

# THE ARCHITECTS' JOURNAL



## Standard contents

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

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

IGE	Institution of Gas Engineers.	17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers.	49, Cadogan Square.	Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers.	Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects.	12, Gower Street, W.C.1.	Museum 1783
I of Arb	Institute of Arbitrators.	35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders.	48, Bedford Square, W.C.1.	Museum 7197/5176
IQS	Institute of Quantity Surveyors.	98, Gloucester Place, W.1.	Welbeck 1859
IR	Institute of Refrigeration.	Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects.	47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institute of Structural Engineers.	11, Upper Belgrave Street, S.W.1.	Sloane 7128
LDA	Lead Development Association.	Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
LMBA	London Master Builders' Association.	47, Bedford Square, W.C.1.	Museum 3891
LSPC	Lead Sheet and Pipe Council.	Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
MARS	Modern Architectural Research Group (English Branch of CIAM). Secretary :	Trevor Dannatt, 6, Fitzroy Square, W.1.	Euston 7171
MOA	Ministry of Agriculture and Fisheries.	55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education.	Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health.	23, Savile Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government.	Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service.	8, St. James' Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply.	Shell Mex House, Victoria Embankment, W.C.	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.	82, New Cavendish Street, W.1.	Langham 4341
N.P.L.	National Physical Laboratory.	Head Office, Teddington.	Molesey 1380
NSAS	National Smoke Abatement Society.	Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty.	42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning.	16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association.	94, Petty France, S.W.1.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland.	15, Rutland Square, Edinburgh.	Fountainbridge 7631
RIBA	Royal Institute of British Architects.	66, Portland Place, W.1.	Langham 5721
RICS	Royal Institution of Chartered Surveyors.	12, Great George St., S.W.1.	Whitehall 5322/9242
RFAC	Royal Fine Art Commission.	22A, Queen Anne's Gate, 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
RSI	Royal Sanitary Institute.	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
SCR	Society for Cultural Relations with the USSR.	14, Kensington Square, London, W.8.	Western 1571
SE	Society of Engineers.	17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association.	30, Cornhill, London, E.C.3.	Mansion House 3921
SIA	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 5051
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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[Vol. 121

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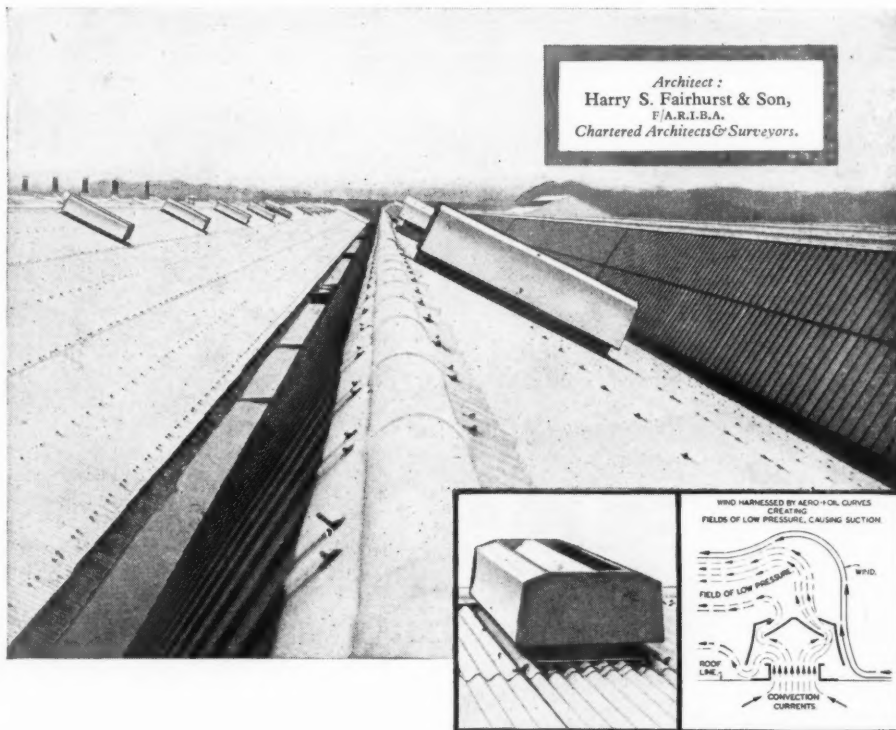
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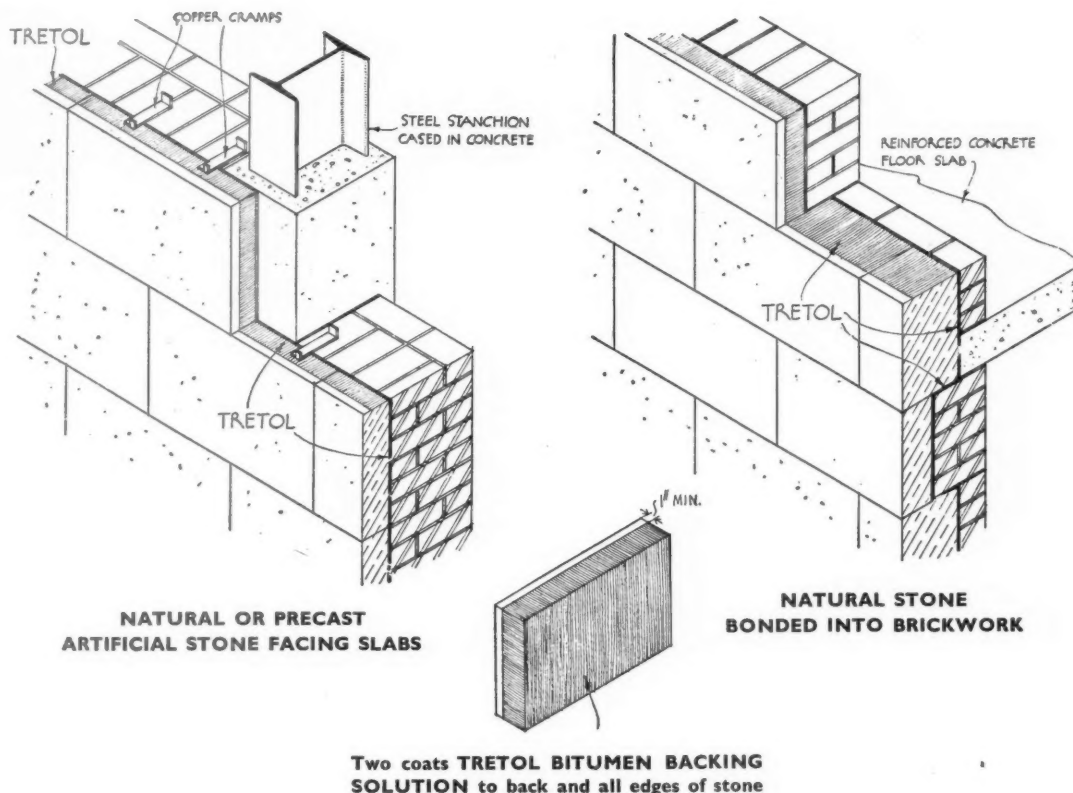
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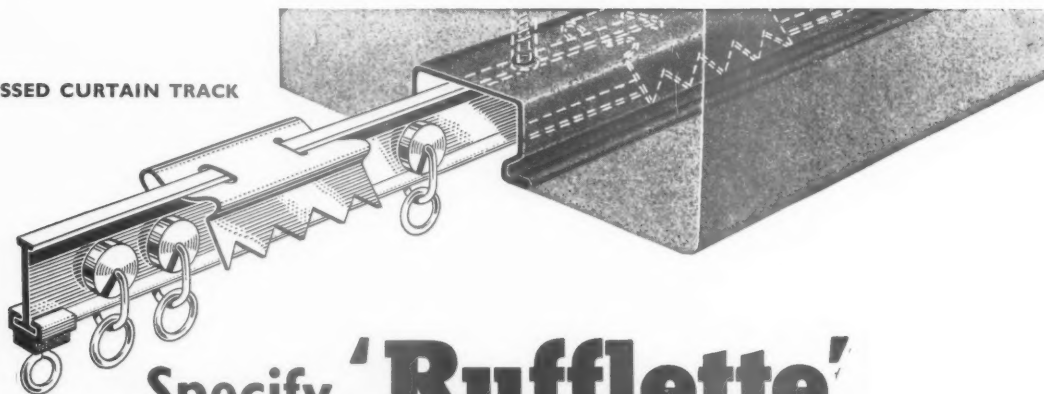
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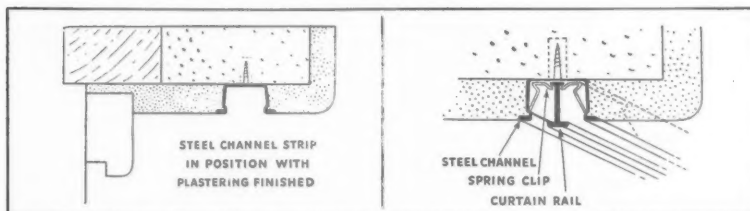
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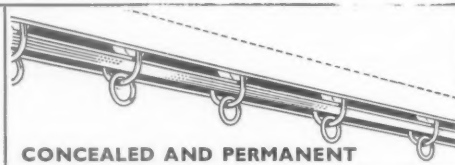
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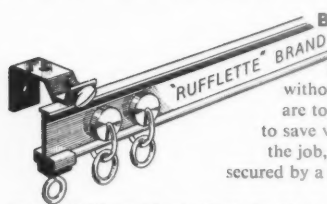
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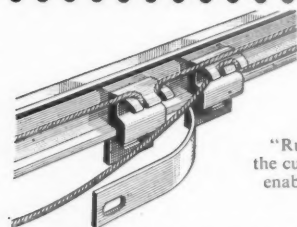
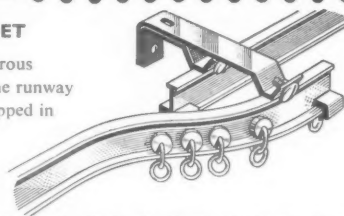


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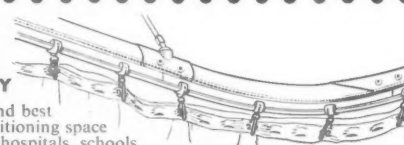


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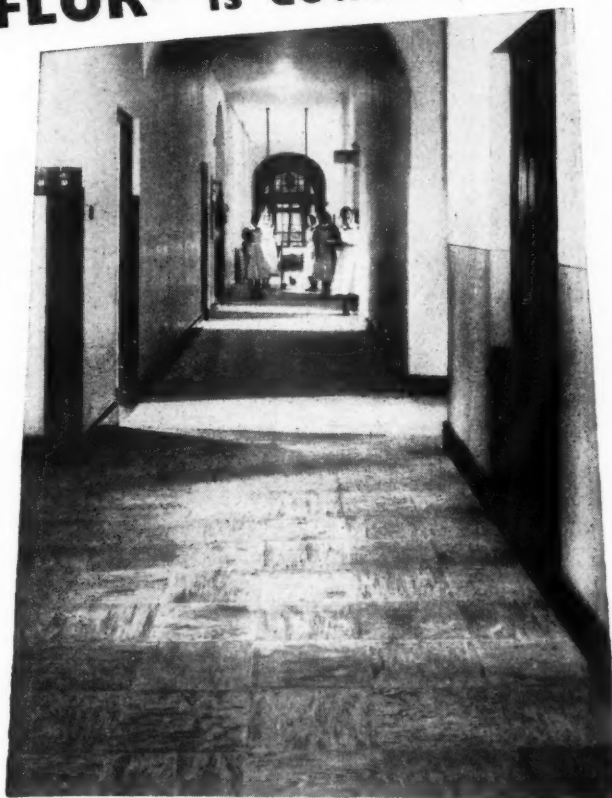
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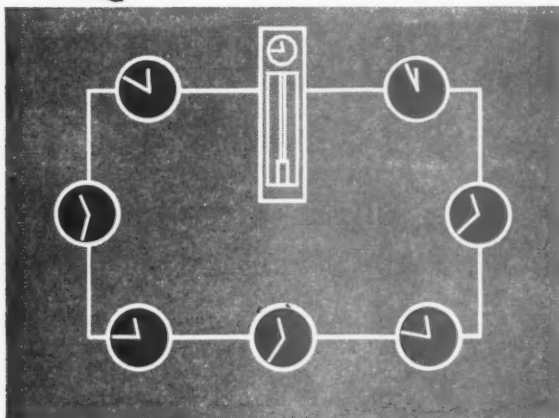
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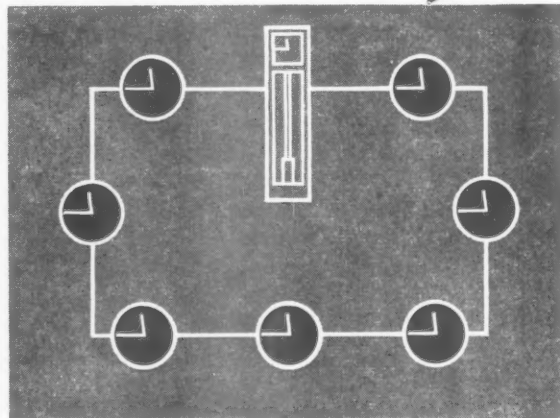
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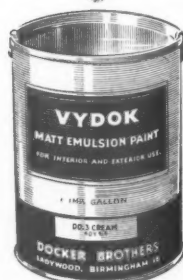
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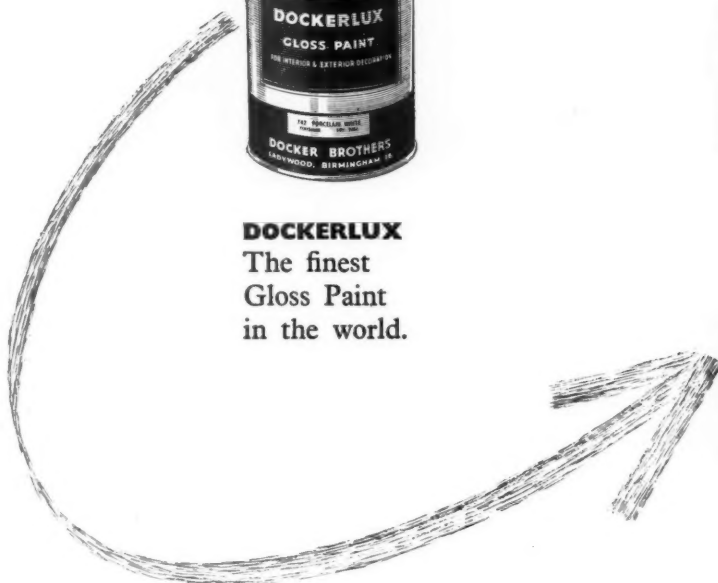
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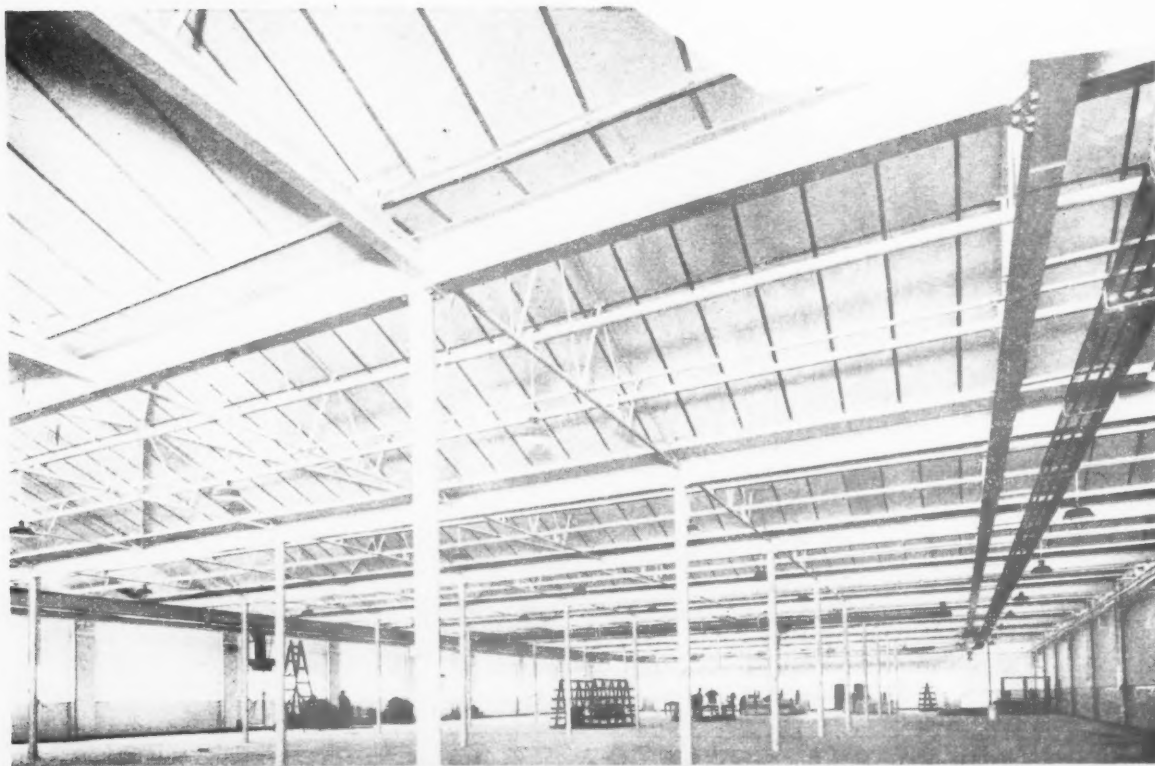
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Extract from a report on the thermal conductivity of a sample of "TURNALL" Asbestos Insulation Board, compiled by the Physics Division of the National Physical Laboratory. Report No. 11,4206, dated 22nd June, 1953.

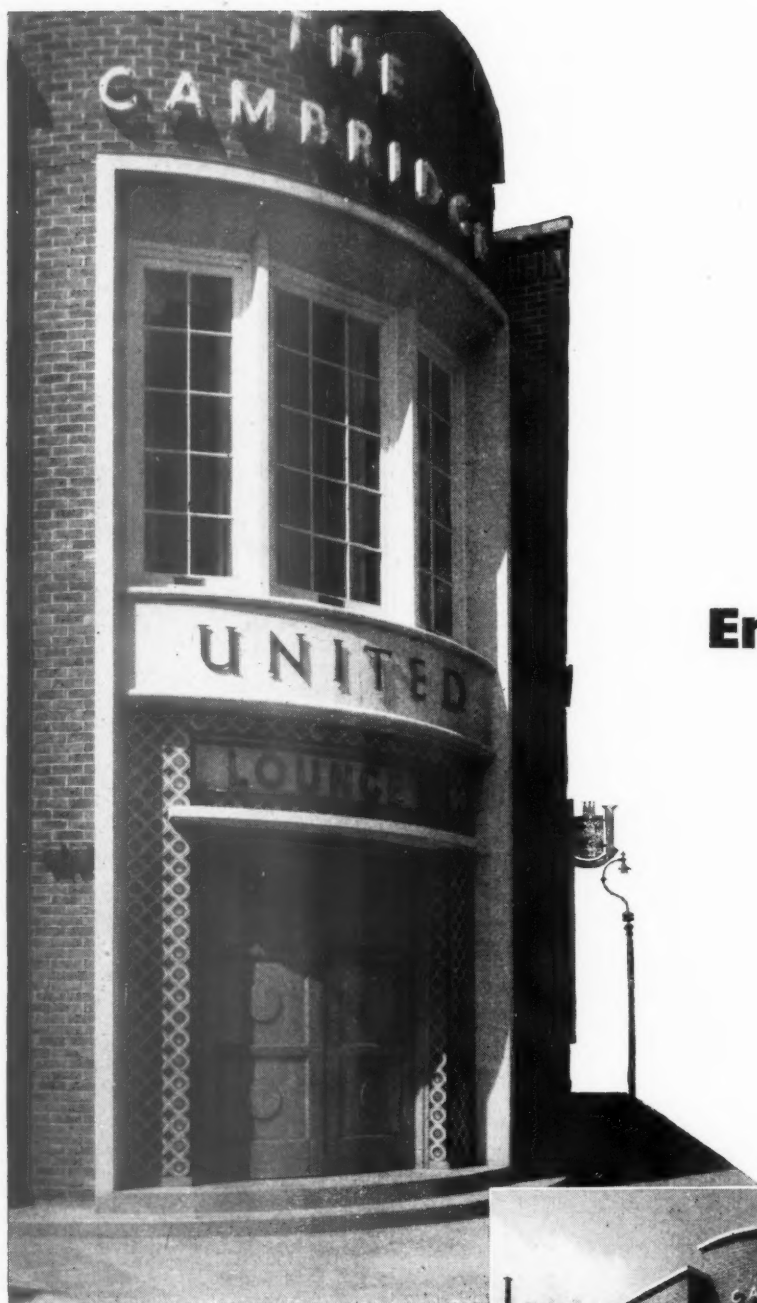


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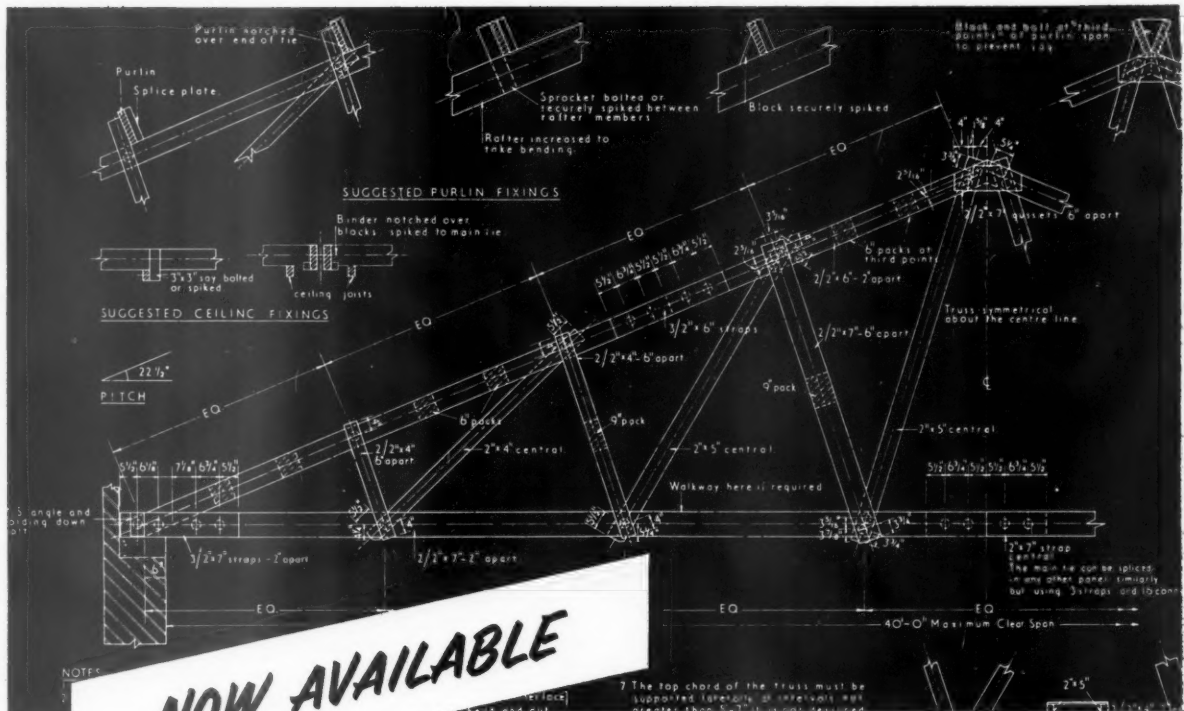
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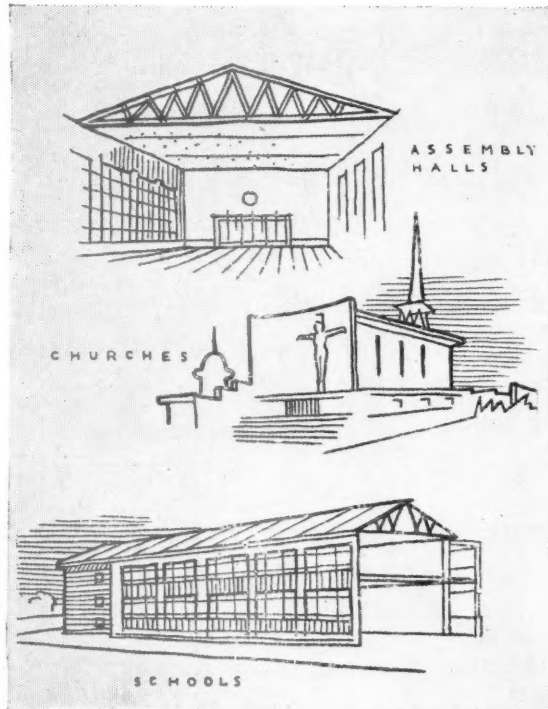
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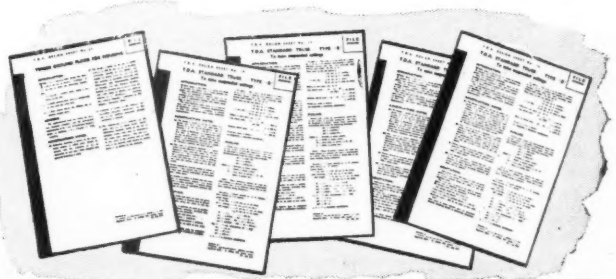
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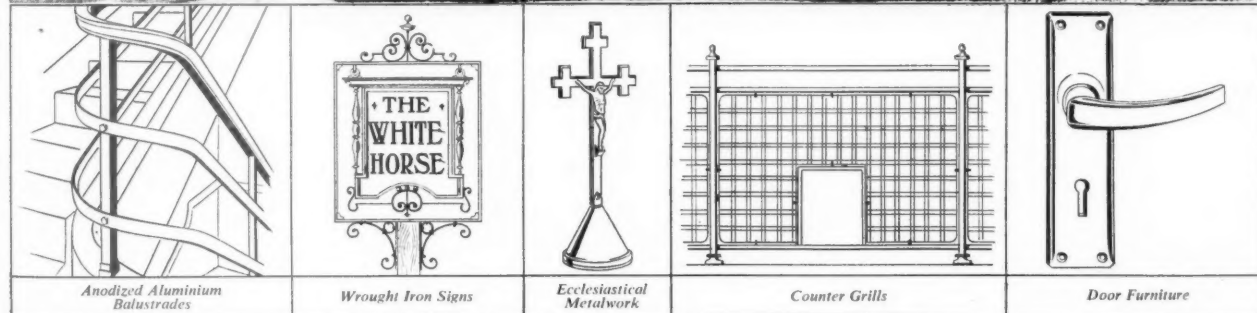
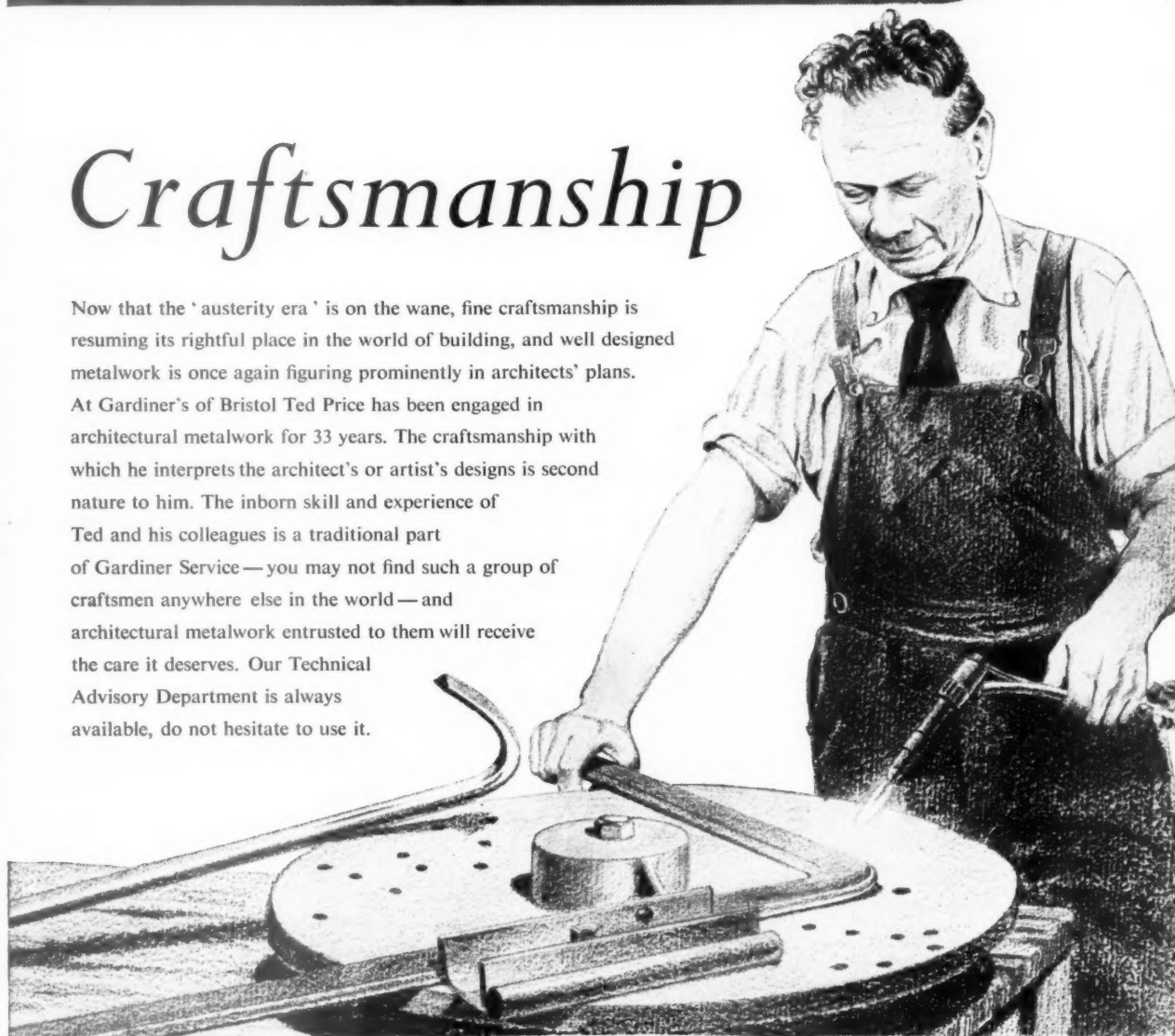


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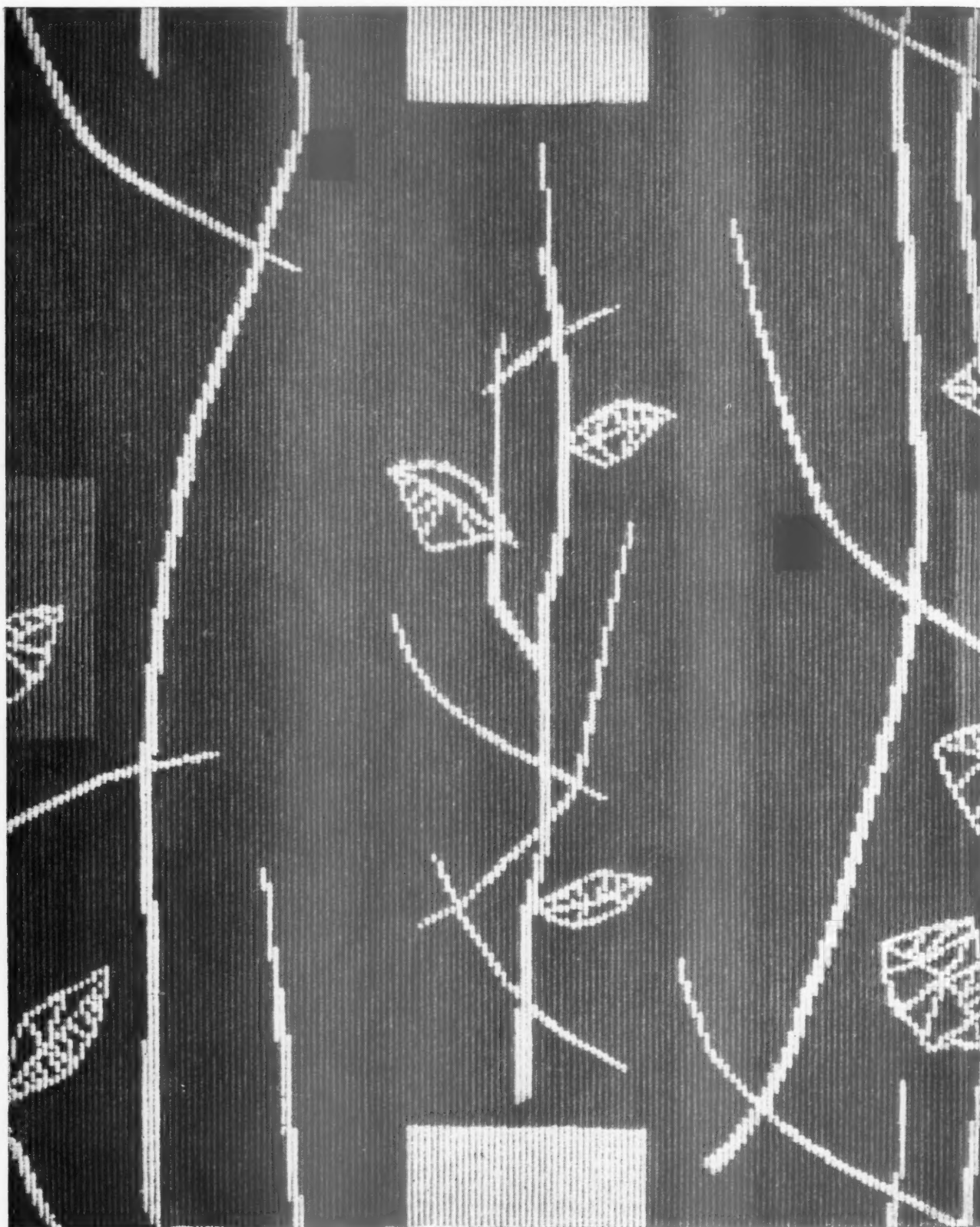
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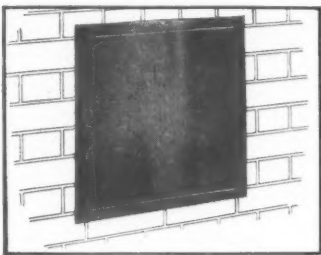
For further information on the use of Glass in building, consult the Technical Sales and Service Department, St. Helens, Lancs., (telephone: St. Helens 4001) or Selwyn House, Cleveland Row, St. James's, London, S.W.1 (telephone: Whitehall 5672-6). Supplies are available through the usual trade channels.



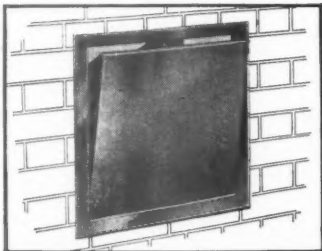
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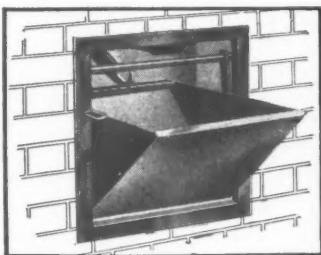
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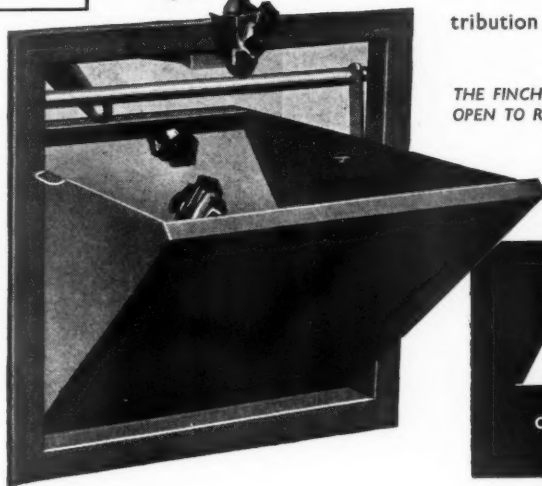
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Breakfast			
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Dinner			
Supper and Sandwiches			
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Paid Outs			
Sundries			
Total	1 19 6	2 1 4	
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Carried forward	1 19 6		

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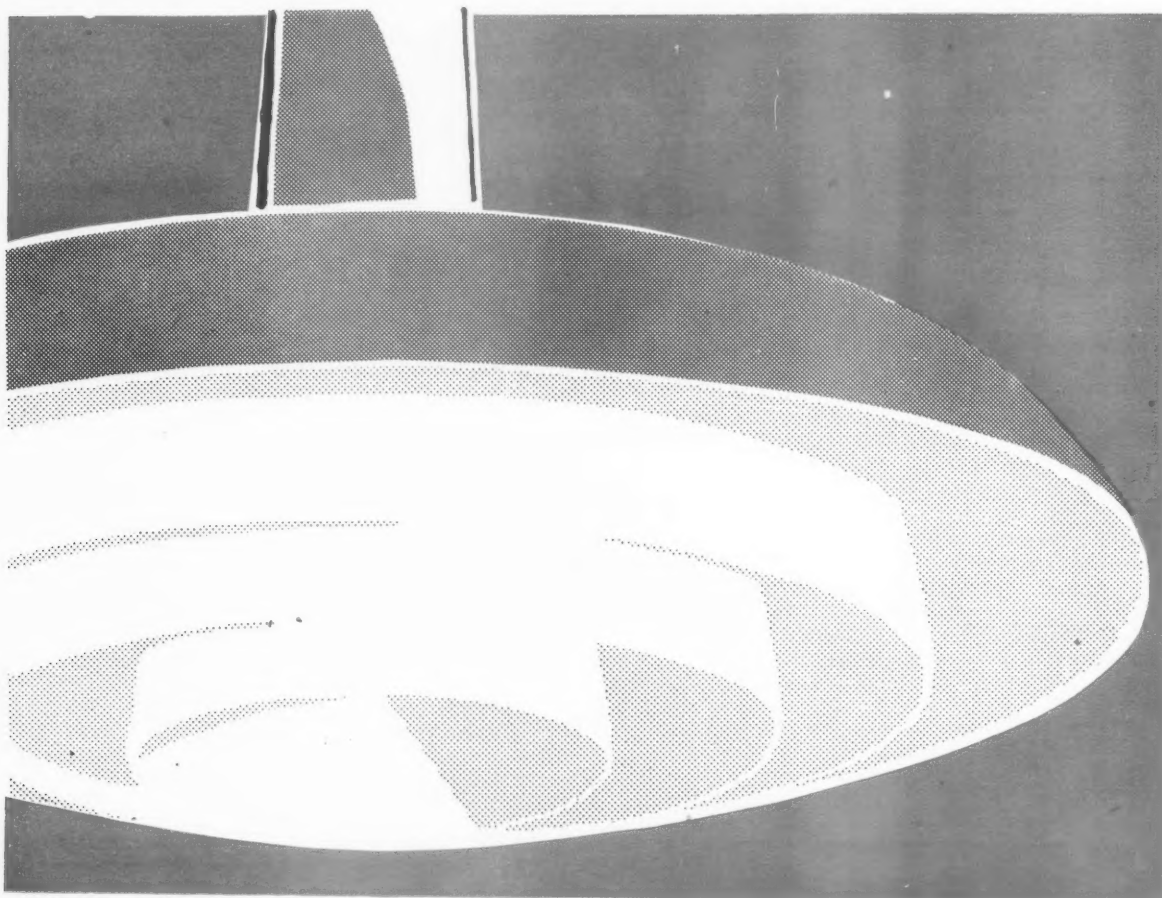
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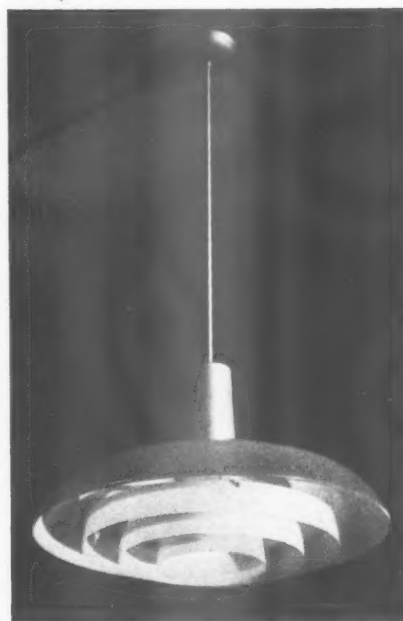
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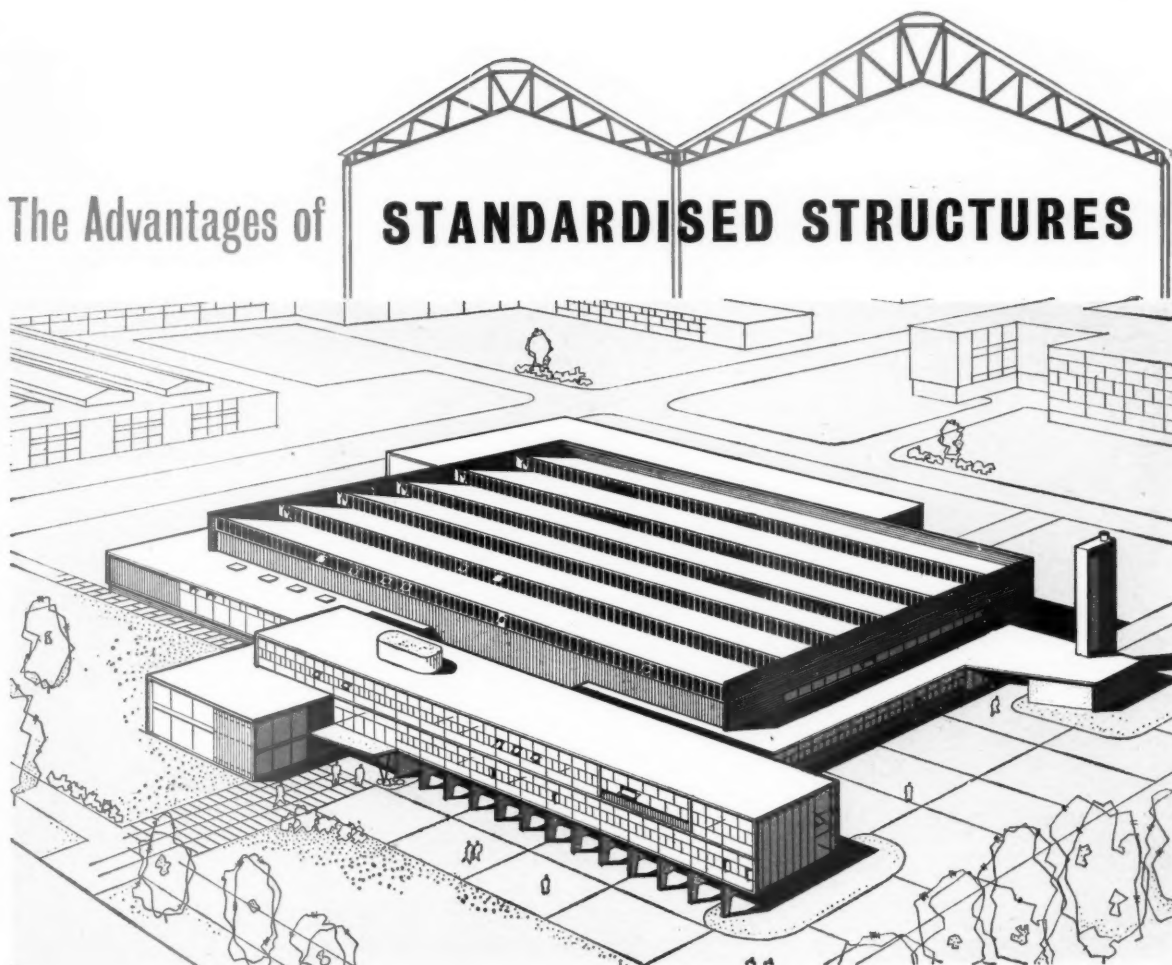


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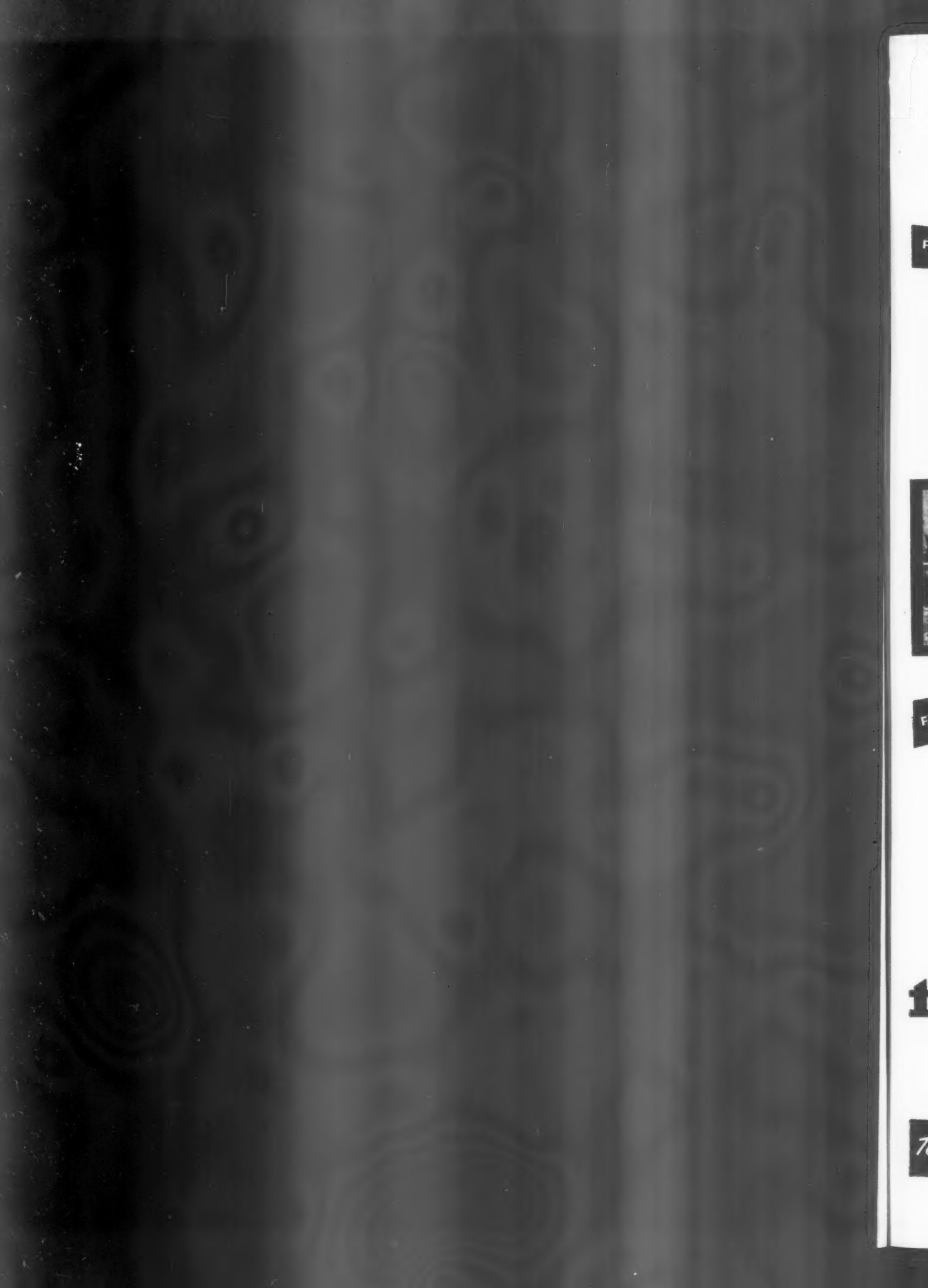




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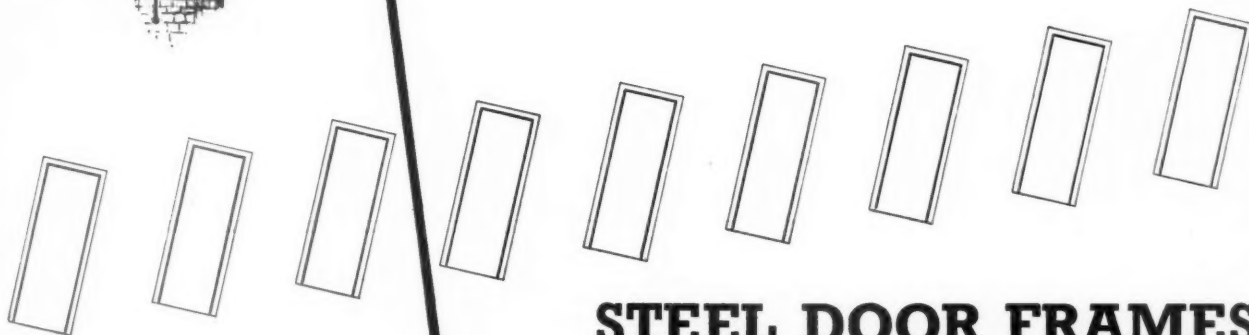
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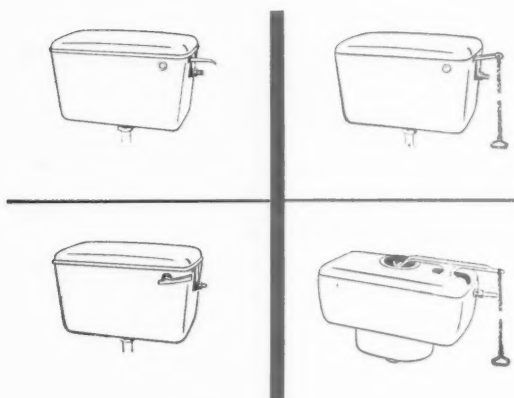
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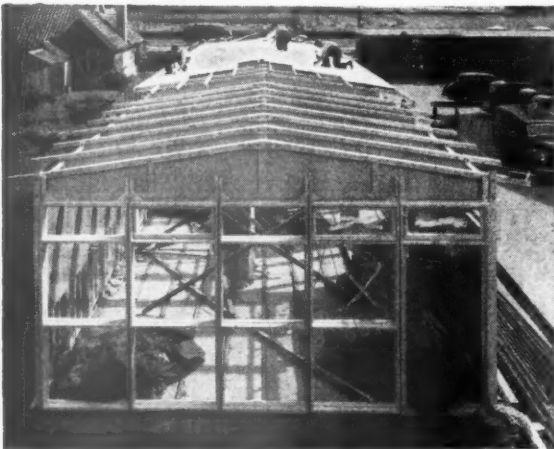
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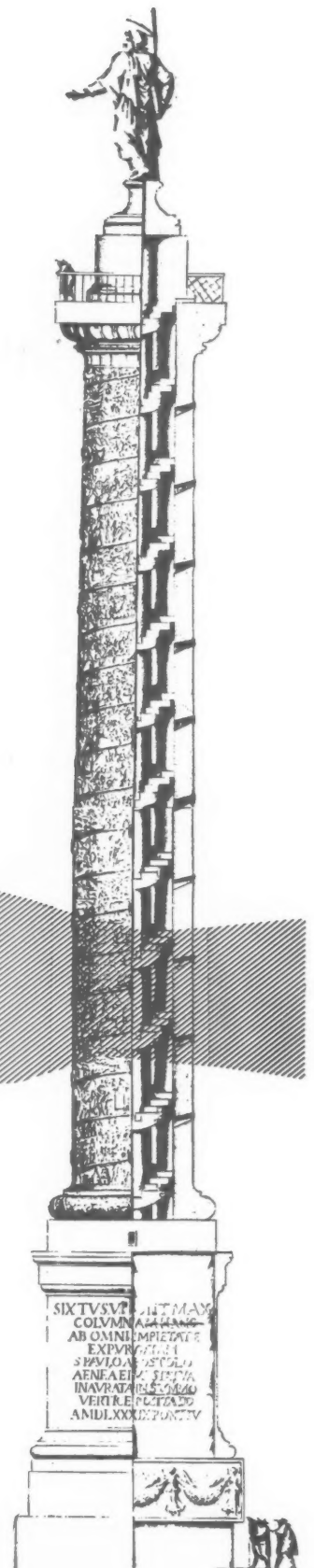
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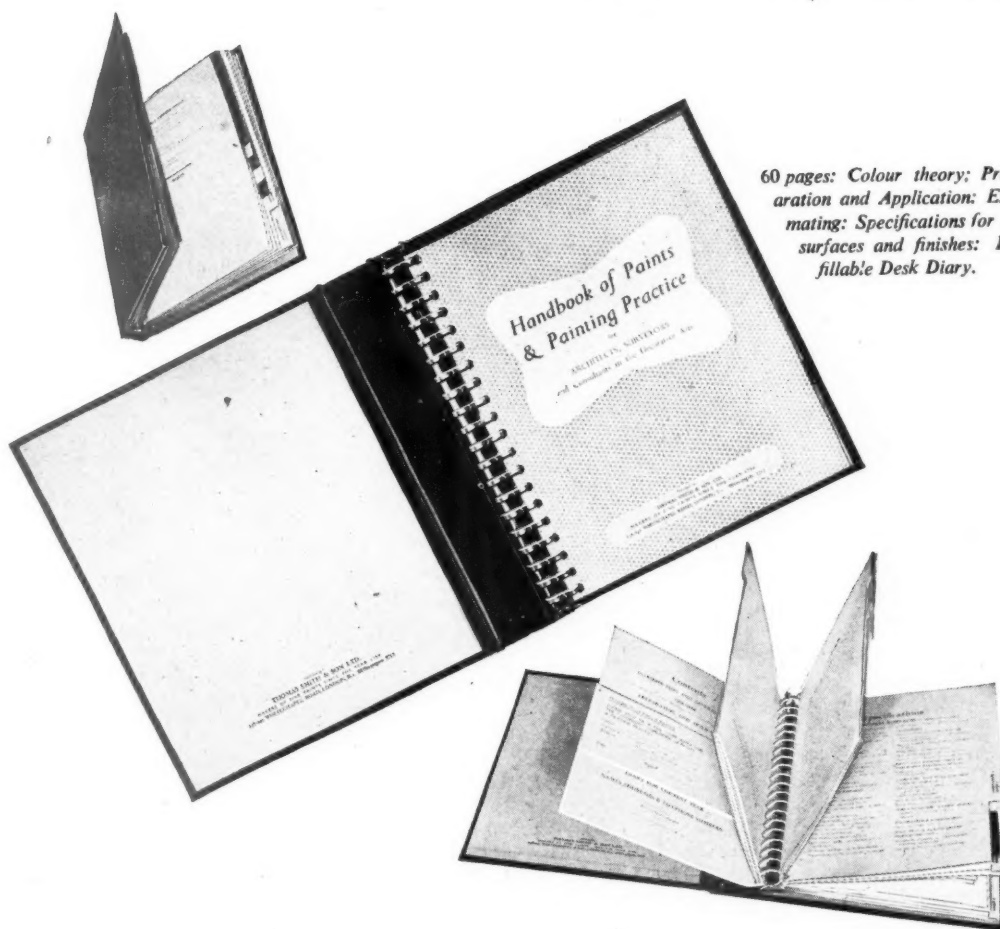
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SMITHSON Paints have been largely used at the B.B.C. Television Centre at the White City.



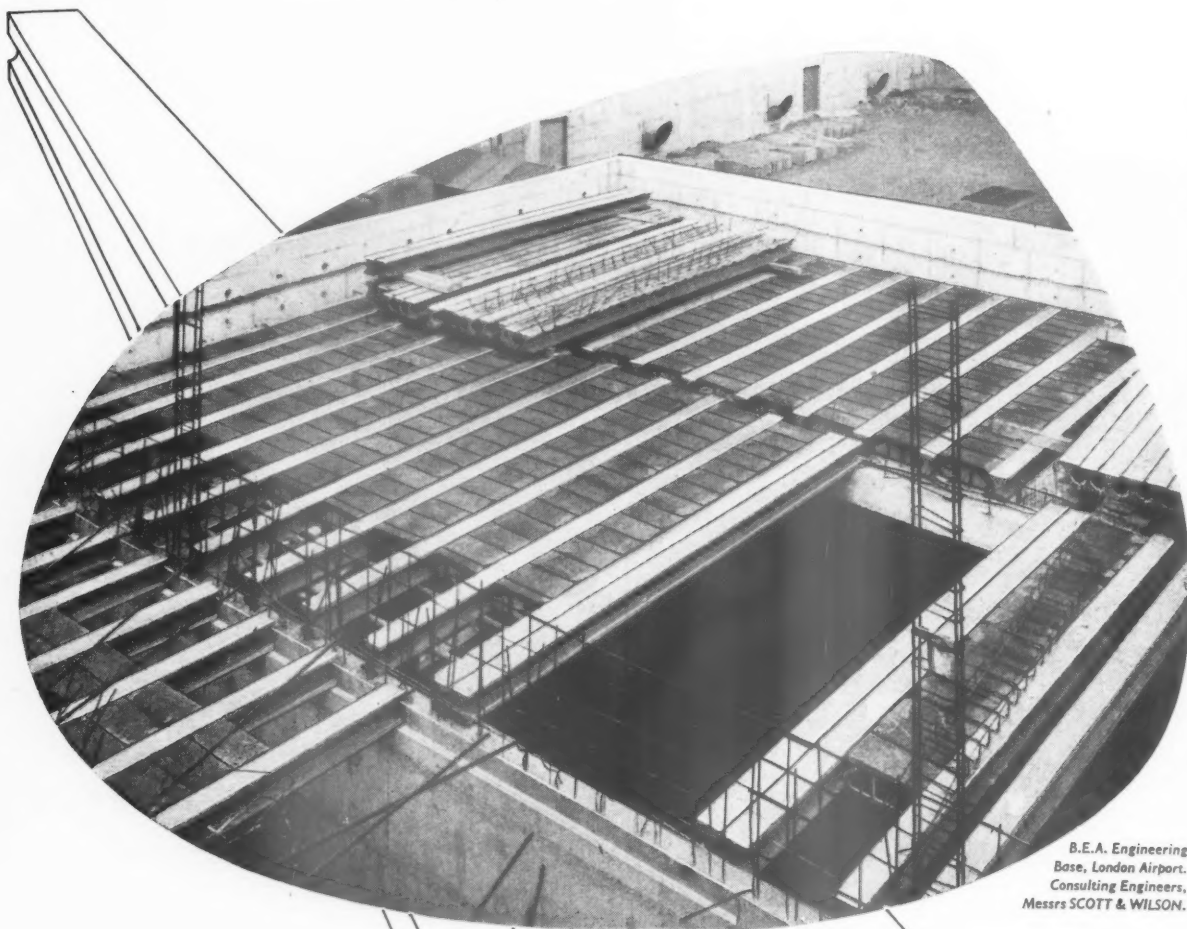
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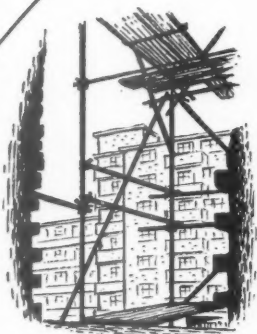
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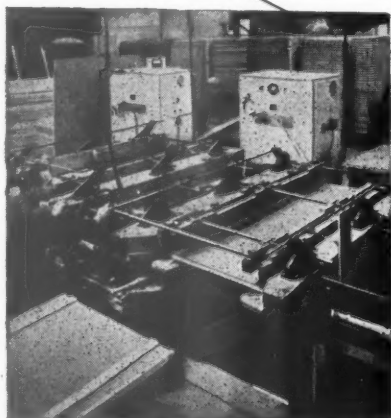
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Interior of Dover  
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finished in Nulon.

Photograph by courtesy of  
Dover Harbour Board

Architects: J. M. Wilson, H. C.  
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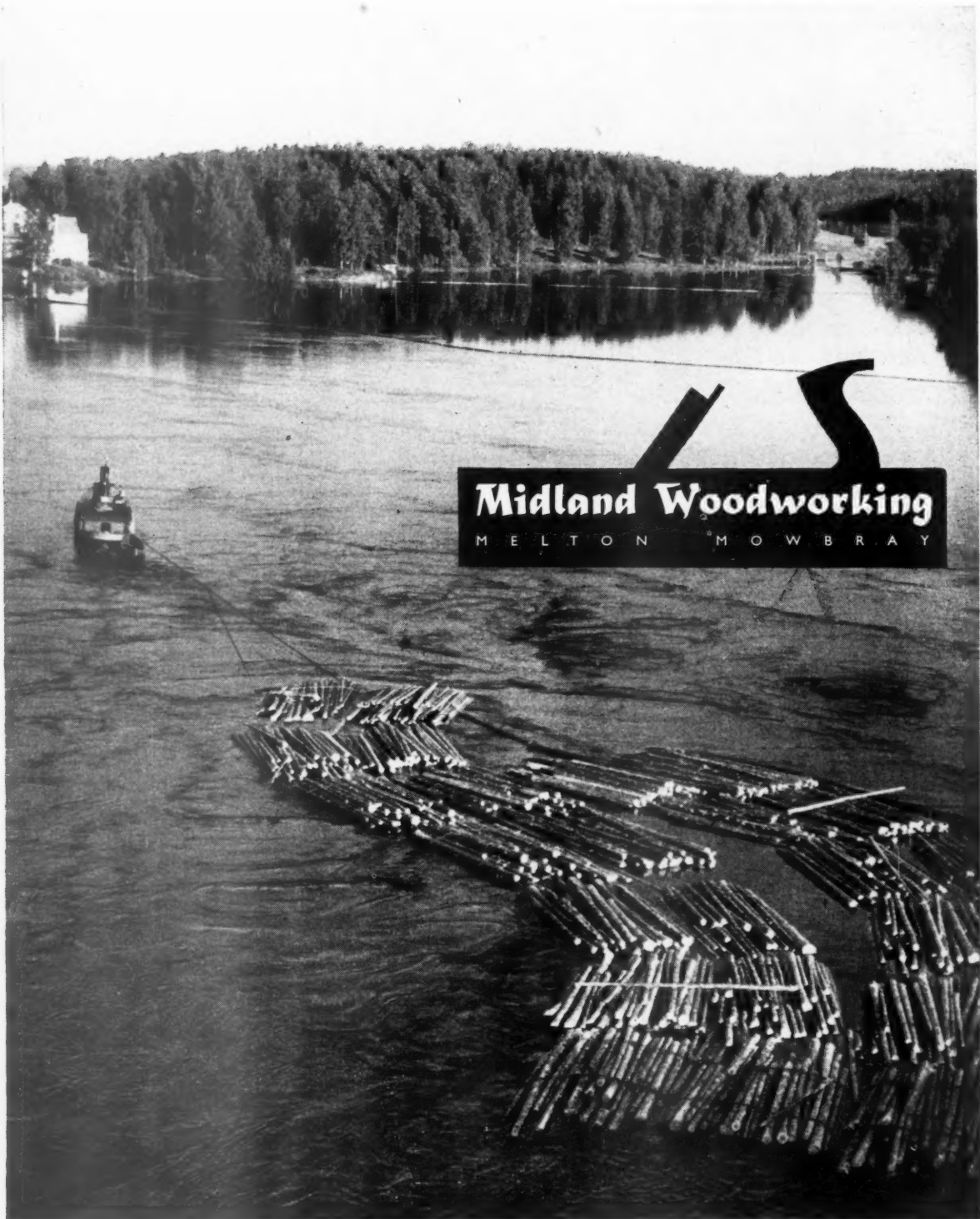
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Same site — 10 a.m.

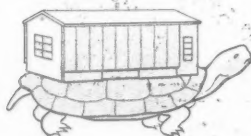
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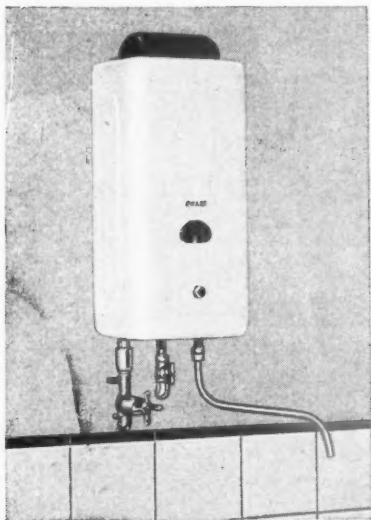
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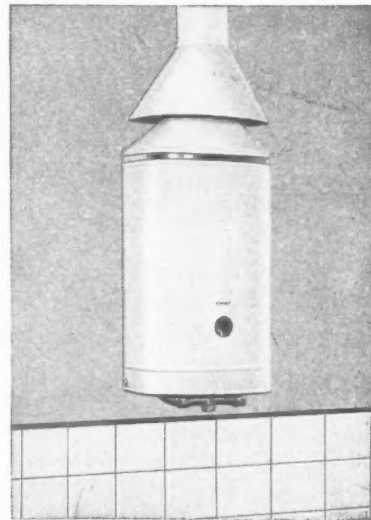
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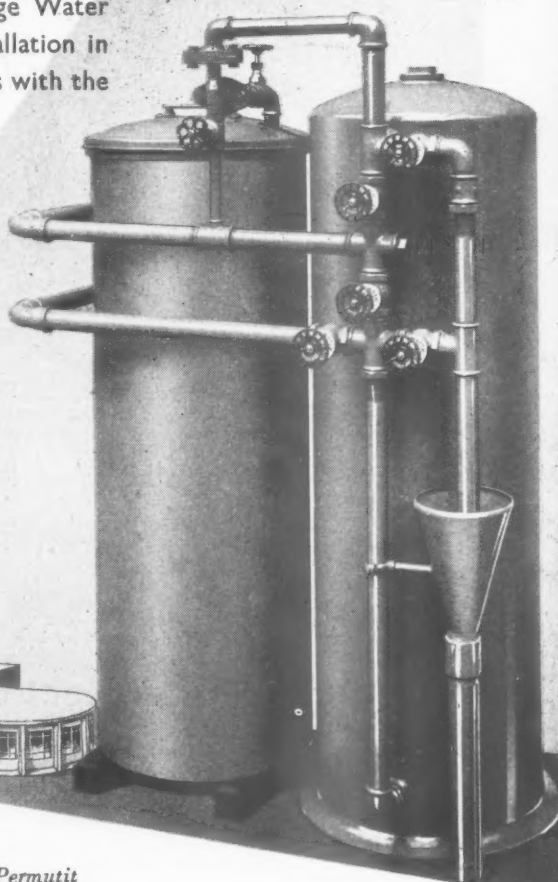
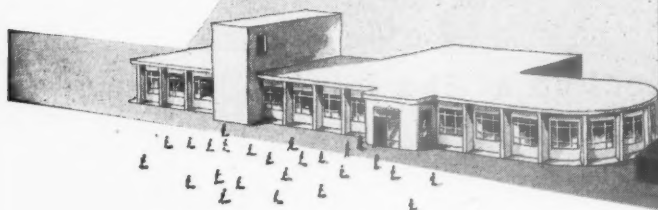
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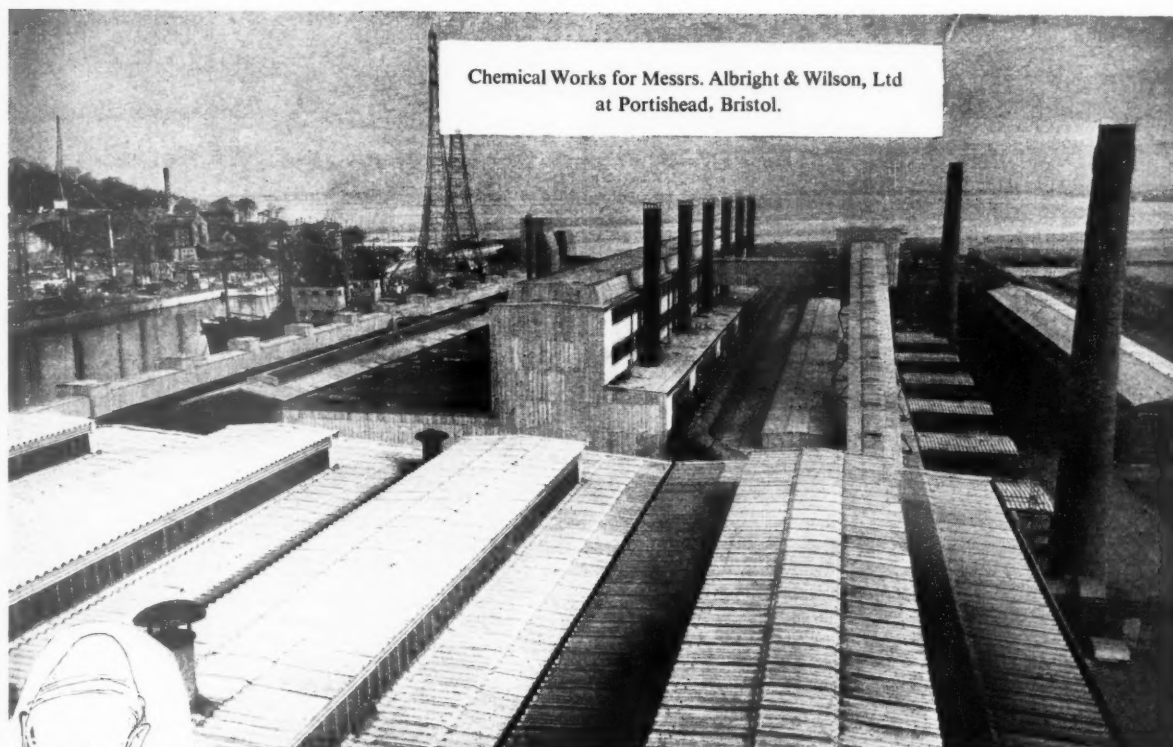
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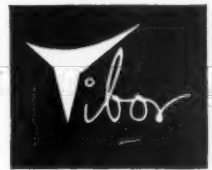
*3*

# tibor texturedrapes

**Designer: Tibor Reich, F.S.I.A.**

**Producer: Tibor Ltd.**

**Stratford-on-Avon**



Tibor's deep textured furnishing fabrics used throughout the Leofric Hotel in Coventry were designed by Tibor Reich. One of the fabrics covering the VIP low back chairs and settees in the lounge and bedrooms, is the texturedrape "Granite" in Spruce and Black. For the high back chairs on the landings, Dark Green and Graphite "Wellington" was chosen, which is a wool texture fabric with a velvet-like appearance. The headrest covers are of flame "Henley", a cotton boucle deep texture. "Henley" is also used for

the chairs in the bedrooms, corner rooms and penthouses in shades of Sprout and Persimmon. A new Tibor design called "Tiara" covers some of the Chairs—this is in midnight Purple and Kingfisher, interwoven with non-tarnishing "Lurex" metallic. For the ballroom curtains "Cymbeline" has been selected in Black with White squares interwoven with "Lurex" giving additional sparkle to the cloth.



## Hotel Leofric

COVENTRY

The illustration shows a corner of the lounge, in which the chairs and settees are covered in Tibor's reversible texturedrape "Granite" Spruce and Black, used in a positive and negative manner. Stockwell's "Links" carpet is in dark red with a design in Grey, Blue and Yellow.

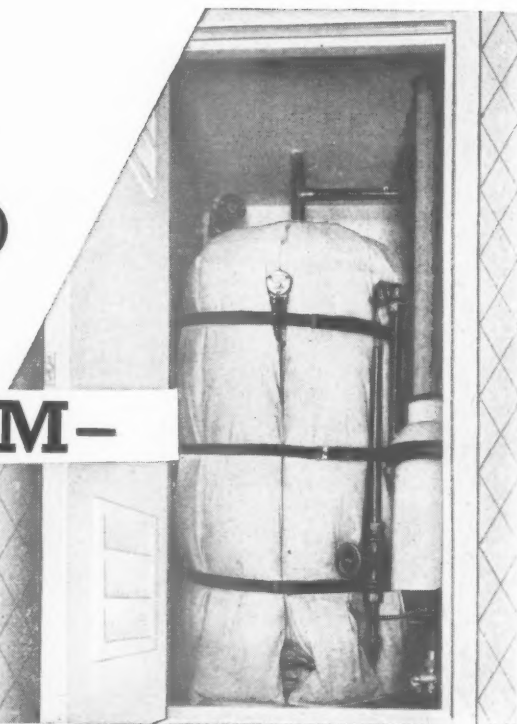
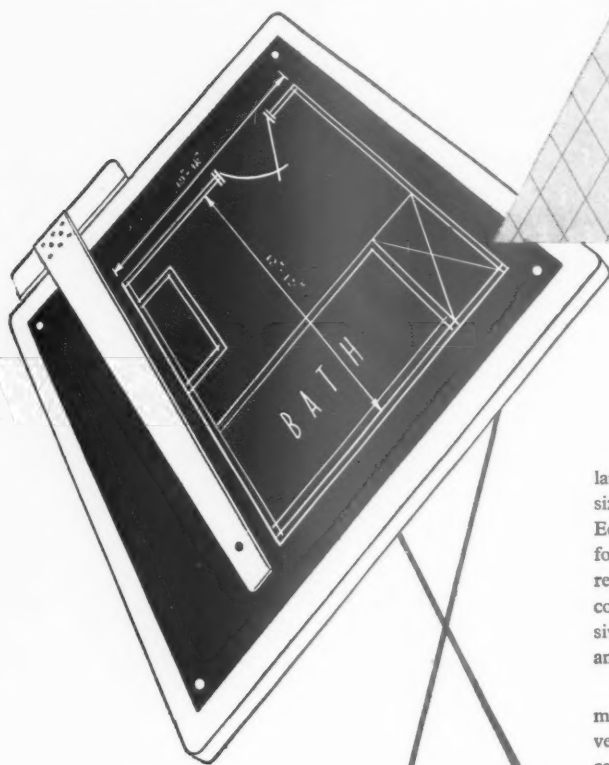
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The carpeting selected for the main public rooms, corridors and staircases is the "Royalist" (regd.) Wilton, mothproofed for life by the Mitin process, and the design selected for the Leofric is "Links" by Ronald Grierson, M.S.I.A. This is a regular design in the Stockwell range, but two special colourings (over 2,000 yds. of each) were specified by the Architects acting on behalf of Messrs. Ind Coope and Allsopp Ltd.

# A COMPLETE NEW WORLD HOT WATER SUPPLY SYSTEM—



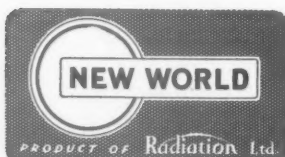
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A similar type of installation is available for accommodation under the draining board in the kitchen, where if ventilation is adequate no flue is needed. When the house contains no ball valve cistern, a combination unit complete with cistern mounted on the cylinder can be supplied. The **NEW WORLD** Circulator can also be used as an auxiliary to an existing solid fuel system and is available in three sizes, the largest of which is suitable for schools and institutions.

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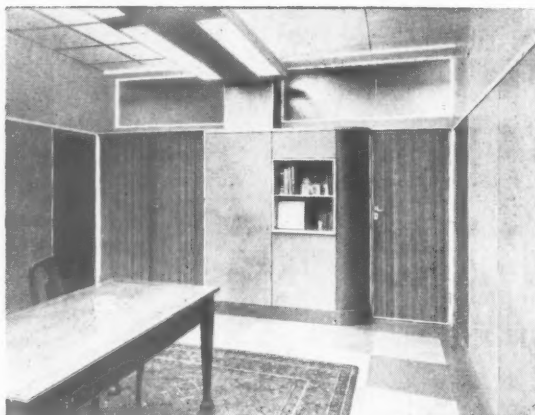


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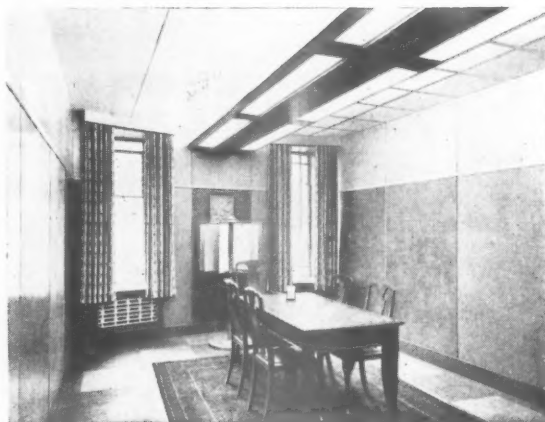
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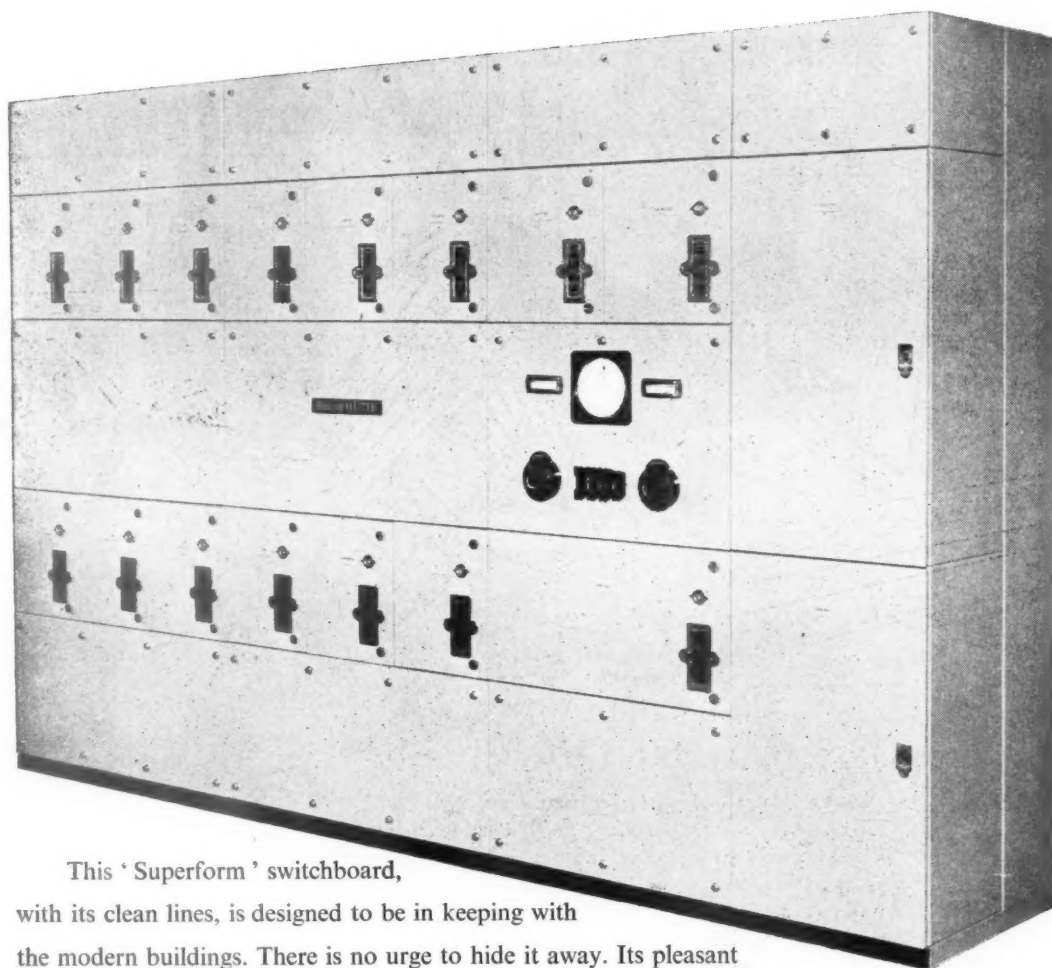
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# Not made to Hide and Seek



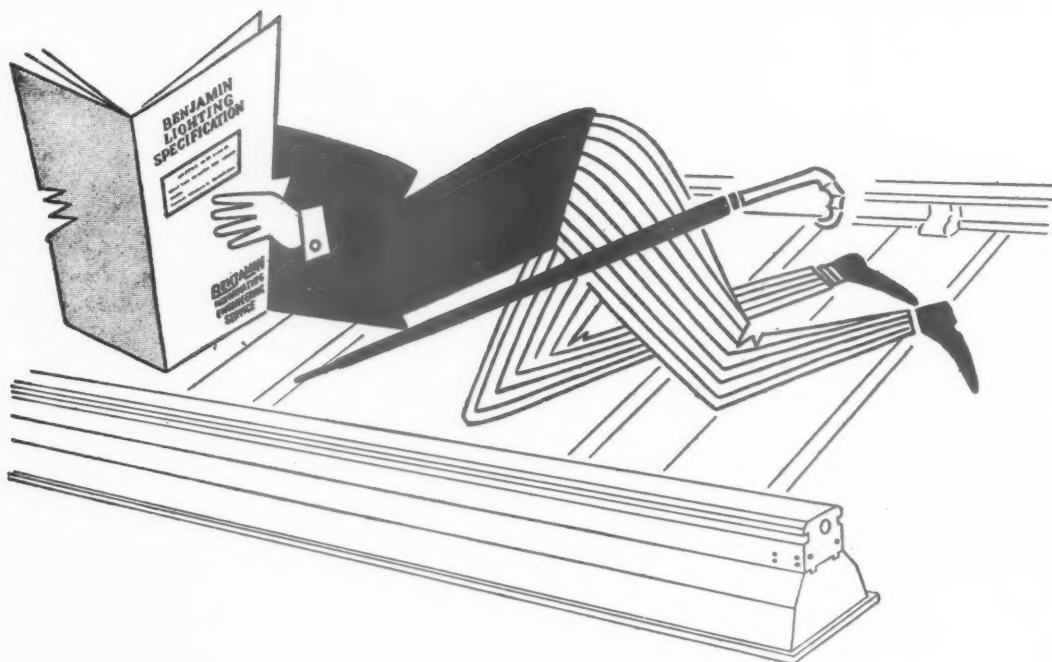
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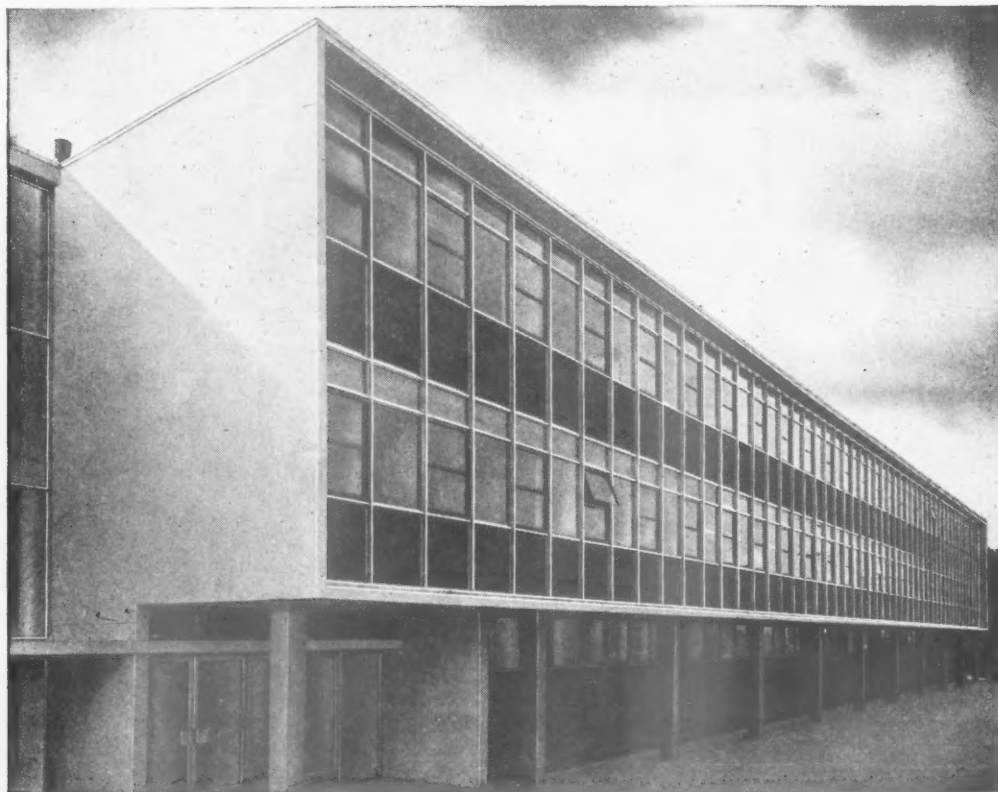
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*Health and Welfare Centre, Vancouver  
Architects: Semmens & Simpson*

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Architects: T. Alwyn Lloyd and Gordon,  
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**dry construction** needs

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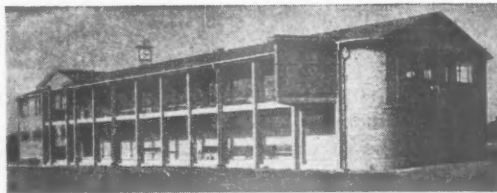
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**The Outside Air Compensator** (a thermostat) is situated on an outer wall.

**An Immersion Thermostat** measures water temperature in the mixed flow main of the heating circuit.

**The Electronic 'Aquatrol' Panel** contains components which co-ordinate signals from both thermostats and regulate the action of valve motor control relays.

**A Modulating, Motorised, 3-way Valve**, located on boiler flow and bypass, is positioned by the control relays to provide the correct flow temperature as a continuous function of outside air temperature.

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The 'Aquatrol' panel receives signals from an immersion thermostat situated in the secondary flow from the calorifier. The panel then positions a modulating motorised valve on the primary water supply to the calorifier, thus maintaining a substantially constant temperature of water for baths, showers, etc.

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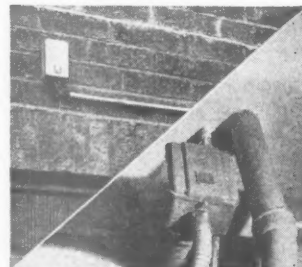
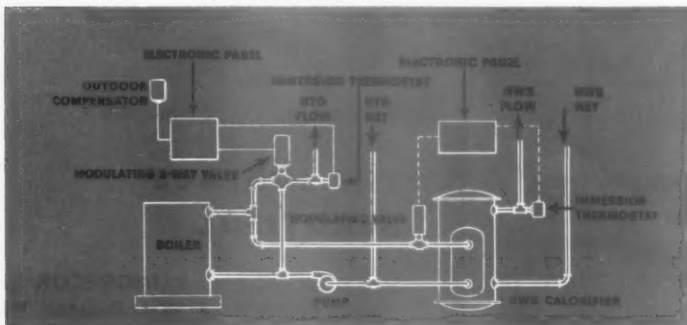
*With acknowledgements to:*

The University College Hospital Medical School authorities; Messrs. Clutton, Chartered Surveyors and Messrs. G. N. Haden & Sons Ltd., Heating and Ventilating Engineers.



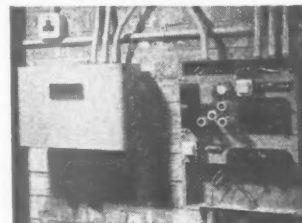
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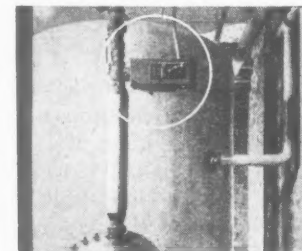


Top left: Outdoor Compensator (northern aspect).

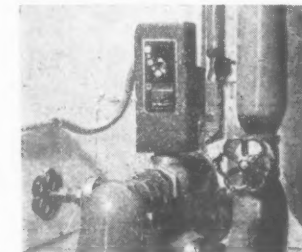
Bottom right: Immersion Thermostat (mixed flow main).



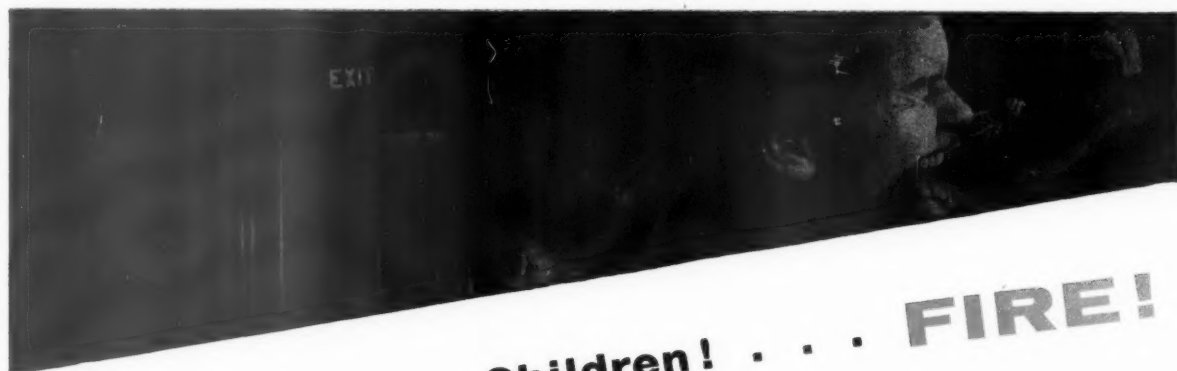
'Aquatrol' Panels (heating and hot water services).



Modulating Valve (hot water service primary supply).



Modulating 3-way valve (boiler flow and by-pass)



... Help! ... Children! ... **FIRE!**



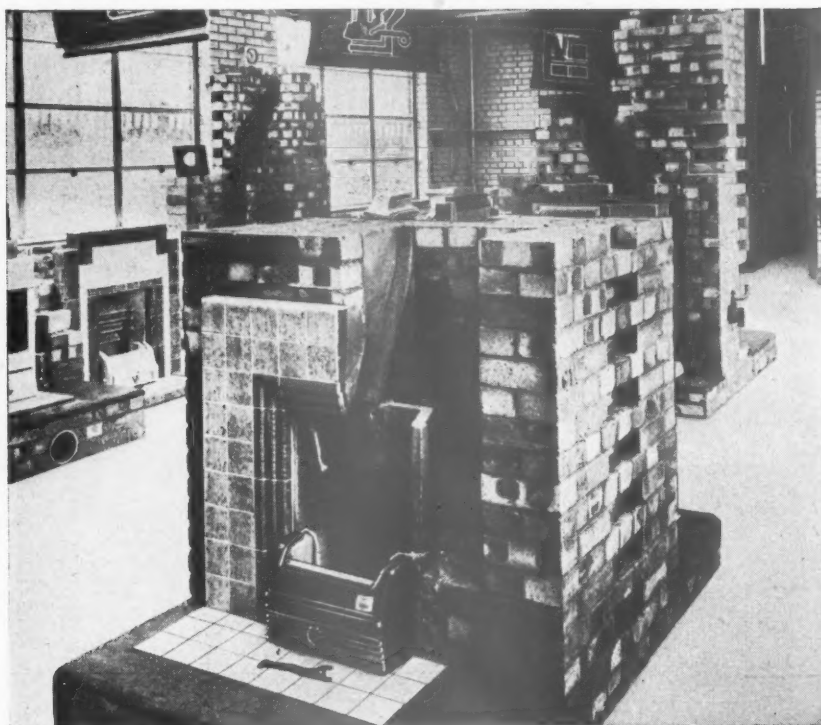
*When a high degree of thermal insulation is required Insulating Gypsum Plasterboard should be used. If you have not received a copy of National Building Studies No. 22 (Fire Hazard of Internal Linings) write to one of these addresses . . .*

**Humanity is stunned by disasters like this. Children are so helpless and time is needed to get them away. If only the internal lining of this building had been carried out with Gypsum Plasterboard, its gypsum core would have held back the flames and the authorities would have been given time to quell the fire in its early stages.**

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### Practical help for architects and builders

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## Are you getting the full facts on the case for solid fuel?

The Coal Utilisation Council's chief aim is to secure the efficient use of solid fuel in British homes. Not simply in the interests of coal, but in the interest of the private consumer and the community, for, as the Simon Report says, "solid fuel, burned in efficient appliances for continuous heating of rooms or of water, costs the householder about half as much as gas or electricity and uses about half as much coal".

### What the C.U.C. is doing to help

Every six months the C.U.C. issues a list of Recommended Domestic Solid-Fuel Appliances. All appliances on this list have been tested to ensure a high standard of efficiency, durability and economy. In the interest of your clients and your firm, it pays to consult this list when recommending domestic solid-fuel appliances for any purpose.

Because recommended solid-fuel appliances must be correctly installed, if they are to be fully efficient, the C.U.C. also provides a service of instruction on installation for architects' and builders' staffs, and all authorities concerned with building or converting houses. Two-day courses on fixing are held at the C.U.C. Training Centre in London. For builders' staffs unable to attend these, special one-day courses are held at Technical Colleges in various parts of the country.

In both cases, the instruction is given by experts, with plenty of practical demonstrations. Direct enquiries on the scope of these training courses should be made to the C.U.C. at the address below—or to any of the C.U.C. Information Centres which appear on the right.

*Issued by the*

COAL UTILISATION COUNCIL, 3 UPPER BELGRAVE STREET, LONDON, S.W.1

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### Important C.U.C. Publications

- "List of Recommended Domestic Solid-Fuel Appliances"
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- "Fuel Stores for Houses and Flats"
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For complimentary copies of the above apply to the Publications Dept., C.U.C., 3 Upper Belgrave Street, London, S.W.1.





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## MORE BLUNT SPEAKING

My Scholarly Spy tottered in to say that, after two of Professor Blunt's lectures on the Baroque Staircase he doubts that he will ever be able to look a simple flight of steps in the risers again. Asked to explain, he said that the effect of the Professor taking a well-developed twentieth-century sense of space, and applying it to seventeenth-century staircases, was to make it clear that just because Baroque architects had no name for it, and therefore had not, presumably, noticed that they were doing it, there is no reason to suppose that they could not play the space-game as well as Mr. Mies or Mr. Corb. The idea that present-day architects might, by analogy, be creating masterpieces of something-or-other without knowing it,

because they had no name for it, he claimed to find too dreadful to contemplate.

\*

He also threw down a problem of nomenclature; viz., the staircase in the entrance hall of the University of Genoa—a Baroque masterpiece by any standards—has its balustrades run down on to the ample sit-upons of two sculptured lions who sprawl down the last five or six steps with their stone claws sunk in the stone of the steps to help them keep their grip and carry the weight of the balusters. Professor Blunt called them, tentatively, "inverted caryatids"; Scholarly Spy, airing his knowledge of foreign tongues, offered "lions-boutants" by analogy with the French for flying-buttress, these being lyin'-buttresses. Any more offers?

## HALSINGBORG

The exhibition at Halsingborg, Sweden, is now open and soon I hope to have some views on it (and of it) to pass on to you. Meanwhile here is some information for any students who want to go: Mrs. O. Ford, lecturer in Interior Design at Leicester School of Architecture, is making up a party of her students to visit the exhibition between July 10 and 26. There are still vacancies, which she is willing to make available to students from other schools. Cheap accommodation has been booked. Those interested should get in touch with Mrs. Ford at 1, Newarke Street, Leicester.

## REPORT FROM HARROGATE

My Spy in Harrogate, who—you will remember—recently sent me a bitter report of hotel catering in the north, wrote a more cheerful note just before this JOURNAL went to Press. He was

apparently finding plenty to his taste in the discussions on the papers that were read at the British Architects' Conference (they were reproduced in last week's JOURNAL). Eight hundred delegates managed to turn up, in spite of the rail strike, and everyone—said my Spy—seemed keenly interested in the theme of the papers. Speakers were all in agreement that pre-planning, better management and better collaboration between architects and builders were necessary, and they were all asking how these things could be achieved.

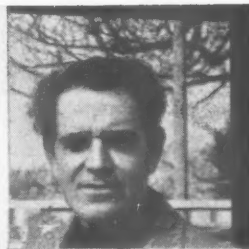
\*

Apparently the star remark of one meeting came from a Mr. Procter—a quantity surveyor, who told of a job of his on which there had been five hundred variation orders. "If a client went abroad at the beginning of a job," asked Mr. Procter, "would the saving in cost pay for his holiday?" The answer, said Mr. Procter, was: "No, not quite, but it would do if the architect went with him."

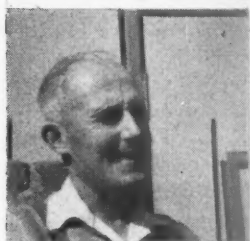
## THE KEELE ROW

Some buildings which have been put up for that fundamentally praiseworthy institution, the University College of North Staffs, are causing quite a fuss in Staffordshire. It was *The Times Educational Supplement* which triggered things off, with a couple of paragraphs in which words like hideous and monstrous were used, and in which the College authorities were criticized for not having a master plan. Apparently buildings have been going up on the Keele Hall site—to the design of staff architects—in a casual sort of way, and no real attempt has been made to relate one block to another.





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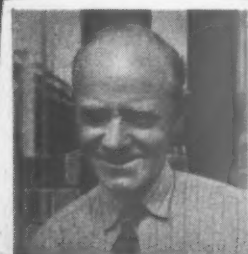
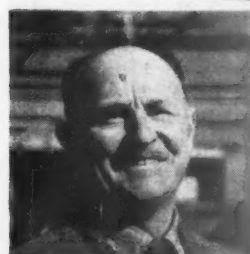


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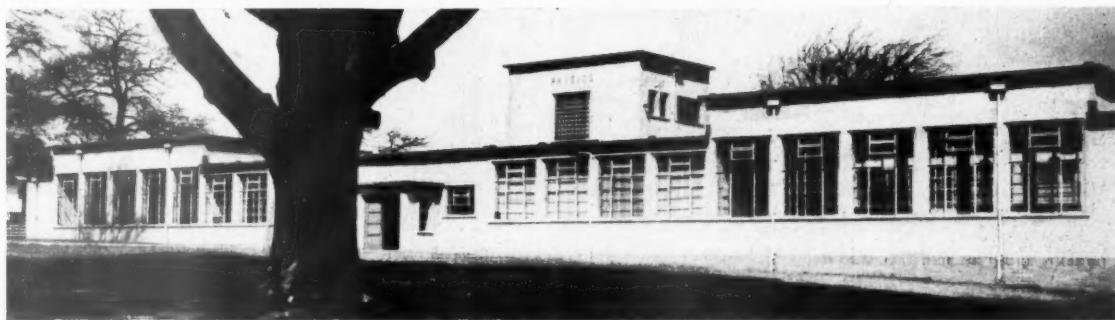
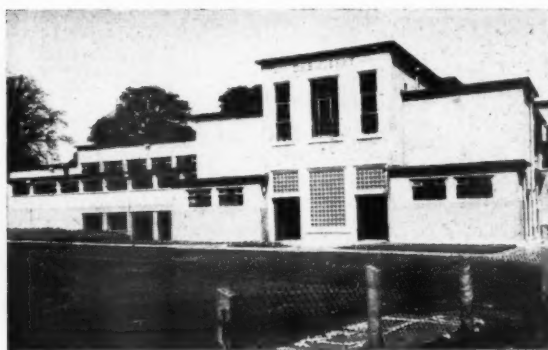


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*The buildings for the University College of North Staffs, which ASTRAGAL refers to on page 803. Top left, Keele Hall—the original College building; top right, the chemistry block; centre left, teaching block; centre right, hostel for women students; bottom picture, physics block.*

The row has now spread to include the local paper, the head of the Hanley School of Architecture, various local architects, and the chairman of the University Council, who has admitted that there is still no master plan, although the University Grants Committee had asked for one. It seems a little odd that the Grants Committee should release public money to a body which has no properly worked-out policy, but no doubt there was a need to get some buildings up pretty quickly. The pity of it all is that Keele Hall itself is a rousing piece of Victoriana of the kind that, with sympathetic handling, could have been exploited to create a fine collegiate atmosphere. As it is, the effect—see above—is that of one of the more pompous RAF stations—arty where it shows, tatty where it doesn't.

#### BOWOOD IMPROVED

Hearing of an impending sale and destruction at Bowood, near Calne, ASTRAGAL made a rapid visit, with sinking heart, to get a last glimpse of just another country house going to the knackers' yard.

Bowood is one of those jobs which obviously gave Robert Adam a headache. From a loose conglomeration of a large square block known as "the big house," and some straggling ancillary buildings by Henry Keene, he built up a not very successful group linked by the Diocletian orangery and the drawing room. Capability Brown did the landscaping; Barry did the terraces and a few twiddly bits. Now Lord Lansdowne and his architect have decided to pull down the big house, leaving the low rectangle surrounding two inner court-

yards, thus literally with one blow achieving a liveable house and a much better architectural composition.



*The "big house," Bowood.*

How nice, for a change, to be able to write cheerfully about the destruction of a country house. Which brings me to a new thought: why don't we organize a plastic surgery branch of the profession; there would be plenty of use for it.



## Good Pull-Up For Architects

Until recently the motorist in need of petrol or servicing has expected the next garage on his route to be anything from the improvised shambles shown in the top left-hand picture to the example of architect-designed Great-West-Road Modern next to it. There are, of course, garages more amusing in their primitive quaintness than Brown's; and there are others more pleasing to the mid-century eye than Henlys. But just recently there has been an outbreak of garage building throughout the country, of a kind which is neither amusing nor as self-assured as the larger garages of the 'thirties; buildings like those in the two top right-hand pictures which, with such clichés as played

window frames and drum-strings, are in the best Inspid-Contemporary manner. Today, however, the first of a number of well-designed modular service stations which are to be built for Shell-Mex and B.P. Ltd., is being opened at Reading, by C. H. Aslin. Buildings of this type (above), made up of basic units (a 4-in. module, a 4 : 40-in. planning grid and standard panels 8 ft. high)—sometimes with certain elements in local materials—will soon be a trade-mark for Shell throughout the country. More details about the designs, which have been produced by the company's architects' department, under D. A. Birchett, appear on page 810.

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## STATUES IN THE TUBE

Underground stations with statuary will set most people in mind of Moscow, but when they remember that the party-line on architecture has changed recently, they might properly wonder where the newly-opened station with



classical statues, shown above, could be. The answer, bafflingly enough, is Rome—but before you start thinking there has been a Fascist revival, or that Italy has gone Red, it should be pointed out that the new Roman tube has one of the most ingenious excuses for statuary that ASTRAGAL has ever come across.

\*

This new line, Italy's first tube, runs from that masterpiece of Italian contemporary architecture, the *Termini* station, to that masterpiece of Mussolinian bombast, *Terza Roma*, which now presents Rome with the kind of problem that the wreckage of Wembley posed for London. The Roman tube is to open up *Terza Roma* as a centre for exhibitions and entertainments, as well as serving the intervening suburbs, and its route, if ASTRAGAL's memory serves right, passes under two, if not three, of the Seven Hills of Rome. The contractors had to tunnel through any amount of solid Roman foundations and ancient concrete, and work was continually held up while archaeologists moved in to salvage works of antique art that were lying about in the path of the advancing tunnel. Quite a lot of the statues and what-have-you thus discovered have become part of the permanent decoration of the station entrances and booking-halls. Everything else, apparently, is resolutely modern—but where could they have dug up those lighting fixtures?

ASTRAGAL

## The Editors

## OBJECT LESSON FOR ARCHITECTS

THE present railway strike, occurring so soon after the repeated demands by members of the RIBA to their council to take more positive action over the representation of salaried architects, provides two very pertinent object lessons. First, it shows the difficulties which confront the more highly skilled minority—engine drivers—when having to stake a claim for higher wages in the face of a larger rival union—the NUR. (The position of architects within NALGO, which does not work exclusively for architects, is not so dissimilar.)

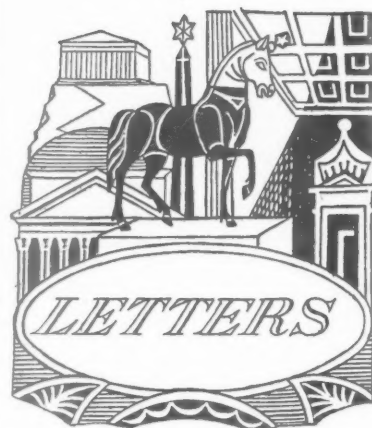
The second object lesson, however, is very much more important. The present fiasco—indeed, near-catastrophe—which the nation is enduring could not demonstrate more forcibly to all architects the inadequacy of the present set-up of trade unions' and employers' federations: the fatuity of nothing being given—in the way of wage increases—save when force is used. The present situation adds point to the request made twice at last month's AGM at Portland Place that architects do not require “an orthodox trade union” (Maurice Lee) but that an architects' union “should break out into new ground . . . suitable for contemporary society . . . where our sole aim ought to be to get the best out of the architectural profession” (G. B. Oddie).

Nothing, of course, could be more preposterous than an architects' strike—a relatively undismayed public would find surveyors and engineers eager and, to a certain limited degree, capable of taking over the architect's job in a very short space of time. Nevertheless, two courses confront the profession: either the issues of salary and status are resolved by attempts to use force—i.e., some form of strike, blackballing or go-slow action, all near-suicidal for the profession, and by bringing outside influences to bear, NALGO, IPCS, ABT and so on; or, on the other hand, the profession can try and handle matters within itself.

Readers will be familiar, we hope, with the policy we advocate; that is, resolving the differences within the profession itself. We are certain that it can be done, and done more quickly within the profession than by any demonstrations outside. The first essential is, of course, information. Information about the profession, its size and structure and the amount of work it is handling. The second essential is efficiency. The establishment in the minds of the profession, and eventually, therefore, in the minds of the public, of the responsibilities of the individual architect, and the production of a specialist technical information service (as proposed by Llewelyn Davies, and as we already partly have in Davies's research group and the MOE), to re-inforce the confidence of the general public in the infallibility of the architect's professional services. The third requirement is unity. Unity of purpose between public and private architect and senior and junior architect. At the moment there is an ill-concealed (witness the correspondence

column of *The Times* recently) squabble between public and private architects, and the makings of a row between principals and assistants (witness the AGM). The troubles are arising because architects have been trained to think in terms of quantity, and not quality. They are trained to imagine that large offices with huge programmes are synonymous with success. So, at present, they may be, but at the cost of reducing the value, in the public's eye, of the average architect. The general public rates a doctor as good if he gives individual attention to a thousand or so patients, cures their ills and keeps them feeling fit. It is not impressed by the doctor who scampers round six thousand and keeps them half alive. They are not confronted, fortunately for them, by a chief doctor with fifty assistants who claims to be able to handle a practice of fifty thousand people. But that is, in effect, the architect's approach. Such monster and monstrous organizations are unnecessary and evil. They benefit only the chief architect, and—on a short term basis only—the client, who imagines he has had the benefit of several architects at a cheap rate. In the long run, of course, getting a service on the cheap means a steady lowering of the quality of entrant into the profession. This is the process that is going on now, and a process some of the profession have observed and are desperately anxious to stop. The objective is simple: to reduce the large number of grades of architects to two. A number of specialists, or seniors, capable of organizing research or building programmes, and plain architects, i.e., those who alone or in partnership can undertake sole responsibility for the job of designing and creating a building. No one else can be called an architect. And if, after training and a certain number of years probation and experience, a man is not found fit to assume that responsibility he should not be allowed to call himself an architect. As to whether he works in a public or private office should depend on the amount and type of work available. Financial considerations, as far as a fair minimum salary is concerned, should not enter into it, as salaries should be related to fees. The nation's building programme has to be carried out. It is up to the profession, via the RIBA and Allied Societies, to thrash out an agreed basis of handling the work. The tragedy is that architects approach each other as rivals, and not as colleagues; talk phoney culture at their meetings, and not policy and technique; conceal their incomes, through shame and pride instead of providing information on which to establish a fair professional income; destroy their standing in the public eye by unconstructive criticism of colleague's work instead of abiding by professional etiquette; fail to agree to work towards establishing an efficient and tolerable organization and administration for public office; and endanger their reputation by having no effective method of ensuring high professional standards of performance.

Does this seem too critical? Then recall that we are now at the peak of a building boom—the greatest of the century—yet architects are finding time to argue and complain. Something must be wrong somewhere.



Leonard C. Howitt, F.R.I.B.A.

Edward Procter, L.R.I.B.A.  
President IRA

John Warren

Geoffrey F. Spray, A.R.I.B.A.  
Hon. Secretary and Treasurer, Devon and Cornwall Society of Architects

Thomas Sibthorp, F.R.I.B.A.  
Advisory architect E.J.M.A.

### What The IRA Is For . . .

SIR, As the president of the IRA has given publicity to his letter to the secretary of the RIBA, it is presumed that public comment is not unwelcome.

No doubt the secretary of the RIBA will reply, in suitably dignified terms, to the effect that "If the cap fits . . .", but the onlooker is left wondering why any member of the largest should want to become a member of the "second largest architectural body."

Hitherto some of us have been under the impression that the second body and others like it were founded to cater for those who could not or would not bother to pass qualifying examinations, yet placed such value on having "letters after their names," which might impress those uninformed on such matters, that they were prepared to pay an annual subscription to qualify for this alphabetical receipt.

However, the confession of the president of number 2 that he is at a complete loss to understand what is pretty obvious makes one question what can number 2 do that number 1 cannot?

LEONARD C. HOWITT.  
Cheshire.

### . . . And What It Thinks It's For

On May 26 we published the letter written to the secretary of the RIBA by the president of the IRA, who asked if his Institute was included in the "outside bodies" which the RIBA council had recently condemned. The RIBA secretary replied that this was so, and we have now been asked to print a further letter sent to him by the IRA president.

SIR,—I have delayed replying, hoping that a more tolerant attitude might develop in the counsels of the RIBA but, regrettably, I must now join issue with you. I am reluctant to believe that the unjustified and most misleading statements in the circular letter, now admittedly aimed at the Institute of Registered Architects, were made

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with a full knowledge of the facts: rather I prefer to adopt the charitable view that they were set out in ignorance of the exact position which may be stated as follows.

The Institute of Registered Architects is not a body of recent growth having been founded in 1933, after the passing of the Registration Act, by Sir Edwin Lutyens, PRA. Outside the RIBA, the IRA is the largest purely architectural body in the country having its interests mainly concerned with the private architect, but we have also many official architects in membership. Over 225 of our members are also members of the RIBA, mostly in private practice but some in official positions.

Private and official architects serve on the council of the IRA, working together in harmony and good fellowship, giving help to each other where possible and differing with cordiality and without malice when their interests come into conflict.

All members of the Institute of Registered Architects—as its name implies—are qualified architects, some by written examination and others by the examination of their credentials by the Admission Committee of ARCUK, surely a body whose authority and standing are unquestioned in exercising functions under the Act. You are here reminded that admission to the Register for many years has been by examination only and here we are on all fours with the RIBA.

It is idle and completely unrealistic to pretend, as your circular letter professes to believe, that private and official architects are united and one body, with no conflict of interest whatever between them. The existence of the City and Borough Architects' Society, the County Architects' Society and the Official Architects' Committee indicate beyond doubt that these official architects consider they have special sectional interests which they are unwilling to delegate to the council of the RIBA.

It should be noted that no private architects' committee was ever set up by the RIBA and it is now far too late to attempt such a move since it would command little confidence.

It may fairly be asked whether private architects may not feel the same as their official brethren in regard to their sectional interests and desire to have their own society, committee or institute to guard their special interests and their right to do so is equal to the right of the official architects to do likewise. Whether such bodies should be within the sphere of the RIBA is for the private architect to decide for himself and elementary ideas of freedom and liberty nullify the right of the RIBA to outlaw all associations except its own.

I am at a loss to understand how you should think that your circular letter will promote the unity of the profession. Its plain intention is to restrict freedom and stifle liberty by condemning membership of the Institute of Registered Architects which will only create that powerful reaction observable in history whenever tyranny emerges.

I strongly deplore the tone of your letter which can only accentuate and widen the differences between architects. So far as the architects' relations with the public are concerned it would seem that neither ARCUK, RIBA nor IRA nor even a Government department will have the last word. In any difference between architects the general public, when they are properly informed on the matters involved, will pass their own judgment.

In conclusion, I specifically assert that my council has always shown both loyalty and respect to the RIBA as the senior body and has constantly shown its willingness to work in amity with it. Although our loyalty has been severely strained by monthly denigration in the RIBA journal we are still prepared to put the true interests of the profession above all others. All sections of the profession must have equal con-

sideration and protection and, above all, liberty.

EDWARD PROCTER.

London.

## What NALGO Can Do

SIR,—Since NALGO was mentioned repeatedly in your report of the annual general meeting of the RIBA (May 7) I hope you will allow me to comment on some of the statements made.

Several speakers suggested that NALGO was unable adequately to represent its architect members in salary negotiations, alleging that:

(a) In the words of G. B. Oddie, it is "largely composed of people who... have not... undergone a long, arduous and expensive professional training... people who have never been able to earn much more than £10 a week and... rather dislike the idea that anyone else should"; and

(b) As was said by C. Hindle, architects who are members of NALGO cannot obtain direct representation on its National Executive Council, with the result that the views and claims of architects are inadequately considered by the Association.

Whilst it is true that the majority of NALGO members are in the lower salary ranges, the suggestion that they "rather dislike" those who earn more, and the implication that NALGO will not do its utmost for its professional members is completely false. The Association recognizes that, in local government, as in most other public services, the differentials between higher and lower ranking employees have fallen drastically during the period of post-war inflation, and is at the moment pressing a claim for their restoration. Further, the part it has played in the separate negotiating committees for clerks and chief officers of local authorities, resulting in the establishment of salary scales ranging up to £3,450 a year, amply demonstrates its concern for the higher officer and its success in representing him.

It is also true that architects cannot obtain direct representation on the Association's National Executive Council. But neither can the members of any other professional or sectional group. NALGO is a comprehensive union, all its office-holders are democratically elected by the whole of the membership in their electoral areas, and, once elected, represent all those members. But an architect has an equal opportunity with every other member to secure election. One did, in fact, sit on the NEC until two years ago, and there is little doubt that more could do so were they to take a greater interest in trade union work. Members of the present Council include clerks to local authorities, treasurers, accountants, engineers, and many other officers with professional or technical qualifications.

The views of architects are, however, sought by and given to NALGO's negotiators, both through a Joint Consultative Committee upon which they are represented by the County, City, and Borough Architects' Association and the Association of County Planning Officers, and through direct contact with the RIBA, which is consulted by NALGO whenever the grading and remuneration of architects is under review. In addition, NALGO has conducted many grading appeals on behalf of architects and has taken several disputes arising out of such appeals to the Industrial Disputes Tribunal.

The real issue, which the report of the RIBA Council made clear but which most speakers at the annual meeting ignored, is that a separate union for architects only would not be recognized by the employers on the local government National Joint Council for the reason that, were they to admit it to negotiations, they would be compelled similarly to admit each of the many other associations representing different professions and sections in the local government

service, and the Council would become so unwieldy as to be unworkable.

The position is, therefore, that NALGO does represent local government architects on all the negotiating bodies which fix their remuneration, that it has established machinery for obtaining their views and does its utmost to give effect to those views, and that no organization composed of architects alone could do this work so effectively. Architects in the local government service will best advance their interests by unity with their colleagues in the service: they cannot do so by forming sectional groups which can have no voice in the recognized negotiating machinery.

JOHN WARREN.

London.

## A Correction

SIR,—In your leading article of April 14 you state that certain private practising Architects in Plymouth have formed a Society separate from the Royal Institute of British Architects.

The Committee of the Plymouth Branch of the Devon & Cornwall Society of Architects request that you correct this statement as, in point of fact, the Panel of Plymouth Practising Architects as it is known is a properly constituted and functioning subcommittee of the main branch committee allied in turn to the Council of the Society and thence to the Royal Institute.

GEOFFREY F. SPRAY.

Plymouth.

## The Design and Practice of Joinery: EJMA Replies

SIR,—I read with considerable interest the article on "The Design and Practice of Joinery" in the JOURNAL (March 24) and congratulate the authors on their efforts to put forward a sound basis for design and practice in joinery. But it would be misleading to let the remark concerning the weakness of the original EJMA specification pass without some reply and I therefore would like to comment as follows:

The windows were designed at the request of the MOW in order to produce a satisfactory minimum standard for use in housing, making the most economical use of the available timber supplies.

The strength of the casement window is in its joints and the sections used in this window were adequate to give a sound joint for all general requirements.

The few complaints that were received in connection with the wartime EJMA window generally arose, not through faulty design or workmanship, but mainly because of improper site storage and protection and inadequate, and often too late, priming and painting.

The wartime specification of EJMA windows is still used by a number of local authorities to whom the window has obviously given every satisfaction for had these been a general weakness and/or failures, they would have changed to the present EJMA window with the heavier sections, now that there are no restrictions on the use of timber.

Finally, remember that these are standard windows for general purpose use and both EJMA and the BSI do from time to time revise the details to improve the design and extend the range, but there will be occasions when special considerations require special design and treatment, and any member of EJMA is able and willing to advise any architect, engineer, surveyor or interested party on their special requirements and by their years of experience can guarantee the results.

THOMAS SIBTHORP.

London.



## BIRTHDAY HONOURS

### No Awards for Architecture

There were no awards for architectural services in the Birthday Honours list. The following is a list of those in associated professions who have received awards:

**CBE:** E. Butler, senior engineering inspector, Welsh Office; **MOHLG:** K. A. C. Cresswell, for service to study of Muslim architecture and archaeology; W. Fairley, chief civil engineer of the crown agents for overseas governments and administrations; R. G. Gosling, chairman of Welwyn Garden City and Hatfield New Town Development Corporations; L. G. Mant, deputy director-general of works, **MOW:** J. B. Ward-Perkins, director, British School at Rome; L. P. Rees, chief technical adviser, Central Land Board and Welfare Commission.

**OBE:** G. L. Ackers, chief sanitary engineer, **MOW:** W. A. M. Allan, divisional engineer, main drainage division, **LCC:** H. F. Fitzgibbon, senior housing and planning inspector, **MOHLG:** S. B. Hamilton, principal scientific officer, Building Research Station, **DSIR:** W. F. Haslop, for service in preservation of mediæval buildings.

## PLANNING

### Is It Possible?

"Who," asked Sir William Holford, "is to father big comprehensive essays in town design." Sir William, who asked this question in the first of a series of three Third Programme broadcasts entitled "Is Town Planning Possible?" answered it himself.

"The answer," he said, "will surely be found among the inventions in the way of planning machinery which have been devised over the last century. These include the county council, the government-sponsored board and company, the National Trust, the National Parks Commission, and the new town corporation. In my view it would be feasible to distinguish even further than is done under the Planning Acts, between the two kinds of planning administration carried out by a local planning authority—the statutory control of development, and the promotion of an urban estate. If the promotion functions of a body such as the London County Council, for example, were consolidated and reformed as a Trust; if the Trust were strengthened by outside advisers, lay and technical, and if the land on which the comprehensive development is planned were handed over to it as landlord—then civic design in scale with the importance of the problem might be achieved, without the necessity for the Trust to build every building.

"There would be checks enough—goodness knows—on the activities of such a Trust, formed let us say for central London or Birmingham: the Minister, the several government departments concerned with development such as the Ministry of Transport and the Board of Trade, and of course the elected council of the local authority itself. But instead of breaking down the job still further, as we tend to do at the moment, the Trust would be a unifying agent, knitting together its purposes, its interests and its executed designs."

## PETROL STATIONS

### Modular Design

The first modular service station built to the designs of the architectural section of the Shell-Mex & BP Company (under D. A. Birchett) is being opened at Reading today, by C. H. Aslin, the RIBA president. A photograph of this station appears on page 806. A number of other stations will be finished in the course of the year. Thereafter a growing number of these new model stations will be seen along British roads as part of the development of the service station trade which the company are fostering.

The designs employ a 4-in. module and a 4:40 in. planning grid. The structure basically consists of a simply framed building with stanchions and beams at economic centres and spans. Curtain walling by a series of interrelated steel framed panels of the type pioneered by the manufacturers, Hills (West Bromwich) Ltd., are then simply fixed to the framing. The panel framing may be filled with glass (clear, opaque, textured, or coloured) or with sheet steel or aluminium stove-enamelled to any desired colours. Both panels and glass can readily be modified to allow for increased thermal insulation.

With the use of the same basic units practically any shape or size of station can be constructed to suit sites of awkward shape, or sloping sites, or to cater for special requirements. Plans have already been drawn, for example, for an isolated station on a main road to include two flats on an upper floor for the staff. Another scheme includes a café for lorry drivers and a series of chalets for overnight accommodation for long-distance drivers.

Other architects responsible for the design of these standard service stations are P. J. Webb, assistant architect to the company, in collaboration with Wallis Gilbert & Partners: architect in charge, John Ware; assistant architect, Michael Wolstenholme.

## CRICKET

### Vitruvians v NFBTE

The Vitruvians, a cricket team of architectural journalists,\* played against the NFBTE at Richmond Cricket Club on June 2. A member of the Vitruvians has written the following report of the match:

The Vitruvians batting first, to their alarm, Harvey G. Frost, President of the NFBTE, gave his coat to the umpire, rolled up his sleeves and bowled the first ball. The most comfortable of curling donkey-drops somehow found the edge. Nerves? He then withdrew. In his first two overs F. J. Munnion (Southern Area) twice rattled the stumps with fast, vicious, inswinging, left-arm yorkers. One for four and two for five. Poor old Vitruvians. Even the freshness in the wicket could hardly be blamed for that.

"We've rung the bell early this year," said the Federation's Skipper, Joe Bird. As if they didn't every year, with all the resources

\* Owing to a shortage of players this season members of the RIBA Cricket Club and others help to make up the XI.

of a 17,000 membership! In five annual matches the building and architectural journalists had suffered three defeats and two crushing draws. Today the builders were keen for yet another kill. The same team as last year to a man, and from all parts of the country, railway strike or no, the car park most prosperously a-glitter.

On came the slow bowlers and three more scalps were claimed before lunch—film star Bill Franklyn (*Above Us The Waves*), the big, bearded captain of Jack Squire's Invaders, and the Editor of *Whitaker's Almanack*. Grace was said at 40 for 5 and in his short, hospitable speech the Vitruvian Skipper, Ian Leslie (Ed.: *The Builder*, of course) thanked the wife of the National Director of the NFBTE for her presentation of the Jeanne Hearder Challenge Cup. From the Vitruvians came wistful but wry, well-worn smiles. They hadn't forgotten W. R. Hammond's 95 (bowled Raglan Squire) in the first match in 1950. Nor the terrible years of F. A. Ridgeon (Cambridge-shire) whose batting average for this fixture stood at 216 runs per innings. And if that was all in the past, there, stirring his coffee, sat the genial and titanic B. W. Gregory, the latest scourge—102 last year and 131 not out the year before—with a higher average still. And what a clean, powerful hitter. There is no peace of mind on the club's not-so-near tennis courts when he is at the crease.

Over at the archery butts arrows were plonking decorously into their bright targets when Dick Dowson of the *Architect & Building News*, collared the builders' bowling in the sunshine after lunch. A fine knock. Pity he missed his fifty by two. He was followed in the runs by J. G. Batty and the tail, the total running on to 160 before Alec Faldo (*Official Architecture and Planning*) missed a well-planned one from Joe Bird. Not bad. Not a winning total maybe. But not bad. How would the journalists, etc., field and bowl? If only the catches could be held. . . .

They were. At 21 P. H. P. Lovell (Y. J. Lovell & Son, Ltd.) swung the *Architect & Building News* into the *AJ's* hands at square-leg and then Mr. Gregory, bless his great heart, got a touch, swishing on the off, and the ball finding Ian Leslie's gloves instead of the pagoda. 2 down for 27. Jolly. Then Mr. Munnion lost his leg peg. 3 for 44, and after a cheerful drive or two the PRO, Bill Bryant, was bowled by Batty. 4 for 55. Could this last? Enter V. R. Blake. He batted beautifully. It was touch and go now. While he was taking over one end of the game Bill Franklyn was taking over the other, removing Mr. Triggs, Mr. Morton, Mr. Costain and Mr. Garrett. 101 for 8. Wonderful. But there was Mr. Blake going like Hades. He had scored nearly half the total runs. What in Heaven's name could be done about him? The *A & BN* and *OA & P* joined forces. Dowson bowling the ball and Faldo, at point, taking the brilliant, stinging catch. 119 for 9, ten minutes to go and now the Skipper, Joe Bird. This was agony indeed. Ball after ball. You never saw a straighter, broader bat. It was like a sweet dream when Dowson slipped a yorker in under it with five minutes to spare and the Vitruvians had beaten the Federation by 39 runs. They deserved to. They had never played better.

At the presentation afterwards Ian Leslie, that most cordial of captains and hosts, cheerily explained his six-year strategy. "I thought I'd bide my time," he said, "until there was a Cup."

ROBIN MUDDIE

## DIARY

New Barbican. Film and talk. Speaker, Sergei Kadleigh. Organized by Students' Committee. At AA, 36, Bedford Square, W.C.1. 6.15 p.m. JUNE 16

# HOTEL

in BROADGATE, COVENTRY

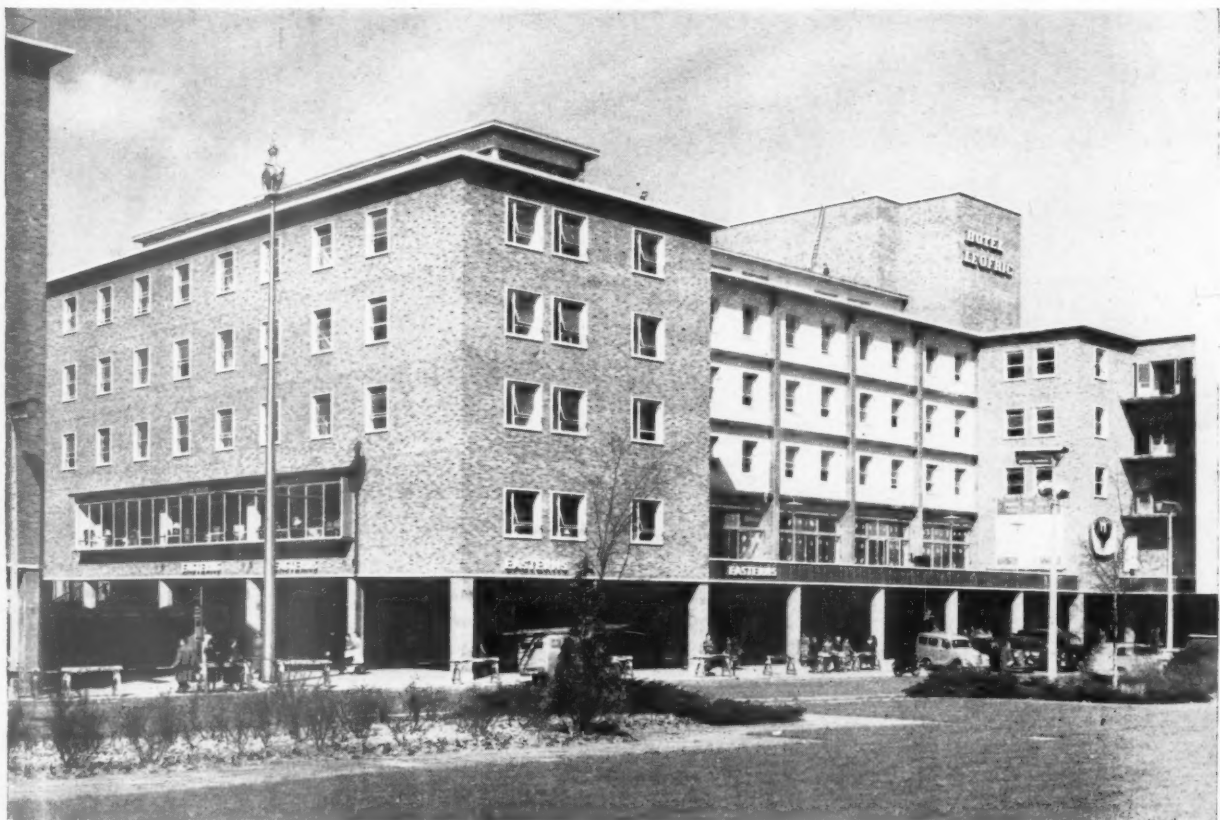
designed by W. S. HATTRELL and PARTNERS, architect-in-charge, G. W. HAMMOND assistants, F. R. MUTCH, J. SIEDLECKI, J. A. METCALF and R. E. ECKERSLEY in collaboration with W. J. WITHAM, chief architect, IND COOPE and ALLSOPP, LTD. assistants, A. G. DREW, B. R. DAVIS, D. M. RICKARD and R. L. G. CARTER consulting architects, WARD and AUSTIN (special bedrooms) and DENNIS LENNON (private dining room) consultants (r.c. frame and services) SIR ROBERT MCALPINE and SONS, LTD. quantity surveyors, BURLEY LANE and PARTNERS



East end of Tank tower.

This building, consisting of an hotel and shops, forms one of the major elements of the central reconstruction around Broadgate. It is complementary to Broadgate House at the main entrance to the shopping precincts, and is linked to the Owen Owen Store at the north end of Broadgate. The hotel is the first built with British capital in this country since the war. The developers of the site are Ravenscroft Properties Ltd. The bulk of the building is leased as an hotel and public house to Ind Coope & Allsopp Ltd. General contractors, Sir Robert McAlpine & Sons Ltd. Sub-contractors, page 836.

The hotel from the Broadgate island.



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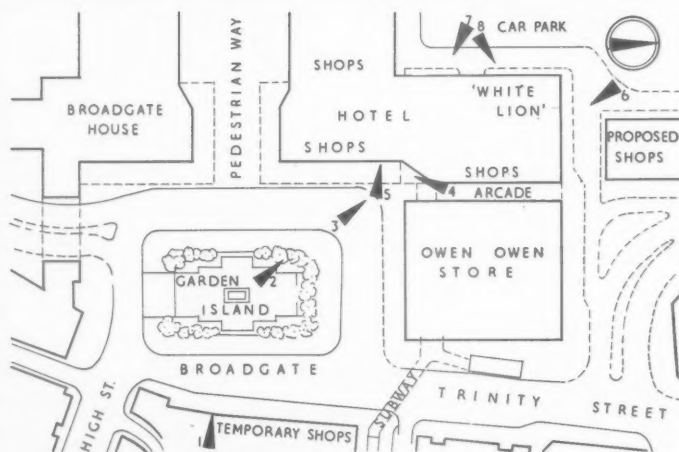
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MUDIE

Speaker,  
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JUNE 16





Key plan showing photographic viewpoints

## HOTEL IN COVENTRY



Top, a view of Broadgate from Coventry Cathedral spire (viewpoint 1). Between the hotel and Broadgate House is the access to the shopping precinct. The elevations of the hotel and shops to Broadgate and the shopping centre are almost exact replicas of corresponding elevations of Broadgate House, the main difference being the window treatment. Left, from viewpoint 2, are the hotel and shops seen from Broadgate. The ground floor is devoted largely to shops. The hotel lounge is on the first floor; the large windows, shaded by sunblinds, open on to the terrace which overlooks the square. Above left, a photo from viewpoint 3, the link between the hotel block and Owen-Owen store. (See the JOURNAL for November 11, 1954.) The main entrance to the hotel is on the left, under the covered way.

Right, viewpoint 4, looking down on to the terrace in front of the hotel lounge and dining room. This terrace forms a colonnade over the pavement in front of the shops. Note the completely different treatment of the facade of the hotel within the structural pattern compared with Broadgate House. The columns are faced with Westmorland green slate, the exposed beams at each level are flashed with copper, and the panels within this frame are faced with travertine slabs. The windows are gear-operated aluminium sash. The lighting fittings in front of the terrace are the same as those used on Broadgate House.

Below, viewpoint 5, the main entrance to the hotel from Broadgate. The hotel sign is engraved on the plate glass window at the side. The name of the hotel will be fixed on to the travertine panel over the doors.

Below right, viewpoint 6, the entrance to the "White Lion" public house, on the north side of the block.

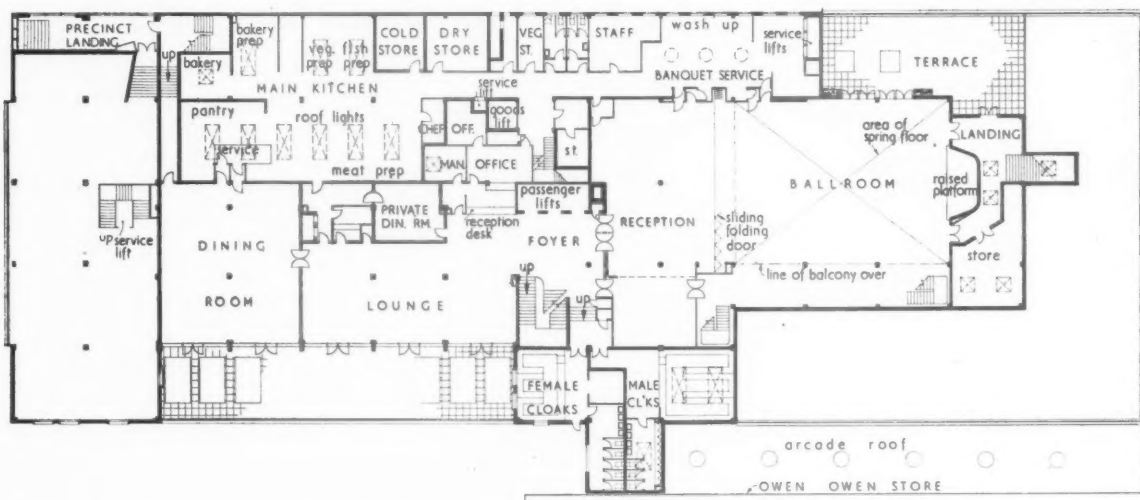
Bottom left, viewpoint 7, the hotel entrance from the car park at the rear.

Bottom right, viewpoint 8, the hotel sign above the windows shown in the previous photograph.

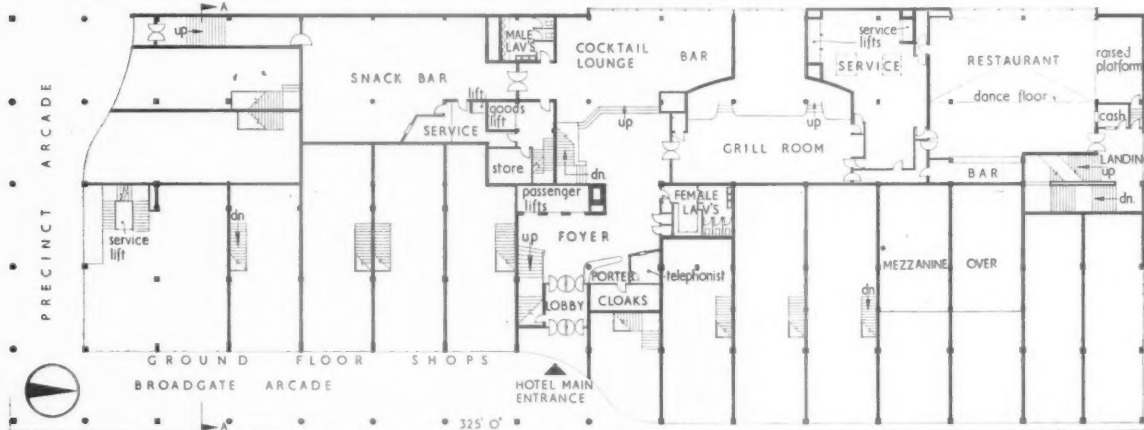




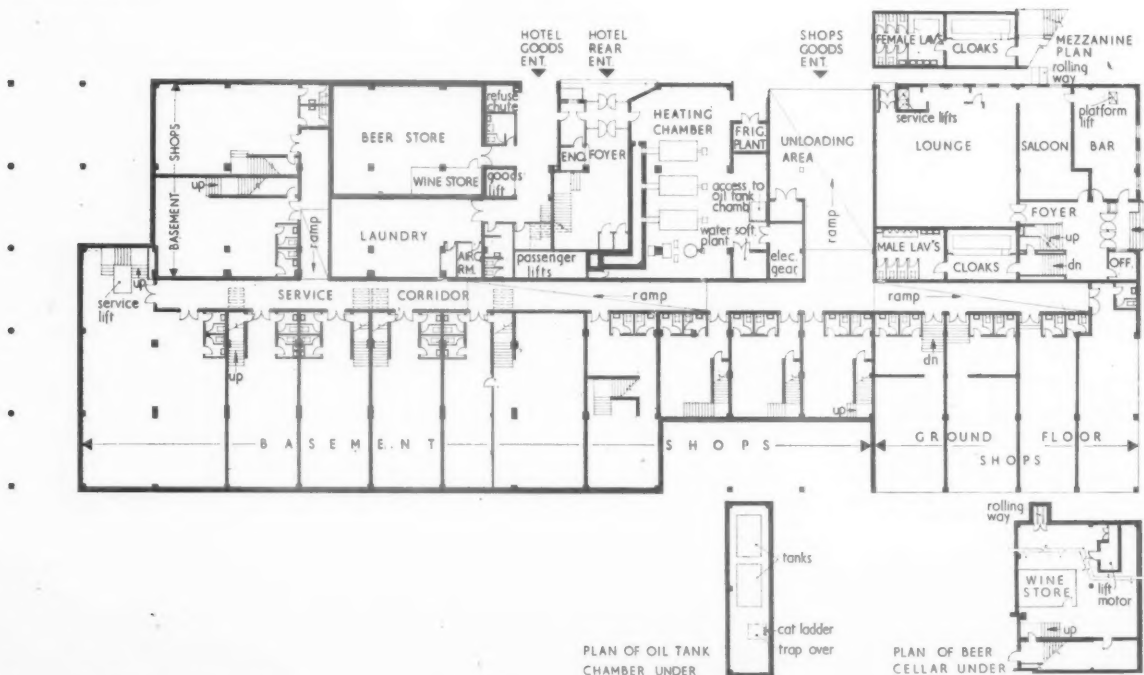
## HOTEL IN COVENTRY



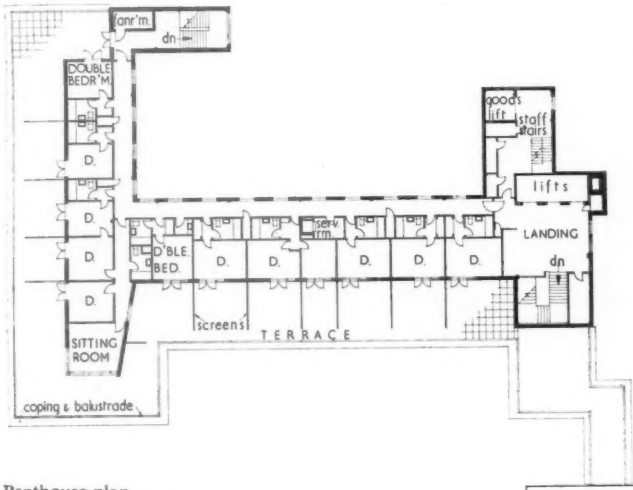
First floor plan (the large room on the south side is an extension to the ground floor shop)



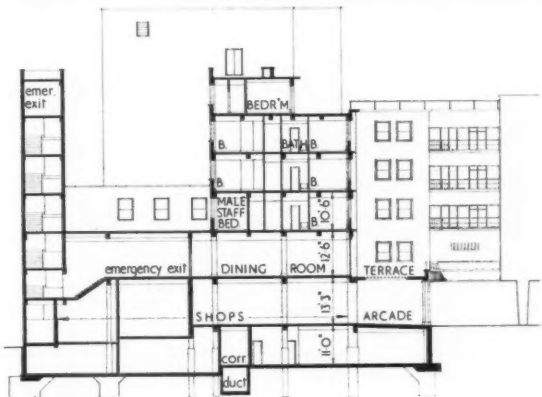
Ground floor plan

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

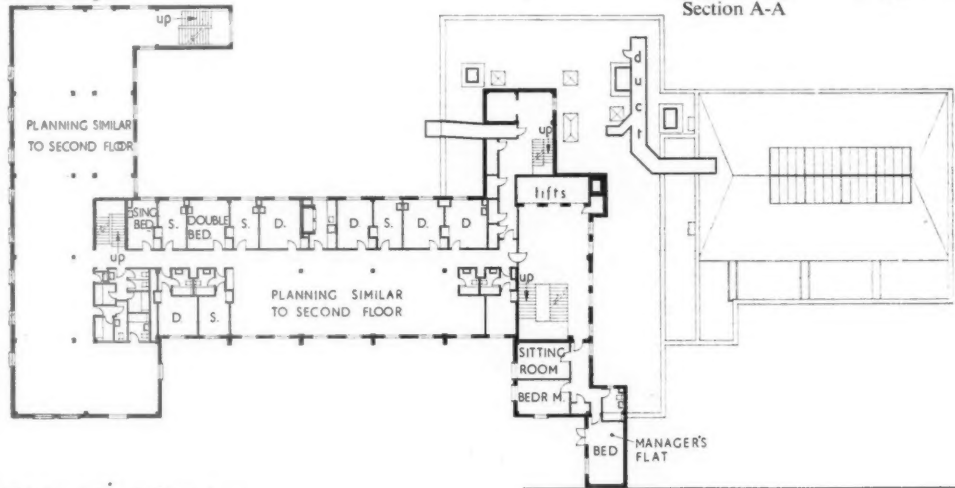
The photograph, right, also from viewpoint 4 (see top photograph on page 813) shows a view from the roof terrace, looking towards the penthouse floor, on which are situated the larger suites of the hotel. The hotel name is in double outlined neon.



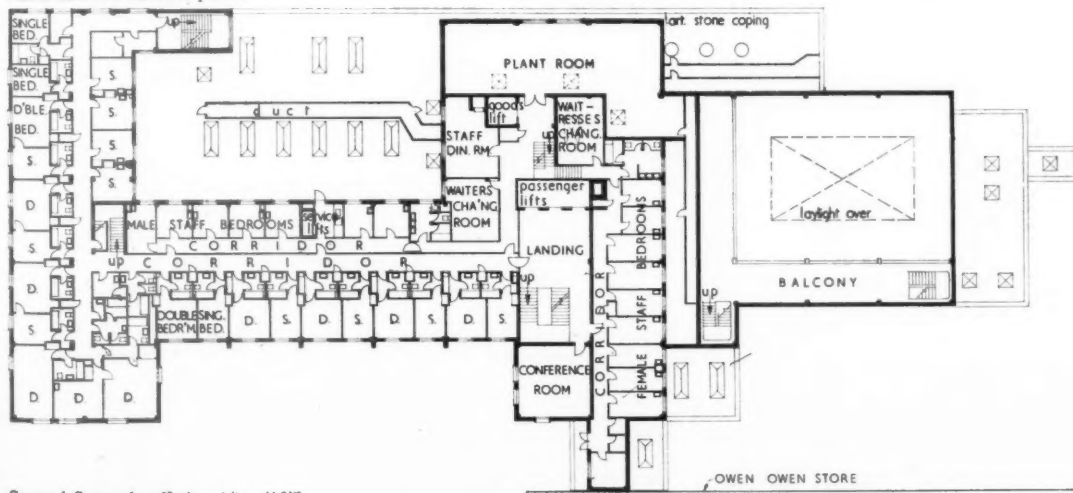
Penthouse plan



Section A-A



Third and fourth floor plans



Second floor plan (Scale: 1/4" = 1' 0")

OWEN OWEN STORE



## HOTEL IN COVENTRY

Above, a view of the rear entrance foyer showing two (of three) similar showcases, telephone booths and lift doors. Panelling in solid African walnut, ceiling terra-cotta and walls sky-blue. The floor is cork tiles to a special pattern in black, blue and grey marble finish.

Top right, a view of the main foyer, from the grill room entrance.

The ceiling is heated behind perforated metal panels with 24-volt "starlights" incorporated. This is in Florentine blue.

The walls to the left are of Australian walnut veneered, and that to the right is Derbydene marble with the hotel "Eagle" incised. The floor is of marble-patterned cork tiles in blue, black and grey.

Above right is the main foyer from the main entrance doors.

Right, hotel reception on the first floor showing entrances to two of the three lifts. The panelling is veneered walnut with the solid timbers in African walnut. The counter has a black hide top with bedroom plan inlaid in gold. The decorative plaques over it mask the extract ducts. The ceiling, in mushroom, has heated perforated metal panels, with 24 v., 12 w., lamps incorporated to give sparkle.

Right, hotel lounge, first floor.

In order to induce a restful atmosphere the designers chose, as a colour scheme, a monochrome of grey, warmth being added by a maroon carpet and red silk shades. This room opens on to a terrace overlooking Broadgate Square.





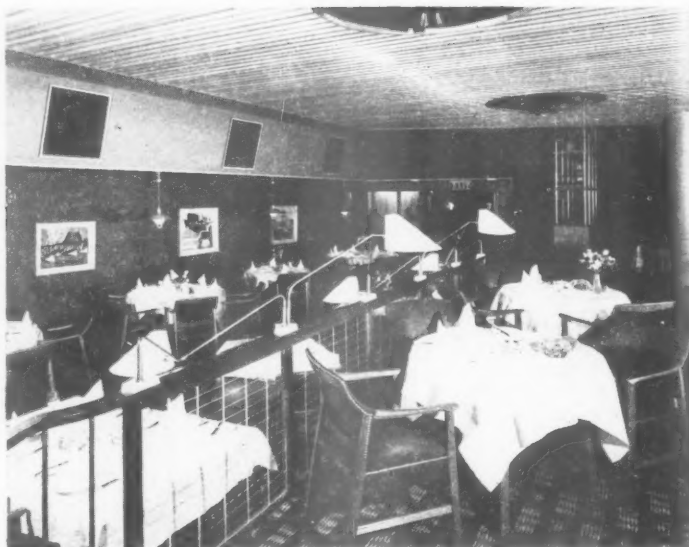
Above, hotel lounge, looking towards reception foyer. Panelling in solid African walnut and walls in mottled grey mural leather cloth. This photograph shows, in the background, some of the showcases required by the clients. Right and below right, the cocktail bar is planned on two levels, giving a new arrangement whereby it is possible to sit at the counter either in ordinary chairs or upon high stools. The counter wall is covered with Roger Nicholson's "Attica" tapestry, in terra-cotta, skyblue and lime green upon a sponge rubber underlay. The opposite wall bears a mural by Guy Egan, representing a fantasy on Broadgate Square, the main square of the city. Artificial lighting in this area has been kept to a subdued level.







Above, the private dining room on the first floor, designed by Dennis Lennon. The walls are covered with grass cloth, the chairs and table are of ebonised mahogany and the table has a rosewood top. The light fitting is of white, pleated silk in an ebonised frame with brass corner angles. Through the glazed wall can be seen the hotel lounge. Right, and below, the grill room on the ground floor.



## HOTEL IN COVENTRY

The lower set of balustrade lights is removable, and the carpet in the lower section is removable to disclose a maple floor for small dinner dances.

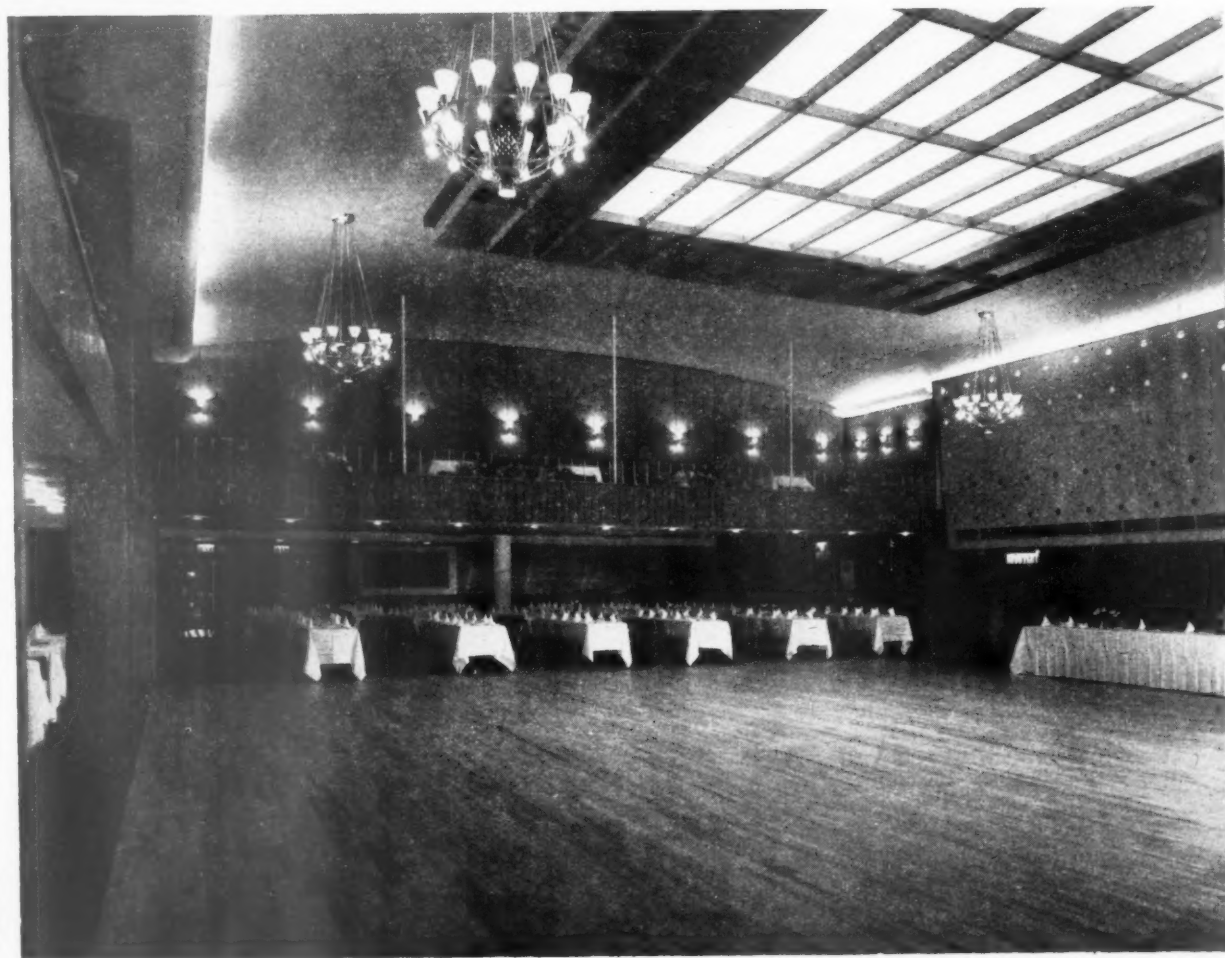
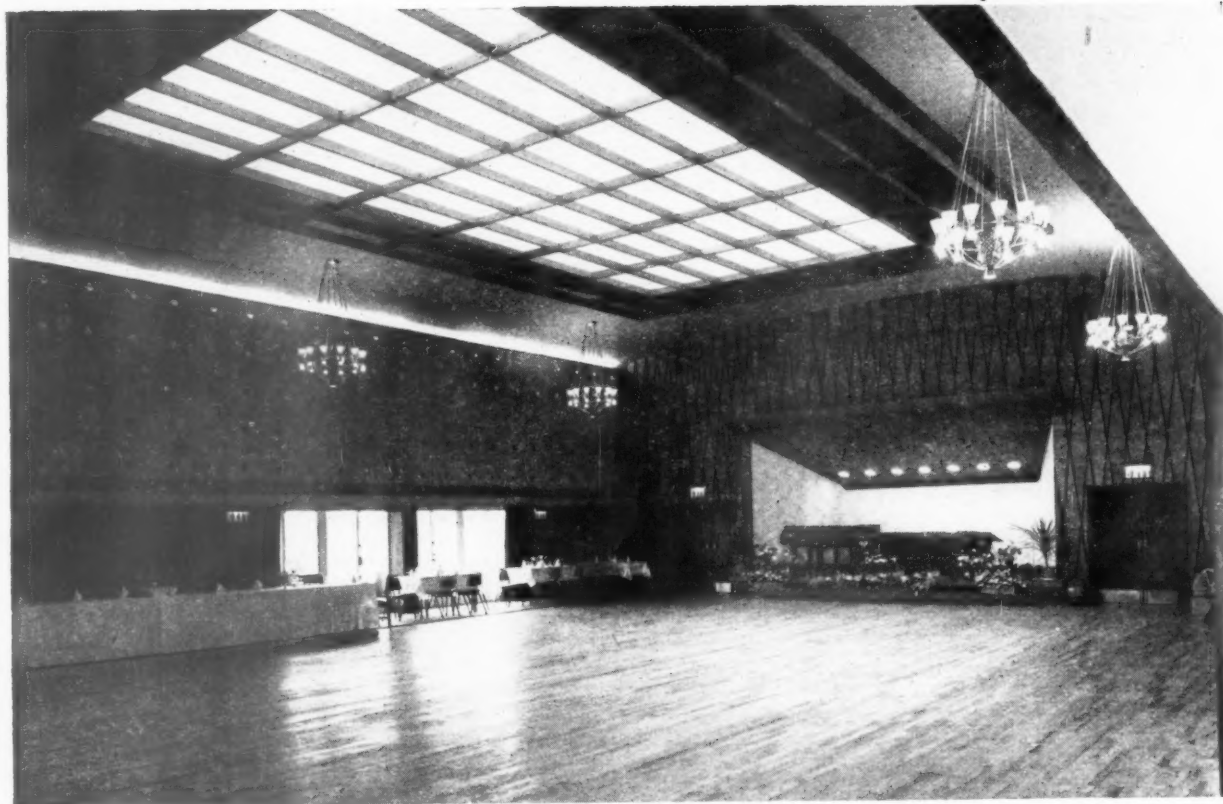
Right, Snack bar on the ground floor.

This windowless room has been designed for counter or waiter service. Strong colours—black and red cork tiles on the floor, red upholstery, deep green plastic panels on walls, and table tops, with accents of lime green and lacquer red, have been employed to give positive character, which is emphasized by the use of spot lights above the open pergola. The counter front is bamboo and timbers are black bean and pine.



Top, on opposite page, a general view of the ballroom towards band platform showing the room set out for a dinner-dance. The panelling is Australian black bean below 8 ft. (except the end wall which is Gaboon mahogany with Brunswick green diced incisions). The inclined perforated panel is in beech and is designed to allow low frequency noise to pass through it to be absorbed behind. In the bottom of this panel are the input louvres. In the curved fibre board ceiling which is painted battleship grey, there is a large natural mahogany laylight glazed in glass ply behind which there are four-colour lighting battens. The remaining panels either conceal the extract ducting, or form baffles for the loudspeakers. The panels near the stage are removable to allow additional lighting for T.V. transmission. The polished maple dance floor is fully sprung and can be covered with carpet for banquets. The chandeliers are in polished brass with red hide upper shades, and clear bulbs below to give sparkle.

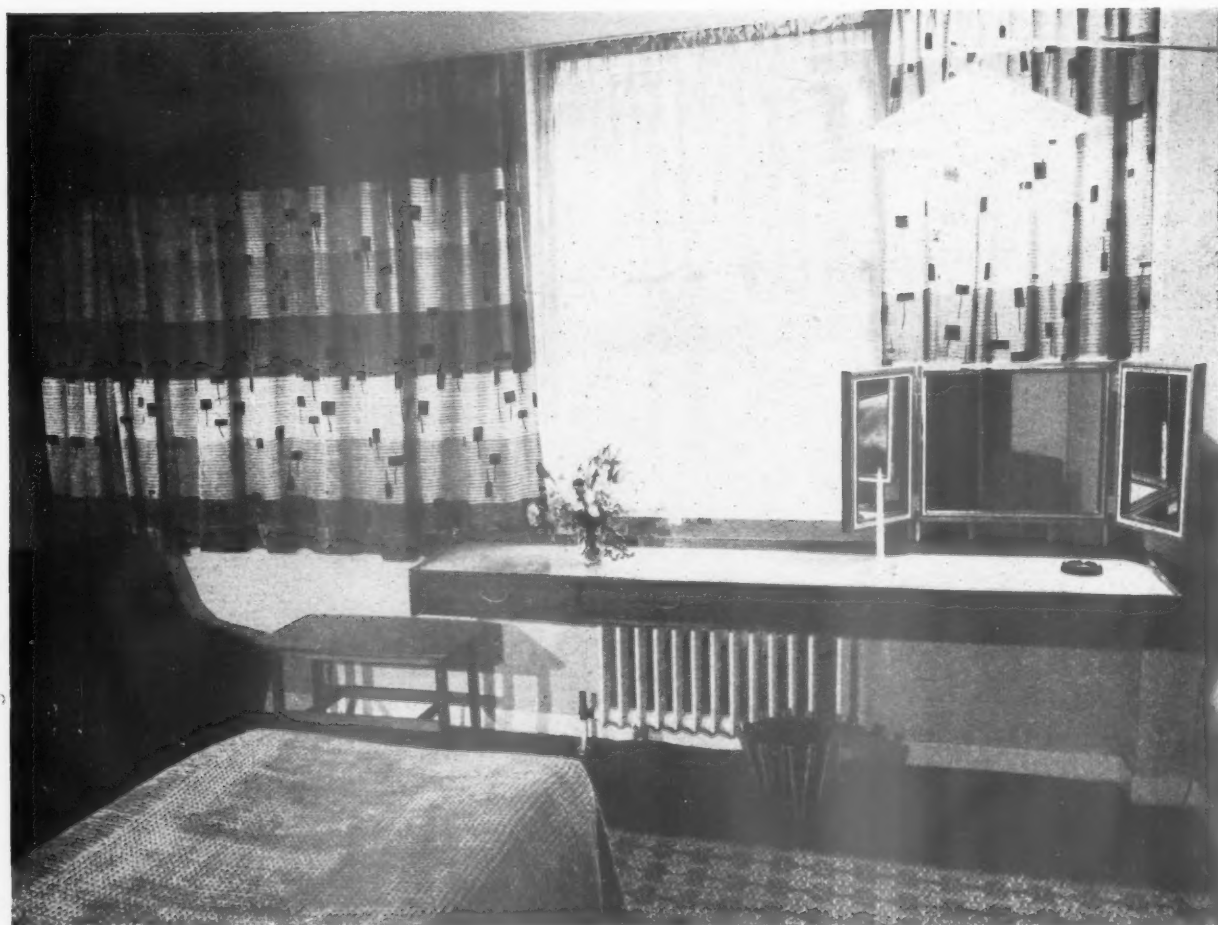






Left, general view of a typical bedroom corridor. Ceilings are white and walls quaker grey. The floor carpet has a maroon ground. The plaques over the doors are to conceal the vent holes to the bedroom lobbies.

Below, a view of a standard hotel bedroom towards the window. This shows the dressing table unit which is 7 ft. 6 in. long, and is cantilevered from the wall so that there is approximately 4 in. between the dressing table and the wall to accommodate the curtains, which in all standard bedrooms cover the entire window wall. In every standard room the carpet is grey and the walls are hemp beige, except that the wall over the bed is antelope brown and a wall beside the bed is grey mural leathercloth. The curtains are in restful shades of green, the bed-cover is mustard, and there is one dark green easy chair and one red dressing chair in each standard room.





#### HOTEL IN COVENTRY

Top left, a typical bedroom again, showing the beds and the bedside unit. Each bedside unit has a switch panel for controlling the bed lights, the room light, the lobby light and the wireless. In each case the telephone is on a wall bracket, to leave the top of the bedside table clear for iced water or early morning tea. In each standard room there are four prints.

Above left, the decorative schemes for the non-standard rooms have been done by Ward & Austin. All these rooms are in the penthouse. This illustration shows the sitting room to one of the smaller suites, with the writing table down.

Above, the bedroom for this small suite. Left, bathroom for this suite. All bathrooms are artificially lit and ventilated.







# HOTEL IN COVENTRY

Top, the public bar in the "White Lion" public house. Woodwork is traditional brush graining, the floor finish is cork tiles and the ceiling varnished lincrusta. There are bright splashes of colour in the built-in advertising matter and decorative lettering. Above right, smoke room for men only. Walls and upholstery are finished in deep red leathercloth. There are polished copper table tops, specially designed porcelain beer pulls, and spun yellow aluminium lamp fittings. Above, the lounge—designed to attract the younger well-paid worker of Coventry: the seating is planned to accommodate groups. The flat surfaces of the ceiling are mushroom and the inclined surfaces are primrose with a polka dot, and purple with off-white stripe. The round louvres are for air conditioning. Right, this room is designed to be a restaurant at mid-day and a banqueting room, dance room or drinking lounge in the evening. With the exception of the glazed floral paper the walls of this room are decorated with leathercloth.





## CLIENT'S BRIEF: his stated requirements

The clients, Ravensett Properties Ltd, wished to develop the site with two-storey shop units, preferably ground floor and basement, on the pedestrian Precinct, Broadgate and

Arcade frontages. They would require the remainder of the building to accommodate an hotel with about 100 bedrooms. The tenants for the hotel are Ind Coope & Allsopp Ltd., who

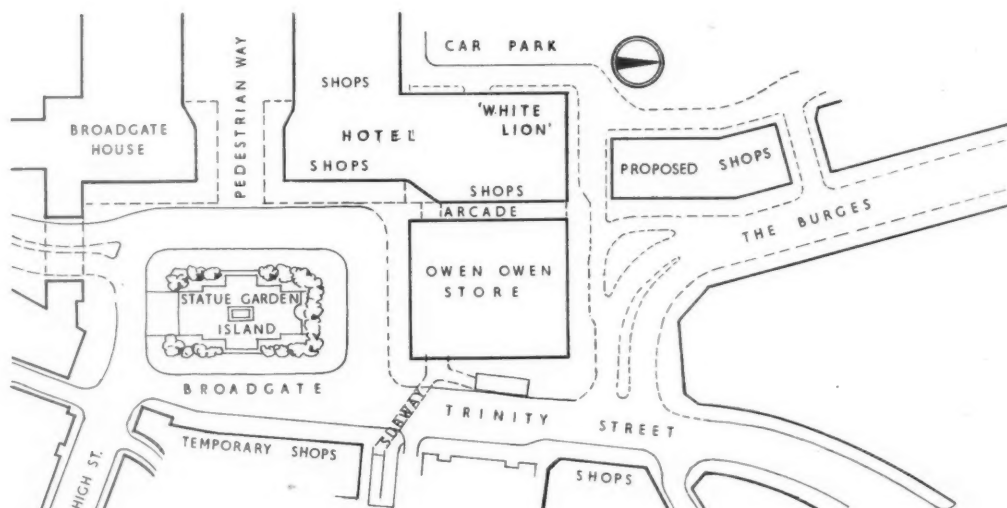
would require guest bedrooms, public rooms, a ballroom suite and separate licensed accommodation at lower ground floor level comprising bars, smoke room, lounge and restaurant.

## SITE: topography, surroundings, access

The site, 325 ft. long and 117 ft. wide, is on the western side of Broadgate, with its southern end forming one side of the head of the new shopping precinct. From the south-east corner to the north-west corner there is a fall of 16 ft. A large

car park is planned immediately to the north west of the site. There is a 20-ft. covered pedestrian way between the lower half of the eastern boundary of the site, and the new Owen Owen store. Abutting the southern half of the western

side of the site is the end of the link block which forms the northern side of the shopping precinct. Vehicular access to the site is from Broadgate to the east, and from the car park area to the north and north-west.



Site plan

## PLAN: general appreciation

The Planning and Redevelopment Committee severely restricted the free use of the site by insisting that the Broadgate and Precinct elevations should be similar to those of Broadgate House. Different types of window were used in some places, but the main structural grid layout, floor-to-floor heights, plan set-backs and facing materials had to be the same as those of Broadgate House. The building comprises two separate entities: 1. hotel, 2. shops.

1. The hotel can be divided into four sections: (a) Entrances, toyers and public rooms. (b) Bedrooms. (c) Kitchen, service and mechanical equipment rooms. (d) The "White Lion" public house.

(a) Entrances from Broadgate and from the car park were considered essential. These are at ground and lower-ground floor levels respectively, half-way along the building, and they open into foyers with common lift- and staircase-access to all floors. The public rooms open out from both sides of the ground and first floor foyers. The main reception area and the ad-

ministrative offices of the hotel are at first floor level.

(b) Approximately 100 guest bedrooms and 30 staff bedrooms were required, with provision for possible extension of bedroom accommodation. 70 per cent. of the bedrooms were to have private bathrooms. Bedrooms are planned on four floors.

(c) The location of kitchen, service and mechanical equipment rooms was dependent on combined access, simplicity of staff inter-communication and ease of service to public rooms and bedrooms. With central service staircase and lift approached directly from the separate loading area on the west side of the building the various rooms are disposed as follows:

*Basement:* Boiler house, beer, wines and spirits cellar and laundry. *First floor:* Administration offices, kitchen, staff rooms. *Second floor:* Plant room, staff changing and bedrooms. *Roof level:* Lift motor and tank room.

(d) The "White Lion." Additional bars and a

restaurant to replace licensed premises demolished to allow for new shops on the pedestrian way were required within the main building so as to make possible: (i) Food service from the main kitchen. (ii) Use of the ballroom suite independently of the hotel. (iii) Simplification of overall administrative control. This accommodation comprising restaurant, lounge, smoke room, public bar, cloakrooms and beer cellar is located at the north-west corner of the site with a separate entrance from the road leading to the car park at lower ground floor level.

2. The shops required maximum frontage to the public thoroughfares, with direct and simple service access. They are generally planned on two floors, and in accordance with the varying site levels some shops have ground floor and basement accommodation whilst others have ground and first floor accommodation. A loading area on the west side of the building connects with an internal service corridor running the whole length of the building at the rear of the shop units.

## MAIN CONSTRUCTION

Reinforced concrete frame with <i>in situ</i> concrete floors, staircases and roofs for economy and		speed of erection. Brick cladding and internal walls. Provision was made in the design for an	extension at the north-west corner to allow additional bedrooms to be built later.
<i>Load-bearing element</i>	<i>Location</i>	<i>Beam spans</i>	<i>Column grid</i>
In situ reinforced-concrete frame	Throughout building	20 ft. 8 in., 23 ft. 6 in.	20 ft. 8 in. $\times$ 23 ft. 6 in. generally; 20 ft. 8 in. $\times$ 20 ft. 0 in. and 23 ft. 6 in. $\times$ 17 ft. 0 in. on bedroom floors
<i>Foundation type</i>	<i>Location</i>	<i>Sub-soil</i>	<i>Depth</i>
Mass concrete	Throughout	Sandstone	10 ft.
<i>Outer wall type</i>	<i>Location</i>	<i>Finish</i>	
11-in. cavity brickwork	Generally	Flush mortar joint	
Cavity brick faced with slab	Broadgate facade with "Blockley" City Mixture facing bricks	1½-in. travertine and Westmorland slate on columns	
<i>Roof type</i>	<i>Location</i>	<i>Finish</i>	
In situ concrete	Throughout building generally	3-layer bituminous felt or cement tile paving	
Steel decking on steel trusses	Over ballroom	3-layer bituminous felt	
<i>Floor structure type</i>	<i>Location</i>	<i>Finish</i>	
In situ concrete	Throughout building	Screeding for carpet, cork and thermoplastic tiles, maple strip, terrazzo tiles, quarry tiles	
<i>Internal wall type</i>	<i>Location</i>	<i>Finish</i>	<i>Reasons</i>
9-in. brick	Main partitions	Plastered, timber panelled, tiled and vitrolite lined	Brick on edge used between bedrooms to save cost and to obviate plaster cracking such as has been experienced with breeze partitions and yet give a satisfactory sound insulation
4½-in. brick	Subsidiary partitions		
Brick on edge	Between bedrooms		
<i>Ceiling type</i>	<i>Location</i>	<i>Finish</i>	
Plaster on expanded metal lathing	Generally	Emulsion or gloss paint or wallpaper	
Plaster on concrete	Shops and service areas	Emulsion paint	
Insulation board	Ballroom	Emulsion paint	
Acoustic tiles	Grill room and ballroom reception	Emulsion paint	
Perforated metal panels	Foyers	Flat oil paint	
Fibrous plaster	Snack bar	Emulsion paint	

## ARTIFICIAL LIGHTING

Generally tungsten lighting is used throughout and the source of light is not hidden, but shaded according to requirements. The lighting in the bedrooms is designed to provide a restful atmosphere and the lighting in Public rooms and especially drinking rooms is concentrated in pools or splashes of high intensity where it is required for use or to give visual effect. This is designed to heighten the sense of excitement or drama.

*Bedroom lighting:* Each bedroom has a spun

brass reflector on a knuckle joint over the bed, and a large adjustable wall bracket fitting designed to move over the dressing table or over the armchair as required. A panel in the bedside cabinet controls all bedroom and lobby lights, the call system and radio.

*Ballroom:* The main body of the ballroom is lit by: (a) six chandeliers on dimmers. (b) Fluorescent cornice lighting. (c) Colour battens on dimmers in the laylight. (White, blue, red and amber).

This main lighting is supplemented by wall brackets in the balcony and semi-flush fittings in the soffit of the balcony. These two circuits are also controlled by a dimmer. There are also strip lights under specially made glass tanks designed to hold plant pots in the front edge of the balcony.

*Starlighting:* In the perforated metal ceilings, in the ground and first floor foyers, are 24 volt car head-lights.

*Wiring and switching types*  
VIR conductors in conduit

*Location*  
Generally

*Power supply type*  
415/240 volt 3 phase 4 wire AC  
  
240 volt single phase AC  
110 volt AC  
24 volt AC  
12 volt AC

*Comments*  
Motive power  
  
Lighting and socket outlets  
Secondary lighting  
Starlighting  
Signal systems

*How distributed*  
Pyrotex risers to distribution boards on various floors

## NATURAL LIGHTING

*Wall glazing*  
Aluminium sliding sashes, gear operated  
Steel casements and doors

*Location*  
Bedrooms  
Public spaces and service areas

*Reason*  
For draughtless ventilation

<i>Roof glazing type</i>	<i>Location</i>	<i>Reason</i>
Roof glazing	Ballroom	Top lighting was chosen for ballroom with a laylight at ceiling level in order to incorporate therein a four-colour artificial lighting system
Lanterns and domelights	Kitchen, lavatories and stores, etc.	

## THERMAL INSULATION

<i>Type</i>	<i>Location</i>	<i>Comments</i>
2-in. cork lining	Beer cellars and kitchen cold room	Constant temperature of 57° required in beer cellars. This is maintained by blower units which can cool or heat as required

## HEATING AND VENTILATION: artificial and natural

<i>Heat exchanger type</i>	<i>Location</i>	<i>Air changes</i>
Ten major fan sets of centrifugal cased type. Eight have speed control. Total capacity, supply and extract, approximately 135,000 cu. ft. per minute	Second floor plant room	Public rooms 12 changes per hour Ballroom 8 changes per hour Kitchen 30 changes per hour Laundry 23 changes per hour Lavatories and baths 6 changes per hour

<i>Boiler type and capacity</i>	<i>Heat load</i>	<i>Fuel type</i>	<i>Stoking method</i>	<i>Reason</i>
Central heating, hot water service and heating batteries to ventilation system: 3 Beeston No. 12BR cast iron sectional boilers, each rated at 2,741,200 BTU/hr. For supplying steam to Laundry and Kitchen: 1 Vertical steam boiler with evaporative capacity of 950 lb./hr. at 120 lb./square in.	Total heat load 7,000,000 BTU/hr.	200 second oil.	Automatic burners with light sensitive cut out	Building is in a smokeless zone. Electricity or gas too expensive

<i>Water storage type</i>	<i>Capacity</i>	<i>Location</i>
Two water to water vertical calorifiers each 1,000 gallons, supplied from main boilers	2,000 gallons	Heating chamber

<i>Pipes and jointing types</i>	<i>Location</i>	<i>Materials</i>
Mild steel class B and C Flanged joints on pipes of 2½-in. bore and over, unions on smaller pipes Domestic hot water and cold water generally in copper with union joints	Generally	Mild steel

<i>Cold water storage</i>	<i>Location</i>	<i>Materials</i>	<i>Capacity</i>
Cast iron tanks	6th floor tank room	Cast iron	3,000 gallons hard. 3,000 gallons soft 1,000 gallons for flushing valves

## SPECIAL ACOUSTICAL TREATMENT

Acoustical treatment was considered as an integral part of the design of public rooms each of which was considered on its own merits

<i>Sound insulation</i>	<i>Location</i>	<i>Comments</i>
All fan and compressor motors fixed on cork pads	Plant rooms	To reduce structure borne vibration

## REFUSE

<i>Refuse method</i>	<i>Type of refuse</i>	<i>Waste recovery</i>	<i>Materials and installation method</i>
By chutes from kitchen to basement	Kitchen waste	Separate chute for salvageable material	Cast iron chutes and large size dustbins

## SOIL WASTE

<i>Type of system</i>	<i>Location</i>	<i>Materials</i>	<i>Method</i>
One pipe system	Generally	Copper	Soil stacks with branches were prefabricated

<i>Drain types</i>	<i>Location</i>	<i>Materials</i>
Soil and storm run separately	In trench under service corridor	Cast iron main drains, copper internal pipes

<i>Rainwater disposal type</i>	<i>Location</i>	<i>Materials</i>
To sewer	Generally internally	Copper down pipe. Cast iron drain

<i>Lifts type</i>	<i>Capacity speed</i>	<i>Relation to traffic circulation</i>	<i>Motor room position</i>
3 passenger lifts	2,000 lb. 300 ft./min.	Off central foyers	Top of building
1 goods lift	3,500 lb. 150 ft./min.	Off service area	Top of building
8 food lifts	2 and 3 cwt. 110 ft./min.		Above shafts

## FIRE

*Structural precautions*

Reinforced concrete frame with 9-in. brick main partitions

*Planning precautions, access for fighting*

All parts of building accessible to turntable escapes. Dry risers and hose reels in strategic positions

*Grade of protection*

"A"

*Apparatus, sprinklers*

Dry risers on three main staircases. Sprinklers not considered necessary as Central Fire Station is within 300 yards of building

*Means of escape*

In accordance with regulations for buildings licensed for public entertainment

## COLOUR

Emulsion paint, oil paint and glazed wallpapers have been used in conjunction with wood paneling, glass and soft furnishings to provide clear emphatic colour schemes in all public spaces, each room being considered individually. In addition, to reduce maintenance charges exten-

sive use has been made of mural leathercloth. The carpet was specially made in two colour schemes and, apart from that in the bedrooms and special rooms, is of one pattern throughout the hotel to form a unifying influence. On each bedroom floor a distinctive "floor

colour" is used, and this extends to key tabs, WPB's, the embroidery on sheets, etc. In snack bar, main foyers, and "White Lion" bars, cork flooring has been used in patterns relating to the shape and layout of the various rooms.

## TIME SCHEDULE

*Drawings*

Sketch plans started June, 1953. Working drawings finalised March, 1954, with the exception of minor alterations which were covered by detail drawings as job proceeded. 1/2-in. details prepared as work proceeded.

*Work commenced*

November 2, 1953

*Work completed*

April 27, 1955

*Type of contract*

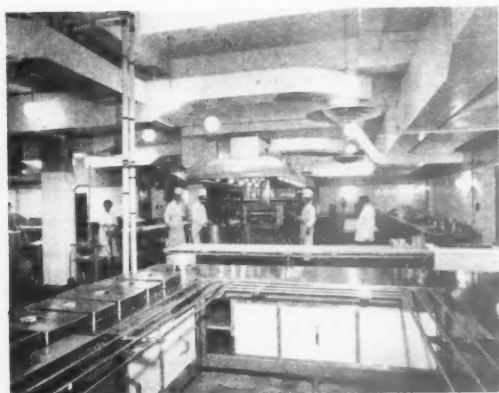
RIBA with Bill of Quantities

## COST

The cost of the hotel and equipment was approximately £800,000. A detailed cost analysis

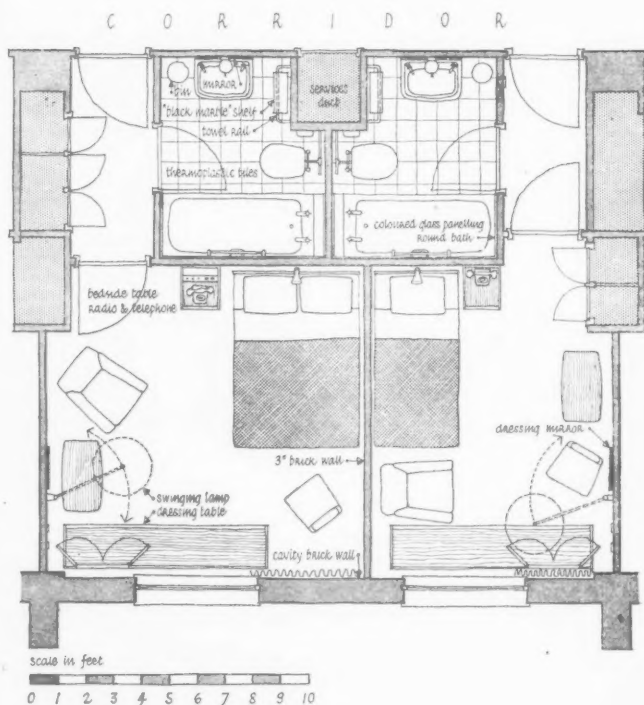
will be given in the JOURNAL at a later date, when the final figures have been settled.

## DETAILS OF SELECTED AREAS



Below is a detailed plan of a typical single and double bedroom, a photograph of which appears on page 820. There are 108 bedrooms to accommodate 170 guests and 70 per cent. have their own bathroom. All bathrooms are artificially lit and ventilated. A typical bedside cabinet and dressing table (designed by Ward and Austin) will be illustrated

as a Working Detail in a later issue of the JOURNAL. Left, the kitchen, which is equipped to serve up to 2,000 meals a day and has a staff of 35. The air conditioning system changes the air every three minutes. Below left, the hotel laundry, which is designed to handle up to half a ton of washing per day.





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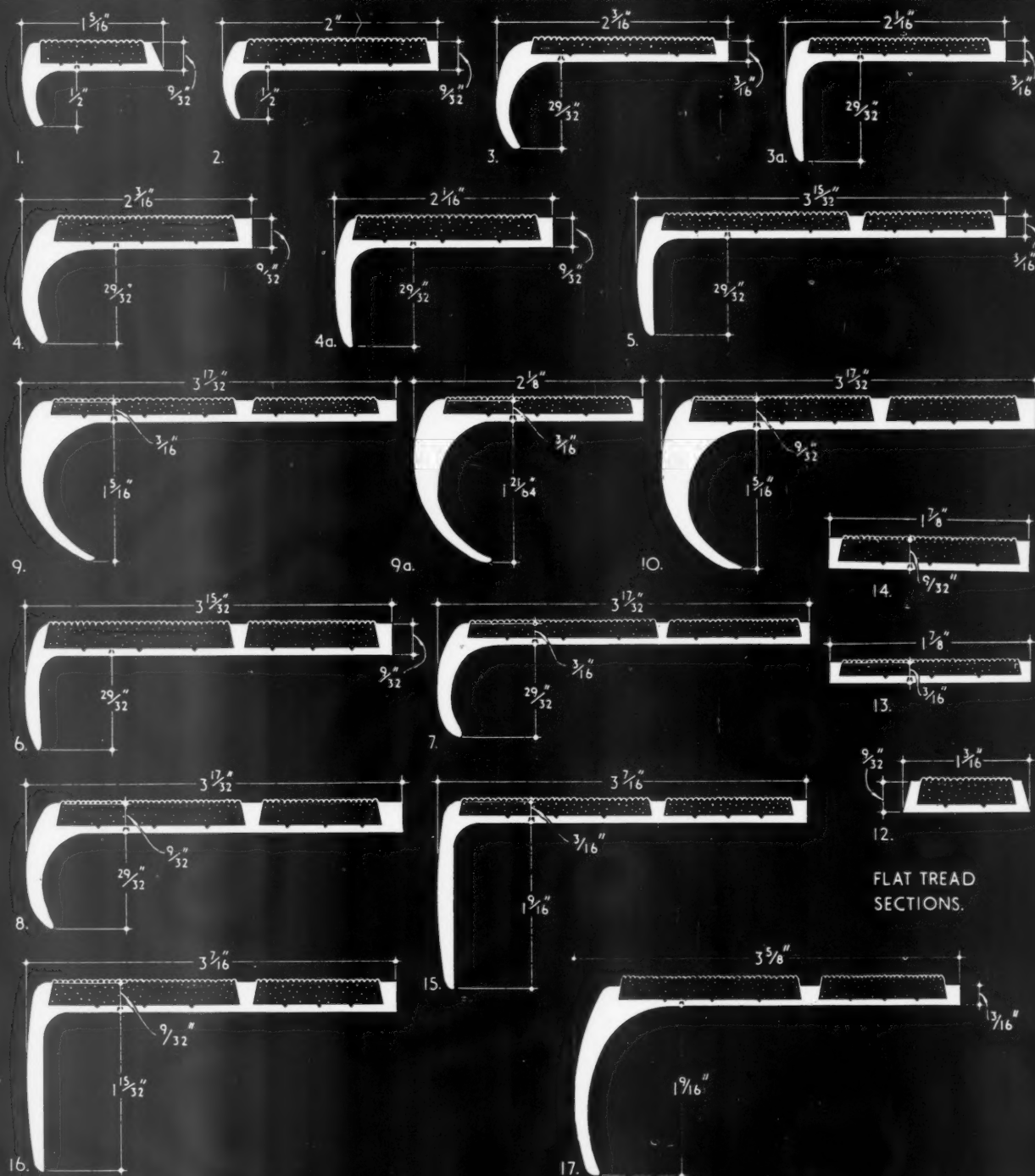




## STAIR TREADS | ALUMINIUM AND PLASTIC

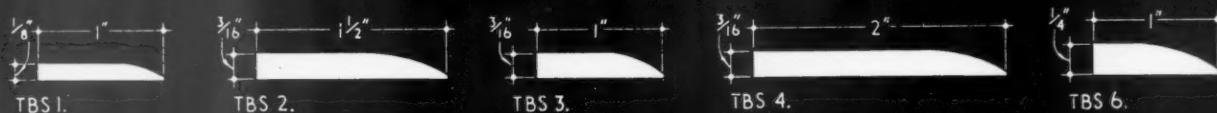
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FLAT TREAD SECTIONS.

TREAD-AND-NOSING SECTIONS.



BACKING STRIPS.

DON ALUMINIUM PLASTIC-FILLED STAIR TREADS. (scale  $\frac{3}{4}$  full size)

Manufacturer: Small and Parkes Ltd.

## 19.Z10 · DON · ALUMINIUM PLASTIC-FILLED STAIR TREADS (Patent No. 645569)

This Sheet describes a range of aluminium stair-nosings which are available fitted with specially compounded plastic inserts in a selection of pure colours. Where a wider tread is required than that provided by the tread-and-nosing section, flat tread sections may be added to make up the required width. Should the step not be brought up to the level of the tread by the stair covering, special feather-edged strips can be fixed at the back of the treads.

### Sizes

The drawings on the face of this Sheet show, to a scale of  $\frac{3}{4}$  full size, the various sections which are available. Special sections can be supplied if the order is sufficiently large to justify the manufacture of the dies. All sections may be supplied drilled and cut to specification; alternatively, standard undrilled lengths of 12 ft. 1 in. may be obtained. Curved lengths are supplied to drawings of templates and are available with the nosing on the inside or outside of the curve.

### Aluminium Sections

These are extruded from pure aluminium and nosings are buffed to give a highly polished finish.

### Plastic Inserts

**Material:** The plastic used is of the thermoplastic type and is a special grade of polyvinyl chloride.

**Characteristics:** The insert is extruded, has a ribbed surface, is stable in shape, non-slip and hard wearing. Under the influence of heat (in excess of 120° F.), combined with mechanical stress, it can become distorted, but these conditions are unlikely to arise when the material is in service.

The compositions used are not affected by water, acids, alkalis or oils with which they may come in contact under normal circumstances. They are not inflammable and do not support combustion.

**Colours:** The colours are blended throughout the material and cannot, therefore, wear off. They may also be regarded in practice as unaffected by light and heat. All sections are available with inserts of white, silver, blue, maroon, red, green, black and two shades of brown.

Double channel sections may be obtained with inserts in a combination of any of these colours.

### Fixing

Plastic-filled stair treads are drilled to take  $\frac{3}{4}$ -in. or 1-in. No. 6 or No. 8 wood screws and are countersunk to take No. 6 or No. 8 screw-caps; these fittings may be brass or cadmium-plated. Alternatively, the treads can be supplied with holes counter-bored through to the aluminium base, these holes being fitted with plastic plugs after the treads have been fixed.

**Wood stairs:** Care should be taken to ensure that the stair treads bed down evenly. Where the steps are badly worn it may be advisable to chisel out and fit the tread flush with the remainder of the step. Where the step is only partly worn it may be built up level and the tread fitted to the top.

**Concrete stairs:** With new stairs the treads may be cast in when making the steps or, alternatively, timber fillets may be cast in to take the fixing screws. With existing stairs the steps can be drilled and plugged to take the fixing screws. When it is required to fix the stair treads with an adhesive instead of screws the manufacturer should be consulted.

**Metal stairs:** The treads should be fixed with  $\frac{3}{16}$ -in. brass countersunk screws and steel nuts with washers, the steps being drilled accordingly.

### Fabric-Filled Stair Treads

All treads on this Sheet can be supplied with the more common type of fabric insert in place of the coloured plastic type if required.

Compiled from information supplied by:

Small and Parkes Ltd.

Head Office: Hendham Vale Works, Manchester, 9.

Telephone: Collyhurst 2511.

Telegrams: Packless, Manchester.

London Office: 76, Victoria Street, S.W.1.

Telephone: Victoria 1845/6.

Telegrams: Karroko, Wesphone, London.



## ASPHALTE: GENERAL DATA

**This Sheet** is one of a series on asphalt. It describes the type of asphalt used in building construction and known as mastic asphalt. It also gives the general rules which must be observed in using the material in all positions. Further Sheets in the series deal with specific applications in flooring and paving, in damp-proofing and tanking and in roofing.

### General

Mastic asphalt consists of a fine mineral aggregate, usually of natural rock or limestone, united with bitumen. It is defined in the British Standards as:—  
"Finely graded mineral matter together with asphaltic cement in such proportions as to form a coherent voidless impermeable mass, solid or semi-solid under normal temperature conditions, but sufficiently fluid when brought to a suitable temperature to be spread by means of a hand float."

It is usually delivered to the site in the form of solid blocks and has to be remelted before it can be used; and on cooling it regains its original solidity. The laying of asphalt is a sub-contracting trade within the building industry and is carried out by skilled operatives who have received a recognised training. There are many grades and types of asphalt to suit differing requirements, and the British Standards Institution publishes standards for the different compositions in order to establish satisfactory degrees of quality. There are also B.S. Codes of Practice for standardising the methods of application of mastic asphalt for building purposes.

### Characteristics

Asphalt is plastic and will undergo a certain amount of distortion without cracking: it adheres well to solid surfaces. It is unaffected by normal temperature changes. It is completely impervious to water and is not affected by alkalis, weak acids, brine, sulphate salts or cool sugar solutions. Normal bitumen asphalt is, however, attacked by mineral oils and greases, animal and vegetable fats and dairy products. Special grades of asphalt are obtainable to withstand the effects of extremes of temperature and contact with destructive agents (see *Grades*). With suitable chemical control asphalt can be made extremely hardwearing for situations where this is desirable.

### Grades

The following grades of asphalt are obtainable.

**Roofing:** These are available in natural rock and limestone specifications, with special hardened surfacings available for heavy foot traffic, and many different finishes to provide a solar reflective surface.

**Tanking and damp-proof coursing:** Available in natural rock and limestone specifications, with special materials included for use in areas with acid sub-soils.

**Heavy duty:** This will withstand severe abrasion, frequent impact of packages or containers and substantial standing loads. It may, if required, be reinforced with metal grids.

It is suitable for heavy engineering work, despatch yards, loading bays, etc., and where rubber-tired trolleys, milk churns, barrels, etc., are handled.

**Medium duty:** For use where there is continuous foot traffic often with light wheeled vehicles as in factories, shops, public corridors, etc. This type of flooring may be in coloured asphalt (see *Colours*).

**Light duty:** For domestic applications generally and for roof areas designed for recreational purposes. The flooring may be in coloured asphalt (see *Colours*).

**High and low temperature grades:** High temperature grade is for rooms maintained at higher than normal temperature, such as shower baths, and for floors frequently swilled with hot water or where hot liquids are likely to be spilt. Low temperature grade is for cold storage and low-temperature process chambers.

**Acid-resisting:** These are of two types: normal grades, which are unaffected by many dilute industrial acids at temperatures up to 25° C., but are affected by phenols and tar acids; special grades, which are made to resist stronger concentrations and higher temperatures. Acid-resisting flooring may be in coloured asphalt (see *Colours*).

**Oil-resisting:** These are prepared from coal-tar pitch mastics which are more resistant to oils and fats than asphaltic bitumen. They are nevertheless still affected by some animal and vegetable fats and where these occur asphalt may be employed as an underlay forming a d.p.c. to the oil-resisting surfacing employed.

**Grainless:**

**Lead- and lime-free:** { These are non-abrasive and are used in ordnance factories, etc., where explosives are handled.

**Underlay:** This grade is for use as a base for other floor finishes, such as linoleum, cork, sheet rubber and different types of tile and may, if desired, be acid-resisting.

### Specification Note

To ensure that materials of standard quality and manufacture are used, it is recommended that the following clause be embodied in specifications and bills of quantities:—

All asphalt used on this contract is to be manufactured according to British Standard . . . . . (appropriate number and type of material) and all asphalt blocks used are to be branded with the mark of the manufacturing company and the relevant British Standard number and "kite" mark of that institution. The asphalt contractor to be approved by the architect before the sub-contract is placed.

### Preparation of Substructure and Surface

Asphalt does not form part of the main structure of a building and always requires support. It is applied as a covering over a firmly constructed base, such as concrete, hollow tile, brickwork or timber. After application it becomes an integral part of the surface it covers, so that its durability depends to a large extent on the soundness of the structure beneath. Defects in the design of the latter can give rise to faults and imperfections in the asphalt covering. The following notes are intended as a guide to producing a satisfactory sub-structure.

**Falls:** Falls for asphalt should be not less than 1½ in. in 10 ft. or 1 in 80. In concrete, hollow tile or similar construction, falls can be provided by screeding and in timber by furring, except where the structure is designed to the required fall. Screeding should be floated to a flat, even surface without variation in the slope. Where thermal-insulating material is laid over concrete, the screeding for falls may be either directly on the concrete or on waterproof paper placed over the insulating medium. Alternatively a

## 12.F1 ASPHALTE: GENERAL DATA

lightweight screed of 1½ in. minimum depth may be used for insulating: the asphalte is laid over it, on a felt underlay.

**Keying:** Where asphalte is to be applied to vertical or steeply-sloping surfaces the base must be suitably keyed.

For brickwork, horizontal joints should be raked out for at least ½ in. and brushed clean. Where the bricks have a very smooth finish, it is also necessary to hack the surface or first to apply a coat of bituminous solution. The top edge of vertical asphalte must be tucked into a chase 1 in. by 1 in. minimum and the angle splayed to act as a weathering.

Concrete is sometimes sufficiently rough, after the shuttering has been removed, to provide a key. It is generally necessary, however, on slopes greater than 10° to hack or groove the surface for asphalte. Metal surfaces should be cleaned and painted with a suitable bituminous solution. To provide a key for asphalte on vertical and sloping timber surfaces expanded metal lathing should be securely fixed over a layer of felt.

Surfaces that have been limewashed, painted, etc., should be wirebrushed so that all smoothness or glaze is removed, and then hacked before asphalting.

**Underlays:** Where there is liable to be movement in the sub-structure, owing to vibration or temperature changes, the asphalte should be isolated from its effects by means of a suitable membrane, laid loose over horizontal surfaces: on vertical or sloping timber surfaces expanded metal lathing is necessary to form a suitable key for the asphalte.

Underlays are always necessary over timber surfaces; thermal-insulation media such as cork; concrete, where steelwork is near to or level with the laying surface, or where the aggregate is of a porous type.

**Laying**

It is important that asphalte should be laid, where possible, after the work of other trades is completed; where it is not possible, steps should be taken to protect it from following trades. Cement, etc., should not be mixed directly on an asphalte surface and care should be taken in handling steel scaffolding and the like. Where there is vertical asphalte tanking in deep basement work back-filling should be very carefully done: it is essential to build a skin wall to protect external vertical asphalte linings. Coloured or polished asphalte floors should be laid after all other structural or decorating operations have been carried out, but where this is not possible they should be suitably protected.

Flat areas of asphalte are laid in bays in two or three coats, each with lapped joints. The thicknesses and number of coats vary according to the application: details are given on the appropriate Sheets in the series. For some heavy duty flooring, the coarse aggregate may be incorporated on the site when remelting, instead of in manufacture.

Any alterations to asphalte work should be carried out by a skilled asphalte worker.

**Applications**

The main functions of asphalte in building are waterproofing of all kinds, lining of containers for liquid and provision of wearing surfaces, both internal and external. Each of the following applications can be

placed in one of the three categories.

**Weatherproofing of roofs:** Asphalte may be applied to concrete, timber or other construction, including gutter linings, weatherings and dormer cheeks (for details of these applications see Sheet 12.F2).

**Damp-proofing of walls and floors:** Horizontal or vertical d.p.c.s may be formed in broad or narrow widths above or below ground level (see Sheet 26.A2). **Waterproofing of foundations and basements:** Asphalte may be used for tanking basements where subject to water pressure (see Sheet 26.A3).

**Internal linings:** Asphalte linings are suitable for reservoirs, water-towers and tanks, and also in industry for containers for corrosive liquids, brine tanks and cold-storage chambers.

**Flooring and paving:** Differing grades of asphalte may be used for domestic and industrial flooring (see *Grades*). For details of flooring and paving applications see Sheet 19.D1.

**Fire Resistance**

Mastic asphalte complies with BS. 476 : 1932 *Definitions for fire resistance, incombustibility and non-inflammability of building materials and structures (including methods of test)*.

**Colours**

The usual colours in which medium duty, light duty and acid-resisting asphaltes are obtainable are shades of brown or red. Grey or green mixtures can be produced, but they are more expensive.

**Relevant British Standards and Codes of Practice**

BS. 988 : 1941 *Mastic asphalt for roofing, type A (limestone aggregate)*.

BS. 1162 : 1944 *Mastic asphalt for roofing, natural rock with high bitumen content (6-10 per cent.)*.

BS. 1097 : 1943 *Mastic asphalt for damp-proof courses and tanking (limestone aggregate)*.

BS. 1418 : 1947 *Mastic asphalt for damp-proof courses and tanking, natural rock containing 6 to 10 per cent. bitumen*.

BS. 1076 : 1942 *Mastic asphalt for flooring*.

BS. 1375 : 1947 *Coloured pitch mastic flooring*.

BS. 1410 : 1947 *Mastic asphalt flooring, natural rock containing 6 to 10 per cent. bitumen*.

BS. 1450 : 1948 *Black pitch mastic flooring*.

BS. 1451 : 1948 *Coloured mastic asphalt flooring (limestone aggregate)*.

BS. 1783 : 1951 *Coloured pitch mastic flooring, incorporating lake asphalt and bitumen*.

CP. 144.201 : 1952 *Mastic asphalt roofing*.

**Compiled from information supplied by:**

Val de Travers Asphalte Ltd.

Head Office : Val de Travers House, 21/22, Old Bailey, London, E.C.4.

Telephone: City 7001 (10 lines).

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**NOTE.**—Throughout this series of Sheets the spelling asphalte has been adopted to comply with this manufacturer's usage.

## TECHNICAL SECTION

A weakness in much post-war planning has been that the valuer has not been called in at the right time. This was pointed out by W. K. Shepherd, Plymouth's Estates and Development Valuer, when he spoke to the RICS on "Value as a Factor in Planning." He told of a bank in Plymouth which had been reduced from the planners' height of five storeys to three storeys because so few people wanted office space. And he mentioned another building in Plymouth—a block of shops—which had little more than a sham facade on the upper floors, to satisfy a four-storey height requirement. The architect is often as guilty as the planner of ignoring the financial background of a job and of turning too soon to solid geometry, which he understands. But in commercial building, commercial realities are of first importance. As Mr. Shepherd pointed out, it was discovered at Plymouth that site ground rents are determined less by consideration of access and ease of parking, than by the nearness of shops to key traders such as the big departmental stores.

### 19 CONSTRUCTION: DETAILS curtain walling on the Lever building, New York

This week's  
special article

The number preceding the week's special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant Information Centre items. Further and earlier information can be found by referring to the index published free each year.

*Recent proposals to build on the South Bank and elsewhere in London to heights greater than about 10 storeys will entail problems hitherto unknown in English practice. Since American experience of high building might offer some guidance, we invited Roger Radford, of Skidmore, Owings and Merrill—Architects for the Lever Building in New York—to take part in a discussion with Peter Trench, Edward Mills, Thomas Bunn (of The Crittall Manufacturing Co. Ltd.) and the Editors of the JOURNAL. The following report is based on notes taken during the discussion and on Mr. Radford's written answers to questions.*

It was first agreed by all that, while American practice and methods have much to tell us, they could not be used over here without modification to suit the British context of building and general outlook.

EDITORS: The New York site of the Lever building must have been very expensive, yet the building seems to cover only a small proportion of the area. Is it still a financial proposition from the clients'

point of view? And how does it relate to town planning regulations?

RADFORD: It was really a "prestige" building. What the clients have gained in this way has probably offset the sacrifice in floor space—of which the building codes would have allowed twice as much as was provided. Over 25 per cent. of the site you can build as high as you like.

MILLS: Were the clients anxious to have

a modern building before the designs were prepared or did they have to be "converted"? And did they provide the architects with full information or did the architects make their own programme?

**RADFORD:** Oh, the clients wanted a modern building. The procedure was for the clients and architects to work out a programme jointly. After agreeing to a programme in some detail—how many square feet, how many people and cars and so forth—possible solutions were studied by the architects. When these had progressed far enough, meetings were held with the structural and mechanical engineers, whom we always attempt to bring in as early as possible, but the circumstances of each job naturally vary. In some cases, the general contractor, when he is appointed and not chosen competitively, is also brought in during the early stages. The usual procedure is for several schemes to be analysed and studied and for cost studies of certain parts to be made. In one recent job, two complete schemes were proposed and costed for comparative presentation to the client. When the final scheme was selected, a model was made and later a full-size mock-up of the cladding to study weathertightness, flashing and general erection procedure. The client bore the cost of these.

**MILLS:** That presupposes a long time between the client approaching the architect and the start of the job.

**RADFORD:** It quite often takes 15 to 18 months to prepare designs. Lever took four to five months, and then about 15 to 18 months to build, possibly less.

**TRENCH:** In America they always seem to put up their buildings in 10 to 18 months regardless of how big or small they are. When using reinforced concrete for the floors they seem quite often to put up one floor a week whatever the size. I think we could improve on their times for small buildings over here. What are the floors in the Lever building?

**RADFORD:** Robertson "Q" flooring. It is a cellular steel flooring through which you can run the services, and is screeded with concrete on top.

**TRENCH:** I expected to see more off-site prefabrication in America, especially for tall buildings, but many of them seem to have solid concrete floors. I only once saw steel shuttering: they use timber mostly, and have developed a resin bonded plywood panel with a special plastic finish which obviates the need for oiling. These can be used up to about 40 times. The Americans are very good at shuttering and do it very fast. Is it true that, provided the steel people board out two floors below where they have got to, the builder can work underneath?

**RADFORD:** Yes. With the average 25-or-so-storey building, the first floor is probably finished by the time they are putting steel on the 17th.

**TRENCH:** When we are doing our very high buildings we shall need a new technique of scaffolding—probably a heavy suspended scaffold, which would be easier on a steel frame than on concrete—and we shall need



*Lever House, New York. The building was completed in early 1952 and cost \$6,924,285.*

bigger and faster hoists capable of carrying men as well as materials. The use of tower cranes will be limited.

**MILLS:** On Lever, can you tell us whether every drawing was tied up before the building started? **EDITORS:** and how the general contractor was chosen?

**RADFORD:** The aim is to complete the drawings, but it does not usually happen! The contractor was chosen by competitive tendering from eight contractors. The successful firm was the George A. Fuller Company. But for large jobs the practice is developing of appointing the contractor at the same time as, or soon after, the appointment of the architect, without competitive tendering. One firm of contractors I know does as much as 50 per cent. of its work in this way. But sub-contracts, which comprise an overwhelming part of the work, are almost always let competitively.

**TRENCH:** What operations are undertaken then directly by the general contractor?

**RADFORD:** Some smaller contractors do perform some of the work themselves—usually sub-letting the mechanical work; but on Lever he would probably be responsible for watchmen, clean-up, guards, permits, licences, and so forth, but no direct building trade.

**MILLS:** With regard to glazing, I understand there was some trouble with the heat-resisting glass on the Lever building: there was some cracking and the panels had to be reglazed. Has the cracking resumed?

**RADFORD:** The only breakage I know of was caused by a stone blown by the wind, but on very big pieces of glass, rubber gaskets or elastic glazing compounds have to be used. If you have a large piece of glass held by some rigid fixing, the rise in temperature from the sun will be greater

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at the centre than at the edges, because the fastening will reduce it; if the difference is too great, any defect along the edge of the glass may cause it to crack. There was some initial cracking in the spandrel panels which are of wired glass but this has not resumed.

**BUNN:** The expansion factor for heat-resistant glass is more than with ordinary glass, and rubber gaskets take up the expansion.

**EDITORS:** What was the sequence of operations in putting up the cladding, and what was the size of the unit that was brought to the site?

**RADFORD:** The exterior skin consists of a structural steel mullion erected in about 12-ft. lengths, by floors, vertically, with a stainless steel cover piece added after glazing. It was not really a prefabricated skin, due to code requirements at the time requiring a masonry (brick) back-up wall.

**EDITORS:** The stainless steel cladding on the ground floor columns appears to be buckling: why is this?

**RADFORD:** Owing to the expense of stainless steel, the cladding is not quite as thick as they would have liked. Stainless steel was used to give a good finish that need not be maintained apart from washing. Many clients are willing to pay extra for this reason.

**MILLS:** In England it doesn't matter what you spend on maintenance, as it comes out of income before taxation.

**BUNN:** Has stainless steel superseded aluminium for cladding would you say?

**RADFORD:** I don't think so, both are used. On the Alcoa building they used anodised aluminium for certain covers, but shiny aluminium for window trim where it can be cleaned with the window.

**MILLS:** On the subject of lighting, I noticed in America that the fluorescent tubes are in many cases always switched on. Why is this?

**RADFORD:** It's just "America." I believe that wear on the starter through switching on and off is more costly than the current used if the lamp is left on all the time.

**BUNN:** And Americans seem always to have their "shades" (blinds) down.

**RADFORD:** That is because the glass does not have enough anti-glare effect; the light is much brighter in America—New York, for instance, is on the same latitude as Madrid. Interest is growing in developing a glare-reducing glass which is really effective.

**EDITORS:** What is the "heat resistant glass" shown on the drawings?

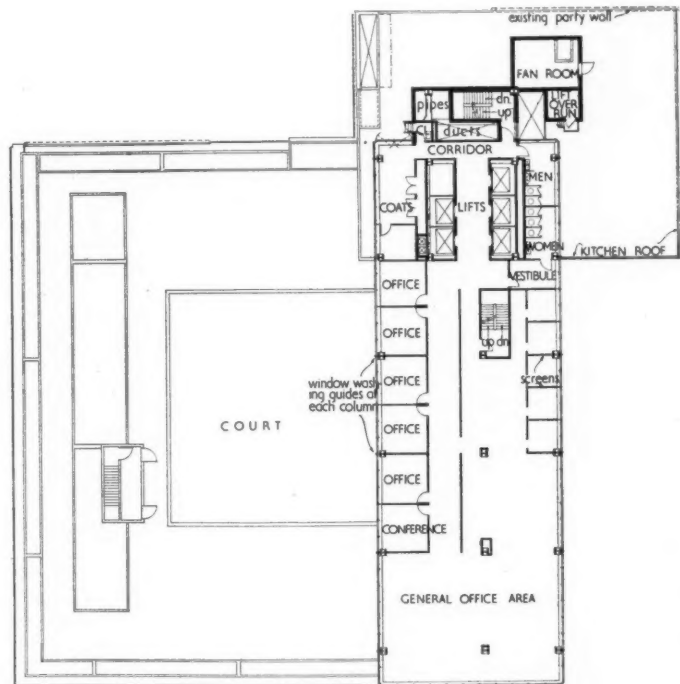
**RADFORD:** There is some component in the glass giving it a greenish colour which reduces penetration of the sun's rays by about 30 per cent. The heat is "still there," and has to be dissipated by the air passing over the surface. The glass also reduces glare to some extent. If the windows are "openable" they have to be of clear glass, because the real light would otherwise show pink.

**BUNN:** We do know about this glass. Few people could afford it as anti-sun glass is so expensive.

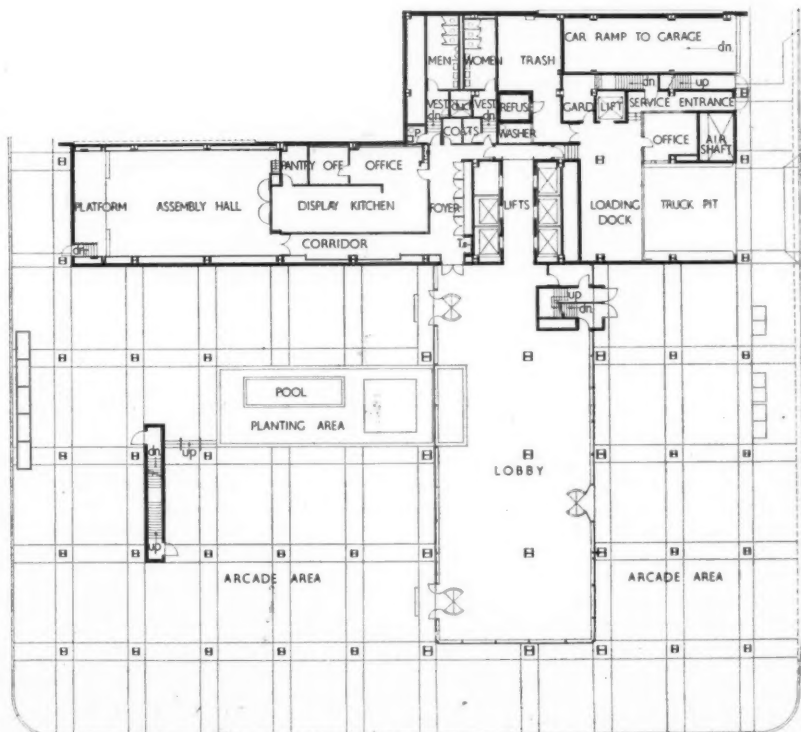
**RADFORD:** In America it is necessary to do a study to balance the cost of the glass against the savings which it may enable in the air conditioning plant, both initially and annually.

**EDITORS:** Why are not more windows arranged so that they can be cleaned from the inside?

**RADFORD:** Air conditioning is the reason in the Lever building...



Upper floor plan



Ground floor plan of Lever House, New York [Scale: 1/4" = 1'0"]

MILLS: ...and they clean the whole exterior face, mullions included.

RADFORD: In non-sealed building the occasional opening of windows for cleaning probably does less harm to the interior climate than the opening by occupants dissatisfied with the temperature. In a sealed building, some device like the suspended "gondola" at Lever has to be used for cleaning. The cost of this device is calculated to be paid for in, I think, about seven years by the saving on the exterior wall, by the reduced heat loss in winter, and faster washing of the building. I believe it takes 116 man hours to clean Lever.

BUNN: Was any particular provision made for the watershed on a building faced with non-absorbent material?

RADFORD: No particular provision was made and it does not appear to have presented any problem.

EDITORS: We understand that on the UN building rain has been blown upwards and has flooded through the weep holes: was there any similar trouble at Lever?

RADFORD: No. Lever was detailed after the UN building and is flashed all round in any case. Lever is on a much less exposed site. There are weep holes—shown on your Working Detail (September 23, 1954)—which are to deal with possible condensation between the glass spandrels and the masonry back-up wall.

TRENCH: Is there any condensation in the building? I thought I saw some when it rained.

RADFORD: I do not know of any. It may occur, as in many air-conditioned buildings, when the change is made from heating to cooling, usually two or three times a year; otherwise humidity control prevents condensation.

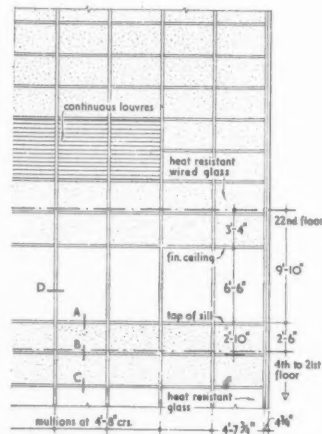
EDITORS: Could you tell us more about the brick back-up wall; why is it necessary?

RADFORD: It is for fire protection. In New York you have to provide 3 ft. of solid construction between each floor and there is a tendency to use upstand beams. I think the reason for the 3 ft. is that flames cannot spread from one floor to the one above further than 3 ft. Lever does have a sprinkler system, by the way.

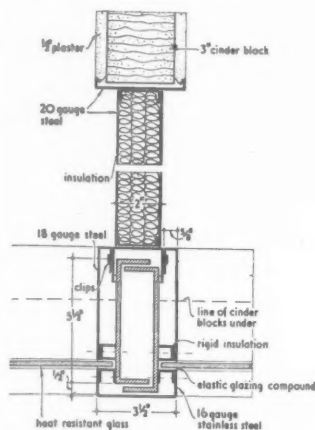
MILLS: On the back of the glass spandrels there is sprayed plastic paint, but I thought the lack of colour here was disappointing. There is too much green.

RADFORD: Skidmore, Owings and Merrill are designing a similar type of building, not in New York, where they are having panels of bright colours, blue, yellow and so on, on the ground floor.

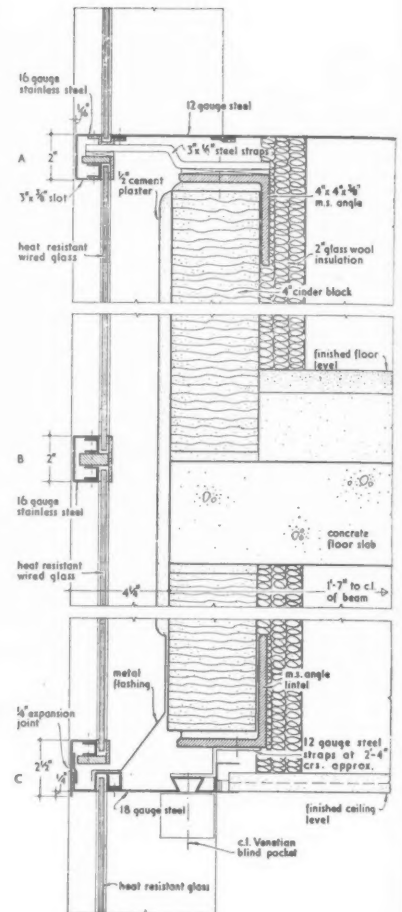
MILLS: It seems that in America there is a tendency to stick to one colour, and at Lake Shore Drive in Mies van der Rohe's



Key elevation of glass curtain wall



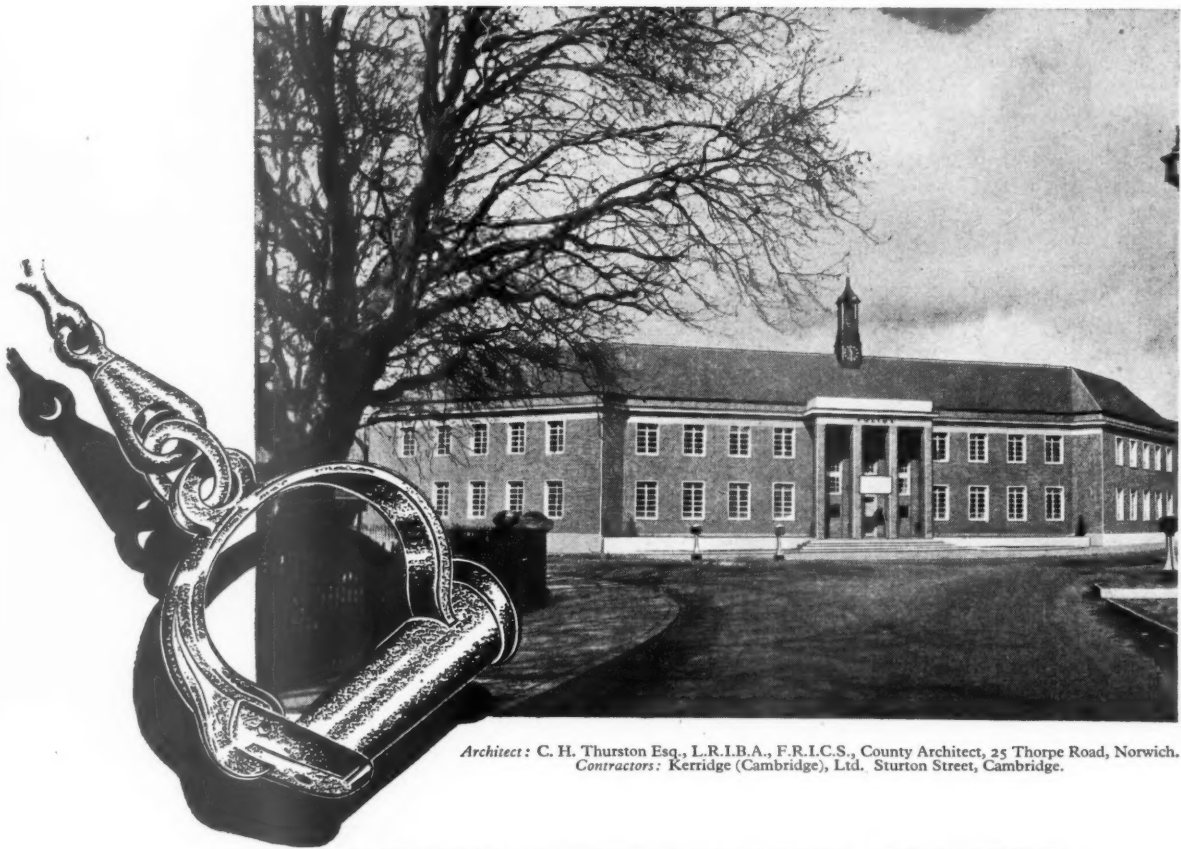
Plan at D



Section through glass curtain wall



Right: interior of one of the private offices. In the centre background is the Waldorf Astoria Hotel.



Architect: C. H. Thurston Esq., L.R.I.B.A., F.R.I.C.S., County Architect, 25 Thorpe Road, Norwich.  
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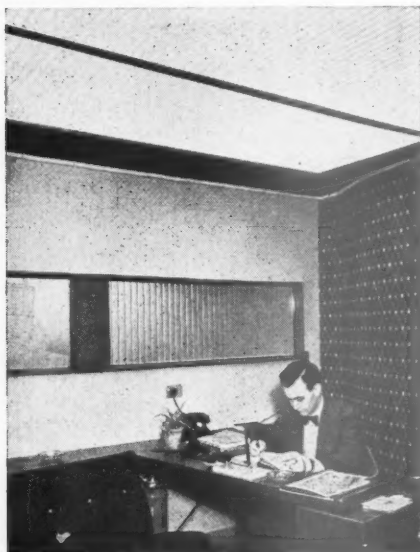


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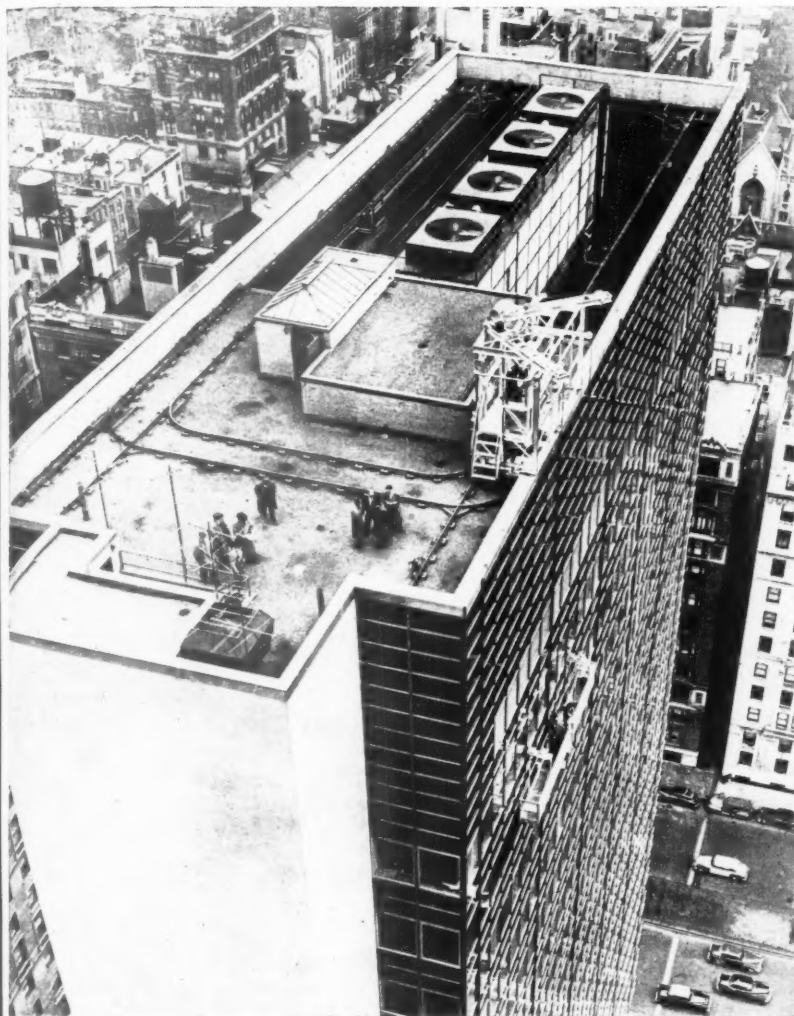
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flats you are not allowed to have coloured curtains.

BUNN: What is the specification of the paint on the glass?

RADFORD: It is a plastic, of the same kind as that used to "mothball" battleships, and has proved satisfactory so far. The idea was to conceal the back-up wall.

## INFORMATION CENTRE

### 9.50 design: general BUILDING ENCYCLOPAEDIA

*The Modern Building Encyclopaedia.* Technical Editor, N. W. Kay. (Odhams Press Ltd. 35s.)

The publication of a new encyclopaedia of Building is an event. To give a notion of the weight of this one: it has "768 pages, over 800 specially prepared drawings, nearly 4,000 entries." It is described in the sub-title as "an authoritative reference to all aspects of the building and allied trades." Thus it is in the nature of a modern counterpart to Gwilt; and though Gwilt describes

the subject of his encyclopaedia as "architecture," the similarity of intention is brought out again by the fact that this work includes the terminology of historic architecture. Indeed, the very first word is "abacus."

Perhaps the most difficult problem the editor had to solve was whether to include trade names. In fact he has included them. This certainly avoids a long winded and pedantic evasion of names which have become—many of them—household words. But it is nonetheless disturbing—to quote one instance wholly at random—to find "Wates house" figuring between "water waste preventer" and "watt." This decision, courageous as it is, renders an already difficult job almost impossible of fulfilment: for a book twice as big could hardly find room for all the entries which have a right to inclusion. The traditional trades seem well covered, new techniques less so. There is no mention, to quote again at random, of the heat pump, daylight protractors, pulverized fuel ash, pitch fibre pipes, shunt (or branched) flues or pop rivets, and a reader wishing to look up

a technical term relating to some recent constructional technique stands a fair chance of being disappointed. On the other hand, the blurb's claim to up-to-dateness is not wholly unfounded. The paragraphs on manufacturing processes seem particularly good, while the inclusion of an illustration of the structure of Worthing Secondary School (which is not yet completed) is a triumph.

Though too many of the line blocks show bad design, the standard of illustrations is high. The standard of the written descriptions is also high, particularly in the longer entries. To sum up, this book is not a classic, though it may yet become one. It contains a mass of useful information. Architects (and we hope there are many of them) who enjoy thumbing aimlessly through this sort of book will keep finding pieces of information which may enlighten them considerably.

### 10.131 design: building types TV STATIONS

*TV Stations.* Walter J. Duschinsky. (Chapman & Hall Ltd., for Reinhold Publishing Corporation, New York. 96s.)

That there should be a call for a book on this subject is explained by the fact that in March, 1953, there were already 143 television stations on the air in America and that the Federal Communications' Commission had provided for a total of 2,053 stations in the US, its territories and possessions. The Reinhold press, therefore, is following up their excellent policy of informing their architect readers about new building types before most of them have been built. This particular work is described as "a guide for Architects, Engineers and Management," and in fact the overwhelming proportion of the subject matter relates to questions which lie outside the traditional architect's "brief." There is, of course, no harm in his learning about them: but if he is to get full value from this book he must be already familiar with the subject.

### 13.125 materials: timber TIMBER TECHNOLOGY

*Timber as a Modern Building Material.* (Special number with series of articles.) (Official Architecture, May, 1955.)

The special number contains a series of articles on timber, each written by a specialist. First is a brief article on the supply situation followed by another on the architect and building in timber. There is then one on the approach to design with especial reference to the Code of Practice and stress grading. Following is a good description of the meaning and importance of moisture content with a table showing moisture movement likely in a large range of woods. An article on plywood includes descriptions of the various types of glue and properties resulting. Another article discusses wood flooring rather briefly but contains some useful lists of suitable woods with some notes on special characteristics of some of them. Finally, there are two brief articles, one a very general one on joinery and the architect, and another dealing with the life of timber in service.

The articles vary individually in the amount of information they contain but the issue as a whole is a useful one, valuable to students and possibly worth filing as an office reference.



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## 14.76 materials: concrete CONCRETE FINISHES

*Concrete Facing Slabs.* J. Gilchrist Wilson. (Cement and Concrete Association. Free.)

An excellent little brochure on concrete slab finishes. Discusses the choice of texture, including a useful guide to scale of texture visible at various distances. "Pattern," as opposed to "texture" is well illustrated by photographs of recent jobs. The brochure then goes on to discuss practical points such as size of slab, the need for reinforcement and methods of fixing. Fixings are very well described and clearly illustrated by diagram and photograph.

An interesting and well illustrated publication.

## 16.116 materials: miscellaneous CHIPBOARD

*Medium Density Resin-bonded Wood Chipboard.* B.S. 2604: 1955. (British Standards Institution, 3s. 0d.)

Specifies requirements for boards made from particles of wood bonded with synthetic resin and/or other organic binders, with density between 40 and 60 lb./cu. ft. for use mainly for building purposes.

Mandatory requirements, defined in terms of an average value and a measure of permissible variation for each property are prescribed for the following properties of  $\frac{1}{2}$ -in. and  $\frac{3}{4}$ -in. boards with a density of between 40 and 60 lb./cu. ft.:

Density  
Transverse breaking load  
Resistance to impact  
Deflection under sustained load and effective modulus of elasticity.

Requirements for dimensions and tolerances, freedom from foreign particles, moisture content, thermal conductivity and surface spread of flame, are also specified.

The standard envisages the use of the B.S.I. Certification Mark with verification of compliance based on the use of quality control charts.

## 19.182 construction: details WINDOWS

*Wood Surrounds for Metal Windows and Doors.* BS. 1285: 1955 (British Standards Institution, 2s. 6d.)

Revised edition for use with metal doors and windows conforming to BS. 990. Now permits use of mortice and tenon joints for the angle joints. Note several alternative sections of sill are approved.

## 22.75 sound: insulation-acoustics SOUND REDUCING DOORS

*Sound Reducing Doors.* M. Rettinger. (Progressive Architecture, April 4, 1955.)

This is an article by a technical expert on the subject. A limited amount of practical information is given.

The fundamental design data for highly sound-resisting doors are well presented, together with figures to show why sealing is of such importance. Architect readers will probably find themselves wishing for some guidance on how to decide what degree of sound insulation should be aimed for. Unfortunately little is said on this. Some details are given of a two skin type door suitable for film studios. This employs well-known principles of sound insulation, but it is disappointing to note that although thin lead has been used in its construction it is employed in such a way that any advantage in the form of enhanced insulation due to the lack of stiffness of this material is not realized.

The information on door seal details is mostly familiar. It would be refreshing to see something really novel which would allow for that frequent practical defect, a badly warped door, and still work reasonably well.

## 23.209 heating: ventilation INTERNAL BATHROOMS

*Internal Bathrooms and Water Closets with Natural Ventilation.* J. B. Dick and G. D. Marsh. (RIBA Journal, April, 1955.)

There is a fairly widespread belief that in this country internal bathrooms and W.C.s are only permitted if ventilated by mechanical means. In fact, the Model Byelaws do not stipulate the ventilation requirements for bathrooms except where gas water heaters are used and for W.C.s the Byelaws allow either mechanical or other means, provided the rate of air change is at least three per hour. This paper describes some of the advantages to be obtained from the use of internal rooms for baths and W.C.s and then discusses methods of ventilation by natural means.

Two main types of natural ventilation can be used. One relies on wind pressure and uses mainly horizontal ducts with inlet and outlet on different sides of the building, while the other uses the stack effect of vertical ducts. General design problems are discussed and reference is made to various continental examples and regulations.

Useful guidance is given on duct sizes and an appendix deals with the design wind speeds for horizontal duct systems and design temperature difference for vertical stack systems.

A useful contribution to knowledge which should assist in bringing economies in planning and reduction in frost troubles with plumbing. It is to be hoped that Local Authorities will accept some systems designed on the lines indicated in this paper and that someone will watch and report on the functioning of the early examples, as at present there is bound to be a certain amount of sales resistance to systems which may, at first sight, appear to be similar to the notorious foreign examples of "bad plumbing," although such bad examples probably would not conform in any way with the design principles outlined in this paper.

## 24.192 lighting LIGHTING

*Modern Fluorescent Lighting* by A. D. S. Atkinson. (George Newnes Ltd., 1955. 15s. net.)

This book is a revised version of an earlier edition by the Technical Editor of the Lighting Service Bureau. For those interested in hot cathode fluorescent lighting it is a useful and comprehensive review of current information. More information might have been included on cold cathode lamps, however, and there seems a tendency on the part of the author to play down this form of fluorescent lighting. In addition to notes on fundamental illumination design and detailed information on the operation and character of hot cathode lamps, the book contains a lengthy chapter on their application. This section is probably of most direct interest to architects, but many of the illustrations of typical installations are far from inspiring. There are certain omissions, for instance, in the comparison between the annual cost of filament and fluorescent lamps, maintenance costs are

ignored, wattage lost in the control gear is not explained or discussed in Chapter I although it is included in the economics equation and given in the table on page 149. In the section on colour the inclusion of a luminosity diagram for ordinary filament lamps would have made a useful comparison with the diagrams for various fluorescent lamps. There appears to be some confusion in the section on glare inasmuch as the numerical glare ratings at the end of this section relate to Hopkinson's data and not to Ward Harrison's formula. Appendix VII gives an interesting table showing the preferred colour of light for the display of various goods. There is a useful index.

## 25.113 water supply and sanitation UNDERGROUND PLUG COCKS

*Underground Plug Cocks for Cold Water Services (Scottish Type).* BS 2580: 1955 (British Standards Institution, 2s. 6d.)

Plug cocks used by various water authorities in Scotland were similar but differed in minor ways sufficiently to make interchangeability and stock-keeping tiresome. This BS should do a useful job in obviating this nuisance. It deals only with half-inch, three-quarter inch and one-inch sizes, operated by a key.

## 25.114 water supply and sanitation MIXING VALVES

*Mixing Valves (Manually Operated) for Ablutionary and Domestic Purposes.* BS 1415: 1955 (British Standards Institution, 2s. 6d.)

Apart from standardizing the sizes and quality, this BS contains a useful foreword in which it is pointed out that mixing valves must not be connected to a mains supply and also that difficulties arise if pressures are uneven, either because of hot and cold tanks being on very different levels or because of other connections permitting a sudden demand elsewhere to rob one of the supplies. Check valves and reducing valves are not regarded as a cure for such conditions.

## 26.116 services and equipment: miscellaneous REFRIGERATORS

*Refrigerators.* (Electrical Review, April 8, 1955.)

List of manufacturers of electric refrigerators for domestic use with details of type, size, shelf areas, etc., electric loading, type of finish, basic price and purchase tax. Many of the models are illustrated. A useful consolidated list especially for reference to dimensions.

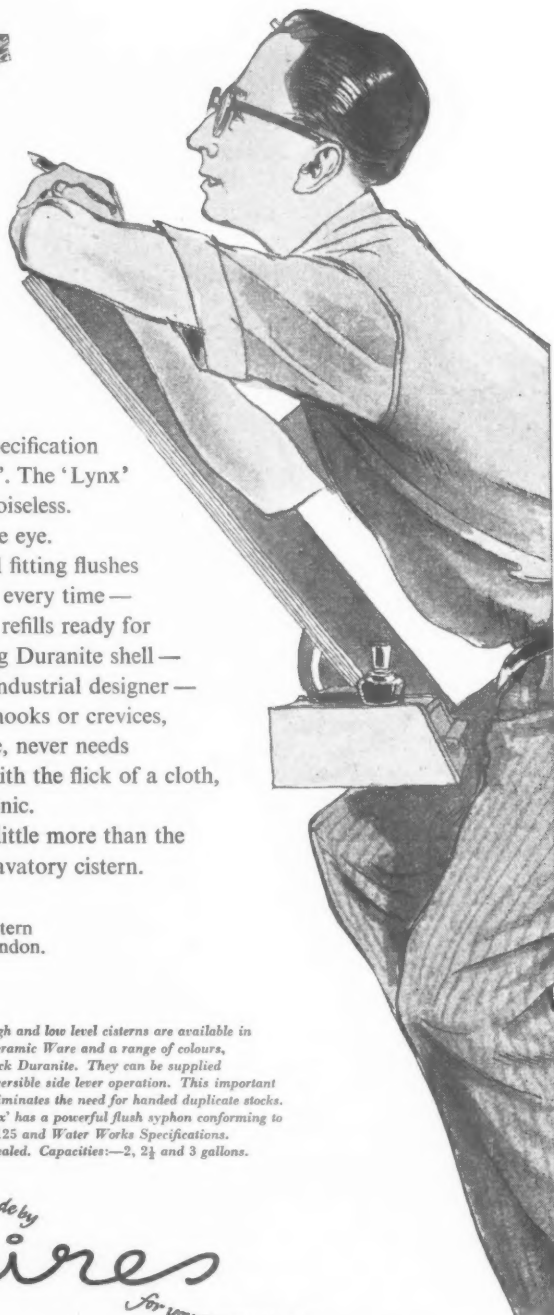
## CLASSIFICATIONS

1. Sociology. 2. Planning: General. 3. Planning: Regional and National. 4. Planning: Urban and Rural. 5. Planning: Public Utilities. 6. Planning: Social and Recreational. 7. Practice. 8. Surveying and Specification. 9. Design: General. 10. Design: Building Types. 11. Materials: General. 12. Materials: Metal. 13. Materials: Timber. 14. Materials: Concrete. 15. Materials: Applied Finishes and Treatments. 16. Materials: Miscellaneous. 17. Construction: General. 18. Construction: Theory. 19. Construction: Details. 20. Construction: Complete Structures. 21. Construction: Miscellaneous. 22. Sound Insulation and Acoustics. 23. Heating and Ventilation. 24. Lighting. 25. Water Supply and Sanitation. 26. Services and Equipment: Miscellaneous. 27. Furniture and Fittings. 28. Miscellaneous.





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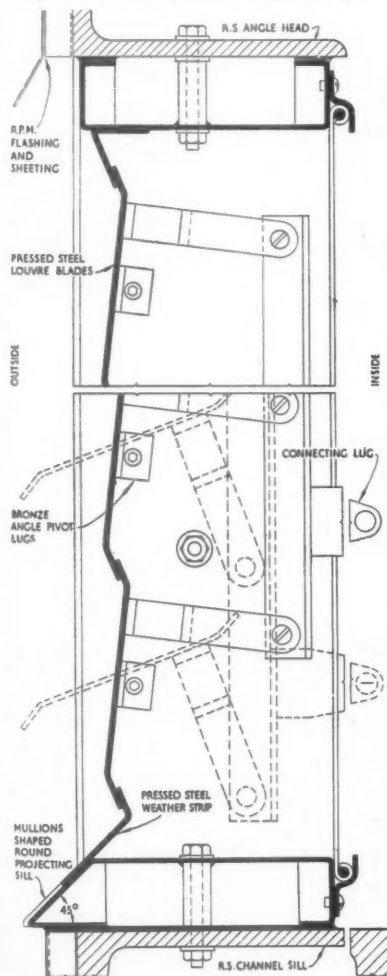
## THE INDUSTRY

*Brian Grant reports on some metal windows and doors, walling blocks, a range of kitchen cabinets, flush and surface mounting sockets, a two-way ventilating fan, two panel heaters and electrical ducting.*

### METAL WINDOWS AND DOORS

The Morris Singer Company has recently issued a remarkably well illustrated book on the design and treatment of metal windows and doors. The jobs described vary from churches to factories, schools, hospitals, railway signal boxes and power stations, and include sliding and folding windows, lay-lights, fixed and adjustable louvres, swing doors and draught screens. Each job is well illustrated with photographs and also has clear and informative constructional drawings. This is an excellent publication which many draughtsmen and architectural students

*Adjustable course from Morris Singer catalogue.*

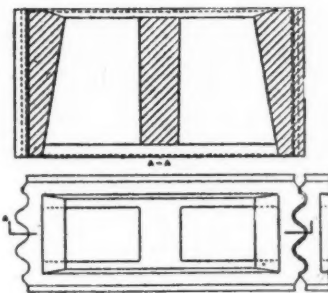


will find very well worth keeping. (*The Morris Singer Co. Ltd., Ferry Lane Works, Forest Road, Walthamstow, London, E.17.*)

### PULVERIZED FUEL ASH BLOCKS

The sketch on the right shows a plan and section of the Melfil walling block which is made from pulverized fuel ash. An almost unlimited quantity of this material is available from power generating stations, where large quantities of it have to be disposed of every year as a waste product.

Erection is simple, as the blocks are interlocking and are assembled one on top of the other without bonding, the cavities then being filled with concrete to meet the loading requirements of the appropriate Code of Practice. The blocks weigh 30 lb. each and can be laid very quickly, one tradesman and two labourers, for example, having laid, but not filled, 25 sq. yds. of walling in less than 20 minutes. Vertical reinforcement can be placed in the cavities if necessary and the filling of them is extremely easy and lends itself very well to mechanization. Pulverized fuel ash has excellent heat insulation properties and the blocks themselves hold nails well, though any nails should be used either at the centre or at the ends of the block and avoiding the cavity. (*Refcon Structures Ltd., Tavistock House South, Tavistock Square, London, W.C.1.*)



*Plan and section of the Melfil walling block.*

shelved end and corner units, cover strips for sealing the gaps between units, and a range of taps, mixing valves, under-sink bucket fillers, and cutlery containers for drawers or wire baskets for the inside of cabinet doors. (*C.S.A. Industries Ltd., Warwick.*)

### 13-AMP. SOCKETS

Messrs. Crabtree have just announced a new range of flush and surface mounting sockets to BS.1363. These are produced in brown and cream, and in metal plate units with a variety of finishes. These units are designed to harmonize with the Lincoln range of Type AC switches, and switched or plain sockets are produced as well as twin socket units, which should be useful where installation costs must be kept low. Plenty of space is available for wiring, an important point when most sockets are installed near floor level. (*J. A. Crabtree & Co. Ltd., Lincoln Works, Walsall, Staffs.*)

### TWO-WAY VENTILATING FAN

Small extract fans, generally designed for fixing direct in window glazing, were introduced in about the mid 1930's, I think by Vent-Axia. Since that date a number of other models have been introduced, for use either as inlet or as extract fans. Now Colt Ventilation Ltd. have produced a "Two-Way" fan which not only extracts stale air, but replaces it with air from outside the building, all by means of a single motor and fan.

The unit is spherical in shape and the axis of the fan and motor is parallel to the window glass. The unit is divided into an

### KITCHEN CABINETS

A new range of kitchen equipment known as the Anemone has been introduced (at the BIF) by the makers of the English Rose range.

The cabinets are made in zinc coated steel sheet, while sink units and draining boards are in stainless steel or vitreous enamel. Work tops are in stainless steel or Formica, and all cabinets are otherwise finished in stove enamel. White and cream are the standard colours, and doors and drawers can either match these two colours or can be supplied in a choice of five different colours, a similar range of colours also being available in the Formica tops.

Dimensions are to BS and are based on the 21in. square plan, with either 42- or 63-in. wide sink units, and a standard work top height of 36 in. Wall mounting cupboards are also produced, as well as

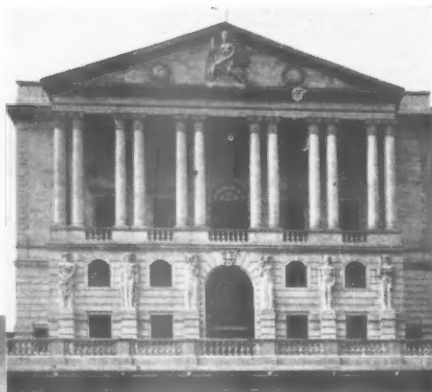
*Below, the Crabtree switch socket. Below right, the Colt "Two-Way" ventilating fan.*



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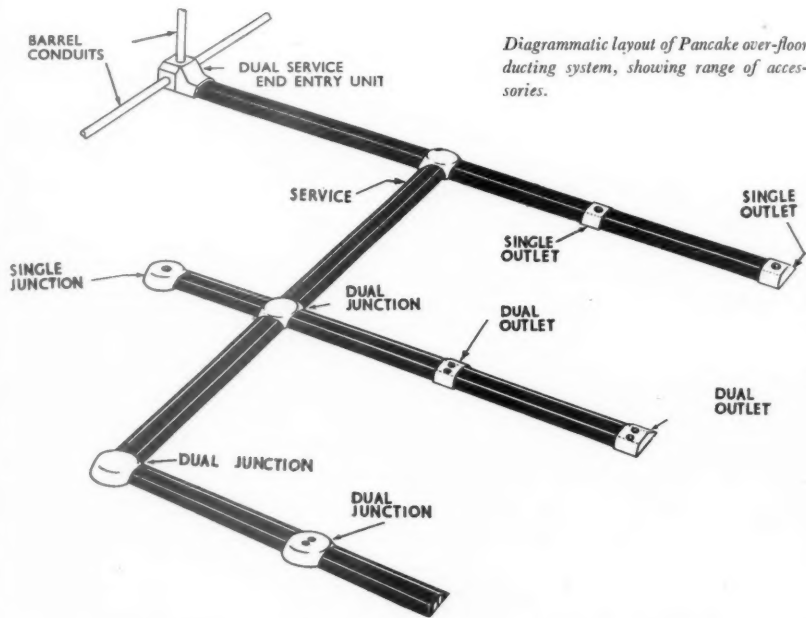
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Diagrammatic layout of Pancake over-floor ducting system, showing range of accessories.

upper and a lower half by a diaphragm (leaving a space for the fan) and the various inlets and outlets are arranged so that the bottom half of the fan works as an inlet and the upper half as an extract, the incoming air being discharged downwards and sideways, and the stale air extracted at the comparatively high level of the fan, so that there is little danger of fresh air being sucked straight out again. (Colt Ventilation Ltd., Surbiton, Surrey.)

#### PANEL HEATING

A new type of towel ailer has been produced by Panel Heaters Ltd. (77, Dean Street, London, W.1) and is claimed to be safe even without an earth wire. The heating element is a graphite-impregnated sheet which is encased between two panels of stove-enamelled hardboard with an insulated surround. Surface temperature is about 140 degrees F. and a 3-ft. by 1-ft. model has a loading of 200 watts. Price is £7 10s. including p.t.

The Hedin panel heater (Hedin Ltd., Commerce Estate, South Woodford, London, E.18) is suitable for large buildings as well as for private houses. In this model the heating element is an asbestos-woven mat which runs at black heat and is vitreous enamelled either grey or cream. The back of the panel is insulated to prevent heat loss and fittings are provided for overhead suspension or wall fixing. Panel dimensions are 10½ by 22½ in. and the electrical loading is either 1 or 1½ kilowatts. Price is £7 3s. 8d. including p.t.

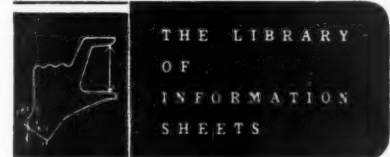
#### ELECTRICAL DUCTING

In most new office buildings, power and other electrical services are distributed by means of underfloor ducts. This is a perfectly satisfactory arrangement in new buildings, but is prohibitively expensive to install in existing work. Hence a new type of overfloor ducting known as Pancake. This consists of a rectangular steel duct (zinc coated) 1 in. wide and ½ in. deep,

which is laid on top of the floor and contains the wiring. The ducting is enclosed throughout its length by a specially shaped capping made of hardened rubber: this capping also incorporates a steel reinforcing strip which covers the channel of the ducting so that the wiring is completely

boxed in steel. An adhesive is used to fix this capping to the floor and makes the ducting dust- and water-proof. Single or twin electrical outlets are standardised and the ducting can be divided by steel fillets so that low tension services such as telephones and bells can be laid in the same duct as light and power services.

It must be admitted that this form of ducting offers a certain amount of obstruction in that it stands proud of the floor, but in large offices where all ducts cannot be placed against a wall it is almost certainly preferable to a death trap of trailing telephone and lighting flexes. (Channel Conduits Ltd., 11, Victoria Street, London, S.W.1.)



#### 12.F1, 19.Z10 REFERENCE BACK

12.F1 published 8.3.51 is cancelled and should be withdrawn from the Library. The publication of a new series on asphalt begins in this issue with a general data sheet which takes over the classification number 12.F1.

19.Z10 published 14.6.51 is also cancelled: it is replaced by 19.Z10 published in this issue.



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## Buildings Illustrated

Hotel Leofric, Broadgate, Coventry, for Ravenscroft Properties Ltd. and Ind Coope & Allsopp Ltd. (Pages 811-826.) Architects, W. S. Hattrell & Partners; assistants, G. W. Hammond, A.R.I.B.A. (architect in charge), F. R. Mutch, Dip. Arch. (Nottm.), A.R.I.B.A., J. Siedlecki, Dip. Arch. (Leics), J. A. Metcalf, Student R.I.B.A., and R. E. Eckersley, in collaboration with W. J. Witham, A.R.I.B.A., Chief Architect, Ind Coope & Allsopp Ltd., assistants, A. G. Drew, D.A. (Edin.), A.R.I.B.A., B. R. Davis, B.Arch. (Liv), A.R.I.B.A., D. M. Rickard, Dip. Arch. (Shef.), A.R.I.B.A., R. L. G. Carter, Des. R.C.A., Consultants (special bedrooms), Ward & Austin (Neville Ward, B.Arch., A.R.I.B.A., F.S.I.A., Frank Austin, F.S.I.A., Mary Ward, B.Arch., A.R.I.B.A.), (private dining room), Dennis Lennon, M.C., A.R.I.B.A., (reinforced concrete frame, heating, ventilation and electrical installations), Sir Robert McAlpine & Sons Ltd., quantity surveyors, Burley Lane & Partners; General Contractors, Sir Robert McAlpine & Sons Ltd. Sub-contractors: dampcourses, Altrinda; asphalt, roofing felt, weatherproofing material, Ragusa Asphalte Paving Co. Ltd.; bricks, Blockleys Ltd.; stone, C. S. Ormerod Ltd.; Hornton Quarries Ltd.; artificial stone, Empire Stone Co. Ltd.; structural steel, Somerville Barnard Construction Co.; Steel Decking Roof, D. Anderson & Son Ltd.; tiles, tiling, Coventry Tile Co. Ltd.; special roofings, Ragusa Asphalte Paving Co. Ltd., Everseal Products Ltd.; Glass (Coventry) Ltd.; patent glazing, Standard Patent Glazing Co. Ltd.; wood-block flooring, Horsley Smith & Co. (Hayes) Ltd.; patent flooring, Francis Morton & Co. Ltd., Korkoid Decorative Floors, Coventry Tile Co. Ltd.; suspended insulation board ceilings, Peters Contractors; acoustic tile ceilings, H. W. Cullum & Co. Ltd.; central heating, gas fitting, boilers, ventilation, Matthew Hall & Co. Ltd.; electric wiring and fixtures, Troughton & Young Ltd.;

stairtreads, Ferodo Ltd.; door furniture, Dryad Metal Works Ltd., James Gibbons Ltd.; casements, window furniture, Stelwin Construction Ltd., James Gibbons Ltd.; telephones, Standard Telephones & Cables Ltd.; roller shutters, Dennison, Kett & Co. Ltd.; plumbing, J. S. Wright & Co. Ltd.; refrigeration, J. & E. Hall Ltd.; sanitary fittings, Sorby & Foster; traps and preformed plumbing units, Econa Modern Products Ltd.; Kitchen Equipment, Carron Company; Silver Grill, Benham & Sons Ltd.; meteorological instruments, Negretti & Zambra Ltd.; laundry equipment, Manlove, Alliott & Co. Ltd.; sliding folding screen, Esavian Ltd.; pneumatic tube system, Dart Cash Carrier Co. Ltd.; sun blinds, London Blinds; venetian blinds, Ordish & Hall Ltd.; balustrading, Bayliss, Jones & Bayliss Ltd.; pavement lights, J. A. King & Co. Ltd.; plaster, decorative plaster, Clark & Fenn Ltd.; metalwork, Harris & Sheldon Ltd.; joinery, Samuel Elliott & Sons (Reading) Ltd., Glisten Doors Ltd., Harris & Sheldon Ltd., Gaskell & Chambers Ltd., Heal's Contracts Ltd., Shapland & Pether Ltd.; stonework, marble, C. S. Ormerod Ltd.; wallpapers, Cole & Son (Wallpapers) Ltd., John Lines & Sons Ltd., J. R. Lee; furniture, Kingfisher Ltd., Buoyant Upholstery Co. Ltd., Loughborough Cabinet, Conran Furniture Ltd., L.M. Furniture; kitchen ventilating hoods, Westwood; hotel fittings, Harris & Sheldon Ltd., Gaskell & Chambers Ltd., Heal's Contracts Ltd.; television service, E.M.I. Sales & Service Ltd.; carpets, S. J. Stockwell (Carpets) Ltd., T. F. Firth & Sons Ltd.; clocks, International Business Machines; water supply, J. S. Wright & Co. Ltd.; signs, Oldham Sign Service Ltd.; water softening plant, Permutit; paint, Leyland Paint & Varnish Co. Ltd.; terrazzo work, Art Pavements & Decorations Ltd.; adhesive for wall tiles, Minnesota Mining and Manufacturing Co. Ltd.; curtain material, Heal's Contracts Ltd., Anslows; fabrics, Tibor Ltd.; leather-cloth, Imperial Chemical Industries Ltd.

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Architects { W. S. Hattrell & Partners, F/A.A.R.I.B.A.  
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# ZINC WEATHERINGS

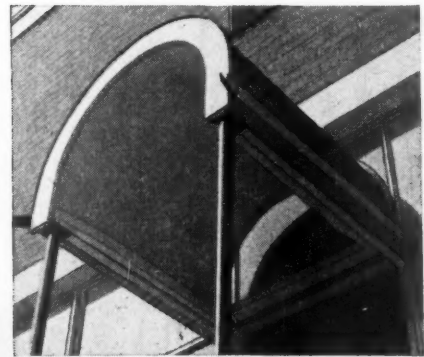


*House at Kensington. Architects: Leonard Manasseh & Partners.*

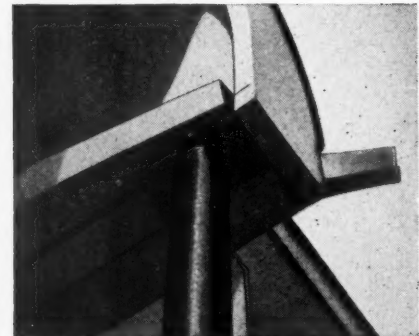
In this house, contemporary design fits snugly into a Kensington background. It also illustrates some interesting uses of zinc—to cover the neat porch hood, and as weatherings for window sills and roof verge. For weatherings, zinc is easy to fix and rigid, and prevents staining of wall surfaces.

From roof to foundation, zinc has vitally important uses in contemporary building—for gutters, pipes, weatherings, flashings and hoods. And there are now no restrictions on its use. Supplies are plentiful, and likely to remain so. The price of zinc has dropped considerably, and it is now one of the cheapest permanent materials.

The Zinc Development Association is a non-trading body which is always prepared to give technical help to potential users. Publications, together with lists of stockists of all zinc building materials and of firms specialising in zinc work, are freely available.



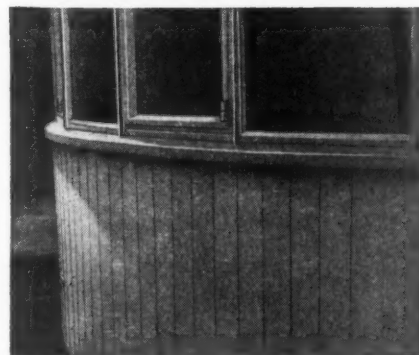
*Porch with zinc covered hood.*



*Detail of porch hood, showing gutter.*



*Zinc weathering on window sill.*



*Weathering to curved sill of bay window.*

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# Emergency Lighting

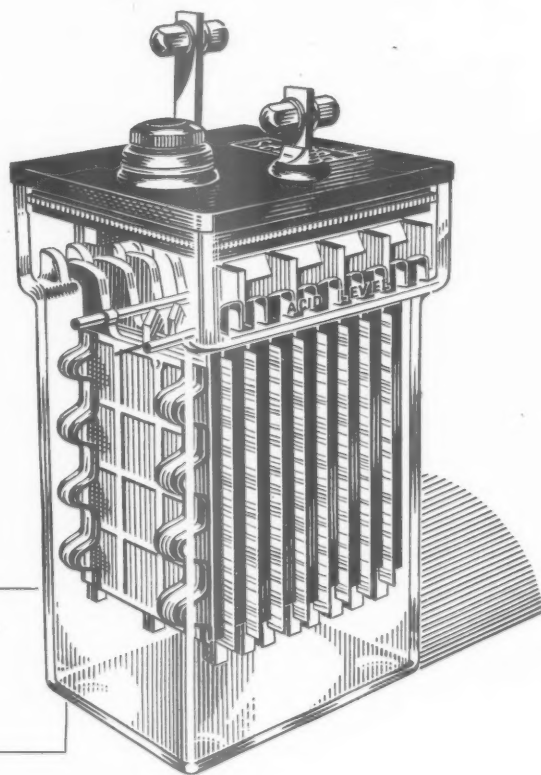
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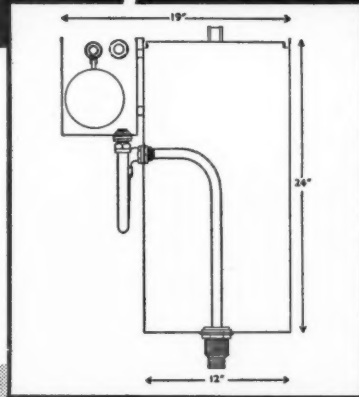
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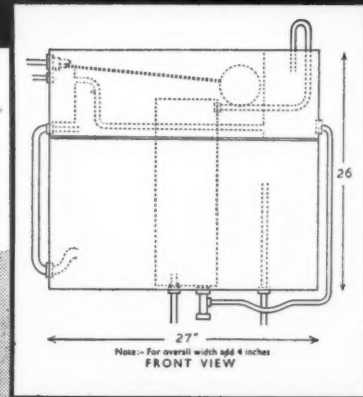


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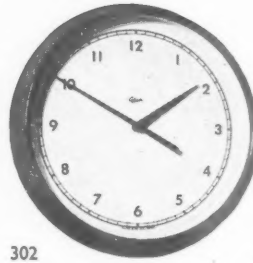
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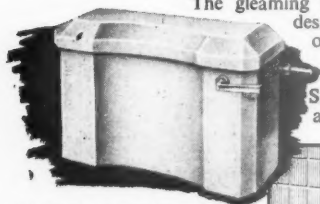
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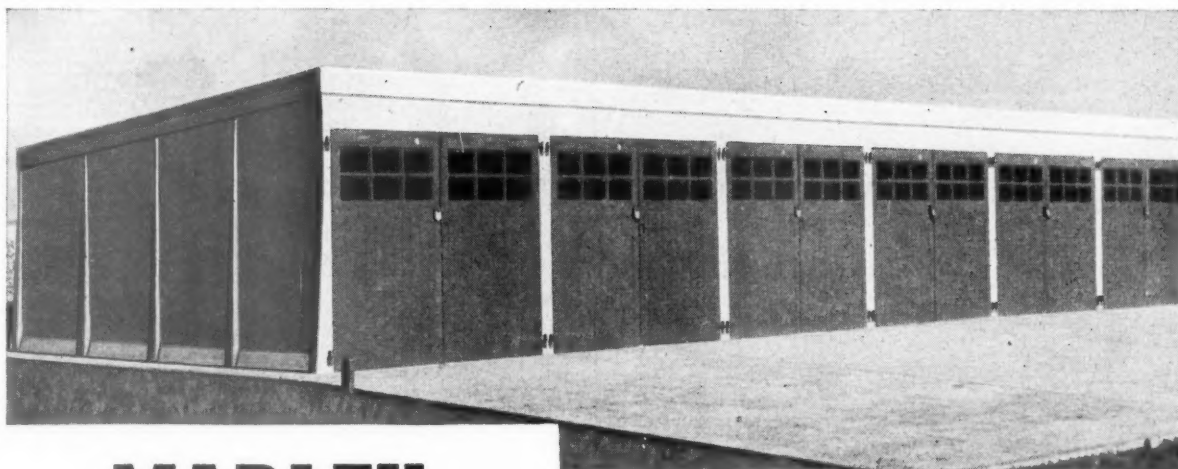


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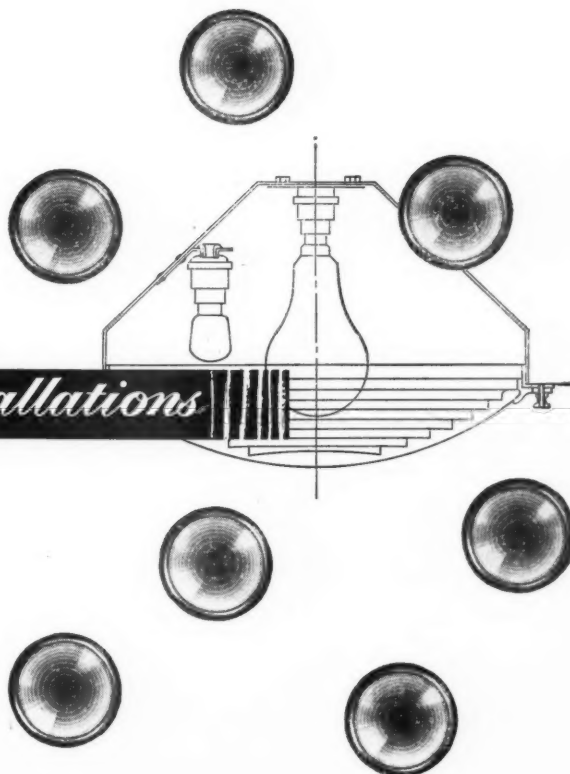
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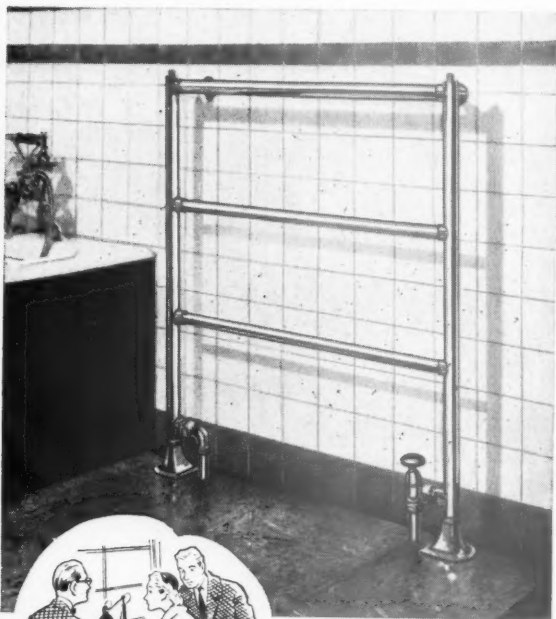
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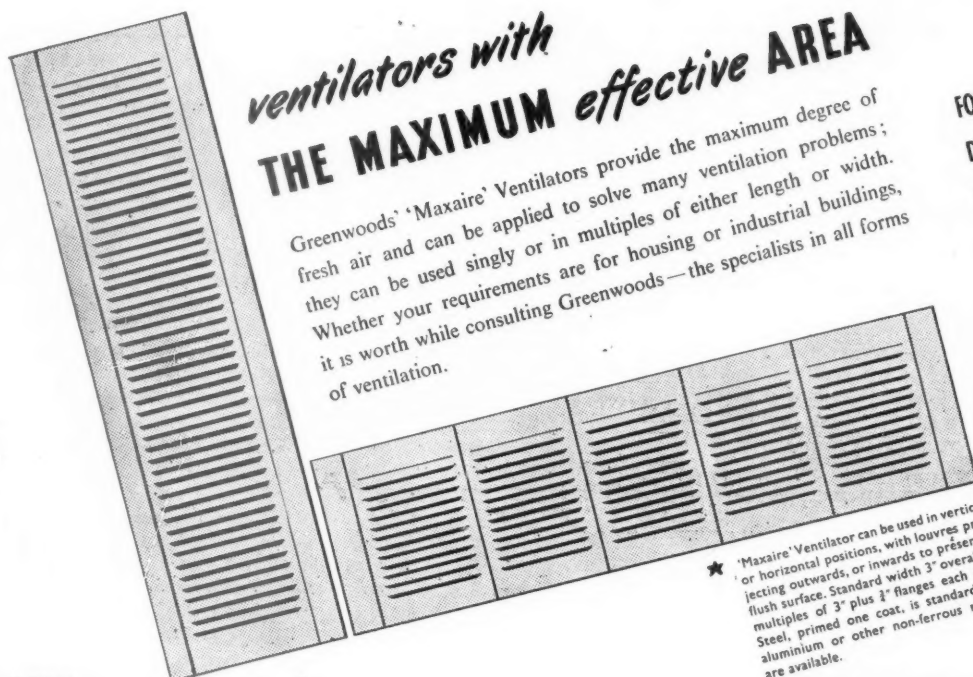
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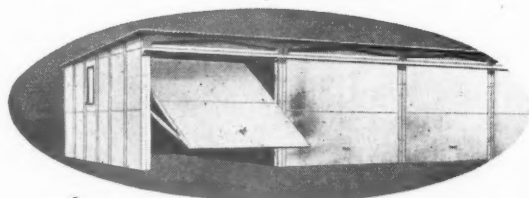
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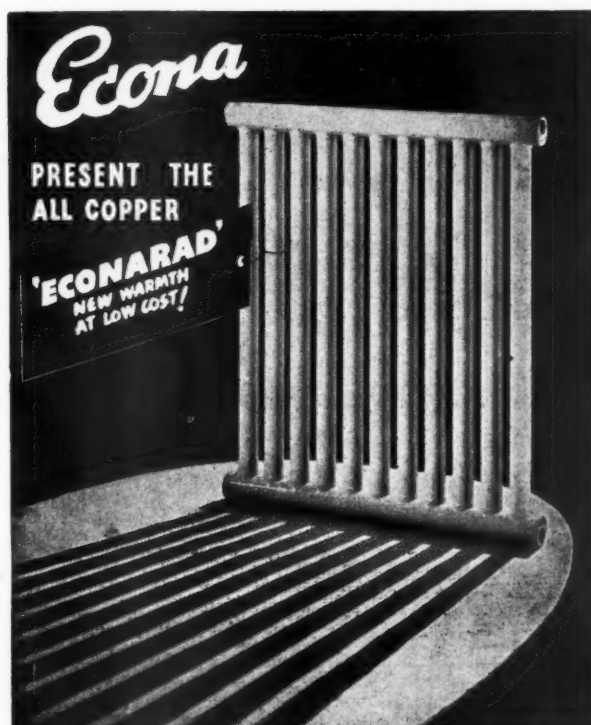
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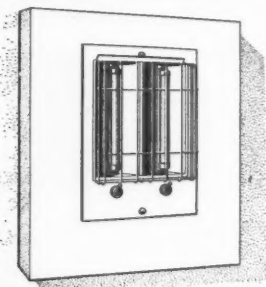
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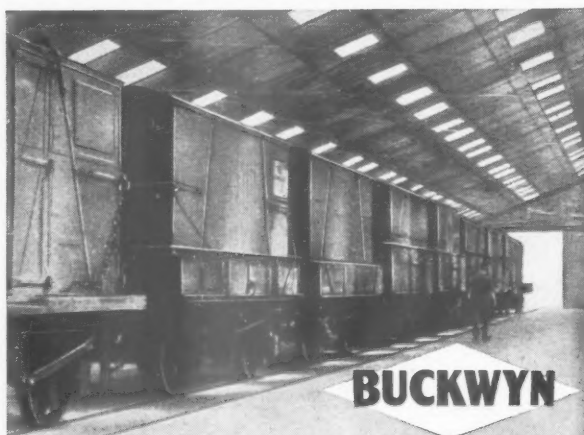
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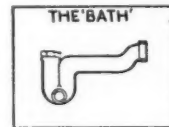
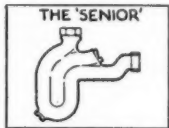
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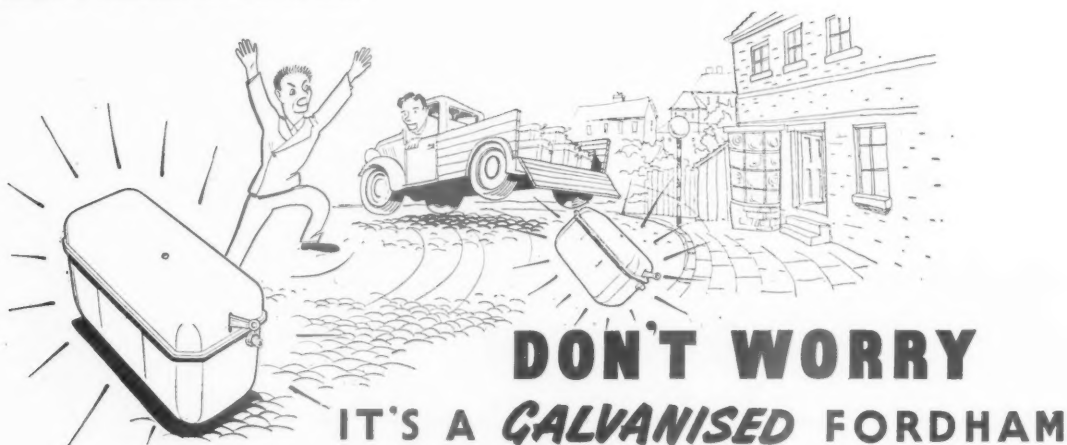
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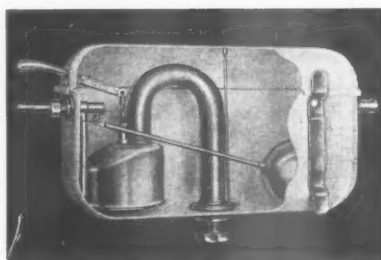
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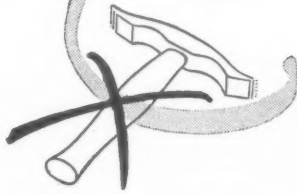
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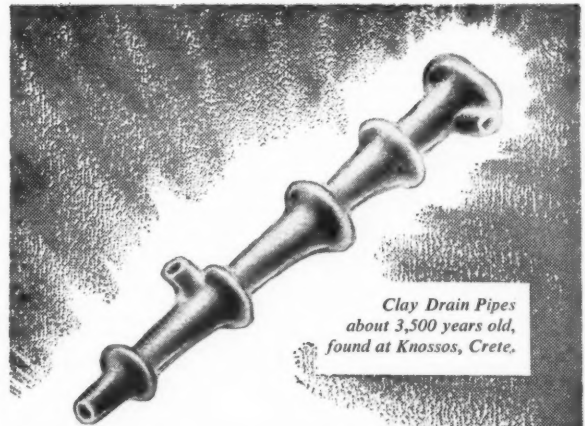


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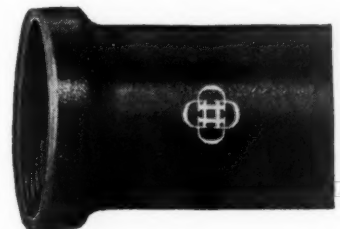
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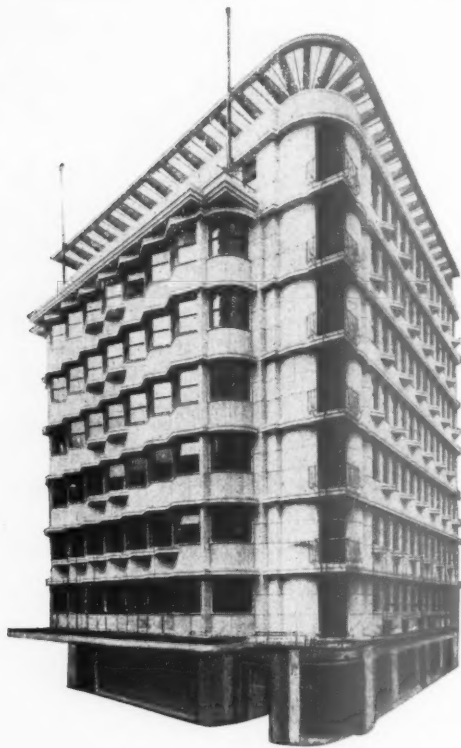
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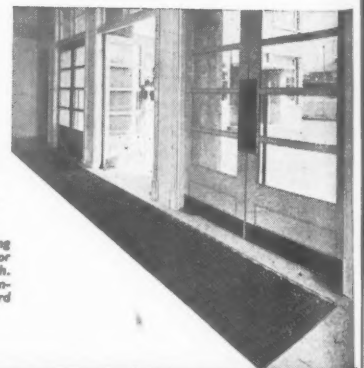
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Left: NUWAY matting protecting the highly polished parquet floor at Bridleway School, Redditch, Worcestershire Education Committee. Architects: Richard Sheppard & Partners, London.



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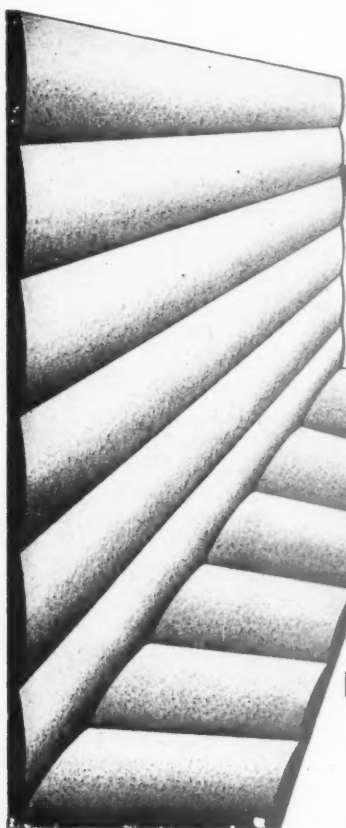
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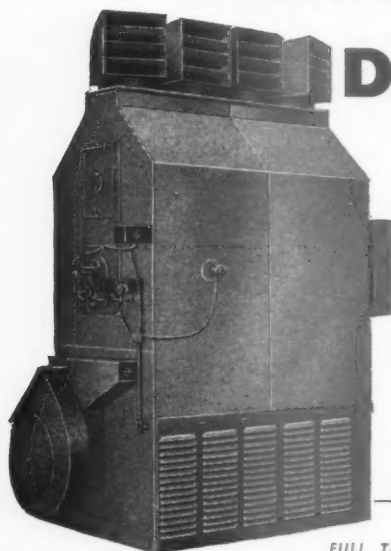
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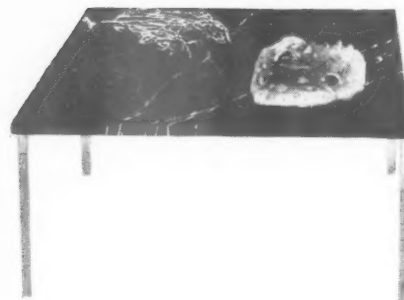
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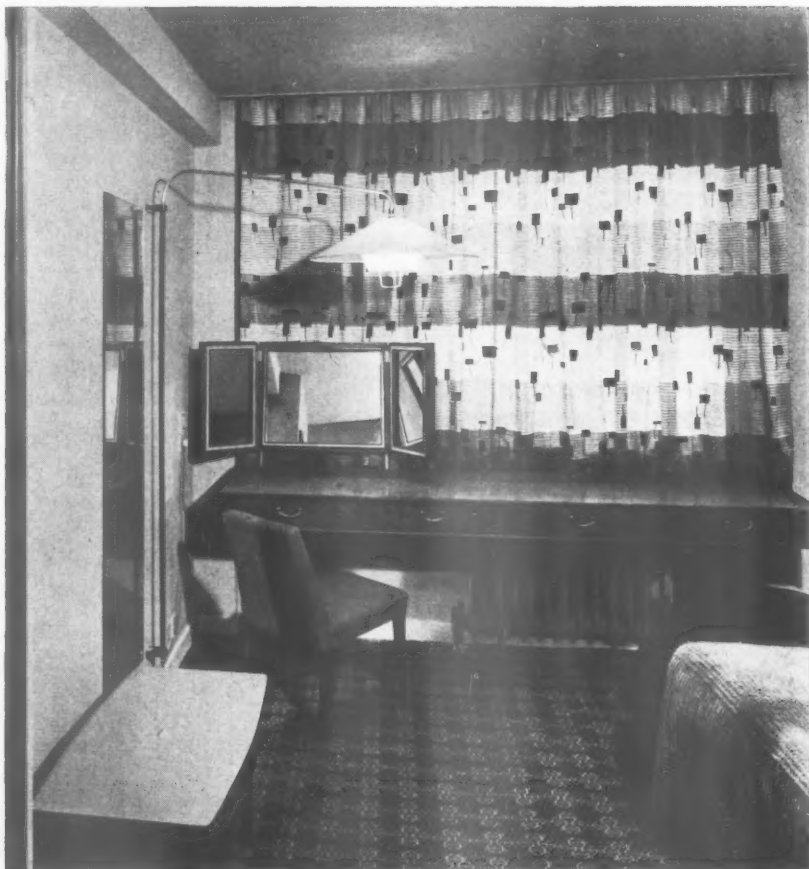
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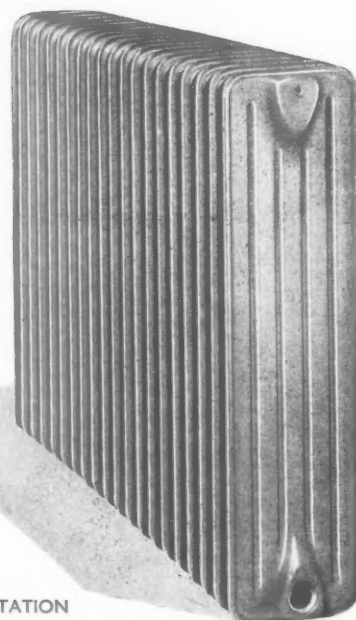
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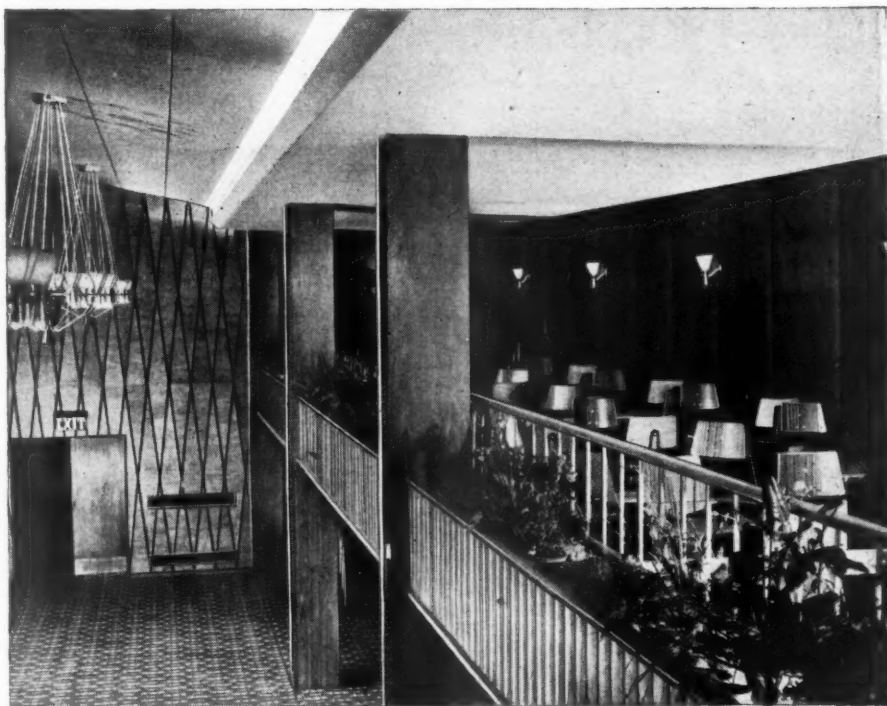
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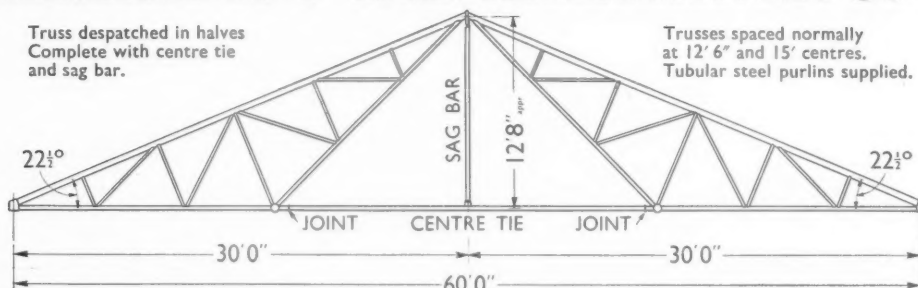
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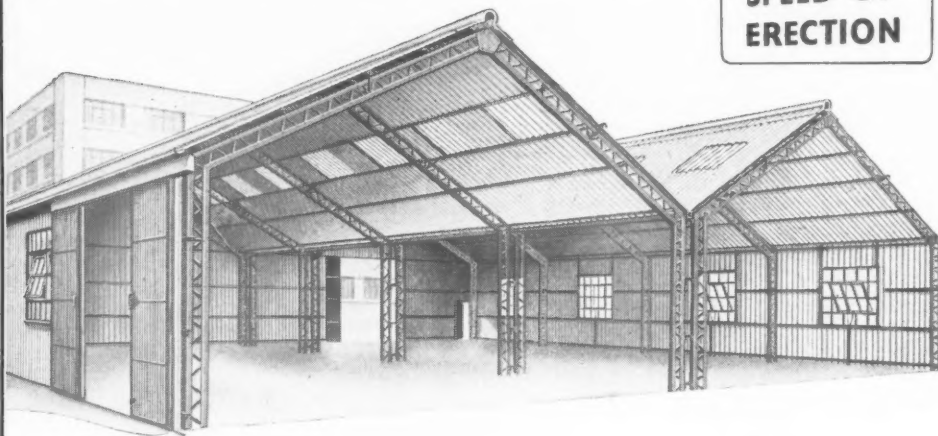
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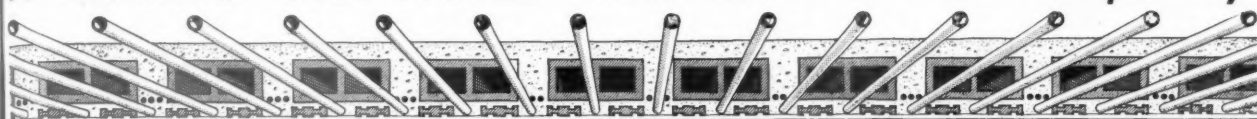
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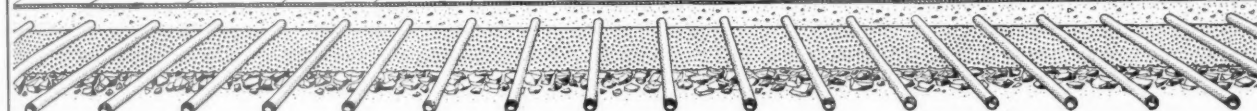
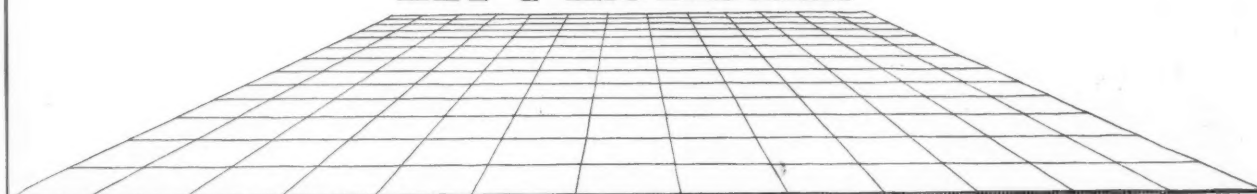
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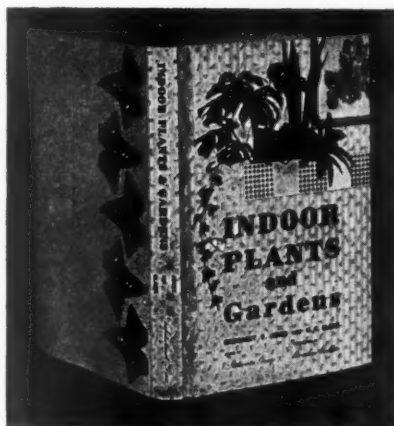
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#### APPOINTMENT OF THIRD ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department. The salary will be in accordance with the special grade for qualified assistants (£650-£775) of the National Joint Council's Scale and the following conditions:—

1. N. J. C. Conditions of Service.
2. Local Government Superannuation Acts, for which purpose the selected candidate will be required to pass a medical examination.
3. Residence within the Borough.

Applicants should have passed the Final Examination of the R.I.B.A. or equivalent examination.

A house on service tenancy agreement is available.

Applications stating age, qualifications, present appointment and salary, previous appointments and experience, together with the names and addresses of not more than three referees should be sent to the Borough Engineer and Surveyor, Carr Bank, Mansfield, and should be endorsed "Third Architectural Assistant." Closing date 27th June, 1955.

A. C. SHEPHERD,  
Town Clerk.

1307

### WARWICKSHIRE COUNTY COUNCIL.

#### ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) **SENIOR ASSISTANT ARCHITECTS**, grade A.P.T. IV (£675-£825).

(b) **ASSISTANT ARCHITECTS** (scale £650-£775).

(c) **ARCHITECTURAL ASSISTANTS**—grade A.P.T. II (£560-£640).

(d) **QUANTITY SURVEYING ASSISTANT**, grade A.P.T. I-II (£500-£640).

(e) **CLERKS OF WORKS** (resident) salary £14 per week. To supervise the erection of new school buildings.

The commencing salary for (a) (b) (c) and (d) can be within the grades according to ability and experience of the applicants. All appointments are subject to the provisions of the Local Government Superannuation Acts 1937-53. Applicants for (a) and (b) should have passed the final examination of the Royal Institute of British Architects or possess some other similar qualification.

Applications to be on forms which can be obtained from G. R. BARNESLEY, F.R.I.B.A., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,  
Clerk of the Council.

Shire Hall,  
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26th May, 1955.

1257

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

There are vacancies on the permanent staff for:—

(a) **ASSISTANT ARCHITECTS** (£675-£825 and £650-£775).

(b) **ARCHITECTURAL ASSISTANTS** (£500-£640).

Plus London Allowance.

For posts (a) applicants should be A.R.I.B.A. or Registered Architect; (b) Inter. standard with office experience.

Application forms and details from Borough Architect and Planning Officer, Thomas E. North, O.B.E., F.R.I.B.A., Dist. T.P., 70 West Ham Lane, Stratford, E.15 (returnable by 28th June, 1955). 1253

### BOROUGH OF BASINGSTOKE.

#### BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of an **ARCHITECTURAL ASSISTANT**, A.P.T., Grade II (£560-£640).

Applicants should have reached the standard of the Intermediate Examination of the R.I.B.A.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, 1937 to 1953, and to the National Conditions of Service, and the successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications, and giving details of education and experience, together with copies of two recent testimonials, are to be submitted to the Borough Architect (Eric Almond, Dipl. Arch., A.R.I.B.A.), Municipal Buildings, Basingstoke, not later than Thursday, the 23rd June, 1955.

Candidates should state whether housing accommodation is required.

MEIRION O. JONES,  
Town Clerk.

Municipal Buildings, Basingstoke. 1314

### BOROUGH OF ILFORD.

#### BOROUGH ENGINEER'S DEPARTMENT.

(a) **TWO ASSISTANT ARCHITECTS**, Grade A.P.T. II/III. Salary £560-£725 p.a. plus London Weighting. The point of entry in the scale will be fixed having regard to qualifications and experience but not exceeding £620 p.a. plus London Weighting. Candidates must be members of the R.I.B.A., and have a thorough knowledge of architectural works.

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The Council is prepared to consider, if necessary, the provision of housing accommodation in connection with these appointments.

Appointments permanent, superannuable and subject to medical examination.

Application forms obtainable from the Town Clerk, Town Hall, Ilford, Essex, on receipt of stamped addressed envelope, should be returned not later than 25th June, 1955. 1312

### NEWCASTLE REGIONAL HOSPITAL BOARD.

#### SPECIAL AREA COMMITTEE FOR CUMBERLAND AND NORTH WESTMORLAND.

Applications are invited for the following permanent (superannuable) appointments in the Carlisle Area-office of the Regional Architect's Department in connection with the development of the Hospital Service in Cumberland and North Westmorland:—

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(b) **ARCHITECTURAL ASSISTANT**, Grade £465 × £25 (1) × £20 (8) to £650 per annum.

Commencing salary will depend on the applicant's age and amount of practical experience. Salary scales are expected to be increased in the near future.

Applicants for post (a) should be Registered Architects, and applicants for post (b) should have passed the Intermediate Examination of the Royal Institute of British Architects and be studying for the Final Examination.

Applications, stating age, qualifications, past and present appointments, present salary, and details of experience and training, together with the names of three referees (of whom at least two should be architects), should be forwarded to the Clerk of the Special Area Committee, 72, Warwick Road, Carlisle, within 14 days of the appearance of this advertisement.

W. J. BALL,  
Clerk of the Special Area Committee.

72, Warwick Road, Carlisle. 1320

### STAFFORDSHIRE COUNTY COUNCIL.

#### EDUCATION ARCHITECT'S DEPARTMENT.

##### ASSISTANT INSPECTOR OF BUILDINGS.

Applications for the post of **ASSISTANT INSPECTOR OF BUILDINGS**, in the South-East Staffs. Divisional Area, are invited from persons having practical experience in the building trade, the preparation of specifications and estimates, and who are car owners. Salary will be in accordance with New Grade A.P.T., II (£560-£640 per annum).

Forms of application, which must be returned within 10 days from the date of this advertisement, may be obtained from A. C. H. Stillman, F.R.I.B.A., County Education Architect, Green Hall, Lichfield Road, Stafford.

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

1352

### COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.

#### OFFICE OF THE COUNTY ARCHITECT.

Vacancies for **ARCHITECTS** and **ARCHITECTURAL ASSISTANTS** exist in the under-mentioned grades:—

(a) A.P.T., V (£750 × £30-£900).

(b) A.P.T., IV (£675 × £30-£825).

(c) A.P.T., III (£600 × £25-£725).

(d) A.P.T., II (£560 × £20-£640).

(e) A.P.T., I (£500 × £20-£580).

Applicants for (a), (b) and (c) should be Associates of the Royal Institute of British Architects and have had experience in the design and construction of modern buildings. Applicants for (d) should have passed the Intermediate Examination of the R.I.B.A. and have had some office experience, and those for (e) should be studying for the Intermediate Examination.

The posts are pensionable. Alternate Saturday morning leave. Canteen facilities available.

Application forms from the County Architect, Bishopgarth, Westfield Road, Wakefield. 1350

### BASILDON DEVELOPMENT CORPORATION.

#### ESTATES DEPARTMENT.

Applications are invited for the above established and superannuable post on the staff of the Chief Estates Officer (J. H. West, F.R.I.C.S.). Candidates must possess the Final Examination Certificate of the R.I.C.S. (Building Sub-Division), and be experienced.

(i) in all technical aspects of the repair and maintenance of Industrial, Commercial and Residential Buildings, mainly by direct labour, and

(ii) in the personal supervision and control of building labour, the preparation of Reports, Specifications and Schedules of Dilapidation and the organisation of a growing maintenance staff.

The successful applicant will be directly responsible to the Chief Estates Officer for the repair and maintenance section within the Department.

Salary range £845-£960 per annum (point of entry determined by qualifications and experience).

Housing accommodation on rent available in approved circumstances.

Applications, stating age, past and present appointments and experience, together with names of three referees, should reach the General Manager, Baisildon Development Corporation, Gifford House, Baisildon, not later than 20th June, 1955. 1341

### COUNTY OF ROXBURGH.

#### COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the under-mentioned appointments:—

(a) **ASSISTANT ARCHITECT**—Salary scale, Grades (V(a) to VII, with placing within the scale according to qualifications and experience. Candidates must be Registered Architects, and preferably Members of the Royal Institute of British Architects.

(b) **ARCHITECTURAL DRAUGHTSMAN**—Salary scale, Grade I. Candidates must have a minimum of three years' training, some experience in an Architect's office, and be of Intermediate R.I.B.A. standard.

The appointments are subject to the Local Government Superannuation (Scotland) Act, 1937, and to satisfactory medical examination.

Applications, accompanied by one copy each of three recent testimonials, should be lodged with the undersigned not later than 20th June, 1955.

Canvassing, directly or indirectly, in connection with the appointments will disqualify.

JAMES R. EUME,  
County Clerk.

County Offices, Newtown St. Boswells. 1340

1st June, 1955.

### SURREY COUNTY COUNCIL.

Applications invited for the following vacancies:—

(1) **ASSISTANT ARCHITECT**, Grade V, £750 × £30-£900 p.a., plus London allowance. Should be Associate Member R.I.B.A.

(2) **ARCHITECTURAL ASSISTANT**, Grade I, £500 × £20-£580 p.a., plus L.A.

(3) **ASSISTANT QUANTITY SURVEYOR**, Grade IV, £675 × £30-£825 p.a., plus L.A. Should be Associate Member R.I.C.S.

Full details and present salary, accompanied by copies of three recent testimonials, to County Architect, County Hall, Kingston, as soon as possible. 1375

### ARCHITECTURAL ASSISTANT required by the GOVERNMENT OF KENYA P.W.D. for one tour of 36-45 months in the first instance. Salary scale (including indocement pay and temporary cost-of-living allowance), £838, rising to £1,359 a year. Commencing salary according to experience. Gratuity of 13½ per cent. of total basic salary, plus inducement pay drawn during contract. Outfit allowance £30. Free passages. Liberal leave on full salary. Candidates must have passed the Intermediate Examination of the R.I.B.A. and be capable of working up sketch designs and preparing full working drawings for various types of Government buildings, ranging from small domestic work to large multi-storied buildings. They must have had at least four years' actual experience in an Architect's office, and have a sound knowledge of building construction. Write to the Crown Agents, 4, Millbank, London, S.W.1. State age, name in block letters, full qualifications and experience, and quote M2B/40529/AG. 1374



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**MINISTRY OF WORKS** require **TEMPORARY ARCHITECTS** in London on work for Ancient Monuments and Historic Buildings. Candidates must have sound professional experience and be Registered Architects by examination, or Registered Architects who, since registration, have passed any professional examination in Architecture by the Architects' Registration Council of the United Kingdom as qualifying for registration under the Architects' (Registration) Acts. Salary range: £729—£1,117 per annum, according to age and experience.

State age and full details of training and experience to Ministry of Works, W.G.20/A24 (E), Abell Mouse, John Islip Street, S.W.1. 1319

**COUNTY BOROUGH OF STOCKPORT.** **TWO ARCHITECTURAL ASSISTANTS** required for work on new educational buildings. Salary £675—£825. Application forms and Conditions of Appointment from Director of Education, Town Hall, Stockport. 1288

**BOROUGH OF SUTTON AND CHEAM.** **BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.**

**APPOINTMENT OF ARCHITECTURAL STAFF.**

Applications are invited for the following appointments in the Architectural Section of the Borough Engineer's Department:—

(a) **ARCHITECTURAL ASSISTANT**, Grade A.P.T., II, £560 p.a., rising by annual increments of £20 to £640 p.a., plus London "weighting" £20—£30 p.a. Applicants should be at or approaching R.I.B.A. Intermediate Examination standard.

(b) **ARCHITECTURAL DRAUGHTSMAN**, Higher General Division. The salary scale is on an age basis, with annual increments of £20—£25, and ranges from £210 p.a. at 17 years; £250 p.a. at 19 years; £300 p.a. at 21 years; £350 p.a. at 23 years to a maximum of £475 p.a., plus London "weighting" of £20—£30 p.a.

Applications, giving age, details of experience and qualifications, accompanied by copies of two recent testimonials, should be sent to Mr. N. H. Mitchell, A.M.I.C.E., M.I.Mun.E., Borough Engineer and Surveyor, by not later than 28th June, 1955, endorsed appropriately "Architectural Assistant" or "Architectural Draughtsman."

Applicants must state whether they are related to any member or holder of any senior office under the Borough Council. Canvassing in any form will disqualify.

**ARTHUR PRIESTLEY,** Town Clerk. Municipal Offices, Sutton, Surrey. June, 1955. 1339

**NORTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD.**

The Board is engaged on a large scale programme of rebuilding, including a new General Hospital at Welwyn, for which the following Staff are required in Regional Architect's Department:—

**SENIOR ASSISTANT ARCHITECT.** Applicants must be Associate Members of the R.I.B.A., and have had considerable experience in a senior capacity in design and construction. Preference will be given to those with recent experience in the design of new hospitals and associated buildings. Salary scale: £900 x £30—£1,050, plus London weighting £40—£50, commencing at minimum.

**ASSISTANT ARCHITECT.** Applicants must be Associate Members of R.I.B.A., and be experienced in design and construction, preferably in new hospitals and associated buildings. Salary scale: £625 x £25 (7) x £30 (3)—£890, plus London weighting £20—£40. Commencing salary above minimum may be paid subject to certain conditions.

**ARCHITECTURAL ASSISTANT.** Applicants must have passed Intermediate Examination of R.I.B.A. Persons appointed will give technical assistance to professional officers. Salary scale: £465 x £20 (1) x £20 (8)—£650, plus £20—£30 London weighting. Commencing salary up to £550, plus weighting, may be paid subject to certain conditions.

Apply, stating which post, and giving age, qualifications (with dates), and experience, with names of two referees, to Secretary, North-West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, by 30th June. 1333

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

Vacancies for **ENGINEERING ASSISTANTS** in Housing Engineer's Division (salary up to £739 10s., according to experience). Applicants should have been trained as Civil Engineers, be proficient in the use of level and theodolite, and have had experience in the construction of roads and sewers. Application form, returnable by 28th June, from Architect (AR/EK/HE/4), The County Hall, S.E.1. (873). 1335

**URBAN DISTRICT COUNCIL OF FELTHAM.** **TEMPORARY ARCHITECTURAL ASSISTANT** required at a salary within the National Scales, according to the qualifications and experience of the successful applicant.

Forms of application, obtainable from the undersigned, must be returned accompanied by copies of two testimonials, not later than 28th June, 1955. Canvassing directly or indirectly will disqualify, and applicants must disclose, in writing, whether to their knowledge they are related to any member of or the holder of any senior office under the Council.

**M. W. COUPE,** Clerk of the Council. Council Offices, Feltham, Middlesex. 1332

**LEYLAND URBAN DISTRICT COUNCIL.** **SURVEYOR'S DEPARTMENT.**

**ASSISTANT ARCHITECT, A.P.T., I-IV.** Applications are invited for the above post. Grade and commencing salary according to experience and qualifications. Subject to N.J.C. conditions and medical examinations.

Applicants should have good experience on Housing and General Architectural work.

Applications, stating full particulars, past and present appointments with salary, together with names and addresses of two persons to whom reference may be made, should be sent to the Surveyor by 25th June, 1955.

Housing accommodation available if required. **T. K. CLAYTON,** Clerk to the Council. 1338

**DORSET COUNTY COUNCIL** require a **SENIOR ARCHITECT** in the County Architect's Department (A.P.T., Grade VII—scale £900—£1,100 p.a.), commencing salary in accordance with experience. Applicant must be an A.R.I.B.A., and have had considerable experience in Local Authority building work. The person appointed will be directly responsible to the County Architect for the new school building programme.

Application forms from the Clerk, County Hall, Dorchester, to be returned by the 24th June. 1336

**CORBY DEVELOPMENT CORPORATION.** Applications are invited for the following appointments:—

(a) **ASSISTANT ARCHITECT** (£720—£840). (b) **ARCHITECTURAL ASSISTANT** (£600—£690).

The work of building the New Town of Corby from 22,000 to 40,000 population is now reaching its most intensive phase, and during the next seven to ten years will offer exceptional variety of experience in the design and construction of houses, flats, shops and factories in the department of the Chief Architect. Appointments are subject to Local Government Superannuation, and housing is available.

Applications, stating age, education, training, qualifications, experience, past and present appointments and salaries, together with the names of two referees, must reach the undersigned by Monday, 27th June, 1955. Envelopes to be endorsed "Architect."

**R. F. BROOKS GRUNDY,** General Manager. Spencer House, Corby, Northants. 1337

**COUNTY OF BERWICK.** **PROPERTY AND WORKS DEPARTMENT.**

Applications are invited for the appointment of **ARCHITECTS**. Salary scale, Grades VI to VIII, with placing according to experience. The Council will assist in providing housing accommodation. Applications, accompanied by one copy each of three recent testimonials, to be lodged with the undersigned not later than 25th June, 1955.

**ROBERT MARTIN,** County Clerk. County Buildings, Duns. 2nd June, 1955. 1334

**HERTFORDSHIRE COUNTY PLANNING DEPARTMENT.**

**ASSISTANT COUNTY PLANNING OFFICER.** ("Scale C") £1,202 10s. x £52 10s.—£1,412 10s. Administrative ability and wide experience needed, in a responsible capacity of consultations with Government Departments and Local Authorities. Must be well experienced in Committee work and in the executive and technical duties of a County Planning Department. The position is next in status to Deputy County Planning Officer.

Applicants should be Corporate Members of the Town Planning Institute, and hold other professional experience and qualifications, preferably in Architecture, Surveying or Municipal Engineering.

Application forms from the County Planning Officer, County Hall, Hertford, Herts., to be returned by the 30th June, 1955. 1383

**SOUTHERN ELECTRICITY BOARD.**

**SENIOR DRAUGHTSMAN.** No. 3 (Portsmouth) Sub-Area Office. Salary: N.J.B., Schedule D, Grade V (£640 x £20—£740 per annum). N.J.B. Conditions of Service.

The successful applicant will be responsible to the Sub-Area Civil Engineer for design work, preparation of drawings and making calculations. Candidates should have knowledge of building construction, steel work and reinforced concrete structures. Experience in an Architect's office would be an advantage.

The successful candidate will be required to contribute to the C.E.B. and Area Boards' Superannuation Scheme, if eligible.

Applications on forms obtainable from the Sub-Area Secretary, Lower Drayton Lane, Cosham, Portsmouth, and returned to him in envelopes suitably endorsed not later than 7th July, 1955. 1371

**NORFOLK COUNTY COUNCIL.**

**ARCHITECTURAL ASSISTANT** required. Salary: A.P.T., I (£500 x £20—£580 per annum). Local Government Superannuation Acts and National Joint Council Conditions of Service apply. Candidates must be good draughtsmen, with general office experience. Applications, stating age and giving details of training, experience, present appointment and salary, and names of three referees, to County Architect, 27, Thorpe Road, Norwich, by Monday, 27th June, 1955. 1364

**COUNTY BOROUGH OF DEWSBURY.** **BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT.**

Applications are invited for the appointment of **ARCHITECTURAL ASSISTANT** in the Education Section of the above Department, at a salary in accordance with A.P.T., Grade II (£550—£640 per annum), the commencing salary to be fixed within the scope of this grade.

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

Applications, stating age, education, qualifications, full particulars of training and experience, together with copies of two recent testimonials, should be sent to the undersigned not later than Wednesday, the 29th June, 1955, in envelopes endorsed "Architectural Assistant."

**A. NORMAN JAMES,** Town Clerk. Town Hall, Dewsbury. 4th June, 1955. 1386

**LEEDS REGIONAL HOSPITAL BOARD.** **ASSISTANT ARCHITECT.** Scale £625—£890 (at present under review). Commencing salary dependent upon practical experience at full professional standard.

Applicants interested in the appointment can obtain further information regarding the scope of the work from P. B. Nash, A.R.I.B.A., Architect to the Board.

Applications, stating age, qualifications, experience (including details of present and former employment), together with the names of two referees, to the Secretary, Park Parade, Harrogate, by 9th July, 1955. 1356

**GLOUCESTERSHIRE COUNTY COUNCIL.** **COUNTY PLANNING DEPARTMENT.**

Applications are invited for the following appointments:—

(a) **TECHNICAL ASSISTANT, A.P.T., Grade IV** (£675—£825). (b) **TECHNICAL ASSISTANT, A.P.T., Grade I** (£500—£580).

Applicants for (a) will be required to work in connection with schemes under the Town Development Act, 1952, and should be experienced in housing and town centre layouts and development. He should be a Corporate Member of an appropriate professional body. Applicants for (b) must have passed the Intermediate Examination of the Town Planning Institute or equivalent, and should have an architectural inclination.

The posts are superannuable, subject to medical examination. The National Joint Council's Scheme of Conditions of Service will apply.

Applications, stating age, qualifications and experience, together with copies of three testimonials, or names of referees, to reach the County Planning Officer, Upton Lane, Barnwood, Gloucester, not later than 5th July, 1955.

**GUY H. DAVIS,** Clerk of the County Council. 1357

**COUNTY BOROUGH OF CARLISLE.** Applications are invited for the following posts in the City Surveyor's Department:—

(a) **SENIOR ASSISTANT ARCHITECT, A.P.T., IV** (£675—£825). (b) **ASSISTANT QUANTITY SURVEYOR, A.P.T., III** (£600—£725).

Appointment (a) is an additional post to cater for an augmented Educational Building Programme. Candidates should be A.R.I.B.A.

Appointment (b) is also additional to deal with the increased work of the Department which includes Housing, Schools and general Municipal work. The successful candidate will be engaged on taking off, site measurement, etc., and will be required to possess the appropriate academic qualifications.

Housing accommodation available if required. Forms may be obtained from and are returnable to the City Surveyor, 18, Fisher Street. Closing date, 22nd June, 1955.

**H. D. A. ROBERTSON,** Town Clerk. 1327

**BOROUGH OF WIMBLEDON.** **BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.**

Applications are invited for the appointment of an **ARCHITECTURAL ASSISTANT** on the established staff.

Salary in accordance with Grade, A.P.T., I, £500 to £580 per annum, London weighting additional. Applicants should have attended a full time course of Architecture and to have passed the R.I.B.A. Intermediate Examination or its equivalent; experience in Municipal architectural work would be an advantage. The appointment is subject to the National Scheme of Conditions of Service, the provisions of the Local Government Superannuation Acts, and to a satisfactory medical report. Applications, endorsed "Architectural Assistant," stating age, qualifications, former Local Government service, present and previous appointments and experience, length of notice required to terminate present appointment, and the names of three referees, must be forwarded to the Borough Engineer and Surveyor by the 11th July, 1955. Candidates must disclose in writing to the undersigned if, to their knowledge, they are related to any member or senior officer of the Council. Canvassing disqualifies.

**FRANCIS J. O'DOWD,** Town Clerk. Town Hall, Wimbledon, S.W.19. 1353

## WALTHAMSTOW COMMITTEE FOR EDUCATION.

Applications are invited for permanent appointments in the office of the Architect to the Committee. Mr. Frank H. Heaven, A.R.I.B.A., A.R.I.C.S., at salaries as follows:—

- (a) ASSISTANT ARCHITECT, Grade A.P.T. IV (£675 × £30 to £825 per annum).  
(b) ASSISTANT ARCHITECT, Grade A.P.T. III (£600 × £25 to £725 per annum).

Applicants for posts (a) and (b) must be Associate Members of the R.I.B.A. or hold an equivalent qualification.

- (c) ARCHITECTURAL ASSISTANT, Grade A.P.T. II (£560 × £20 to £640 per annum).

- (d) TWO ARCHITECTURAL ASSISTANTS, Grade A.P.T. I (£500 × £20 to £580 per annum).

In addition to the salaries quoted above, London weighting is payable as follows:—  
£30 per annum if 26 years of age or over.  
£20 per annum if between 21 and 26 years of age.

Application forms to be obtained from and returned to the Borough Education Officer, Town Hall, Forest Road, Walthamstow, E.17, within two weeks of the appearance of this notice. 1331

METROPOLITAN WATER BOARD.  
APPOINTMENT OF ASSISTANT ARCHITECTS.

There are two vacancies for ASSISTANT ARCHITECTS for appointment to the permanent pensionable staff of the Surveyor's department. One appointment will be at a commencing salary of £880 p.a., rising to £940 p.a. and one at £820 p.a., rising to £880 p.a. It is a condition of the appointment to and the holding of these positions that the selected candidates must be and continue to be subscribing Corporate Members of the Royal Institute of British Architects. Applicants should have had experience in the design, preparation of plans and working drawings, specifications and quantities for the erection of houses and offices.

Forms of application may be obtained from the undersigned on receipt of a stamped addressed foolscap envelope, quoting reference (G.P.S.), and completed forms must arrive not later than 29th June, 1955.

W. S. CHEVALIER,

Clerk of the Board.

Offices of the Board, New River Head, Rosebery Avenue, E.C.1. 1330

## COUNTY BOROUGH OF SWANSEA.

## BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following established posts:—

1. ONE SENIOR ASSISTANT ARCHITECT. Salary Grade. £650 × £25 = £775.  
2. ONE ASSISTANT ARCHITECT. Salary Grade. £560-£640.

Applicants for appointment No. 1 should be Associates of the R.I.B.A. and should have had at least 5 years' experience (including the period spent in theoretical training). For appointment No. 2 applicants should have passed the Intermediate Examination of the R.I.B.A.

For appointment No. 1 previous experience in the design and construction of new school buildings, organisation and supervision of new building contracts will be an advantage.

The appointments are subject to the Local Government Superannuation Acts, 1937-1953, and the successful applicants will be required to pass a medical examination.

Forms of application may be obtained from the Borough Architect, Guildhall, and are to be returned to him accompanied by three recent testimonials not later than Monday, 27th June, 1955.

Canvassing directly or indirectly will disqualify. T. B. BOWEN,

Town Clerk.

The Guildhall, Swansea. 1329

## WEST SUSSEX COUNTY COUNCIL.

## COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of ASSISTANT ARCHITECTS, at a salary in accordance with the Special Grade III, A.P.T. Division (£650 to £775 per annum), of the National Scales of Salaries.

Further particulars should be obtained from the County Architect, County Hall, Chichester, to whom detailed applications must be submitted not later than the 24th June, 1955.

T. C. HAYWARD,

Clerk of the County Council.

County Hall, Chichester. 1328

## LONDON COUNTY COUNCIL.

## ARCHITECT'S DEPARTMENT.

Vacancy for SURVEYING ASSISTANT (salary up to £739 10s.), for preparation of specifications and estimates for minor improvements, repairs and painting to Voluntary Schools. A.R.I.C.S. or equivalent.

Application forms, returnable by 11th July, from Architect (AR/EK/VS/3), The County Hall, S.E.1 (916) 1404

## COUNTY BOROUGH OF HALIFAX.

## BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the appointment of ASSISTANT ARCHITECT (GENERAL). Salary £650-£775.

Applications, stating age, education and training, qualification, present and past appointments (with dates and salaries) and experience, accompanied by copies of two recent testimonials, should reach me by 25th June, 1955.

RICHARD DE Z. HALL,

Town Clerk.

Town Hall, Halifax. 1393

## WAR OFFICE

Vacancies exist for ARCHITECTURAL ASSISTANTS in the Architectural branch of the Directorate of Fortification and Works, Cheshington, Surrey.

Candidates must have at least three years' architectural training experience in an architect's office, and be of Intermediate R.I.B.A. standard.

A varied programme of design is undertaken, including married quarters, barracks, hospitals, schools, clubs, layouts of estates and cantonments, for Home and Overseas.

Salary range is £432 (at 21)—£680, plus overtime. Starting pay according to age, qualifications and experience, with annual increases subject to satisfactory service. Prospects of promotion and establishment. Canteen facilities.

State age, full details and experience to Secretary of State for War, War Office (C.5.A), R.503, Northumberland House, W.C.2. 1402

## METROPOLITAN BOROUGH OF HAMPSHIRE

Applications are invited for a TEMPORARY ASSISTANT ARCHITECT, A.P.T. III (£600-£725 plus London Weighting) work under the direction of the Housing Architect. The successful applicant will be a member of a team engaged on Housing and Flat Development Schemes, and there are opportunities to gain valuable experience both in a Housing Architect's office and on site.

No housing accommodation can be provided, and canvassing will disqualify. Applications to the Town Clerk, Town Hall, Hampshire, N.W.3, with names of three referees, by the 1st July, 1955. 1403

## BUCKS COUNTY COUNCIL

Applications are invited for the appointment of an ASSISTANT HEATING AND LIGHTING ENGINEER in the County Architect's Department at a salary in accordance with A.P.T. Grade IV, £675-£825 p.a.

The successful applicant must be capable of designing heating and hot-water schemes under supervision. Some knowledge of electrical installations desirable. Preference will be given to candidates holding suitable qualifications.

The appointment is superannuable and subject to medical examination.

A weekly allowance of 25s. 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 giving further particulars of the appointment are obtainable from F. B. Pooley, County Architect, County Offices, Aylesbury, and returnable by 30th June, 1955. 1408

## EASTERN ELECTRICITY BOARD.

## CHILDREN'S SUB-AREA.

## SENIOR DRAUGHTSMAN.

Applications are invited from candidates who have had a good technical training, and preferably several years' experience in an architect's office. Candidates should be capable of preparing detailed drawings and specifications of Building and Civil Engineering work, including Showrooms, Stores, Garages, Workshops, Offices, Sub-Stations, etc.

Salary: N.J.B., Schedule D, Grade V (£640-£740).

The successful candidate will be required to contribute to a superannuation scheme, and may be required to undergo a medical examination.

Apply, by letter, within 14 days to the Manager, Children's Sub-Area, Eastern Electricity Board, Prebend Street, Bedford. 1409

Coventry Corporation require PLANNING ASSISTANT, A.P.T. III (£600-£725), for Development Control Section. Additional award £26 p.a. (men), £19 10s. p.a. (women), in approved circumstances. Intermediate Examination T.P.I., sound knowledge of planning legislation and practical experience of development control work essential. Application form and conditions from City Architect, Bull Yard, Coventry, returnable 30th June. 1406

## BRACKNELL DEVELOPMENT CORPORATION.

Applications are invited for the post of ARCHITECT, Grade III. Salary: £375 × £50 (3) × £45 (1)—£2,170. Applicants should be Corporate Members of the R.I.B.A., and should have had considerable experience in the execution of working drawings and the supervision of contracts.

Superannuation scheme, medical examination. Housing available in due course. Apply by 28th June, giving age, education and qualifications; experience and appointments held (with dates and salaries), and two references, to the General Manager, Bracknell Development Corporation, Farley Hall, Binfield, Bracknell, Berks. 1420

## COUNTY BOROUGH OF BURY.

Applications invited for appointment of ARCHITECTURAL ASSISTANT, Borough Engineer's Department. Salary up to £650-£775, National Scale of Salaries, according to qualifications and experience.

The appointment is superannuable and subject to medical examination.

Applications, stating age, details of training, qualifications and experience, together with names and addresses of two persons to whom reference may be made, must reach me not later than 25th June. EDWARD S. SMITH,

Town Clerk.

Town Hall, Bury. 1370

## BASILDON DEVELOPMENT CORPORATION

ESTATES DEPARTMENT.  
APPOINTMENT OF MAINTENANCE SURVEYORS

Applications are invited for the established and superannuable posts of MAINTENANCE SURVEYORS on the staff of the Chief Estates Officer (John H. West, F.R.I.C.S.). Applicants should have passed the Final or Intermediate Examination (Building Sub-Division) of the R.I.C.S. or hold an equivalent qualification and must be capable of preparing Specifications and Schedules of Dilapidation, and of supervising the maintenance and repair of buildings, particularly during the contractor's maintenance period. Experience of taking over new buildings from contractors will be an advantage.

Salary within the range of £580-£650 per annum, according to qualifications and experience. Housing accommodation in approved cases.

Applications, stating age, education, qualifications, present and previous appointments, with salaries and experience in precise terms, and giving the names of two referees, should reach the General Manager, Basildon Development Corporation, Gifford House, Basildon, Essex, by Monday, 27th June, 1955. 1405

LEYTON COMMITTEE FOR EDUCATION  
APPOINTMENT OF SENIOR ASSISTANT ARCHITECT

Applications are invited for the above permanent appointment in the School Architect's Section of the Borough Engineer and Surveyor's Department at Grade A.P.T. IV (£705-£855, including London Weighting, which is reduced according to scale where the age of the successful applicant is less than 25 years).

Applicants should be Registered Architects with experience in the planning, construction and supervision of school building works.

Details and Form of Application from the Borough Education Officer, Kirkdale Road, Leytonstone, E.11, to whom they should be returned not later than Friday, 8th July, 1955. D. J. OSBORNE,

Town Clerk.

Town Hall, Leyton, E.10. 1407

## Architectural Appointments Vacant

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

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive, or a woman aged 18-55 inclusive, unless he or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

ARCHITECTURAL ASSISTANT: Intermediate approaching final. Commercial and industrial work; large-scale contracts. Watson, Johnson, Stokes, Victoria Square, Birmingham. 4996

OPENING FOR QUALIFIED ARCHITECTS as Assistant Designers with an expanding firm of new traditional builders. Must have good general practical knowledge and a keen interest in new building methods. A prospect exists for working overseas. Starting salaries range between £650 and £750 according to experience, with an increase after six months' satisfactory service. Messrs. Reema Construction, Ltd., Milford Manor, Salisbury, Wilts. 9236

ARCHITECTURAL STAFF, all grades, wanted, interesting and varied work of contemporary character; light and airy offices. Apply J. Seymour Harris & Partners, 4, Greenfield Crescent, Edgbaston, Birmingham, 15. 8786

ARCHITECT'S ASSISTANTS required (1 Senior and 2 Juniors) for West End Office. Write, stating full particulars and salary required, to Box 8725.

ARCHITECTURAL ASSISTANT required in small private office. Intermediate to Final standard. Write, stating experience and salary required, to: A. F. Bennett, 35, Queen's Gate Mews, London, S.W.7. 9286

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SENIOR INTERMEDIATE and JUNIOR ASSISTANTS required in West End Architect's Office.

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Salaries offered up to £915 (a) and £745 (b), according to experience, with prospects of upgrading.

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**REQUIRED** at Company's Head Office, Guildford, experienced **ARCHITECTURAL ASSISTANT**, varied work, mainly factory. Five-day week. Salary by arrangement. Box 1180.

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**ARCHITECTURAL ASSISTANTS** required urgently for London office. Intermediate stage or above, and with practical experience, particularly in traditional domestic and other work. Please write stating age, experience, and salary required to Box 9896.

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Applications, stating age, experience, qualifications and salary required, to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 9852

**RILEY & GLANFIELD** require **Male ASSISTANT**. Maximum salary £700 p.a. Voluntary overtime paid time and a half. Work: church, industrial, housing and public house. Telephone CHA. 7328. 1073

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**ARCHITECT'S ASSISTANT** required immediately. Intermediate to Final standard, in small south-east London practice. Quick, neat draughtsman; some office experience. Reply, with full details of experience, age, and salary, etc., Box 1279.

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**ASSISTANT ARCHITECT** and **ARCHITECTURAL ASSISTANT** required for the London Head Office of a major oil company. The work is in connection with large-scale development of service stations, involving the design of new and the re-modelling of existing stations. **ASSISTANT ARCHITECT** should preferably be an Associate Member of the R.I.B.A., capable of supervising staff and controlling work through all stages of development. Must hold current driving licence. **ARCHITECTURAL ASSISTANT** (Male or female)—intermediate standard of R.I.B.A. Capable of handling jobs with a minimum of supervision. Work will involve a high standard of presentation and an understanding of contemporary design. Pension and Life Assurance Scheme. Generous sickness benefits; luncheon voucher scheme; Social Club. Write, giving full details, stating age, experience and salary required, to Box 1296, quoting Ref. RO/AA 713.

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**RESIDENT REPRESENTATIVE** required for East Anglia and East Midlands by leading nationally known manufacturers of prefabricated timber buildings. Applicants must have sound knowledge of building construction, with some experience of timber of prefabricated structures. This is an opportunity for a capable sales executive, able to initiate, maintain, and successfully finalise technical and commercial negotiations at high level. Send fullest details of career, age, experience, and salary level to Box 1251.

**SENIOR ASSISTANT, A.R.I.B.A.** or equivalent, with experience of domestic design, used to both office and site working and supervision, required by Architect dealing with housing and shops for a London Company. Work will be in London and Pinner. Salary £750 to £800 p.a., according to qualifications. Pension scheme. Box 1271.

**Cecil Howitt & Partners, Architects, St. Andrew's House, Mansfield Road, Nottingham**, require **JUNIOR ARCHITECTURAL ASSISTANTS**, preferably Inter. R.I.B.A. standard. Please apply in writing, giving full details and stating salary required. 4705

**ARCHITECTURAL ASSISTANT** required immediately in small private office. Intermediate Standard. Write, stating experience and salary required to Geoffrey Shires, A.R.I.B.A., 52, Artillery Mansions, Victoria Street, S.W.1. 1349

**ARCHITECTURAL ASSISTANTS** (Senior & Junior) required in busy office handling a wide variety of interesting work including commercial, domestic, school and brewery projects. Please apply stating experience and salary required to Portess & Richardson, Lloyds Bank Chambers, Peterborough. 1348

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**ARCHITECTURAL ASSISTANTS** required immediately, London office. Good salary and prospects. Write, with particulars of age, qualifications, experience, and salary required, to Box 707, c/o 7, Coptic Street, W.C.1. 1345

**ARCHITECT'S ASSISTANT**, Intermediate Standard, required in the Architects' Department of a London Brewery Company. Write with full particulars to Box 1344.

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**BANK ARCHITECT'S DEPARTMENT** in City has vacancies for **THREE ASSISTANTS** of R.I.B.A. (Intermediate) standard, and used to work of good class. Appointments will be permanent, subject to probationary period, and salary will be according to age and experience. Box 1342.

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**ARCHITECTURAL ASSISTANTS** urgently required of Intermediate or Final R.I.B.A. Standard. Applicants must be capable of preparing full working drawings and details, be quick, accurate draughtsmen and have a sound knowledge of construction. Applicants should write in first instance to Brandt & O'Dell, Grosvenor Gardens House, S.W.1, giving full particulars of age, past experience, education and salary required. 1324

**FRY, DREW, DRAKE & LASDUN** have vacancies for **ARCHITECTURAL ASSISTANTS** of experience or good qualifications. Overseas and U.K. work. Write, with details of training qualifications, experience, etc., to Secretary, 65, Gloucester Place, W.1. 1323

**NORMAN & DAWBARN** require **ARCHITECTURAL ASSISTANTS**, at or about R.I.B.A. Intermediate standard, with from 3 to 6 years' continuous office experience. Salaries according to age, also length and type of experience. Summer holiday will be arranged. Applications, stating age and details of career, should be made in writing to 5, Gower Street, London, W.C.1. 1387

**ARCHITECT'S ASSISTANTS** required by Manchester firm of Architects. Some previous office experience desirable, and not less than Intermediate R.I.B.A. standard. Write, stating age, experience, qualifications, and salary required. Box 1385.

**ARCHITECT'S ASSISTANT** required in the Architect's Department of Truman, Hanbury, Buxton & Co., Ltd. Capable of working on own initiative from preliminary sketch drawings. Staff canteen, 5-day week, and pension scheme. Write, stating age, experience, and salary required to Frederick G. A. Hall, F.R.I.B.A., The Brewery, 91, Brick Lane, E.1. 1382

**REQUIRED**, by West End firm of Architects, **ASSISTANT**, Intermediate standard, for varied practice. Must be keen and of contemporary outlook. Write, giving full particulars and salary required, to Box 1380.

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**JUNIOR ARCHITECTURAL ASSISTANT** required in Holborn office. Write, stating full particulars and salary required, to Box 1368.

**ARCHITECTURAL ASSISTANT** required immediately. Experienced in preparation of working drawings, details, specifications, and Estate Development, etc. Please apply, with full details of experience, age, salary required, etc., to L. F. Halton, L.R.I.B.A., 57, High Street, Bexley, Kent. 1366

**SALARY** of £900—£1,000 offered by West End firm for a **SENIOR ARCHITECTURAL ASSISTANT**. Knowledge of school and hospital work an advantage. Write, giving full details of age, experience, etc., to Box 1365.

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**ARCHITECTURAL ASSISTANTS** required by West End Architect, with varied practice. Must be capable of carrying through a scale drawings and working details. Good salaries. Apply William H. Robbins, 77, Wigmore Street, W.1. WELbeck 0274. 1355

**INTERMEDIATE ASSISTANT**, with some practical experience, required. Applications by letter, stating age and brief details of career, to S. P. Jordan, A.R.I.B.A., M.S.I.A., Dip.T.P., 11, King's Road, Sloane Square, S.W.3. 1391

**ARCHITECTURAL ASSISTANT** required, of R.I.B.A. Intermediate standard, to work on large development schemes. If necessary, provision of a house would be considered. Write, stating age, qualifications and salary required, to E.M.A., Cadbury Bros., Ltd., Bournville, Birmingham. 1390

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**EXPERIENCED SENIOR ASSISTANT**, at least 30 years of age, capable of handling schemes from sketch plans to final account and site supervision, required for West End office, specialising in industrial and office buildings. Salary £1,000 per annum, or by arrangement. Box 1388.

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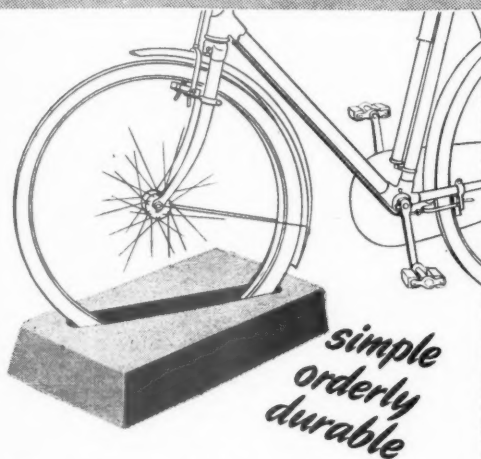
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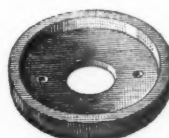
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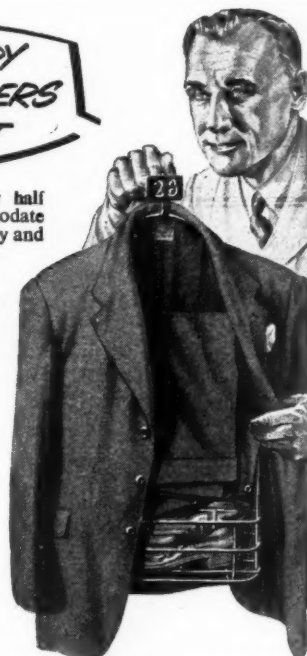
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