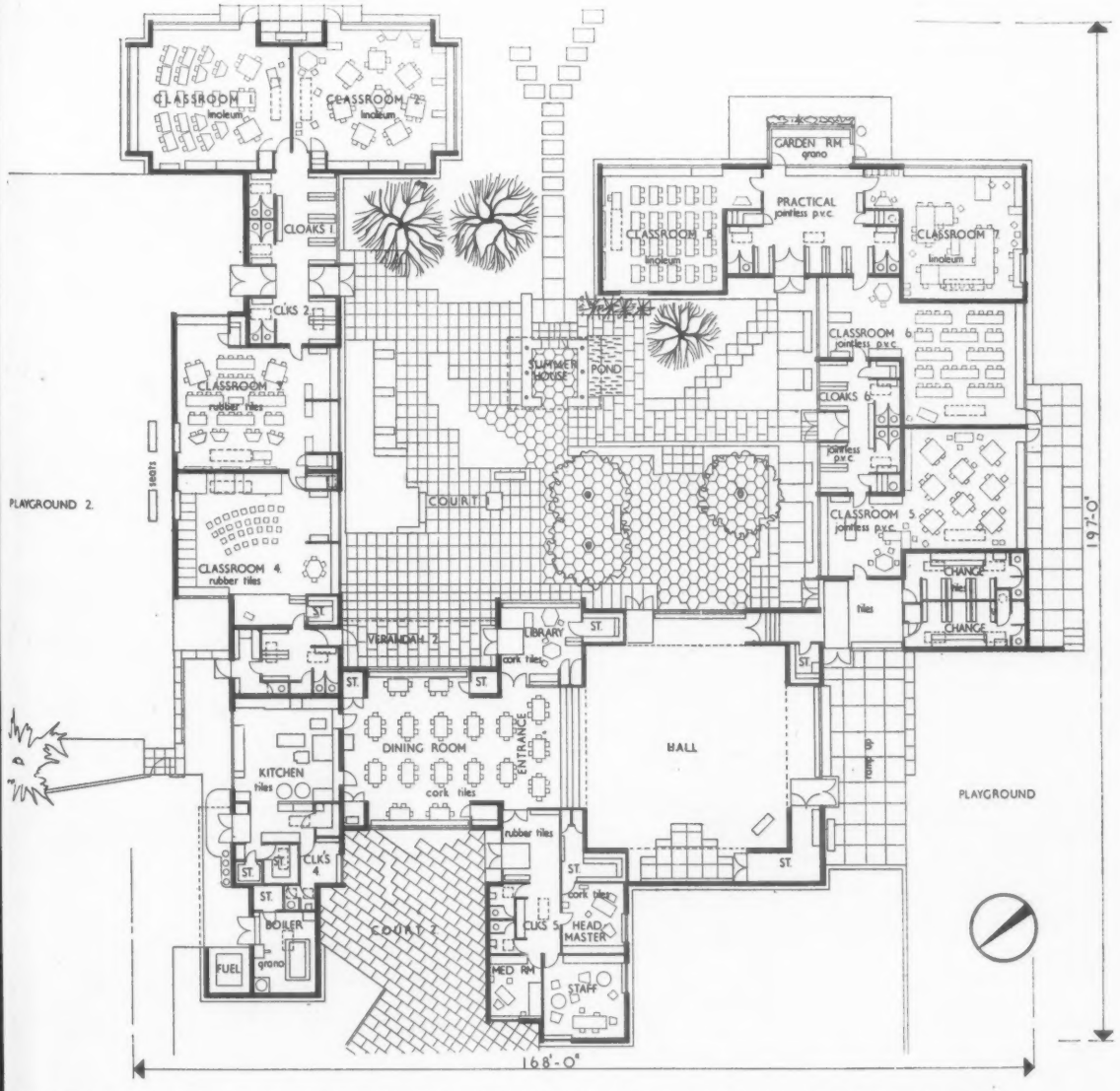
excellent arrangement; but such separation of classes to give individual independence to each requires a unity in the whole design, since the whole of the school environment is a place for learning. This school with its buildings grouped round the garden court gives just this feeling of unity.

The Bulletin describes in detail the plan which the architects adopted in striking a balance between the requirements of teaching and the demands of a cheap structure; and this plan has several unusual features. Each class has a very large teaching space, and this is planned differently for each age-group to meet their differing needs. In addition to these teaching spaces, with their cloak, etc., accommodation, there is a large hall, a music or dining room, a small room for reading, and foot showers for boys and for girls. For such valuable accommodation it is a small price to pay that the classrooms are not connected by a covered corridor.

Only in the hall does it seem that the architects might have given even a little more. Here is a large space of good shape for most purposes. But, among other activities, young children like to climb; and when he climbs, a 10 or 11-year-old is not content with a rope or ladder hung from a 9 ft. point of suspension. Only in a few areas have authorities provided equipment which gives children of this age opportunity to show their capacity; but where they have, it has been made clear that the scale of children's movement is much greater than that commonly accepted. This small problem remains to be solved.

Doubtless this Bulletin contributes to architectural thought; for teachers it describes a work of exceptional importance. It is unusual to find anywhere a description of Junior education today so sensitive in understanding; and the expression of this rare insight has created a building which is at present unique.

CHRISTIAN SCHILLER.



Ground floor plan [Scale: $\frac{1}{16}$" = 1' 0"] *Note the wide variety of furniture arrangement envisaged in the teaching areas.*

technical section

2. THE ARCHITECT'S VIEWPOINT

Many of our new buildings are modern only in a superficial way. Too often we accept the easy application of the current stylism and the structural gimmick to designs which in essence are obsolete. Sometimes this is because there is not the time to consider all aspects of the design. More often it is because it is the easiest way. The new Ministry of Education Building Bulletin, No. 16, tells the story of what happens when a quite ordinary building—an eight classroom junior school at Amersham for Bucks County Council—is designed from first principles.

The Ministry of Education architects had a reasonable amount of time for the job. They studied present day educational practice and future trends at first hand, and then designed and built a school which met their requirements. They employed the most appropriate constructional techniques and the resources of scientific research: the result is a completely new kind of building, as modern, as versatile, and as lively as the educational activity that it accommodates.

There never has been a junior school like Amersham, and there never will be another built in the future which will not owe something to it.

Aims of the Bulletin

The Bulletin aims at doing three things. By describing the building and the educational thought that inspired it, it aims at contributing to the design of junior schools. By its description of the construction it aims at helping the smaller authority and smaller builder to obtain better results from traditional construction. Lastly, by its narrative of the design process it aims at indicating to architects a method of work.

Designing the brief

It is this last aim of the Bulletin which is, in many ways, the most significant. This account of careful analytical study which began with the children and the teachers and continued through the design of furniture, equipment, planning, site layout and construction indicates a method of working which is of universal value. Architects not concerned with school design will enjoy reading the Bulletin for its story of

General view of Amersham Primary School from the internal courtyard.

technical section

The Assembly Hall. Note the use of the deep reveals to modulate the light. Among the useful ideas which can be seen are the louvres (to give ventilation without thickening the frames), the continuous rail for positioning gymnasium equipment and the double sliding-folding doors to give a sound reduction of 40 decibels. All of these will figure in future "Working Details."

how a group of architects tackled a specific job.

The architects just visited over 30 schools, talking with teachers and watching them at work; noting not only what they saw but also the directions in which the pioneers were leading. With their client education officers they then formulated their conclusions objectively. With this clear picture of the sort of things that were happening in junior schools and might be expected to happen in the future they settled down to the task of seeing how far they could design a building within the fixed cost limits which would help rather than restrict these activities. They started the design with the furniture and equipment needed for the enormous variation of teaching methods they had learnt about. This range of quite new elements, together with the spaces required for the different activities, determined in principle the areas and shapes of the rooms and their relationship with each other.

All aspects of the design of a particular space were considered simultaneously. It was felt that the comfort, quality and character of each part of a building are affected more by heating, acoustics, colour, lighting and equipment than by the purely formal problems of design. For this reason the Bulletin is divided in such a way that each area of the school is discussed comprehensively—rather than colour, for instance, being described separately in its general application to the school.

This comprehensive approach is the key to the design method. Amersham is not conceived as a structure which is the architects' responsibility, with things in it and around it which are not, but as a complete design which ranges from the planting of trees and shrubs to the detailing of every item of equipment. Each aspect of design is subordinated to the conception of an environment as a whole, and is based on a thorough knowledge of the requirements of the people who will use the building.

It is this approach to design that, in the end, really contributes to architectural development. Since it is a long, hard process, the Bulletin is fairly long, too, and is very detailed. But it is not a difficult story to read. One is reading another architect's notebook about his work; the reader shares not only the conviction that inspires the design, but also the difficulties. Errors are quite fairly admitted. The sound reduction between rooms was not, when tested, as good as it should have been, storage of rubber boots in racks did not work in practice, and so on. At all times the opinions of the architect enliven the writing.

The plan

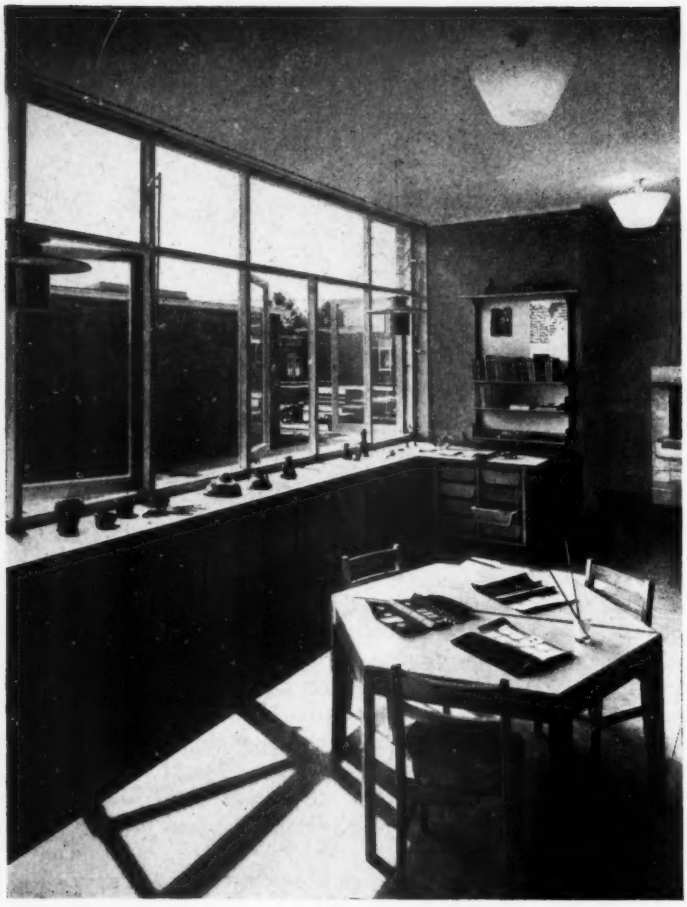
The ground plan of the school at the beginning of the Bulletin allows the reader to appreciate at a glance how the Ministry architects have transformed the design of a junior school. The arrangement of classrooms opening off corridors has, of course, gone. The eight enormous rooms—nearly 800 sq. ft. in area—are self-contained spaces accessible from outside with an alternative internal circulation; there is a specialist craft room and garden room and there are showers and changing rooms. Space was what the teachers wanted and it is space that the architects have given them.

Each pair of classrooms differs from the others. Their arrangement reflects the different requirements of the children growing up from seven to eleven years old. This progression through the school is one of the central ideas behind the design.

Furniture

A part of the Bulletin gives a detailed account of furniture. The recommendations of the draft British Standard on classroom table and chair sizes have been incorporated in its design. The new British Standard defines chair heights related to work top heights, and it defines minimum knee room for children sitting in classrooms. A great deal of existing furniture types are not and can never be in accord-

technical section



Corner of classroom for 7-8 year olds, with store for reference books.

ance with these recommendations. For instance, the familiar locker desk used universally in schools is automatically excluded because there is insufficient knee clearance. The account in the Bulletin indicates how new and satisfactory furniture can be designed which loses nothing in other respects but accords with the British Standard dimensions. Amersham is the first essay in the application of these dimensions to actual furniture designs. This is a most important part of the book because the experience of those authorities who have already changed over to the new furniture sizes indicates that the British Standard will be adopted quite rapidly because of the far greater comfort it provides for the children.

All items of equipment are described fully and illustrated in diagrams, sketches and photographs. Physical education equipment, sun blinds, mobile storage units, bookshelves, classrooms suites, external play equipment, soundproof folding doors and so on are all here; and because of these alone the Bulletin will form a standard reference book for architects and educationalists working on new primary schools. There probably never has been so full a description of detail design published before.

Structure

Only 22 pages are devoted to the description of the main structure and services. The Amersham project aimed at increasing the efficiency of traditional as opposed to prefabricated buildings and showing that good schools could be built this way which would be economical and reasonably quick to construct. The construction chosen is a clear and simple essay in traditional building. It has been worked out on the basis of a very thorough appreciation of the sort of operation which can be done speedily and efficiently by the small builder.

This is, nevertheless, the least convincing section of the Bulletin. After the other Ministry of Education development jobs at Wokingham, Belper and Worthing, it is too easy. However correct it may be from the point of view of Ministry policy to give a lead in traditional construction, one cannot help regretting that the group of architects who have done most to establish prefabrication as the vehicle of good architecture have stepped aside from its development even for a time. There are few enough architects with this kind of experience.

Job organization

The last section in the book describes how the work on Amersham was organized in the office and on the site. It is the story of teamwork between architect, quantity surveyor and builder—the latter being brought into it at design stage by a negotiated form of contract. It begins with the plan of office design work and ends with the final account. The principles employed are relevant to all building projects. A lot has been said about preplanning of contracts: here is a very well written account of how it is done. It was a difficult operation in many ways, designing for and working with the small scale, very traditional, end of the building industry. A lot of lessons were learnt and the reader will learn them too. It was difficult to make the builder feel that he was really expected to contribute to the work at the drawing board; the job ran behind schedule on the site in spite of all the careful work (although it was fast enough by usual standards). The Bulletin analyses just why these things occurred and what should be done about them next time. Mistakes are admitted, but never without drawing conclusions from them. But mostly it is the story of a success. Without pre-contract preparation as thorough as that, it is probably quite impossible to get such a building as Amersham at the right cost and at the right time. The organization of the project is as fundamental to the design as the ground plan.

This book is a major contribution to the development of school building in this country. By describing an actual project built today within deadlines of time and limits of cost, it says more to architects than a shelf full of theoretical writing. It is also a very good book about architecture.

HENRY SWAIN.

structure study

OFFICES FOR SHELL AT ELLESMERE PORT, CHESHIRE

At Stanlow refinery, Ellesmere Port, Cheshire, in a setting of tank farms and oil refinery plant, one of the largest office blocks to be erected in north-west England in recent years is now in the course of construction.

The new development, for the Shell Company and designed by Grenfell Baines & Hargreaves, consists of an 8-storey office block (plus basement), and a canteen which is connected to the offices at ground level by a glazed link. The main elements within the office block, which will house a staff of 400, are a 2-storey "accounts hall" with senior financial executives in the gallery level offices, an "exhibition" floor, which will include reception for visitors, models of refinery plant, travelling exhibition space and a training department for home and overseas students, and a drawing office for the engineering department on the top floor.

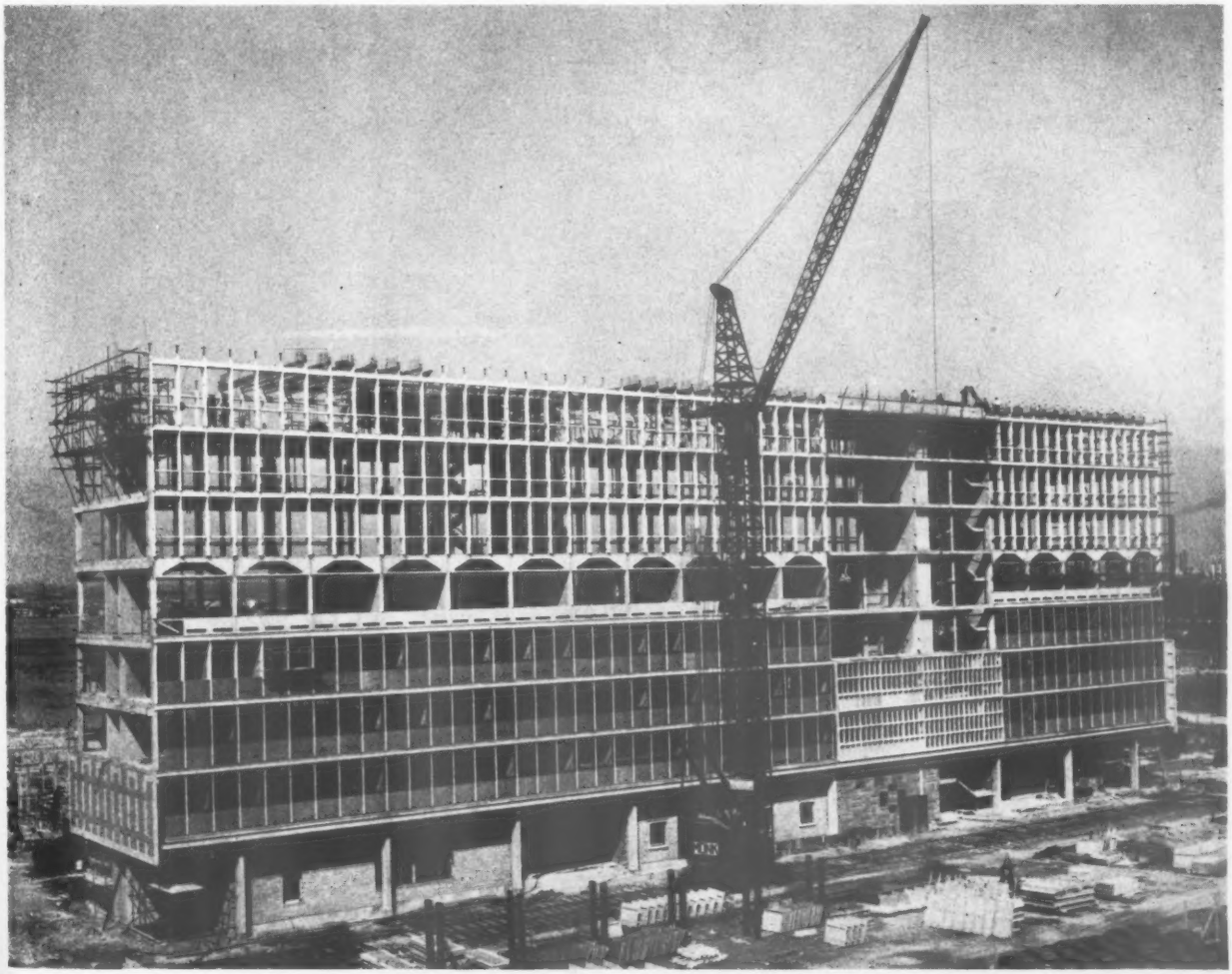
The canteen is designed to seat 430 people, and separate dining rooms are provided for senior staff and private managerial groups at first floor level: the kitchen is designed to serve 740 meals in two sittings.

The model (left) shows the north-west elevation of the offices and the north-east side of the canteen.

The contract sum is approximately £700,000 and the completion date is May, 1959.

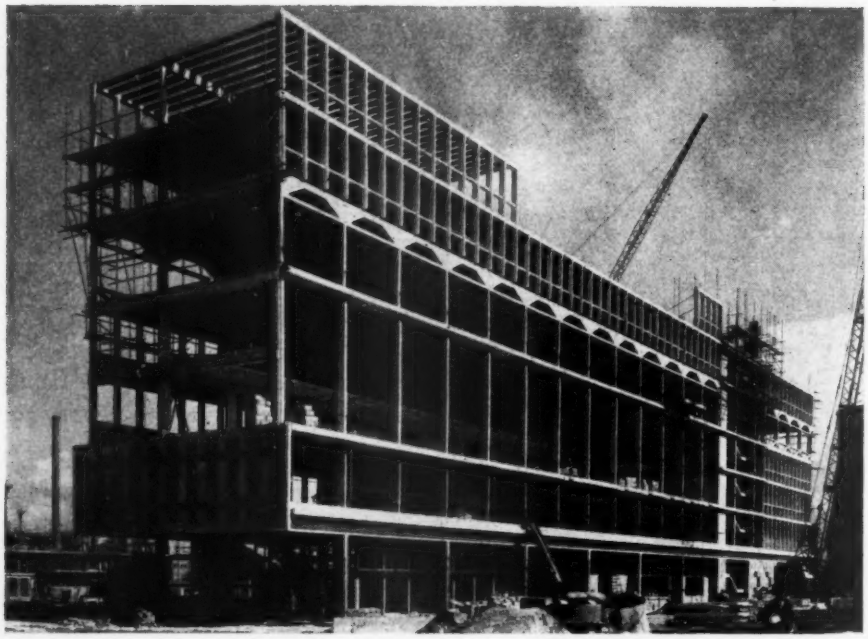
The office block is 285 ft. long, 40 ft. wide and 100 ft. high, and has been designed with a grid of 4 ft. 9 in. for the elevations and a general depth of office of 16 ft.; the total floor area is approximately 100,000 sq. ft. The structure, designed by Felix J. Samuely & Partners, is *in-situ* concrete for the basement and framework up to first floor level and for the crosswalls of the two vertical circulation cores; elsewhere, precast concrete has been used. Foundations are piled.

Above first floor level, the south-east and north-west external walls are structural precast concrete frames, each unit consisting of two columns, a head beam and a sill beam (below).



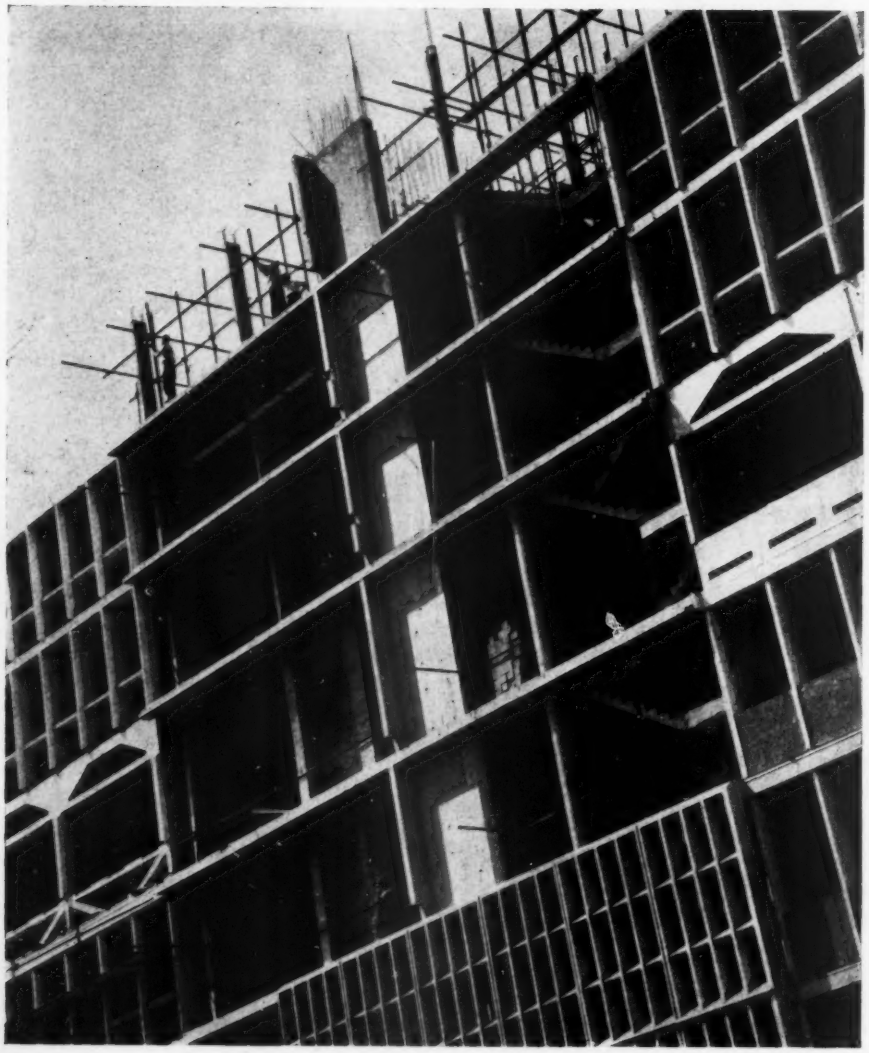
structure study

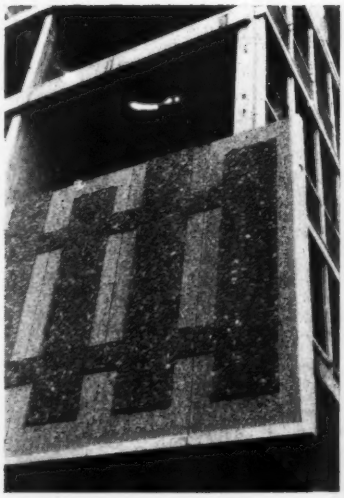
OFFICES FOR SHELL AT ELLESMERE PORT, CHESHIRE: continued



Frames are erected and then joined by precast infilling head and sill beams which are bolted to them (left and below left). Column members are bolted together within the depth of the floor slab. External spandrel panels are exposed dark grey-green aggregate precast concrete slabs, above which are double-glazed hardwood reversible windows.

With the exception of the basement slab, all floors are 8 in. overall depth and consist of 2-in. minimum *in-situ* concrete topping on a permanent shutter of corrugated asbestos cement sheeting carried in rebates in the webs of prestressed concrete inverted T-beams.





The ends of the building are clad with storey-high precast concrete panels which have an overall design in brown Hoveringham gravel set on a background of grey granite (above). The architects have distinguished the circulation cores by a precast concrete grille, erected in storey-height units (shown in the photograph left).

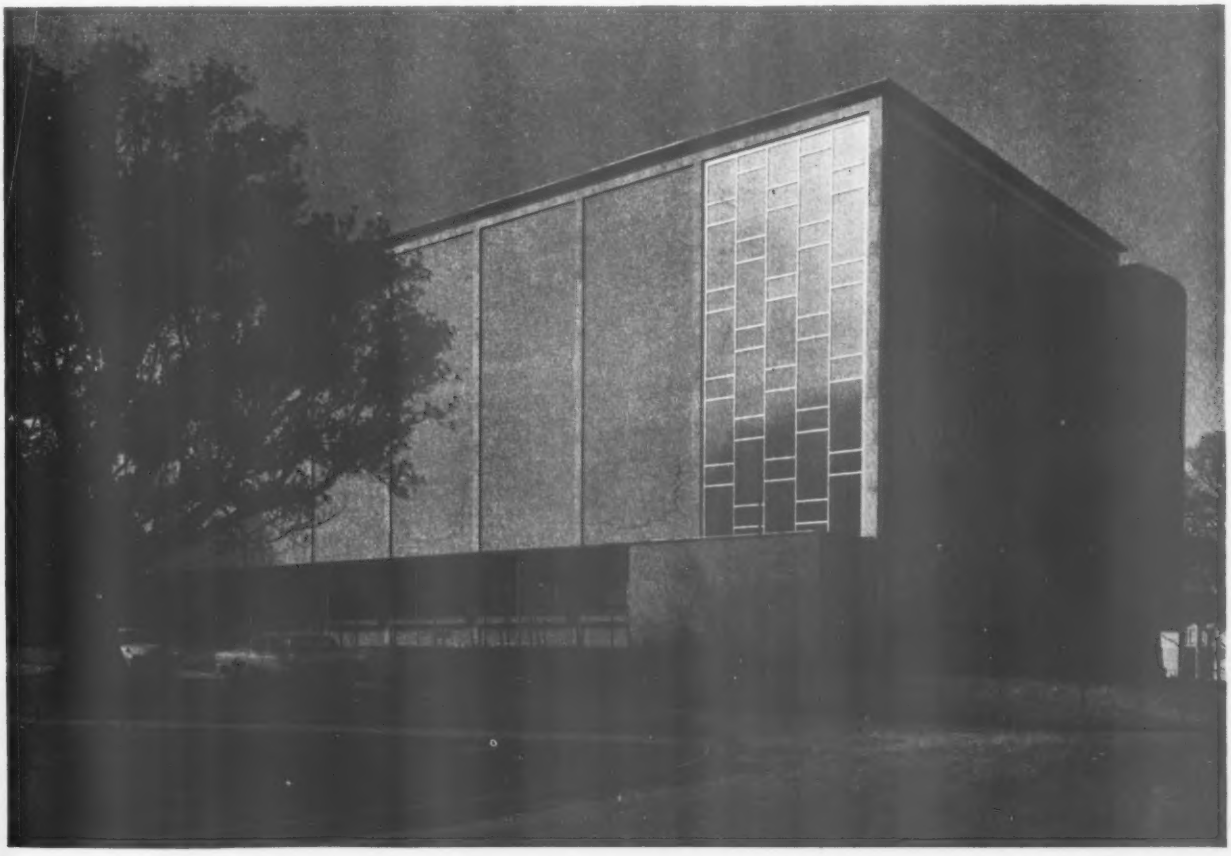
The structural frame of the canteen is mainly *in-situ* concrete, and the building has been designed as a horizontal foil to the office block. A landscape architect, G. P. Youngman, is designing all the external works, which promise to be of considerable interest. The general contractor is A. Monk & Co. Ltd., of Warrington. A full-length cost analysis article will appear in the JOURNAL on completion of the building.

UNIVERSITY HALL

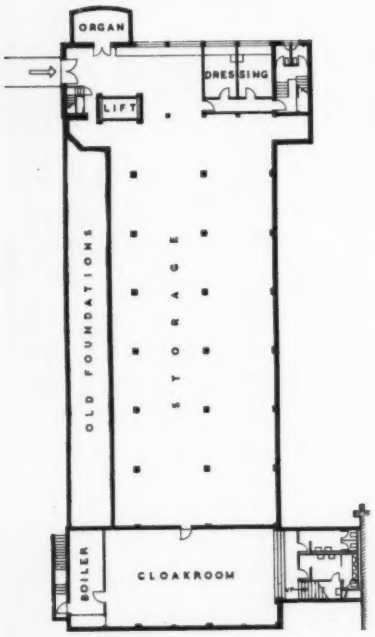
at UNIVERSITY OF MELBOURNE, AUSTRALIA; designed by BATES, SMART and MCCUTCHEON quantity surveyors RIDER, HUNT and PARTNERS; consultants (heating and mechanical) W. E. BASSETT and ASSOCIATES; (electrical) JULIUS, POOLE and GIBSON; (acoustical) H. VIVIAN TAYLOR (landscape) JOHN STEVENS; (furniture) GRANT FEATHERSTONE

The New Wilson Hall is the ceremonial centre of the University of Melbourne and was built to replace a Gothic Revival building burnt down in 1952. The University authorities are to be congratulated on their decision to rebuild in a forthright modern way; although the University contains a Gothic "core" of great beauty, this is not to be imitated in the many new extensions, and the result, judging from the example of the New Hall, will be an extremely lively juxtaposition of old and new. It is only to be hoped that certain British Universities will be inspired by Melbourne to adopt a similar policy.

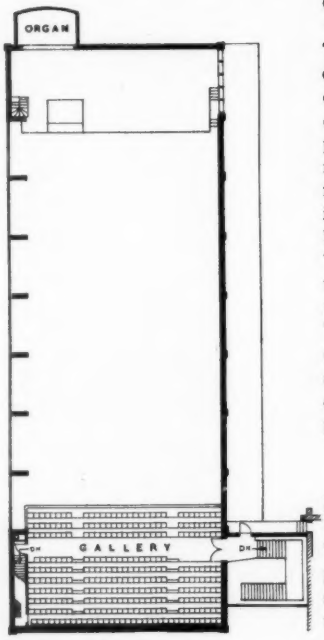
The hall from the south-west, with the organ loft on the right. The raised brick panels will hold four sculptures.



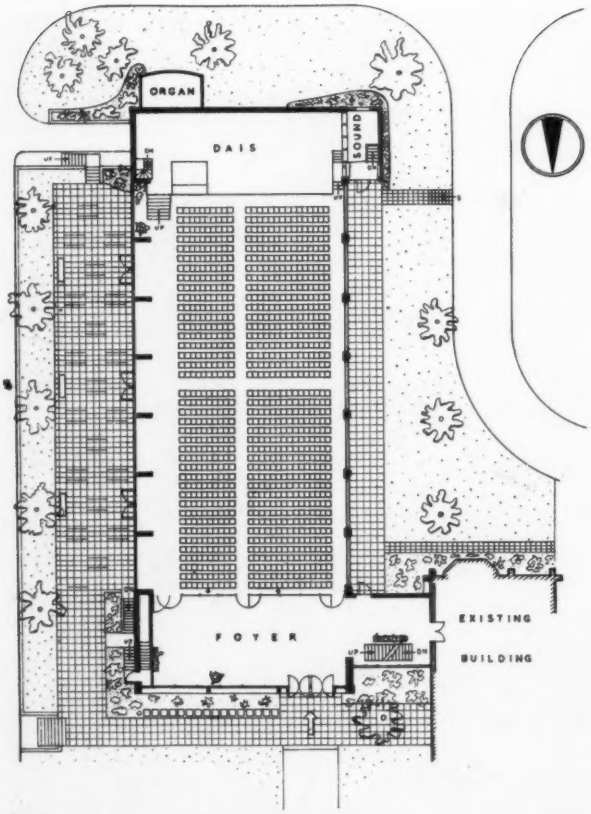
analysis



Basement plan



Gallery plan



Ground floor plan [Scale: $\frac{1}{16}$" = 1' 0"]

CLIENT'S REQUIREMENTS

The Old Wilson Hall, a fine Gothic Revival building opened in 1879, was the ceremonial centre of the University of Melbourne. When it was burnt down in 1952 the many departments of the University were left without a focal point at which their activities could come together. Its replacement was therefore a matter of urgency, and after finding that the restoration of the Old Hall was impracticable, the University decided to erect a new building.

The New Hall, to be built on the same site, was required to seat 1,300 people, with a dais to accommodate a further 100. Some of the seating could be arranged in a gallery. The main purposes for which the hall would be used were: (*a*) ceremonial functions, *e.g.*, conferring of degrees, addresses by distinguished visitors; (*b*) cultural functions, *e.g.* art exhibitions, orchestral, organ and choral concerts, public lectures, and (*c*) university examinations.

PLANNING AIMS

The main and varied uses to which the hall would be put posed difficult planning and acoustic problems. In the early stages of the design there was considerable controversy over the question of flat versus sloping floor. A flat floor was eventually chosen, not so much because the majority of functions were best served by it, but for the perhaps better reason that the main function (ceremonial) required a flat floor if the formal quality of the ceremony was not to be diminished. By careful attention to acoustics and dais height, the disadvantages of a flat floor for other functions have been reduced. A large basement store for seating has been provided; access to this may be obtained from a lift, consisting of part of the dais floor.

The ground floor seats 1,000; a further 306 people are accommodated in a sloping gallery. Beneath the gallery is a large entrance foyer which can be used for minor exhibitions.

Public cloakrooms and lavatories and heating plant are under the foyer; dressing rooms are situated below the dais. An organ chamber has been placed externally behind the dais, with openings into the hall.

Almost the entire east wall has been glazed (sunlight from the west in Australia is very intense) and is cleaned externally by means of a monorail and bosun's chair.

SUMMARY

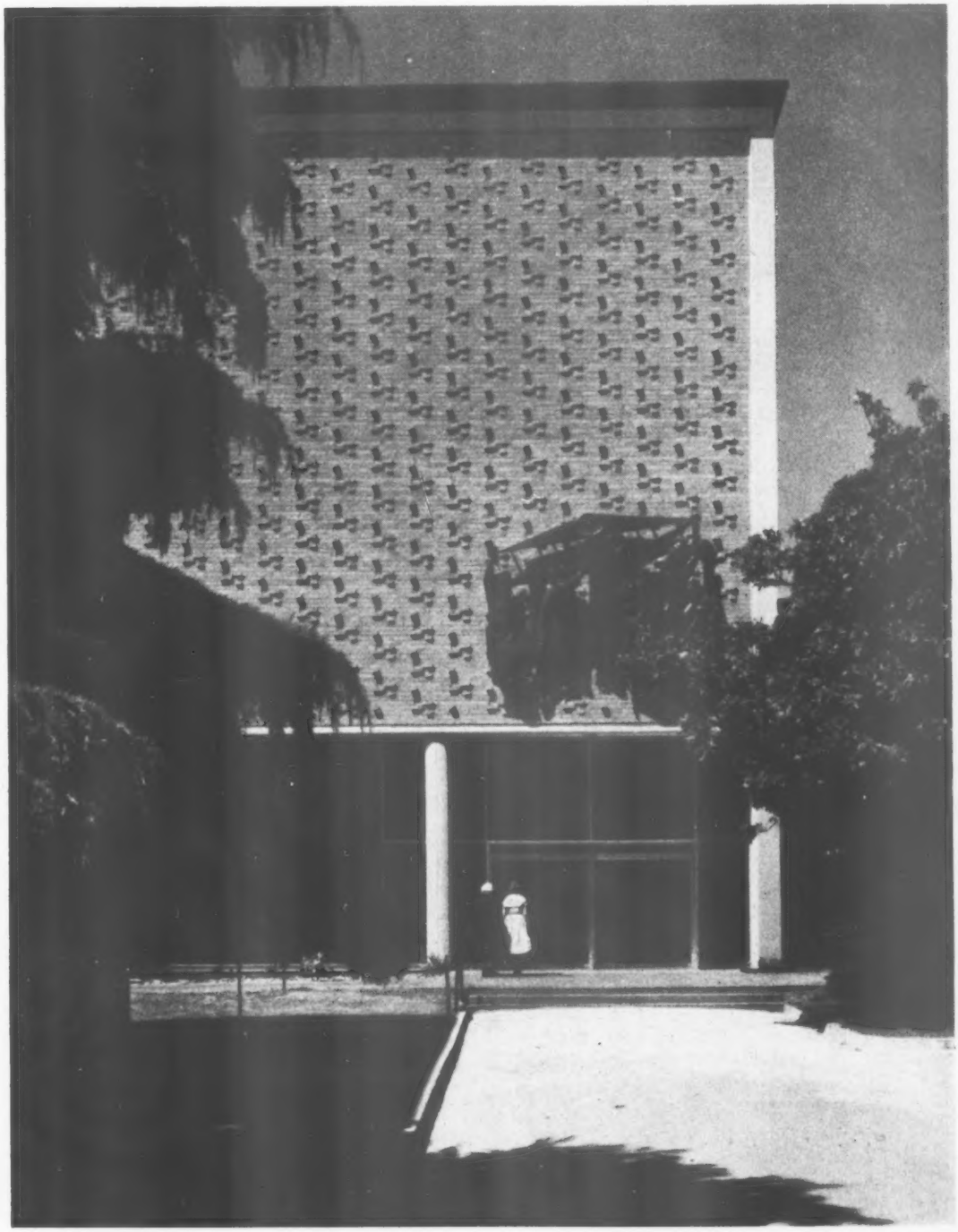
The following money values are in £ Australian.
Ground floor area (measured *outside* external walls): 11,680 sq. ft.
Total floor area (ditto): 24,630 sq. ft.
Type of contract: Lump sum plus rise and fall.
Tender date: August 11, 1954.
Work began: October 4, 1954.
Work finished: March 22, 1956.
Tender price of foundations, superstructure, installations and finishes: £A210,251.
Final contract price: £A238,142.
Tender price of external works: £A12,045.
Final contract price: £A13,350.
Total: £A251,492.

Total cost per sq. ft. of floor area:
£A 238,142 (net cost excluding external works)
24,630 sq. ft. (floor area measured outside external walls)
= 193s. 4½d.

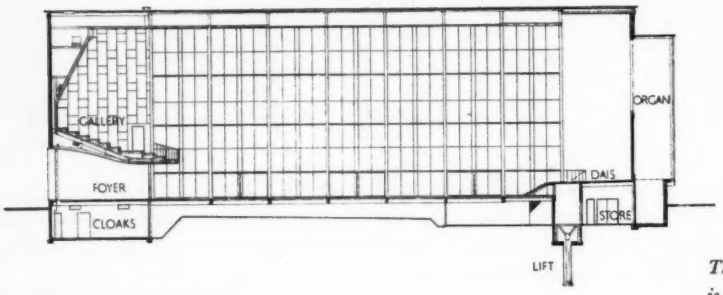
Total cost per sq. ft. of floor area, converted to £ sterling = 154s. 8½d. (Note: £1 sterling = £A1 5s. approx.).

building illustrated

The north end of the building has a glazed wall to the entrance foyer on the ground floor, the remainder being filled with a large panel of textured brickwork, in light buff bricks, which provides an interesting play of light as the bright Australian sun changes its position in the north sky. Above the entrance is a copper sculpture by Tom Bass of the Trial of Socrates. The columns and dressings are of reconstructed stone and the eaves are formed of copper sheet.



building illustrated



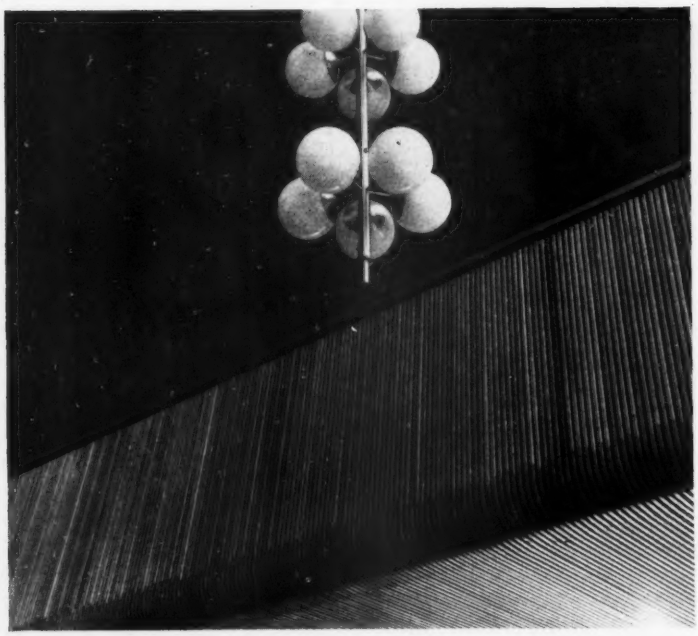
Section [Scale: $\frac{1}{16}$" = 1' 0"]

The east window is 118 ft. long by 48 ft. high. The main framing is of steel with aluminium facing and infilling members, glazed with Belgian heat-absorbing glass. Incorporated in the eaves is a track to carry the window cleaning cradle. The terrace is paved with grey-green concrete slabs with panels of brickwork providing a pattern. Sprinklers are arranged so that it can be kept damp during hot weather, reducing the reflection of heat onto the glass.

building illustrated

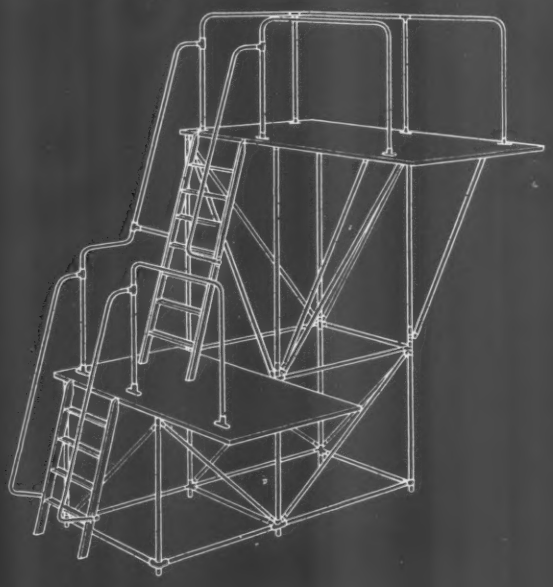
Left, the foyer from the stairhall. The ceiling is of polished timber ribbing, backed with mineral wool, and follows the general line of the rake of the gallery above. The white spots are recessed light fittings. The end wall is of polished grey Reppen marble, with stainless steel skirting. Except for a strip of dark grey quarry tile along the entrance front, the floor both here and in the Hall itself is of vinyl tile in three shades of grey. Three decorative glass panels commemorating the pioneer women graduates of the University will later be inserted in the glass and aluminium screen between the foyer and the hall. Below is another view of the foyer, looking back towards the stairhall. The treads of the stair are of laminated blackwood with aluminium inserts and are carried on steel strings. The end wall is of plaster acoustic tiles, with stone heads inserted from the Old Hall. The double doors in the background lead to the administrative building, where reception and robing rooms are to be provided later.

building illustrated

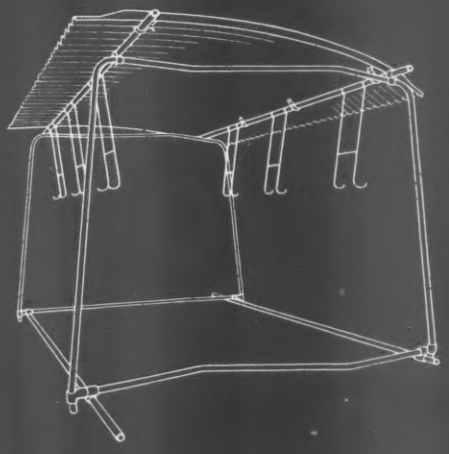


A detail of one of the copper light fittings and part of the ribbed front and soffite of the gallery. The ribbed back wall of the hall can also be seen. These ribbed areas are backed with mineral wool for sound absorption.

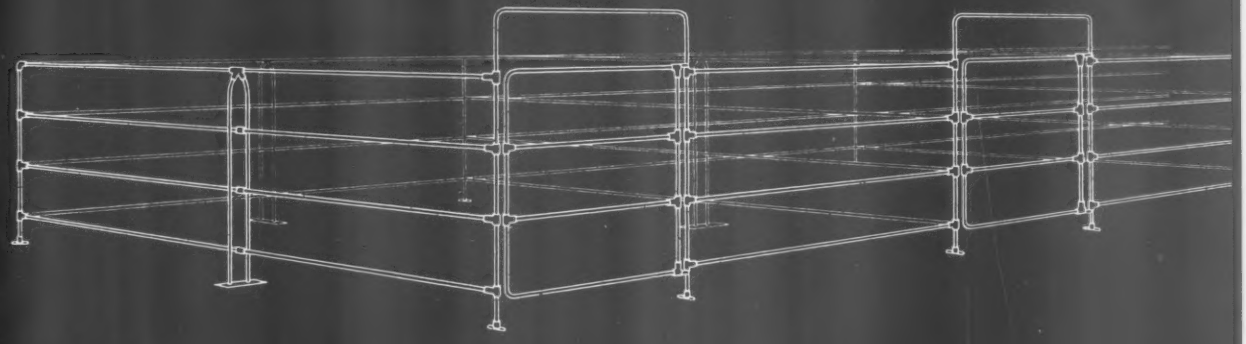
The main purpose of the hall is for University functions and on the left is the conferring of degrees ceremony. The panelling of the west wall and ceiling is of Swedish birch. For acoustic reasons the panels are of various thicknesses, from $\frac{1}{16}$ in. to $\frac{7}{8}$ in., some being perforated, and have various acoustic treatments behind them. The back wall and ceiling of the dais are of plaster acoustic tiles. The timber sound reflector, which can be seen suspended from the dais ceiling, can be lowered to various positions according to need. The columns are faced with black and gold marble. The copper shields at shoulder level, house loud speakers, as well as protecting the columns. The mural, by Douglas Annand and Tom Bass, which was carved from plaster blocks set in the wall and then painted, symbolises man's struggle from the chaos of ignorance towards the light of truth. The organ screen is formed by three groups of the actual sounding pipes of the organ. The square holes below allow the transmission of sound from the pipes in the loft behind. The console is movable and can be brought to the front of the dais when the hall is used for organ recitals.



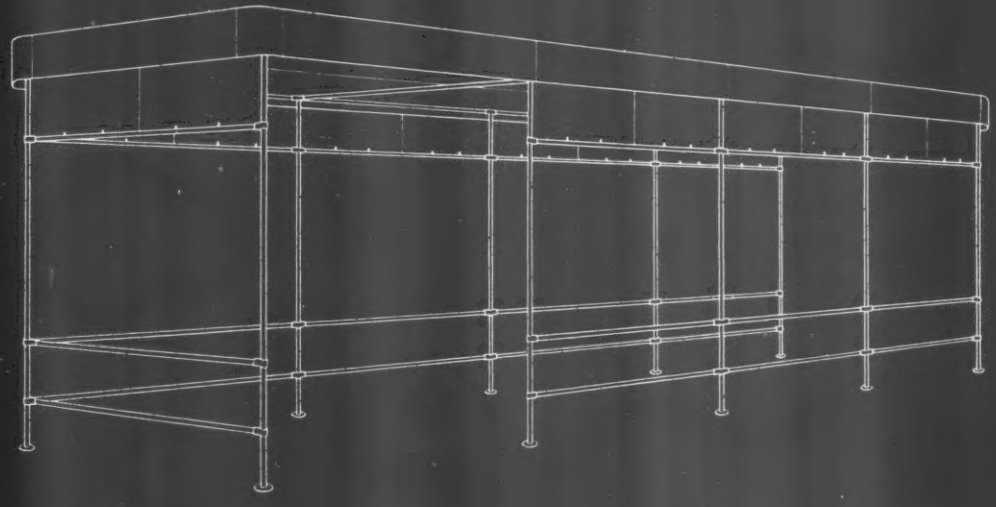
DIVING STAGE.



CYCLE RACK.



CATTLE PENS.



BUS SHELTER.

KEE KLAMP FITTINGS FOR TUBULAR STEEL CONSTRUCTIONS: 4 MISCELLANEOUS STRUCTURES.

Manufacturer: Geo. H. Gascoigne Co. Ltd.

26.Z3 ·KEE KLAMP· FITTINGS FOR TUBULAR STEEL CONSTRUCTIONS : 4 MISCELLANEOUS STRUCTURES

This Sheet is the fourth of a series on Kee Klamp fittings. It illustrates the wide variety of structures that can be built up from steel tubular members by means of the standard Kee Klamp fittings available. Sheet 42.Z1 illustrates the principle of the system and the basic standard components; other Sheets in the series deal with storage racking and pedestrian guardrailing.

Principle

Each socket on a Kee Klamp fitting is provided with a grub screw fixing. The hexagon-socket grub screw is tightened by a special key so that it grips the tubing. This simple principle has been applied to produce a very wide range of components for accommodating single and multiple junctions, crossovers, base flange fixings, etc., so that the flexibility of the system is almost without limit.

Material and Construction

The fittings are of malleable iron and are for use with standard steel gas, steam and water tubing to B.S.1387:1957 or B.S.1775:1957. The drawings on the face of the Sheet show typical assemblies for widely differing applications: a diving stage, cycle rack, cattle pens and a bus shelter.

Sizes

The standard sizes in which the fittings are obtainable vary according to function and the manufacturer should be consulted for details. Straight couplings and most of the right-angled junctions are obtainable to take tubing from $\frac{3}{8}$ in. to 2 in. internal diameter and the sizes of other components vary between these limits. Where the required sizes for a particular application are not available from stock, they can normally be supplied to special order.

Finish

The fittings and tubing may be left untreated or galvanised.

Further Information

The manufacturer maintains a technical advisory service available to answer questions and prepare schemes for Kee Klamp installations.

Compiled from information supplied by:

Geo. H. Gascoigne Co. Ltd.
Address: Berkeley Avenue, Reading, Berks.
Telephone: Reading 54417-9.
Telegrams: Keklamps Reading.

FIRE RESISTANCE GRADING OF ELEMENTS OF STRUCTURES USED IN BUILDINGS: 2

This Sheet together with 36.A5, gives the fire resistance grading of elements of structures used in buildings. It is determined by tests carried out by D.S.I.R. and J.F.R.O. in accordance with B.S. 476. The information given in the tables is extracted from "Fire Resistance Grading in Buildings" (Nov., 1955), published by the Fire Protection Association. For classification of aggregates and general notes see Sheet 36.A5.

FLOORS AND ROOFS

The gradings relate to the resistance of fire from below. With regard to floors, experience in actual fires suggests that exposure to fire of the upper side is not as severe as the conditions below and it is reasonable to expect that a non-combustible floor which successfully resists exposure from below will be adequate to prevent penetration from above. Timber joist floors protected underneath will afford resistance to fire exposure below but fire on the upper surface will ignite board finishes and the fire may spread to lower floors.

Construction and Materials	Minimum thickness in inches for period of:			
	4 hr.	2 hr.	1 hr.	½ hr.
Concrete Construction				
Filler joist. Maximum spacing of joists as allowed for structural requirements. Any aggregate.				
Minimum slab thickness	6	5	4	3½
Minimum cover on flanges of joists—top	1	1	—	—
bottom	1	1	½	½
Solid reinforced concrete slab				
Minimum slab thickness	6	5	4	3½
Hollow tiles. Minimum thickness of non-combustible material i.e., thickness of concrete slab and of solid material in tiles	5	3½	3	2½
Minimum cover to steel	1	¼	¾	½
Timber Joist Construction				
(*a*) Joists not less than 7 in. deep by 2 in. wide with t. and g. boarding not less than 1 in. (nominal) thickness with ceiling of:				
Timber or metal lath and plaster, thickness of plaster	—	—	—	⅝
One layer of plasterboard ⅜ in. thick with gypsum plaster of thickness	—	—	—	½
One layer of plasterboard ½ in. thick with gypsum plaster of thickness	—	—	—	3/16
Two layers of plasterboard of total thickness	—	—	—	¾
One layer of insulating board ½ in. thick finished with gypsum plaster of thickness	—	—	—	½
Woodwool slab 1 in. thick finished with gypsum plaster of thickness	—	—	—	3/16
Asbestos insulation board of thickness	—	—	—	¼
(*b*) Joists not less than 1½ in. wide with t. and g. boarding not less than ¾ in. (nominal) thickness with ceiling of:				
Timber lath and plaster ⅝ in. thick, covered on underside with plasterboard of thickness	—	—	—	⅜
Metal lath and plaster, thickness of plaster	—	—	—	⅝
One layer of plasterboard ½ in. thick finished with gypsum plaster of thickness	—	—	—	3/16
Two layers of plasterboard of total thickness	—	—	—	7/16
Woodwool slab 1 in. thick finished with gypsum plaster of thickness	—	—	—	3/16
(*c*) Joists not less than 1½ in. wide with plain-edge boarding and ceiling of:				
Timber lath and plaster ⅝ in. thick, covered on underside with plasterboard of thickness	—	—	—	½
Metal lath and plaster, thickness of plaster	—	—	—	⅝
One layer of ½ in. plasterboard finished with gypsum plaster of thickness	—	—	—	½
Two layers of plasterboard of total thickness	—	—	—	1
Woodwool slab 1 in. thick with gypsum plaster of thickness	—	—	—	3/16

SUSPENDED CEILINGS

Construction and Materials	Minimum thickness in inches for period of:		
	2 hr.	1 hr.	½ hr.
Thickness of plaster (cement/lime/sand or sanded gypsum mix) on expanded metal	—	⅞	⅝
Thickness of vermiculite/gypsum plaster on expanded metal (1½ : 1 mix)	¾	½	½
Thickness of vermiculite/gypsum plaster on ⅜-in. plaster lath	—	½	—
Precast vermiculite slabs	1½	1	1

36.A6 FIRE RESISTANCE GRADING OF ELEMENTS OF STRUCTURES USED IN BUILDINGS: 2

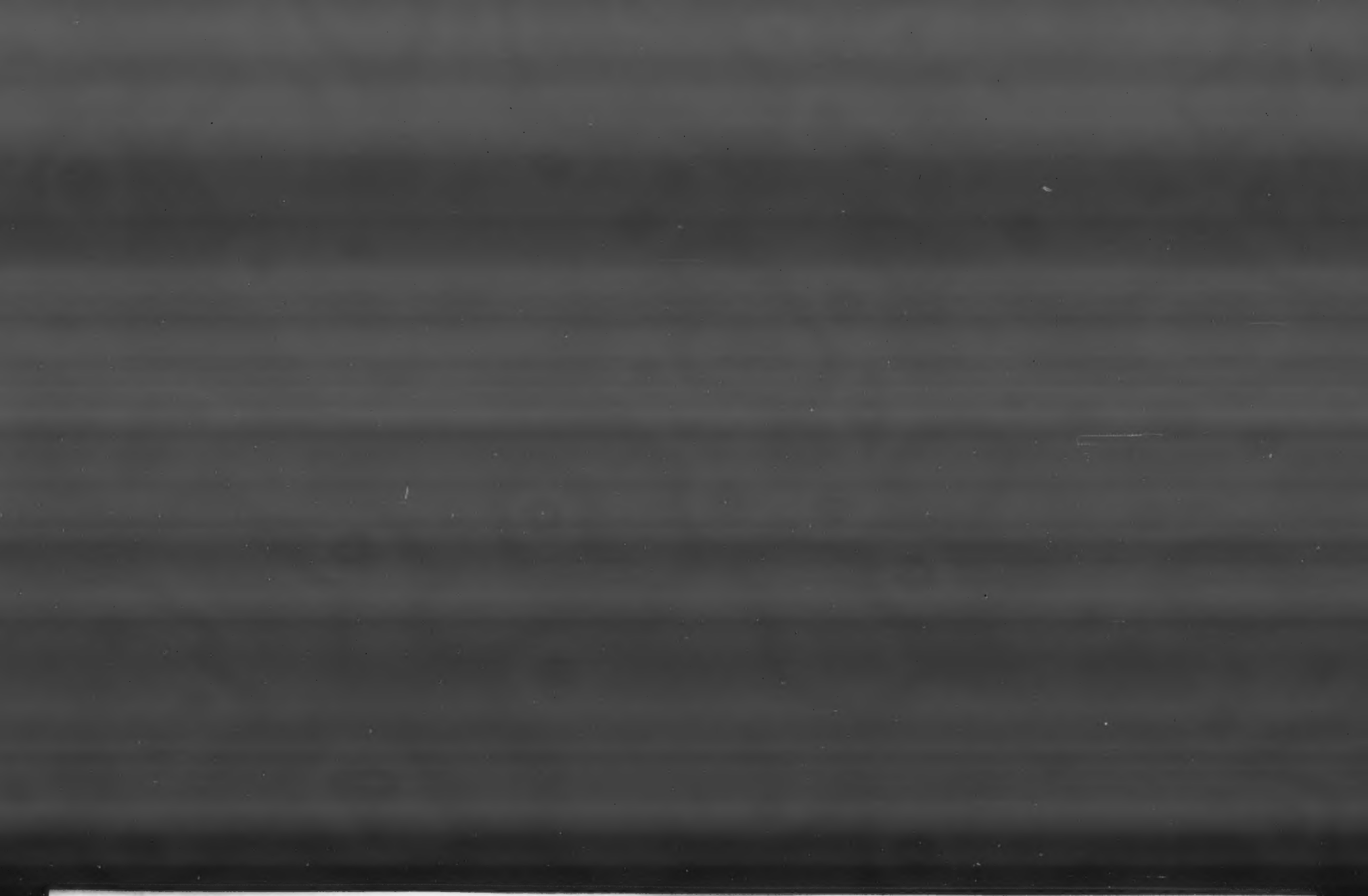
STEEL COLUMNS AND BEAMS : PROTECTION REQUIRED

Construction and Materials	Minimum thickness in inches of protection outside steel for period of:			
	4 hr.	2 hr.	1 hr.	½ hr.
Solid Protection				
Brickwork, with filling of brick and mortar, all properly bonded	3	2	—	—
Concrete, not leaner than 1 : 2 : 4 mix Reinforced centrally with steel mesh or with wire* — Class 1 aggregates	2½	1½	1	—
Concrete, not leaner than 1 : 2 : 4 mix Reinforced centrally with steel mesh or with wire* — Class 2 aggregates	2½	2	1	—
Gypsum concrete (7 parts gypsum, 1 part wood chips poured *in situ*)	2	1½	1	—
Hollow clay tiles with interior filling of concrete—thickness of solid material	—	—	—	1½
Foamed slag blocks with interior filling of concrete or blocks and mortar. Wire reinforcement in every horizontal joint	2½	2	2	—
Gypsum blocks with interior filling. Wire reinforcement in every horizontal joint	2	—	—	—
Sprayed asbestos	2	1	½	¼
Vermiculite/cement spray following profile of section	—	1½	¾	½
Vermiculite/cement spray giving solid rectangular encasement	1¾	¾	—	—
Hollow Protection				
Brickwork or solid clay blocks with wire reinforcement in every horizontal joint	4½†	3	2	—
Foamed slag blocks with wire reinforcement in every horizontal joint	3	2	2	—
Gypsum blocks with wire reinforcement in every horizontal joint	3	2	2	—
Moulded asbestos held in position with nichrome wire	2½	1½	1	—
Vermiculite/cement blocks 2 in. thick, finished with vermiculite or ordinary plaster, of thickness	⅝	—	—	—
Precast vermiculite/cement on metal lathing finished with skim coat of plaster, thickness of slabs	2½	1	½	
Trowelled application on metal lathing of vermiculite/cement/diatomite plaster, of thickness	1⅜	¾	—	—
Trowelled application on ¾ in. gypsum plank of vermiculite/gypsum plaster, of thickness	1½	—	—	—
Gypsum plaster on ¾-in. plasterboard, sanded plaster, of thickness	—	½	—	—
Gypsum plaster on ⅜-in. plasterboard — sanded plaster, of thickness	—	—	½	—
Gypsum plaster on ⅜-in. plasterboard — neat plaster, of thickness	—	—	¼	—
Two layers of metal lathing plastered with gypsum plaster on each layer, each	—	¾	—	—
Plaster on metal lathing wired to joist with wire netting over first coat	—	—	1	—
Plaster on metal lathing, thickness of plaster	—	—	—	¾
Asbestos insulation board on non-combustible battens	—	¾	⅜	¼

REINFORCED CONCRETE COLUMNS AND BEAMS

Construction and Materials	Minimum overall size of column in inches for period of:			
	4 hr.	2 hr.	1 hr.	½ hr.
Reinforced concrete columns	—	12	10	8
Reinforced concrete columns with light 2-in. mesh reinforcement placed centrally in the concrete cover to longitudinal reinforcement	12	10	—	—
	Minimum concrete cover to reinforcement in inches for period of:			
	4 hr.	2 hr.	1 hr.	½ hr.
Reinforced concrete beams	2½	2	1½	1

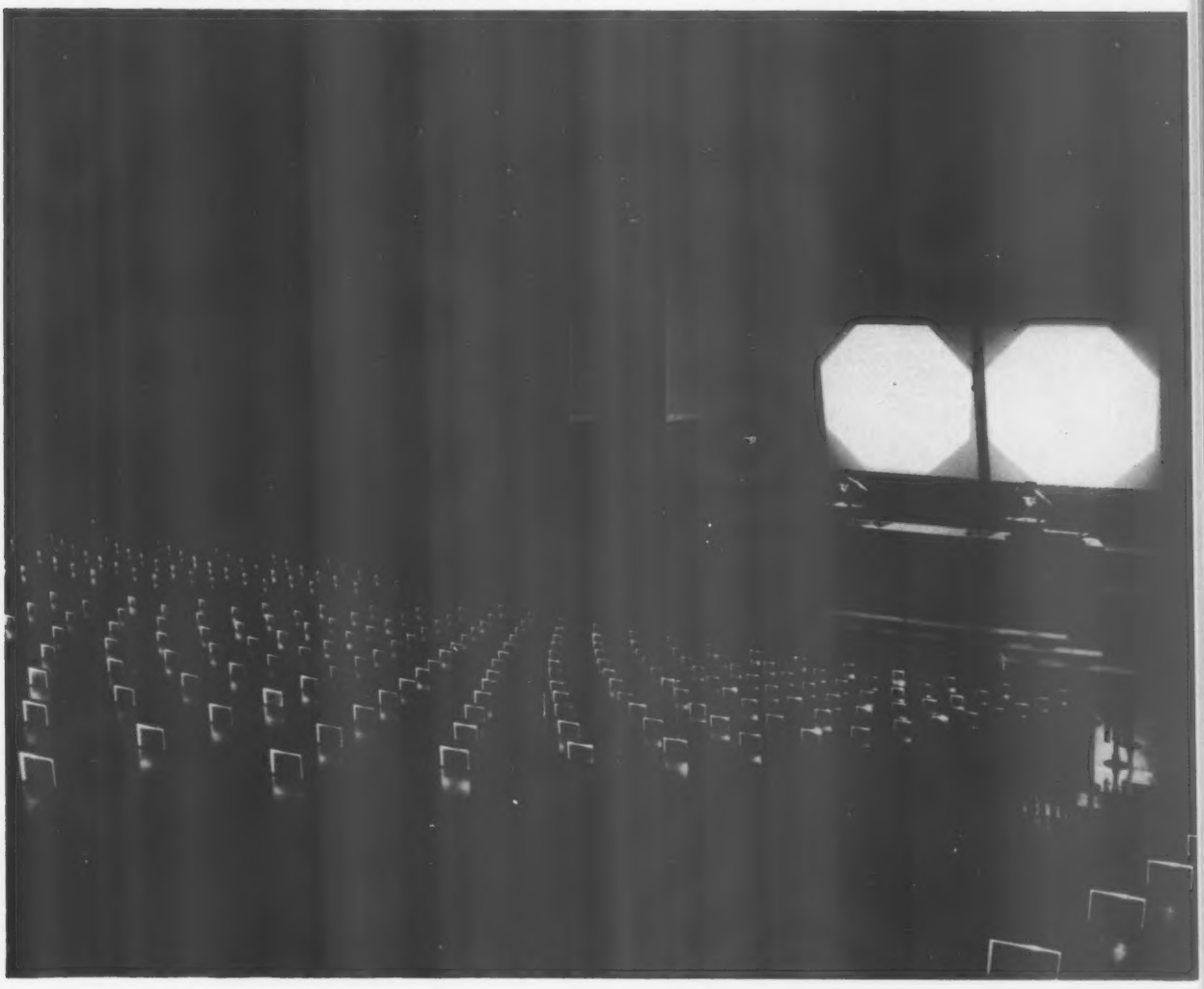
* Mesh reinforcement suitable for reinforcing concrete protection is 6 in. by 4 in. mesh s.w.g. wire. Wire reinforcement may consist of ½-in. (13 s.w.g.) wire loosely bound round the steel at 4 in. to 6 in. pitch.
† Reinforced every fourth joint.



working detail

DESK LAMPS IN LECTURE ROOM: MEDICAL SCHOOL IN PARIS

Louis Madeline, architect. (*Material supplied by Michael Hacker*)

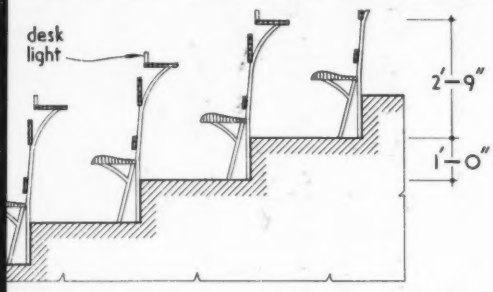


The object of this desk light is to enable students to take notes in a darkened room while shielding the lecturer from glare. The light source is wholly concealed beneath the desk top and shines upwards through the thickness of a ¾-in. polished plate glass panel. The top edge of the glass is cut on the splay to serve as a prism and to cast light downwards on to the desk surface.

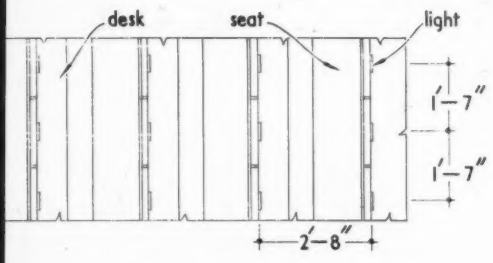
working detail

DESK LAMPS IN LECTURE ROOM: MEDICAL SCHOOL IN PARIS

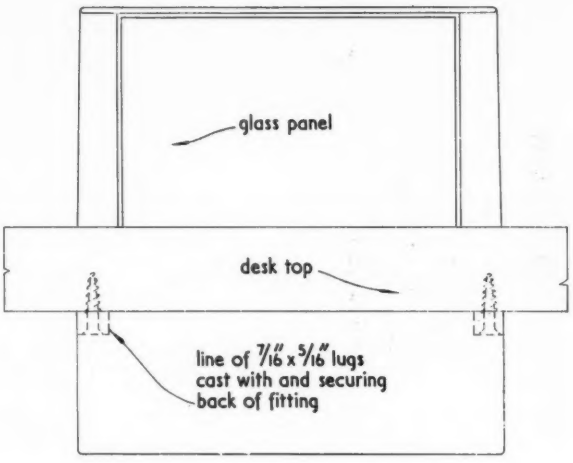
Louis Madeline, architect. (Material supplied by Michael Hacker)



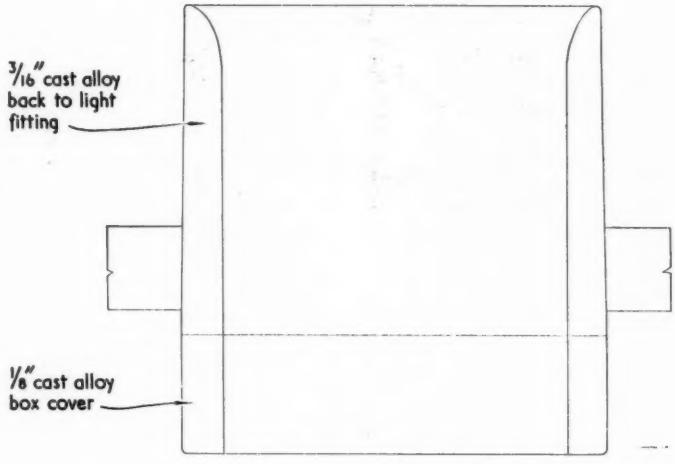
SECTION scale 1/4" = 1'-0"



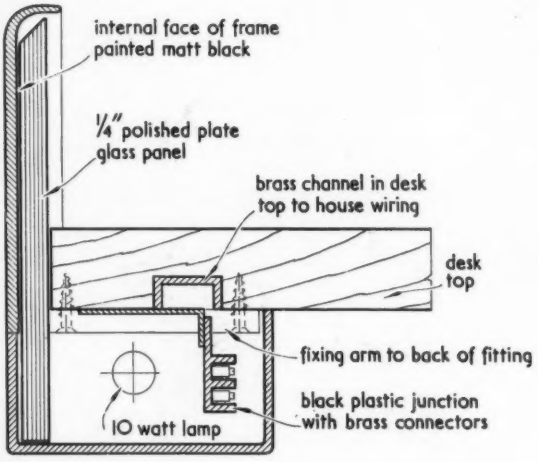
PLAN. scale 1/4" = 1'-0"



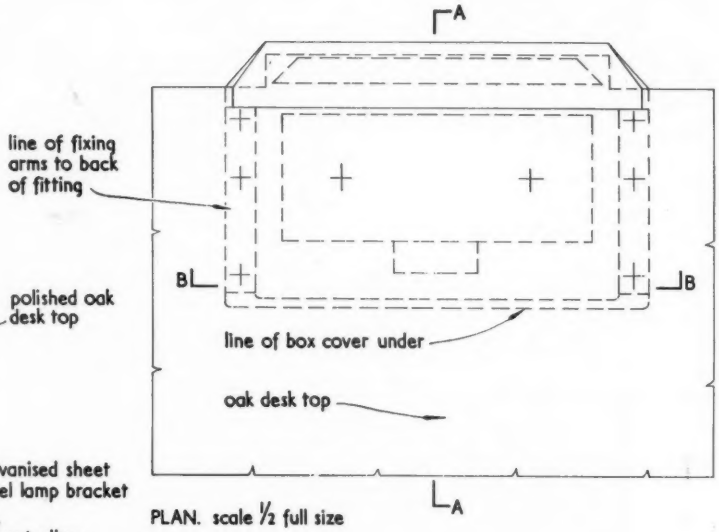
FRONT ELEVATION. scale 1/2 full size



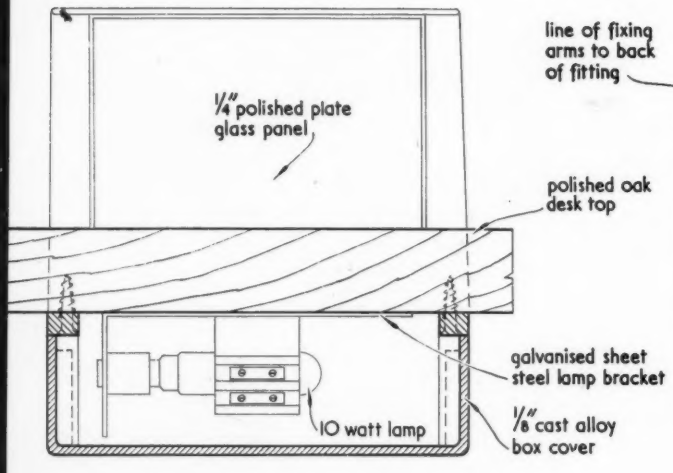
BACK ELEVATION. scale 1/2 full size



SECTION A–A. scale 1/2 full size

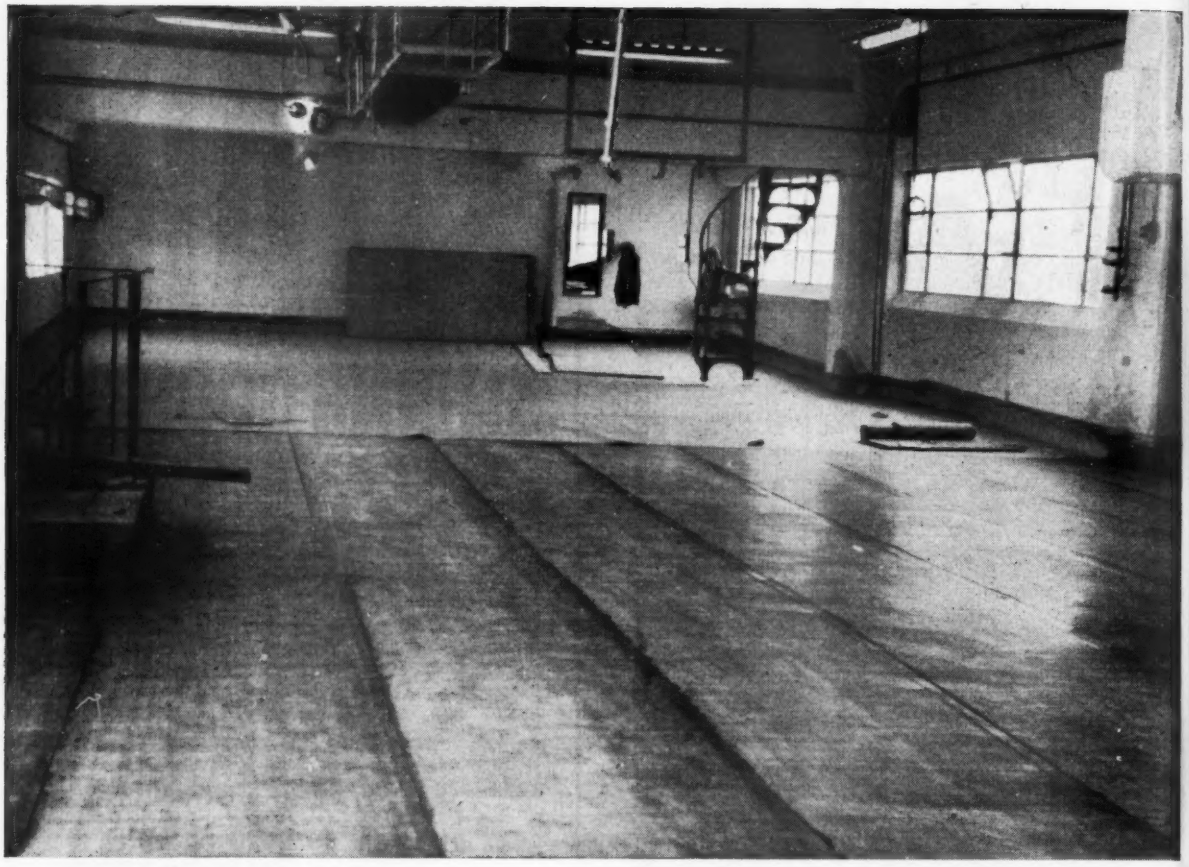


PLAN. scale 1/2 full size



SECTION B–B. scale 1/2 full size

note: figured dimensions in feet and inches are approximate



Photograph shows suspended floor lined with Oppanol BA 1.5 mm at the Torridge Vale Dairies (Devon) Ltd, a member of the Cow and Gate Group.

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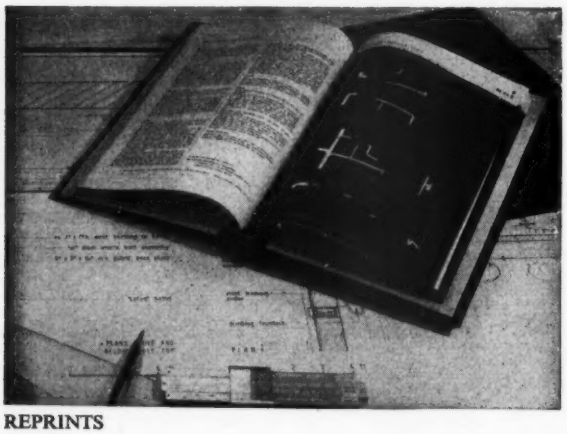
SIGNAL BOXES ON BRITISH RAILWAYS, SOUTHERN REGION

British Railways, Southern Region, have almost completed a number of new automatic signal boxes as part of the Kent Coast electrification scheme, some of which are shown here. They were designed by H. Pittaway, architect to the Southern Region, and consist of a light steel cabin with view windows mounted above a solid-looking brick equipment room. In appearance they are a marked improvement on pre-war buildings in the "Southern Railway style." Top (left), the box at Beckenham Junction; far left, that at Shortlands Junction; left, the box at Chislehurst, under construction. Other similar signal boxes are to be seen at Rochester, Rainham, Sittingbourne and Faversham.



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Christmas Holiday Lectures

Leo De Syllas is to give two informal lectures for boys and girls at the RIBA on Wednesday, December 31, 1958, and Friday, January 2, 1959, and has chosen as his title, "Out in the Mid-day Sun." He will discuss planning and building in the "under-developed" countries and his talk will be illustrated by coloured slides.

Tickets for the lectures may be obtained free on application to the Secretary, RIBA, 66, Portland Place, W.1. Envelopes should be marked "Christmas Holiday Lectures" on the top left hand corner.

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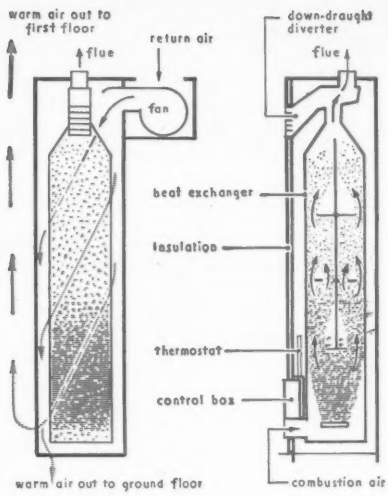
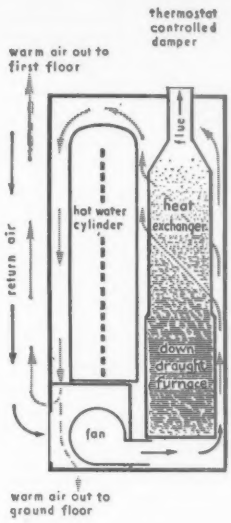
gives a HIGHER COMFORT STANDARD than ANY OTHER HEATING SYSTEM





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Uniformity of temperature distribution. *Low level* discharge and high level return allow very low temperature gradients. This avoids that "cold feet and hot head" feeling characteristic of some older systems.

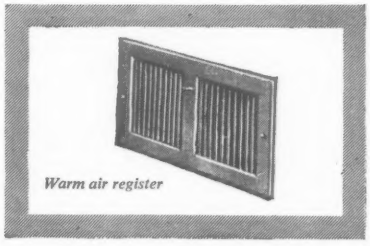
Freedom of planning—by heating the *whole* building *all* the enclosed space becomes useful space. Ducts are easily accommodated at planning stage and they make no demands on wall space. Outlet and return grilles are unobtrusive. Ducted warm air makes both "open" and conventional planning easier and offers scope for new ideas.

Clean heating—since warm air is "moved" into the room—instead of merely rising from an outlet—there is no discoloration of walls. (The warm air has, of course, no contact at any point with flue gases.)

Ventilation—the circulation of warm air is stimulating to the occupants and does away with the "heavy" feeling associated with earlier forms of central heating.

Clothes drying—efficient drying cupboards can be incorporated simply and cheaply. This is of particular value in multi-storey flats.

Drying out. A warm air system can be used to speed the drying out of new buildings for early occupation.


Warm air register

Here are the reasons why:—

Running costs—Radiation engineers take running costs to be the true efficiency index of an appliance. Here is a short example—many others, in detail, may be seen on request. *Bungalow at Oulton Broad, Suffolk. 1500 sq. ft. insulated to Egerton standard. Heated by Ductair 0.50. Average oil consumption over 2 years (heating period 1 Oct. to 31 March) . . . 625 gallons domestic fuel oil. Standard of heating attained: Living room 60° F. Bedrooms 55-60° F (day and night averages.) N.B.* plus *domestic hot water during heating season. Out of season hot water by immersion heater.*

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50 year background of research and experiment Radiation technicians, for well over 50 years, have been concerned with making better use of fuel. This is reflected in the simplicity of the highly efficient equipment they have evolved. It means too that Radiation engineers have an unusual ability to see their own system against a background of many alternative systems—an understanding particularly valuable at discussion stage.

RADIATION DUCTAIR is more than just another central heating system. It offers a fully integrated service to architects and builders. Its aim is to raise comfort standards and to make possible the more efficient use both of fuels and building space.

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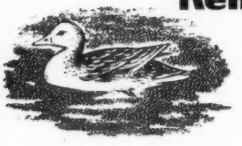

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Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

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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 prepayment should be sent by subscribers wishing to take advantage of this service. The charge we are making represents only the actual cost of the postage involved.

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Applications are invited for the above appointment in the Borough Engineer's Department. If the successful applicant possesses the Intermediate Examination of the R.I.B.A. the salary will be on Grade A.P.T. II (maximum £845). Candidates not so qualified but who possess the necessary training and experience are also invited to apply for the appointment on Grade A.P.T. I (maximum £725).

Housing accommodation will be provided if required, and half removal expenses paid.

Applications, stating qualifications and experience and giving names and addresses of two referees, should be delivered to the Borough Engineer, Town Hall, Thornaby-on-Tees, not later than 27th October, 1958.

A. STOCKWELL,
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1. PLANNERS, ETC.

(1) ARCHITECT / PLANNER—Salary scale £844—£1,146 per annum. Applicants must be A.R.I.B.A. and A.M.T.P.I. with at least two years' qualified experience.

(2) ASSISTANT PLANNER—Salary scale £679—£811 per annum. Applicants should have at least passed the Intermediate examination of the R.I.B.A. or T.P.I. The work will involve preparation of residential layouts, Village redevelopment, Town Centre development and Open Space proposals.

(3) DRAUGHTSMEN—Salary scale £562—£716 per annum. Candidates should have general experience of drawing office procedure and a particular ability in drawing maps and plans. The work will include compiling and maintaining statistical records for the Architectural Department.

(4) APPRENTICE ARCHITECTS—Salary scale £191—£446 per annum.

2. QUANTITY SURVEYORS.

(1) ASSISTANT QUANTITY SURVEYORS—Salary scale £679—£811 per annum. Candidates should have passed the Intermediate examination, sub-division III (Quantities) of the R.I.C.S. They should have good experience in all duties pertaining to the profession in the execution of building projects from the probable cost stage to the settlement of contractors' final accounts.

(2) JUNIOR ASSISTANT QUANTITY SURVEYOR—Salary scale £562—£716 per annum. Candidates should at least have passed the first examination of the R.I.C.S. They should have served a recognised apprenticeship and shall be expected to perform the duties indicated for vacancy 2 (1) above.

The commencing salary in each case will be in accordance with qualifications, experience, etc. The appointments are subject to the Corporation's Conditions of Service and Superannuation agreement. Selected candidates will require to pass a medical examination. A house or flat will be made available, if required. Application forms may be obtained from the General Manager, Torrance House, East Kilbride, to whom completed forms should be returned not later than 7th November, 1958. Canvassing directly or indirectly of the members of the Corporation will constitute an absolute disqualification. 1690

BUCKS COUNTY COUNCIL

Applications are invited for the appointment of an ASSISTANT ARCHITECT in the County Architect's Department on the Architects' Special Scale, £750 × £40(7)—£1,030 p.a.

The appointment is superannuable and subject to medical examination.

A weekly allowance of 25s. 0d. and return fare home once every two months may be paid for six months to newly appointed married officers of the Council unable to find accommodation.

Applications on forms provided, must be returned by the 8th of November, 1958.

F. B. POOLEY,
County Architect.
County Offices,
Aylesbury. 1794

QUANTITY SURVEYING ASSISTANTS required by AIR MINISTRY in LONDON and PROVINCES. Duties include abstracting and billing, site measurement and preparation of estimates. Commencing salary and grading according to age, qualifications and experience. Salary ranges in London: (*a*) £545 at age 25 rising to £745 for candidates with minimum three years good experience under Quantity Surveyor or Building Contractor; (*b*) £695 at age 26 rising to £870 for candidates with O.N.C. (Building) or (Builders Quantities) or equivalent and good experience under Quantity Surveyor or Building Contractor. Approved full time study will count towards period of experience. Salaries somewhat lower in Provinces. Promotion and pensionable prospects. Five-day week, 3 weeks' leave a year. Appointments carry liability for service anywhere U.K. or overseas. Applicants normally should be natural born British subjects. Write stating age, qualifications and previous appointments including type of work done, to Manager, Professional and Executive Register, Ministry of Labour and National Service, Atlantic House, Farringdon Street, E.C.4, quoting reference PE 105/745. No original testimonials should be sent. Only applicants selected for interview will be advised. 1627

KINGSTON-UPON-HULL EDUCATION COMMITTEE

REGIONAL COLLEGE OF ARTS AND CRAFTS

Principal: S. I. Hemming, A.R.C.A. (Lond.), F.R.S.A.

SCHOOL OF ARCHITECTURE

Applications are invited for two posts: (*a*) SENIOR LECTURER and (*b*) LECTURER in the School of Architecture, which conducts a five-year full-time Diploma course in Architecture and a part-time course in Town Planning. Candidates should have had some years of professional experience and possess a degree or diploma of a recognized School of Architecture.

Salaries: Burnham Technical Scale. Senior Lecturer—£1,350 × £50—£1,550, and Lecturer—£1,200 × £30—£1,350.

Application forms, to be returned as soon as possible, will be supplied by the Chief Education Officer, Guildhall, Kingston-upon-Hull.

Applicants should state for which vacancy they wish to apply. 1741

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

Vacancies for: (1) ARCHITECTS, Grade III, starting salary up to £1,090 a year. (2) ARCHITECTURAL ASSISTANTS, starting salary up to £860.

Full and interesting programme of houses, flats, schools and general buildings.

Application form and full particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council, the County Hall, S.E.1, quoting ref. AR/EK/36/58. (1428) 1674

CITY AND ROYAL BURGH OF DUNFERMLINE
DEPARTMENT OF BURGH ARCHITECT AND TOWN PLANNING OFFICER

Applications are invited for:—

(1) ASSISTANT ARCHITECT, Grade AP VII (£945—£1,025) with placing according to experience. Applicants should be A.R.I.B.A. with a minimum of three years' experience in Local Authority work since qualification. Housing accommodation can be arranged for suitable applicant.

(2) ARCHITECTURAL ASSISTANT, Grade AP IV-V (£700—£830) with placing according to experience. Applicants should be inter-R.I.B.A. or equal, and should have had experience in Local Authority work.

Applications stating age, experience, qualifications and present appointment, together with copies of two recent testimonials, should be lodged with Leonard Howarth, Burgh Architect and Town Planning Officer, 6 Abbot Street, Dunfermline, within seven days of this advertisement.

Applicants must disclose in writing whether to their knowledge they are related to any member or senior officer of the Town Council and canvassing either directly or indirectly will be a disqualification.

J. DOUGLAS,
City Chambers, *Town Clerk.*
Dunfermline. 1795

COUNTY BOROUGH OF BIRKENHEAD
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited from qualified persons for the post of ASSISTANT ARCHITECT, salary £750—£1,030 per annum (N.J.C. scale). Applicants must be Associates of the R.I.B.A. or hold equivalent qualifications. Salary commensurate on qualifications and experience. The appointment is permanent and subject to one month's notice. Form of application and further particulars from the Borough Architect's Department, 3, Conway Street, Birkenhead.

Closing date for applications—30th October, 1958.

Relationship to Members or Senior Officers of the Council must be disclosed. 1780

CORPORATION OF LONDON

require ASSISTANT in ARCHITECTURAL AND BUILDING SECTION of CITY SURVEYOR'S DEPARTMENT. Applicants must have passed Intermediate R.I.B.A. or Intermediate R.I.C.S. Neat and accurate draughtsmanship, with sound knowledge of building construction, essential. Salary scale £470—£880 per annum, point of entry dependent upon age and qualifications.

Applications, in writing, stating age, qualifications and experience, with names of three referees, to City Surveyor, Guildhall, London, E.C.2, within 14 days. 1757

LANCASHIRE COUNTY COUNCIL

PLANNING ASSISTANT required at Preston. Applicants must be qualified planners with experience of development control. Salary within Special Scale, £750 to £1,030 per annum according to experience.

Applications giving age, qualifications, present appointment, experience, etc., and two referees to the County Planning Officer, East Cliff County Offices, Preston, by 10th November, 1958. 1758

WAR DEPARTMENT
C.R.E. SHOEBURYNESS
DRAUGHTSMAN (A. & C. E.)

Two ARCHITECTURAL and ENGINEERING DRAUGHTSMEN are required by the Commander, Royal Engineers, Shoeburyness, Essex.

In addition to the usual draughtsman's qualifications, applicants should be capable of preparing detailed working drawings.

Applications are invited from persons between the ages or 21 and 50 years.

Annual salary rate £510 at age 21 to £714 at age 28 or over, and then by annual increments to a maximum of £820.

Letters of application giving details of age, experience and qualifications should be addressed to: C.R.E. Shoeburyness, Old Ranges, Shoeburyness, Essex. 1750

NATIONAL COAL BOARD
EAST MIDLANDS DIVISION

Applications are invited for the following posts in the Divisional Architect's Department, 69, Lower Parliament Street, Nottingham.

S.V. 912/R. ARCHITECT, Grade II, salary scale £815 × £30—£1,125. Candidates should be corporate members of the R.I.B.A. with varied practical experience.

S.V. 926/R. ARCHITECTURAL ASSISTANT, Grade I, salary scale £715 × £25—£850 (exceptionally, £1,000).

S.V. 929. ARCHITECTURAL ASSISTANT, Grade II, salary scale £595 × £25—£710.

Qualifications: Preferably Intermediate R.I.B.A., although regard will be paid to good practical experience.

The architectural work of the department covers the design of colliery surface buildings of all types, including workshops, stores, power plants, offices, pithead baths, canteens, medical centre and recreation buildings.

The point of entry into the salary scale will depend on qualifications and experience. The posts are superannuable and superannuation rights under Local Authority and certain other schemes are transferable.

Applications giving age, present salary and full details of qualifications, experience and present appointment should be addressed to: The Divisional Chief Staff Officer, National Coal Board, East Midlands Division, Sherwood Lodge, Nr. Arnold, Nottingham. Please quote the appropriate S.V. reference. 1747

SHEFFIELD REGIONAL HOSPITAL BOARD

Applications are invited for the post of SENIOR ASSISTANT QUANTITY SURVEYOR in the Architectural Division of the Board's Headquarters. Applicants must hold or have held Corporate Membership of the Royal Institute of Chartered Surveyors. The appointment is subject to the Whitley Council terms and conditions of service, to the National Health Service (Superannuation) Regulations, and to one month's notice on either side. Salary scale £1,010—£1,195 per annum. Applications stating age, qualifications, previous appointments and experience, together with the names of three referees, should reach the Secretary to the Board, Sheffield Regional Hospital Board, Fulwood House, Old Fulwood Road, Sheffield, 10, not later than 7th November, 1958. 1742

CITY OF NOTTINGHAM
ESTATES DEPARTMENT

Applications are invited for the following appointments in the Chief Architect's Section:—

(1) ASSISTANT ARCHITECT at a commencing salary within the Special Scale (£750 × £40—£1,030). Applicants should have passed Parts 1 and 2 of the Final Examination of the R.I.B.A.

(2) JUNIOR ARCHITECTURAL ASSISTANT at a commencing salary within the General Division Scale (£200—£560).

There is a large programme of interesting and varied work covering redevelopment schemes and estate development, which includes housing, shops, hostels, etc.

The appointments will be subject to the National Joint Council's Scheme of Conditions of Service.

Applications stating age, qualifications, experience, present appointment and salary, and naming two referees, should be sent to the Estates Surveyor and Valuer, Guildhall, Nottingham, by Friday, 14th November, 1958.

T. J. OWEN,
Town Clerk.
Guildhall,
Nottingham. 1760

CITY OF OXFORD

ARCHITECTURAL ASSISTANT required in City Architect and Planning Officer's Department; salary within range £750—£1,030 per annum, according to qualifications (minimum required A.R.I.B.A.) and experience. Housing accommodation provided.

For further details and application form (to be returned by 1st November) apply City Architect and Planning Officer, Town Hall, Oxford.

HARRY PLOWMAN,
Town Clerk.
Town Hall,
Oxford. 1746

BASILDON DEVELOPMENT CORPORATION
DEPARTMENT OF ARCHITECTURE AND PLANNING

ASSISTANT ARCHITECT/PLANNER of ability to work in Group on the implementation of the Master Plan for a New Town of 100,000.

Grade A.P.T. VI, salary range £934—£1,146.

Work will include all aspects of progressive planning including layouts for new residential and commercial development.

Candidates must be A.M.T.P.I. with A.R.I.B.A. an advantage

Application on the special form (obtainable from the Chief Architect/Planner) to the General Manager, Basildon Development Corporation, Gifford House, Basildon, Essex, endorsed "Architect/Planner" by Friday, 21st November, 1958, quoting Ref. No. GM. 5758. 1768

CITY OF LEEDS
CITY ARCHITECT'S DEPARTMENT

Post No. 1. SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV, Salary scale £1,025—£1,175. Applicants must be members of the Royal Institute of British Architects.

2. ASSISTANT ARCHITECTS, A.P.T. III, £845—£1,025.
3. ARCHITECTURAL ASSISTANTS, A.P.T. 1, £575—£725.
4. DRAUGHTSMAN, A.P.T. I, £575—£725.
5. ASSISTANT QUANTITY SURVEYOR, A.P.T. III, £845—£1,025.
6. ASSISTANT QUANTITY SURVEYOR, A.P.T. I, £575—£725.
7. ASSISTANT SURVEYOR (Land), A.P.T. III, £845—£1,025.
8. ASSISTANT SURVEYOR (Land), A.P.T. I, £575—£725.

Applicants are asked to clearly indicate the post for which they wish to be considered.

Medical examination. Superannuation payable.

Application forms from the City Architect, Priestley House, Quarry Hill, Leeds, 9, to whom they should be returned by 12 noon on Saturday, 8th November, 1958.

Canvassing disqualifies.

R. A. H. LIVETT,
City Architect.

Priestley House,
Quarry Hill,
Leeds, 9.
13th October, 1958. 1764

HAMPSHIRE COUNTY COUNCIL

PLANNING ASSISTANT, A.P.T. Grade II (£725—£845) required for County Planning Department Headquarters in Winchester. Candidates should preferably have passed the Intermediate examination of the Town Planning Institute or of a related professional body and have had experience with a Local Planning Authority. The appointment is pensionable and subject to a satisfactory medical report. In approved cases the County Council assist with removal and other expenses.

Applications stating age, education, qualifications and experience, together with a copy of one testimonial and the names of two referees should reach the Clerk of the County Council, The Castle, Winchester, by 31st October. 1745

EAST RIDING OF YORKSHIRE COUNTY COUNCIL

Applications are invited for the permanent appointment of an ASSISTANT QUANTITY SURVEYOR on the staff of the County Architect, at a salary in accordance with the N.J.C. Special Scale (£750—£1,030).

Particulars of qualifications, age, experience, past and present appointments with salaries, together with the names of three referees, should be sent to the County Architect, County Hall, Beverley, not later than Friday, 7th November, 1958.

Assistance towards removal, lodging and travelling expenses may be granted.

THOMAS STEPHENSON,
Clerk of the Council.
1782

OLDHAM EDUCATION COMMITTEE

Applications are invited for an established post of ARCHITECTURAL ASSISTANT or ARCHITECTURAL DRAUGHTSMAN in the Schools Architect's Department within the following scales according to qualification and experience.

Architectural Assistant—Special Grade (£750 to £1,030) or A.P.T. I (£525 to £725).

Architectural Draughtsman — Miscellaneous Grades IV—VI (£565 to £745).

The successful applicant will be required to pass a medical examination for entrance to the Superannuation Scheme. The department is engaged in an extensive educational building programme which includes contemporary primary and secondary schools, special schools and further education establishments and the post offers ample opportunity for responsible and interesting work. Applications should be forwarded by letter to the Director of Education, Education Offices, Union Street West, Oldham, by 3rd November and should give full details of age, qualifications and experience. 1781

COUNTY BOROUGH OF TYNEMOUTH
BOROUGH SURVEYOR'S DEPARTMENT

Applications are invited for the post of ASSISTANT ARCHITECT on the Special Scale £750 to £1,030.

Application forms together with conditions of appointment should be obtained from D. M. O'Herlihy, Esq., O.B.E., B.Sc. (Eng.), M.I.C.E., 16 Northumberland Square, North Shields, and returned before 10th November, 1958.

FRED. G. EGNER,
Town Clerk.
1778

BOROUGH OF TAUNTON
ASSISTANT ARCHITECT

Applications are invited for appointment of Assistant Architect in the Borough Housing Architect's Department, Special Grade, salary £750—£1,030 per annum.

Superannuable post, subject to medical examination, and to National conditions of service. Applications stating age, present position and salary, qualifications, experience and names of two referees to be sent to C. Bacon, F.R.I.B.A., Borough Housing Architect, Flook House, Station Road, Taunton, by 10th November, 1958.

Canvassing will disqualify.

Consideration will be given to housing accommodation, if required.

K. A. HORNE,
Town Clerk.

Municipal Buildings,
Taunton. 1772

BOROUGH OF BEDFORD
APPOINTMENT OF ASSISTANT ARCHITECT
Grade A.P.T. I (£575—£725)

Applications are invited for the above appointment, the point of entry into the Grade being determined by experience and/or qualifications. Applicants should have obtained the standard of the Intermediate examination of the R.I.B.A.

The Council have in hand a programme including multi-storey flats, shops and offices.

The Council are prepared to assist in the provision of housing and will contribute towards removal expenses.

Forms of application and particulars of the appointment may be obtained from the undersigned, to whom applications should be returned not later than Monday, 3rd November, 1958.

F. W. DAWKES,
Borough Engineer & Surveyor.

Newnham House,
Horne Lane,
Bedford. 1773

NORFOLK COUNTY COUNCIL
APPOINTMENT OF SENIOR PLANNING ASSISTANT (DEVELOPMENT CONTROL)

Applications are invited for the above post on the Special Scale (£750—£1,030 p.a.).

Applicants should have had good previous experience in a County Planning Department, and preference will be given to those possessing a recognised qualification in planning, architecture, engineering or surveying, or a degree in a suitable subject.

The person appointed will be expected to provide a motor-car, for which the standard allowance will be paid.

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

Applications, including the names of two referees, should be received by the undersigned by the 15th November, 1958.

R. I. MAXWELL,
County Planning Officer.

41/43, Thorpe Road,
Norwich. 1787

STAFFORDSHIRE COUNTY COUNCIL
COUNTY ARCHITECTS' DEPARTMENT
APPOINTMENT OF ASSISTANT ARCHITECTS
Special Grade (£750 × £40—£1,030)

Applications are invited for the above posts from qualified and suitably experienced Architects. The Department is a large one and has an extensive programme of varied and interesting work.

The appointment will be subject to:—

(*a*) The National Scheme of Conditions of Service.

(*b*) The Local Government Superannuation Acts and the passing of a medical examination.

The County Council are prepared to grant a lodging allowance of 35s. per week to married applicants maintaining a home outside the geographical County for a period of 6 months; also 2nd class rail travel home every second month during the initial 6 months. The Council are also prepared to give consideration to the granting of financial assistance in appropriate cases towards removal expenses.

Forms of application, which must be returned by the 3rd November, 1958, may be obtained from The County Architect, Green Hall, Lichfield Road, Stafford.

T. H. EVANS,
Clerk of the County Council.
1775

URBAN DISTRICT COUNCIL OF BRAINTREE AND BOCKING
ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment within A.P.T. Grade I, £575 × £30—£725 from persons who have had experience in municipal housing.

The appointment will be subject to the National Joint Council Conditions of Service, the provisions of the Local Government Superannuation Acts, the passing of a medical examination, and will be terminable by one month's notice on either side.

Applications suitably endorsed stating age, qualifications and experience, together with the names of two referees, to be delivered to the undersigned not later than Monday, 3rd November, 1958.

Canvassing directly or indirectly will be deemed a disqualification and candidates should state whether they are related to any Member or Senior Officer of the Council.

Housing accommodation will be made available if required.

H. COOK,
Engineer & Surveyor.

Town Hall,
Braintree.
13th October, 1958. 1777

MIDDLESEX COUNTY COUNCIL
APPOINTMENT OF COUNTY ARCHITECT

Applications are invited from duly qualified and experienced persons for the full-time and pensionable appointment of County Architect at the approved salary of £3,390 rising by £105 annually to £3,915 p.a. Appointment subject to satisfactory medical assessment and prescribed conditions. Applications, to be made on forms obtainable (with further particulars relating to the appointment) by sending stamped and addressed foolscap envelope to the undersigned, by whom completed applications must be received not later than 20th November, 1958. Canvassing disqualifies.

KENNETH GOODACRE,
Clerk of the County Council.

Guildhall, Westminster, S.W.1
14th October, 1958. 1784

COUNTY COUNCIL OF ESSEX
COUNTY PLANNING DEPARTMENT

Applications invited for the following posts:—

(1) 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 flair 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.

(2) PLANNING ASSISTANT, A.P.T. Grade I (£575—£725) at Broomfield. Applicants will be required to undertake duties in the Detailed Planning and Design Section at Headquarters, particularly in regard to elevational control and housing layouts and should have aptitude for an experience in work of this nature.

Five-day week; day release facilities; medical examination; superannuation.

Applications on forms to be obtained from County Planning Adviser, Broomfield Place, Broomfield, Chelmsford, to whom they should be returned by 3rd November, 1958. 1783

UNIVERSITY OF HONG KONG
POSTS IN ARCHITECTURE

Applications are invited for the posts of SENIOR LECTURER and LECTURER in ARCHITECTURE.

Annual salary (superannuable) is:—

Senior Lecturer: £2,000 × £75—£2,300 for a man or £1,500 × £60—£1,740 for a woman (there is also an expatriation allowance of £250 a year if applicable).

Lecturer: £1,575 × £50—£2,175 for a man or £1,200 × £40—£1,680 for a woman (there is also an expatriation allowance of £225 a year if applicable).

The equivalent of income tax in the Colony is comparatively low.

Applicants should have a degree or diploma from a University or school recognised by the Royal Institute of British Architects and should be A.R.I.B.A. Postgraduate qualifications and/or good practical experience are additional requirements.

The Senior Lecturer will be required to perform the duties of a Year Master and should be able to offer instruction or lecture in a specialised subject (not Theory of Structures).

The Lecturer will be required to lecture in the "Appreciation and History of Architecture" and to assist in the studio work.

First class sea passages are provided for expatriate staff and their families on first appointment and leave.

Further particulars and information as to the method of application may be obtained from the Secretary, Association of Universities of the British Commonwealth, 36, Gordon Square, London, W.C.1.

The closing date for the receipt of applications, in Hong Kong and London, is 30th November, 1958. 1774

Architectural Appointments Vacant

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

ARCHITECTURAL ASSISTANTS required. Starting salary £915 per annum, Glasgow office, five-day week. Schools, offices, etc. State experience. Box 1532.

THREE additional ARCHITECTURAL ASSISTANTS required—two up to Intermediate standard, the other fully capable of handling jobs throughout. Busy and varied practice. Salaries by arrangement. D. C. Denton-Smith and Partners, Chartered Architects: Surveyors, 40, Regent Street, Cambridge. 1629

ARCHITECTURAL ASSISTANTS required. Excellent salaries and opportunities offered to suitable applicants. Five-day week. Write giving full particulars of experience to Sandon & Harding, A/A.R.I.B.A., 14, Lower Brook Street, Ipswich. 1631

A DESIGNER with architectural experience, imagination and progressive ideas required. Apply Trehearne & Norman, Preston & Partners, Architects & Surveyors, 83, Kingsway, W.C.2. HOL 4071. 1537

INTERMEDIATE ASSISTANTS required for Architect's Office, London. Salary £600 to £800. Industrial and Commercial projects. Scope for initiative and responsibility. Box 1696.

SENIOR and Intermediate ASSISTANTS required, interesting work, responsibility, London Architects' Office. Box 1597.

SENIOR Qualified ARCHITECTS and ASSISTANTS at Intermediate stage required by Birmingham Firm of Architects for works of large and varied nature. Apply in writing stating age, qualifications, experience and salary required to Harry W. Weedon, F.R.I.B.A. and Partners, 45-47, Calthorpe Road, Edgbaston, Birmingham, 15. 1709

WEST END Architects urgently require capable ASSISTANT of Final standard for interesting commercial and industrial work. Minimum four years' London experience. Salary by arrangement. Write Box 1710 with full details or telephone WELbeck 6244 for appointment.

ARCHITECTURAL ASSISTANT required for small busy practice, preferably school trained with at least 3 to 5 years' office experience. Must be good draughtsman and capable of detailing houses and flats and knowledge of dealing with site supervision. Apply giving full particulars of training, past experience and salary required and present salary to: R. Jelinek-Karl, F.R.I.B.A., 22, Chancery Lane, W.C.2. 1707

ASSISTANT ARCHITECT required, school trained, with one or two years' office experience for small busy practice, mainly domestic buildings. First class draughtsmanship and presentation important. Prospects of advancement for the right man. Please apply giving full particulars of training, experience and salary required, Box 1706.

ARCHITECT'S ASSISTANT required by Manchester firm of Architects. R.I.B.A. Intermediate standard with some previous office experience. Write stating age, experience, qualifications and salary required. Box 1735.

ARCHITECTURAL ASSISTANTS required, medium sized London West End office. Experienced commercial work. Good draughtsmen essential. £800—£1,100 according to experience, plus bonuses and luncheon vouchers. Five-day week. Write Box 1730.

ASSISTANTS and ARCHITECTS in responsible positions and with good architectural experience interested in augmenting their income please write to Box 1717. All enquiries acknowledged and dealt with in the strictest confidence.

ARCHITECTURAL ASSISTANT, Intermediate R.I.B.A., required by large Birmingham firm, to work on interesting contemporary multi-storey projects, in Birmingham. Preferably capable of working with minimum supervision. Five-day week. Phone Edgbaston 4571 or write J. Seymour Harris & Partners, 3/4, Greenfield Crescent, Birmingham, 15. 1689

ARCHITECTURAL ASSISTANTS required for Office, University, Laboratory and Hospital Buildings, some office experience necessary, Intermediate or Final standard. Five-day week. Write Adams, Holden & Pearson, 38, Gordon Square, W.C.1. 1685

FIRST CLASS SENIOR ASSISTANT required. Must have good office experience in London. Very interesting work. Five-day week. Morris de Metz, F.R.I.B.A., 2, Ludgate Hill, London, E.C.4. Telephone CITy 4086. 1655

ARCHITECTURAL ASSISTANT required for general practice South of England. Intermediate standard or near. Applicants to write giving full details of education, experience and state salary required. Box 1700.

SENIOR and JUNIOR ARCHITECTURAL ASSISTANT required for varied range of Contemporary work in Knightsbridge Office of moderate size. Write with details of experience, salary required, etc., to Box 1771.

BURLES & NEWTON require ARCHITECTURAL ASSISTANTS in their London and Southend-on-Sea offices. Interesting and varied practice, including churches, schools, housing, etc. Some experience necessary. R.I.B.A. Final standard. Age about 23-30. Reply, giving details of experience and salary required, to 25, Bedford Row, W.C.1, or to Weston Road, Southend-on-Sea. 1785

ARCHITECTURAL ASSISTANT required immediately for office in Horsham. Intermediate or Final standard. Accommodation available. Write, giving full particulars, to Godman & Kay, F/F.R.I.B.A., 13, North Parade, Horsham, Sussex. 1786

QUALIFIED ASSISTANT ARCHITECT required to work overseas. Please reply to Box 1790.

SCHERRER & HICKS require in their London Office ARCHITECTURAL ASSISTANTS, with office experience, for a variety of interesting contracts. Salary £450—£650. Apply in writing, giving full particulars, to 19, Cavendish Square, W.1. 1744

ARCHITECTURAL ASSISTANT required for industrial and hospital work, by Howard Kelly & Partners, 11, Duke Street, Manchester Square, London, W.1. Tel. Welbeck 3995. 1749

ARCHITECTURAL ASSISTANT required up to Intermediate standard, good draughtsmanship essential. Salary by arrangement. Vigers & Co., Architects, 4, Frederick's Place, Old Jewry, London, E.C.2. 1751

ASSISTANT ARCHITECT required in small office in Chelsea. Office conversions and industrial design. Salary about £850. Box 1793.

ARCHITECTURAL ASSISTANT required (Intermediate to Final standard) for general practice 15 miles from Central London (Kent area). Five-day week, salary by arrangement. Box 1743.

SENIOR ASSISTANT ARCHITECT for busy practice in W.R. Yorkshire. Engaged mainly on Schools, Public Houses and general work. Person appointed must be quick and neat draughtsman and be able to take charge of small Drawing Office. Apply, giving full particulars and salary required, to Dyson, Cawthorne & Coles, 25, Regent Street, Barnsley. 1763

SENIOR and INTERMEDIATE ASSISTANTS are invited to join an expanding Architect's practice in Edgbaston, Birmingham, which offers exceptional prospects. Box 1762.

MORRISON AND PARTNERS have vacancies at their Derby Office for ASSISTANTS of Intermediate and Final standard to work on a varied programme of an interesting and progressive nature. School trained men are preferred. Salaries by arrangement. Apply to St. Aikmunds House, Belper Road, Derby. 1754

ARCHITECTURAL ASSISTANT required in the Chief Architect's office of a large Multiple retail firm with offices in London. Five-day week, pension scheme, dining room. Applicants should state age, qualifications, experience and salary required. Box 1767.

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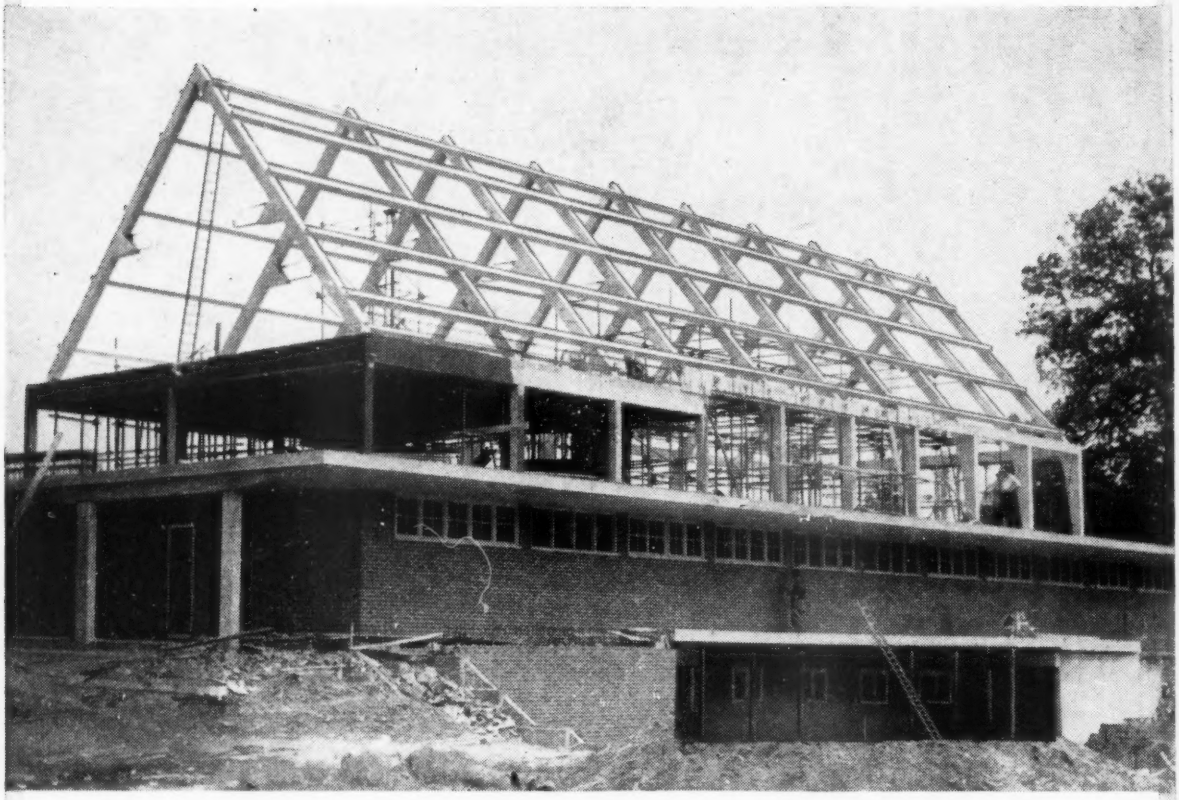

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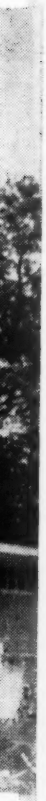

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