

The Architects' JOURNAL for May 21, 1959

# THE ARCHITECTS' JOURNAL



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

## standard contents

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

## NEWS and COMMENT

*Astragal's Notes and Topics*

*Letters*

*News*

*Diary*

*Criticism*

## TECHNICAL SECTION

*Information Sheets*

*Information Centre*

*Current Technique*

*Working Details*

*Questions and Answers*

*Prices*

*The Industry*

## CURRENT BUILDING

*Major Buildings described:*

*Details of Planning, Construction,*

*Finishes and Costs*

*Buildings in the News*

*Building Costs Analysed*

*Architectural Appointments*

*Wanted and Vacant*

No. 3351]

[Vol. 129

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Registered as a Newspaper.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. L. Stevenson, College of Art, Hope Street, Liverpool 1.	Royal 1826
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Langham 5533
ABT	Association of Building Technicians. 1, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James's Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Langham 5861
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BC	Building Centre, 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portland Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5.	Ealing 9621
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Fremantle 8494
BE	Building Exhibition. 11, Manchester Square, W.1.	Hunter 1951
BEDA	British Electrical Development Association, 2, Savoy Hill, W.C.2.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Whitehall Gardens, Horseguards Avenue, Whitehall, S.W.1.	Trafalgar 8855
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 4040
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. British Standards House, 2, Park St., W.1.	Mayfair 9000
CABAS	City and Borough Architects Society. C/o S. A. G. Cook, A.R.I.B.A., Borough Architect and Director of Housing, Town Hall, High Holborn, W.C.1.	Holborn 3411
CAS	County Architects' Society. C/o S. Vincent Goodman, F.R.I.B.A., Shire Hall, Bedford.	Bedford 67444
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Belgravia 6661
CDA	Copper Development Association. 55, South Audley Street, W.1.	Grosvenor 8811
COID	Council of Industrial Design. 28, Haymarket, S.W.1.	Trafalgar 8000
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.1.	Sloane 4280
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
CVE	Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1.	Reading 72255
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 68, Gloucester Place, W.1.	Welbeck 9966
FASS	Federation of Associations of Specialists and Sub-Contractors, 14, Bryanston Street, W.1.	Welbeck 1781
FBBDO	Fibre Building Board Development Organization Ltd. (Fidor), Stafford House, Norfolk Street, W.C.2.	Covent Garden 3008
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	Regent 0221
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 33, John Street, W.C.1. Tel.: Chancery 7583 (6 lines)	
FPC	The Federation of Painting Contractors, St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4341
GPDA	Gypsum Plasterboard Development Association. 11, Ironmonger Lane, E.C.2.	Monarch 8888
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
GG	Georgian Group. 2, Chester Street, S.W.1.	Belgravia 3081
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 29, Belgrave Square, S.W.1.	Belgravia 3755
ICA	Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. 1, Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square	Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers, 100, Park Street, Grosvenor Square, W.1.	Mayfair 7086



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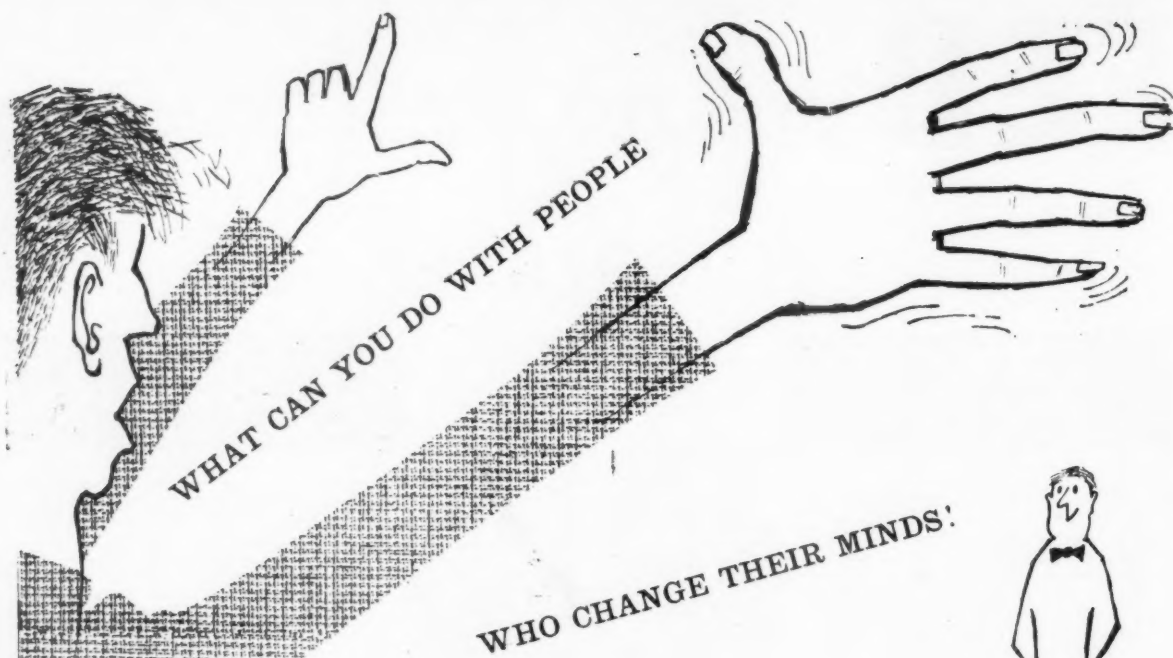
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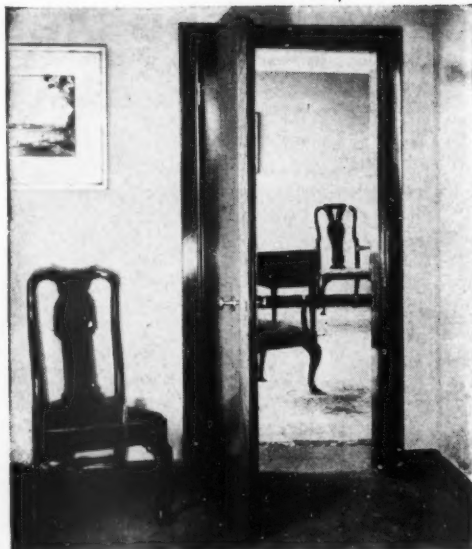
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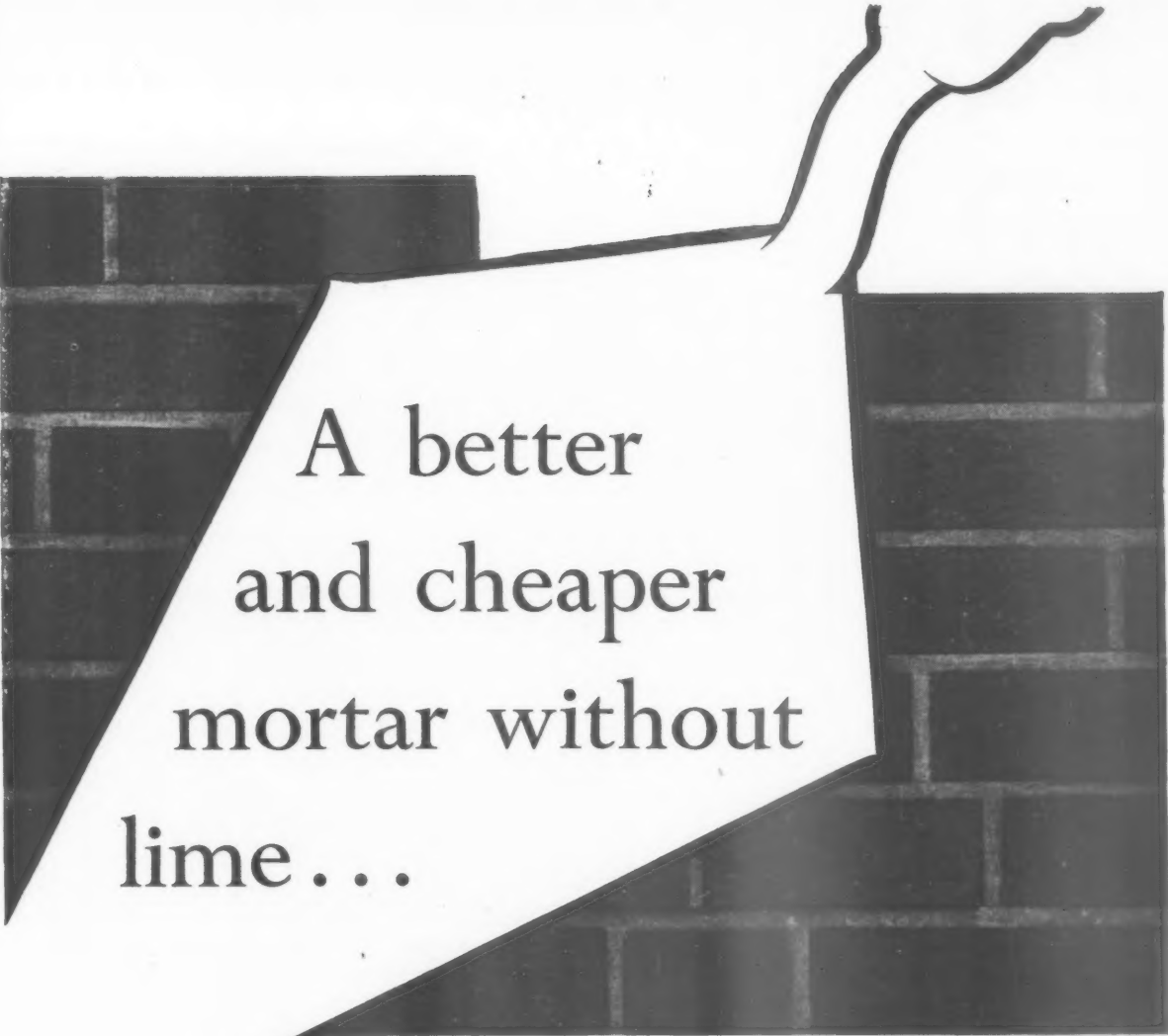
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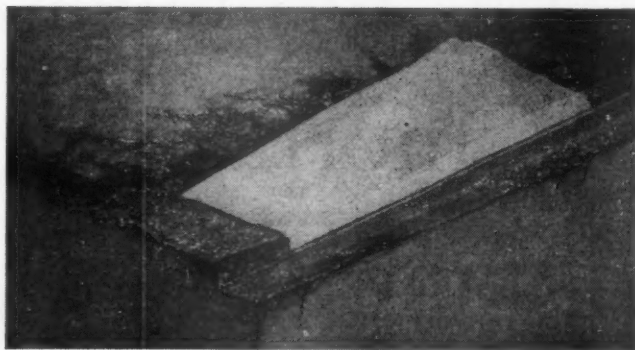
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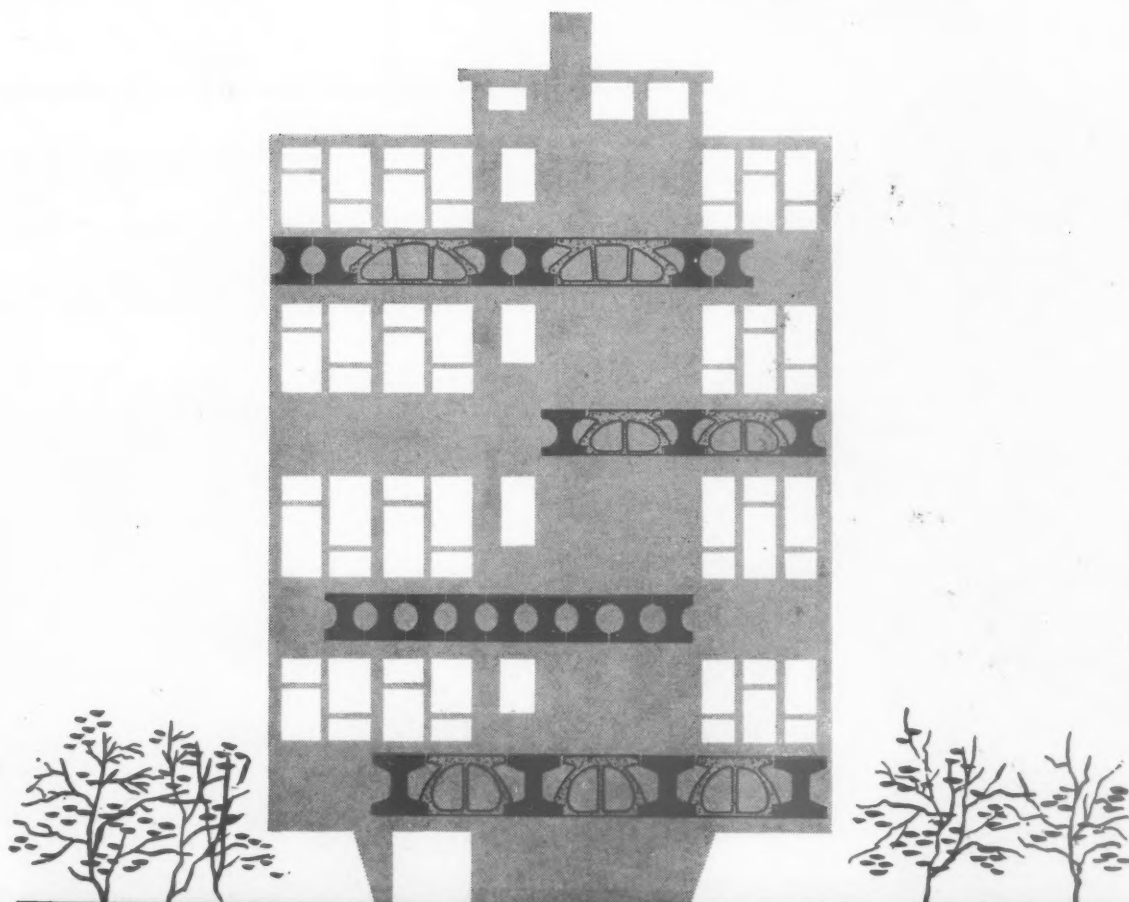
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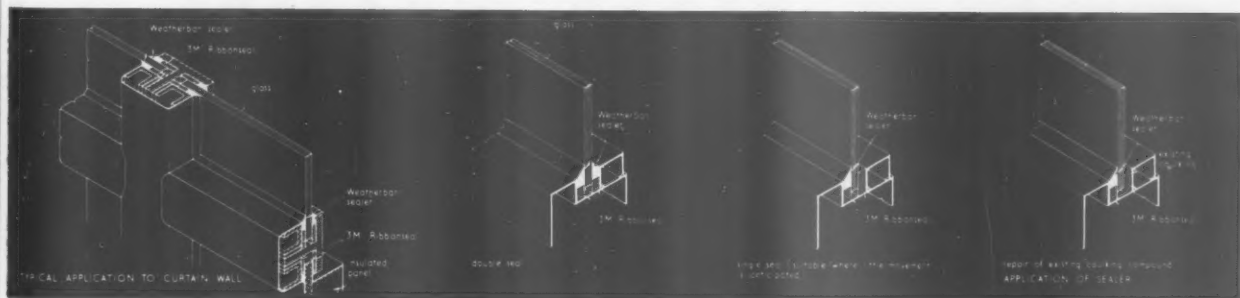
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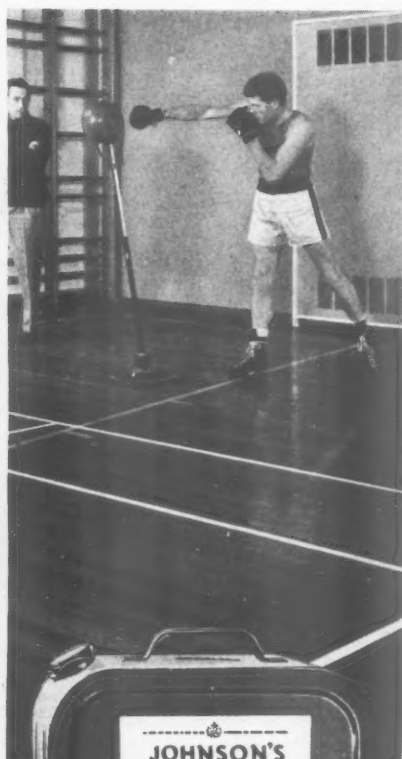
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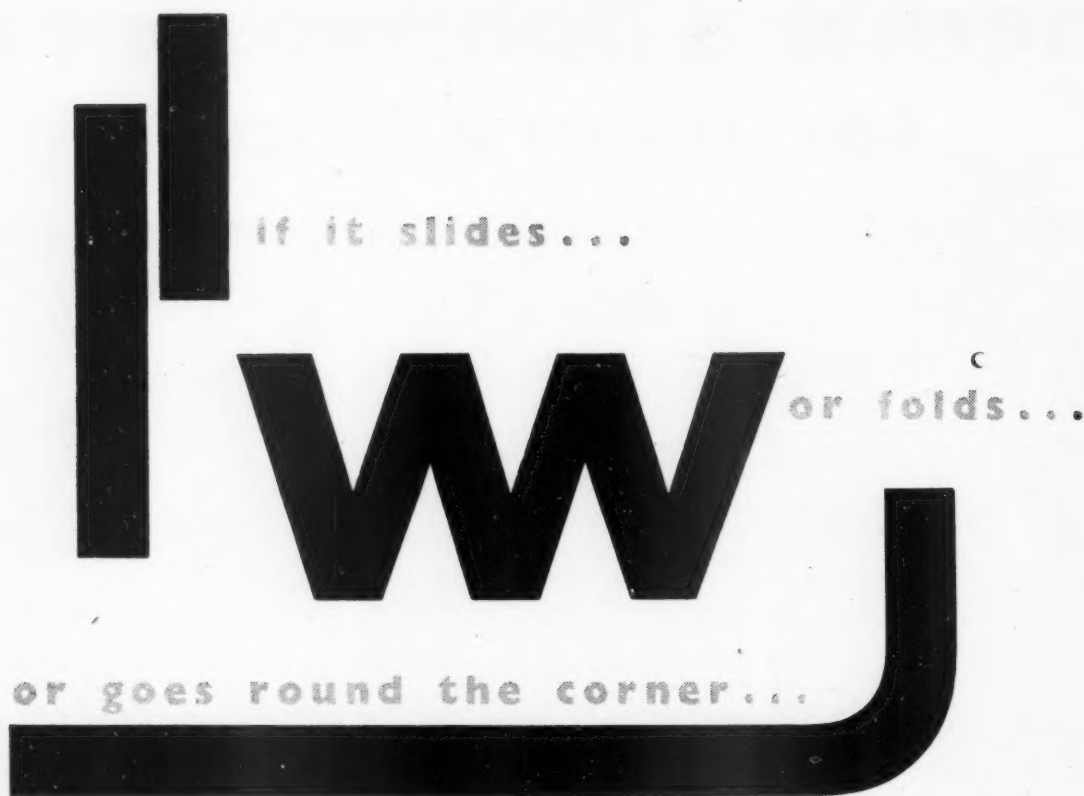
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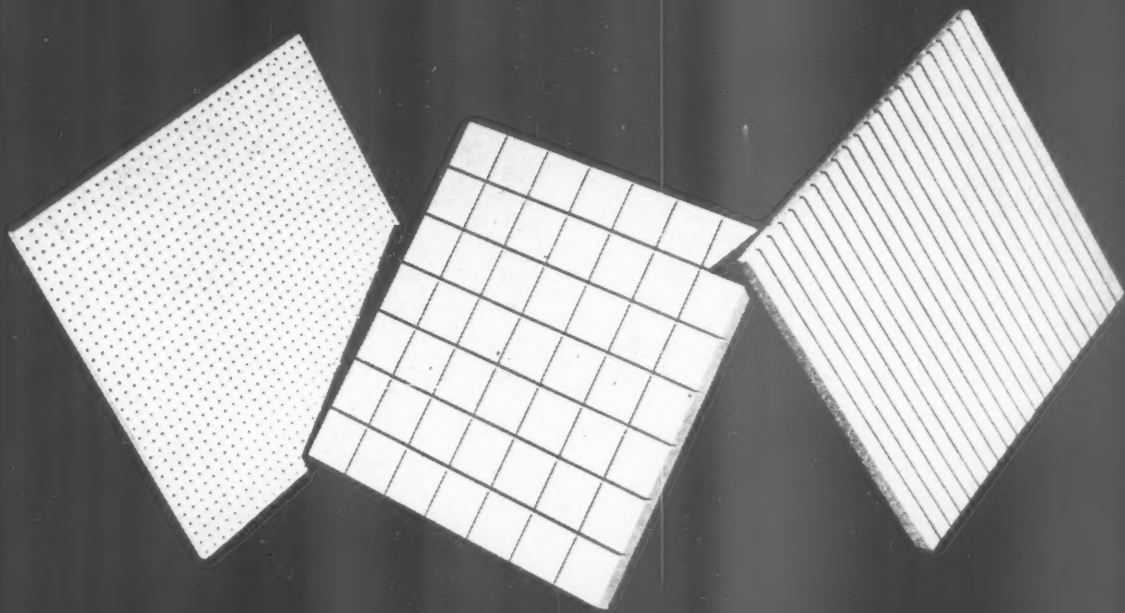
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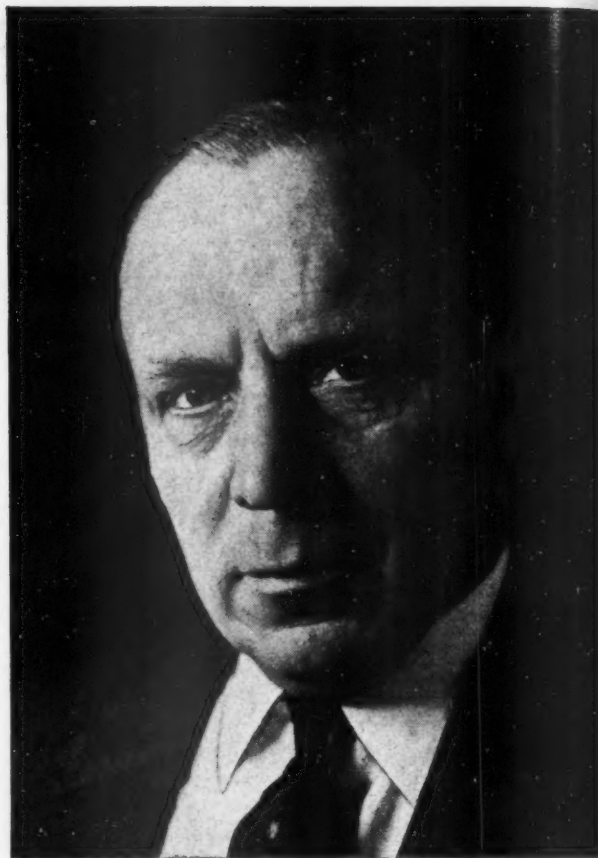
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the property more valuable, more desirable. Makes it easier to sell. More profitable to sell. Mr. Scott may be selling a bargain, but you can be quite certain he's not losing on the deal. And he knows about building houses — he's put up over a thousand since the war, more than 500 of them in the last four years.

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These houses have the lot: three good-sized bedrooms; modern open planning downstairs; fitted cupboards throughout; kitchen fitments; air extractor in kitchen; separate W.C.; and front and back gardens with garage space. The oil fired heating includes 8 radiators (4 of them double ones) and automatic timing and temperature control plus separate built-in chambers to house both the boiler and oil storage tank. All this for £2,150!

## **"It's Just Wonderful"**

Mrs. Jack Taylor is lucky enough to live in a Scott house. And one of the most important reasons for buying the house was the oil fired heating. In her own words, "It's just wonderful. Less work — why, I can sit down and knit after lunch, and that's with



Mr. and Mrs. Jack Taylor with Jennie, their daughter, in the lounge of their Scott house. You can see how roomy it is, and you can also see the sort of radiators Mr. Scott puts in.

three kids to worry about, too." Mr. Taylor is just as pleased. "There's nothing wrong with this house and with oil fired heating - it's a winner!"

### What Your Customers Want

A recent enquiry covering 5,000 families in the U.K. showed that what the customer looks for in home heating now is:

- 1 A better standard of house heating - constant, even warmth in the home.
- 2 Economy.
- 3 An automatic labour-saving heating system - one which virtually runs itself.
- 4 Cleanliness and convenience - no dirt, dust or ashes to be cleared away.

Like Mr. Scott, you can give your customers all these advantages - with oil fired heating, which is the cheapest form of automatic heating. And by installing oil fired heating in houses you build, those houses

will be more profitable to sell. And don't forget, the whole oil firing installation can be bought as part of the house mortgage.

### Co-operation With Building Trades

Shell-Mex and B.P. Ltd. are playing the major part in the development of the new domestic oil firing market, working in very close co-operation with the building and heating trades. What's more, they have over 100 domestic oil firing representatives throughout the country. Shell-Mex and B.P. Ltd. are advertising extensively in the consumer press and every day are creating more and more prospects for oil fired heating. Customers wanting oil firing will go to you. Shell-Mex and B.P. Ltd. will be happy to help you satisfy them. Free technical advice is available at all times.

The Taylors, like many thousands of families throughout the country, get their fuel supplied through the Authorised Distributors of Shell-Mex and B.P. Ltd. That's why they get a good fuel fast and efficiently. With this sort of service, Mr. Scott knows all his customers will be satisfied.

If there's anything at all you'd like to know about oil fired heating; any particular problem you'd like solved, get in touch with

**SHELL-MEX AND B.P. LTD.**

FUEL OIL DEPARTMENT AJ11, SHELL-MEX HOUSE, 8 STRAND, LONDON, W.C.2



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The versatile outdoor plywood

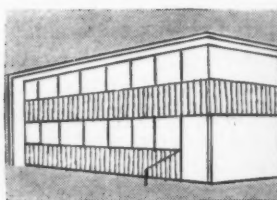
## Defies sun, rain and snow!

Designers may now take advantage of plywood's remarkable properties and cost savings for exterior construction.

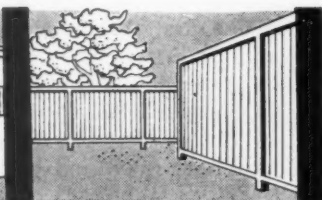
Used extensively in Canada and now being featured in some of the latest building developments in Great Britain, Ranch Wall has the same waterproof, boil-tested glue-line of all Seaboard Douglas fir plywoods, but is vertically grooved at 5-inch centres and factory-treated with a base-coat of Redwood stain. Ranch Wall is not only impervious to weather, it gives to buildings the pleasing design effect of rustic planking, while completely concealing the joints between panels.

If your usual supplier does not stock Ranch Wall, he can order it for you.

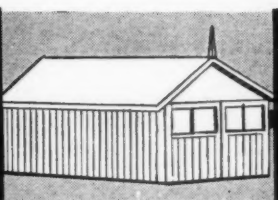
Standard 8 x 4 ft. panels—either 3/8 in. or 9/16 in. thick (lengths over 8 ft. may be ordered)



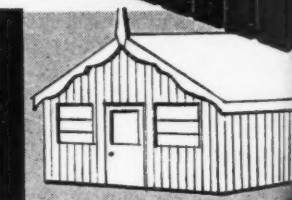
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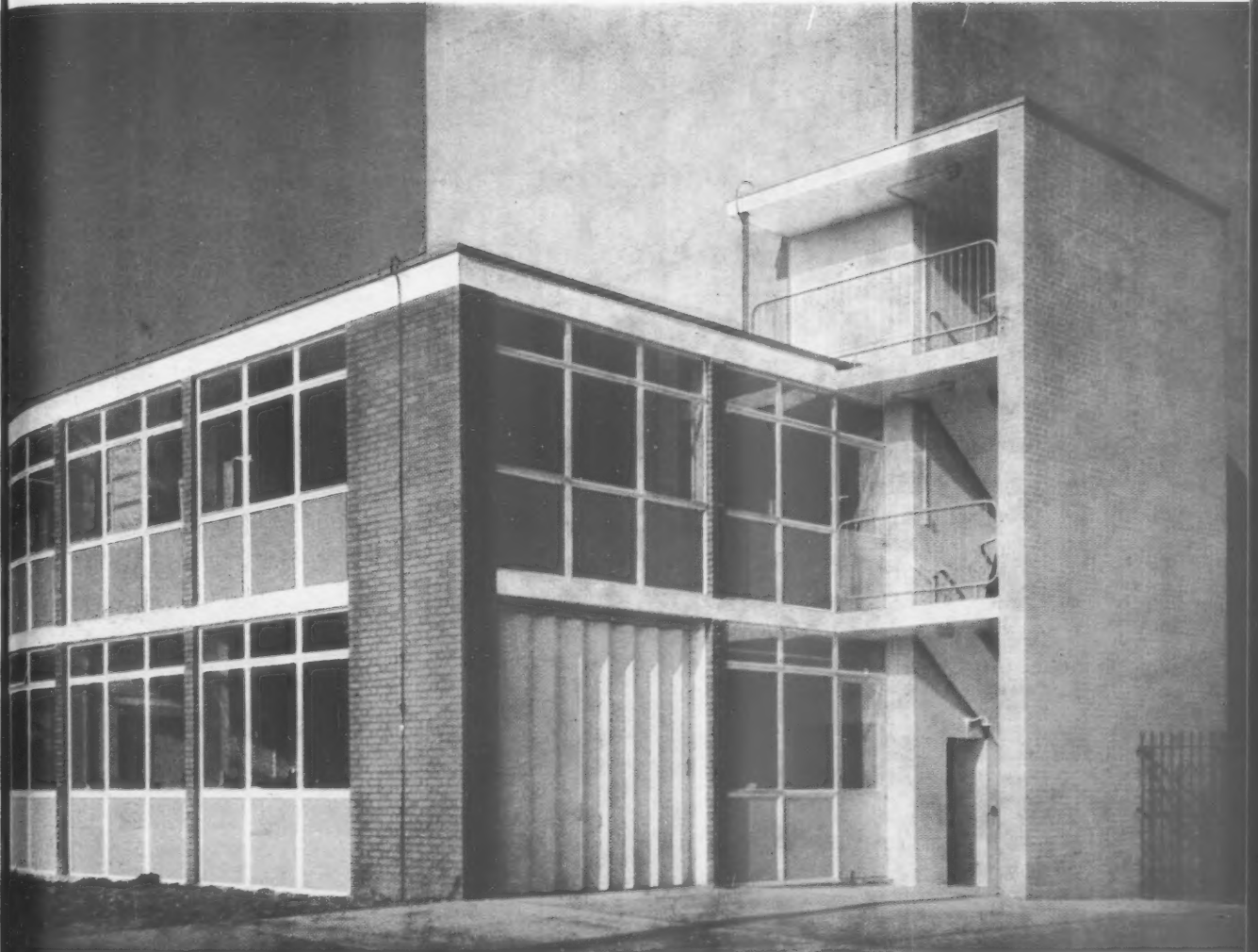
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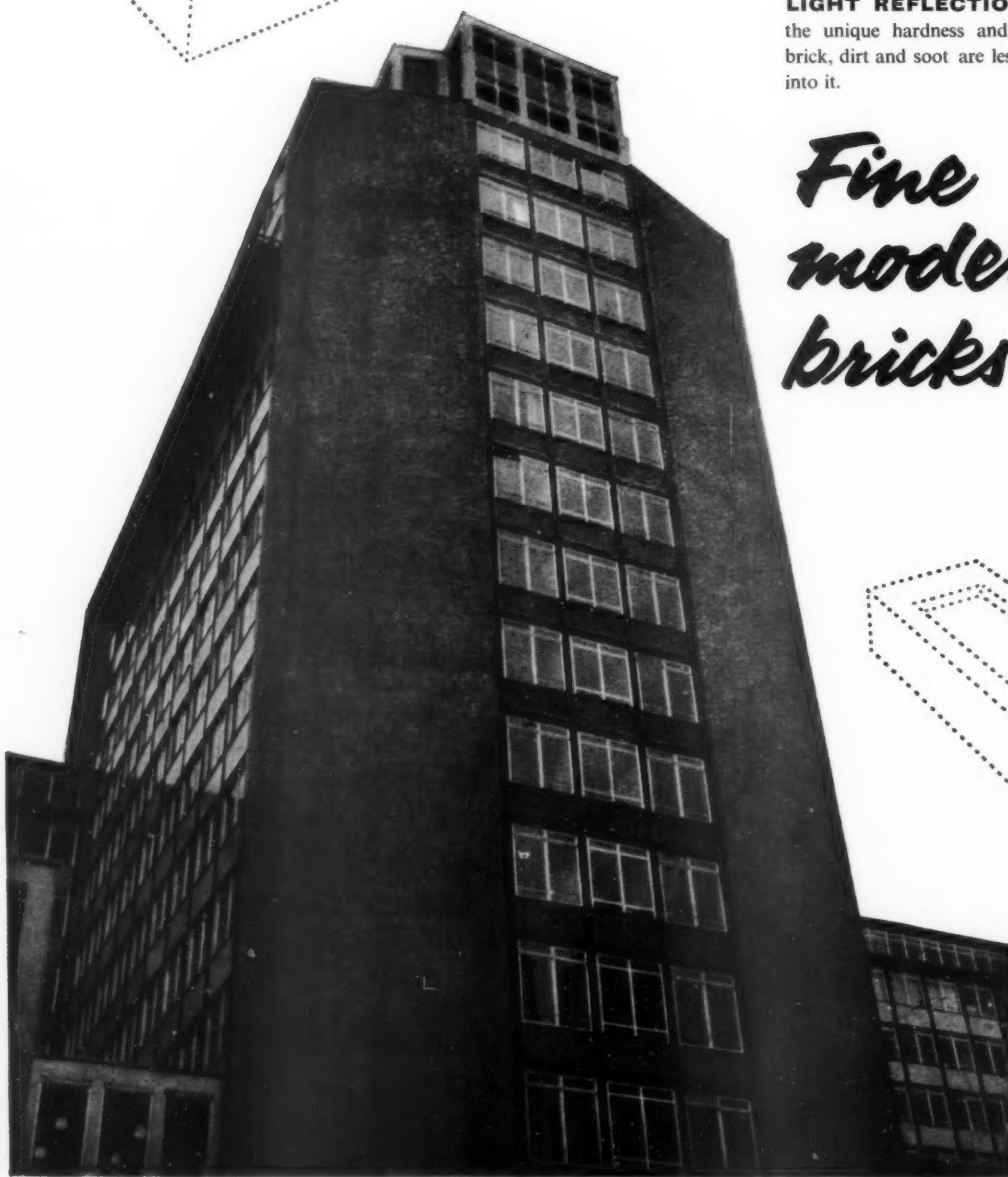
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used for facing  
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Architects:  
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Photo by courtesy of  
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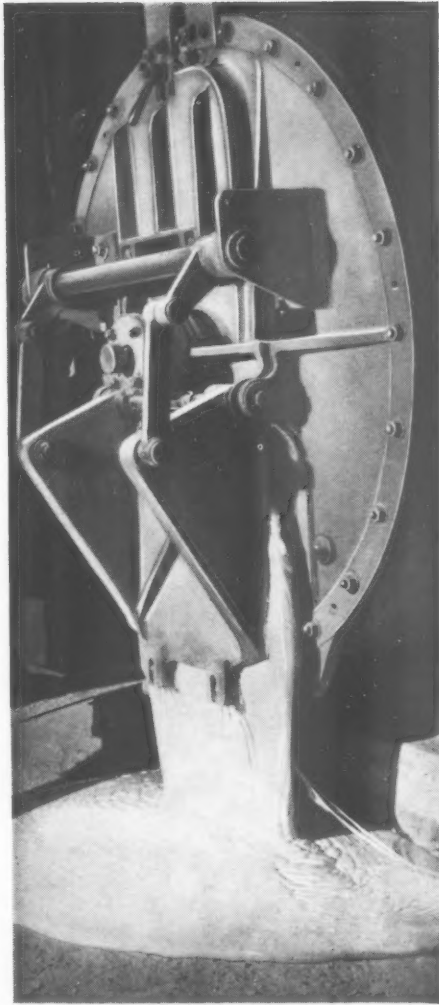
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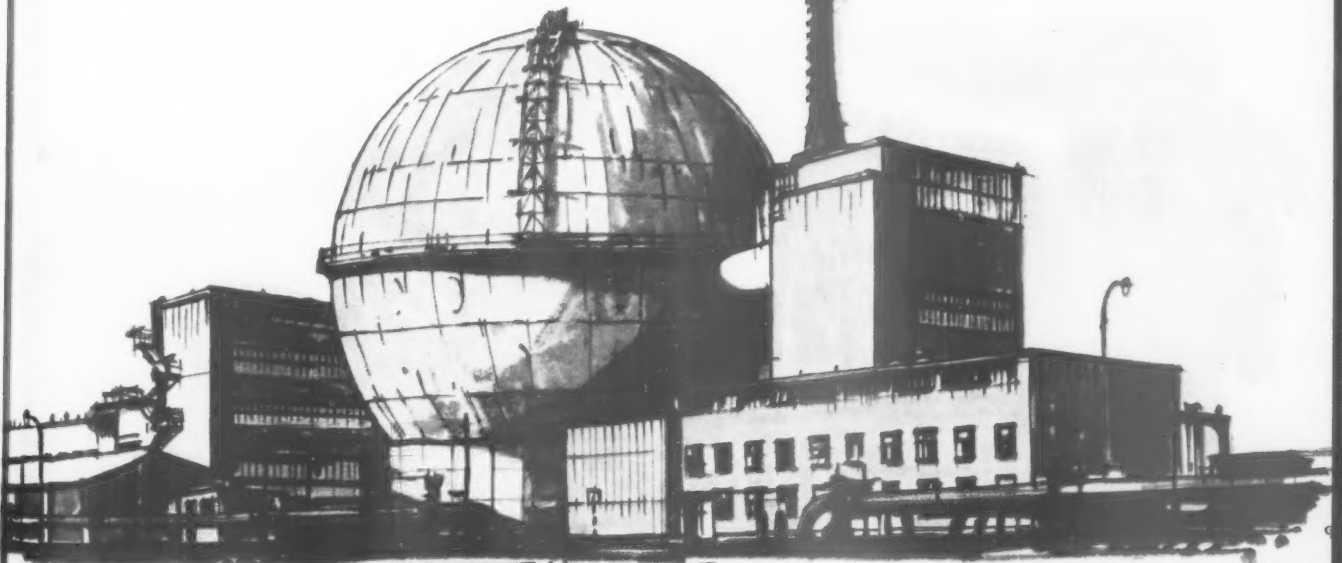


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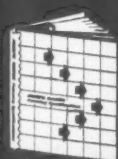
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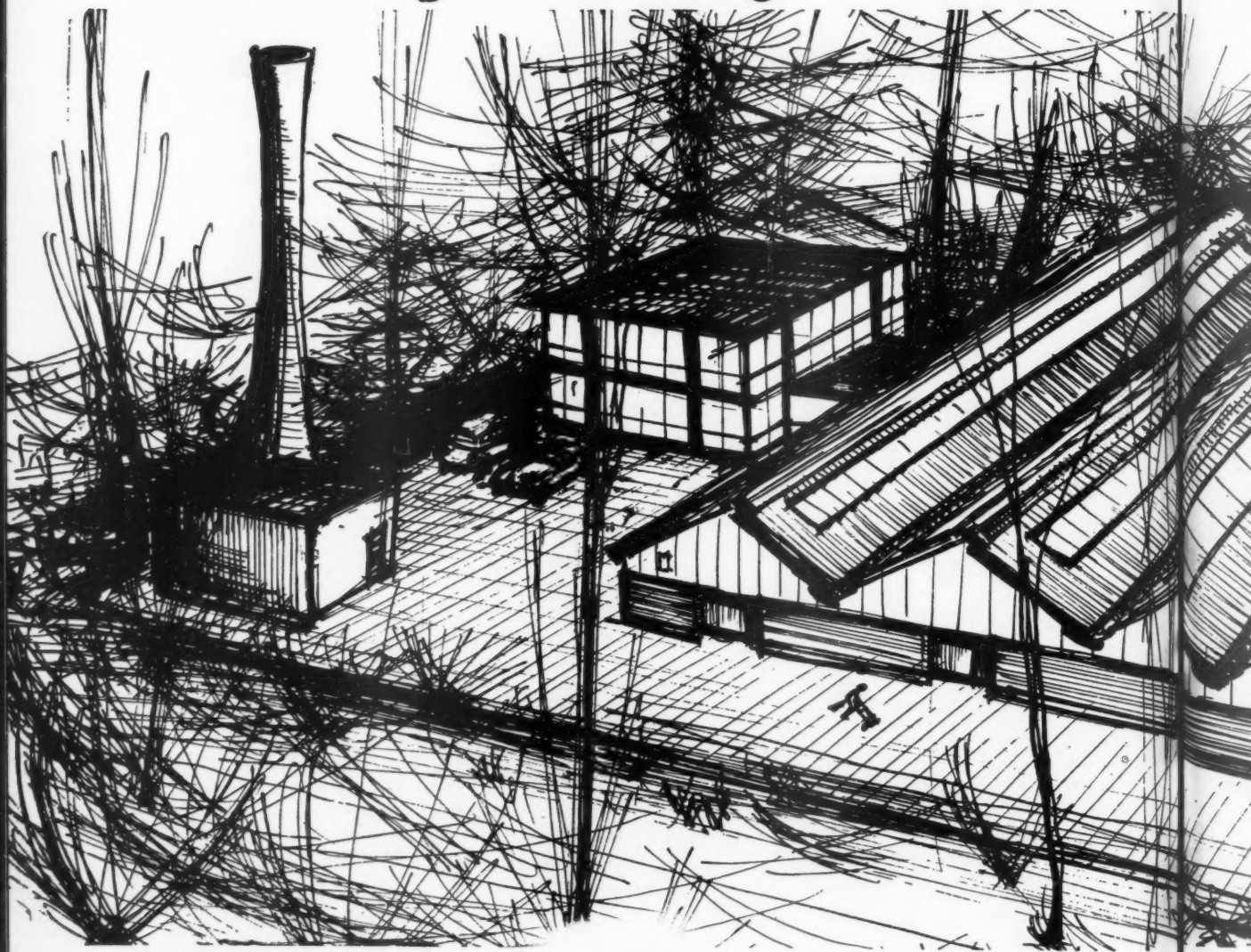
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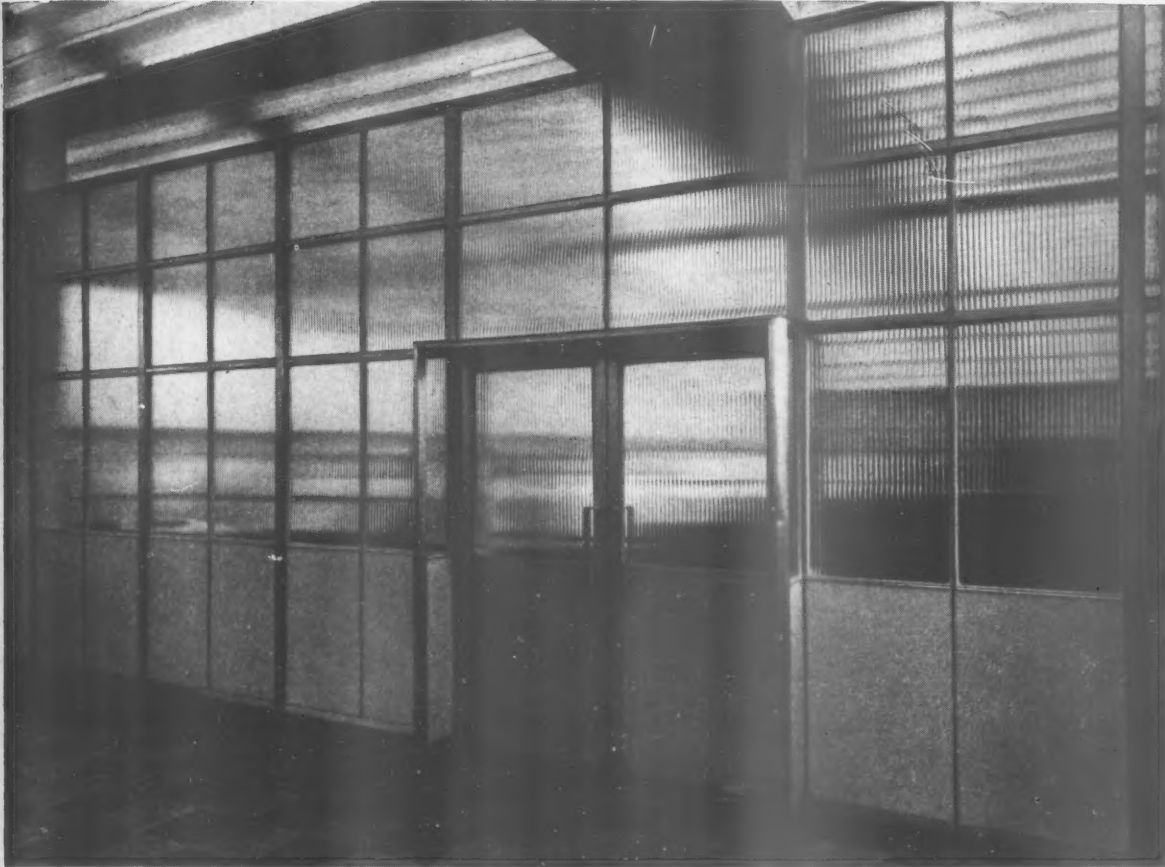
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*The above photograph shows BRABY 'Bar-Form' Partitions supplied and fixed at the new Research and Design Building of Messrs. C. A. Parsons & Co. Ltd., Newcastle-on-Tyne.*

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Planet House, Chiltern Street, Baker Street, London. Architects: R. Seifert and Partners.

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*Designed, installed and serviced by Weatherfoil.*

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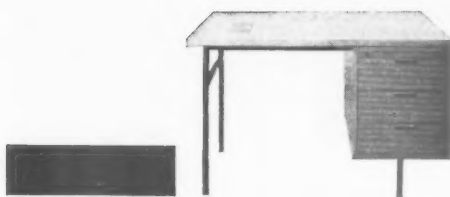
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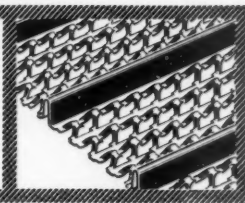
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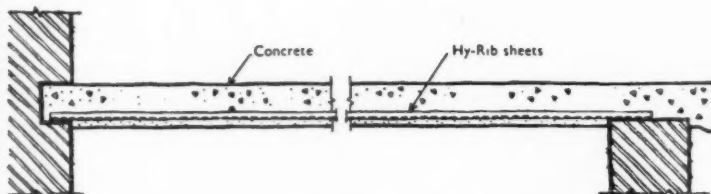
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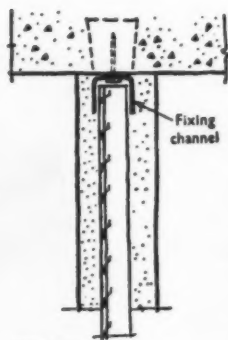
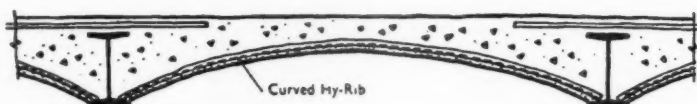


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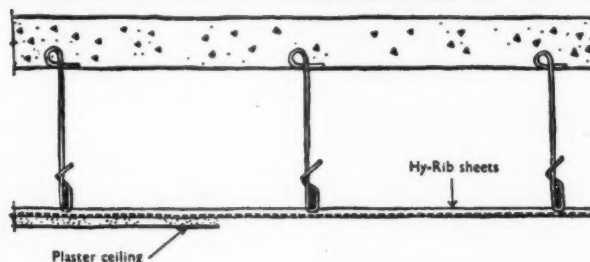
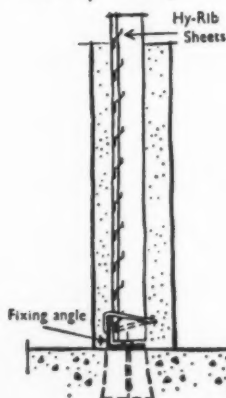
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*'Crestaline' flooring made from 'Corvic' by Jas. Williamson and Son Ltd., Lancaster, at the Hobs Moat Branch Library, Solihull.*

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An increasingly important use of 'Corvic' is in the manufacture of flooring. The illustration shows 'Crestaline'

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**'CORVIC'**

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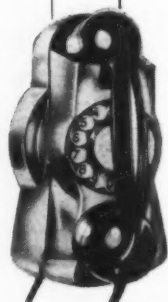
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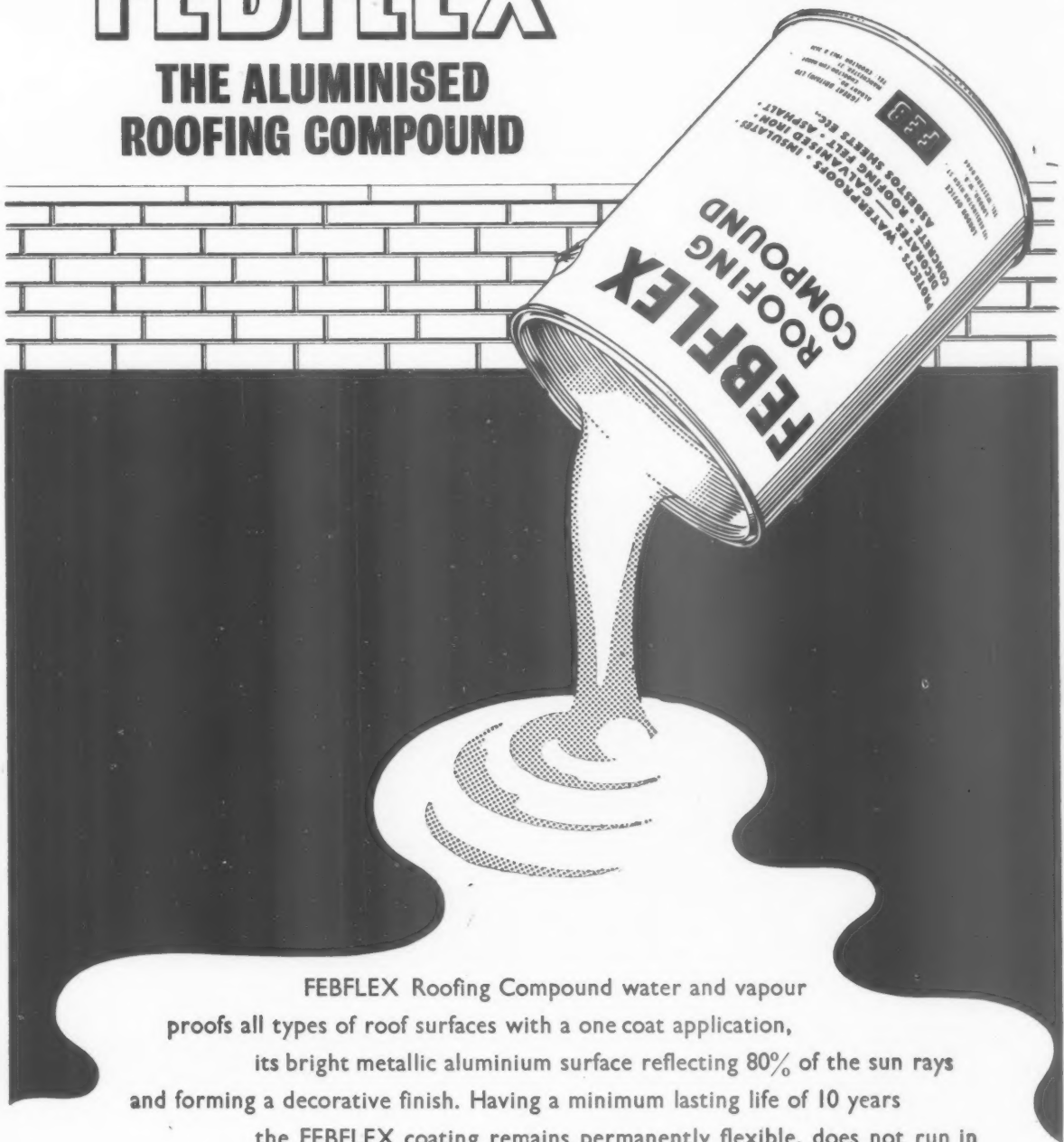
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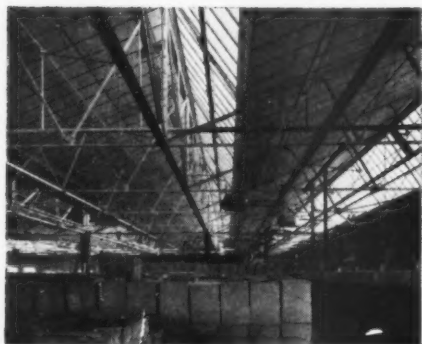
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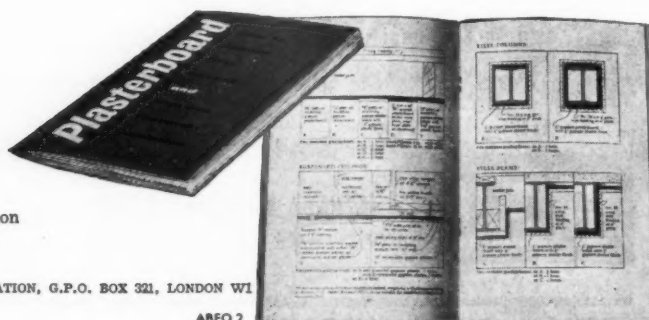
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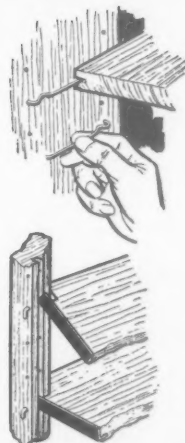
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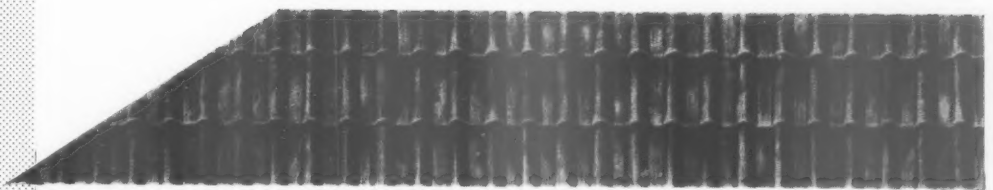
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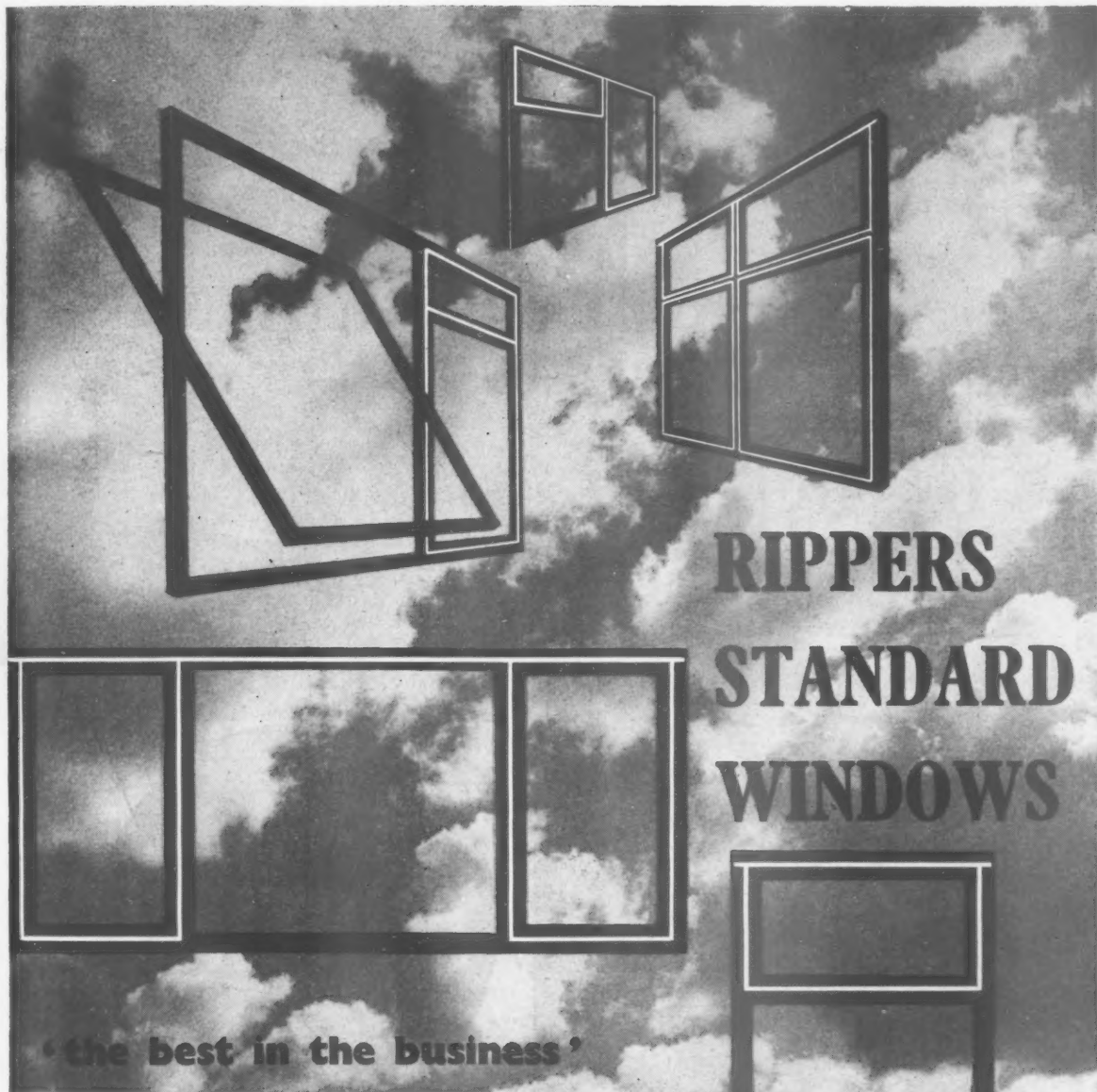
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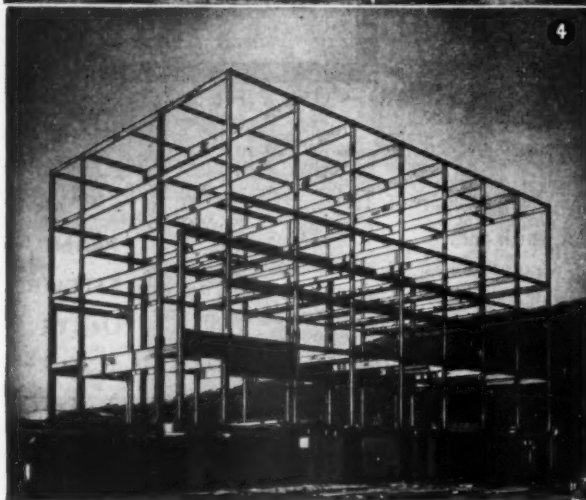
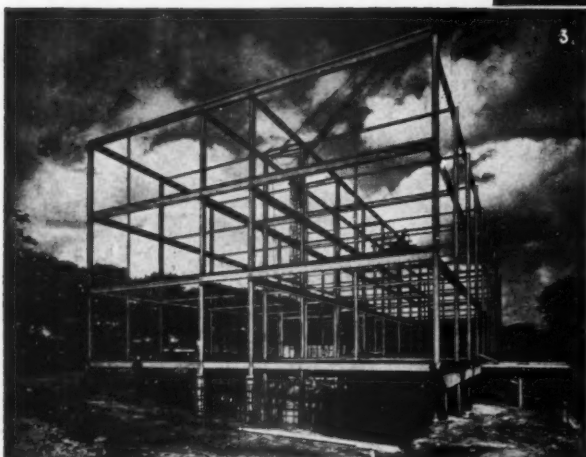
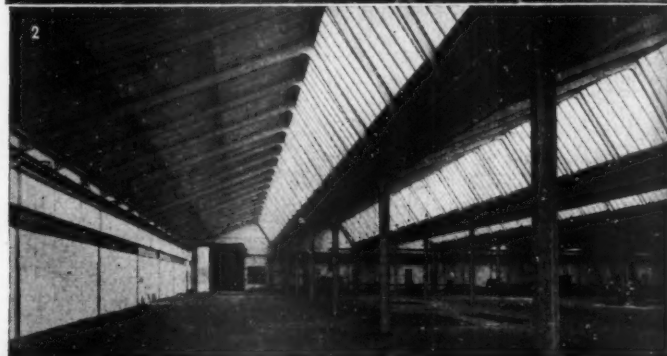
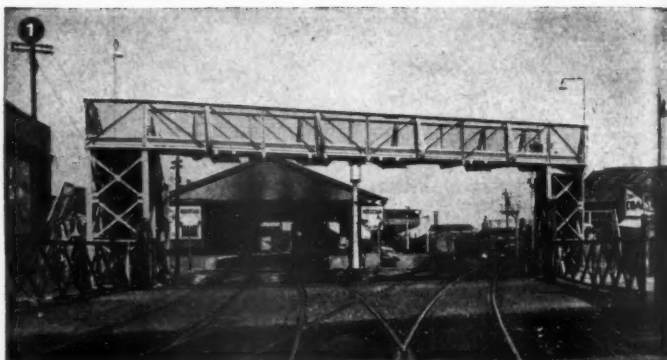


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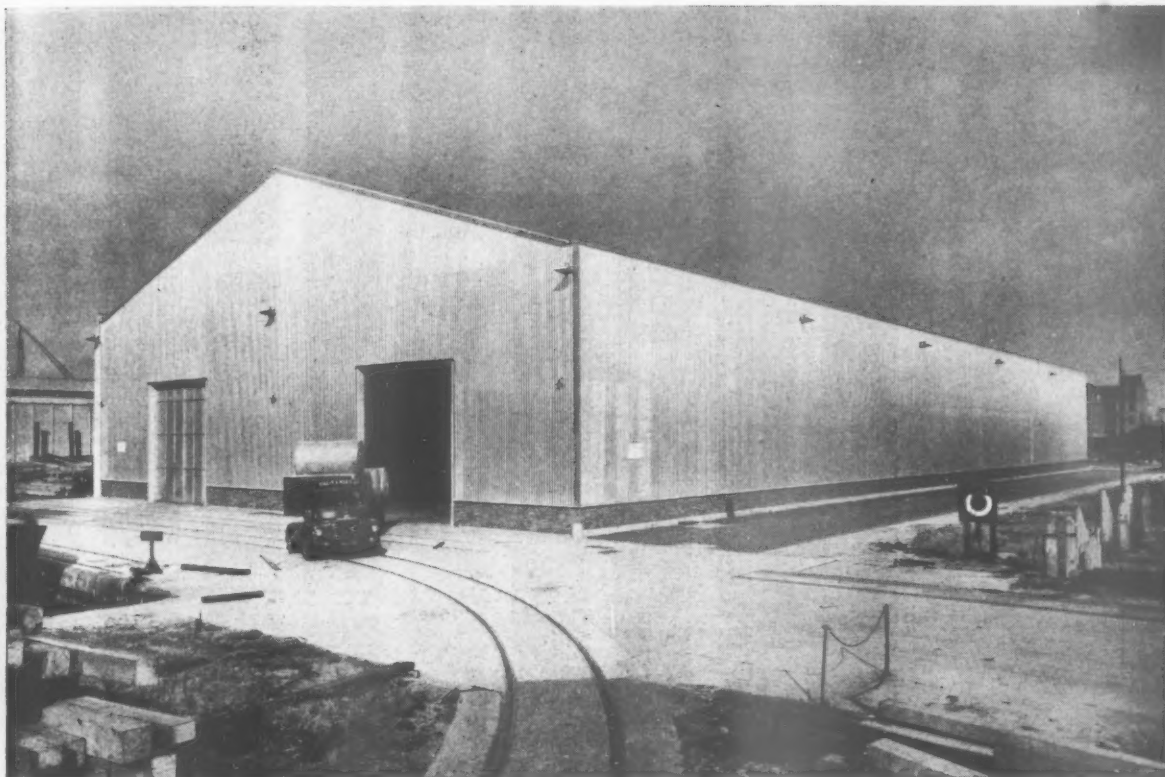
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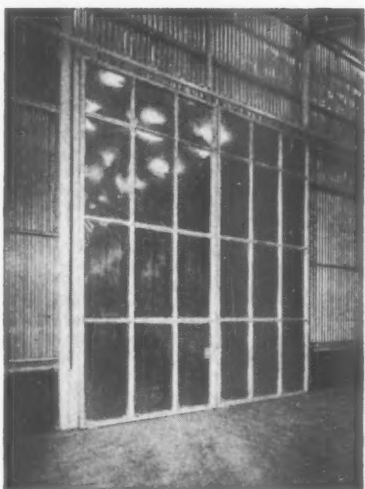
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*Designed and constructed under the supervision of G.A. Wilson Esq., M.Eng., M.I.C.E., M.I.Mech.E., Chief Engineer, Port of London Authority.*

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### in the Port of London

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British Aluminium building sheet needs little maintenance, and will last a lifetime in this marine environment.

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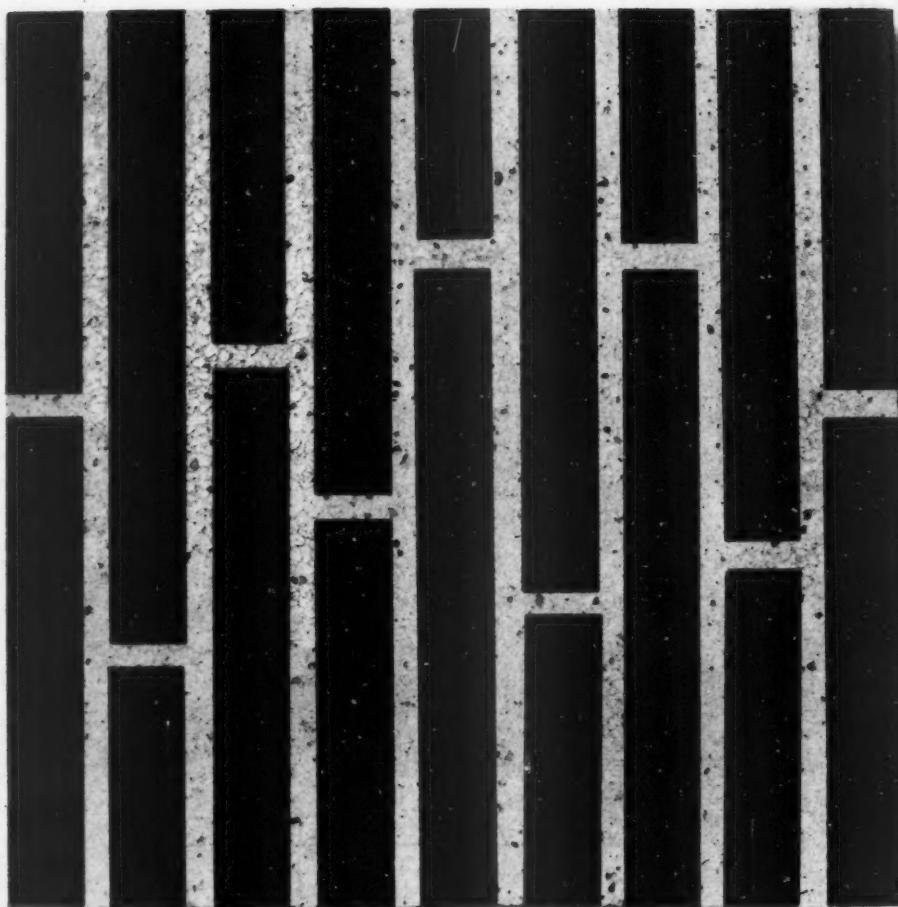
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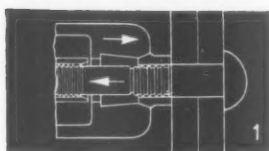
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**THE WINCILATE GROUP**

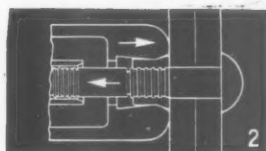


# REVOLUTION IN FASTENING METHODS

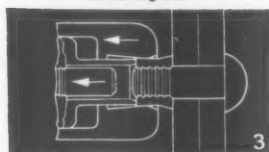
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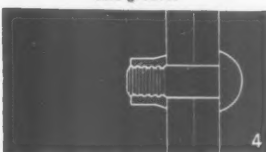
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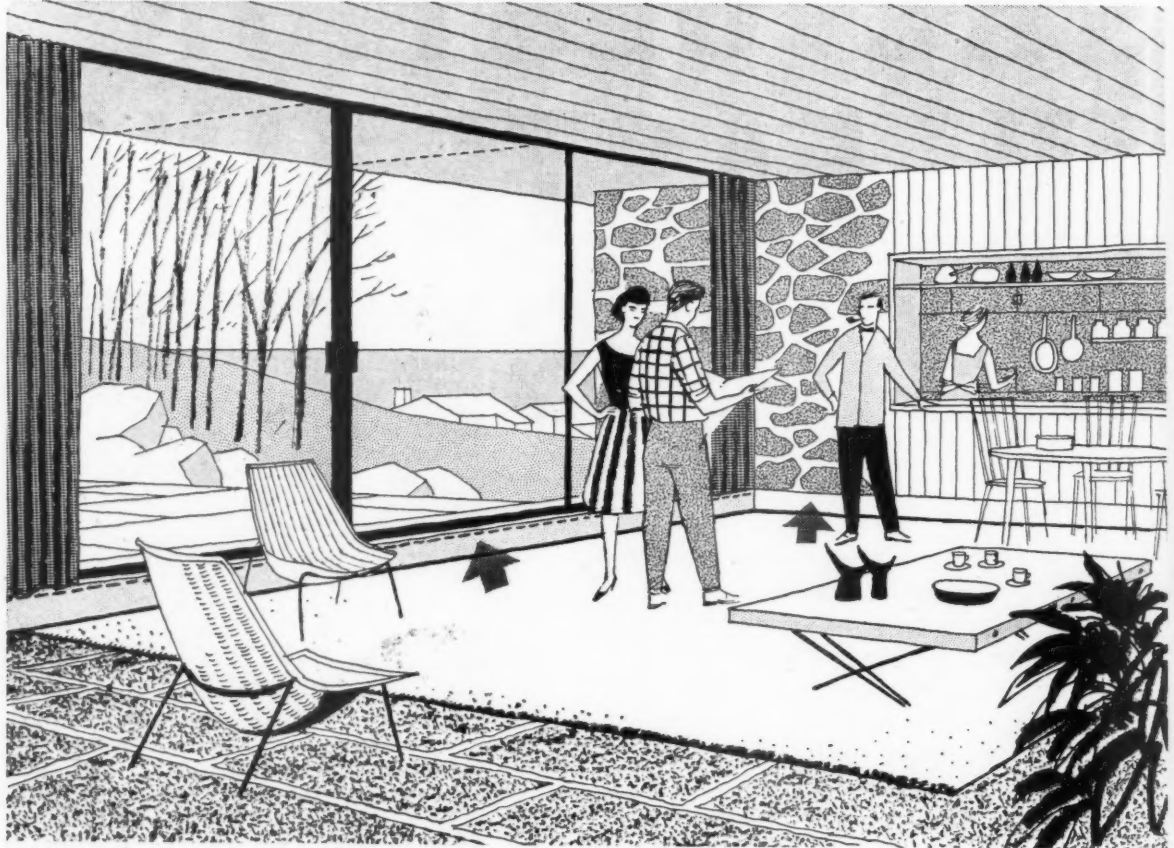
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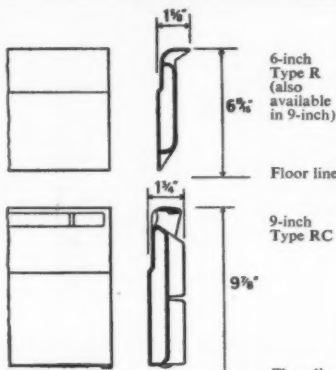
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AJY

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6-inch  
Type R  
(also  
available  
in 9-inch)

6"

Floor line

9-inch  
Type RC

9"

Floor line

*Manual (No. 423) on Crane Skirting Heating  
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**E**VEN in the case of a private house, where normally the cubic space to be heated is in relatively small units, the existence of a large window area in any of these units will appreciably increase the amount of heat required to maintain a steady, equable temperature.

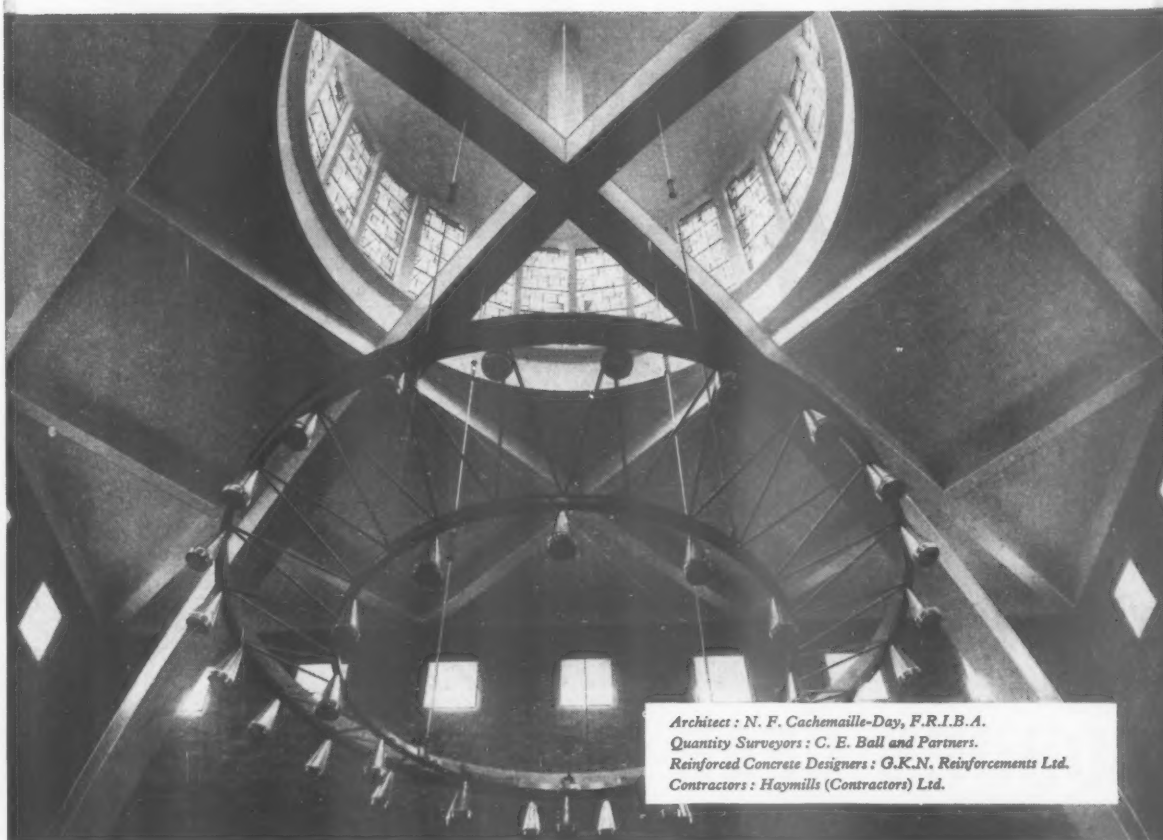
Fortunately this loss of heat can now be countered very efficiently, and very much more simply than might be imagined, by the installation of Crane Skirting Heating. This system of heating, which is more and more widely recognized by the architect and heating engineer as the answer to heating problems in general, owing to its unobtrusiveness and even distribution of warmth, is particularly suitable to this problem.

Crane Skirting Heating takes the form of heating panels which 'stand-in' for normal skirting boards. The Type RC (radiant-convector) panel is nominally 9 inches high and is used in this instance directly beneath the window to offset the heat loss (see arrow). Type R (radiant) panels are in two sizes—6-inch and 9-inch (the latter marked with arrow). All panels are in 2-ft and 1-ft lengths and are made of cast iron, which gives them considerable resistance to accidental damage. The operations of calculating heat requirements and designing the pipework are in principle no different from those for conventional radiator heating systems.

Whenever the architect needs greater freedom of expression than conventional heating systems allow him, and at the same time has to pay due consideration to costs, the answer is, undoubtedly,

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## DESIGNS IN CONCRETE 2



*Architect : N. F. Cachemaille-Day, F.R.I.B.A.  
Quantity Surveyors : C. E. Ball and Partners.  
Reinforced Concrete Designers : G.K.N. Reinforcements Ltd.  
Contractors : Haymills (Contractors) Ltd.*

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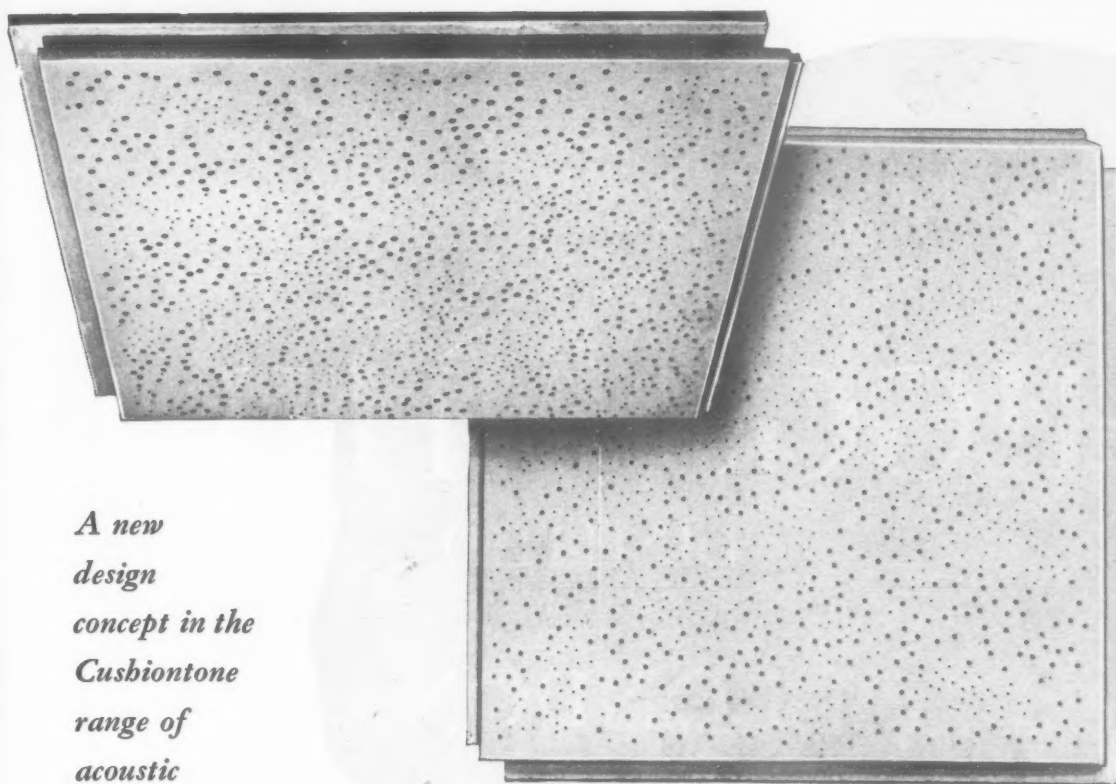
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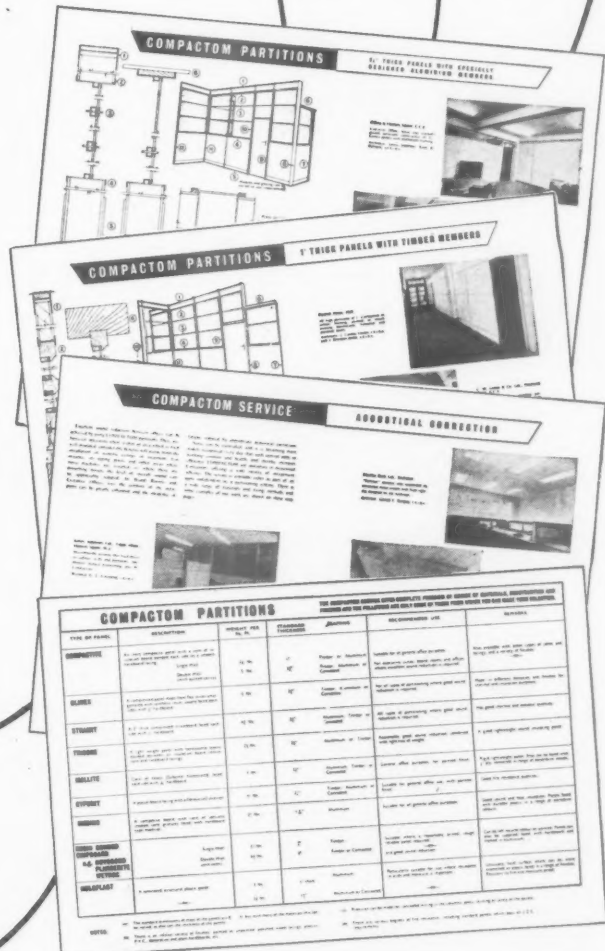
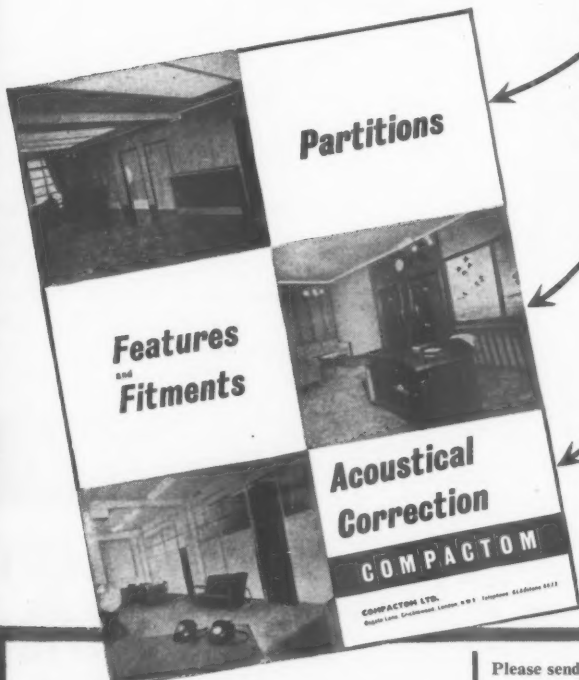


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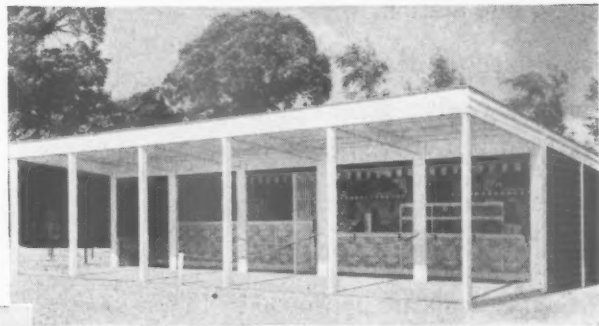
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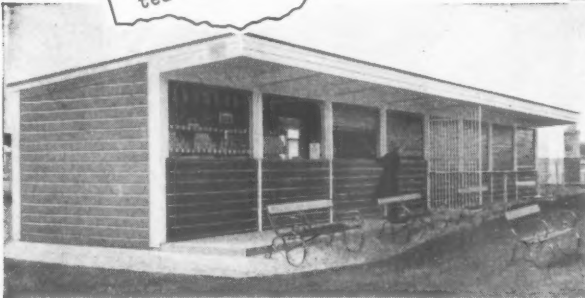
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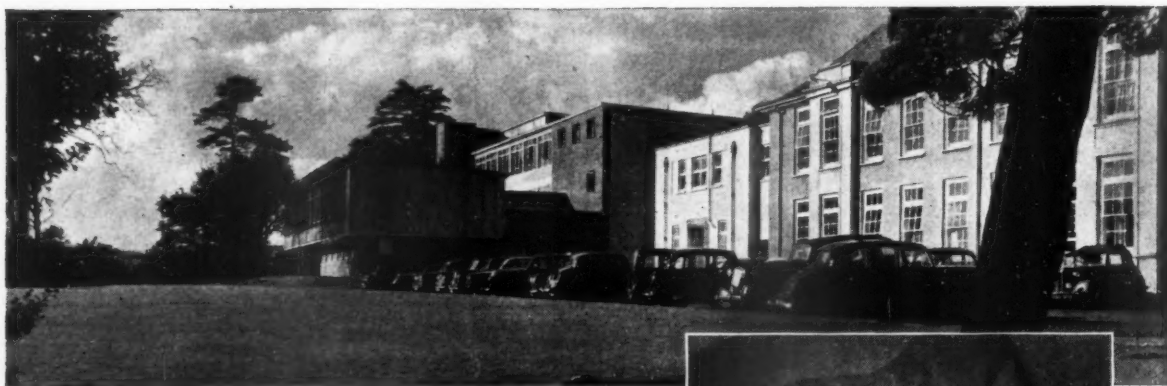
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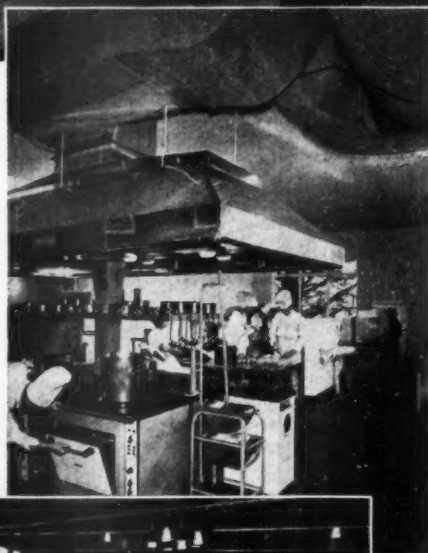
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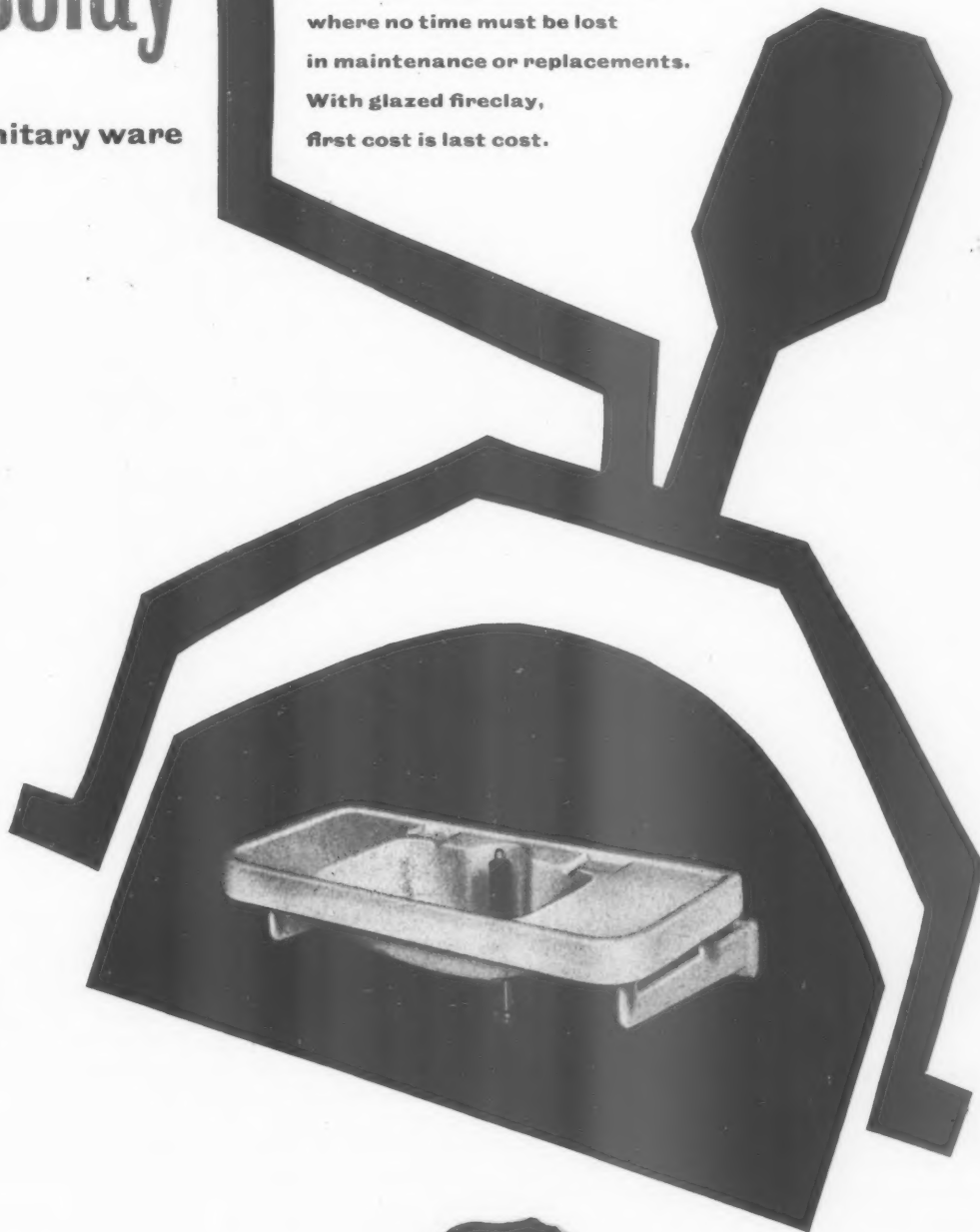


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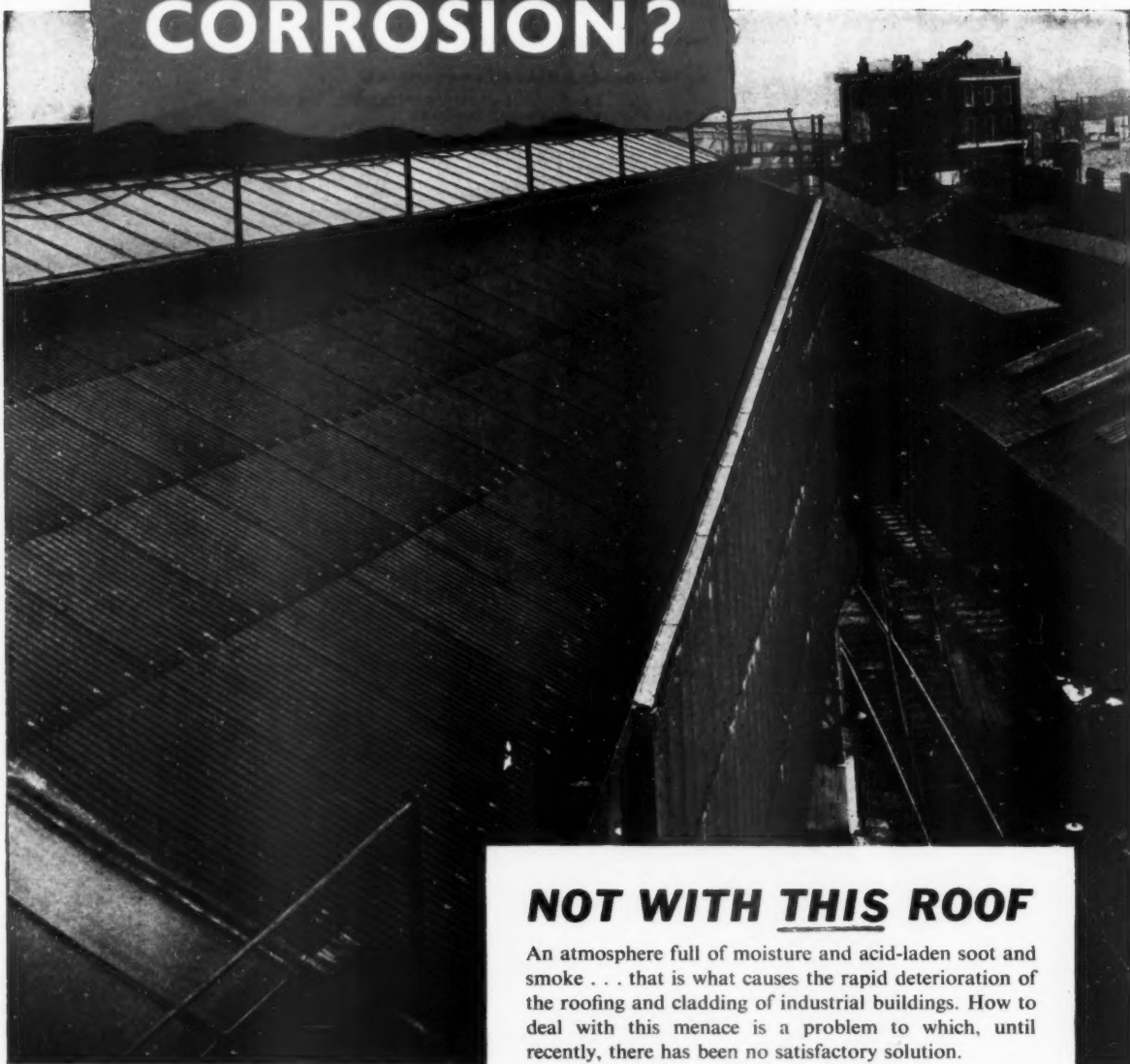
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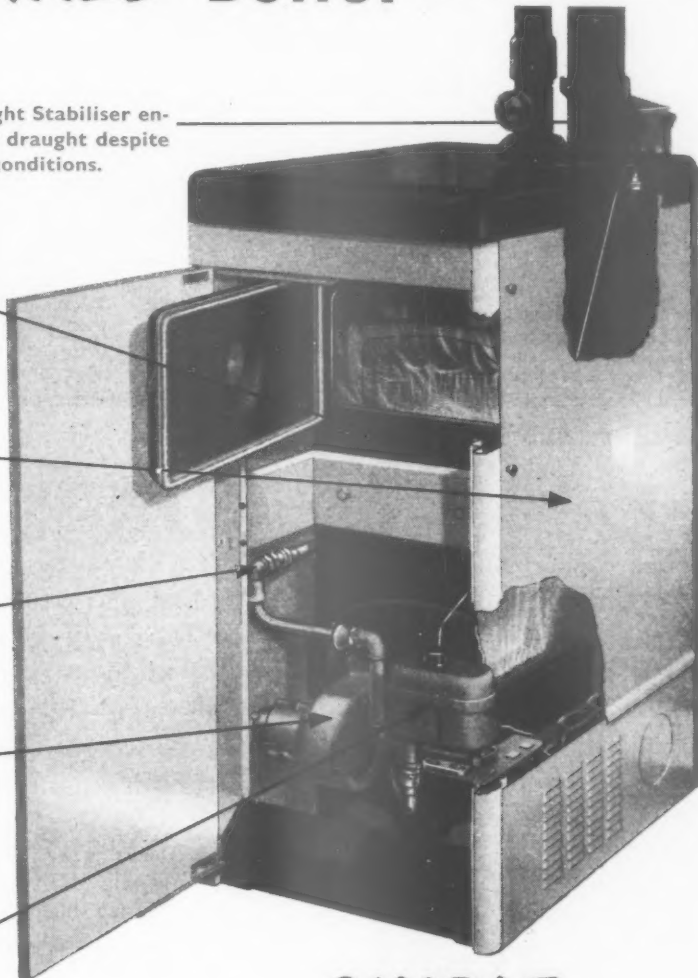
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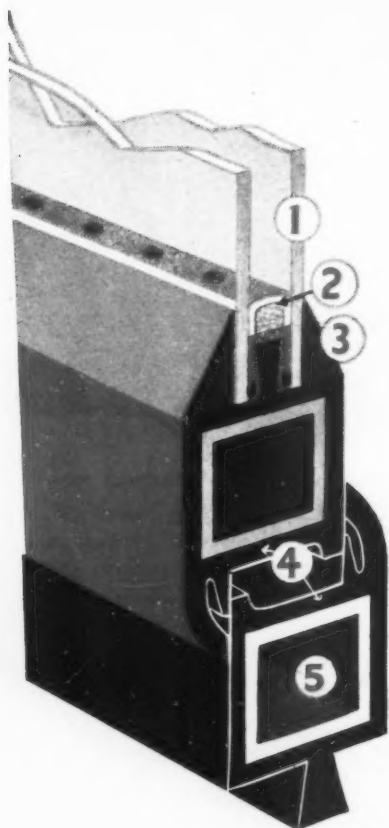


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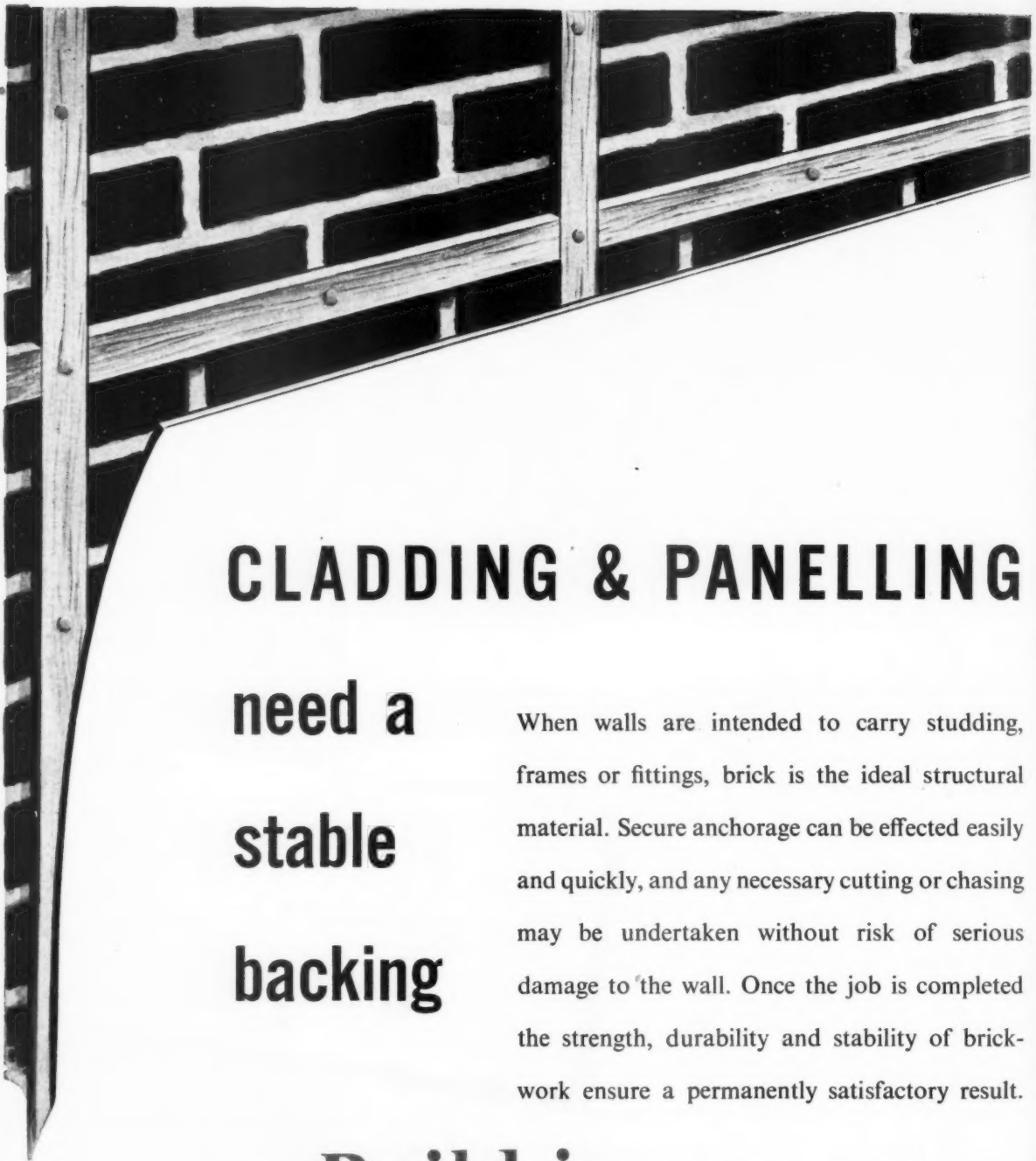
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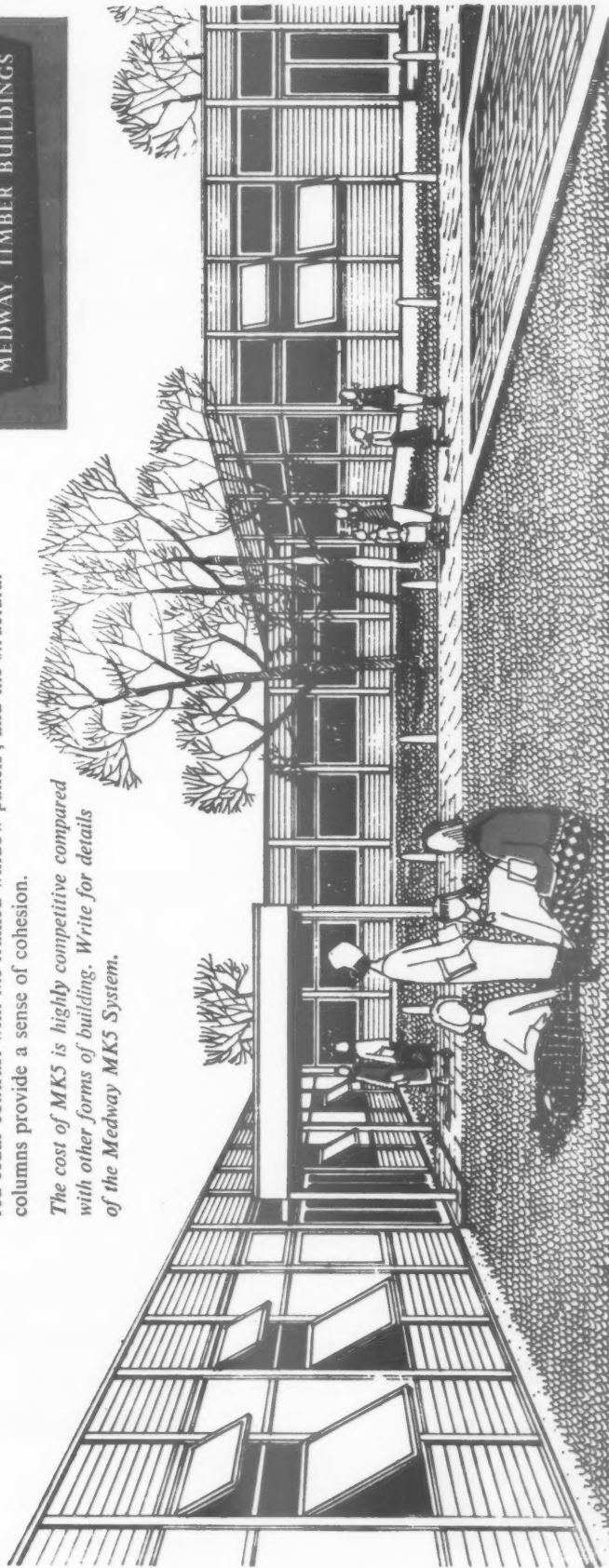
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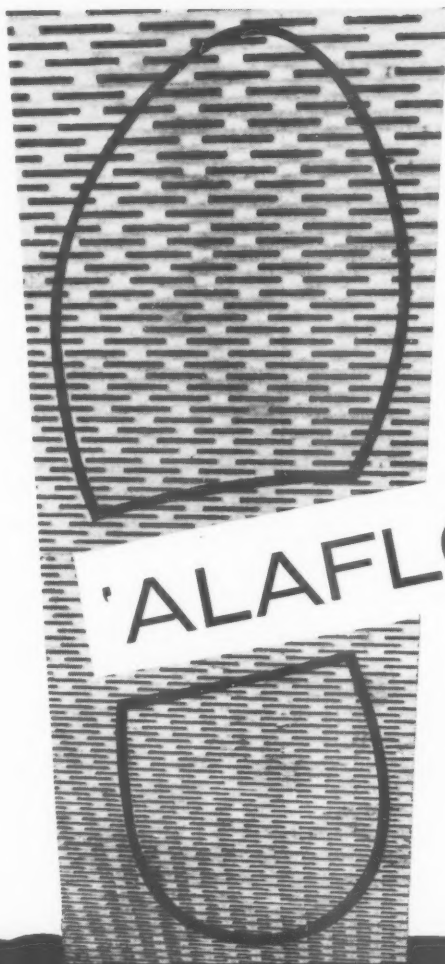
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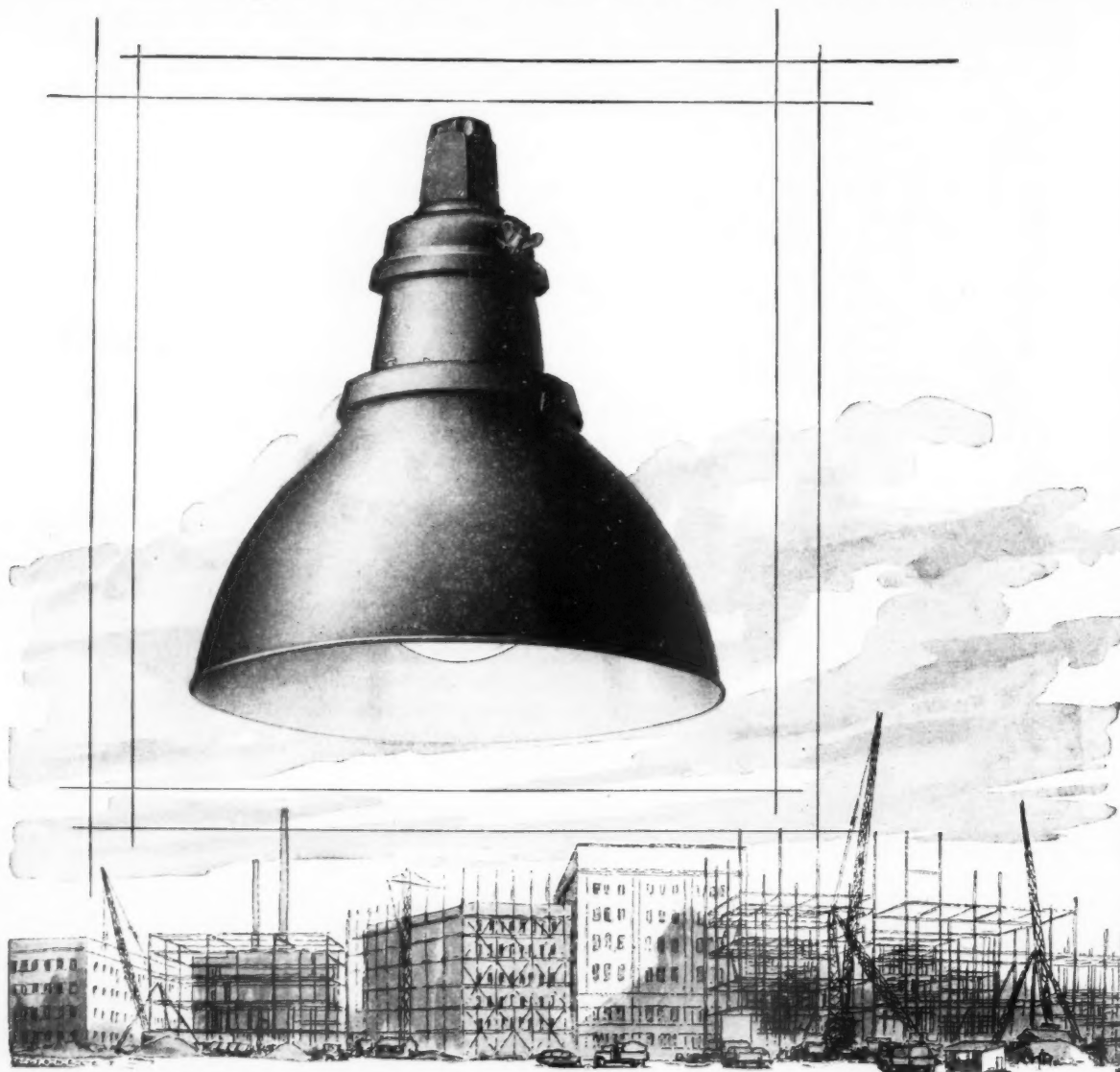
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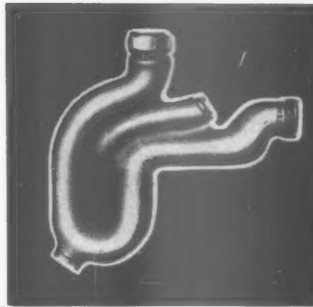
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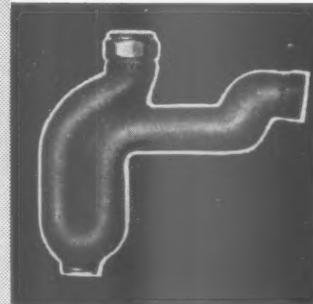
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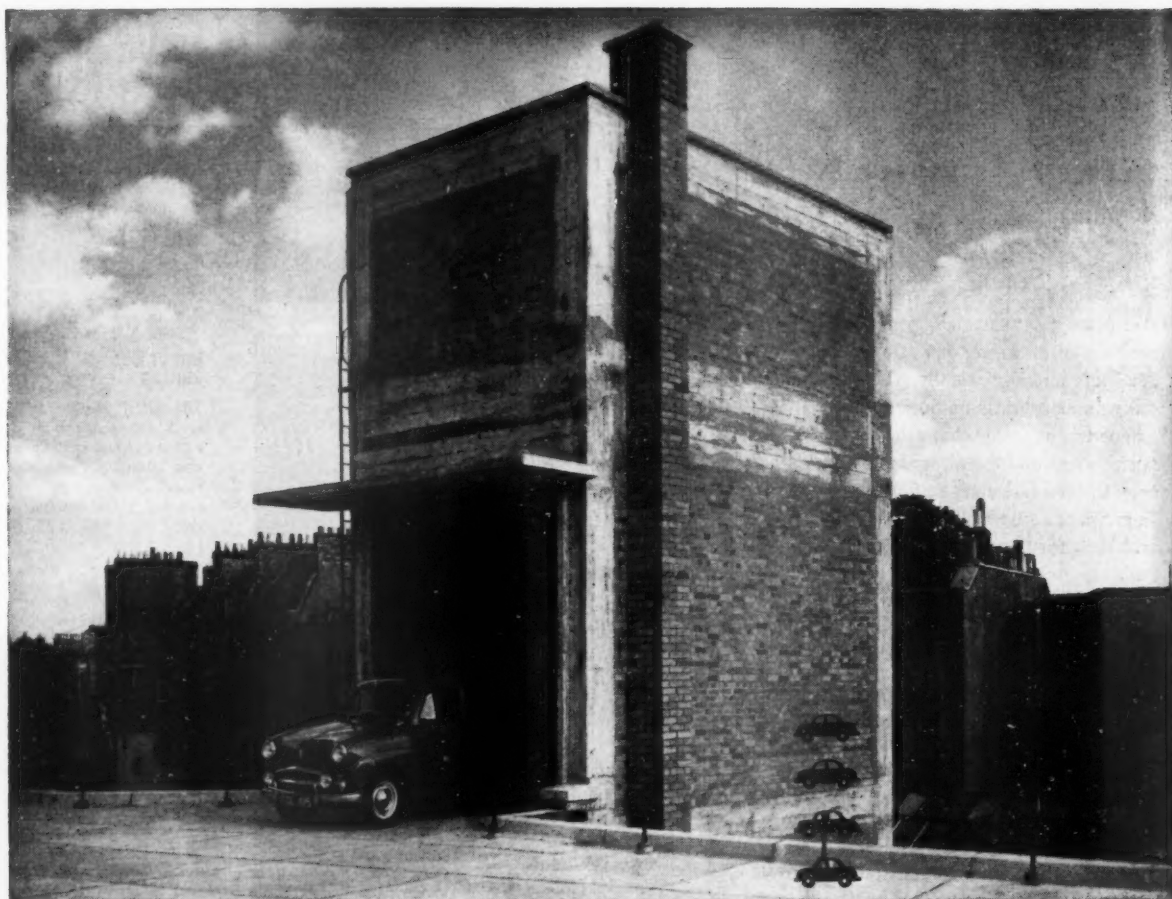
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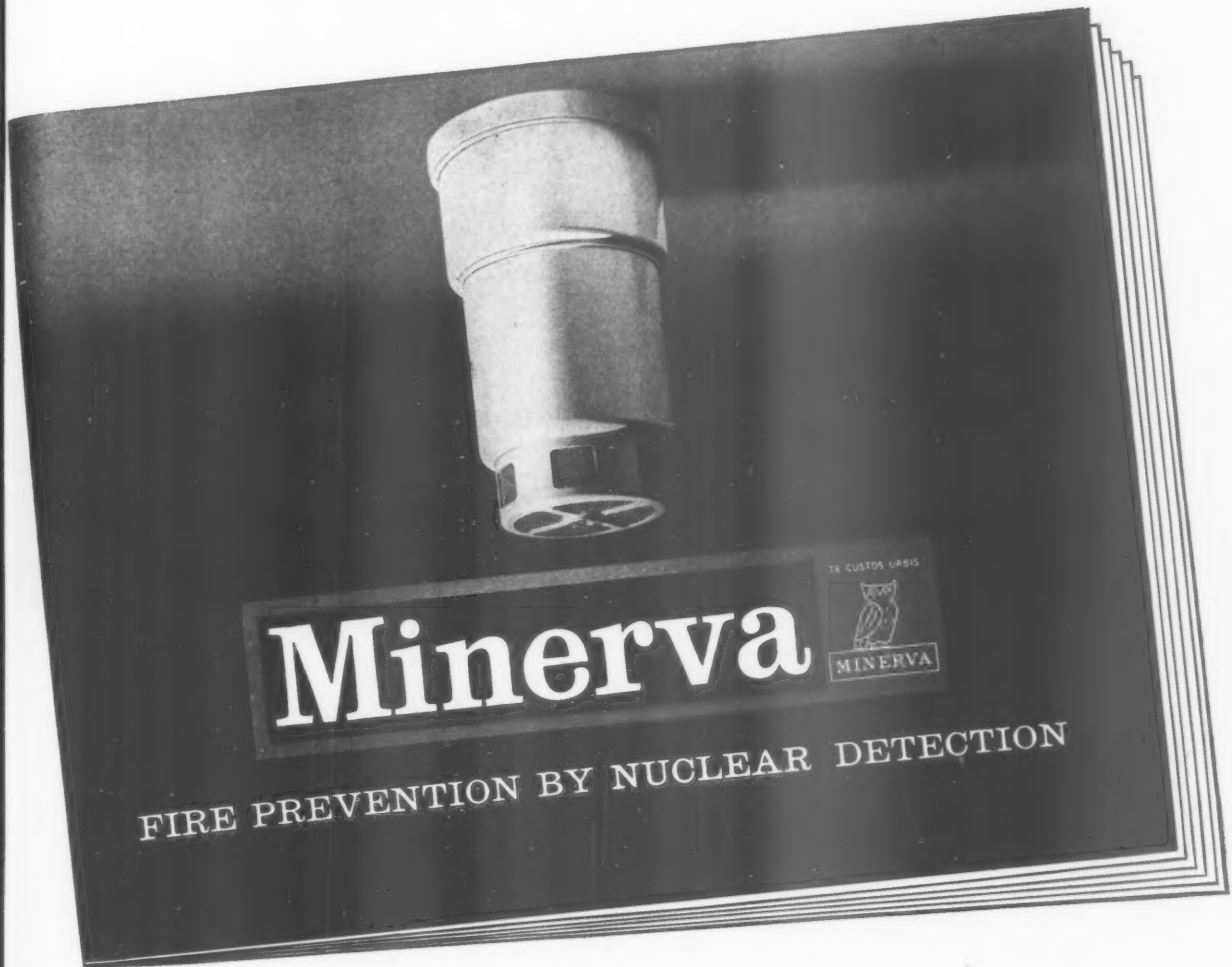
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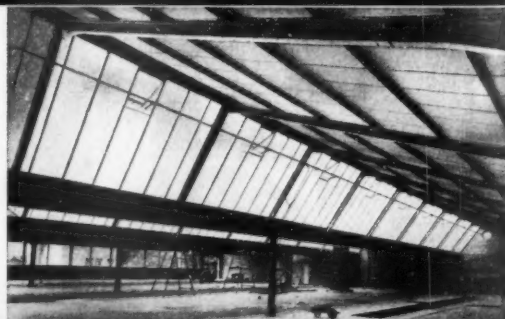
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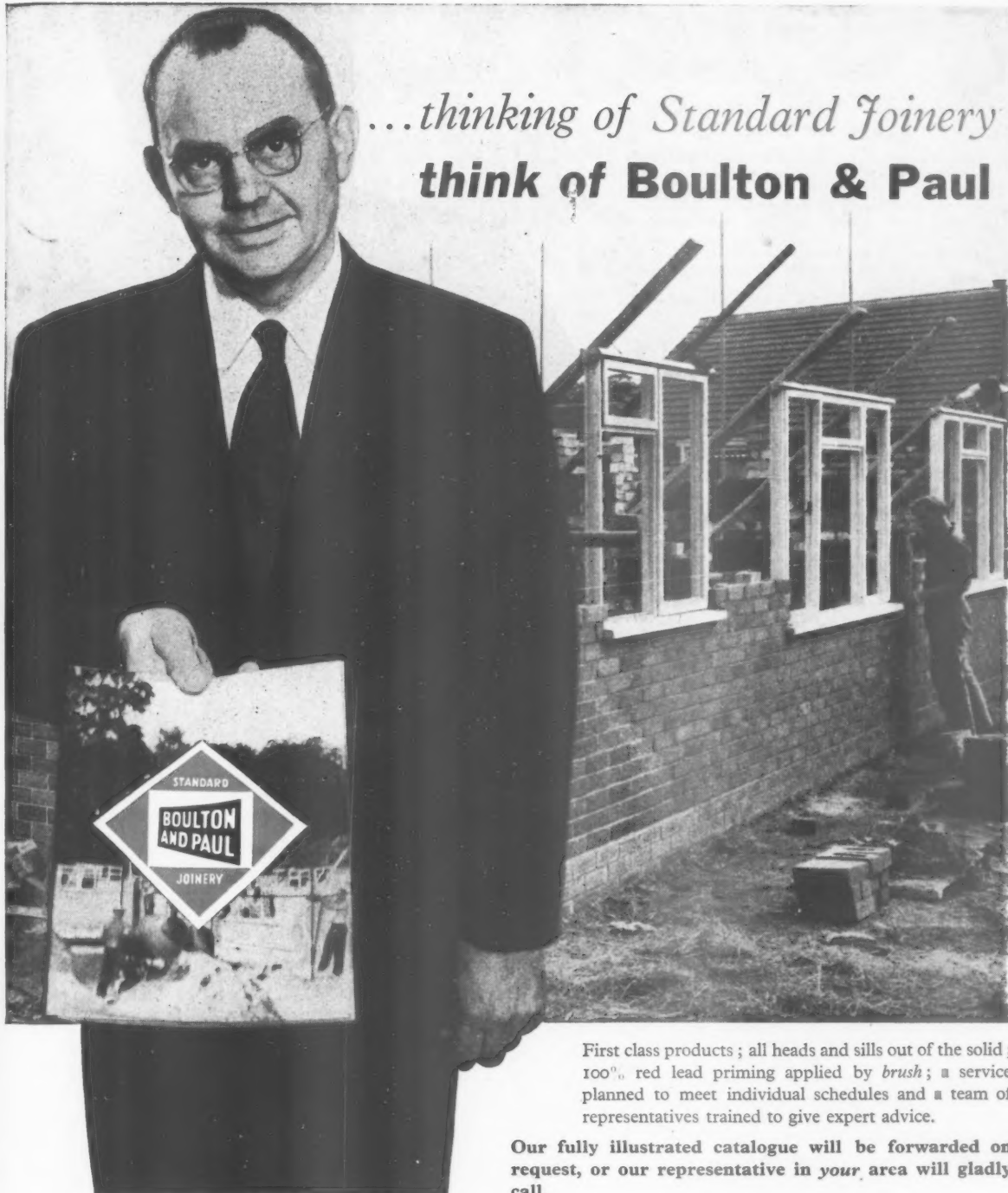
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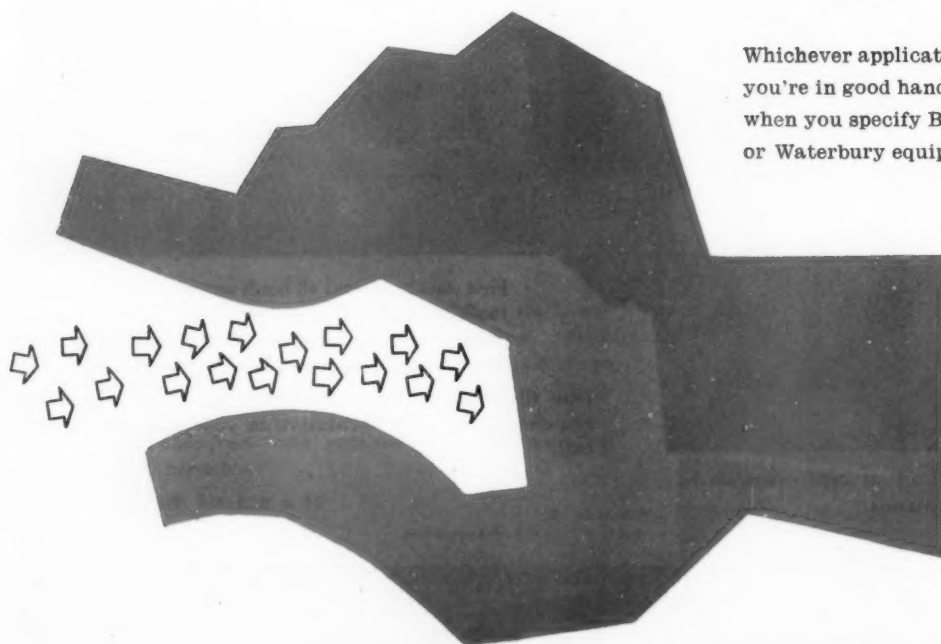
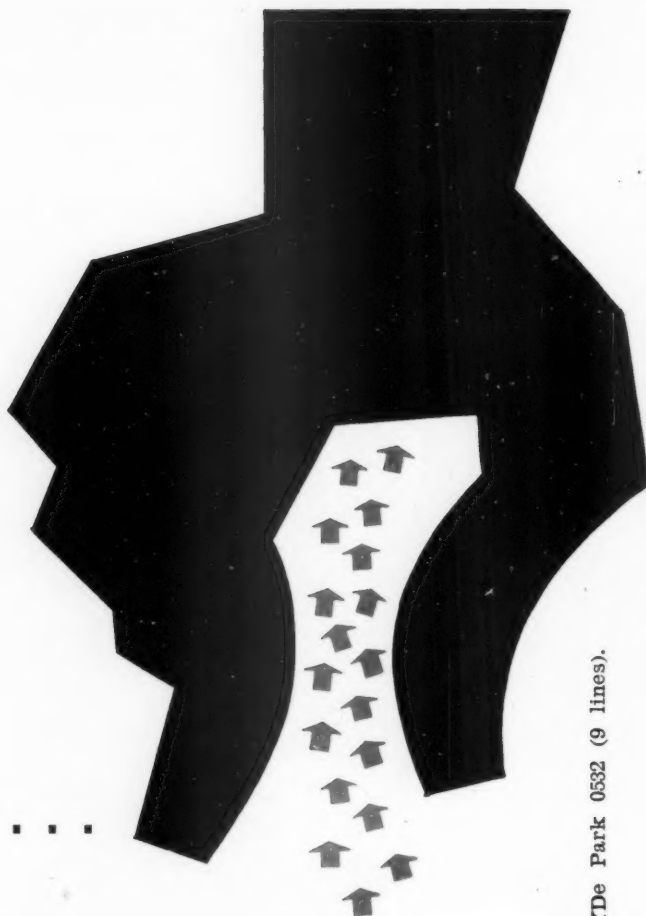
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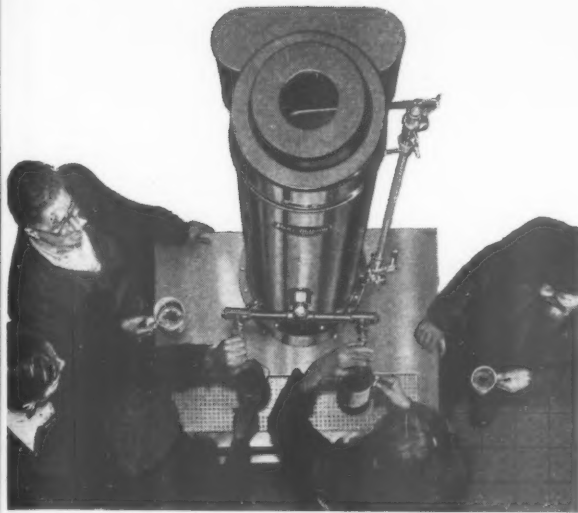
## COAST (GASP) TO (PANT PANT) COAST

I had to be in San Francisco in a hurry. So did a student just back from a six-month motor scooter tour of Europe and an Air Force intelligence officer bound for the Far East. We also found another member of the USAF heading for Reno. We left Philadelphia one Monday morning. On Wednesday, 63½ hours and 3,000 miles later we were in San Francisco, the '49 Chevrolet still intact, but gasping for breath. (The cast-offs of planned obsolescence are remarkably sturdy.) The routine of eat, drive, sleep coupled with passing through so many places leaves a blurred impression of details, but a good image of the size and variety of the continent. The journey starts on super-highways. From central Philadelphia the road squirms west across the country to within two miles of Chicago Loop. At Valley Forge, where we join the Pennsylvania Turnpike, Washington defeated the British troops and it is now a showplace for Dogwood blossoms each spring. After diving through the tunnels below the Blue Ridge and Allegheny Mountains, Pittsburgh passes by, several miles to the left. This is a depressing city and not even a Clean Air Bill, Triangle Redevelopment, Alcoa Building or Mellon Square have been the necessary shot in the arm.

The mountains fade away, so does the day, and we rush along the Ohio and Indiana Turnpikes. There is no advertising on the turnpikes, but selection by advertisers of sites adjacent to the Right of Way bring the bill boards back in view. In the next recession the advertising lobby may even convince Congress that bill boards are "in the public interest."

Exit from the turnpike just south of Chicago, in a forest of factories. No time for Mies, no time for Sullivan and Wright, no time for the Loop or F. L. Olmstead, only time to stop and pay a passing policeman \$15 for driving at 47 in a 40 zone.

Heavy fog now on the road. I drive with my head out of the window in a temperature of 30 degrees. We cross the Mississippi



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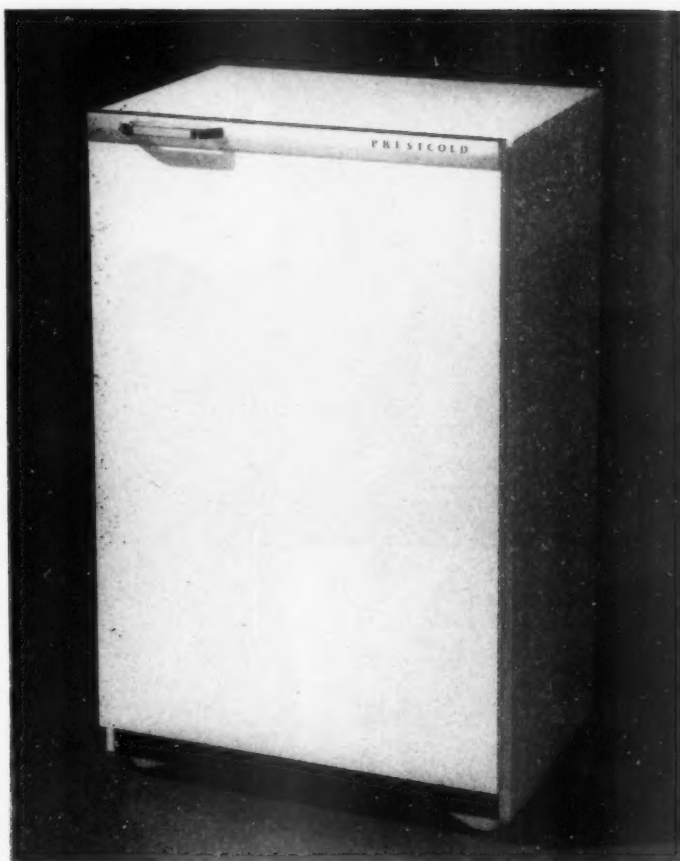
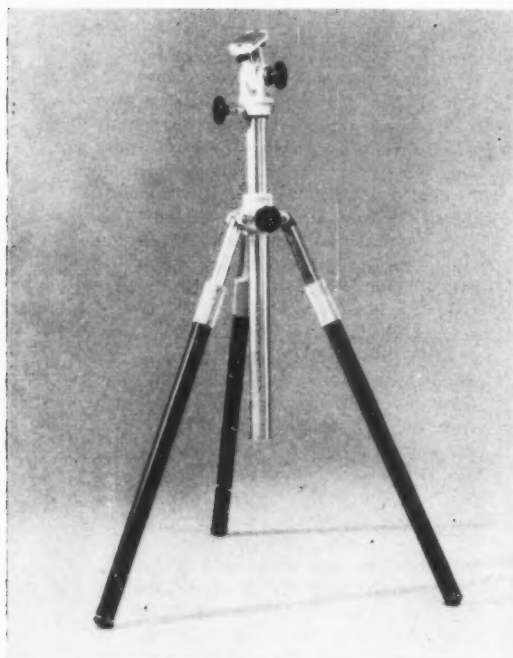
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LANCASHIRE

## The Best of the Best



C. W. F. Longman, designer (in association with E. H. Wilkes) of the "Packaway" refrigerator by Prestcold Division of the Pressed Steel Co. Ltd., received the Duke of Edinburgh's Elegance Award at the Design Centre last week. Our correspondent, John Sharp, had already included it in the four Designs of the Year (out of 16) illustrated on this page, which he regarded as outstanding. It is not accidental that three of them are engineering products. In the three-dimensional group of designs there are clear criteria by which judgment can be made, whereas in the flat, two-dimensional pattern-making designs personal preference and fashion have strong influence. In the "Packaway" we have at last a really clean, square cabinet, which, by use of the new high efficiency insulants, crams an extraordinary capacity into the space available. The design is adaptable for many installations on floor or wall. The outside detailing is excellent and the lettering is readable and well-formed. Perhaps in a later version the smaller, inside details may be brought up to the high expectations of the outside. The woodworking socket chisels, "Aristocrat," (made by Ward & Payne Ltd., and designed by the company's engineering staff, directed by John A. Hattersley) are considerably more expensive than any others on display in the Centre, but if ever there was an expression of function, and a good use of materials in the most direct way, it is here. They would clearly be a pleasure to use, as well as being efficient. Another engineering product that well deserves the award is the photographic tripod, "Professional," (made by Kennedy Instruments Ltd., and designed by Walter Kennedy). Standing up to six feet tall, and designed to give a very steady camera stand, it is heavily engineered. The legs are reversible so that the camera can be suspended between them, and the adjustment of their length is a masterpiece of simplicity and efficiency—perhaps rather better knobs will be fitted later for the other controls that are provided. The circular dining table (made for New Furniture Design Group by Design Furniture Ltd., and designed by H. El-Hayani, School of Furniture Design, Royal College of Art) is excellent, as a good example of analytical design pursued to its conclusion. The top is treated as a flat slab, without rails, and the three laminated double Y headed legs fit directly to it, to give immense stability with the minimum of material.

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(so far from New Orleans?) and still the fog doesn't lift. Only at sunrise does the road clear, and I sleep as we gobble up the miles, and the petrol, through the rolling flat corn land of Iowa and East Nebraska. Then comes the change to dryer cattle country, rising towards the Rockies. A signpost says 1,500 miles to Philadelphia and 1,500 miles to San Francisco so we stop at dead centre for a one hundred per cent Americano steak dinner.

\*

Now we climb gradually to Cheyenne, more than a mile above sea level. 100 miles to the south is some of the most exotic scenery in the Rocky Mountain National Park, but at Cheyenne the mountains do not impress. We cross the continental divide at 7,000 feet without even noticing and head for Salt Lake. Only at dawn we realize the full beauty of the mountains, as we are surrounded by purple blue ridges and peaks, all snow capped, rose coloured and shiny hard. Then Salt Lake City, lying in the valley. A magnificent setting, but the city covered with a grey red haze, and we are surrounded by cars in the early morning quixotic stampede from the suburbs. The city itself has lost what attraction Brigham Young gave it, apart from the Temple Square of the Latter Day Saints. Here is a walled garden of silence and serene trees in contrast to the surrounding honkey tonk. After the city, the lake, and then the Great Salt Lake Desert. 30 miles of barren dead straight road and I sleep as we enter Nevada. Everytime I wake we are hemmed in by fantastic peaks, some with snow, rising directly from the arid plain. The very bareness is echoed in the population: one person per square mile. There is almost too much contrast to the plains of Iowa and the soft hills of Pennsylvania.

\*

The USAF private shows us Reno with pride. The only thing preventing its ugliness being as famous as its divorce and gambling is the ugliness of so many other cities. The last obstacle, the Sierra Nevada, we cross at the Donner Pass and now we are really inside California, in succession Indian, Spanish, Mexican and an independent republic before becoming the third largest state. Through the Central Valley and Sacramento, part of one of the most fertile places in the world, until finally San Francisco glitters across the water. The 8½-mile Bay Bridge is good preparation for entering what seems a world apart. With a gridiron plan plopped on a series of hills there is never lack of visual surprise, one of the few such cities in the USA.

\*

Guardian of jazz hot and cool, and the Beats, sourdough bread and sukiaki, with a range of architecture from Bernard Maybeck to SOM, birthplace of poetry read to jazz and home of the most vital landscape movement of the century, San Francisco may collapse at any moment. A recent 12-minute quake shook the whole city and registered 5.5 on the Richter Scale as again 8.25 for the 1909 disaster.

PHILLIP LANGLEY

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

## The Editors

### AGREEMENT TO DISAGREE

THE meeting last week between representatives of the RIBA, the ICE, the RICS and the TPI to discuss the role of the architect in planning seems to have been about as chummy as the Foreign Secretaries' get-together at Geneva. There was, apparently, no difficulty about the shape of the table, but otherwise there was only agreement to disagree.

This is regrettable in one way. Planning is in far too serious a mess for us to afford the luxury of a squabble between the professional societies about who does what—caused, to a large extent, by the inability of the other professions to understand what the architects are driving at when we insist on the need for urban design to be in the hands of planners who are architects. The RIBA, it must be added, is not blameless: the original (and still unpublished) Brett paper did not sufficiently recognize the great contribution to be made to planning by the other professions. Planning, like architecture, depends for its success upon professional co-operation.

On the other hand, the negotiations of the last two years have merely had the effect of silencing the architects. The way is now clear for the RIBA to publish, after further consideration, what it wants to say. As nothing is to be gained at this stage by negotiation the RIBA must convince others by its example. The fact that this week's symposium on "the living town," and the SPUR exhibition on urban renewal, are being held under the auspices of the RIBA is evidence that architects are beginning to give leadership in a field where new initiatives are sorely needed.

### BUILDING RESEARCH AT A DISADVANTAGE

How do DSIR decide where to allocate money for research? Describing the policy of the Research Council at a Press Conference this month, the Chairman, Sir Harry Jephcott, said that there are broadly three kinds of subject which attract DSIR funds: those in which Government has a special responsibility (he instanced sewage), those which have too broad an impact on society to receive attention from any one interest (he instanced road research) and those which are of a very fundamental nature, such as are tackled by the NPL. Judging

by these criteria it would be thought that Building Research should have a particularly good claim on DSIR funds. These are being increased progressively from the present rate of £9 million a year to £14 million a year in 1963. What proportion of this increase is to be devoted to BRS? Not very much, if the Report for 1958 is anything to go by. A feature of present policy is to give increasing grants for research and post-graduate training in universities, to keep pace with the increasing numbers of graduates in science and technology. This tendency automatically sets Building Research at a disadvantage, due to the poor standing of Building Science in academic circles. Apart from this, the temptation of the Advisory Council must always be to give more money to sections of learning where important advances are already being made and where, in consequence, there are gifted people ready to benefit by it. A wiser policy would be to look first to public need. If the Advisory Council were to ask themselves such questions as "Which industry spends most money?" "Which is technically and academically the most backward?" "In which would advances be of the greatest public benefit?" then building and town planning research would come into their own.



#### VOTE FOR —?

The statements by RIBA Council candidates on page 761 provide raw material for amateur statisticians. A lot of candidates want some form of two-tier profession—though they don't all agree about the form it might take. More candidates see the all-in service as a challenge rather than a menace,

and they are evenly divided on amending the code of professional conduct to allow architects to accept directorships in building firms. They all think that sizeable local authorities should have chief architects, and there is overwhelming support for the idea that town planning should be entrusted to the city architect.

In the candidates' statements about the most important issue now facing the RIBA the main emphasis is on the status of the profession, by means of education, better quality of work, value for money and improved public relations.

#### FRENCH LEAVE

With characteristic foresight Percy Johnson-Marshall chose a perfect summer week-end for this year's LCC excursion to the Continent. While a hot sun baked the Place de la Concorde and filtered through the leafy boulevards, 37 architects and planners made a pilgrimage to the unfinished CNIT exhibition hall (Nervi, Zehruss and Prouvé) and Corb's Brazilian students' hostel at *Cité Universitaire*. At the UNESCO building they were taken on a high-pressure, statistics-studded conducted tour behind 1,068 windows and 175 tons of glass.

Le Corbusier's latest contribution to the *Cité Universitaire* (see picture) is faithful to the rules established at Marseilles and Ronchamp—massive chunks of formwork-patterned concrete, riotous colours, skyline sculpture and the inevitable water spouts so readily and tediously copied by the disciples.

\*

A stone's throw and thirty-odd years away is the Swiss students' hostel, Corb's earlier work. If you stand on the playing field facing the buildings you can almost (if you've got wide-angle vision) take in the two buildings simultaneously. Despite the lapse of time it is hard to believe that they are the work of the same man.

#### CATHOLIC ASSESSORS

The competition to be held later this year for Liverpool's Roman Catholic Cathedral means, presumably, that there won't be any more attempts to do a Lutyens on the cheap. Adrian Gilbert Scott's scheme for a smaller, Lutyensesque building on the existing gigantic crypt was a brave try to do something no architect ought to be called upon to attempt. The original Lutyens scheme should have been persevered with, or completely abandoned, as it has been now.

\*

The panel of assessors—the archbishop, Basil Spence and David Stokes—is a reasonable one, the conditions, I hear, are going to give plenty of scope, and there should be a million pounds to spend. There may be some tricky problems, such as prizing the University's Atomic buildings off the front of the site, and then deciding what to do with the existing crypt, which already has something of the status (and the looks) of a Roman remain. It is too big and too good to ignore, but it isn't likely to settle down easily with the sort of design that the inclusion of Basil Spence among the assessors would seem to foreshadow.

#### CLEANING UP POST-CARDS

ASTRAGAL has already referred to the new series of architectural post-cards which Bobby (late RIBarian) Carter is helping Gordon Fraser to produce. The other day Mr. Carter gave a talk to the DIA entitled "British Architecture and the British Post-card—Imagination or Common Sense?" Judging from the pleasure of the audience which studied

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the splendid examples he showed (many photographed by the brilliant Eric de Mare), Gordon Fraser, who is producing the cash, is backing another winner. Good ideas beget better ideas, of course, and in the discussion following the talk Bobby Carter was advised to supply albums for card collectors (there's a society of these). He was also advised to sell sets of cards of architecturally important cities, together with a "guide card" for tourists and to set up a centre in London where all cards could be bought by visitors. Among those making suggestions was LCC architect Christopher Whittaker, who has been trying to persuade an enterprising publisher to undertake this important and potentially profitable venture for many years.

\*

Mr. Carter has discovered that amongst sightseers—and chairman, Charles Gibbs-Smith of the V & A confirmed this—post-card buying is almost a reflex action. The tourist buys automatically—as a record, or for one-upmanship, or merely for communication, and he has been observed at Windsor, solemnly and blindly buying sealed (and therefore unseen) packets of cards *before* entering the castle.

#### ARCHITECTURAL ESPERANTO

Anxious to see what a four-inch module really looks like when handled by a 100 per cent. four-incher, ASTRAGAL joined the Modular Society's visit to Bruce Martin's (sorry, BSI's) Laboratory at Hemel Hempstead. His fears were (a) that it would look lumpish, (b) that it would look just like any other lightweight building. But neither was realized. It is a most elegant little building with three one-storied wings connected by glazed links. To test the range of this architectural esperanto, each wing is as different from the others in its dimensions and arrangement as the designer could legitimately make it. And to make quite sure that the four-inch lesson is not lost on the beholder, all are held up by a visible frame of 4-in. x 4-in. aluminium box stanchions. This, of course, set off a barrage of nasty asides from the hard-bitten, cost-conditioned architects who made up the bulk of the party. To these Bruce Martin's retort was that the aluminium was made comparable in cost to steel by getting the extruders to reduce the width of the flanges by half and by so design-



*A view of Le Corbusier's new Brazilian Students' Hostel at Cité Universitaire, Paris, showing part of the west facade of the main block with the single storey projection in the left foreground. Corb's current preoccupation with off-the-form concrete is characteristically expressed in the massive column and beam sections supporting the main block above ground level. The development of his ideology is dramatically apparent in a comparison of the two buildings, both designed for the same purpose. See "French Leave."*

ing the frame that the distance between supports was nowhere greater than what you would expect for timber. But apart from this, it is in any case a prestige building and as such will be the most sophisticated shell in which a British official body has ever worked. Congratulations to everybody.

#### THE BETTER THE QUICKER

*Good Design Saves Time* is the title of a neat booklet published by Coventry's architects' department. The booklet, which shows wrong ways of laying out small estates, as well as typically-imaginative right ones, is designed to improve the standard of privately-built housing estates in the city. It implies that a good layout will be quickly approved by the committee, while a bad design will be rejected. Let's hope Coventry housebuilders will take the hint.

#### THE FACTS ABOUT BAROQUE

One of the most long-awaited volumes of the Pelican History of Art (rumour has it that it was the first to be commissioned by Professor Pevsner) has at last appeared—Rudolf Wittkower's *Art and Architecture in Italy, 1600-1750*. To me it is doubly welcome, firstly because Professor Wittkower is one of architecture's favourite historians, and secondly because it gives the facts on Baroque, a field of study that has been much ornamented but little explained by earlier writings

in English. However elegant and romantic the prose of, say, Sacheverell Sitwell may be, it is good to be able to sit down and read, in one's own tongue, the accumulated historical erudition of Europe and America, digested and re-expressed in a style that is close-packed but by no means daunting.

\*

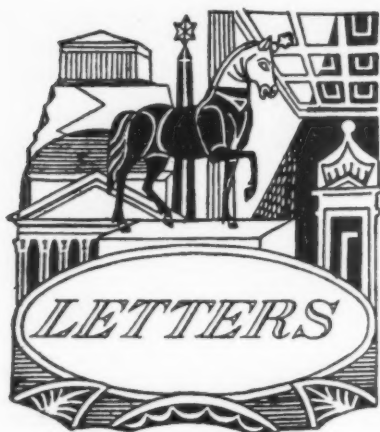
Indeed, one's sympathies are immediately engaged by the foreword, in which the Professor explains the reasoning and the personal motives that made him decide to write, not a one-volume encyclopædia of Baroque, but something more selective and more rich. "Instead of saying little about many things, I attempted to say something about a few things, and so concerned myself only with the history of painting, sculpture and architecture."

\*

I don't doubt that there will be howls of rage from doctrinaire Baroque men on the grounds that the Baroque, above all, is a period that must be seen as a whole, with town-planning, mathematics, medicine and theology all bundled in as well, but I think that the decision to cut the subject down to size justifies itself by the book, and particularly the architectural chapters on Bernini, Borromini, Cortona, Guarini and Juvarrá. There's richness for you . . . and now, if you'll excuse me, I have some serious reading to do.

ASTRAGAL





*T. A. King, A.M.I.C.E.*

*Douglas Beaton, A.R.I.B.A.*

*L. Daniels, A.R.I.B.A.*

*Master in Charge, Hanley School of Architecture*

## RIBA and Motorways

SIR: I refer to the recent RIBA Press conference on this subject, and in particular the vice-president's statement that "the architect should lead the planning team in the location and design of urban motorways," from which it is to be inferred that architects can exercise the best judgment in this field which is particularly the province of another profession and in which they have only incidental experience.

In any team for the design of major road works such as motorways the civil engineer is, and will remain, the dominant partner. The architect's contribution is advising on the form and environmental relationship of the structures within the framework provided by the engineer. It is the engineer's business to produce works in this category which are economical and functionally effective, and this is the heart of the matter. It is evident that the roads, bridges, structures and services must first be conceived in terms of a full understanding of the vast and intricate problems involved but the dominant factors are in the realms of economics and engineering. Design is accordingly the function of the civil engineer and is much more than the æsthetic question of form, alignment and location, though it can be easily presented to the public in those terms to the disadvantage of the status of the engineer, and on this point I will refer later to one or two phrases in the RIBA statement on motorways.

This is not to suggest, however, that æsthetic considerations are not an essential part of the problem, but what is particularly needed is not so much collaboration between architects and engineers—though that is obvious—as the emergence of civil engineers who are architects in their own fields, as was formerly the case when the first

major engineering works for transport were undertaken in the last century. It is not to be assumed that the civil engineer is constitutionally defective in the capacity to apply his creative faculties to the æsthetic problem—a view which seems to be propagated in architectural circles. There is nothing in his attitude or approach to design which precludes him from producing works of architectural merit or seeing them in terms of the "total human environment," and Mr. Brett's assertion that it is not the engineer's business to "consider whether the solution was going to be happily related to the environment" is a sorry misconception for it is as much his business as anyone else's notwithstanding the architect's contribution.

Returning to the point about the connotation of the term "design," the RIBA statement contains, for instance, the following—"The root of the architect's argument is that no benefit will come from calling him in merely to design the bridges . . . along the motorway"—and this phrase "merely to design the bridges" very well illustrates the illusion that the architect's function in advising on the form and setting of engineering structures is in itself design and not part of it. Let the two professions defer to each other in the respective spheres of dominance. There is no question of architects being called in "merely to design bridges," but the inclusion of architects in the motorway study groups might be more readily achieved if their claim to representation looked a little less like a take-over bid.

T. A. KING

Herts

## Architects as Engineers

SIR: The letters of Mr. Bryant and Mr. Burns are both excellent standard-bearers for planners, but let us face the facts: the major problems in the development of our cities today, let alone the cities of the future,

will demand something much better than we have got at the moment.

I suggest that the director should be a qualified architect and engineer, then planner if you will, filling a major post with full statutory status to direct the whole gamut of planners (sociologists and all other categories), engineers, surveyors and architects. The stature of the post would obviously call for high academic standards at the outset, but I have no doubt that if the names we know today had been given the facilities for such a combined course many of the "chicken and egg" bickerings of architects, engineers and planners could be resolved by positive direction at the outset.

Incidentally much of the long hair associated with architectural education at the moment could be, in my opinion, usefully eliminated in such a course to make way for the slide rule to the benefit of all concerned, and architect's status and consequently salaries in particular.

The title City Architect and Engineer—or City Engineer and Architect—would do a power of good in all directions and it would not be difficult to relate similar national appointments to resolve "the location and design of urban motorways."

The recent meeting of architects and engineers at the ICE is in the right direction. The proposal for separate Planning Departments seems to me to be in the opposite direction, bearing in mind the record of positive planning achievements in this country since the 1947 Act was introduced.

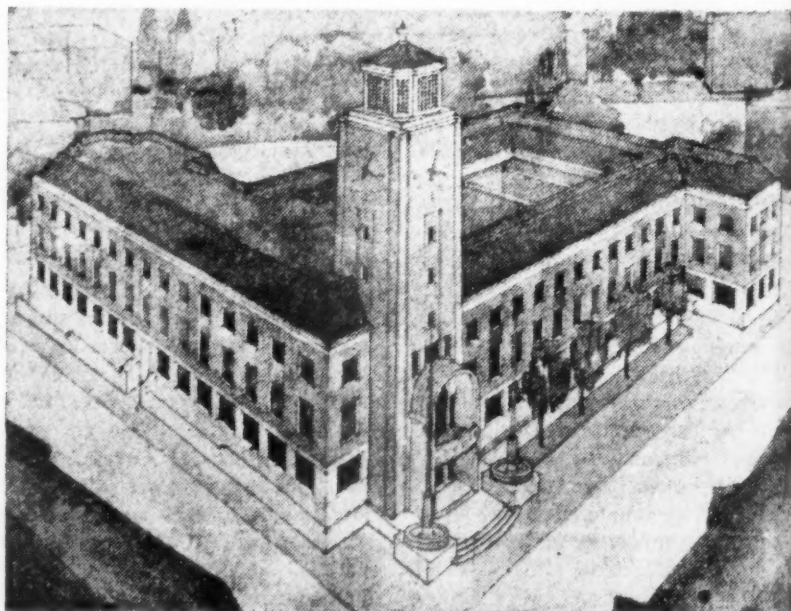
DOUGLAS BEATON

Coventry

## Another Civic Centre

SIR: Having recovered from the sad experience of the Ipswich Civic Centre competition with my drawings (now returned) as a reminder of those lost weeks spent juggling accommodation—since proved to be no more than a labour of love, I am re-

*Design for Newcastle-under-Lyme Civic Centre. See "Another Civic Centre."*



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mindful of yet another blunder and this time it affects the very authority I support as a ratepayer.

Illustrated on the front page of the local newspaper (see photograph) is an artist's impression of the new £456,000 Newcastle-under-Lyme Civic Centre. I understand that the RIBA were approached for advice and a list of architects' names was submitted to the committee concerned. From this list Messrs. Bradshaw, Gass and Hope of Bolton were asked to prepare a scheme with the result that it has been accepted.

I have three criticisms to make: (1) When advice is sought on matters concerning civic architecture, why is it not given? It is not good enough simply to supply a list of names. Apart from the large sum of money involved, the least that could be expected from the RIBA is for a representative to discuss problems of design with the committee. (2) If this type of building suits the needs of the local council, why was it necessary to go all the way to Bolton, for this kind of architecture is popular here in North Staffordshire. (3) If shortage of funds prevents the use of a competition, I should have thought the Authority's own architectural staff could have made some real contribution towards a better architecture. The council obviously do not recognize an improved standard in recent years.

L. DANIELS

Master in Charge, Hanley School  
of Architecture

Hanley

#### D. B. Bullivant: Information for the Architect

*The article on the need for standardization in the presentation of information, which should have appeared this week, has had to be delayed at the author's request. We hope to publish it next week.*

## DIARY

**The Living Town: A Symposium on Urban Renewal.** At the RIBA, 66, Portland Place, W.1. 10 a.m.

**Better Towns For Better Living.** SPUR exhibition at the RIBA, 66, Portland Place, W.1. Monday to Friday, 10 a.m. to 7 p.m., Saturday 10 a.m. to 5 p.m.

**Australian Town Planning Trends and Problems.** Talk by A. J. Brown at the TCPA, 28, King Street, Covent Garden, W.C.2. 6.30 p.m.

**Presentation of Royal Gold Medal to Professor Mies van der Rohe.** At the RIBA, 66, Portland Place, W.1. 6 p.m.

**Excellence in English Architecture.** Second of two lectures by Sir Albert Richardson at London University, Senate House, W.C.1. 5.30 p.m.

**Communities and Neighbourhoods.** Evening discussion at the RIBA, 66, Portland Place, W.1. 6 p.m.

**Public and Private Transport.** Evening discussion at the RIBA, 66, Portland Place, W.1.

**The Big City.** Evening discussion at the RIBA, 66, Portland Place, W.1.



## BRISTOL BC

### Ricketts on Information

Gordon Ricketts, the secretary-elect of the RIBA, spoke on the problem of disseminating information at the Bristol Building Centre's Dinner and Dance, held at the Long Ashton Country Club, last week. The speaker was introduced by the Chairman, John Collins, and said that as far as he could see, the problem could be dealt with in three ways. The first was miniature libraries in individual architects' offices—a method that had obvious limitations such as the necessity to keep the information up to date, and the expert staffing that this requires. The second was a published directory or "bible" of information in a highly organized form, issued by a competent authority, perhaps involving a subscription. The third was a battery of experts answering queries by 'phone but not producing any published recorded information.

Each section of the building industry had its own particular needs, but these needs had common factors which could be met by a central source of information producing data in an organized form. An associated problem with this type of organization would be that of testing products and techniques. The BRS work, though excellent, only covered a very small part of the output of the industry. Associated also with this problem was that of meeting the cost. Mr. Ricketts said: "Whatever form of national technical information service it is ultimately found possible to pay for, I am quite certain the provincial initiative and enterprise that have created the Bristol Building Centre will have a most important part to play. Quite apart from the technical information issue, a Centre like this can be an invaluable focal point at which all component members of the building team meet."

## IOB

### Duke a Fellow

The President of the Institute of Builders, H. S. Oddie, accompanied by the Vice-presidents, Honorary Treasurer and the Secretary, visited Buckingham Palace last week when the Scroll of Honorary Fellowship of the Institute of Builders was presented to His Royal Highness The Prince Philip, Duke of Edinburgh.

*At the Annual General Meeting of the RIBA Arthur Ling said that one of the main issues before the Council this year must be the fact that 38 County Boroughs in England and Wales still have no Chief Architect as an independent officer. We publish below a list supplied by the RIBA of municipal authorities without Chief Architects as independent officers.*

## RIBA

### Local Authorities without Chief Architects

#### A. The Black List

##### Authorities without chief architects

##### County Boroughs

Borough	Population (in 000's)	Borough	Population (in 000's)
Barnsley	74	Rochdale	86
Blackburn	108	Rotherham	82
Boole	78	St. Helens	111
Brighton	158	Salford	169
Burnley	82	Smethwick	74
*Bury	58	South Shields	107
Cardiff	248	Tynemouth	67
Carlisle	68	Walsall	114
Chester	58	Wakefield	59
*Croydon	249	*Warrington	79
Eastbourne	57	West Bromwich	89
East Ham	116	Wigan	82
Gateshead	116	Wolverhampton	155
*Grimsby	94	*Worcester	63
*Halifax	96	*Yarmouth	51
Hastings	64		
Ipswich	109		
Merthyr Tydfil	59		
Middlesbrough	148		
*Nottingham	312		
Oldham	120		
Poole	85		
Preston	117		

##### London Metropolitan Boroughs

Battersea	113	Shoreditch	45
Bermondsey	57	Southwark	93
Bethnal Green	53	Stepney	98
Chelsea	51	Stoke	
Deptford	72	Newington	50
Finsbury	35	*Wandsworth	336
Greenwich	89	*Westminster	97
*Hackney	167	Woolwich	148
Hammersmith	114	<sup>1</sup> Housing Manager is L.R.I.B.A.	
*Hampstead	97	<sup>2</sup> Housing architect only. Engineer is registered architect.	
Islington	228	<sup>3</sup> Director of Housing is F.R.I.B.A.	
Kensington	169		
Lambeth	224		
Poplar	70		
St. Marylebone	73		
St. Pancras	134		

##### Non-County Boroughs with Population over 60,000

Acton	66	Leyton	102
Beckenham	75	Mitcham	65
Bexley	88	Newcastle-under-Lyme	72
Bromley	64	Rhondda	108
Cambridge	91	Romford	107
Cheltenham	67	Slough	67
Chesham	67	Solihull	82
Colchester	63	Stratford	62
Dagenham	115	Sutton & Cheam	78
Ealing	184	Tottenham	122
Enfield	109	Twickenham	104
Epsom & Ewell	67	Wandsworth & Woodford	61
Gillingham	77	Watford	72
Gosport	61	Wembley	129
Hendon	154	Worthing	69
Hornsey	97		
Hove	69		
Ilford	181		

**B. The White List****Local Authorities with Chief Architects****County Boroughs**

Name	Population (in 000's)	Name	Population (in 000's)
Bath	79	*Bradford	286
Birkenhead	141	*Bristol	442
*Birmingham	1,111	Burton-on-	
Bolton	165	Trent	48
Bootle	78	Newport	
*Canterbury	30	(Mon.)	105
*Coventry	267	Northampton	102
Darlington	83	*Norwich	121
Derby	139	*Oxford	105
Dewsbury	53	*Plymouth	218
Doncaster	83	*Portsmouth	238
Dudley	64	*Sheffield	501
*Exeter	77	Southampton	194
*Gloucester	67	Southend	154
Huddersfield	127	Southport	82
*Hull	299	Stockport	141
*Leeds	507	*Stoke-on-	
*Leicester	286	Trent	274
*Lincoln	70	Sunderland	182
*Liverpool	779	Swansea	161
*Manchester	692	Wallasey	102
*Newcastle-		West Ham	167
upon-Tyne	281	West	
Bournemouth	141	Hartlepool	72
		*York	106

\* Denotes City.

**Non-County Boroughs with population over 60,000**

Barking	75	Swindon	71
Edmonton	99	Walthamstow	117
Finchley	69	Willesden	176
Luton	113		
Stockton	75		

**London Metropolitan Boroughs**

Camberwell	178	Lewisham	223
Fulham	118	Paddington	121
Holborn	23		

**Counties**

All counties except the Soke of Peterborough.

**INFORMATION****Question in House**

Mr. Barnett Janner (Lab., Leicester) asked the Minister of Works in the Commons last week whether he was aware that the multiplicity of architectural research organizations which exist in this country made for confusion and expense in building; and whether he would consider setting up a department as is done in Holland and Sweden for the purpose of sifting and classifying technical information and presenting it in a standard form for easy filing.

Mr. Hugh Molson replied: The Government have for some time felt that there was room for improvement in the co-ordination of building research. It therefore decided that all research should be under the DSIR. As recently announced, I shall not, therefore, re-appoint my Advisory Council on Building Research and Development. In its place there will be a Standing Conference on Building Research, which will be under the aegis of the Lord President of the Council.

The dissemination of technical information will continue to be my responsibility. I am discussing with the industry the many problems involved.

Mr. Janner: While thanking the Minister for that reply, may I ask if he is satisfied that the new set-up will provide facilities for architects quickly to obtain available information so as to cut down the expense on building, and provide more efficient buildings?

Mr. Molson: That is exactly what I am at present discussing with those concerned in the building industry—architects, builders and quantity surveyors.

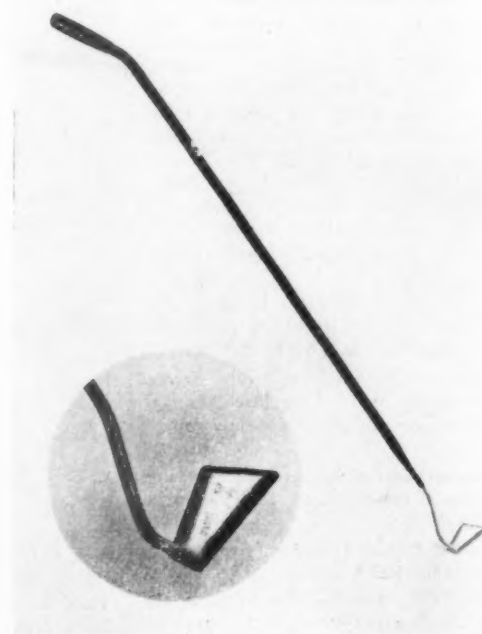
John Sharp contributes this review of the sixteen Designs of the Year selected by the Council of Industrial Design's selection panel, which consisted this year of Mrs. Monica Pidgeon, Editor, *Architectural Design*; F. H. Henrion, Consultant Designer; Geoffrey Dunn, Managing Director, Dunns of Bromley; Jack Howe, Architect and Industrial Designer; and the Chairman, Sir Colin Anderson. The judges were asked "to choose designs from any of the categories of goods shown in the Design Centre which, to their minds, are outstanding for originality, workmanship, economy, or some other quality, and which make a real contribution in their industries." The four designs which Mr. Sharp considered to be the best are illustrated on page 752. The selection committee for the Duke of Edinburgh's Elegance Prize was: Lady Casson, Miss Audrey Withers, Basil Spence, Sir John Summerson and the Duke of Edinburgh (Chairman).

## Designs of the Year 1959

1. Garden tool. Made by Wilkinson Sword Ltd. Designed by the company's Design Department in consultation with Hulme Chadwick.

To quote the Judges' report, "this garden implement is remarkable for being a new design in a field where tradition is seldom broken. It looks as good as it feels . . . most important of all, it is good at its job."

1



2. Fluorescent kitchen light. Made by Atlas Lighting Ltd. Designed by John and Sylvia Reid.

This fitting is outstanding in terms of simplicity and cheapness (only £3 7s. 6d. including purchase tax), but its stark nakedness when mounted on current low ceilings can produce an unpleasant glare—the addition of a diffuser or one-sided shield would surely be an asset.

3. Easy chair, "Flamingo." Made by Ernest Race Ltd. Designed by Ernest Race.

This chair has the unusual advantage of being comfortable however you sit in it—straight backed or sprawling. It is in the now familiar Race traditional construction of steel frame and foam sheeting.

2



3



4

4. Lever handle. Made by Dryad Metalworks Ltd. Designed by Roger Peach.

To quote the Judges' report, "This is a really comfortable handle. . . . It is easy to feel at a touch that it is shaped for various aspects of its job—to be pulled, pushed, or turned." It is the most accomplished lever handle design to be produced in Britain.

5



5. EPNS tea set, "Pride." Made by Walker and Hall Ltd. Designed by David Mellor.

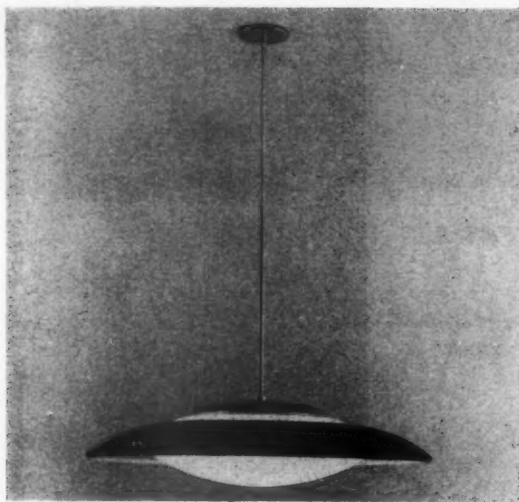
This is an interesting award, as it is an example of a manufacturer breaking new ground in a rather traditional field. The forms are pleasant, and belong to the new silverware tradition. The nylon handles are extremely practical. But £9 11s. 0d. for a hot water jug!

6. Solid fuel room heater, "Queen-Heater," Made by Grahamston Iron Co. Ltd. Designed by David Mellor.

This is an astonishing choice. From a constructional and operational point of view this fire is very conventional; detailing of doors is clean and proportions pleasant, but there is not much to choose between it and the others on display at the Centre, none of which solve the ash problem satisfactorily.

6





7

7. Light fitting, Ellipse Series. Made by The Merchant Adventurers Ltd. Designed by Paul Boissevain.

We seem to have seen this one, fat and thin, large and small, for so long now that it comes as a slight shock to find it selected as an outstanding design of the year.

8. Woven furnishing fabric, "Inglewood." Made by Edinburgh Weavers Ltd. Designed by Humphrey Spender. Sometimes it is not clear why a particular pattern is woven, and another printed. With this fabric, the weaving process is well exploited to get a strong contrast of tweed and satin effects, that give an unusual character of robustness and richness. The colours are pleasant.

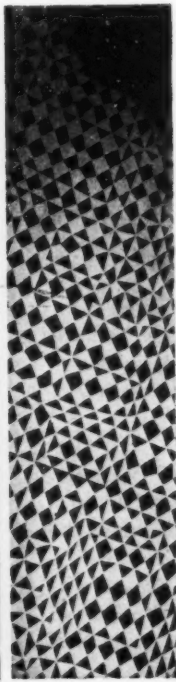
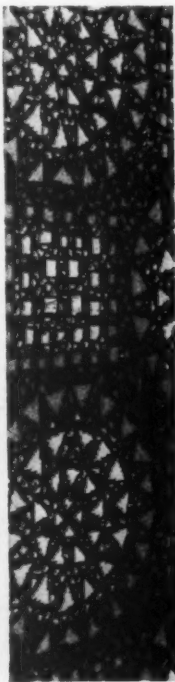
9. Printed furnishing fabric, "Malindi." Made by Liberty & Co. (Wholesale) Ltd. Designed by Gwenfred Jais.

8

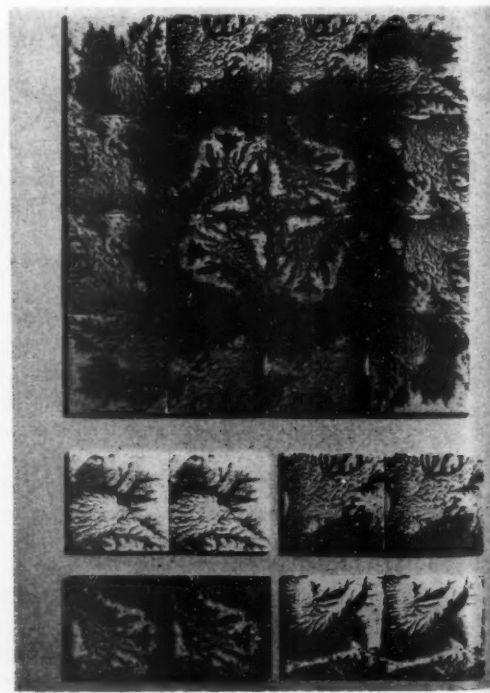
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10

11



12



The photograph of this fabric gives quite a false impression. To quote the report, "for a printed fabric, this is unusually rich; it looks as if its surface is textured. An outstanding effect of iridescence and depth has been achieved." This is true, but the surfeit of contrasting and blending colours is overpowering.

10. Wilton body carpet, 1820 "Mandala." Made by The Carpet Manufacturing Co. Ltd. Designed by Audrey Tanner.

To quote from the report, "The pattern is not too large or definite, and does not jump. A luminous effect has been cleverly achieved despite the use of only four colours of wool." Which really adds up to a general-purpose, dull, background design.

11. Plastics coated fabric, "Piazza." Made by Bernard Wardle (Everflex) Ltd. Designed by Edward Pond.

To quote the report, "The imaginative pattern and the unusual colour range combine to make this a distinctive fabric. There is enough geometry in the pattern to make it mathematically satisfying, but enough freedom to prevent it from being dull." Indeed, it has a rather restless quality.

12. Ceramic glazed tiles, "Planit" System. Made by H. & R. Johnson Ltd. Designed by Derek Hodgkinson. This is clearly outstanding in terms of "idea," that is, of producing five random patterned tiles in 30 different colours, that can be arranged in an endless variety of effects. The patterned tiles here become a tool, with which decorative schemes can be worked out. The possibilities are infinite—from the hideous to the first rate, but the idea has still to be fully explored in terms of pattern and colour selection.



# RIBA Candidates' Replies

*We publish today the replies received from candidates for election to the RIBA Council to the questionnaire which we sent to them. We have included all replies received up to the date of going to press, and have been informed that Donald Gibson has been unable to reply because he is abroad on War Office business. Candidates are in alphabetical order. ASTRAGAL's analysis is on page 754.*

## The Questionnaire

1. What is the most important issue now facing the RIBA, and what do you consider the RIBA ought to be doing about it?
2. What is your view of the concept of a two-tier profession, with separate qualifications for (a) architects and (b) architectural assistants or building technicians?
3. Do you think the All-In service is a menace or a useful contribution: if the latter, do you think the Code of Professional Conduct should be amended to allow architects to become directors of building firms?
4. What in your view is the most urgent reform in education?
5. (a) Do you think that all local authorities of substantial size should have an architect's department under an independent chief officer? (b) Should the city architect's department be responsible for town and country planning? (c) How should these aims be achieved?
6. Are you satisfied with the internal organization and administration of the RIBA? If not, what changes do you suggest?

### William Allen (A) writes:

1. I think the most important matter for the RIBA in the immediate future is to get architects appointed as Chief Officers in the 38 large towns and cities that have not got them. The most direct method of action for the Institute will be to argue the case with the Central Government that the appointments should be made statutory. Much the same goes for the Admiralty and Air Ministry.
2. A great many people seem to be jumping to conclusions about this; I think we ought to wait for the report of the Oxford Conference Committee before we debate it. As a short answer, it seems to me we already have a two-tier profession de facto, with a rather poor disguise that does not hide some unsatisfactory features. I would like to see a higher quality single tier profession supplemented by technical staff qualified separately for a special function.
3. What questions you ask! We can't stop it, and if we want to keep it from getting out of hand, we simply have to be able to compete successfully on its own ground. It seems to serve a useful purpose sometimes, and may even increase the total market for our professional services. Yes, I think architects ought to be able to operate at director level, but they should give up the consultation side if they do. Keep the two quite distinct as other professions do. We are out of date on this and cutting our own throats.
4. You limit us to one reform. The RIBA post-bag continually reminds the Secretary that the public most often finds us wanting

either on technology or management of expenditure. We can improve these a lot in the schools; and incidentally I think design will benefit, not suffer.

5. I've answered (a) and (c) under Question 1. The answer to (b) is surely a loud "yes," with few exceptions.

6. It has been improved a great deal in the last few years. Everything depends on good staff and first-class council and committee work; they've got to work together as a team. The next thing I would like to see is a better way of getting the profession's collective experience on record for everyone to use.

### C. H. Bingham Powell (A) writes:

1. The most important issues facing the RIBA are two: (a) How to serve the interests of most members by adopting new methods of election, and (b) how to sell architecture to the public. Concerning issue (a): As the RIBA Council numbers 68 and is too large to appoint its chief committees democratically in another way these should all be elected. Other elections should be more democratic; therefore all nominations and elections of candidates should be done by postal ballot of all members irrespective of class of membership. The RIBA Council should consist only of representatives of allied societies, of which London should form one, elected by postal ballot for a three-year period. Each member of the RIBA should automatically belong to his local society.

2 and 4. There should be separate qualifications for architects and architectural assistants, and education should be reformed to tailor the Intermediate exam. to become a suitable Final for assistants: History and some Design done in the first three of the five-year course should be swapped for Working Drawings done in the last two years.

3. The All-In-Service is a menace.

5 (a) and (c): The RIBA want someone to persuade the public that as the law obliges every local authority to appoint to its staff a surveyor, so it should oblige it to appoint its architect. (b) A qualified planner should be responsible for town and country planning.

6. The internal administration of the RIBA is satisfactory.

### J. B. Brandt (F) writes:

Among provincial members there is an increasing lack of confidence in the control and direction of the RIBA. A clear concise Statement of Policy is required and a greater recognition of the interests of the Allied Societies and provincial members.

It is the duty of all provincial members to work for a more equitable representation on the Council of the RIBA, a representation which will strengthen provincial interests, and which if co-ordinated by the Allied Societies can exercise a decisive influence.

If elected, therefore, this would be my main concern.

### Sir Hugh Casson (F) writes:

I fear that owing to absence abroad I have not had time to prepare fully considered answers to your Questionnaire and I fear also that, even if I had had the time, my answers would be no less vague and equally packed with what your editorial scornfully calls "praiseworthy sentiments." However, here goes:

1. To improve the training of architects so as to get better architecture.

2. Against it.

3. Not sufficiently informed about the all-in service to give an intelligent opinion.

4. All reforms are urgent, and none seems to me to be more urgent than another.

5. (a) Yes.

(b) Not necessarily, so long as both Planning Officer and City Architect work together. Leadership goes to leaders, not to titles, and the time to claim responsibility is when you have shown your ability to take it.

(c) Aim (1) above.

6. Of course not, but neither am I satisfied with the internal organization and administration of my own office, or, for that matter, of my private life. "All artists," said somebody, "are messengers of discontent," and no doubt this will form part of the duties of those who are honoured by election to the Council.

### Denis Clarke Hall (F) writes:

1. Education and the welfare of architecture through the Oxford Conference Committee.

2. Fully support this concept provided that (a) assistants receive adequate training leading to a sought-after qualification,

recognized by the profession as a whole and main employing bodies—local authorities, nationalized industries, etc.—and carrying adequate scales of fees; (b) that at any stage of training or work it is open for an assistant to qualify as an architect.

3. Useful contribution by showing the profession what sections of the building public want. Yes, provided that they do not carry out any form of practice.

4. Integrating training of all members of the building team and the establishment of a "common language."

5. (a) Yes. (b) Yes. (c) By continual pressure on all concerned.

6. No. Changes along the lines of the Constitutional Committee proposals.

#### Andrew Derbyshire (A) writes:

1. The most important problem facing the RIBA is how to give its members value for money. This can best be done by concentrating on means to enhance the status of the architect as follows: (a) By improving his competence through educational reform, and his efficiency through a comprehensive technical information service run as part of the Institute. (b) By seeing that the directly productive part of the profession—the salaried assistants—whether in private or official practice, get the money and the recognition that is their due.

2. The concept of the two-tier profession seems to me like an attempt at self-justification by architects who feel that they have risen so high that they need no longer bother with the details of design and job administration—which may thus be left to lesser folk with smaller talents. I mistrust the whole idea, deeply.

3. The All-in service is a useful contribution only if it takes the form of a consortium of designers and associated specialists combining on *equal terms* with the building firm to produce buildings by negotiated contract with *full disclosure* of the financial details. Any other arrangement which does not satisfy these conditions may secure for the architect, in spite of himself, a vested interest in bad design.

4. The most urgent reform in education (after the abolition of the 11 plus) is the abolition of part-time schools, testimonies of study, and RIBA External Exams.—with help for the poor to attend full-time. The two A-level entry condition is dangerous—not all good architects are good at academic exams.

5. (a) Yes. (b) Yes. (c) In two ways:—By improving the status of local government architects through better pay, more civilized working conditions, and recognition of individual design responsibility. By staging a series of continuous exhibitions comparing the work of architects in this field with the work of others.

6. RIBA organization has improved enormously during the last year or two. Two important tasks remain:—(a) To improve the efficiency of the Council/Committee/Staff work structure which seems slow and cumbersome and involves much duplication of effort. (b) To find the means to employ sufficient numbers of highly qualified staff to give the sort of service that members of a technical institute are entitled to expect.

#### G. W. Dixon (A) writes:

1. The RIBA has a twofold problem; firstly, to re-establish the architect in the public eye; secondly, to improve its service to its members. The RIBA should assert itself publicly on architectural matters with prompt official comment.

2. The "two-tier" profession regrettably already exists to some extent; I do not like the system which at present appears to limit the advancement of qualified staff. A trained and qualified assistant should be able to rise in position solely according to his ability.

3. It is hard to see how the "All-In Service" could be ended; the RIBA must, therefore, try to ensure that staff conditions in these organizations are at least equal to those offered elsewhere and that managements do not interfere unduly in the architectural staff's professional function and status. No professional architect should become a director of any building firm.

4. Final examinations in recognized schools should be set and assessed by the RIBA and not by individual schools. I would like to see far greater practical training given by schools, perhaps by closer co-operation with local architects "borrowing" students of all standards.

5. Whilst an architect should head the Architect's Department in all substantial local authorities, the important thing is to create a team spirit between architect, engineer, and town planner; an architect often makes the best co-ordinator of such a team but the achievement of these aims can only come from public recognition of the architect and top level co-operation between the Institutes involved.

6. Not entirely. In my opinion the RIBA particularly fails as an organization on two points:

(a) Insufficient collaboration with allied professional institutions.

(b) Too low a standard of their professional journal.

In order to overcome these failings I would suggest a re-orientation of the Committee views dealing with these matters.

#### Robert Foster (F) writes:

1. An improvement in the efficiency of architects without which no amount of propaganda for better design will be effective. The RIBA should set up a technical information service and couple with it a consultancy service on a fee-paying basis to give practical advice to offices on modern methods of management and administration including cost control.

2. A two-tier system already exists and should be recognized by the RIBA. When entry to the profession is restricted by higher educational requirements, the RIBA should make itself responsible for looking after the technicians whose invaluable services the profession will still badly need.

3. It is a potential menace while architects can only play a subsidiary role in it. I believe that its scope will remain limited but that it has come to stay; an Architect should be allowed to become a director of a building firm provided that he abandons all other forms of practice, including architectural journalism.

4. More facilities for common training of builders and the building profession.

5. (a) Yes. (b) Yes. (c) By a publicity campaign backed by the facts and figures which the RIBA is now collecting and designed to encourage the growing public interest in architecture.

6. Heavens no! Satisfaction is the mark of death; but sniping at the RIBA's organization and administration should wait until the Constitutional Committee has done its job and until the new Secretary has had a chance to settle down in his.

#### Frederick Gibberd (F) writes:

1. That all buildings of any description erected must be designed by architects. Continuous propaganda by the Institute and from every individual member, from the President to the probationer. This should be a crusade; all other issues, such as a minimum salary of £1,000 a year for an architect, are secondary.

2. I dislike it as leading to class distinctions and bitter disappointments.

3. A menace for most buildings but there are exceptions such as a nuclear power station. All-In service does not imply that the architect must be a director of a building firm and it is undesirable that he should be so.

4. That every student should attend a day school of architecture but that he should also be attached to an architect's office which he would be required to attend at definite periods during his training, the curriculum being modified to make this possible. As an interim measure, students educating themselves "the hard way" should have time off to attend part-time day classes.

5. (a) Yes. (b) Yes. (c) Exhibitions, conferences, individual propaganda.

6. Yes.

#### Alex Gordon (A) writes:

1. The status of the profession—to act quickly on the *Ad Hoc* Committee's recommendations.

2. All designers should be fully trained and if now working as a team member should be capable of becoming a leader in the future. For architects, I suggest, therefore, one qualification, but a limitation of the numbers. To relieve architects of routine administrative and non-design work, justification exists for a separate technical assistant grade, but this should not be a junior branch of the RIBA as both groups might be looked upon as architects by the public. How such a body can be separate from the RIBA in the public's mind, yet related to it, requires further investigation.

3. The important thing is not what I think, but what the building owner thinks. Both the traditional and the all-in service have merits and will exist side by side:

**All-in Service:** The architect is expected to be a leader; if he can be employed by a building firm, he should also be allowed to share in its leadership. The code should, therefore, be amended.

**Traditional Service:** Initiative necessary regarding design consortia—if possible based on a lower total fee than the aggregate arrived at by the application of the pre-

sent scales of the architect/quantity surveyor/consulting engineer.

4. Apart from a more selective entry and restrictions in numbers qualifying so as to raise standards, the opportunity for all members of the building team (consultants, quantity surveyors, builders, specialists) to train in a relationship leading to that under which they will be later called upon to work.

5. (a) Yes—if sufficiently substantial to warrant a person of adequate stature. If not large enough to support more than one independent chief officer of adequate status, then one person of the right stature (whether architect or engineer) is better than two with inferiority complexes.

(b) While present aesthetic controls remain, it is preferable that the local authority's architect should not be responsible as it is more easy to fight the non-architect. The whole system requires reviewing, but all parties want bringing together, not separation.

(c) By raising the status of the profession, so that its views are more readily accepted by ministries, local authorities and the public.

6. I am satisfied with how the present measures of re-organization are going and encouraged by the Foreword to the Annual Report that the RIBA will take the initiative more and lead more.

I feel that the competition policy needs reviewing in order to enable the smaller offices to compete—a policy aimed at finding the architect rather than finding the design for large buildings involving very considerable research.

The British Architects' Conference might be made more of a Research Conference, less dependent for success on the support of the local authority (non-architect) members.

#### Leonard C. Howitt (F) writes:

1. Measures to be taken to improve the quality of architecture and to increase the operational efficiency of architects. This involves the educational system at all stages, demanding higher standards from entrants, programmes of training and post-graduate instruction that embrace all the practical aspects without neglect of design, which is the architect's major contribution to building.

2. My conception of a two-tier profession consists of Fellows and Associates. The Fellowship should be strengthened and broadened by the admission of all responsible senior executive architects in private or public offices, say including the rank of group leader. Building technicians should obtain the qualification appropriate to the technical subject they practice. Any kind of recognition of unqualified draughtsmen by the R.I.B.A. would prejudice the value of the Associateship and encourage the potential "building designer," etc., etc.

3. As Chairman of the Joint Sub-Committee which produced the widely acclaimed report on the employment of architects on the salaried staffs of building contractors, I am in full agreement with that report. The all-in service is a menace and a challenge to architects to produce an even better service. As the leader of the building team the

architect should quote an inclusive fee and take responsibility for his consultants; such a service would give the client the benefits of competitive tendering denied by the all-in system. I am not in favour of architects entering upon a business career without first surrendering the title of architect.

4. Covered by 1.

5. Yes; I have been fighting the cause of the independent architectural department for many years. I also believe that the City or Borough Architect should be qualified in town planning and be the Planning Officer. Only by continual agitation and powerful direct representation on every appropriate occasion is complete success likely to be achieved.

6. The internal organization and administration of the R.I.B.A. must keep pace with changing demands upon its services and among its many functions must acquire and analyse the background evidence essential to the constructive formulation of policy by the Committee and Council. The machinery now exists and the elected members who serve on those bodies receive the most helpful and knowledgeable assistance from the permanent staff. I have enjoyed that privilege for the past 12 years.

#### S. A. W. Johnson-Marshall (A) writes:

1. In the short term, the constitution of the RIBA and architectural education, because they are both of great importance to the status of the profession. Both subjects are under review by committees. The RIBA should ensure that their reports are made available quickly. I hope that a new constitution will be proposed and that it will be more liberal than our present one. For instance, I should like all members of the Council, the Hon. Officers and members of the Executive Committee to be elected. I should also like some means to be found of ensuring that the "under 30's" are appropriately represented on the Council.

The RIBA seems to be absolutely right in raising the standard of entry to the profession. I hope it will also work towards the situation where we are obliged to attend courses for architects, builders, structural engineers, services engineers and quantity surveyors (during the early part of our higher education). This is not the place to elaborate this approach but it is surely fair to say that until the key members of the building team can all start with a common aim, great architecture is going to be increasingly elusive.

2. I dislike the concept of a two-tier profession. The answer to Question 1 indicates an attitude of mind towards building technicians.

3. An All-in service will make a useful contribution if it is well manned and well run. It is unlikely to be well run if the architect is not a member of the policy-making part of the organization.

4. Answer included in Question 1.

5. (a) Yes and the RIBA should do everything it can to achieve this aim. (b) Yes. (c) By encouraging the right people to be available and willing to qualify themselves for such posts and by convincing the local authorities that they should choose them.

6. The internal organization and administration are undergoing changes now. What little I know, I like.

#### H. J. Whitfield Lewis (A) writes:

1. The education of the architect—I think the changes in policy arising out of the Oxford Conference are a move in the right direction, but eventually the RIBA will have to face a broader-based educational system covering the whole building industry. Percy Johnson-Marshall's proposals for a Faculty of Architecture & Building seem to me to point the way.

2. With the inevitable industrialization of building and the consequent need for meticulous detailing and pre-planning, the need for an increasing number of technicians can only be met by a two-tier profession. Nevertheless, the architect must be in control as the creative designer and I think, for clarity, your two categories should read (a) architect, and (b) building technicians.

3. I think the "all-in service" with the architect as a salaried member of the contractors' staff is a menace, because he inevitably takes at least second place. Also it is unlikely that the salary offered is sufficient to attract the really high-quality architect. I am strongly in favour of the closest collaboration between architect, engineer, contractor and client from the inception of a project, provided the architect retains his professional status and is accepted as the leader of the team.

4. See my answer to No. 1.

5. (a) Yes. (b) Ideally, yes, but where there are well-established separate planning departments it is obviously very difficult to bring about the necessary changes. (c) Deliberate fostering of closer relations between architects and planners by RIBA and TPI and, longer-term, joint education of architects and planners, at least for the early years of their training.

6. No, but I am confident that the Constitutional Committee under Cleeve Barr's chairmanship will bring about the necessary changes.

#### Eric Lyons (F) writes:

1. There seem to be so many important issues, that it is difficult (perhaps misleading?) to isolate the most important issue. But one issue that ought to be faced is the need for a vigilant system of Public Relations.

2. I am in favour of the two-tier idea, providing that the second tier consists of *Building Technicians*, and not merely an underprivileged breed of hack draughtsmen. This may provide us with the opportunity of leadership of the building industry by training men who can *build*. Such technicians are needed, not only in architects' offices, but also inside contractors' organizations and in the various "specialist" sub-contracting firms. We could help to establish *real Building Technology*.

3. A menace (but perhaps a challenge). I have nothing against architects becoming builders, but I am not sure this would necessarily affect the issue.

4. Basic reorganization to establish item 2.

5. (a) Yes. (b) Yes. (c) This may have to be fought for, on many fronts (items 1, 2



and 4) and it needs firm action (for example to bar architects from employment as "architectural assistants" to municipal engineers, town planners, etc.)  
6. Don't know. I would like to find out more.

**D. Plaskett Marshall (F) writes:**

1. The most difficult issue facing the RIBA is the decline in the professional status of the architect who is becoming progressively subordinate to other professions. Everything should be done to reinstate the architect in his proper position as head of the building team.

2. The profession at the moment tends to be unofficially in two tiers, and I am of the opinion that this matter should be thoroughly examined to ascertain as to whether or not separate qualifications would be of advantage.

3. In my opinion the "all-in service" is a menace, but is inevitable. The matter should be thoroughly examined so that the profession can be in readiness to adapt itself accordingly. However, at this juncture I do not think that the Code of Professional Conduct should be amended to allow architects to become directors of building firms.

4. The most urgent reform in education is the provision of greater experience in practical constructional design.

5. (a) I am of the opinion that all local authorities of substantial size should have an architectural department under an independent chief officer, but such department should not be too large and should act as a liaison office with private architectural practices. (b) The City Architects' Department should be responsible for Town and Country Planning. (c) This aim could be achieved by making representation to the Responsible Minister. Town Planning should be under the jurisdiction of architects.

6. At this juncture, and without the facts, I cannot express an opinion on the internal organization and administration of the RIBA.

**E. D. Jefferies Mathews (F) writes:**

1. The quality and status of the architect in modern society. The RIBA should and can take the lead and help members in this. Some possibilities—many already operating—are: (1) Close collaboration with the building industry and our allied professions. (2) Post-graduate education, technical study conferences. (3) Encouraging architectural criticism. (4) "Public relation." (5) Information. (6) Liaison with public authorities. (7) Remuneration, salary scales, status of salaried appointments. (8) Initial architectural education (see 4 below).

2. Ideally not desirable, but to-day forced upon us by the movement of modern society, and the increasing complexity of the requirements of building and therefore the qualities and capabilities of architects. I therefore support the principle of the two-tiered profession. Promotion from one tier to the higher should not be barred.

3. The all-in service can be a useful contribution if properly handled. Theoretically, an architect in private practice or a chief departmental architect should be able to offer the equivalent of an all-in service.

The arrival of this service is the inevitable outcome through the profession as a whole failing to match up to what is required from it to-day. We should see that it operates efficiently and that architects have their right status in the organizations offering such service. In some cases this kind of service is to-day misleading the building public—this we must fight.

I support the amendment of the Code to permit architects to become directors of building firms. If we turn our backs on what is going on around us we shall lose our leadership in the industry to the contractors.

4. Increase the standard of general education required for entry into the profession, even higher than proposed at the Oxford Conference. Broaden the basis of architectural education and collaborate with the education of engineers, quantity surveyors and builders. Include more technology and economics—the good design, absolutely essential, will emerge without overplaying that part of architectural education.

5. (a) Yes. (b) Yes. (c) Through leadership and direction by the RIBA with government and local government. Slowly at first and stronger as the quality and status of the profession grows (my answer to Question 1).

6. No. In recent years social progress in relation to the architect's position in society has moved faster than it is possible to move in an old chartered learned society established in a different age. Consequently improvements cannot be made as quickly as we should like. I think our aims should be: (i) an internal business administration comparable to the most efficient commercial undertakings; (ii) an awareness of what is going on in the work outside No. 66—the architectural, the building industry and the "lay" worlds.

**Gwyn Morris (L) writes:**

1. (a) To ensure unity among all members and not differentiate between practising or salaried. (b) To give greater publicity to the architectural profession and to see that the architect takes his rightful place in "society." (c) The Ad Hoc Committee have done a lot of useful work and made recommendations to the Council: it is now necessary for these to be finally considered and where possible put into practice.

2. I am not generally in favour of a two-tier profession. I think it would be everyone's ideal ultimately to qualify as an architect, but if a draughtsmen's class is to be catered for, it should come under the RIBA.

3. All-in services can be a most useful contribution but the architect must be the leader of the team, not well down the "tree." The Code of Professional Conduct could be amended to allow architects to become members of building firms in the same way as civil engineers.

4. A great amount of research is still required to establish what the aims of architectural education ought to be. The sandwich course might be expanded to give greater experience of office procedure, and the system of live projects practised by some schools could be more widely utilized.

5. (a) All local authorities of substantial

size should have an architect's department under an independent chief officer, which should be a statutory appointment. Smaller authorities could utilize the services of a private practising architect, as they do now for their Clerk or Medical Officer.

(b) The City Architect's department should be responsible for town and country planning. This allows for the integration of architectural and planning staffs and fosters a live interest. The county have a somewhat different problem, and a separate department controlled by a planning officer would be the most successful.

(c) By example—there are several good examples in the country, and it would be for the RIBA, through its PRO, to achieve the greatest publicity.

6. Re-organization of committee structures, enabling committee members to instruct permanent staff to prepare more detailed reports, thereby freeing the elected member to give more time and attention to the business of the RIBA.

**Denzil Nield (A) writes:**

1. The question of the architect's place in the whole framework of physical development. The architect claims leadership of the building team: he claims the planner's place in town planning. The building public are not yet convinced. It is up to the architect to prove it. This calls for four things: (a) working out better relationships with clients, contractors and specialist services which means facing up to 3 below. It should be possible with safeguards to work out different conditions of "engagement" for different circumstances which are not out of accord with sensible professional ethics. (b) Better education over a wider field perhaps involving 2 below. (c) Better public relations. Practical exhibitions of architects' contribution such as the Bristol Forum's Plan for Bristol gain more respect for the architect than deputations and lobbying. (d) General improvement of level of competence, improving at present but still too low.

2. Some tiers exist: probably more than two. It is only rational to recognize such differences. At present every office boy who traces is soon forced towards the RIBA Exams. This results in too many sour half failures in the profession. Proper technical qualifications could give pride and respect to many who are not suited by character to get to the top. The question is what should the lower tier be, something like the solicitor's chief clerk, or a science boffin? This needs much study and it is too early to pronounce.

3. The all-in service does a particular job, where speed or cost or both are the most important factors. It must be accepted and the architect take a major part in it (see 1 above) or we must work out something better to offer the building public.

4. The implementation of the recommendations of the Oxford Conference. More University graduate architects are needed, and better training over the whole field of architectural activity will force us to some sort of division as in 2 above.

5. (a) Yes. (b) Town and country planning should be the responsibility of an architect-

trained should qualifications are needed  
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trained planning officer. (c) More architects should be encouraged to take town planning qualifications, and more courses in schools are needed.

6. The reforms started last year should be given time to show what effect they will produce. The secretary of such a large organization, with a changing Council, should have an active and progressive policy on all internal affairs, and we should let the new secretary show what he can do.

#### Robert Paine (A) writes:

1. Revision of the Constitution: getting right the proportion of regionally elected to nationally elected members, and settling properly the question of London members.  
2. The concept of a two-tier profession is a bad one: good architecture is indivisible and all engaged in it should be either architects or persons training to be architects.

3. The All-in service is a menace not merely to architects but to architecture.

4. Education needs less of reform than a counter-reformation from within.

5. Undoubtedly all local authorities ought to have an architect's department under an independent chief officer and where powers are delegated the department should be responsible for Town and Country Planning. The best and quickest, and probably the only way, to bring this about is by local action. Authorities can be persuaded but they will not be driven.

6. My criticism of the internal organization and administration of the RIBA is that while the machinery is sometimes too cumbersome and slow when action is urgently needed, measures which in their effects often seem dubious to the general body of members can be stamped through too quickly.

#### J. V. Parker (A) writes:

1. Selling ourselves to the public. Whatever has been done to date has been so discreet, so 19th century professional gentleman, that even now a high proportion of supposedly intelligent university educated business men does not know what an architect does for them.

2. "Two-tier" profession must come sooner or later—my own preference being for "building technicians" as the second tier. We all know the ones who should be building technicians—and extremely valuable they can be—but as it is, even the office draughtsman is entitled to call himself "architect," and this it not good for the profession.

3. All-in service could conceivably be good. I have never yet found a case where it offered any *real* advantages to the Client: the all-in firm is in it primarily for an all-in profit. If the all-in does a good job, which includes a good design, this can only help the good private architect. If it does not do a good job the good architect can show his superiority, anyway.

If all architects were good architects I should be all in favour of allowing them to be directors of building firms. Under the circumstances I am against the proposal.

4. Standard of entry to the profession. This is tied up with 2 above. At the moment it is ridiculously easy to become an A.R.I.B.A.—particularly externally, where the standard

of accepted work is very poor. Association should be raised to an extremely high level without any flinching. I realize how easy it is to say this *when I am in*, but the problem is very serious.

5. Undoubtedly all Local Authorities should have an independent architect. I think the profession is now strong enough to forbid its members to take posts except under an independent architect. The Town and Country Planning Department should be headed by an architect-planner. We all see around us the visual destruction caused by these departments being run by other professions.

6. The report of the RIBA Constitutional Committee should in its following effects go a long way to putting right many problems of the moment, though I object strongly to that foolish and unnecessary Recommendation Three.

#### Charles Pike (F) writes:

With reference to your questionnaire in connection with the forthcoming RIBA election, I have endeavoured to answer where I consider it appropriate but wish to make the point that all matters of this importance require all the facts first.

1. The most important issue facing the RIBA is the improvement necessary in the confidence of the general public in architects who can be relied upon to do the job with full responsibility, both in the field of aesthetics and finance. Method, improved education.

2. I am not in favour of a two-tier profession, but realize that some modification in architectural qualifications may be desirable.

3. I do not think that the All-In service where a builder has financial control is desirable, but I do believe that a comprehensive design unit working in conjunction with a builder may well be the answer which would be acceptable to the general public.

4. This is not an item which can be answered in a few words, but whatever methods of reform are eventually decided upon, they must tend to implant a greater sense of responsibility in the young architect who is spending other peoples' money.

5. (a) Yes. (b) No. (c) This cannot be discussed in a short space.

6. Having worked on committees of the RIBA for over twelve years, I am well aware that some re-organization is necessary, but it must be a considered programme when all the facts are available. Sweeping changes may appeal to those who have no responsibility for their implementation, but the efficiency of the RIBA must be the final goal.

#### Fred Pooley (F) writes:

1. To re-establish public confidence in the profession. The RIBA can best help by making its members realize that buildings (and ones which satisfy clients at that) can be built without architects, and that the profession as we know it today can only survive if members are able to demonstrate that by their use a building owner can get better value for money than he could otherwise.

2. Don't like it, it smells. Much better to have some horizontal specialization within a generally qualified profession.

3. Not so much a menace as a clear warning as to what will happen to us unless we pull our socks up. Any amendments to the Code should ensure that architects *must* be directors of building firms.

4. Urgent need in architectural education is to ensure that young architects get some business acumen and real experience of putting buildings together. Easiest way to achieve this is to re-organise the Professional Practice Examination. Make it worthwhile and combine it with longer period of undergraduate service in specially selected offices.

5. Yes and yes, but I don't think planning will ever come under the control of architects by national legislation. Much more likely to achieve this desirable result by architects demonstrating locally the obvious advantages to be gained.

6. Yes. Getting better rapidly—latest Annual Report looks as if it comes from a professional body concerned with design and efficiency. What is now necessary is to keep the good work going.

#### R. Duncan Scott (F) writes:

1. The most important issue appears to be the position of the architect vis-à-vis the building industry and society generally. Until his position is determined, other important issues, such as education, cannot be properly assessed. A decision must be made as to whether he should remain strictly professional, or become an integral part of the building organization; whether he should be the head of the planning team or merely a member of it.

2. A two-tier profession does now exist. There appears to be a case for acceptance of this fact, if the architect is to take his place as head of either the building team or planning team. The initial qualifications for both teams should probably be more or less identical or parallel.

3. I believe that the menace of the all-in service should be regarded as a challenge to the profession. As such its existence will give the necessary impetus to the profession to re-adjust itself. The answer is to make the architect more efficient to enable him to counter by means of an all-out service. I do not believe that the answer is integration with building firms.

4. Failure to keep education abreast of recent developments, tied to the uncertainty of what the architect is being trained for, has been one of the main causes of the rise of the all-in service and resistance from other professions to the architect's leadership in many fields. The student must be brought into much closer contact with building sites and organization, management techniques, cost control, etc.

5. I believe that, ideally, there should be attached to all county borough and large authorities a chief officer, responsible for town and country planning and the architectural work of the authority, the chief officer being an architect-planner. This can only be achieved by training such men—

possibly by a post-graduate course for suitable candidates.

6. Recently, there has been in the Council a growing awareness of the urgency of these problems, and a determination to solve them. I believe that the profession as individuals must also be made aware of these problems and help to solve them, and that the reconstitution of the Council, with much greater direct representation from the provinces, will improve the two-way communication between the Council and the individual architect.

**Alexander Steele (A) writes:**

1. The most important issue now facing the RIBA is that the organization as a whole should enjoy the confidence of the greatest possible proportion of its membership. The present efforts to revise the Constitution are moving in the right direction.

2. I am in favour of a two-tier profession but my approach is different from that being examined at the present time. I believe that as many persons as possible should attain the status of architect but that the second-tier should consist of persons who have acquired a "practising certificate," after passing a supplementary examination. The first-tier examination should not vary greatly from the present examination except that the professional practice section should be simplified to that of a nominal examination of a person's knowledge. At the second-tier level, however, the examination would be at an advanced level and would go quite deeply into the laws of contract and building and would be an index of an architect's capacity to protect the client's interests.

3. One cannot answer this question without knowledge of all the circumstances. I would certainly resist any action which would permit architects to become directors of building firms. Such a concession would be at variance with the terms of the Local Government Acts, and many architects would be in difficulties when dealing with local authorities.

4. I have been working actively for all architectural education to be of University standard and it is gratifying that there is now more than a tendency to adopt this point of view.

5 (a) The difficulty is to determine what is a substantial size. The answer lies in a regional organization which would administer the architectural work of a collection of small authorities. This would not preclude the appointment of architects in private practice, a practice which should be followed in all local authorities. (b) I am not in favour of the city architect's department being responsible for Town and Country Planning. I am, however, in favour of the Planning Officer being a person with an architectural qualification. I believe it to be wrong that a City Architect should be judge and jury where his own work is concerned.

6. Insufficient information is available about the internal organization and administration of the RIBA and an answer to this question could only be given when one had been an active member of the Council for a reasonable period.

**F. Reginald Steele (F) writes:**

1. The vast amount of building work still

being conducted without the professional advice and guidance of an architect. The full answer to this problem can only be obtained by legislation to make it compulsory for plans submitted to a local authority to have been prepared by an architect. An early attempt should be made and this should be regularly renewed until eventually the objective is reached.

2. The title, a "two-tier profession," is misleading. It may be, however, that the detailed examination of the profession which is taking place will reveal that the formation of a supporting body of architectural technicians is a logical development of the fixing of higher standards of entry into the profession and of higher standards of performance within the profession. The question requires very careful consideration to avoid the dangers of cheaper labour in times of recession.

3. I am not in favour of an All-In service which limits the professional independence of the architect or removes from a client any protection he is entitled to expect from an architect. Nevertheless, consideration might be given to the amendment of the Code of Professional Conduct to permit architects to become directors of building firms providing such building firms do not also conduct an architectural practice.

4. The objective of any reform of architectural education must, however, be to produce an architect more suited to the present scientific and competitive way of life.

5. (a) Definitely yes. I believe the formation of independent City and Borough Architects' Departments is to the advantage of both the general public and the profession as a whole.

(b) Yes. Except where Authorities consider that an independent Town Planning Department under a separate Chief Officer is justified.

(c) These aims can only be fully achieved by legislation making these appointments statutory requirements. However, the growth of the number of Departments since the war has shown something can be done by publicity, propaganda and the example of satisfactory performance.

6. I think the RIBA is a well-organized and progressive body, aware of the problems of the future and prepared to face them.

**Henry T. Swain (A) writes:**

1. The most important issues facing the RIBA are, firstly, the raising of the pay and status of salaried architects—particularly those in public employment, and secondly, the improvement of architectural education.

2. I am categorically opposed to the concept of a two-tier profession in any form.

3. The all-in service is already making a useful contribution to building. It will achieve still better results if it is directed by architects. The code of professional conduct needs to be amended to permit this. The "all-in service" is the logical counterpart of the public authority building with its own architect's department.

4. Architectural education needs greater scientific and organizational emphasis. It must take place in Universities but it needs to be closely associated with the practice of

industrial and building production.

5. All public authorities should have architects' departments and obviously planning should be one of their responsibilities in cities. It is up to those architects already working in local authorities to go on proving that they represent a good investment of public money. The RIBA must be able to make out a factual and statistical case for the establishment of architects' departments in terms of quality, speed, and economy of building.

6. The organization of the RIBA has improved a lot recently. Obviously there is much to do. Steps forward are generally the result of intervention by the members. The lesson is that the RIBA has to be democratic if it is to develop, but like all part-time representative bodies it will need to concentrate on building up and maintaining a team of really good well paid officers.

**Bryan Westwood (A) writes:**

1. Raising the status of the architect in the community. This could be achieved by:

(a) fostering appreciation of architecture, and better public relations;

(b) by improving the education of architects not only by better teaching and higher standards, but by accepting the fact that there are limits to detail which can be absorbed and by teaching more generally and over a wider field and adopting the two tier system, see below.

2. I think it a waste of time for both teacher and taught to continue with a "design" course when aptitude lies elsewhere. There should be a two-tier profession, and the second tier should be given its own special identity and be encouraged to develop its own expertise.

3. I think the only real justification is too low an average standard of performance by the profession as a whole. The architect in the package is not necessarily his own master. If the All-in service is to become general it is a pity to deprive the architect of the opportunity to be a director, but even so I think it would be fundamentally wrong to amend the code to allow it, because his loyalty could then be divided between his firm and his "client."

4. Greater integration with other branches of the building team.

5. (a) Yes.

(b) Yes.

(c) Firstly, architects have to convince a public, which places little value on the visual arts, that architects are the best qualified people to be in these positions. Secondly, the importance of the positions has to be made sufficiently well recognized to attract first-class architects.

6. Reasonably so, but decisions on awkward points are liable to be timid. If standards are to be raised, committees must stick to principles more tenaciously.

My main criticisms are:

(a) There is overlapping.

(b) Committee work should be more widely spread so that the same names do not appear on several committees.

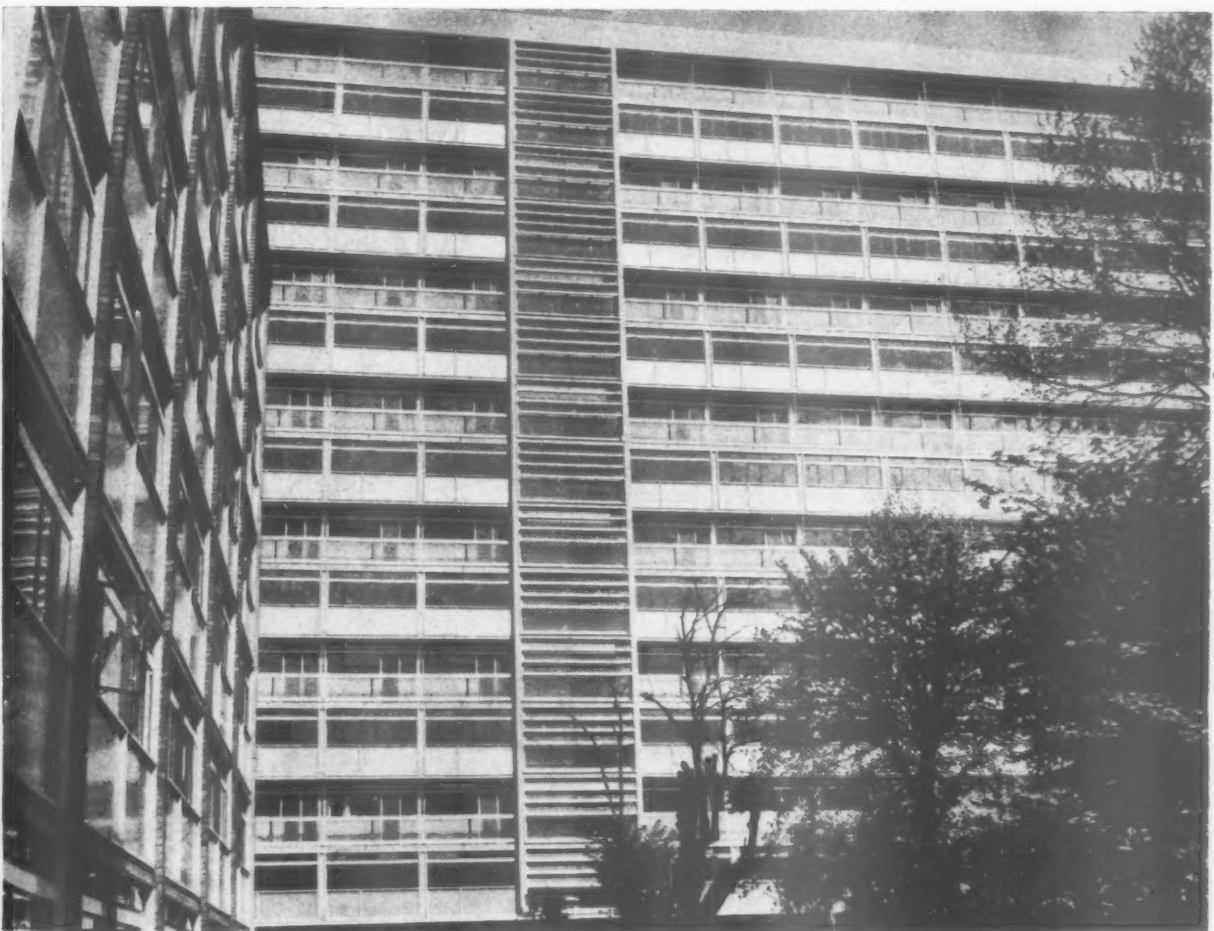
(c) Some committees, such as the Board of Architectural Education, are too large.

## 14-STOREY FLATS AT SCEAUX GARDENS, CAMBERWELL



*This new council estate, opened last Saturday, in Camberwell is called Sceaux Gardens as a tribute to the French municipality of that name with which the borough has been linked in friendship for some five years. It was designed by F.O. Hayes, the Borough Architect. The site was acquired by the Borough Council in 1955*

*when Camberwell House Mental Hospital was closed down. The planning density in North Camberwell is 136 persons per acre and this and the nature of the sub-soil, together with the presence of the established gardens led to the adoption of high buildings for a major part of the development, but the original plan to provide buildings of 20 storeys was abandoned in accordance with views put forward by the MOHLG. Sub-soil conditions demanded piling for all other than the single-storey blocks and the 15-storey cross wall and slab construction obtained the maximum benefit from this expensive form of foundation. A large variety of family sizes has been catered for, the old peoples' dwellings being in single-storey houses close to the major gardens of the estate. Three laundries, one central boiler house serving the whole estate, tenants' stores and garages, together with six shops are also included in the scheme and the future provision of a community centre has been allowed for. The general contractors for the scheme were John Laing & Sons. This building will shortly be published fully in the JOURNAL together with a cost analysis.*





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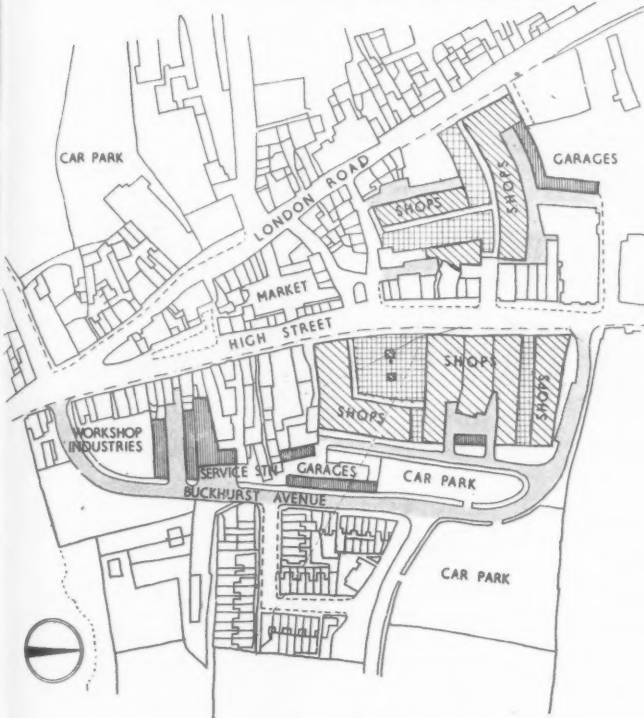
## PROPOSALS FOR THE REDEVELOPMENT OF SEVENOAKS

The evolution of the successive plans prepared by Max Lock and Partners for the redevelopment of the centre of Sevenoaks is of exceptional significance for two reasons. The first is that the Urban District Council of this small town of 20,000 inhabitants, largely inhabited by city-bound commuters, has been convinced (despite its conser-

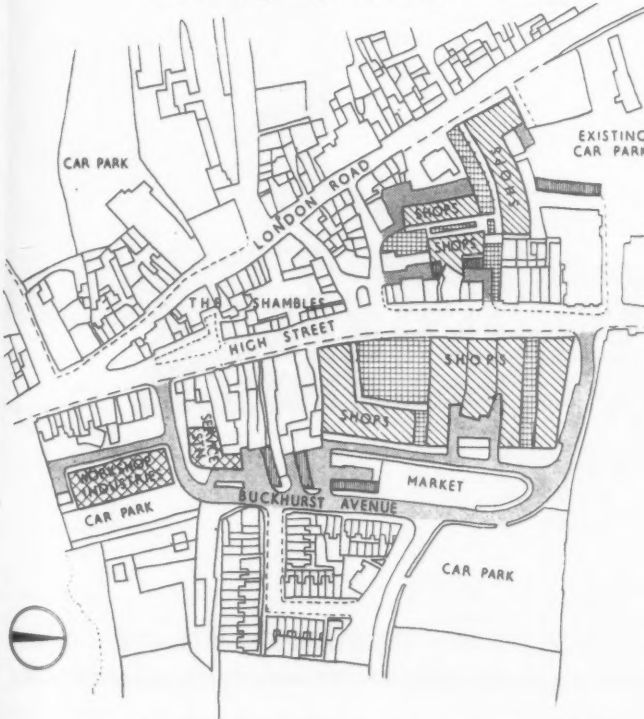


1. The 1954 plan: pedestrian ways tinted.

vative politics) that the only way to solve the problem of its central area is the compulsory purchase and comprehensive redevelopment of 50 acres. The second is that by taking the public into its confidence, explaining the consultants' proposals and inviting criticism before adopting the plan, the Council has been able to carry public opinion with it, and the consultant has been able to modify the plan in the light of constructive criticism. Max Lock and Partners were first asked in 1954 to prepare a plan (above) for the central triangle between London Road and High Street, which included a pedestrian shopping centre, and a market square in the Shambles, a group of tightly-knit, characterful but rather run-down shops. The credit squeeze put this plan on the shelf. Then, last year, the County Council's decision to widen the High Street created an opportunity for comprehensive development on both sides of it. Max Lock and Partners prepared, last January, a new plan (top left), the basic features of which were a market in the Shambles, a pedestrian shopping area in the central triangle, an open square with a public hall and shopping arcade to the east of the High Street, a relief service road to the east of the High Street, and car parking for over 300 cars. As a result of three months of public criticism, an amended plan (left) was prepared. This met the main criticisms, by dropping the idea of a market in the Shambles, re-aligning the service road, and reducing the number of shops to be demolished. Sevenoaks Council is expected to buy the designated area, and lease it to a single developer to ensure positive control over the detailed design—and also, which is important, to ensure that it gets a return on the profitable parts of the plan to help it to pay for the unprofitable parts.



2. First 1959 plan: pedestrian ways cross-hatched.



3. Second 1959 plan: pedestrian ways cross-hatched.

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## THE INDUSTRY

*From the industry this week Brian Grant describes a sliding wardrobe door, a two-unit gas cooker, insulating matting and a fluorescent light fitting.*

**Wardrobe doors to slide**

The illustration, top right, shows the general arrangement of Henderson's new Double Top sliding gear for wardrobe and other doors up to 60 lb. weight. Hangers at the top of the doors carry nylon wheels which run in a vee shaped cadmium plated top track, and are suitable for doors of any thickness from  $\frac{1}{2}$  in. to  $1\frac{1}{2}$  in. thick. The floor guides are nylon, and the gear is very quiet. Complete sets are supplied for openings from 4 ft. to 8 ft. wide, and for two or three doors, and include a safety stop and circular flush pulls in BMA finish. Prices start at 34s. per set. (P. C. Henderson Ltd., Harold Hill, Romford, Essex.)

**Gas cookers**

In the report of the Ideal Home Exhibition mention was made of the Radiation 72 cooker, a type produced in two units with the oven separate from the hot plate so that it can be installed at eye level. The new type is now in production and is illustrated on the right. Price is £48 10s. 0d., in cream or white with stainless steel trim, and the two units can, if necessary, be bought separately, at £19 19s. 6d. for the hotplate and £28 16s. 0d. for the oven. (Radiation Group Sales Ltd., Radiation House, Stratford Place, London, W.1.)

**Flexible insulating mat**

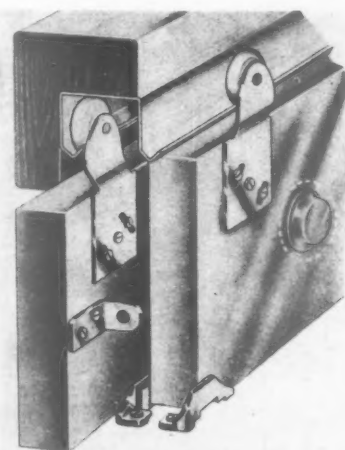
Mineral wool as an insulating material has been used for many years, and a Slagbestos flexible insulating mat in roll form is now being produced by McNeill & Co. in widths of 16 in. for house insulation, and also in any width up to 36 in. for sandwich roofs. The rolls are interleaved with paper, so that it is only necessary to lay them in position

between the joists and pull the paper gently, afterwards pressing the mat into position. The mats are 1 in. thick, with a k value of 0.24, and weigh about 4 oz. per square foot. (F. McNeill & Co. Ltd., 10 Lower Grosvenor Place, London, S.W.1.)

**Lighting fittings**

The photograph on the right shows Harris & Sheldon's new Luveline fluorescent fitting, which consists of a steel spine enclosing the control gear and carrying two fluorescent lamps and a long injection moulded white polystyrene louvred diffuser. The steel spines are made in 4 ft., 5 ft., and 8 ft. lengths and the diffusers in 4 ft. and 5 ft. lengths, so that the units can be butted end to end to make a continuous line in which there are no obvious breaks between units. Any single diffuser section can be hinged down and removed without disturbing the remainder. (Harris & Sheldon (Electrical) Ltd., 46, Great Marlborough Street, London, W.1.)

*Top right, cut away detail of the Henderson Double Top sliding door gear. Right, Harris & Sheldon's Luveline fluorescent light fitting. Below, the Radiation 72 cooker with the oven separated from the hot plate.*





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## technical section

**26 SERVICES AND EQUIPMENT****small electrical installations, 8  
alternatives to t.r.s. cable and screwed steel  
conduit**

In the earlier articles in this series\* the authors, Peter Jay and Clive Wooster, considered in detail the use of tough rubber sheathed cable and screwed steel conduit for wiring a small house. This week they discuss the merits of the various alternatives for these which have come on the market in recent years and they conclude that, except for a few, very special applications, there is at present no motive for using them.

Previous articles in this series have dealt with wiring in tough rubber-sheathed (t.r.s.) cable, and screwed steel conduit. In this and the following article we shall describe some of the other systems of wiring which are available.

These fall under the following headings:

1. The use of plastic insulation in place of rubber.
2. Light gauge steel conduit.
3. Non-metallic conduits.
4. Mineral insulated copper-covered cable.

This list is by no means exhaustive. There are systems of wiring available which employ copper or aluminium alloy conduits, unprotected wiring on porcelain cleats, rubber insulated cables enclosed in an aluminium outer covering, and many patented methods which are intended to cover special situations. We have simply selected from the list the four types which architects are most likely to come across in general practice: the systems which we have omitted, although important in certain types of work, have a more restricted application.

**The use of plastic insulation in place of rubber**

Nearly all the cables which are used in installation practice may be obtained with plastic insulation and sheathing in place of rubber. The plastics most commonly used are p.v.c. (polyvinyl-chloride) and polythene. Polythene is rarely used by itself and most of the polythene insulated cables are provided with an outer sheath of p.v.c.

**Plastic cables in conduit**

Single-core cables may be used in steel conduit in place of v.i.r. These cables may be insulated with p.v.c. only, or may be insulated and sheathed, when the sheath must be of p.v.c. and the inner insulation may be of p.v.c. or polythene.

There are two possible reasons for using these cables, the one based on specific advantages the plastic insulation has to offer in certain circumstances, the other on costs. We will deal with the technical advantages first.

**Advantages of plastic insulation**

The chief advantage of p.v.c. is that it is resistant to certain oils and other solvents which will attack rubber. This is important in some industrial applications, but it is most unlikely that an architect will have to deal with the electrical installation in such a case without the assistance of a consultant, or, at least, the works engineer.

Another advantage of p.v.c. is that it is relatively less affected by condensation than v.i.r., since the latter contains fabric which can, in course of time, start to rot. This makes p.v.c. insulation especially suitable for wiring to lighting points in boiler houses and other similar places, and this has already been mentioned in a previous article. Lighting points wired in this way should not, of course, be placed too near the boiler.

P.v.c. is thermoplastic, and starts to soften at about 110 deg. C (230 deg. F) which is a little higher than the temperature at which rubber starts to become brittle. However, we do not consider it desirable to use p.v.c. in the hotter applications, since in all cases in which temperatures above about 70 deg. C (160 deg. F) may be expected, mineral insulated cable should be used instead.

P.v.c. has better fire resisting properties than rubber, which can be made to burn, but here again, neither type of cable is suitable for situations in which fire is a really serious hazard.

In such cases, either mineral insulated cable should be used, or, where this is unsuitable, there are other special cables which will do. For instance, polychloroprene (p.c.p.) is a suitable outer sheath for cables in conditions of moderate fire hazard, and various silicone rubbers are available which will withstand very high and very low temperatures.

To sum up the discussion, p.v.c. is advantageous:

1. For wiring to lighting points in boiler houses and similar situations where severe condensation may be expected.
2. In certain highly specialized applications, when the architect will expect to be assisted by an engineer.

**Costs**

Some contractors use p.v.c. insulated only cable (as distinct from insulated and sheathed) in conduit because, as compared with v.i.r., it is slightly cheaper and is also slightly thinner, so that a conduit will accommodate a greater number of cables.

This does not seem to us desirable, as p.v.c. cable is liable to catch, and if unsheathed, the insulation can strip right down. Besides this, the briefest consideration of the two preceding articles on wiring in conduit, gives some idea of the number of cables likely to be passing through a box when v.i.r. cables are used. To increase the number of cables in each conduit by using p.v.c. makes the jam at boxes quite consider-

26 Services and equipment. Small electrical installations, 8. Alternatives to t.r.s. cable and screwed steel conduit

\*Previous articles appeared on July 25, August 8, 15, and 22, 1957, February 13 and 27 and March 6, 1958.

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### technical section

able, and must lead to kinking, overstripping and various other practices which shorten the life of the installation.

P.v.c. (or polythene) insulated, and p.v.c. sheathed cable is not subject to these disadvantages. As compared with v.i.r., it is a little more expensive and is also thicker, so that the capacity of conduit is reduced. Such installations are therefore somewhat more expensive than those using v.i.r. In the cases in which the use of p.v.c. offers real advantages to offset the increased cost we would recommend it, but there is no case for the wholesale use of plastic insulation.

#### P.v.c. insulated and sheathed cables as an alternative to t.r.s.

Twin, twin with earth and three-core p.v.c. or polythene insulated cables with an outer sheathing of p.v.c. form an alternative to the use of t.r.s. cables. Their construction is exactly the same, but, in some cases, the overall size of the cable is a little smaller.

They are used in exactly the same way as t.r.s. cables, and all the remarks previously made regarding method of wiring and layout apply equally well. Such cables cost about the same as t.r.s. and are more resistant to moisture, oil and sunlight. It may therefore be seen that they are likely to be preferable in the wiring of garages and in applications out of doors. In such cases they should, like t.r.s., be clipped to 1-in.  $\times$   $\frac{1}{2}$ -in. wood battens. This avoids the necessity of plugging the wall at close centres to fix the buckle clips, and assists in drainage.

Many contractors are tending to use plastic insulated cable generally for interior wiring in place of t.r.s. and are accustomed to say that it will last longer, but there is no evidence to suggest that this is true.

P.v.c. sheathing may be preferable to t.r.s. for installations on the surface. This is mainly on grounds of appearance, since the plastic sheath may be obtained in a variety of colours. Further, it is quite easy to make p.v.c. cable run absolutely straight, whereas t.r.s. tends to kink.

It is possible that p.v.c. is slightly more resistant to mechanical damage and abrasion than t.r.s. although this is very difficult to determine by any recognized test, and each person has to rely on his own experience. The authors' impression is that p.v.c. does stand up rather better to the knocks and wear which a surface installation is likely to receive in practice, although it may be more easily cut by a sharp edge.

#### Light gauge steel conduit

In discussing heavy gauge screwed conduit we mentioned that steel conduit may also be obtained in a lighter gauge. Such conduit may be obtained in the same range of sizes as the heavy gauge, although, as sizes are measured by the external diameter of the tube, the bore of a light gauge conduit is rather larger than that of a heavy gauge conduit of the same nominal size.

Light gauge conduit may be obtained close joint, that is, bent into shape with the joint left unsealed (known in the trade as "tin whistle"), welded, or solid drawn, that is, with no seam. It may also be obtained in round or oval section. Oval conduit can be accommodated in a smaller thickness of plaster than the round type. Its principal function is as an enclosure for t.r.s. or p.v.c. insulated and sheathed cables when buried behind plaster.

Connections between lengths of light gauge conduit, and between conduit and fittings, are made not by screwing, but by a variety of methods, all of which essentially involve clamping the conduit as tightly as possible, and in some cases the use of a set screw. A selection of fittings and jointing methods is shown in Fig. 1.

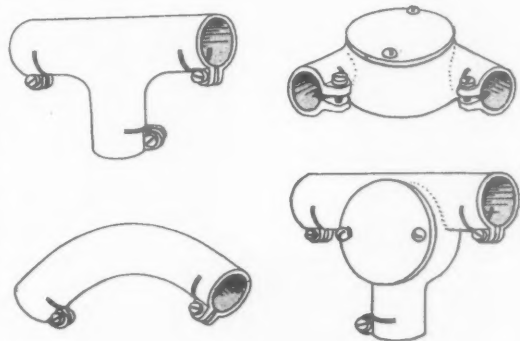


Fig. 1.

Light gauge conduit is very difficult to bend, and if attempts are made to bend it, will usually kink and collapse, so that changes in direction are generally made by means of fittings. All the fittings described for screwed conduit have their counterparts for light gauge conduit.

In the fifth article of this series we laid great stress on the necessity for ensuring good electrical contact at conduit joints, and explained that if this contact should fail, owing to corrosion or slackening at the joint, trouble may ensue.

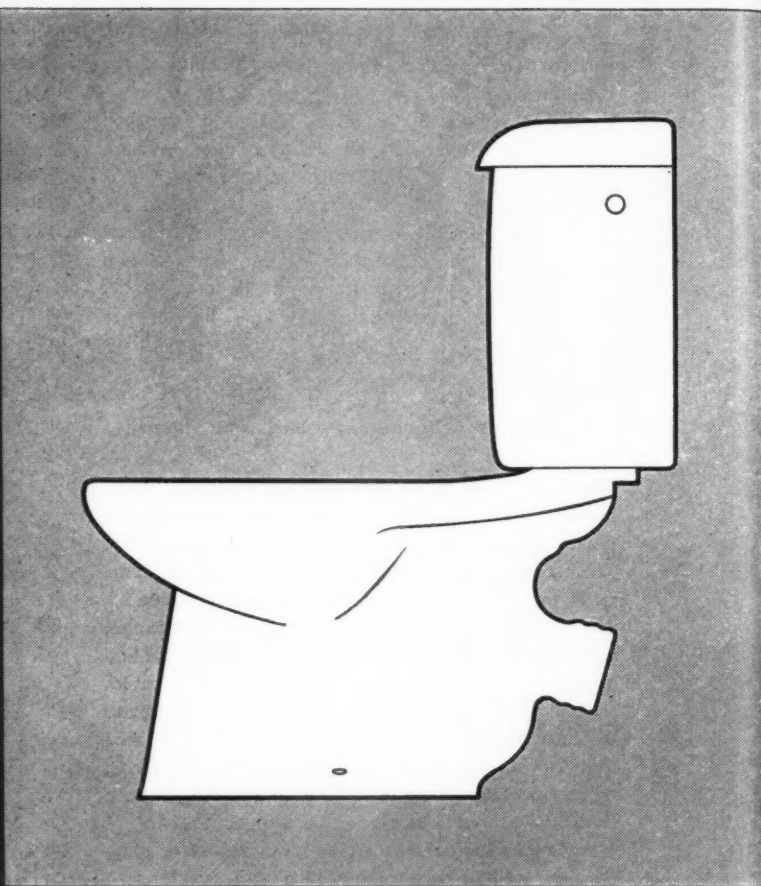
If extreme care is necessary with screwed connections, it may be imagined how much more difficult it is to ensure a reliable joint with light gauge conduit, where components are only clamped together; or, if there is a set screw, this can make contact only over a small area, and is itself liable to corrode.

In our opinion the two major disadvantages of light gauge conduit, the fact that it is so difficult to bend and the constant difficulty of maintaining earthing continuity at joints, are very serious.

Light gauge conduit was introduced before t.r.s. cable was readily available, and did at that time form a cheaper alternative to screwed conduit, and was fairly



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### technical section

satisfactory for lighting work only. Now t.r.s. cable is generally employed for cheaper work, and is far better in most circumstances.

To our mind, the principal function of light gauge conduit should be as an enclosure for switchdrops in t.r.s. installations.

While this article was being prepared for the press our attention was drawn to a new kind of coupler that has been developed for use with light gauge conduit, which does seem to have a better chance of preserving earthing continuity than most of those that have been used hitherto. The same firm has also produced a method of bending the conduit without kinking. The cost is rather more than that of an ordinary light gauge installation, but is below that of screwed conduit.

It is too early yet to approach this new method with any degree of confidence, but if it should turn out to be as reliable as has been claimed, light gauge conduit may in the future be used a good deal more, especially for domestic work, than has been customary during the last ten years.

#### Non-metallic conduits

During and since the war a number of non-metallic conduit systems have been developed. These are divided into three classes:

1. Those in which the conduit cannot be bent, of which a system employing bakelized paper as the material is perhaps typical.
2. Those in which the conduit can be bent with the application of heat but is rigid at normal temperatures. P.v.c. is the commonest material for these systems.
3. Those in which the conduit is flexible at all temperatures. Such systems should be distinguished from the use of short lengths of flexible metallic conduit in conjunction with steel conduit or t.r.s. for final connection to cookers and similar appliances. They are mostly patented "systems," marketed for use in special circumstances, and although some are certainly very effective, they are rather too specialized to be treated here, and we shall say no more about them.

The first type, which cannot be bent at all, obviously has a rather restricted application, and the best known system was designed for use with Nissen Huts and similar buildings.

In these buildings a conduit system is advantageous, since it requires fixings only at two or three foot centres, and offers some degree of flexibility. On the other hand, it is often very difficult indeed to obtain a good earth, and if steel conduits are used the metal can become live and so constitute a source of danger.

A rigid non-metallic conduit offers considerable advantages in such situations. It is installed exactly like steel conduit, and the boxes, etc., are of a corresponding pattern. It is not necessary to worry about earthing continuity and corrosion at joints, and earthing for lighting circuits is not necessary at all provided that no metallic lighting fittings are used. If an earth is required for a socket outlet an additional bare earth wire can be pulled into the conduit, although if there is a large number of such socket outlets the need for this earth wire may vitiate the advantages the system might otherwise offer.

Situations in which this conduit is likely to be useful are garages, concrete store sheds, etc. It is not recommended for domestic work or other permanent buildings, because it cannot be bent, and will result in a very clumsy installation.

#### Thermoplastic conduits

These have had quite a vogue for very much the same reasons as plastic cable; plastic is felt to be the coming thing.

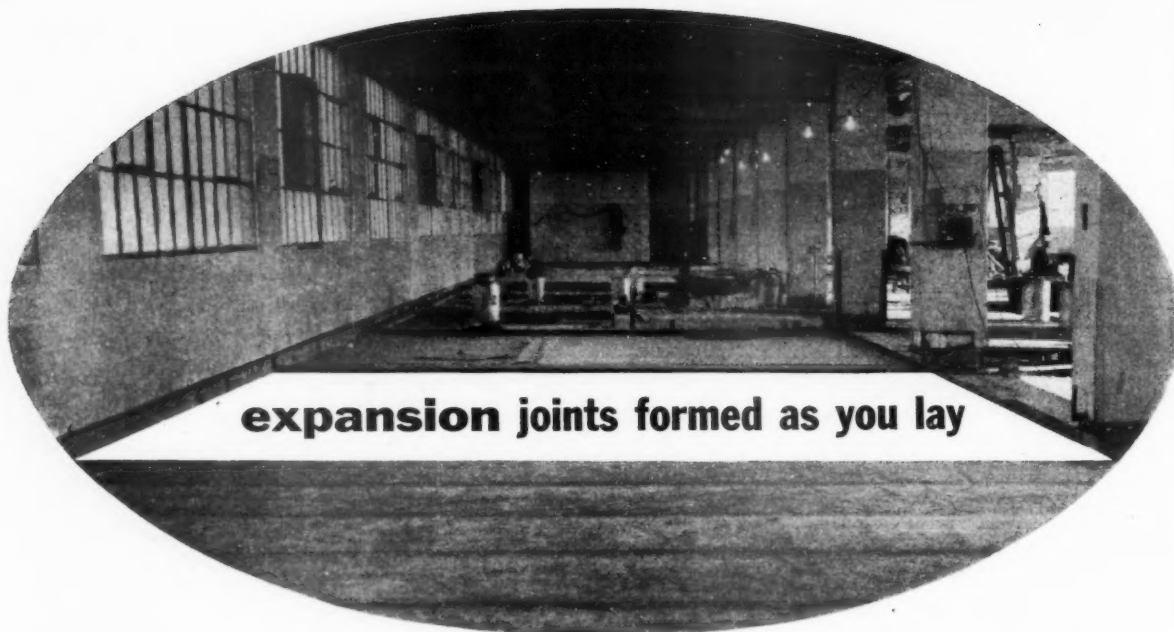
These conduits are very useful in damp and corrosive situations where steel conduit might be attacked directly by fumes, or will rust so quickly that even galvanized screwed conduit will not maintain earthing continuity for very long. They are clearly unsuitable for use where the ambient temperature may be high, otherwise they will soften.

In any event, where abnormal conditions are found, the architect would be well advised to have specialist advice, rather than blindly to accept the manufacturers' claims.

From time to time these conduits have been proposed for use as an enclosure for t.r.s. or p.v.c. insulated and sheathed cables in domestic and similar work. We can see no advantage in this. For the protection of t.r.s. cables buried behind plaster, oval metal conduit is cheaper and better, while t.r.s. cable under a suspended floor does not require additional protection in any case.

As explained in earlier articles, where it is required to instal a considerable amount of cable under a solid floor, there is no advantage in attempting to draw t.r.s. cables into conduits, since the cable is so thick, and the radius of bends must be so great that it is cheaper to use v.i.r. cables drawn into screwed steel conduit in the ordinary way.

The question is really one of value for money. In certain circumstances plastic conduit may be marginally cheaper than screwed conduit, but it must be asked whether the saving is worth while in view of the reduced mechanical strength and special provision then needed to preserve earth continuity.



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## critical study

## A CHURCH IN SCOTLAND AND A CHAPEL IN SOUTH WALES

In this article Robert Maguire discusses one of the many factors involved in the design of modern churches and considers two recently completed buildings in this context.

The two buildings discussed here may appear at first sight to have little in common; quite apart from obvious visual differences, one is a Roman Catholic parish church in a New Town, the other the new chapel of a long-established theological college of the Church in Wales. The reason why they can be discussed together, and to some extent compared, is that they have both been designed in conscious relation to the same general principles. They are, moreover, the two most recently completed of a surprisingly small number—some half-dozen—of churches or chapels designed according to these principles on this side of the English Channel.

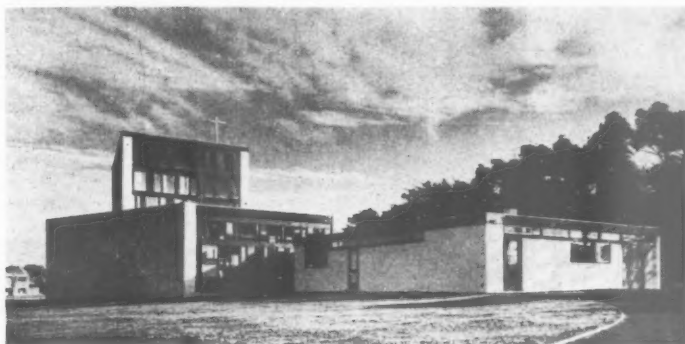
The Rev. Peter Hammond, in an article, "The Liturgical Brief" in the *Architectural Review* for April, 1958, has described these general principles at a length which is not possible here. The following, quoted from this article, is a brief summing up.

"The most successful churches of recent years have been inspired by a movement which is fundamentally theological in character. The Liturgical Movement, as it is commonly known, is an attempt to reformulate in terms of contemporary social and cultural patterns the essential function of the Church in the modern world. Though this movement is not confined to any one country or denomination, it is

among Continental Roman Catholics that its influence has been most widely felt. Significantly, it is in those countries of western Europe affected by the Liturgical Movement that church architecture is beginning to emerge from the depths of sterility and irrelevance into which it had fallen."

The church of St. Paul at Glenrothes by Gillespie, Kidd and Coia, was described, with a cost analysis, in the *JOURNAL* for February 5, 1959, and there is little need to describe it further here. The chapel of St. Michael's College, Llandaff, designed by George Pace, (delegates to the RIBA conference at Cardiff will visit it next month) is a much smaller building, seating only 50 but with space for a further 30 on special occasions. It is built with loadbearing walls faced externally with blue Pennant stone, and a timber trussed pitched roof covered with grey-green Westmorland slates. It stands in the centre of the fourth side, previously unfilled, of the College quadrangle, opposite the main entrance to the College. A large cross, of tooled concrete, stands in front and to one side of the entrance doors; it is later to carry a bronze crucifix.

The plan, hexagonal externally, is made irregular internally by the intrusion



"... a Roman Catholic parish church in a Scottish New Town. . . ." (left).

"... the new chapel of an established theological college of the Church in Wales."

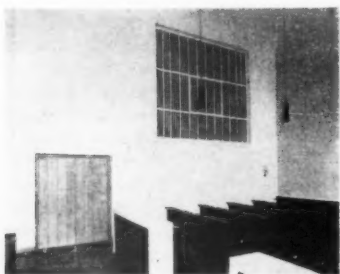


critical study

ST. PAUL'S CHURCH, GLENROTHES NEW TOWN, SCOTLAND, AND

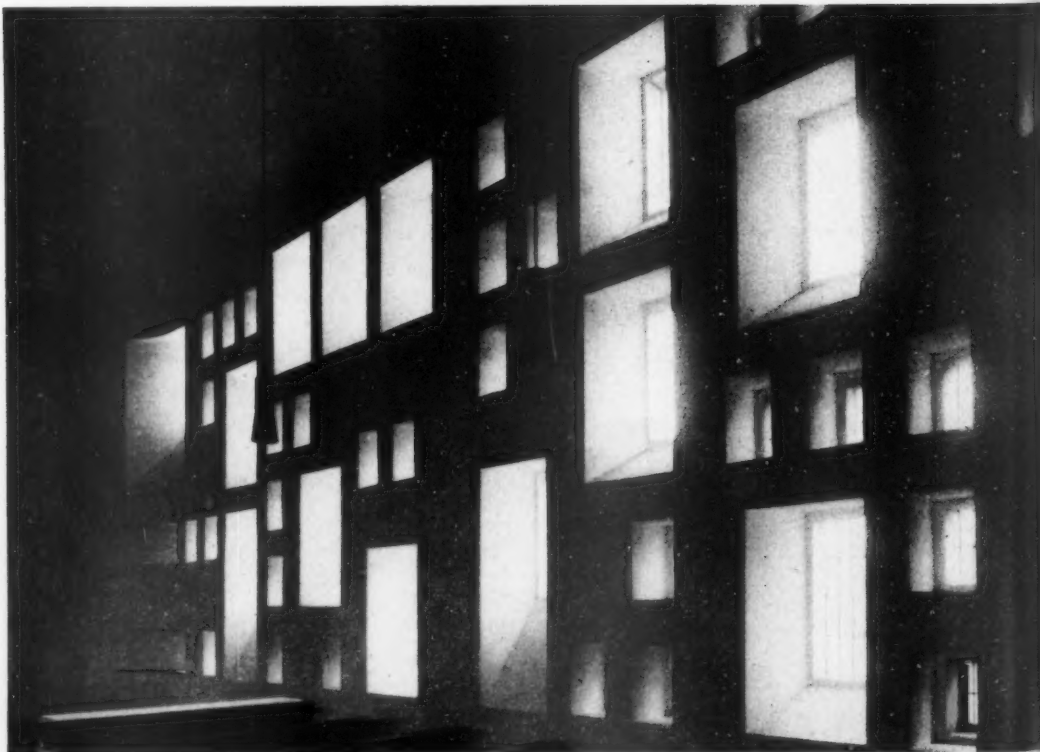
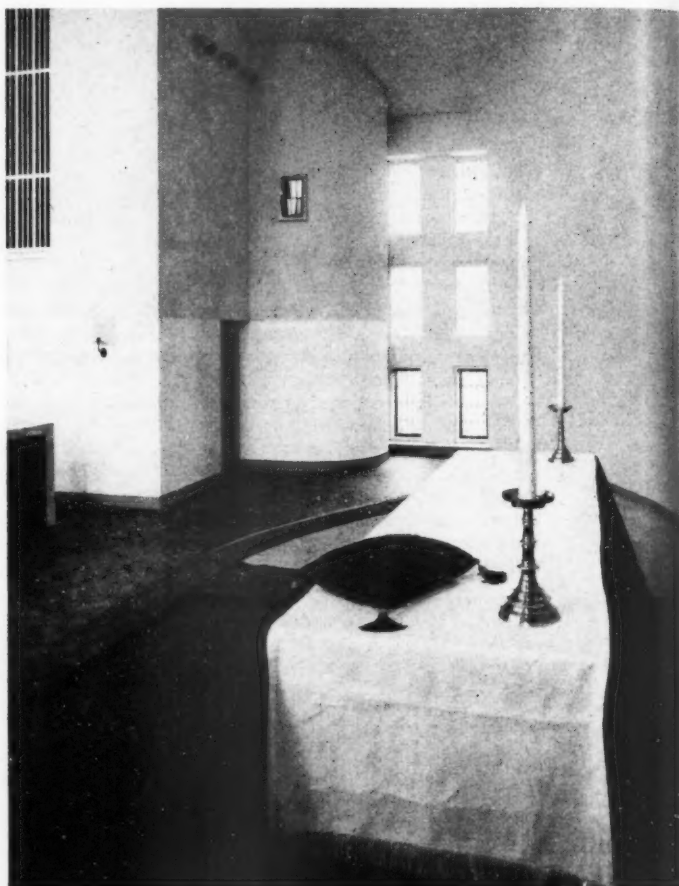


"... in the centre of the fourth side, previously unfilled, of the College quadrangle..." (above).



"... made irregular internally by the intrusion of the porch, sacristy and stair to the organ loft..." (above and right).

"... lit by a battery of random-placed windows..." (below).





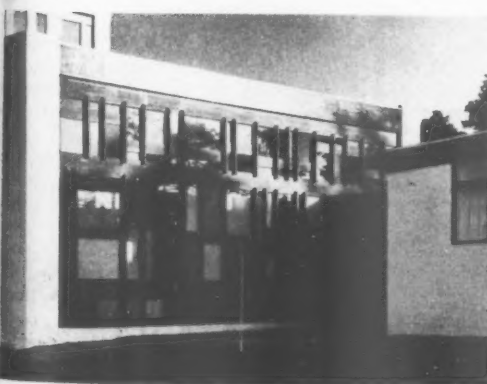
## ST. MICHAEL'S CHAPEL, LLANDAFF, SOUTH WALES: continued



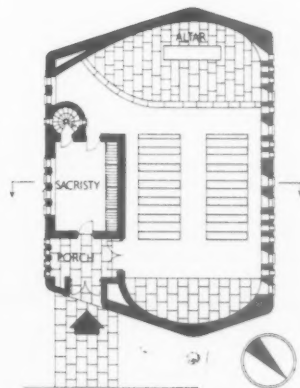
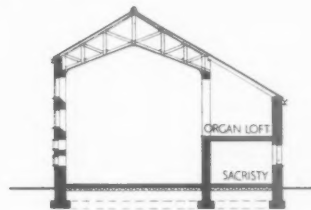
"The almost Mycenaean lintel. . ."



". . . and the different uses of random glazing in each. . ."



of the porch, sacristy and stair to the organ loft, and a wide rounding-off of corners. The original intention was to allow the outer face of the external wall to follow the internal curves, but this proved too costly. In section, the junction between walls and ceiling, and the apex of the ceiling, are also rounded; since the entire interior is plastered and painted white, the result of these devices is a cycloramic effect. The main space of the chapel is lit by a battery of random-placed windows, of two standard (precast) sizes. The altar is free standing in a broad sanctuary defined only by the communion step (long enough to accommodate all the students) and stone paving. Later, above the altar, will hang an 11-ft long figure of Christ in Majesty and the four Beasts of the Apocalypse. The main seating is arranged in two rectangular blocks of pews facing the altar; further seating occupies the curve at the "west" end.



Ground floor plan and cross section of St. Michael's chapel [Scale: 1/4" = 1' 0"]

This article being called a "critical study," an important question springs to mind. Can one criticise churches according to the accepted, albeit widely generalized, criteria of modern movement orthodoxy? It is as well to be honest about this: if you believe that churches have no *raison d'être* then according to one of these criteria—that concerned with relation of form to function—there is no such thing as a church within the terms of the modern movement. And indeed many of the so-called "modern" churches with which we are now familiar appear as

attempts to prove the converse of this argument: they consist essentially of spatial forms from the past decked out in contemporary fancy dress.

If, on the other hand, churches are admitted to have a legitimate function, then I believe they become an interesting test-case for the criteria themselves. With most building types, it is now customary to justify or invalidate design decisions (either during design, as a part of the creative process, or in retrospective criticism) from a number of different points of view independently, as though these viewpoints have little to do with one another. For instance under a so-called "functional" heading the adequacy of daylight in the rear of offices or the economy of circulation can be assessed; under "structural honesty" one can question the suppression or disguise of a structural frame. Whether a steel angle or boot-lintel is or is not a legitimate way of holding up brickwork over openings can now, it seems, be dealt with from the standpoint of "truth to materials" without reference to anything else. (In passing, it would be relatively easy to review the two buildings now under discussion in this way. The almost Mycenaean lintel—in reinforced concrete—over the entrance doors at St. Michael's, the total suppression of the roof structure at St. Paul's, and the different uses of random glazing in each, would be good cases in point.)

A church is basically one main space serving one main function, but this function is so exacting in its demands as to require the building to be organized in all its parts in consciously determined relationships to it. Put in a different way, the total aesthetic integrity of the building depends on the extent to which design decisions at every level relate directly to the function, so that ideally the building should become an image of the function itself. Such a concept, applicable not only to churches, absorbs the various isolated standpoints already referred to. The value of the church as a test case is that here their interaction and mutual dependence are seen most strongly.

As a demonstration of this point it is useful to take only one aspect of the church function: the relationship between the congregation and the priest at the altar. The Liturgical Movement has laid great stress on the balance of this relationship, which is one of participation. The relationship is not to be rationalized in terms purely of visibility and audibility, although these are, of course, component parts. (An interesting, but only partly true, analogy could be made with the theatre; it is relatively easy to design for sight-lines and acoustics, but pursuit only of these can jeopardise the actor/audience relationship.)

## ST. PAUL'S CHURCH, GLENROTHES NEW TOWN, SCOTLAND, AND



Fig. 1.



Fig. 2.

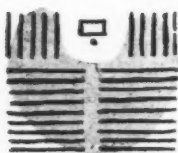


Fig. 3.

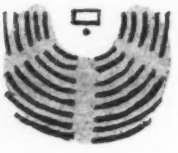


Fig. 4.

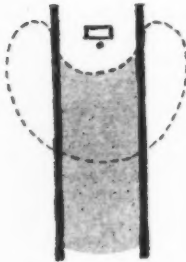


Fig. 5.



Fig. 6.

Take as a starting point a "free" situation, *i.e.* one quite unencumbered by architectural elements—an altar set up in the middle of a flat field (Fig. 1). The congregation (standing) will adjust themselves into their own physical relationship, forming a half-moon shape, which reflects the inner, "felt" relationship. (Note: the priest is shown with his back to the people. One of the salient features of the Liturgical Movement is the growing use of the position facing the people across the altar. The altar at St. Michael's is free-standing to make this possible.)

If now the people are provided with seats, in the same position as they are standing, a number of alternative arrangements are possible (Figs. 2, 3 and 4). Immediately the relationship is altered; the seats, a minor architectural element, impose their own formal relationship of markedly different character according to arrangement.

Consider now the introduction of more decisive architectural elements, walls, placed so as to distort the original "shape." Fig. 5 shows two parallel walls; the people are forced into a new formation, and the original relationship is upset not only by this distortion; the axiality of the resulting space imposes a far more decisive formal relationship. The arrangement in Fig. 6 shows another such modification; the walls, although distorting the original situation little, produce a formal effect of quite different character.

Wide differences of formal organization can of course be obtained without any physical distortion of the original situation at all, as shown in Figs. 7, 8 and 9. The modulating effect of structural elements such as columns, or the strict continuity of an encircling wall, again impose a formal relationship of their own.

The object here is not to judge the relative merits of these various modifications, but merely to show that immediately architectural elements of any kind are introduced, they alter the balance of the relationship in some way or other. In fact, the original "free" situation is far from ideal and needs to be modified. As far as this one aspect of the function is concerned, the building's task is to modify it to advantage.

The same kind of argument can be pursued considering the church in section, and Figs. 10, 11 and 12—a meagre selection from the obviously infinite number of possible examples—are self-explanatory. The whole three-dimensional organization of the building is involved, and the smallest detail will have its ramifications. This consideration—the relationship between congregation and priest—provides a conveniently limited standpoint from which to discuss St. Paul's church and St. Michael's



Fig. 7.



Fig. 8.

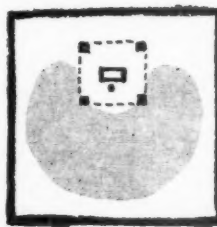


Fig. 9.

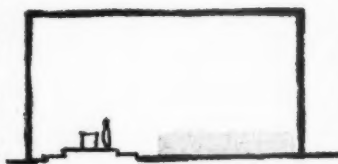


Fig. 10.



Fig. 11.

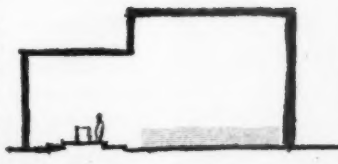


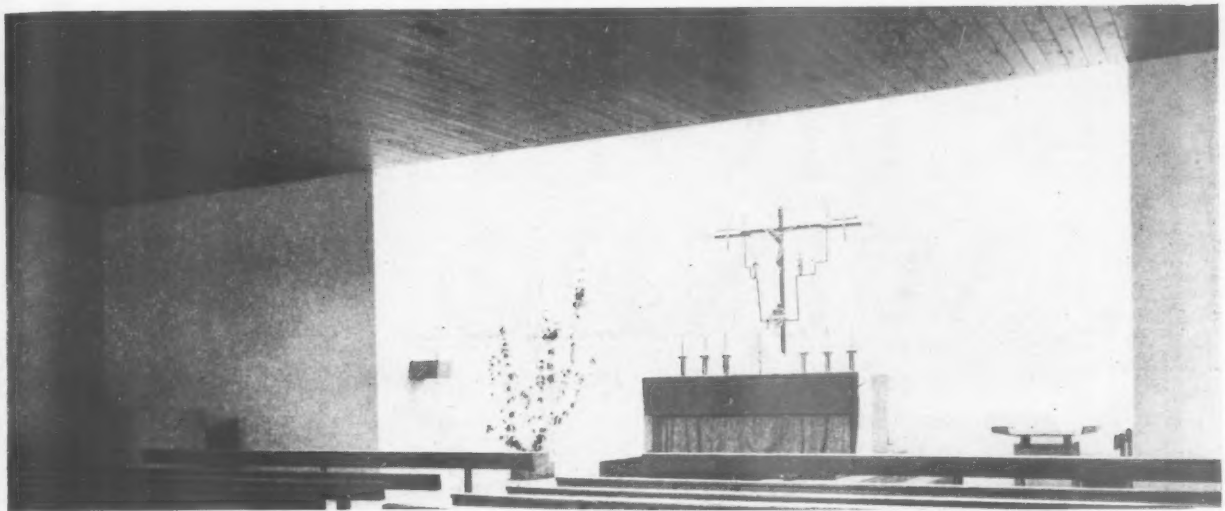
Fig. 12.

chapel.

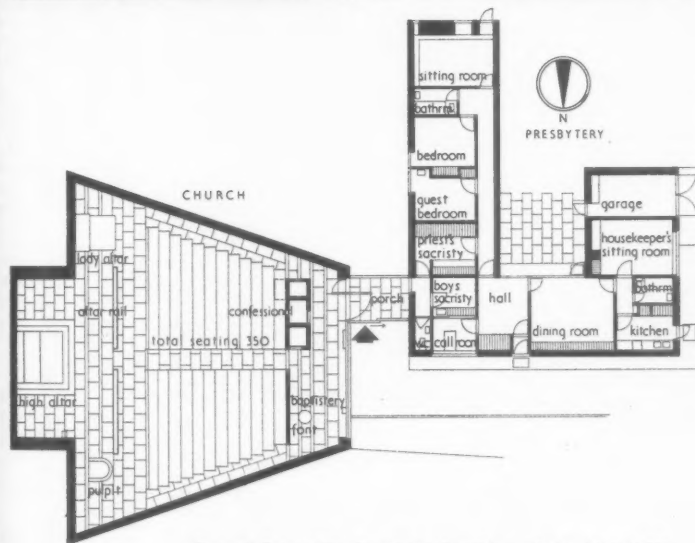
The plan-shape at St. Paul's church is trapezoidal with an attached rectangular sanctuary. The use of a trapezoid *this way round* has an interesting spatial effect: the interior space, when looking towards the sanctuary, is foreshortened by reversed false perspective. This contraction of the interior space towards the sanctuary undoubtedly helps the congregation/priest relationship by the illusion of nearness. It also has formal disadvantages. The clean sharp corners and the white-painted straight walls create an immensely powerful space, but the character of this space is directional. This directional quality is emphasized by the arrangement of the natural lighting, by the formal rigidity of the seating, and by the junction of the sanctuary with the main space. The long wall at the base of the trapezoid has created a problem in that two blank areas are left on either side of the sanctuary, giving it the nature of a proscenium stage. Some debt to the arrangement of the side-chapels at Ronchamp is noticeable in the transition between the two spaces, a high concealed clerestory and window lighting down into a tower-shaped sanctuary. This creates a barrier at this point, and it is interesting to note that at Ronchamp the side-chapels have not a primarily liturgical function. On balance, the resulting relationship tends to be uni-directional.

At St. Michael's chapel the reverse is true. The rounding off of all internal corners, producing a cycloramic interior, dissolves the walls and ceiling as active agents in the relationship. The long wall with random windows, again reminiscent of the chapel at Ronchamp, runs continuously through between the sanctuary area and the rest of the space: there is no transition. The effect of the interior therefore tends toward the "free" situation described earlier. The seating, however, is arranged in two rectangular blocks and so introduces its own formal relationship, the more forcibly because it is ebonized. Presumably the arrangement of the seating in this way rather than as is usual in college chapels—two blocks facing each other—is due to the College's already established tradition. It is interesting to speculate on the effect on the internal space had the other arrangement been chosen. Generally, the feeling is that there is insufficient articulation as yet to produce a dynamic relationship, that the building is underplaying its role. But the most important internal device has not yet been installed—the 11-ft. long figure of Christ in Majesty. This will completely alter the internal balance, and decide the nature of the relationship in no uncertain terms, one way or the other.

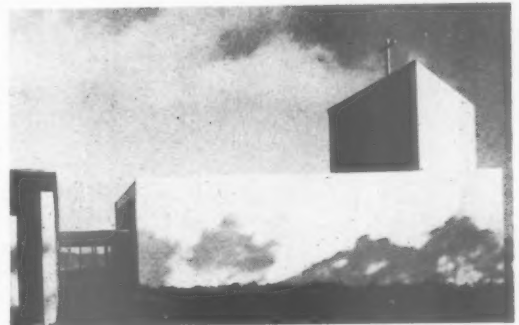
# ST. MICHAEL'S CHAPEL, LLANDAFF, SOUTH WALES: continued



"An immensely powerful space, but . . . directional." (above)

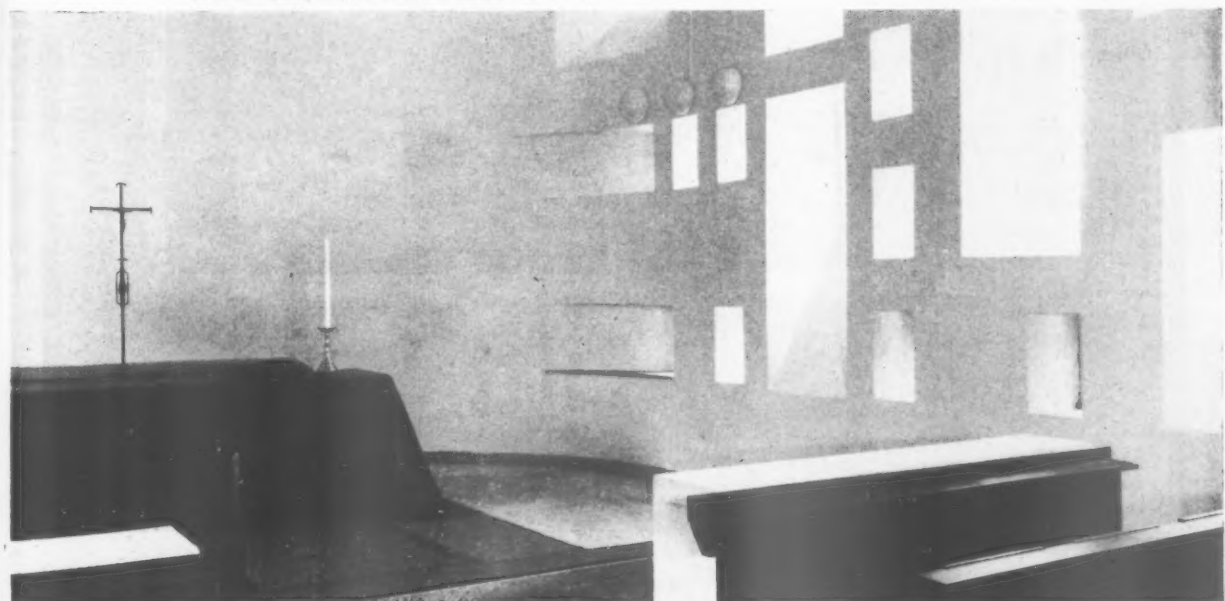


Ground floor plan, St. Paul's Church. (Scale: 1/4" = 1' 0")



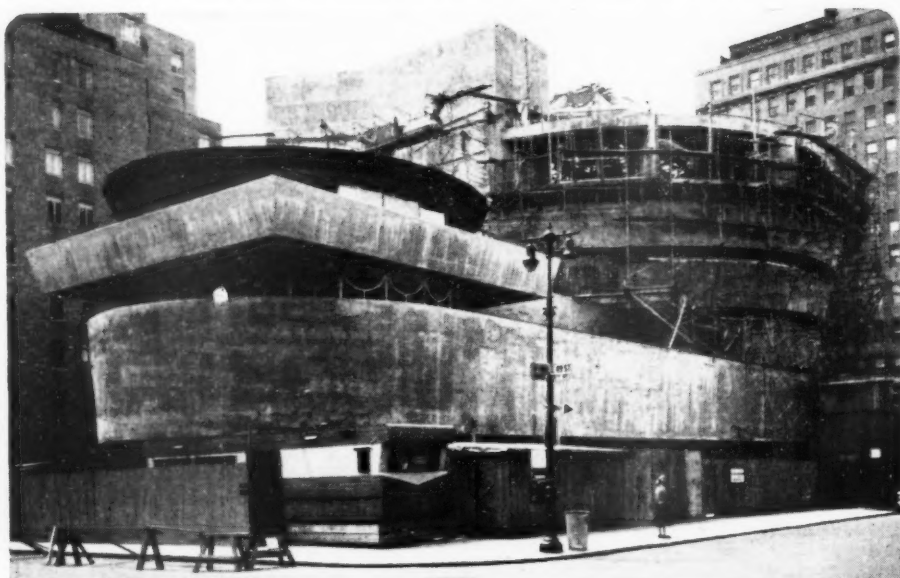
"... a high concealed clerestory lighting down into a tower-shaped sanctuary." (above).

"The long wall with random windows . . . runs continuously through between the sanctuary area and the rest of the space; there is no transition." (below)



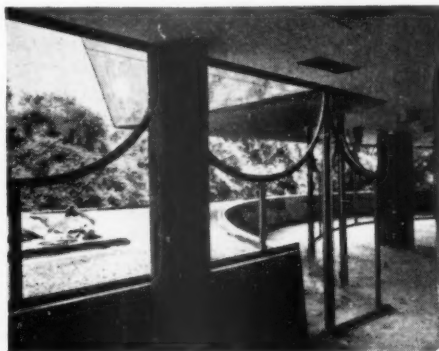


# HOPE'S WINDOWS




*The SOLOMON R.  
GUGGENHEIM  
MUSEUM, New York*

*Frank Lloyd Wright  
Architect*



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# STUDENT SECTION BASA

## Extracts from talks to 5th year students on "The Shape of Things"

Alison and Peter Smithson

The purpose of these talks is to re-focus the attention of the student on to the fundamentals of architecture. They try to do this as simply as possible, assuming that most students at the end of their school course are aware of the typical architectural problems of our period and the technical means available, but are uncertain as to what "shape" their buildings should take.

By now most of you have realized that even such a simple thing as a cup may have a thousand shapes, all equally functional. The shape of things is decided by other factors than function—by form-giving and form-demanding drives that are in constant change. To make any decision about the actual shape of things it is necessary to be as knowledgeable, as objective, as hard-headed as possible about the present social and technological situation—about the forms and technology of the past, and especially of the immediate past—and about one's own ability.

These talks are a sort of guide to the general topography of the problem, the route is for you to choose.

### How to Crib

The necessity to crib is born of the difficulty of plastic invention. Plastic invention is the ability to invent form and constitutes the essential difference between the artist and the craftsman. It is the resolution of conflict in the poetry of practicality, that marks the great architect.

Every programme presents unique problems and at each new moment the architect feels the compulsion of new plastic necessities.

For the student, and indeed for most architects, mastering the programme, visualizing the spaces in terms of an existing formal vocabulary and assembling the



Above. Farnsworth house. 1951. Mies van der Rohe. A re-interpretation of the Classic-Pastoral tradition in the terms of machine technique.

Right. Armee de Salut. 1933. Le Corbusier. The purest poetry of the machine and complete expression of the Constructivist idea. Garches and Poissy involve a re-interpretation of the Classic-Pastoral tradition (vide: Rex Martinson's Analysis of the Armee de Salut)

necessary techniques brings him to the limit of his capacity for mental construction. Indeed, it is only possible to acquire a mastery of mental construction by long experience of actual construction, a process of trial and error, which is simple for a plastic artist, but immensely difficult for the architect who has to persuade someone to pay for his trials and whose errors are very permanent. It is because of the limits of their minds and the difficulties of actual building (which is a heavy responsibility legally and financially, as well as technically) that architects take refuge in an existing formal vocabulary.

To work within an existing formal vocabulary gives us confidence—it has been done before, therefore we know it works, and the difficulties of visualizing it are decreased. Furthermore, it makes communication of our idea simpler, for others are familiar with the vocabulary and can see the aptness of the practical and technical solution without any strain on their powers of imagination. (I speak here perhaps a little bitterly, for we have found in our own work that the further we have got in evolving a personal, formal language, the more difficulty one has with communicating the idea. In terms of speech, that which one wants to say no one can understand, and that which can be understood one no longer wishes to say.)

For the student, it is almost always necessary for him to crib, to use someone else's formal vocabulary, if he is to achieve anything. Within a given discipline, he can do great things, but only if this discipline is properly understood.

The essence of a style is that it is the product of a way of thinking and in consequence, consistent and unified. The work of an individual great architect is similarly consistent and unified even when these qualities are only implied and not, in fact, achieved, for the difficulties of achieving them are great. The MEANS of achieving unity should be your constant concern.



## On Modern Architecture

What was the first Modern Building?

This is commonly supposed to be a meaningless question, but if we accept that something did happen round about the first world war, that a new way of thinking, which was manifest in a new **STYLE** came into being, then there must be some building in which this new style was first apparent.

What we are looking for is a building which is so different from those which preceded it as to establish a new architecture as a fact, not as a possibility. Many buildings by social or technological chance, or by a longing which could manifest itself only in the negative (for example, "ornament is sin") may seem to anticipate Modern Architecture but they were **NOT** Modern Architecture. They are absolutely different both in intention and in spirit. They had not discovered the essential "idea," that moment when the dissatisfactions and the rejections are replaced by a positive all-embracing new conception.

To describe this new "idea" is not easy. Fundamentally, like every renaissance, it was an upsurge of confidence in man, in his potentialities and his inherent nobility. This nobility it was felt needed a new way of life in order to find release—a new physical environment; new city structure, new houses, new equipment, new art objects and above all, a new relationship between man and nature. It was to be the Golden Age of the machine.

To the previous generation, an architecture of the machine had been an unattainable dream. The new generation were able to kick the machine around, take what they needed from it and bend their image of it in their own likeness.

What they took had very little to do with actual machines. The machine was, in fact, only the jumping off point for an essentially

human manifestation, a new myth and a new style. The **MACHINE** "created" a new architecture by way of the simple geometric forms-in-light of Mediterranean architecture, through the disciplines of the Japanese house and through the rediscovery of the Attic spirit. Essentially, a "Modern Architecture" was:

1. Cubic, or appeared to be carved out of cubes.
2. Geometrically organized and highly abstract in its interpretation of human activities.
3. A complete thing in itself.
4. Was poised, not rooted to its site.
5. Was usually white or brightly coloured, or made of shiny materials.
6. Natural materials when used, appear to be substitutes for artificial materials not yet invented.

There were in fact several quite distinct, completely evolved plastic systems. For example, *De Stijl* in Holland, which started before the first world war, Constructivism in Russia, which started after the revolution, and Purism, the architecture of Le Corbusier in France in the early twenties.

Each of these movements shared the belief that architecture was important and that it alone could give to man the possibility of a new way of life. Each thought that modern life had exciting possibilities, and their architecture grew out of what excited them most.

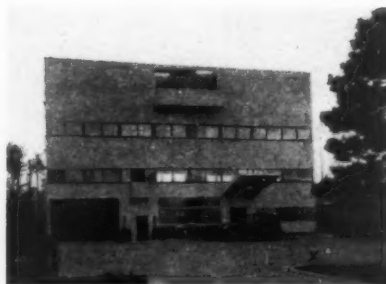
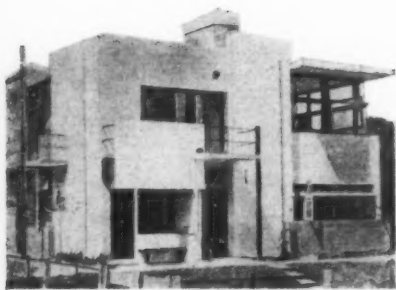
**DE STIJL**—the idea of continuous space, a world of separate but related simple rectangular parts.

**CONSTRUCTIVISM**—from the banalities of a mechanized life and engineering structure, was created an almost lunatic poetry.

**PURISM**—an ancient dream to be realized through a new conception of the machine.

Left. The *Reitveldt* house, 1923.  
Below. *Villa at Garches*, 1927. Le Corbusier.

Both these show what is meant by "a completely consistent and unified plastic system."



## On History

Every generation recreates the past to satisfy its own needs. It is now your turn.

During your school course, you will have been "taught history" by one of the following methods:—

- (i) The Old Formal—basically Bannister Fletcher with some real experience to bring the lectures to life.
- (ii) The Sociological—a study of the times with architecture as an inevitable result of certain social forces. (With a mention of Bach in passing.)
- (iii) The Art History. Detailed stylistic analysis—flow of ideas from period to period. The first simply says this is what it was like.

The second regards buildings as symbols of a way of life and what they are like is relatively unimportant. In the third the buildings are often considered as a vehicle for art-historical technique (only great exponents have actually LOOKED at the buildings). Mostly they are considered as components of an art-historical sequence.

Outside the schools there is the world of real architecture.

The greatest plastic artists alive today, Le Corbusier and Picasso, are in the great European tradition. Western history flows through them to us. Their genius lies in being able to take from the past that which is necessary for the present. This is no eclecticism, no retreat into pastiche, but some sort of instinct that makes them see that certain systems and images evolved in the past—of whose meaning in their own time we can often have no knowledge—are relevant to the present.

The order or image is transformed by the present in the work of art that results.

They do not CHOOSE to take from the past—they feel an inner compulsion—which compulsion is born of the forces of the present, and this compulsion is felt to a greater or lesser extent, according to their degree of awareness by all artists in the field of these forces; by us.

The Neo Palladian Movement after the war, and, later on, the Peasant revival are good examples of this.\*

In our own work we have been very much aware of these compulsions at work within us and then found that simultaneously all over the world people were feeling the same compulsions and producing similar forms.

At this stage in the argument it must be understood clearly that it is the plastic systems which are the spark-points, not the superficial shapes, nor any romantic notion of life in Europe in the middle-ages or in Mycenaean Greece.

**STYLE IS CONVICTION IN ACTION!**

For this reason an absolute understanding of the unity of past ways of building, of the lyrical discipline of the great historical periods is essential equipment for an architect. Without this, a mastery of building techniques or draughting is meaningless.

\* 1. The immediate post-war passion for geometric architecture, theories of proportion, etc., etc., particularly Palladio—the neo-Platonic school and then into the whole field of mediaeval proportional systems, etc., etc.  
2. The re-emergence of the pointed roof, the vault and the dome as methods of covering; the new plasticism of the section; the study of Mediterranean peasant architecture—N. Africa, the Greek Islands, S. Italy; the sophistication of 17th and 18th century Turkey; the revival of the natural use of homely materials—wood, plaster, brick, stone, yet in a most sophisticated way; the study of indigenous dwellings, primitive societies and the dwelling patterns and forms of these societies



## On Drawing

Drawing is a means of communication. Before any sort of drawing can be made one must ask "What is it I am trying to communicate and what are the capacities and requirements of the receiver?" Certain difficulties of communication were discussed in an aside in the second talk, where the problems of communicating through an evolving formal vocabulary to satisfy new plastic necessities and answer new problems of programme, were found to be heart-breakingly difficult. That breakdown of communication had occurred between architect and architect, which *should* be the simplest situation. But of course, at the heart of the actual architecture of architecture, the communication of the idea, the greatest difficulties are to be found.

For every project it is necessary that one should struggle to produce a single drawing which explains the principles involved. Such an image should make the reading of all the drawings (which are necessarily mechanically complex) relatively easy.

The problem of communicating an idea is not easy even when working within an existing formal vocabulary, for we have inherited most of our methods of drawing from the Beaux Arts tradition. Conventional draughting is primarily concerned with the representation of surface. Modern Architecture from its beginning has been concerned with volume, void, and transparency, without, except in the case of constructivism (the sort that never got built) trying to evolve a means of communicating its ideas through drawing.

Mies van de Rohe's drawings of his I.I.T. buildings are still largely Schinklesque in spite of the fact that the drawings represent an architecture of transparency and reflection. Most glass buildings are shown on drawings as if they were solid buildings, whereas we all know that under certain lighting conditions the first solid plane that the eye encounters when walking at ground level past a glass walled building may be the first floor slab, or an internal wall, or a wall beyond the building, rather than what is shown on the drawing—a plane of the outer wall. This clearly makes a nonsense of the drawing except as a convention

indicating the constructional principle. Every architectural idea involves the invention of its means of communication—in the first place through drawing.

It would be pointless to try and detail exactly what sort of drawings are required for builders, clients or sub-contractors, for each person and for each building the requirements are different, but perhaps there are a few simple reminders worth putting on record.

1. Consider the method of building. This will give a guide to the dimensioning system and to the necessary tolerances.
2. Consider the actual mechanical difficulties and the limits of your own knowledge. For example, in a complex metal window or lighting fitting the sequence of assembly and the limits of various bending and pressing processes, etc., which are in-built knowledge to the draughtsman at the works, but are unknown to you, put absolute limits on the degree of detail which your drawing can show. You should produce principles of design, not fake shop details.
3. Never be governed solely by the limitations of known techniques. If necessary, spend a year finding the means that will produce your ends.
4. Do not listen to technocrats. This is fake technique which, like false art, degrades the human spirit.
5. Consider the man reading the drawing—on a winter's day when it is raining and he is knee deep in mud.

Behind all this sort of drawing which is concerned with making the building, there is that drawing which is part of our personal struggle. The recording of an architectural idea, the essence of a building, such as those in Le Corbusier's notebooks—both the ideas in building he has seen and those which he is making in his head; or the photographs of Moholy-Nagy or Charles Eames which perform the same function in a different medium; or the measured drawings of some detail that moves us—which may be the key to a quite different problem twenty years later.

Below. From Le Corbusier's notebooks.

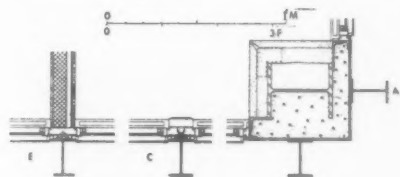
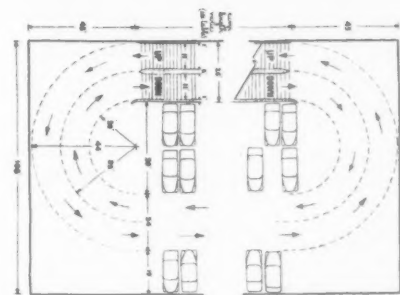
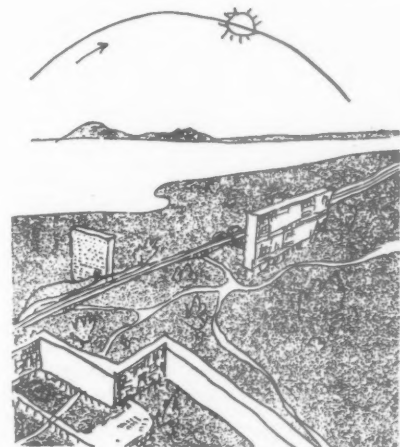
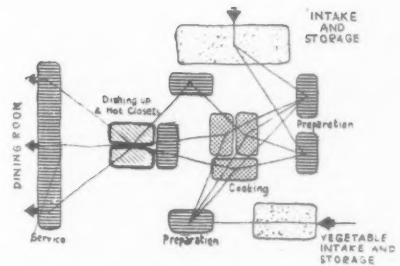
Remember the difference between: diagrams (definitions of function), ideograms (definition of concept), dimensional studies (exploration of sizes and equipment), and the problems of construction (which are NOT working drawings).

Right. 1. Diagram—Ministry of Education Kitchen analysis.

2. Ideogram—from "Propos d'Urbanisme."

3. Dimensional study—Multi-level car park.

4. Construction drawing—Detail of "Lake shore drive" apartments.



# Architects and the All-in Service

R. C. Cockburn

Any "ism" in art is, at one level or another, a formula. What is a formula but a formalization of a universally-applicable solution? What has Modern Architecture been fighting during the last thirty years but "formalizations of universally-applicable solutions"? Yet if we examine the kernel of the Modern Movement, Functionalism, do we find its characteristics any different from, say, Neo-classicism? The formalization might be less superficial: it is therefore all the more serious. It is now a formalization of ideas, of dealing with human needs. Human needs are so variable that to talk of a formalized way of satisfying them is a contradiction in terms.

An interpolated example might make the point of these last two paragraphs clearer:—Frank Lloyd Wright proposed a low-density, scattered city as the ideal modern way of living. The means of achieving this, and the basic, unifying element in it was to be the private motor-car, with everything that the motor-car requires. So far, so good: the designer is using contemporarily-valid social information. BUT he goes on to suggest (an *intellectual* argument) that, as the motor-car is the essence of his community-structure, the point where it is re-charged with energy should be the focal-point and core of the community; gathered around the re-fuelling point should be the restaurants, libraries, town hall, law courts, and so on: it should be the centre of these things. The designer, he says, living in the Twentieth Century, should exploit the drama latent in its technology. Now can one really talk of exploiting the drama of technology in such an abstract way? One can invest *anything* with symbolic significance; but for the symbol to mean anything that is satisfying, it must take account of *all* information that can be obtained about contemporary society. And one knows that, to most people, having their tank filled with petrol is an utter bore. The last place where they would like to eat is overlooking, and smelling, a petrol-station; nor do they like browsing in libraries against a back-ground of flashing traffic and its exuberant noise. In ignoring these two items of information, F.L.W. was ignoring some fundamental values of our civilization. Common to us all is a hierarchy of standards, interests, . . . —call them what you will. Eating in a restaurant is a concept different in *value* from calling for some more petrol: its place is therefore nearer the centre of things. Why did F.L.W. ignore these factors? Because he was led astray by current "isms"—"Modernism," "Futurism," "material-Functionalism," or whatever you like. Similarly (and coming more up-to-date), I fail to see how one can think of a "Hall of Technology" taking the place of a Medieval Cathedral. Technology has no standards that interpret, or reflect, or have any counterpart in, the way people run their lives. From the point of view of standards of value, it is not even Existentialist (for it does not deny the concept of "standards of value"); it is quite neutral in this field: its own criteria are

concerned only with what is expedient. Since it is thus neutral, it can be used, validly, solely as a means to some further end.

The fate of Functionalism is, consequently, what one would expect. Instead of helping lesser architects to satisfy people's needs, it is preventing them from even knowing what people's needs are. For as soon as it left the minds of the Masters who propounded it, "The Function of the Building" came to mean merely "The *material* Function of the Building" (i.e., how it works; how it stands up; . . .) What happened to "The *spiritual* Function of the Building"? That became forgotten; for the new "intellectualized" criticism could more readily comprehend "material Function": further, this is more superficial than "spiritual Function," hence easier to get right.

One of the reasons for the development of the All-in-Service firms has been the acknowledgment of lack of ability in the architect and the inefficiency of the building trade. This has demanded the avoidance of the RIBA's professional restrictions by the formation of a team under leadership other than that of the architect.

At one moment during the conference\* when the architects were propounding their foremost aim as that of leading the team who often appears to have lost sight entirely of the team as a fact and to regard builder, engineer and surveyor as inhibiting controllers.

Surely the virtue of a team is the equality of its members, the diversity of its ingredients and the unity of its purpose. The fact that the architect applies his talent within the team rather than over it does not necessarily indicate loss of integrity.

In so far as the architectural student is able to consider the role of the architect in society, he is projecting the idea of himself into that future role.

Above all he must be practical. The first thing that faces the newly qualified architect is the need to make a living and the architect's practice exists, like any other office, on money coming in. If it doesn't come in he will have to turn to the less appealing alternatives of applying his skill in the context of a larger organisation where, whether it be purely architectural or all-in-service, his value is going to be taken only at its worth to the team.

There may in fact be greater scope for him in an organisation that is composed of a group of specialists all working together, where each specialist has his own responsibility to the team, and where the architect is dealing with those who recognise his special ability in relation to their own and will respect his opinion as a consequence. The fact that he is a "professional" man should enhance this respect. There is thus no need to fight professionalism when it can be turned to our profit. It maintains standards of integrity and quality that can only be to our advantage.

Any outsider attending the Conference at Cambridge can scarcely have gained the impression that the architect of tomorrow is a practical being intent on putting first things first and producing Architecture whatever the limitations.

It would serve as a lesson to us that the best way of reinforcing the acknowledged shaky position that the architect holds in society is to learn from All-in-Service their dynamic organisation and aggressive public relations. Recognising the fact that All-in-Service is practical, economical and here to stay, the architect should, instead of fighting it, apply his skills to exploiting the trend.

If the architect can do as well standing alone so much the better. I believe that a group of young newly qualified architects combining together to apply these methods would stand a good chance of competing successfully with both old-established firms and the new development organisations.

\* BASA Conference at Cambridge, on the function of the architect in society.

working detail

STAIRCASES: 47

STAIRCASE: OFFICES IN BERLIN

Paul Baumgarten, architect (material supplied by Hans Haenlein)



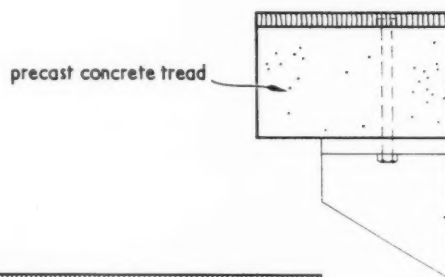
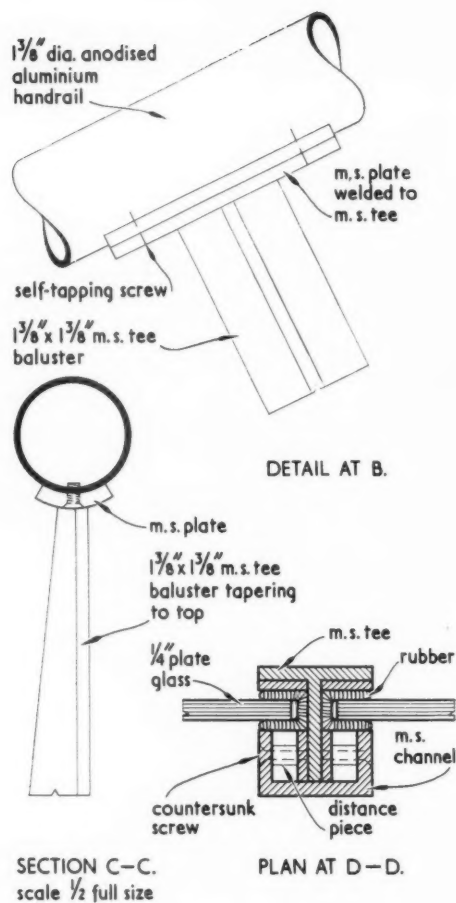
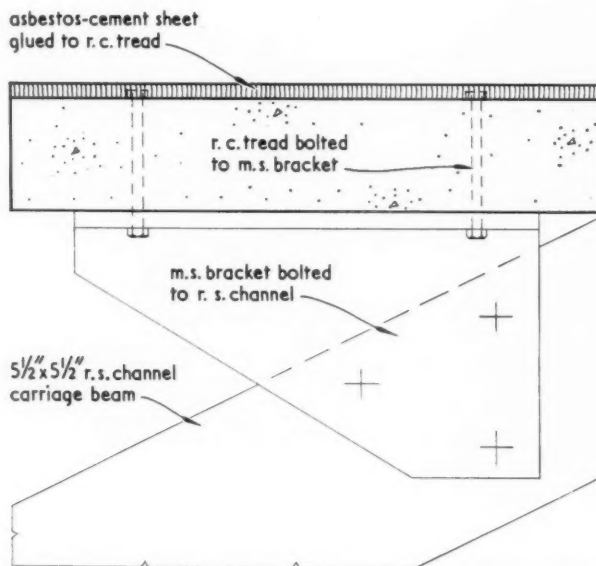
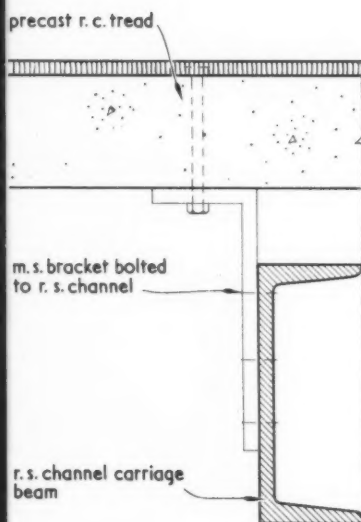
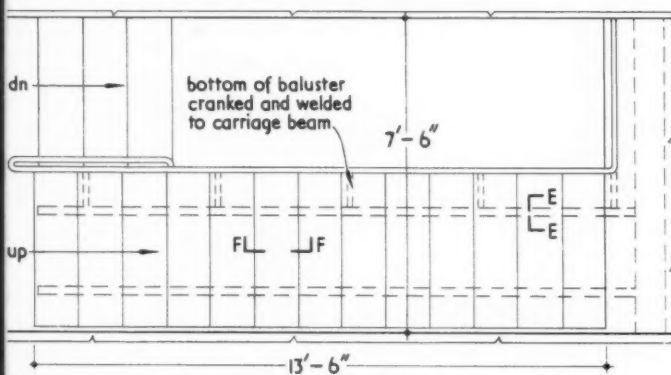
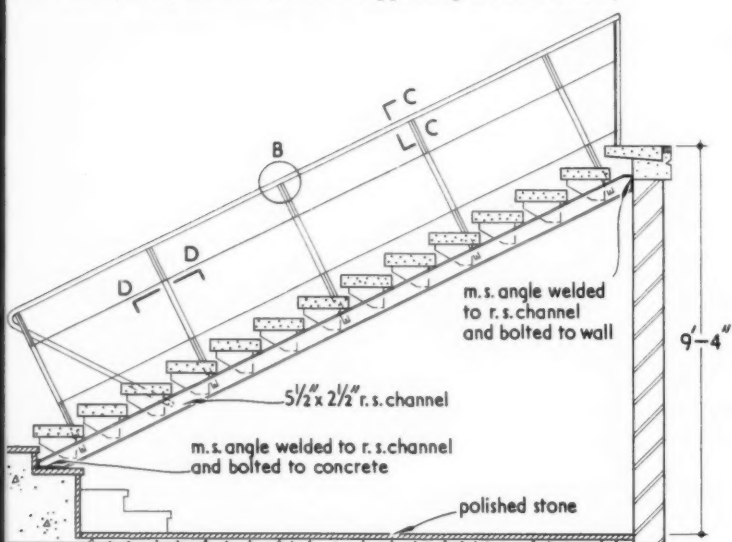
With its high standard of finish, careful detailing and effect of sparseness and simplicity this flight of stairs is in the best German functional tradition. Note the use of asbestos cement glued to the precast concrete treads, and as a floor finish on the top landing. Note also the continuation of the anodised aluminium handrail at the foot of the stair, where, to give greater stiffness, it is twice cranked and secured to the steel carriage.

## working detail

## STAIRCASE: OFFICES IN BERLIN

Paul Baumgarten, architect (material supplied by Hans Haenlein)

## STAIRCASES: 47



note: figured dimensions in feet and inches are approximate



working detail

LIGHTING: 18

LIGHTING: POWER HOUSE IN CHÂTELOT, SWITZERLAND

*Suter and Suter, architects (material supplied by Dariush Borbor)*



*This example of Swiss industrial architecture has been classified under the heading Lighting, both for the way in which structure and suspended ceiling have been shaped to give sufficient natural lighting from an enclosed outlook and for the neat incorporation of artificial lighting in the architectural frame.*



Architects: Harrison & Cox, F./A.R.I.B.A.

Contractors: Hinkins & Frewin, Oxford

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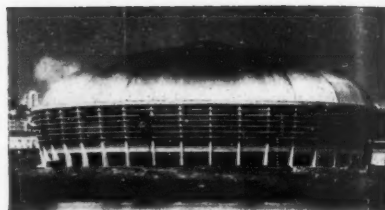
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# SPORTS STADIUM AT SAO PAULO



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ported by reinforced concrete, and is planned to seat 20,000 people. Yet the hall is so arranged that at no point is the spectator more than 52 metres from the central track and a full view of it can be had from anywhere in the hall. The hall will be used not only for athletics but for volley ball and ice hockey.



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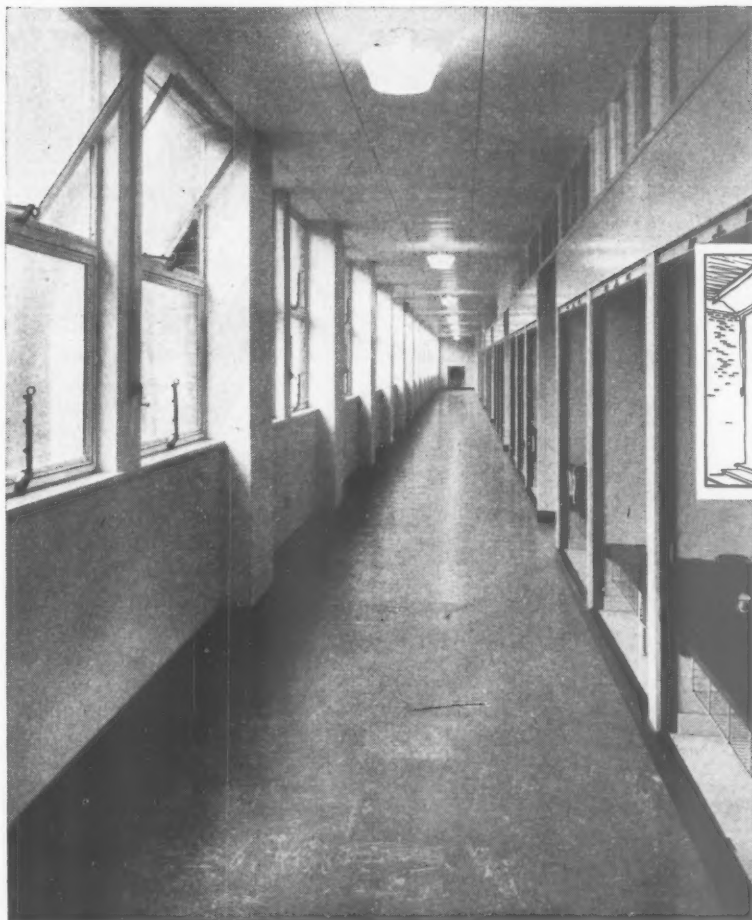
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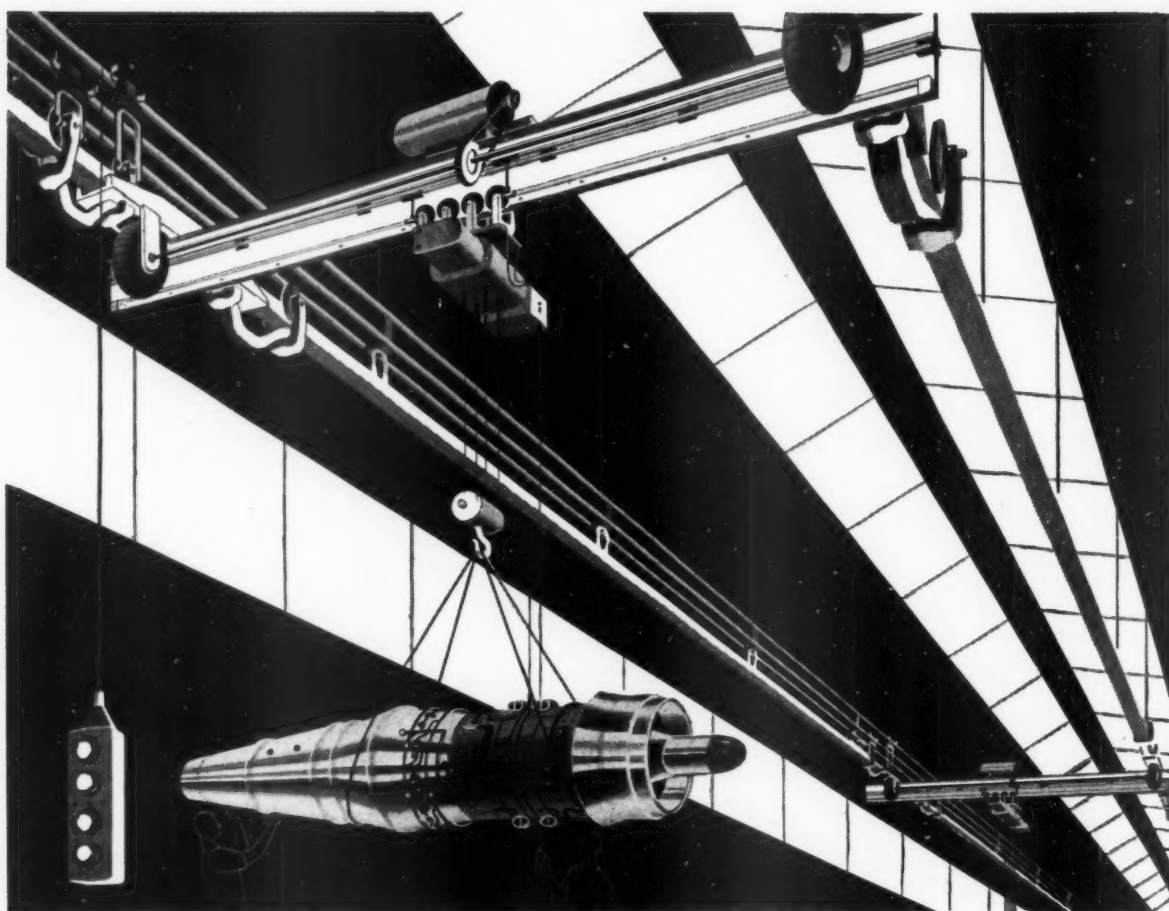
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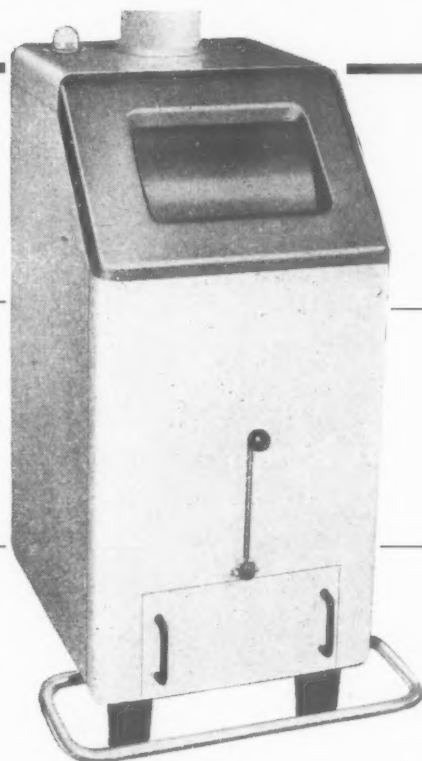
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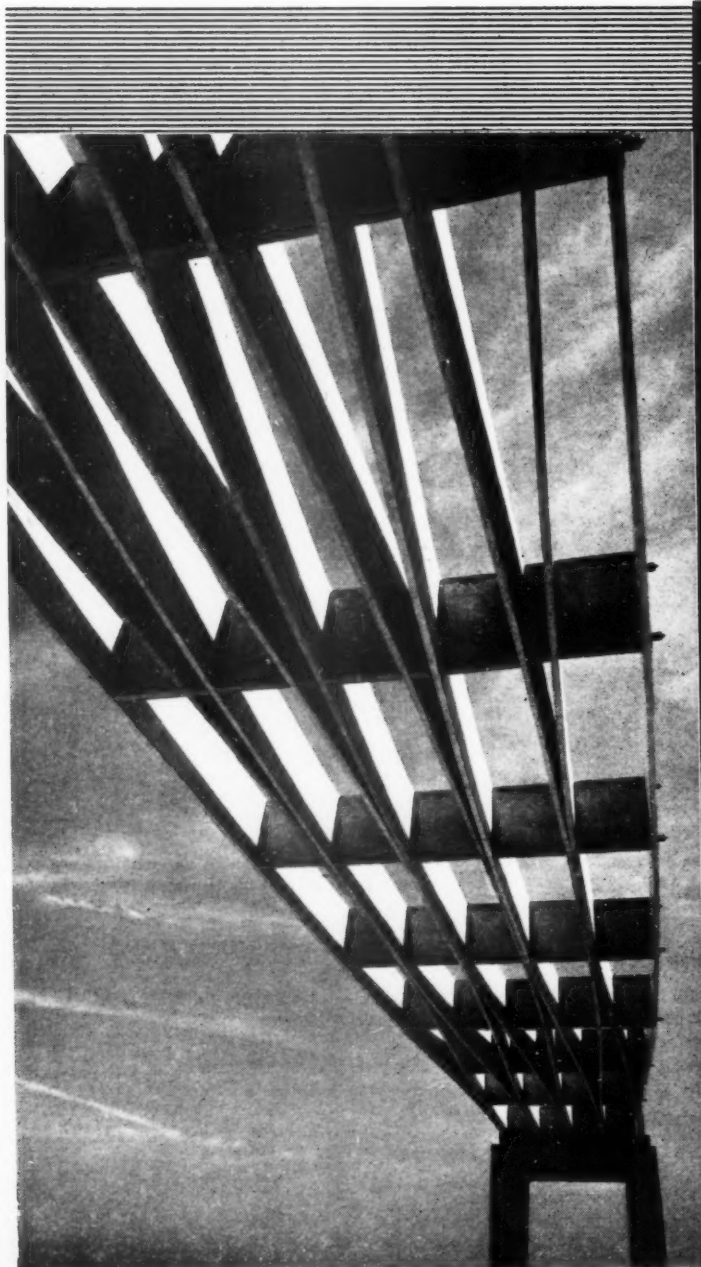
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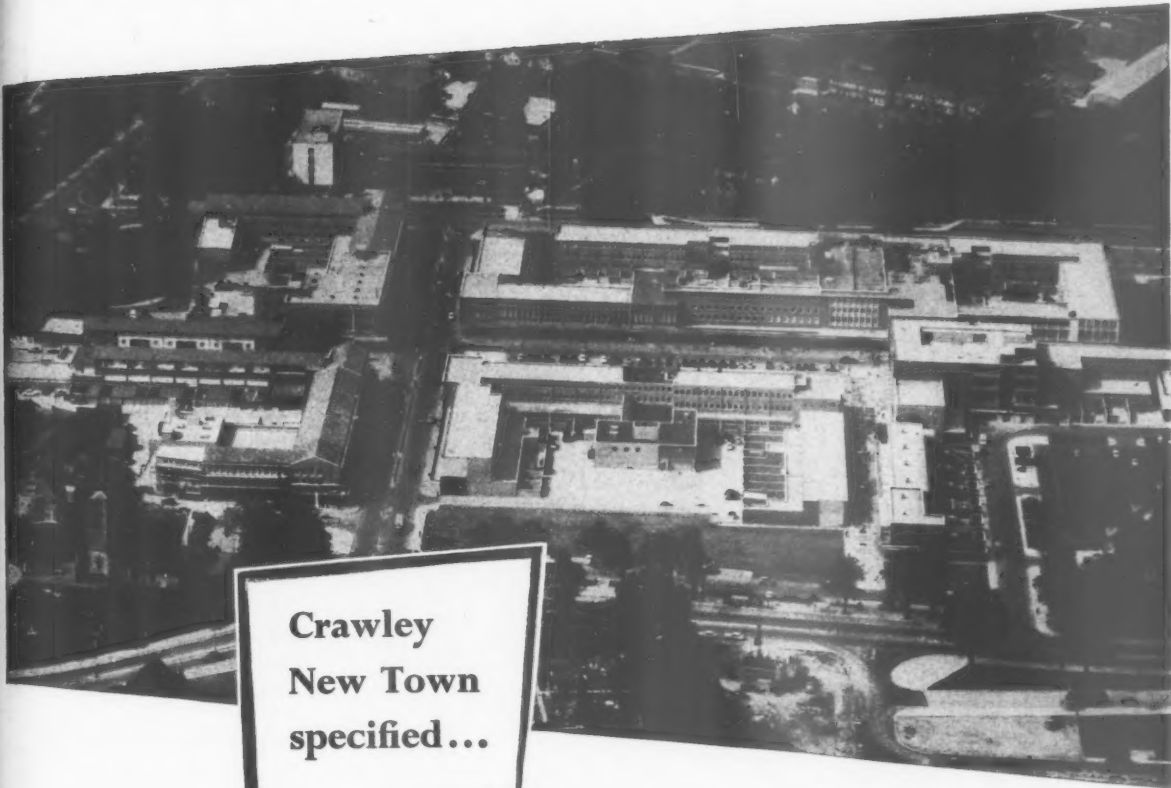






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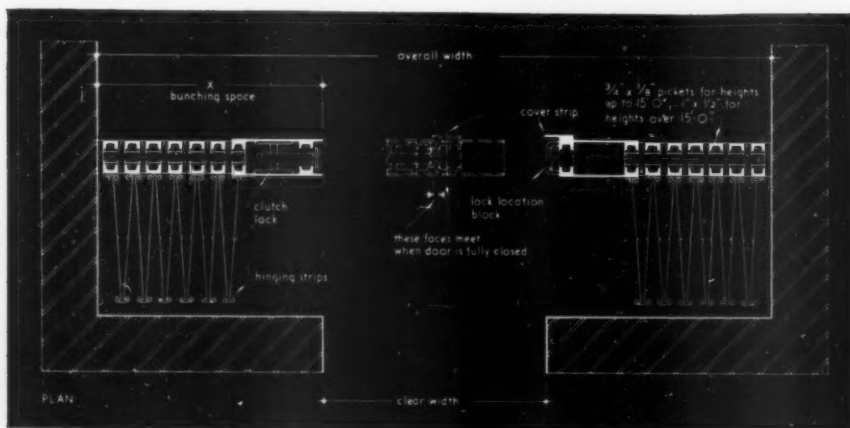
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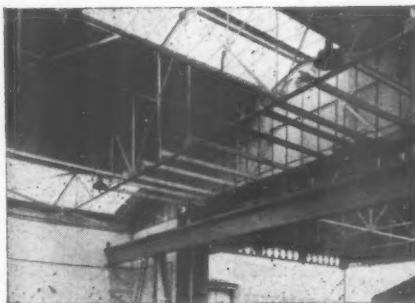


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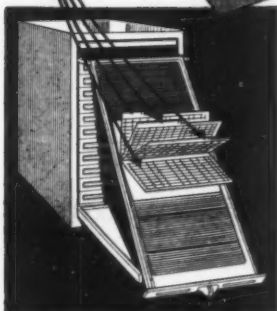
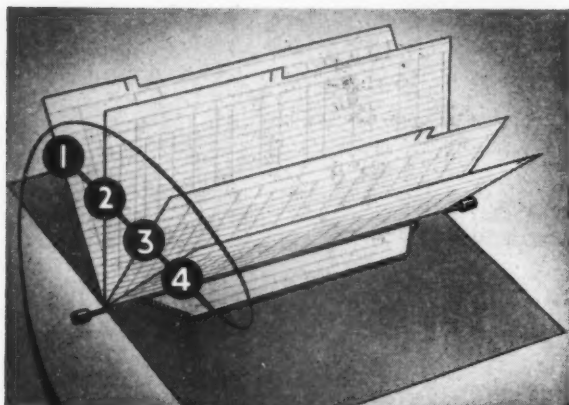
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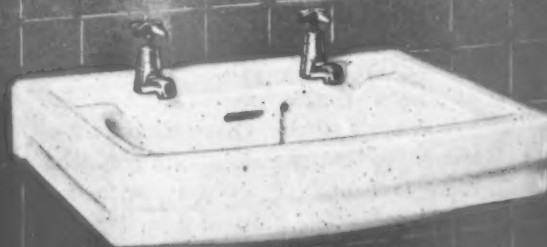
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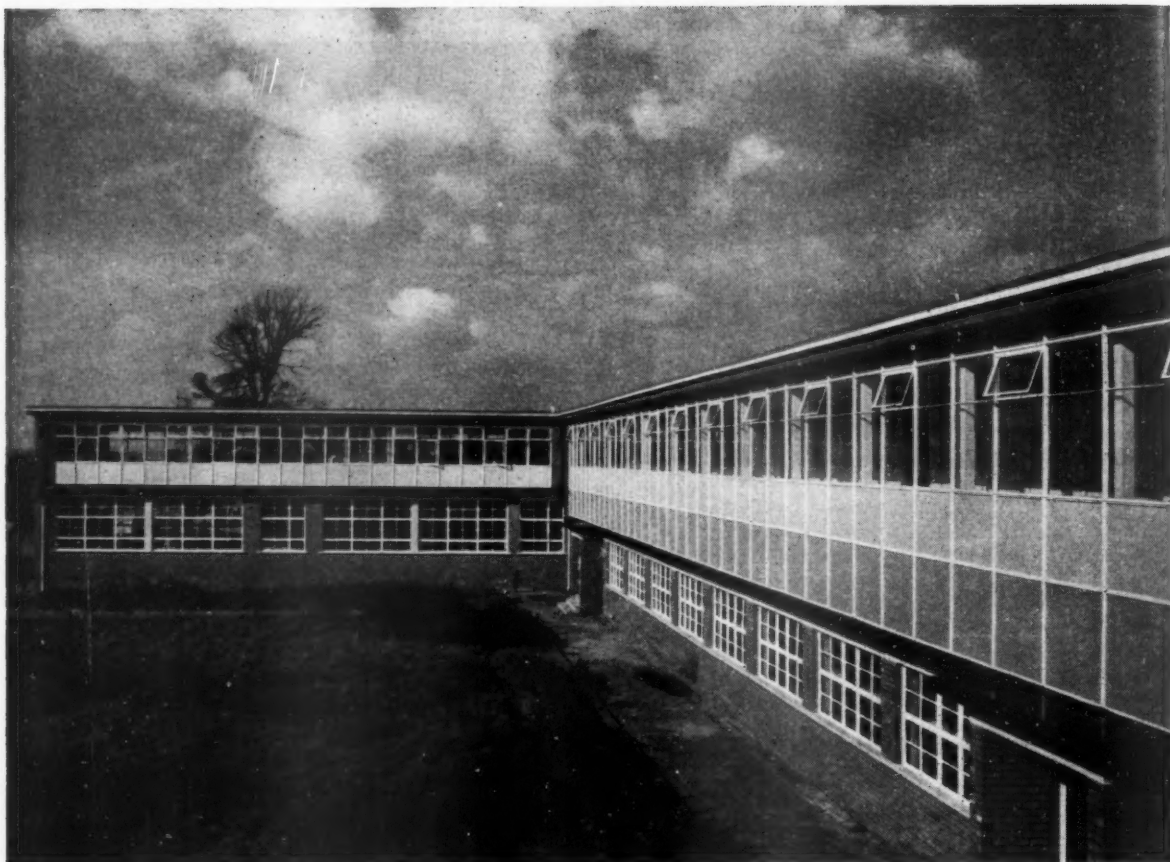
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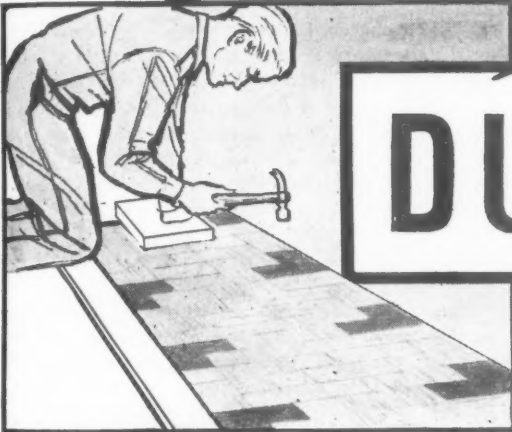
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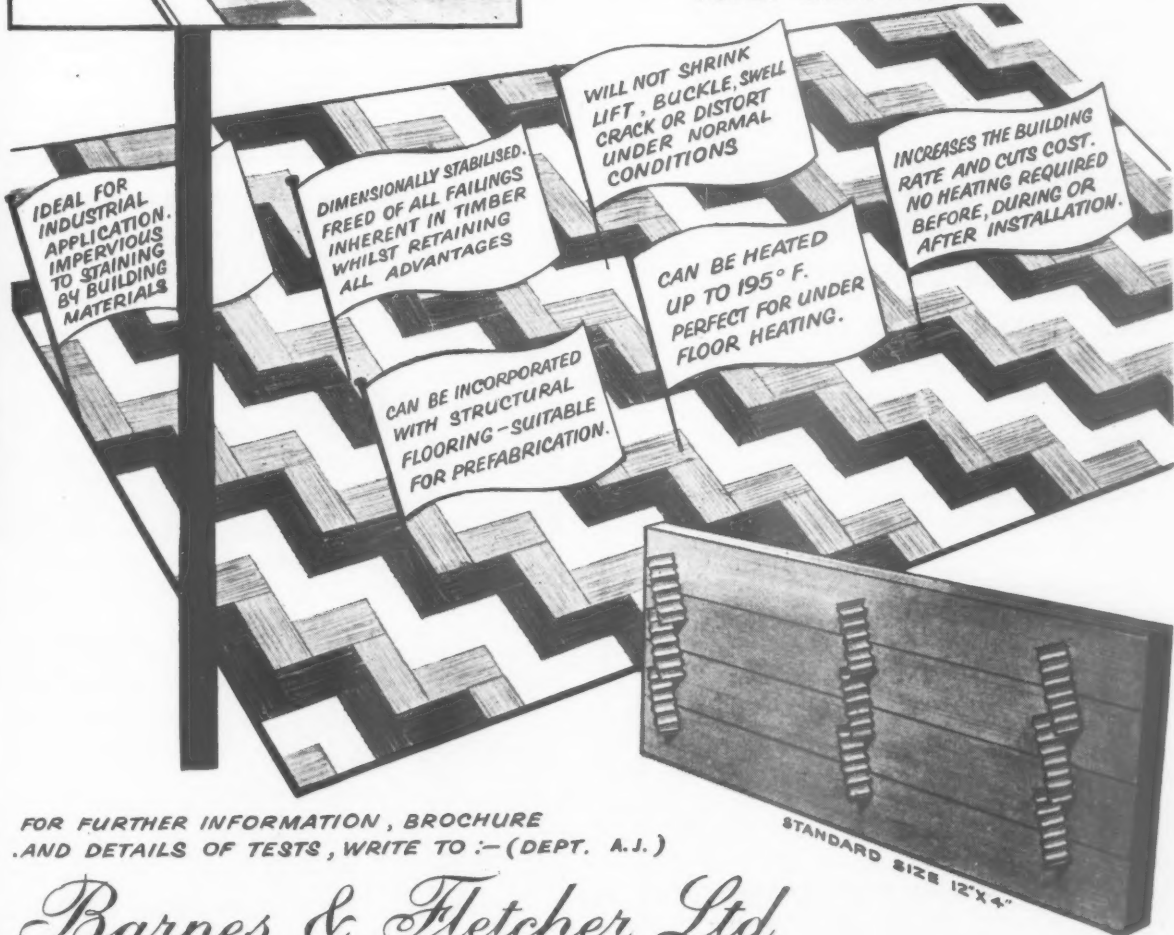
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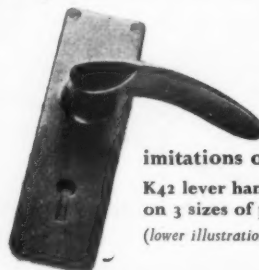
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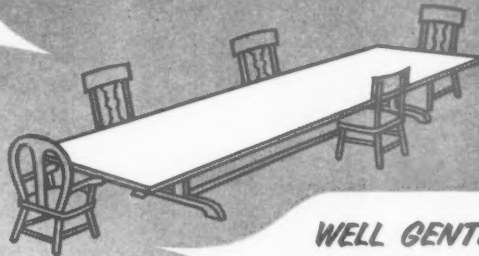
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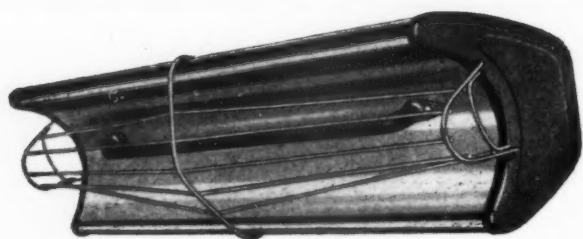
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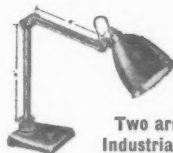
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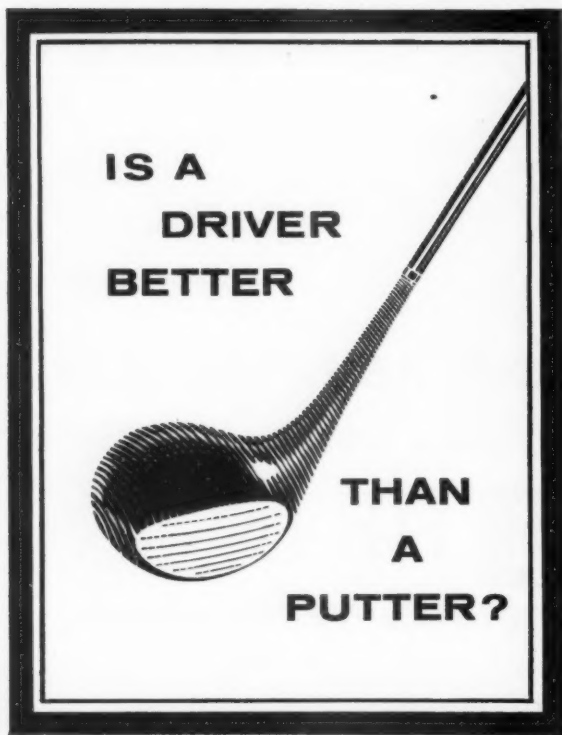
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Patent No. 735602.

## BATLEY 'UP & OVER' DOOR

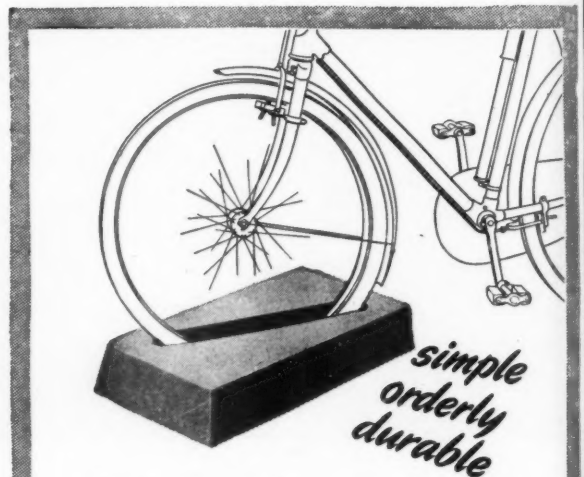
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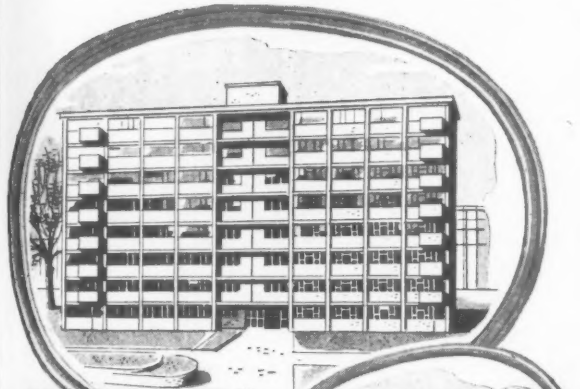
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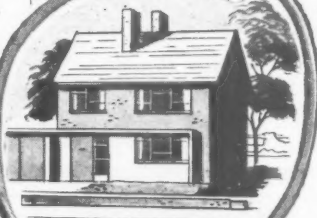


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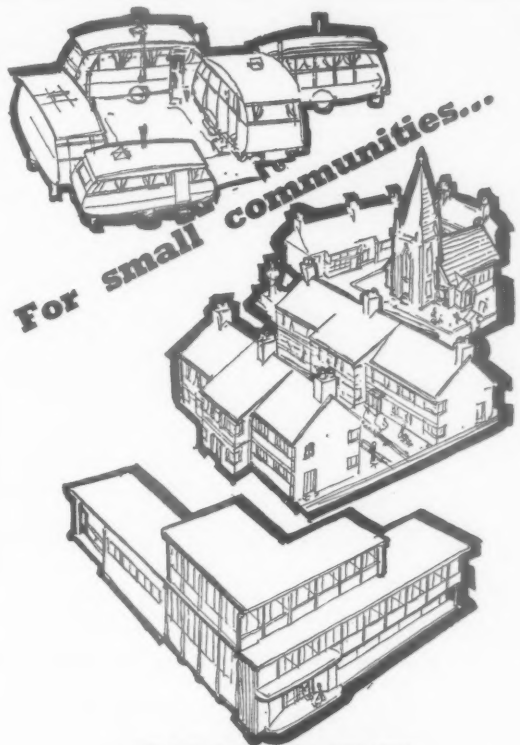


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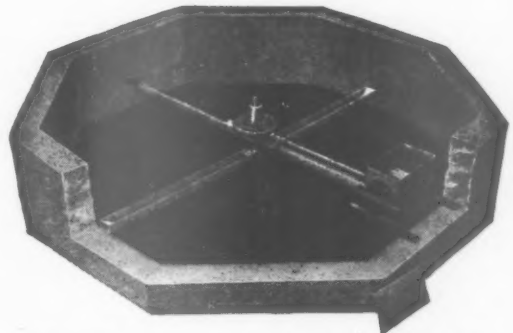
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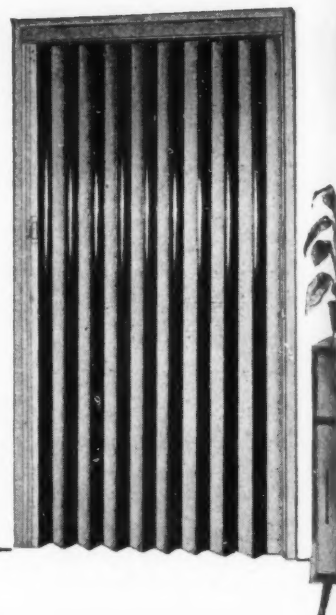
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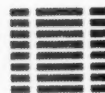
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Right up to the minute are the new Avery venetian doors—a wonderful idea which fits perfectly into modern interior schemes.

The door is extremely light in operation and can be supplied to fit any size opening. Single or centre dividing. Wide range of colours with different colours each side if required. Please write for leaflet.



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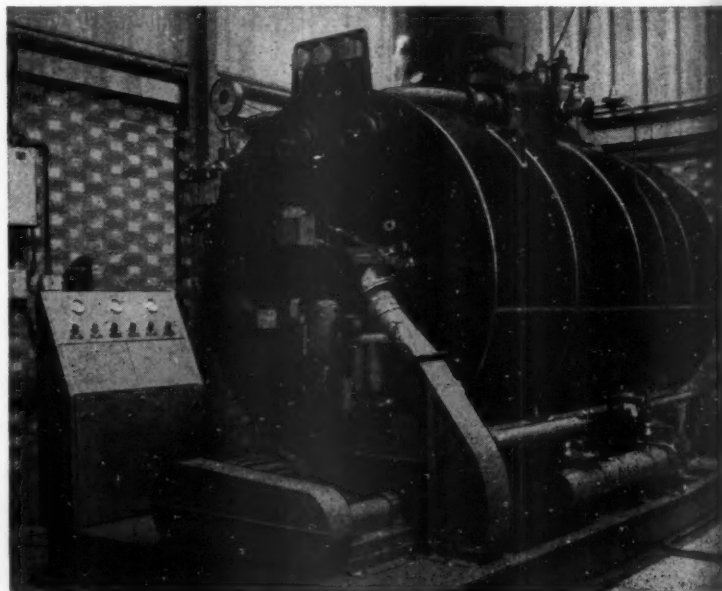
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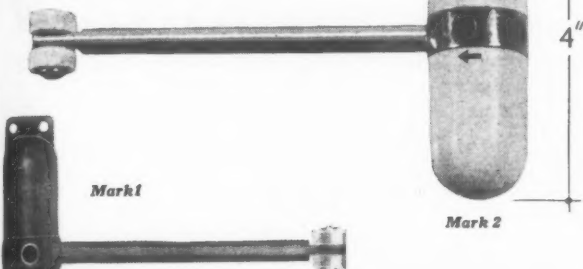


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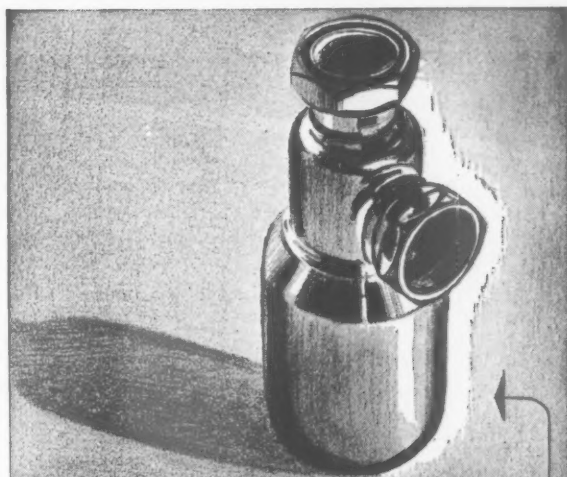
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## DOMELIGHTS

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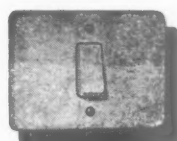
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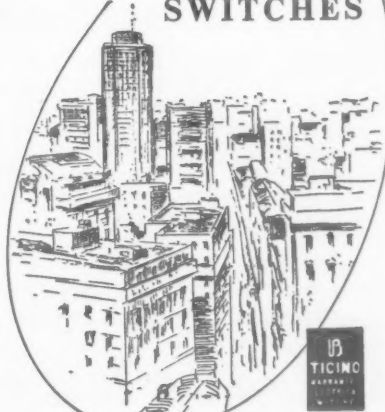
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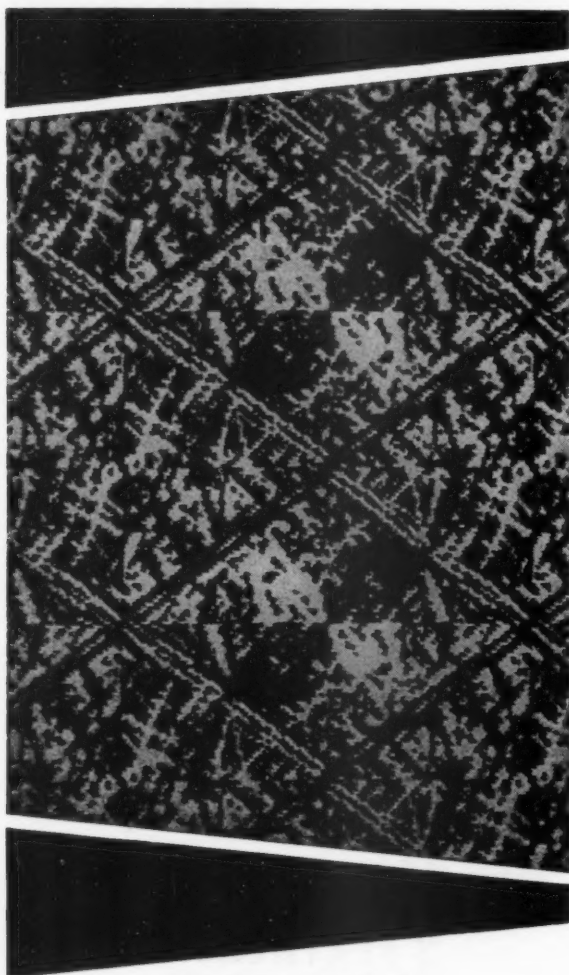
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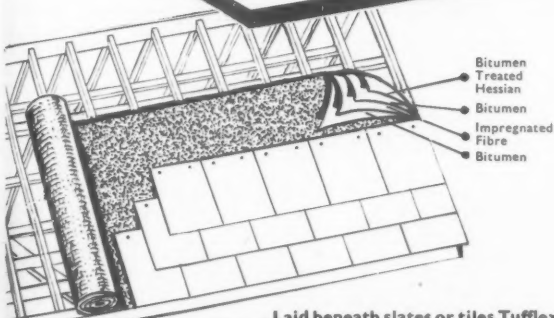
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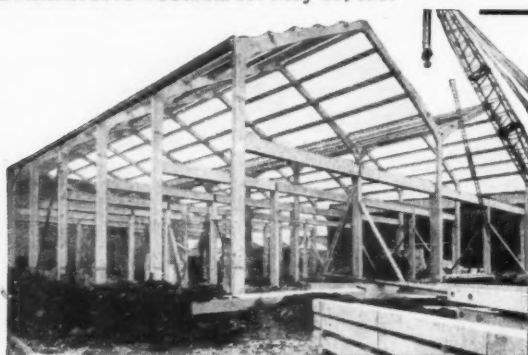


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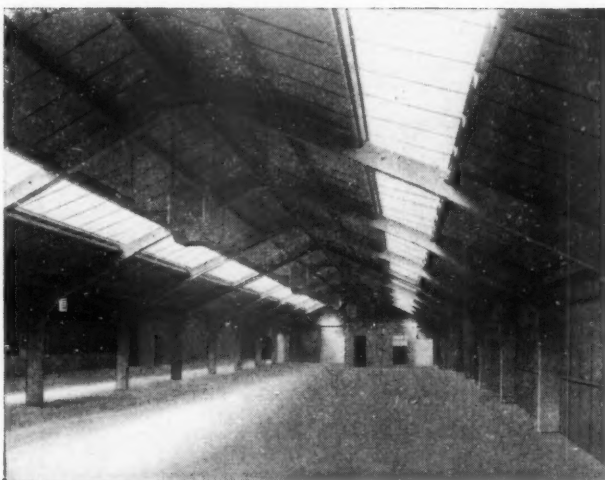
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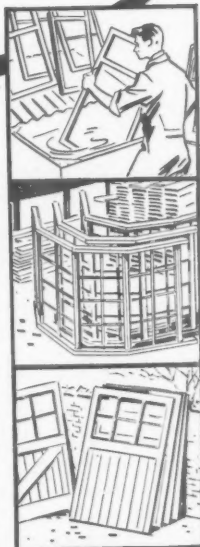
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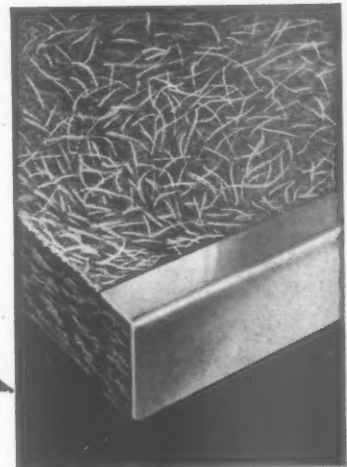
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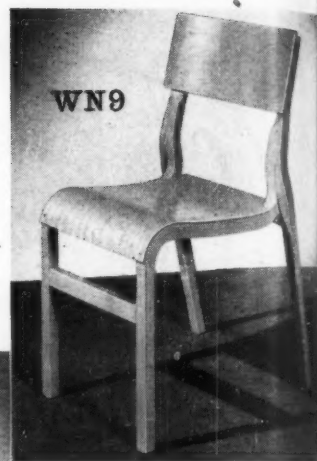
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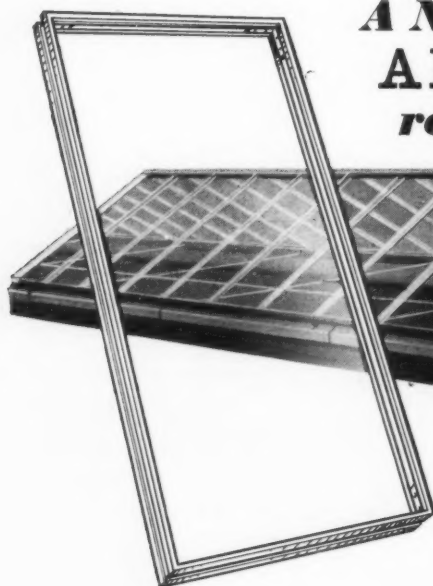


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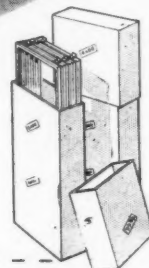


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Light both in weight and appearance  
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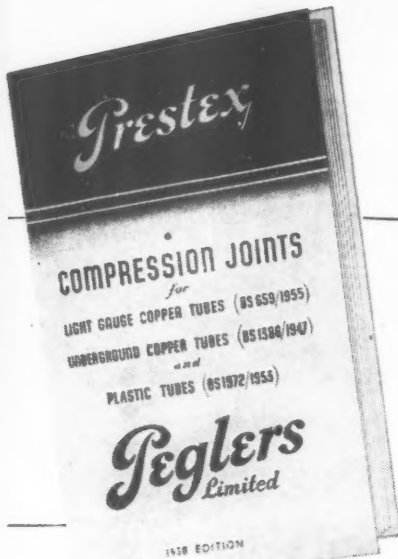


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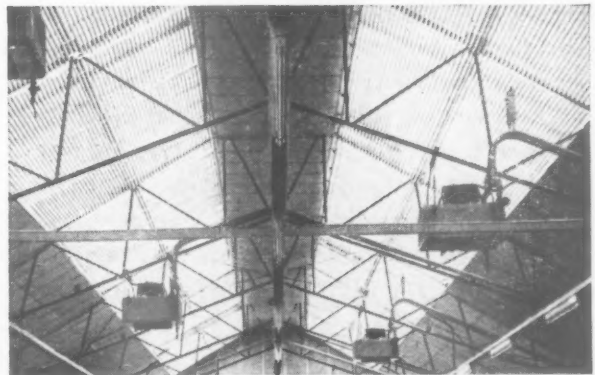
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Trianco Boilers provide constant hot water and central heating cleanly, economically, with maximum efficiency, and with the minimum of labour. Solid-fuel domestic models are available from 50,000 B.t.u.'s capacity and Oil-Fired from 100,000 B.t.u.'s capacity. These boilers are thermostatically controlled and require very little attention. Larger models for factories, hotels, blocks of flats, public buildings, etc., up to 2 million B.t.u.'s capacity.

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**SUNWAY VENETIAN BLINDS**

for **WINDOWS**

**ROOFLIGHTS**

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★ Instant adaption to hour by hour changing light and heat conditions.

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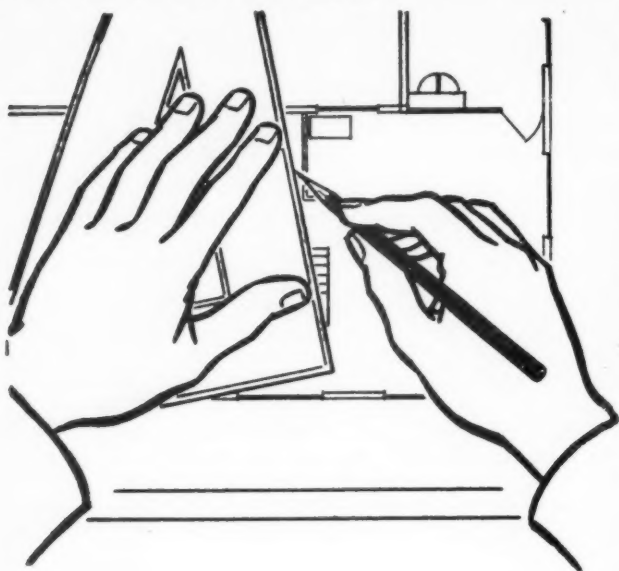
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**HORSLEY, SMITH & CO. (HAYES) LTD.**

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HAYES, MIDDLESEX.

TEL: HAYES 2931



"To a chap like me –  
and I'm proud of my work – my pencil's  
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The pencils I use have to stand up to **fast**  
hard work, their grading's got to  
**be** absolutely spot on – not almost  
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time.

The leads must hold their points  
and flow smoothly throughout a long line –  
no crumbling or 'clinkers' mark you! –  
and if I erase a line it must go cleanly –  
there's no 'furrow' left in my paper  
so you won't find ghost lines in prints  
made off my drawings. As a matter of  
fact you can tell from a print when it is  
my drawing – the print's always first class."

"What pencils do I use?"

"Venus drawing pencils of course, the  
ones with the crackle finish! – how else do  
you think I keep up my high standard?"

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DRAWING  
PENCILS

"VENUS Drawing pencils are made in 17 accurate  
grades from 9H to 6B."

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country for kitchens, bathrooms, canteens, factories, and  
other situations where steam or condensation presents a prob-  
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- (a) It has the maximum resistance to steamy conditions.
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There is a full range of Sissons  
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Our representative will  
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special requirements for  
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# SENSATIONAL

New **COMPLETE**  
treatment for

# WOODWORM

**KILLS  
FILLS HOLES  
RESTORES  
PROTECTS  
and  
FUMIGATES  
WITHIN**

and so easy too

**No Smell**

**No Mess**

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The greatest advance of the century in  
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## SOLITOX

WOODWORM FILLER-KILLER KIT

Whether Cottage or Castle or Church,  
whether furnishings simple or magnificent,  
SOLITOX completely eradicates woodworm,  
prevents re-infestation, restores appearance,  
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Household kit . . . 17/6  
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A floor takes endless "punishment" on its  
**'TOP surface**

London Airport's hangars confirm the  
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wear-resistance is remarkable. The  
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**COLOURTOP** has flint aggregate—many colours.

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Full details from:— **SNOWTOP PRODUCTS LTD.**, Ashford Road,  
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## Site Supervision

by A. A. Macfarlane, A.R.I.B.A., A.M.T.P.I.

IN THIS VOLUME the author, a practising architect  
with a particular enthusiasm for job management,  
presents in a readable and readily accessible form the  
knowledge he has gained from half-a-life time's  
experience of site supervision on a very wide variety  
of building contracts. He defines the architect's duties  
and responsibilities on the site, elucidates the  
mysteries of site etiquette and gives guidance on the  
complex subject of the architect's relations with client,  
builder, clerk of works and the craftsmen in the  
various trades. He explains with precision what are  
the things to look for and how to find them, what  
questions to ask and of whom to ask them, what  
instructions to give, and to whom to give them. He  
describes the quality of work to be sought after as  
well as the quality to be expected, and he makes clear  
what can be accepted and what must be rejected.

Size 8½ ins. by 5½ ins. 160 pages including 25 line  
illustrations. Second impression. Price 16s. net,  
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## CLASSIFIED ADVERTISEMENTS

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

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

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

## Public and Official Announcements

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

### LONDON COUNTY COUNCIL

**ARCHITECTS, Grade III**, required for Housing, Schools and General Divisions. Full and varied programme of new work including schools, multi-storey flats and Town Development. Up to £1,090 according to qualifications and experience. Particulars and application form from Hubert Bennett, F.R.I.B.A., Architect to Council, AB/EK/25/29, County Hall, S.E.1. (441) 3510

### CITY OF CANTERBURY

**ARCHITECTURAL ASSISTANT**—a vacancy exists in the General Works Section of the City Architect's Department; salary scale within the City £610—£1,030, according to qualifications and experience. Applications are required from assistants with varied experience, capable of good detailing and presentation and some experience in specification writing.

Applications, with the names of two referees, to the City Architect & Planning Officer, Mr. J. L. Berriers, F.R.I.B.A., A.M.T.P.I., not later than Friday, 29th May, 1959. Canvassing will disqualify.

J. BOYLE,  
Town Clerk.

Municipal Buildings,  
Canterbury. 4286

### EAST SUSSEX COUNTY COUNCIL APPOINTMENT OF AREA PLANNING OFFICER

Applications are invited for the appointment of Assistant County Planning Officer in charge of the Area Office at Bexhill at a salary within the appropriate Special Grade of the National Joint Council scales, the commencing salary to be within the range £950 to £1,030 according to qualifications and experience. (This grade is at present under consideration by the National Joint Council.)

Applicants must be Corporate Members of the Town Planning Institute and preference will be given to those who hold a recognised qualification in architecture. Applicants should have had considerable experience in the administration of County Development Plans and the general work connected with the Control of Development in the Urban and Rural areas of a County.

The Council will be able to offer the successful applicant housing accommodation in Bexhill. The appointment will be terminable by one month's notice on either side; it is superannuable, and subject to medical examination, if required.

Applications, stating age, qualifications and details of experience, together with the names of two referees, should be sent to the undersigned not later than 6th June, 1959.

Applicants must disclose in writing whether or not they are related to any member of the Council or officer of the Authority. Canvassing will disqualify.

L. S. JAY,  
County Planning Officer.

County Hall,  
Lewes, Sussex. 4277  
5th May, 1959.

### STEVENAGE DEVELOPMENT CORPORATION

Applications are invited for a post in the Chief Architect's Department of ASSISTANT QUANTITY SURVEYOR, on New Towns Salary Grade A.P.T. II/III—£631/£811 p.a. Commencing salary will be fixed according to qualifications and experience.

Candidates should be suitably qualified and have experience in "working-up" Bills of Quantities, measurement of variations, etc.

The successful candidate will be engaged on work of an interesting nature relating to the building of a New Town, comprising Shopping Centres, Housing and Multi-storey Flats, Office Blocks and Industrial Buildings.

Housing accommodation will be available in due course in appropriate cases.

Applications, giving details of qualification, experience and the names of two referees, should be sent to Chief Administrative Officer, Aston House, nr. Stevenage, Herts, not later than Monday, 1st June, 1959. 4232

### PONTYPRIDD URBAN DISTRICT COUNCIL APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of Architectural Assistant at a salary in accordance with the Special Grade (£750 + £40—£1,030 per annum), the incremental stage to be determined according to the experience of the applicant.

Candidates must be Associate Members of the Royal Institute of British Architects.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937: a satisfactory Medical Examination; and one month's notice on either side for termination. Housing accommodation (if required) will be provided.

Form of application and further particulars may be obtained from Mr. W. Cecil Evans, Architect and Surveyor, Municipal Buildings, Pontypridd.

Applications must be delivered to the undersigned not later than 9th June, 1959.

BERNARD M. MURPHY,  
Clerk of the Council.

Municipal Buildings,  
Pontypridd, Glam. 4234  
6th May, 1959.

### SURREY COUNTY COUNCIL

Applications invited for following appointments:—

1 **Grade V** (£1,220—£1,375 p.a. plus £30 p.a. London Allowance).

ARCHITECTS. In addition to a minimum of 10 years' experience, after qualifying as Associate R.I.B.A., and general architectural ability, candidates must be capable of leading a small team dealing with medium and large scale contracts.

2 **Special Grade** (£750—£1,030 p.a. plus £30 p.a. London Allowance subject to revision).

ARCHITECTS. Must be A.R.I.B.A. and experienced in design and detailing.

**BUILDING SURVEYORS.** Must be A.R.I.C.S. (Bldg. Sub. Div.). Capable drafting specifications in all trades, preparation Schedules of Dilapidations, detailed estimates for general maintenance works and surveys of properties.

3 **Grade II** (£765—£880 p.a. plus up to £30 p.a. London Allowance according to age). Must be of good general training. Preference given to those who have passed Intermediate R.I.B.A.

Full details, present salary, and three copies testimonials to County Architect, County Hall, Kingston, by 30th May, 1959.

The County Council have adopted a five-day week. 4255

### CITY AND COUNTY OF THE CITY OF EXETER

**CITY ARCHITECT'S DEPARTMENT**

Vacancy on the established staff for **SENIOR ASSISTANT ARCHITECT**. Salary within Special Grade (£750 to £1,030). This grade is at present under review. The provision of Housing Accommodation will be considered. The successful applicant's removal expenses will be paid.

Applicants must have passed Parts I and II of the R.I.B.A. Final Examination or Special Final or equivalent, and the entry point on the grade will depend on experience.

Preference will be given to those with experience in the design and construction of Civic Buildings.

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

Applications, stating age, qualifications, previous and present appointments and salaries, full details of experience and earliest possible date when available, should be sent to the City Architect, Municipal Offices, Exeter, not later than the 30th May, 1959. 4228

### BOROUGH OF FINCHLEY

**HOUSING DEPARTMENT**

**JUNIOR ARCHITECTURAL ASSISTANT**

Salary within A.P.T. Grade I according to qualifications and experience (£610—£765) plus London weighting.

Subject to satisfactory service anticipated duration of the post will be approximately 2-3 years. Preference will be given to those who have passed the R.I.B.A. Intermediate Examination and who have had practical office experience in housing work.

The National Scheme of Conditions of Service and the Local Government Superannuation Acts apply and medical examination is required.

Applications stating age and full particulars of qualifications and experience, with the names of two referees, should be submitted to The Borough Housing Officer, The Avenue, Finchley, N.3 by first post on Wednesday, the 3rd June, 1959.

R. M. FRANKLIN,  
Town Clerk.

Municipal Offices,  
Finchley, N.3. 4295

**ARCHITECTURAL ASSISTANT** required by GOVERNMENT OF ANTIGUA for service in the LEeward ISLANDS on contract for three years. Salary £1,100 a year. Gratuity at rate of 12½ per cent. Free passages. Liberal leave on full salary. Candidates, single, must possess Intermediate R.I.B.A. and have had at least three, but preferably five years' experience. Write to the Crown Agents, 4 Millbank, London, S.W.1.

State age, name in block letters, full qualifications and experience and quote M2B/50598/AE. 4319

### BOROUGH OF SUTTON AND CHEAM BOROUGH ENGINEER AND SURVEYORS' DEPARTMENT APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of an **ARCHITECTURAL ASSISTANT**, Grade A.P.T. IV, £1,065—£1,220 plus £20/£30 London weighting per annum.

Applicants should have good general experience in Housing and Public Buildings. The commencing salary will be according to ability and experience.

The appointment which is terminable by one month's notice in writing on either side, is on the permanent staff of the Corporation, is subject to the provisions of the Local Government Superannuation Acts, 1937 to 1953, and to the National Scheme of Conditions of Service.

The successful candidate will be required to pass a medical examination. Forms of application may be obtained from Mr. N. H. Michell, A.M.I.C.E., M.I.Mun.E., Borough Engineer and Surveyor, to whom they should be returned, accompanied by copies of two recent testimonials not later than 9th June, 1959, endorsed "Architectural Assistant Grade A.P.T. IV." 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. 4294

### CITY AND COUNTY OF NEWCASTLE UPON TYNE

Applications are invited from suitably qualified persons for the following vacancies in the City Architect's Department (Structural Section):—

(a) **SENIOR STRUCTURAL ENGINEER** in Scale "C" (£1,385—£1,620 per annum).

(b) **SENIOR ASSISTANT STRUCTURAL ENGINEER** in the A.P.T. Division Grade V (£1,220—£1,375 per annum).

Applicants for post (a) must be Associate Members of the Institution of Structural Engineers or the Institution of Civil Engineers. The officer appointed will be the Head of the Section, and will be responsible for the preparation of calculations and detailed structural schemes for steel and Reinforced Concrete framed buildings, and experience in dealing with problems of special foundations will be an advantage.

Members of one of the above Institutions, and the officer appointed will be required to assist the Senior Structural Engineer in the duties outlined above. Both appointments will be subject to the provisions of the Local Government Superannuation Acts, 1937-1953, and the successful candidates will be required to pass a medical examination.

Further particulars and Forms of Application may be obtained from George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle upon Tyne, 1.

Closing date for receipt of completed applications, Monday, 15th June, 1959.

JOHN ATKINSON,  
Town Clerk.

Town Hall,  
Newcastle upon Tyne, 1. 4306  
8th May, 1959.

### CITY OF LEEDS EDUCATION COMMITTEE COLLEGE OF ART SCHOOL OF ARCHITECTURE AND TOWN PLANNING

**DEPARTMENT OF TOWN PLANNING**  
(a) Certificate Course in Town Planning (three years part-time day and evening) exempting from the Intermediate examination of the Town Planning Institute, open to candidates at least 17 years of age with requisite general education.

(b) Diploma Course in Town Planning (three years evening and one year full-time followed by one year evening) exempting from the Final examination of the Town Planning Institute, open to Architects, Engineers, Surveyors, Geographers and Economists.

Applications for the session 1959/60, beginning the 14th September, are now being considered. Further particulars can be obtained from the Clerk to the School, 43a, Woodhouse Lane, Leeds.

2. Telephone: Leeds 32491/2.

GEORGE TAYLOR,  
Chief Education Officer. 4321

### WEST SUSSEX COUNTY COUNCIL COUNTY PLANNING DEPARTMENT APPOINTMENT OF PRINCIPAL ASSISTANT

Applications are invited for the appointment of Principal Assistant in the County Planning Department. Salary—J.N.C. Scale "B," £1,375—£1,485.

Applicants must have passed the Final Examination of the Town Planning Institute; an additional qualification in Architecture or Surveying would be an advantage.

The appointment will be subject to the National Scheme of Conditions of Service.

Forms of application and further particulars as to the duties of the post can be obtained from Mr. John G. Jefferson, M.I.C.E., M.I.Mun.E., M.T.P.I., County Planning Officer, County Hall, Chichester, to whom applications should be sent not later than the 6th June, 1959.

J. C. HAYWARD,  
Clerk of the County Council. 4361



**BOROUGH OF NEWCASTLE-UNDER-LYME****REQUIREMENTS****TWO ASSISTANT QUANTITY SURVEYORS**

Grade A.P.T. II (£765-£880 p.a.)

Commencing salaries will be in accordance with qualifications and experience.

The department has contracts pending for several new schools in addition to housing and general works.

The Council will consider the provision of housing accommodation in suitable cases. Application Forms may be obtained from the Borough Engineer and Surveyor, Lancaster Building, Newcastle, Staffs, and must be returned to him not later than Monday, 1st June, 1959.

C. J. MORTON,  
Town Clerk.  
4320**BOROUGH OF OLDBURY****BOROUGH SURVEYOR'S DEPARTMENT****ARCHITECTS' SECTION**

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

(a) ARCHITECTURAL ASSISTANT, A.P.T. Grade II (£765-£880 per annum).

(b) ARCHITECTURAL ASSISTANT, A.P.T. Grade I (£610-£765 per annum).

Candidates for appointment (a) should preferably have passed the Intermediate Examination of the R.I.B.A. and be capable of preparing working and detailed drawings and specifications. The appointment offers to a suitable applicant an excellent opportunity of being engaged on a wide range of architectural projects including housing, education and other works.

Appointment (b). The appointment offers, to a competent draughtsman, experienced in the preparation of working and detail drawings, an excellent opportunity of being engaged on a wide range of architectural projects.

Both appointments will be superannuable, subject to the National Scheme of Conditions of Service, and to the selected candidate passing a medical examination.

Applications, giving particulars of age, qualifications, experience, and the names of two referees, should be delivered to the undersigned not later than Monday, 25th May.

KENNETH PEARCE,  
Town Clerk.

Municipal Buildings,

Oldbury,

Nr. Birmingham.

May, 1959.

4321

**CIVIL SERVICE QUANTITY SURVEYORS****AND ASSISTANT QUANTITY SURVEYORS**

required by Admiralty War Office, Air Ministry,

Ministry of Works, Ministry of Education and

Department of Scientific and Industrial Research

in most parts of United Kingdom and occasionally

overseas. Although unestablished, these posts

have long term possibilities. London salaries for

those suitably qualified and experienced, over

25 years of age, range from £830 to £1,300 per

annum. Vacancies also exist for Quantity Survey-

ing Assistants and others having some experience

in Quantity Surveying at salaries ranging from

£350 per annum upwards. Write quoting reference

J.Q.S. to Room 403, M.L.N.S., Technical and

Scientific Register (J), 25, King Street, London,

S.W.1.

4310

**COUNTY BOROUGH OF WEST BROMWICH**

Applications are invited for the following

appointments:—

ASSISTANT ARCHITECTS: Salary A.P.T.

Grade II (£765-£880)

ARCHITECTURAL ASSISTANTS: Salary

A.P.T. Grade I (£610-£765).

N.J.C. Conditions of Service.

Applications, naming two referees, to Borough

Surveyor, Town Hall, West Bromwich, by 23rd

May, 1959.

4250

**BOROUGH OF BRENTFORD AND CHISWICK****BOROUGH ENGINEER AND SURVEYOR'S****DEPARTMENT**

Applications are invited for the appointment of

ARCHITECTURAL ASSISTANT Special Grade

£750-£1,030 or A.P.T. III (£880-£1,065) plus

London weighting allowance. Commencing salary

according to qualifications and experience.

Varied programme of work, mainly Housing

Redevelopment and including multi-storey flats.

Consideration will be given to the provision of

housing accommodation, if necessary.

Application forms returnable by 1st June, 1959

may be obtained from the Borough Engineer and

Surveyor.

W. F. J. CHURCH,  
Town Clerk.

Town Hall, Chiswick, W.4.

24th May, 1959.

4336

**CITY OF SHEFFIELD EDUCATION****COMMITTEE****APPOINTMENT OF****ENGINEER AND SURVEYOR**

Applications are invited from men with appropriate and recognised qualifications for the above

appointment which includes full responsibility to the

Director of Education for the maintenance, repair and upkeep of all buildings and grounds

within the jurisdiction of the Education Committee. Salary scale A.P.T. III (£1,220-£1,375).

Appointment subject to N.J.C. conditions of service and conditional upon satisfactory medical examination. Further particulars and form of application (returnable not later than 1st June, 1959) from the undersigned.

T. H. TUNN,  
Director of Education.Education Office,  
Sheffield, 1.

4354

**WEST SUFFOLK COUNTY COUNCIL****ENGINEER (in charge of Heating and Electrical Section)—A.P.T. IV (£1,065-£1,220): National**

Joint Council Service Conditions; post pensionable; medical examination.

Applicants must hold appropriate professional qualifications and be experienced in the design and supervision of heating systems; preference will be given to applicants with experience in design of electric lighting and power installations.

Apply to County Architect, 13, Westgate Street, Bury St. Edmunds, for application form, also particulars of staff house and subsistence allowance; application to be returned by 1st June, 1959.

4335

**BANSTEAD URBAN DISTRICT COUNCIL****HOUSING DEVELOPMENT SCHEME**

(Chapel Way Area, Tadworth)

The Council are to consider instructing an Architect to prepare a Scheme for the development of 14 acres by the erection of houses, two and three storey flats and old people's dwellings. Practising Architects are invited to supply details of their qualifications and experience to the undersigned not later than 30th May, 1959.

Selected Architects will be asked to submit drawings, photographs, etc., of comparable schemes prepared by them.

F. L. SHAW,  
Clerk of the Council.

The Council House,

Brighton Road,

Banstead.

4334

**DEVON COUNTY COUNCIL require Two**

Senior ARCHITECTS on A.P.T. IV (£1,065-£1,220)

and Two Senior ARCHITECTS on N.J.C. Special

Scale (£750-£1,030: increase under consideration).

Full and interesting programmes of Schools and

other County Buildings.

In approved cases, loans for house purchase

and removal expenses are available—also lodging

allowance for married officers while seeking

accommodation.

Particulars and Application Form, returnable by

11th June, 1959, from County Architect, 97, Heav-

tree Road, Exeter.

4332

**EAST SUFFOLK COUNTY COUNCIL****ASSISTANT ARCHITECTS**

A.P.T. Grade IV: £1,065-£1,220

Applications are invited from qualified architects

who have good general experience in design and

construction, and are capable of taking charge of

large projects with the minimum of supervision.

The starting salary in each case will be fixed

according to qualifications and experience, and

removal expenses will be paid in approved cases.

The appointments are subject to the provisions of

the Superannuation Acts and selected candidates

will be required to pass a medical examination.

The posts offer interesting and responsible work

in connection with the Council's extensive pro-

gramme of school and other building.

Applications, stating age, qualifications, expe-

rience and present employment, together with

copies of two recent testimonials, must be delivered

to the County Architect, Mr. E. J. Cundell,

A.R.I.B.A., County Hall, Ipswich, by the 26th

May, 1959.

4333

**COUNTY BOROUGH OF WOLVERHAMPTON**

Applications are invited for the following

appointments:—

(a) PRINCIPAL ASSISTANT ARCHITECT,

Grade A.P.T. IV (£1,065-£1,220), with usual car

user's allowance.

Candidates must be A.R.I.B.A., have had considerable

office experience and be capable of taking

charge of a section dealing with large

contracts.

(b) ASSISTANT ARCHITECT, Grade A.P.T. I

£610-£765.

Candidates should have Intermediate R.I.B.A.

Applications, stating age, education, experience,

and details of present and previous appointments,

naming two referees to the Borough Engineer,

Town Hall, Wolverhampton, by Monday, 8th

June, 1959.

4303

**METROPOLITAN BOROUGH OF LAMBETH****CHIEF ASSISTANT ARCHITECT**

Salary £1,385-£1,620 p.a.

Applications are invited for this appointment in

the Housing department. Candidates must be full

members of the Royal Institute of British Architects

or hold an equivalent qualification. The

officer appointed will be responsible for the design

of municipal housing schemes, including multi-

storey flats; the conversion and improvement of

existing properties and the supervision of building

contracts. Candidates should have had good expe-

rience of both technical and administrative work

of an architectural office. Superannuation scheme;

canteen; alternative Saturdays off. Application

forms from Town Clerk (Ref. 1436), Lambeth

Town Hall, Brixton Hill, S.W.2. Closing date:

6th June, 1959.

JOHN E. FISHWICK,  
Town Clerk.

4342

**SOUTHAMPTON COUNTY BOROUGH COUNCIL**

requires under N.J.C. conditions of service:

ASSISTANT QUANTITY SURVEYOR, salary

within Special Grade (£750-£1,030 p.a.).

Applicants must be Chartered Quantity Sur-

veyors, preferably with experience in municipal

housing, including multi-storey flats and shopping

centres.

The salary scale is subject to adjustment in

accordance with the new N.J.C. increase.

Apply on application forms, obtainable from the

Borough Engineer and Surveyor, Civic Centre,

Southampton, by not later than Monday, 15th

June, 1959.

4348

**SOUTH EASTERN ELECTRICITY BOARD****ARCHITECTURAL ASSISTANT—Surveyor's**

Section, Headquarters.

Salary £795 x £25-£870 under NJC Grade 4.

Superannuable. Applicants should be capable of

preparing drawings and estimates for garages,

offices, stores and substations.

Preference will be given to applicants who are

members of the R.I.B.A. or I.A.A.S.

Applications quoting A.J. and naming two

referees to Surveyor, Seaboard, 10, Queen's Gar-

dens, Hove 3, Sussex, by 3rd June, 1959.

GEORGE WRAY,  
Secretary.

4341

**COUNTY BOROUGH OF WOLVERHAMPTON****APPOINTMENT OF PRINCIPAL PLANNING**

ASSISTANT

Further particulars for the above mentioned

appointment in the Department of the Borough

Engineer &amp; Planning Officer. Salary within

A.P.T. Special Grade (£750-£1,030 per annum),

according to qualifications and planning expe-

rience.

Housing accommodation will be provided in

suitable cases.

Further particulars may be obtained from the

Borough Engineer &amp; Planning Officer, Town Hall,

Wolverhampton, and applications should be

returned by the 2nd June, 1959.

4349

**H.M. PRISON COMMISSION****DRAUGHTSMEN, both Architectural and**

Engineering, required (men or women). Salary

(men) £550 at age 21, £753 at age 28 then to £875.

For women equal pay scheme applies. Hours:

42 per 5-day week. Annual leave 3 weeks 3 days

rising to 4 weeks 2 days after 10 years' service.

Qualifications: Architectural Draughtsmen.

Recognised training with a good general know-

ledge of building construction and surveys, pre-

ferably up to Intermediate R.I.B.A. standard.

Engineering Draughtsmen. Should preferably

have had educational training to Ordinary

National Certificate in mechanical or electrical

engineering course standard or the equivalent

in heating and ventilating course.

Appointments unestablished in first instance

with prospects of permanency.

Regulations and application forms from Estab-

lishment Officer, Prison Commission, Horseferry

House, Dean Ryle Street, London, S.W.1. to be

returned by 5th June, 1959.

4351

**HUNTINGDONSHIRE****COUNTY ARCHITECT'S DEPARTMENT****ARCHITECTURAL ASSISTANT Grade A.P.T. II**

(£765-£880)

Applications are invited for the above appoint-

ment from suitably qualified persons.

Further details and application forms may be

obtained from the County Architect, County

Buildings, Huntingdon. Completed application

forms should be returned to the undersigned by

Friday, 5th June, 1959.

A. C. AYLWARD,  
Clerk of the County Council.

County Buildings,

Huntingdon.

4350

**HEREFORDSHIRE COUNTY COUNCIL****ARCHITECTURAL ASSISTANT**

A.P.T. Grade I (£610 to £765 per annum).

Superannuated post subject to medical examina-

tion and one month's notice on either side. Travel

and subsistence allowance payable to married men

in certain cases for limited period.

Application form from County Architect, Bath

Street, Hereford, to be submitted by 8th June,

1959.

4346

**METROPOLITAN BOROUGH OF HAMP-****STEAD require a temporary ARCHITECTURAL**

ASSISTANT on A.P.T. Grades I/II (£575-£845

p.a. plus London weighting) for Intermediate

R.I.B.A. or Special Scale (£750-£1,030 plus

London weighting) for Final R.I.B.A.; salary

according to qualifications and experience.

Applications giving training, experience, pre-

vious appointments and the names of three

referees to the Town Clerk (A.J.), Town Hall,

Haverstock Hill, N.W.3, by the 11th June, 1959.

No housing provided.

4344

**SALOP COUNTY ARCHITECT'S DEPARTMENT**

Applications are invited from qualified persons

for the following posts:—

(a) CHIEF ASSISTANT ARCHITECT, J.N.C.

Scale "B" (£1,275-£1,485 p.a.) to act as leader

of a small group producing a detailed scheme

for new COUNTY ADMINISTRATIVE

CENTRE in Shrewsbury.

(b) SENIOR ASSISTANT ARCHITECTS (3

Vacancies), A.P.T. Grade IV (£1,065-£1,220

p.a.).

(c) JUNIOR ASSISTANT QUANTITY SUR-

VEYOR, A.P.T. Grade IV (£1,065-£1,220 p.a.).

A disturbance allowance or weekly separation

**HEMEL HEMPSTEAD DEVELOPMENT CORPORATION**

Applications are invited for the following vacancies in the Chief Architect's Department:  
**SENIOR PLANNING OFFICER:** £934-£1,273. Vacancy No. 154.

Duties include liaison with other planning authorities on matters affecting revised Master Plan, planning applications, etc. Experience in planning office essential. Short-term post which might be attractive to senior man approaching retiring age.

**SENIOR ASSISTANT ARCHITECT:** £934-£1,273. Vacancy No. 155.

To take charge of small team responsible for housing, neighbourhood centre, etc., development. **ARCHITECTURAL ASSISTANTS:** Vacancy No. 156.

In grades with salaries ranging from £265-£439, according to age, qualifications and experience. Junior posts available for architectural students not yet qualified, and for those who have qualified and wish to gain practical experience.

Conditions of service similar to those in Local Government. Housing may be provided.

Applications, endorsed with appropriate vacancy number, giving age, education, qualifications and experience and names of two business referees to General Manager, Westbrook Hay, Hemel Hempstead. 4368

**COUNTY BOROUGH OF DONCASTER**

Vacancies exist in the **BOROUGH ARCHITECT'S DEPARTMENT** for (a) one **ASSISTANT ARCHITECT**, Special Grade (at present £750-£1,030, revision pending); (b) one **ARCHITECTURAL ASSISTANT**, Grade A.P.T. I (£610-£765-£880), and (c) four **ARCHITECTURAL ASSISTANTS**, Grade A.P.T. I (£610-£765).

These appointments offer scope for experience in, and provide opportunities for development of, modern architecture particularly as applied to educational projects and public buildings.

Applicants for (a) must have passed parts I and II of the R.I.B.A. Final or Special Final examination and for (b) and (c) must have passed the R.I.B.A. Intermediate examination.

The appointments will be subject to one month's notice on either side, will be superannuable and the successful applicants will be required to pass a medical examination.

Application forms may be obtained from the Borough Architect, L. J. Tucker, Esq., A.R.I.B.A., P.I.Hsq., 15 South Parade, Doncaster, to whom they must be returned by the 28th June 1959.

H. R. WORMALD,  
Town Clerk. 4369

**ISLE OF ELY COUNTY COUNCIL**

**PLANNING ASSISTANT**

Applications are invited for the above appointment. Salary within A.P.T. I, II or Special Grades according to qualifications. Duties include assistance in preparation of Town Maps, County Map Review, central area and village layouts, etc. National conditions. Consideration given to assistance towards removal expenses.

Forms of application and further particulars obtainable from the County Planning Officer to whom they must be returned by 1st June 1959.

R. F. G. THURLOW,  
Clerk of the County Council.

County Hall,  
March, Cambs. 4357

**JUNIOR TAKERS OFF AND WORKERS UP** required in the new Works Directorate at the WAR OFFICE, Chessington. The Works Directorate is an expanding organisation being formed to take over design and supervision of all Army's new building work, in this country and overseas. Scope of the work will be varied and will include single and married quarters, hostels, schools, offices, workshops and civil engineering works. The Quantity Surveying Division under the Chief Quantity Surveyor will be organised in small self-contained teams. Each team will be responsible for estimating, cost planning, preparation of Bills of quantities, certificates and preparation and settlement of final accounts for all projects assigned to it.

Preference given to candidates studying for professional examinations. Salaries will range from £200 (at age 16) to £900 (including London weighting) p.a. depending on age and experience. Appointments in the first instance will be unestablished. Write stating age, nationality, details of education and training and experience to Manager, P.E. 1057, Professional and Executive Register, Atlantic House, Farringdon Street, London, E.C.4. Only those applicants selected for interview will be advised. 4375

**CWMBRAN DEVELOPMENT CORPORATION**

**APPOINTMENT OF**

**DEPUTY CHIEF ARCHITECT**

Applications are invited for the above superannuable post in the salary range £1,527-£1,755, the point of entry being in accordance with qualifications and experience.

Applicants should be Associates of the R.I.B.A. and with experience of large scale Housing contracts and Town Centre Development. Experience in Town Planning will be an advantage. Housing accommodation will be made available to the successful applicant if needed.

Applications stating age, experience, details of present and former employment (together with applicable salaries) and the names and addresses of two referees must reach the undersigned by first post on Monday, 8th June, 1959.

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

Victoria Street,  
Cwmbran, Mon. 4362

**BOROUGH OF BROMLEY**

**CHIEF ASSISTANT ARCHITECT**

Applications are invited for this appointment in the Borough Engineer's Department. Salary A.P.T. V plus London weighting (£1,250-£1,405) and lump sum car allowance of £40 per annum. Application forms and further details, obtainable from the Borough Engineer, Municipal Buildings, Bromley, must be submitted to him by 29th May, 1959.

LIONEL KAYE,  
Town Clerk.

Municipal Buildings,  
Bromley, Kent. 4382

**JUNIOR ARCHITECTURAL ASSISTANT** required by HACKNEY BOROUGH COUNCIL. Salary grade A.P.T. I (£610-£765 p.a.), London weighting allowance £20 p.a. at age 21, £30 p.a. at age 26. Commencing salary according to training, qualifications and experience. Candidates must be Students of the R.I.B.A. or Probationers with a good architectural training and several years' experience in an architect's office. Apply Town Clerk, Town Hall, Hackney, E.8, for application form returnable by 9 a.m., 8th June, 1959. 4371

**MIDLANDS ELECTRICITY BOARD**

**ARCHITECTURAL DRAUGHTSMAN** required on the Chief Engineer's staff at Board Headquarters.

Duties will involve (under supervision) site surveys, preparation of site layouts, sketch plans, detail and working drawings for office blocks, stores, workshops, garages, and Service Centre buildings. Intermediate R.I.B.A. an advantage. Salary £790-£890 per annum (N.J.B. Schedule "D" Grade 5). Superannuable.

Apply, by letter, within 14 days, stating age, experience, present salary and position to The Secretary, Midlands Electricity Board, Mucklow Hill, Halesowen, Nr. Birmingham.

A. STEPHENS,  
Secretary. 4358

**GLOUCESTERSHIRE COUNTY COUNCIL**

**ARCHITECTURAL ASSISTANTS**

(Qualifying Class)  
A.P.T. I (£610-£765), A.P.T. II (£765-£880).

Applicants must have passed Intermediate Examination, R.I.B.A. N.C. Service Conditions; superannuation; medical examination.

Apply giving age, present position, salary and date of appointment, details of previous appointments and names and addresses of two persons for reference, to County Architect, Shire Hall, Gloucester, by 30th May.

GUY H. DAVIS,  
Clerk of the County Council. 4359

**COUNTY BOROUGH OF HALIFAX**

**BOROUGH ENGINEER'S DEPARTMENT**

**APPOINTMENT OF ASSISTANT ARCHITECT**

**SPECIAL GRADE**  
Applications are invited for the above appointment, salary within Special Grade, at present £750-£1,030 p.a. The successful candidate will serve in the section which deals with all architectural work except schools.

Applications stating age, education and training, qualifications, present and past appointments (with dates and salaries) and experience, accompanied by copies of two recent testimonials, should reach me by Monday, 1st June, 1959.

RICHARD DE Z. HALL,  
Town Clerk. 4360

Town Hall,  
Halifax.

**CITY OF WINCHESTER**

Applications are invited for the post of **ARCHITECTURAL ASSISTANT** in the City Engineer's office (C. C. Steploe, A.R.I.B.A., Chief Assistant Architect). It is essential that the applicant should be a neat and accurate draughtsman and have had previous experience in an architect's office. Salary, according to experience, will be within Grade I of the National Scales, and the appointment is subject to the Local Government Superannuation Act.

Applications, stating age and details of experience, together with the names and addresses of two referees, should be addressed to the City Engineer, Guildhall, Winchester, and should reach his office not later than Monday, 1st June, 1959.

Canvassing, either directly or indirectly, will disqualify.

R. H. McCALL,  
Town Clerk. 4285

**STEVENAGE DEVELOPMENT CORPORATION**

**CHIEF ARCHITECT'S DEPARTMENT**

Applications are invited for appointment to post as **ASSISTANT ARCHITECTS** on salary grades £631 rising to £811; £753 rising to £1,029, and £934 rising to £1,273—starting salary and grade according to experience and qualifications.

Applicants should have experience of the design and construction of modern buildings, and successful candidates will be engaged on work of a varied and interesting nature relating to the building of a New Town, and will include Shopping Centres, Housing and Multi-storey Flats, Office Blocks and Industrial Buildings.

Housing accommodation will be available in due course in an appropriate case.

Applications, giving full details and names of two referees, to be sent to the Chief Administrative Officer, Aston House, nr. Stevenage, Herts, not later than Monday, 25th May, 1959. 4181

**CITY OF ROCHESTER**

**CHIEF ARCHITECTURAL ASSISTANT**

Applications are invited for the above appointment in the City Surveyor's Department on A.P.T. IV (£1,065-£1,220).

Candidates should be Associates of the Royal Institute of British Architects, and administrative ability is essential in addition to a good general experience, particularly in the preparation of drawings and specifications for municipal housing and buildings, including shops and flats. The commencing salary will be according to qualifications and experience.

There is a varied programme of work, including the redevelopment of clearance areas and the development of a large area added to the City.

In an appropriate case the City Council will provide the successful candidate with suitable housing accommodation, and will be prepared to refund removal expenses after 12 months' service. The appointment will be subject to the National Scheme of Conditions of Service, the Local Government Superannuation Acts, and a satisfactory medical examination; one month's notice on either side.

Applications, stating age, qualifications and experience, together with the names and addresses of two persons to whom reference may be made, should be delivered to the City Surveyor, 66, Maidstone Road, Rochester, not later than Monday, 8th June, 1959.

PHILIP H. BARTLETT,  
Town Clerk. 4257

Guildhall,  
Rochester. 6th May, 1959.

**NEWCASTLE REGIONAL HOSPITAL BOARD**

**REGIONAL ARCHITECT'S DEPARTMENT**

During the next two years the Board plans to spend several millions on hospital developments and larger programmes are being planned to follow. The present building programme includes a wide variety of projects, ranging from houses to hospitals, and (since a large hospital resembles a small town) affords ample opportunity for gaining both general and hospital experience simultaneously.

The following posts in the Regional Architect's Department are at present open to applicants. The salary-scales quoted include interim increases pending completion of a current Health Service review of salaries.

(i) **ASSISTANT ARCHITECTS** (4). Salary £730 × £225 (2) × £30 (2) × £35 (5) × £40 (1)—£1,565. Applicants should be registered architects and have had experience of the planning and construction of public buildings. The commencing salary will be fixed within the Grade by reference to relevant experience and to age.

(ii) **ARCHITECTURAL ASSISTANT**. Salary £545 at age 21 × £20 (3) × £25 (4) × £30 (2) to £765. Applicants should have passed the Intermediate Examination of the R.I.B.A. and examination recognised by the Institute as equivalent, and some practical experience is desirable.

The commencing salary within the grade will depend upon the applicant's age and practical experience, but will not exceed £605.

(iii) **ARCHITECTURAL DRAUGHTSMAN**. Salary £445 × £25 (5) × £30 (3)—£660. Applicants should have had previous experience in an architect's drawing office and be neat and quick draughtsmen.

Evening study facilities are available at King's College of Durham University in Newcastle.

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 Secretary to the Board, Benfield Road, Newcastle upon Tyne, 6, not later than 28th May, 1959. 4283

**ARCHITECTS AND BUILDING SURVEYORS**

The L.C.C. (Architect's Department) requires Architects and Building Surveyors interested in modernisation and conversion of older blocks of Council flats which are being undertaken in the General Division. Up to £1,090 according to qualifications and experience. Salaries at present under review. Holiday arrangements respected. Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council, AR/EK/48/59, County Hall, S.E.1. (1036.) 4219

**ARCHITECTURAL ASSISTANT** required by HAYES & HARLINGTON U.D.C. Salary within Grade A.P.T. II, i.e., £765-£880 per annum, plus appropriate London "weighting," 21-25 years £220 per annum, 26 years and over £30 per annum.

Candidates must have had a good general architectural experience and preference will be given to applicants who have passed the R.I.B.A. Intermediate examination. The Council is unable to assist with the provision of housing accommodation. Five-day week. Further particulars and conditions of service and form of application obtainable from the undersigned, which, when completed, must be returned by 1st June, 1959.

GEORGE HOOPER,  
Clerk and Solicitor.

Town Hall,  
Hayes, Middlesex. 4199

**LONDON COUNTY COUNCIL**

**ARCHITECTURAL ASSISTANTS** required up to £850 (at present under review). Full and interesting programme of houses, flats, schools and general buildings. Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council, AR/EK/43/59, County Hall, S.E.1. (923.) 4066



**BOROUGH OF ERITH**

Applications are invited for the following post:  
**ARCHITECTURAL ASSISTANT, A.P.T. I,** £40-£765 plus London weighting.  
Applications, with copies of two recent testimonials, should be delivered to the Borough Engineer and Surveyor not later than 1st June, 1959.

**J. A. CROMPTON,**  
Town Clerk.

Town Hall, Erith, Kent. 4278

**METROPOLITAN POLICE, Receiver's Office,**

requires:-  
(1) **ARCHITECTURAL DRAUGHTSMEN/WOMEN.** Scale £570 (age 21) - £900.  
(2) **TECHNICAL ASSISTANT,** Scale £720 (age 21) - £900, in connection with Police Housing and Non-housing building programme.  
Starting pay according to age. Applicants to have Ordinary National Certificate as a minimum qualification or to be of Intermediate R.I.B.A. standard. Five-day, 42-hour week; paid leave; canteen facilities.  
Apply, giving qualifications, experience, age and nationality, to Room 578, Receiver's Office, New Scotland Yard, S.W.1. 4199

**BOROUGH OF BROMLEY**

**ARCHITECTURAL ASSISTANT**  
Applications are invited for this appointment on salary scale A.P.T. II (£765-£880) plus London weighting.  
Applications, stating age, qualifications, experience, present appointment and salary, and the names of two referees, should reach the Borough Engineer by 25th May, 1959.

**LIONEL KAYE,**  
Town Clerk.

Municipal Buildings, Bromley, Kent. 4227

**SKIPTON URBAN DISTRICT COUNCIL**

**BUILDING AND QUANTITY SURVEYING ASSISTANT (or ARCHITECTURAL ASSISTANT)**  
Salary within Special Classes Scale (at present £720-£1,030) according to qualifications and experience. Established post for capital works (houses, shops, flats, municipal buildings).  
Person appointed will assist senior architectural assistant; experience in architectural work an advantage.  
House available. Five-day week in operation.  
Apply, stating age, qualifications, present salary, experience and names of two referees, to the Engineer and Surveyor, Town Hall, Skipton, by 25th May. 4206

**THURROCK U.D.C. (Engineer and Surveyor's Department)** require **ARCHITECTURAL ASSISTANT** under Architect to the Council. Salary - A.P.T. I/II: £610-£880 per annum. Good architectural experience necessary. Applicants must be capable of preparing working drawings in all categories and should have passed the Intermediate examination of the R.I.B.A. The Council have interesting projects in hand, including an Indoor Swimming Bath. Appointment pensionable. Applications, stating age, qualifications, and experience, and quoting three referees, to Clerk of the Council, Council Offices, Grays, Essex, by 26th May, 1959. Canvassing disqualifies. Relationship with members or Senior Officers of the Council must be disclosed. 4211

**LONDON COUNTY COUNCIL**

**ARCHITECTS AND BUILDING SURVEYORS** required for improvements, alterations and extensions. Jobs up to £20,000. Selected candidates responsible for surveys, schemes, working drawings, specifications and supervising contracts. Up to £1,990 (at present under review) according to qualifications and experience. Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council, AR/ER/46/59, County Hall, S.E.1. (927.) 4088

**Architectural Appointments Vacant**

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

**ASSISTANT of Intermediate/Final standard** required in Croydon office. Varied and interesting work. Five-day week holidays this year. Apply by letter to Hugh Macintosh & Partners, 33/35, High Street, Croydon. 3683

**ARCHITECTURAL ASSISTANTS** required about Intermediate standard. Opportunities for good all round experience. Please write stating age, experience and salary required. Box 336.

**REQUIRED** in Oxford office of W. H. Watkins, Gray & Partners, ASSISTANT to work on advanced Technical Laboratory. Apply in writing to 37, Catherine Place, S.W.1. or ring for appointment Vic 7761. 3955

**CITY OF LONDON** firm of Building Surveyors require **SENIOR ARCHITECTURAL ASSISTANT** for work on industrial and commercial projects. Scope for initiative and responsibility. Salary £800 to £1,100 according to experience. Box 4029.

**RONALD WARD & PARTNERS** require **ARCHITECTURAL ASSISTANTS** with contemporary outlook, and willing to use own initiative. Congenial working conditions. Five-day week. Apply, 29, Chesham Place, Belgrave Square, S.W.1. Telephone Belgrave 3361. 3985

**WEST END Architects** urgently require a competent **ARCHITECTURAL ASSISTANT** of Final standard with a minimum of four years' experience, for interesting and varied work including Churches, Offices, Homes for the elderly, etc. Holiday this year and salary by arrangement. Telephone WELBECK 8863 for appointment. 3987

**EXPERIENCED ASSISTANT** required. Medium size office, varied work. Write or telephone Harker & Hall, L./F.R.I.B.A., 13, Welbeck Street, W.1 (Welbeck 0061). 4027

**QUALIFIED ARCHITECTURAL ASSISTANT** required for work in mixed rural practice, S.E. Cornwall. Scope for expansion. Would consider possibility of partnership. Pension scheme available. Apply with references and particulars to Henry S. Tucker, A.R.I.C.S., The Parade, Liskeard, Cornwall. 4056

**JACK GODFREY-GILBERT, F.R.I.B.A.,** requires an **ASSISTANT** not necessarily qualified but willing and able to take responsibility. Good prospects and permanent position in small but very busy private practice with branch office shortly starting on South Coast. Please apply in writing with full particulars to: 3, The Broadway, Wimbledon, S.W.19. 4379

**SENIOR** and other **ASSISTANTS** able to take responsibility required in South Kensington office. Varied work-holiday arrangements kept. Write experience and salary required to Box 4378.

**BURLES & NEWTON** require an **ARCHITECTURAL ASSISTANT** between Intermediate and Final standard. The appointment offers opportunity for experience and initiative on a wide range of projects, including schools, churches, housing and commercial buildings. Write or telephone for appointment to 25, Bedford Row, W.C.1. CHA. 9538. 4376

**ARCHITECT'S** Office with modern approach to design requires **ASSISTANTS** of Intermediate and Final standard, London or Reading, for interesting and varied work. Write Box 4374.

**JUNIOR ARCHITECTURAL ASSISTANT** required. Intermediate standard, with some office experience. Please reply, giving age, experience and salary required, to Ardin & Brookes, 129, Mount Street, W.1, or telephone GROS. 7728. 4373

**FARMER & DARK** have vacancies for **SENIOR** and **ASSISTANT ARCHITECTS** for a variety of projects in the U.K. and Overseas. Write with full particulars and salary required to Farmer & Dark, Romney House, Tufton Street, Westminster, S.W.1. 4372

**ARMSTRONG & MACMANUS** require **JUNIOR ASSISTANTS** to assist small team on interesting and varied work. Telephone WELBECK 2273 for appointment. 4370

**ARCHITECTURAL ASSISTANTS** (Senior and Junior), with some experience, required for busy expanding Practice in Manchester. Should be keen and capable of doing various types of schemes under supervision. Opportunity for developing own ideas on interesting projects. Pleasant office, and good salary offered. Write with brief details, in first instance, to Box 4366.

**FOUR SENIOR ASSISTANT ARCHITECTS** required to lead groups working on Central area redevelopment schemes: must have considerable experience. Salary £1,000-£1,250. Details to Covell & Matthews, 34 Sackville Street, W.1. REGent 2291. 4383

**GEORGE WIMPEY & CO., LIMITED**  
The Architects Department's current work covers all types of technical, industrial and domestic projects.

Appointments are available for a wide range of experience, particularly for Assistants who appreciate the contribution good design can make towards efficient construction and are interested in applying cost knowledge to detailing.  
Appointments, on a permanent basis, are immediately available at Head Office for **ASSISTANT ARCHITECTS** and **ARCHITECTURAL ASSISTANTS**.

Salaries will match qualifications and experience and, following a probationary period, there is a pension scheme available.

Applicants should write to E. V. Collins, A.R.I.B.A., 27, Hammersmith Grove, London, W.6. 4367

**W. J. SIMMS SONS & COOKE LTD.,** require the services of an **ASSISTANT** in their architectural department. Applicants must have had wide experience in General Building Construction. Consideration will be given to applicants in the age group from 35 to 55 years of age. Apply to the Staff Architect, W. J. Simms Sons & Cooke Ltd., Haydn Road, Sherwood, Nottingham. 4364

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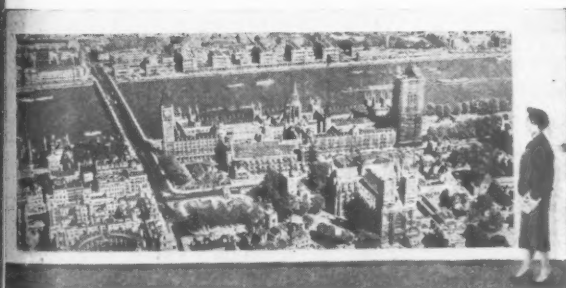
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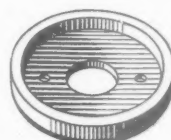
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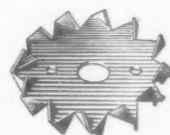


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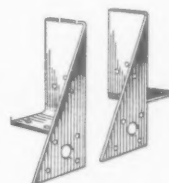
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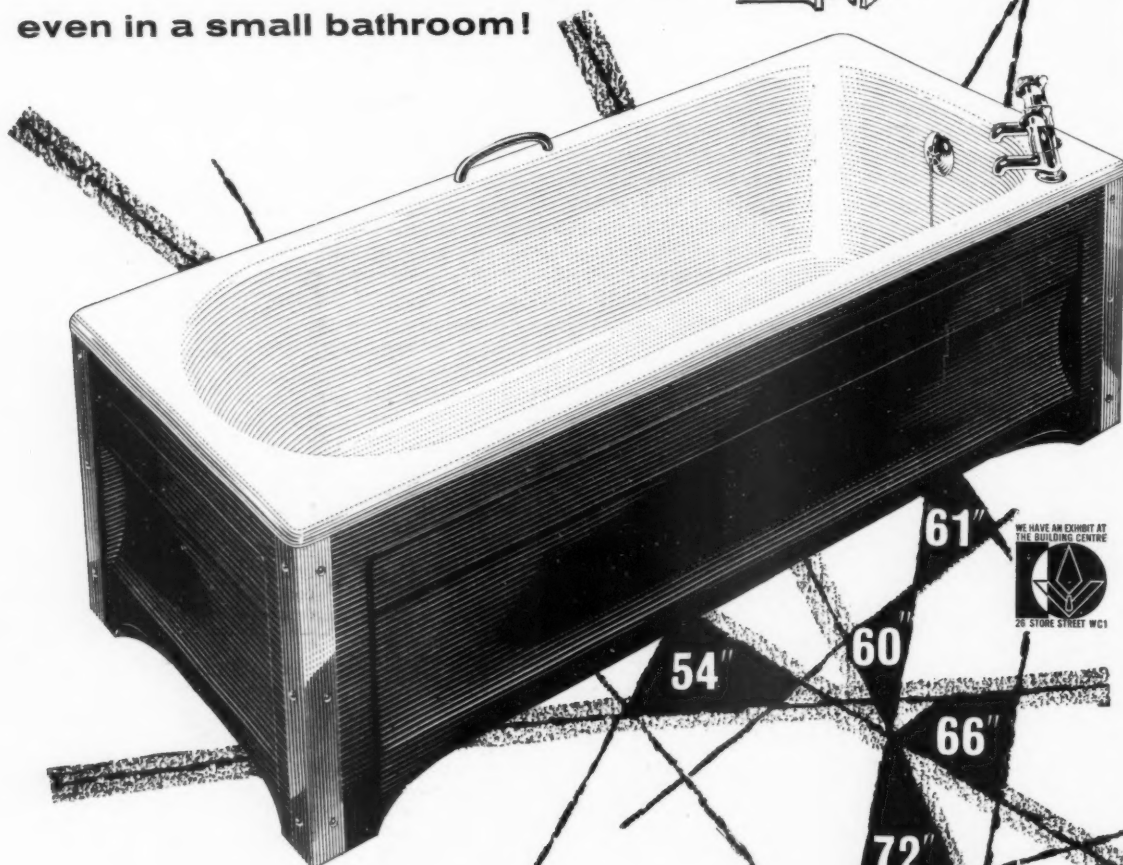
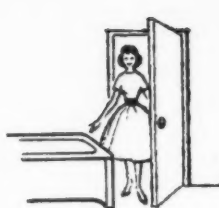
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