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THE ARCHITECTS' JOURNAL

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standard contents

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

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

IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1.	Sloane 3158/1601
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
I of Arb	Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197/5176
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
IWA	Inland Waterways Association. 14, Great James' Street, W.C.2.	Chancery 7718
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MARS	Modern Architectural Research Group (English Branch of CIAM) Secretary: Gontran Goulden, Building Centre, 26, Store Street, W.C.1.	Museum 5400
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. 23, Saville Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James' Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94-98, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 4813
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 8161
NCBMP	National Council of Building Material Producers, 10, Princes Street, S.W.1.	Abbey5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4451
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4341
NPL	National Physical Laboratory. Head Office, Teddington	Molesey 1380
NSA	National Sawmilling Association. 14, New Bridge Street, E.C.4.	City 1476
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Edinburgh 20396
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1.	Whitehall 5322/9242
RFAC	Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SCR	Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8.	Western 1571
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3.	Mansion House 3921
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1.	Langham 7616
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	Langham 1984
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 75, Cannon Street, E.C.4.	City 5051
WDC	War Damage Commission. 6, Carlton House Terrace, S.W.1.	Whitehall 4341
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988

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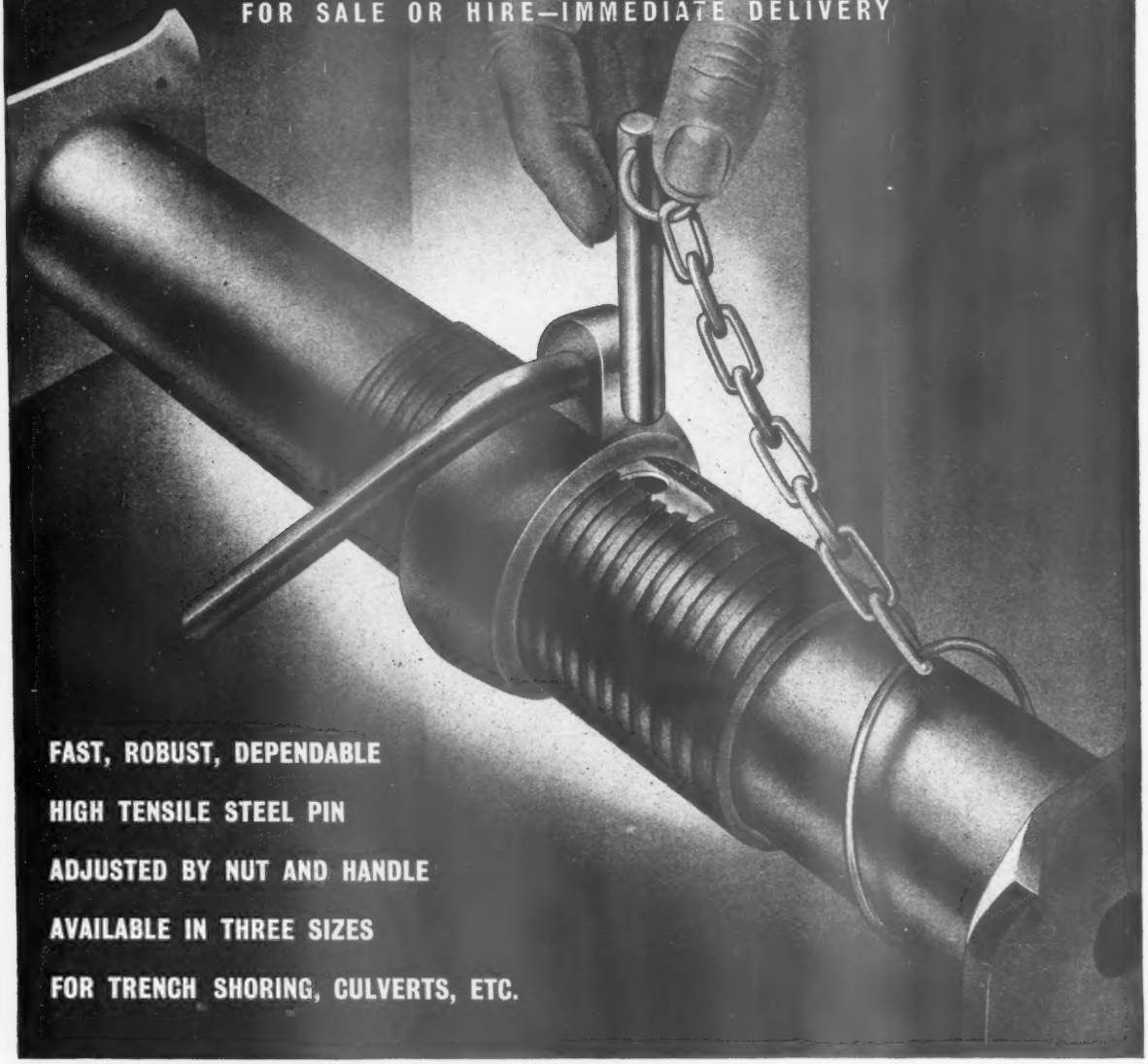

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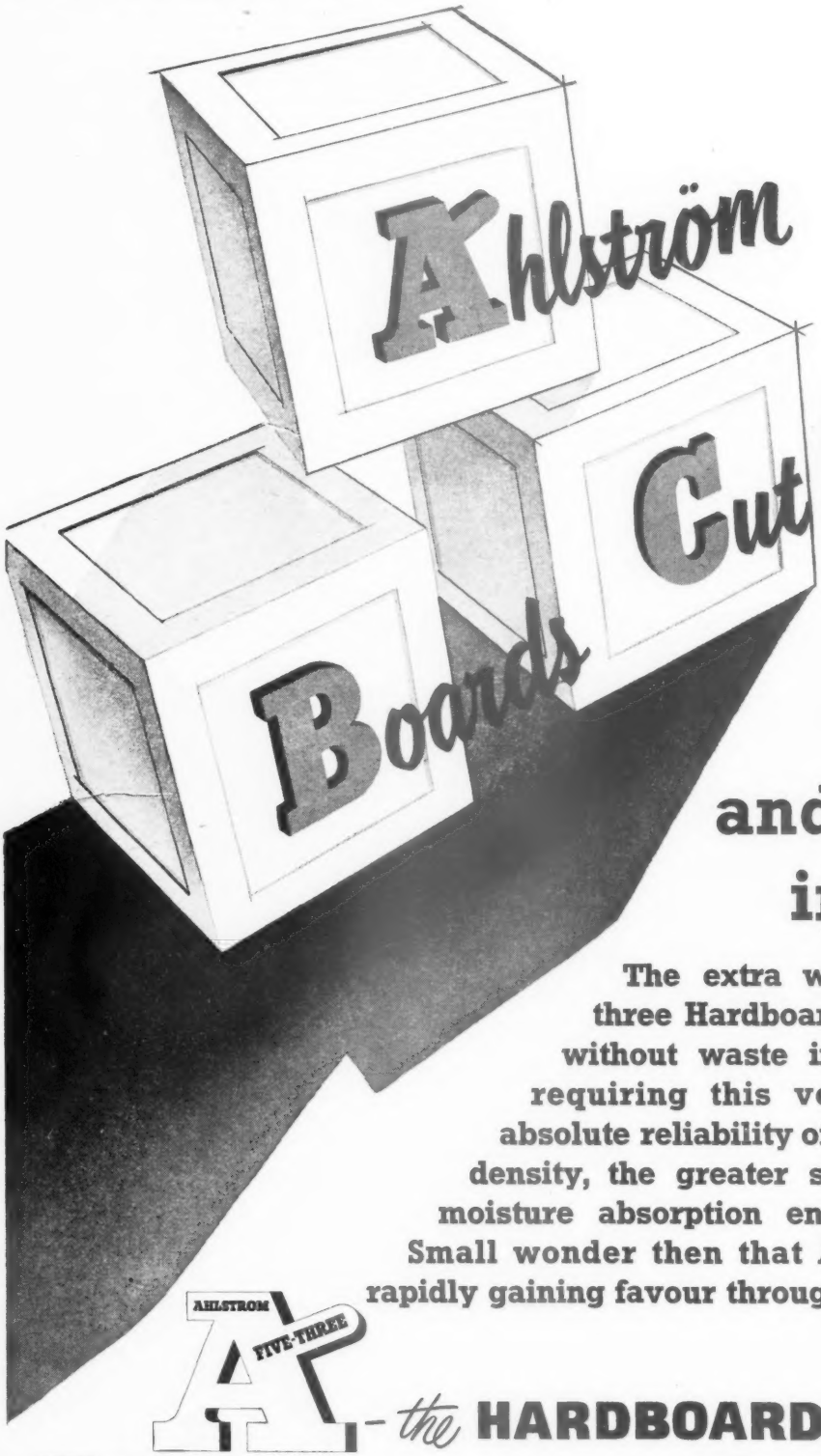

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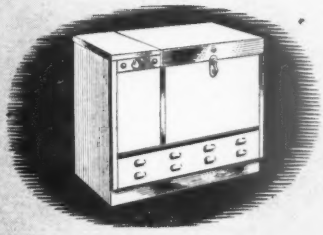

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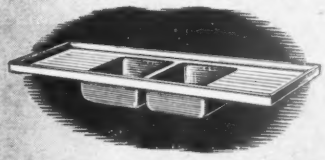

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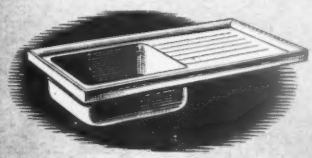

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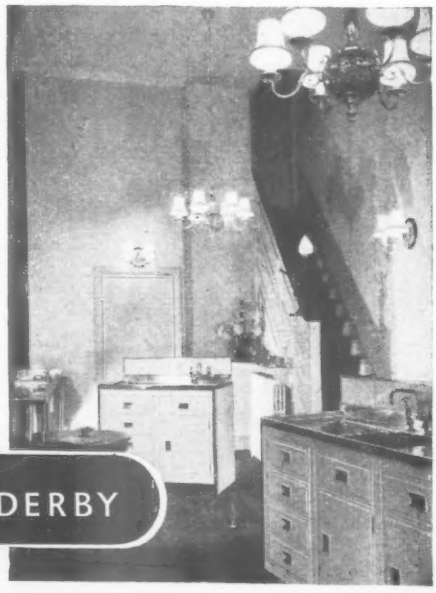

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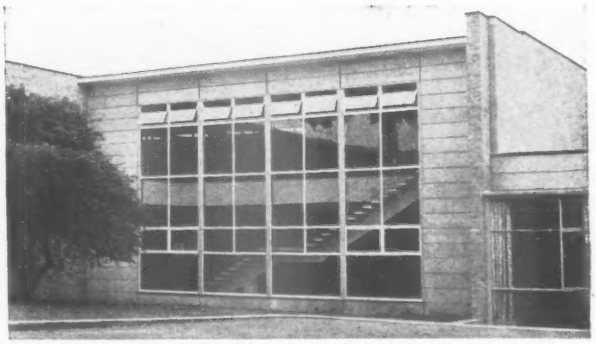

A view showing the high-level windows operated by Arens controls which run down to the level of the staircase at the Barclay School, Stevenage.

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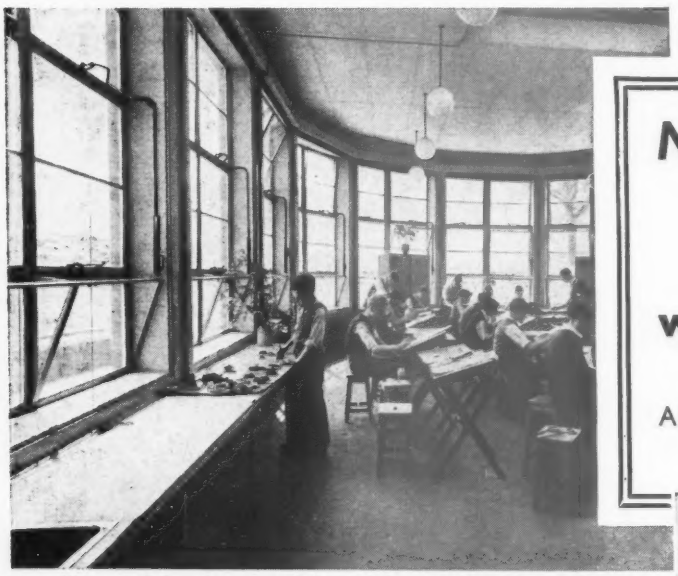

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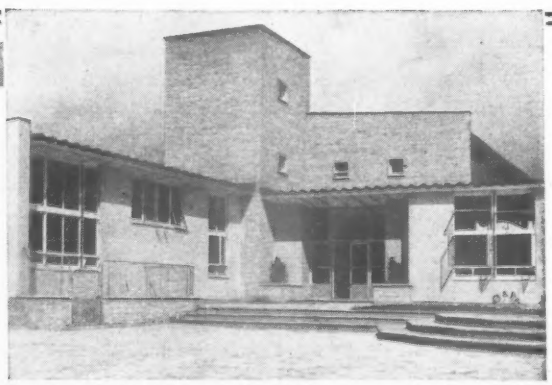

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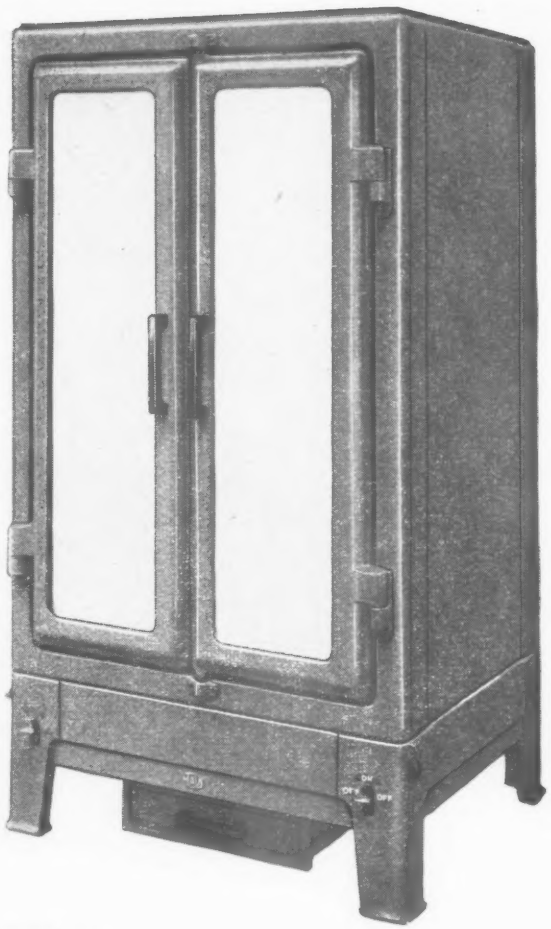
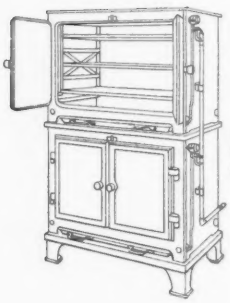
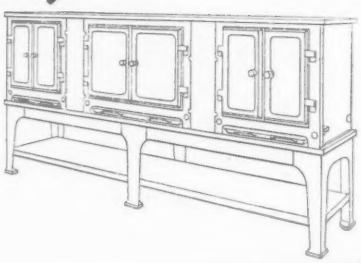


other types of roasting oven



A Vertical Battery of two ovens on a short stand.



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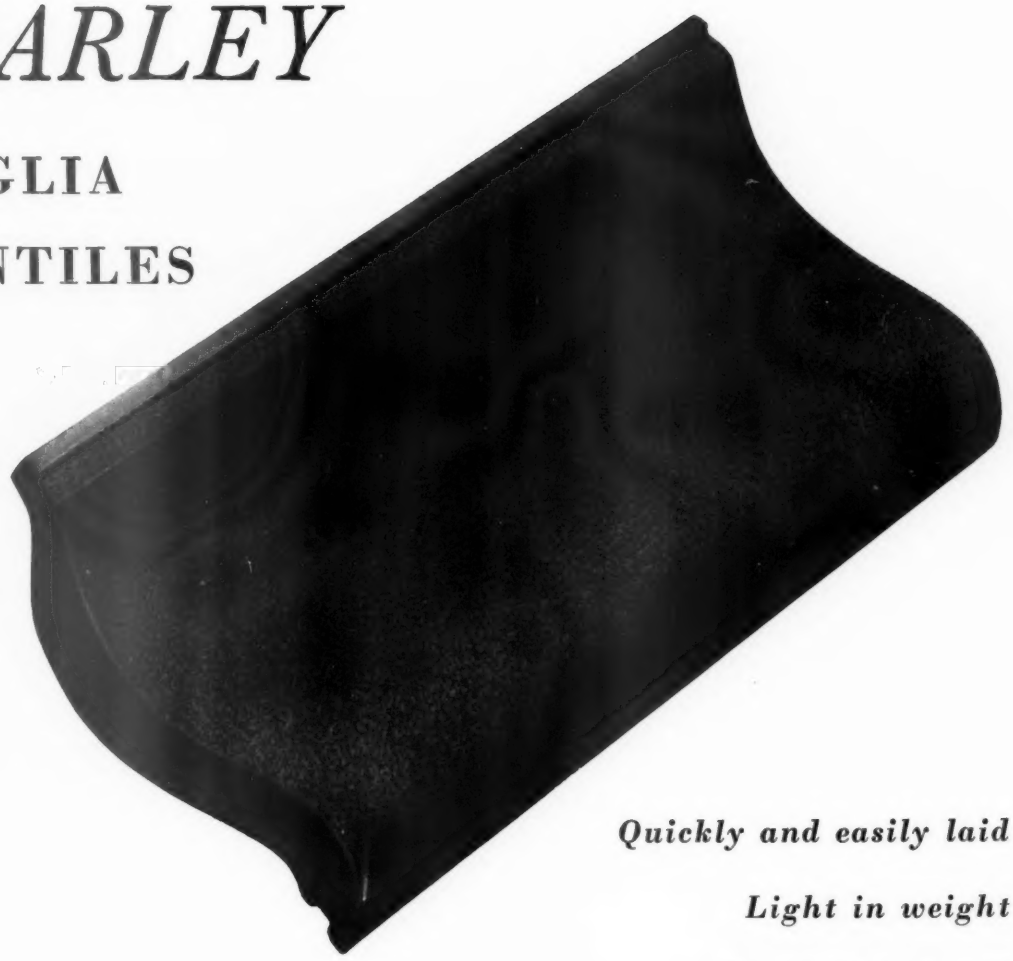

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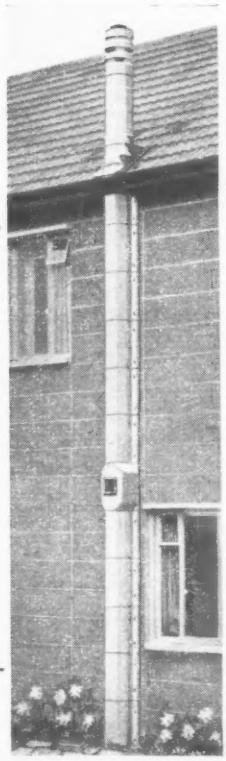

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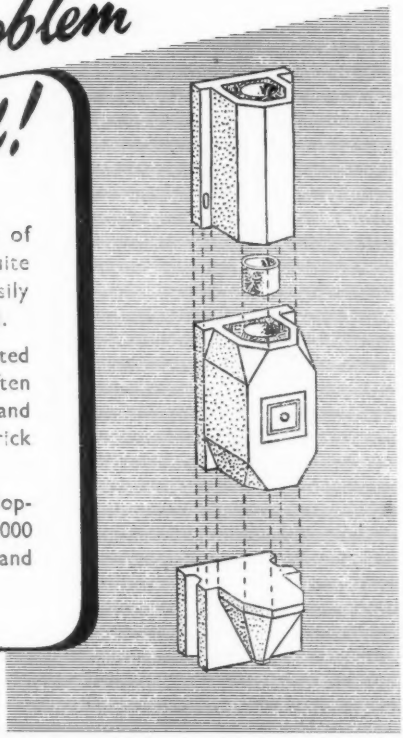

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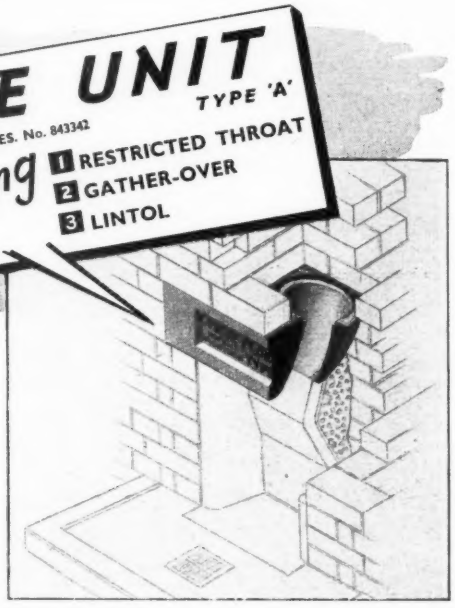

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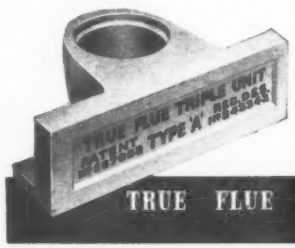

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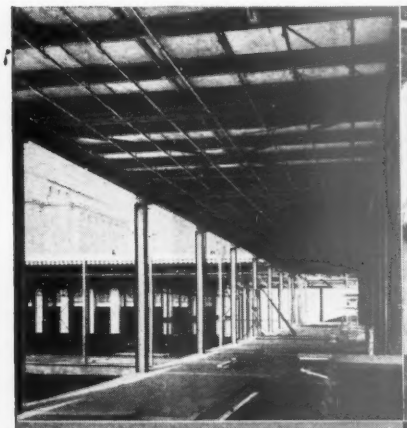

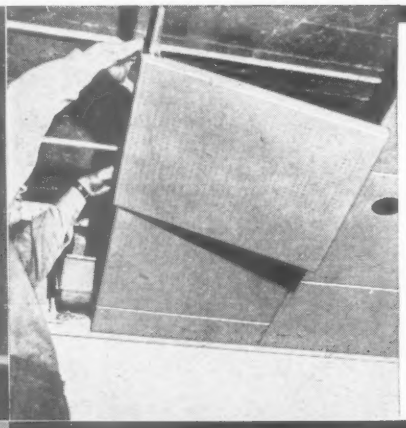

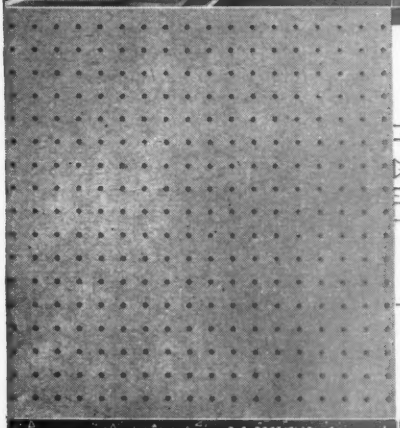

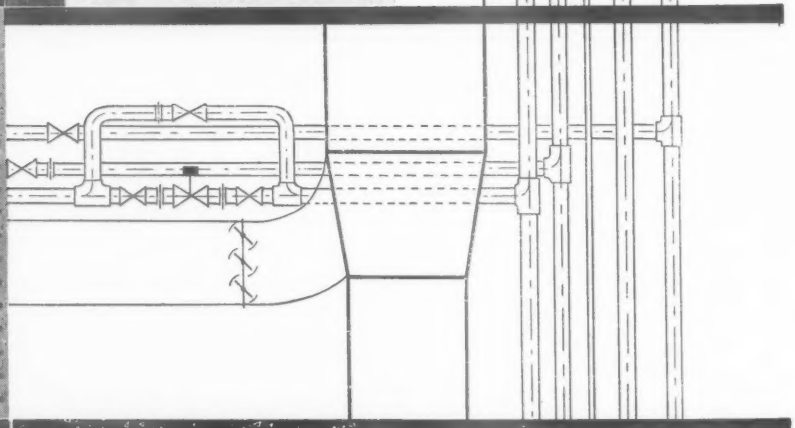

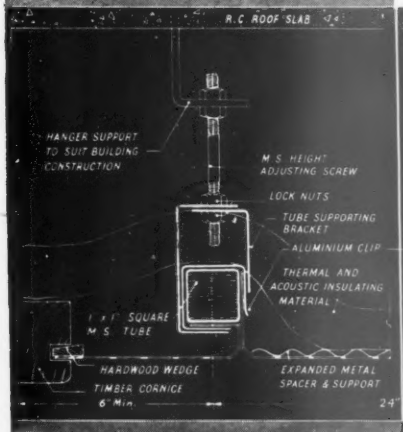

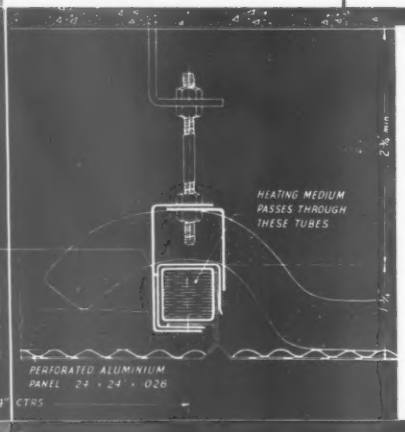

FRENGER—*three ceilings in one*

Here is a ceiling, that is *first:* a radiant panel heating unit with an immediate response to changes in temperature; *second:* a most efficient sound absorbing surface; and *third:* a suspended, removable ceiling that serves to conceal a mass of ugly pipes, wiring, ducts and other services while leaving them completely accessible.

The ceiling is pre-fabricated and made up of a grid piping system supporting perforated, square, metal panels of aluminium and blanketed by insulating material. A Frenger can be installed in existing buildings with very little structural alteration and is easily adapted to fit any shape of room or lighting and ventilation system.

Technical leaflet with full data from :—

FRENGER CEILINGS LTD., 67 GREAT RUSSELL STREET, W.C.I. CHANCERY 5534

Now YOU CAN CHOOSE ON PRICE AS WELL AS QUALITY

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1. They won't rust and can't cause ugly wall stains.
2. They don't need painting.
3. They are lighter to transport and handle and cheaper to erect.
4. Will not crack even in the coldest spells.
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OBTAINABLE FROM BUILDERS' MERCHANTS, WHOLESALE IRONMONGERS, ETC.

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'Hiduminium' is a Registered Trade Mark

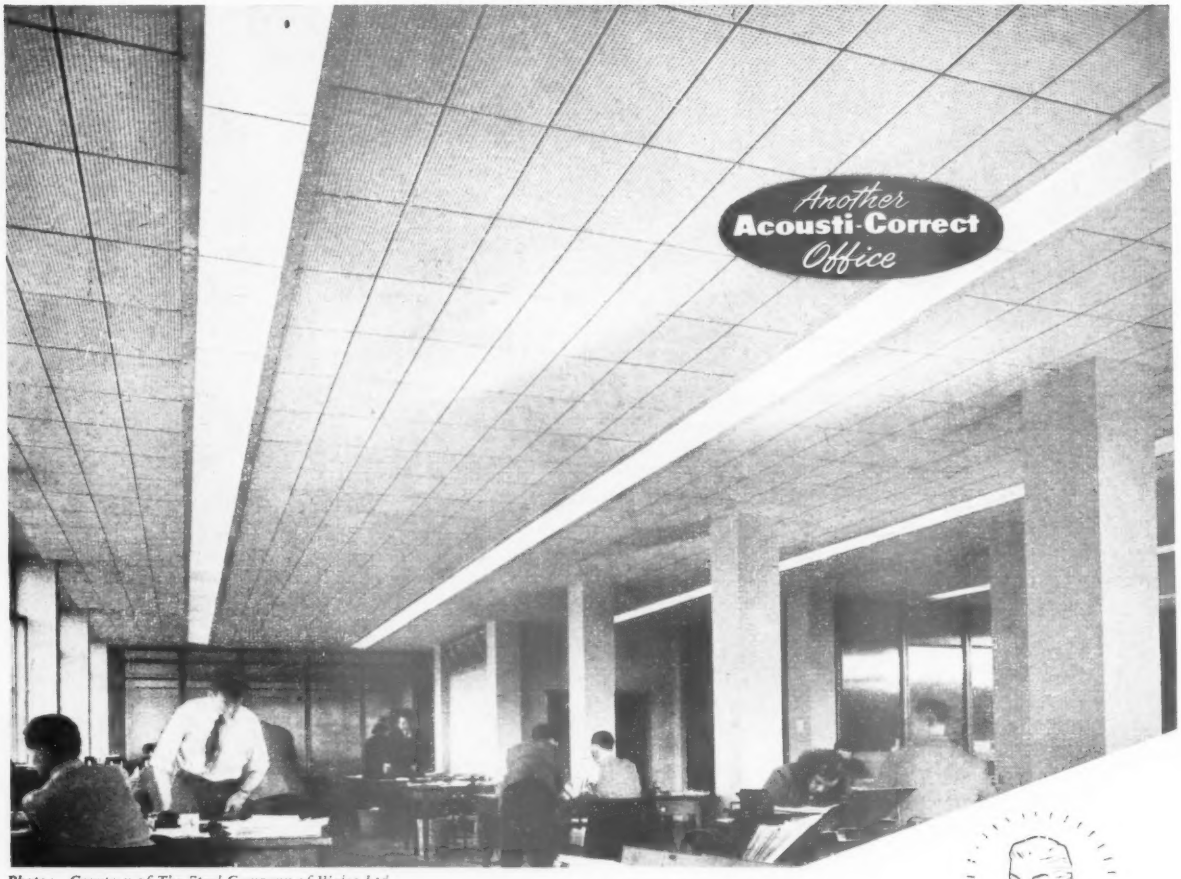

Photo: Courtesy of The Steel Company of Wales Ltd.

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. . . quiet has changed the office

There's moderation in all things. Because no one expects a cathedral hush in a busy office, there's no reason to accept noise as normality. For noise means trouble. Efficiency slumps and mistakes increase; concentration falls off and absenteeism rises. To put things right you need quiet — and that is why offices all over the world have installed Acousti-Celotex Sound Conditioning. These sound-absorbing tiles mop up unwanted reverberation, bringing noise down to comfortable levels, creating conditions in which people can *work*. Acousti-Celotex Tiles can be installed at moderate cost, with little or no interruption to normal routine. They need no maintenance and their efficiency is unimpaired by repeated painting and decorating. If you have a sound problem consult your regional distributor of Acousti-Celotex Tiles.

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Made in Great Britain by

CELOTEX LIMITED, NORTH CIRCULAR RD., STONEBRIDGE PARK, LONDON, N.W.10. Telephone: ELGar 5717

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Frederick Gibberd Esq., F.R.I.B.A., M.T.P.I.,
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25 factories

so far completed . . . .

all with natural ventilation

planned by **COLT**

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This is one of several major industrial developments where COLT Ventilation equipment has been used. Others have been the Silicosis, Advance and Standard Factory Programmes and the Ex-Wartime Factories involving approximately 100 Factories under Sir Percy Thomas & Son F/A.R.I.B.A. The Wales and Monmouthshire Industrial Estates where for some twenty factories COLT Ventilation equipment was specified by Jonah Arnold & Smith. The Remploy Factory Programme under the Ministry of Works where nearly one hundred factories were ventilated by COLT. COLT Ventilation equipment has also been specified for many further contracts on Industrial Estates at Slough, Stevenage, Crawley, Trafford Park; for the Northern Ireland Advance Factory Programme, Scottish Industrial Estates, The Ministry of Supply Factories and Irish Estates Ltd.

FREE MANUAL *with full specifications of the wide range of Colt Ventilators is available on request from Dept. A.20/154.*

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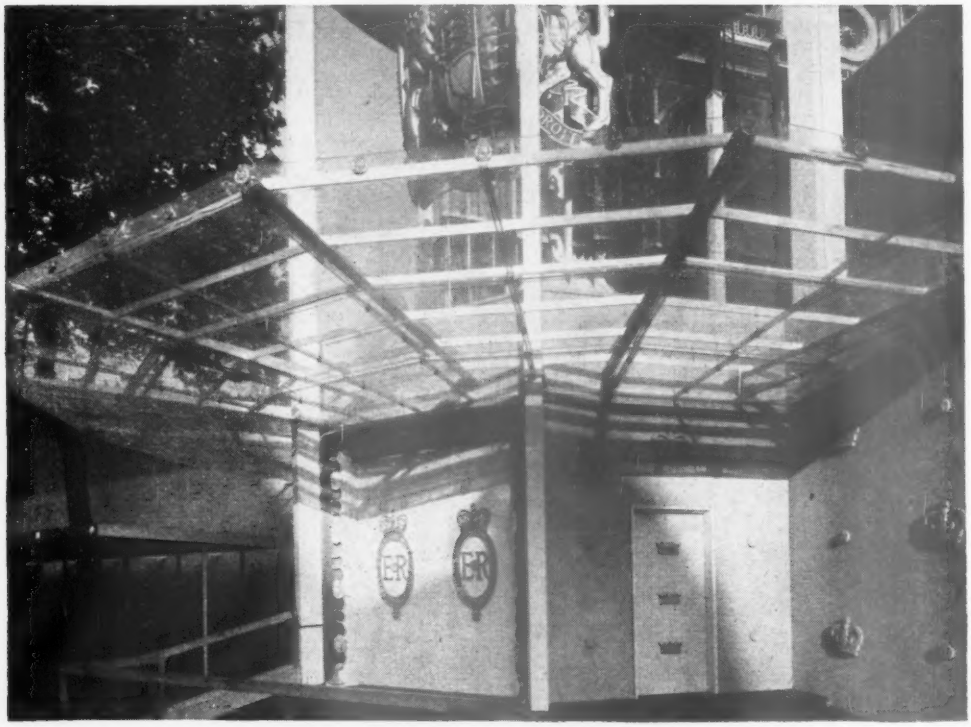
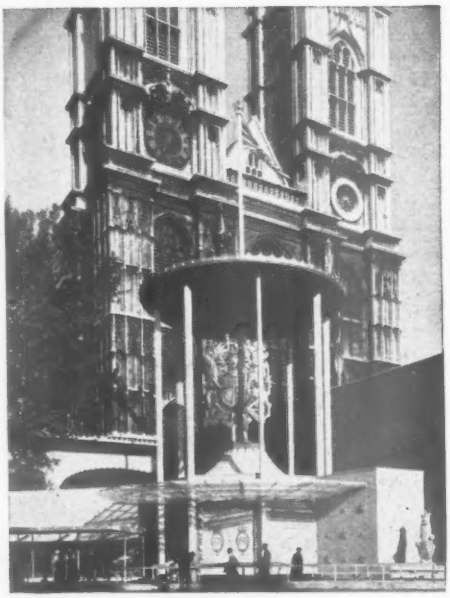


'PERSPEX' for a Royal Occasion

The canopy over the entrance of the Coronation Annexe to Westminster Abbey was made of tough, light, transparent 'Perspex' acrylic sheet. 'Perspex' contributed much to the lightness and delicacy of Mr. Eric Bedford's design, which was carried out for the Ministry of Works by Starkie Gardner Ltd.



'Perspex' sheet—flat and corrugated—is found wherever a lasting, quickly-fitted, and efficient daylighting installation is required.

'Perspex' is the registered trade mark for the acrylic sheet manufactured by I.C.I.

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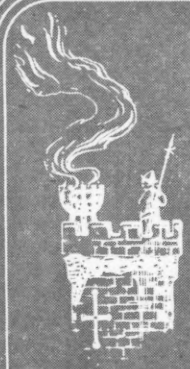

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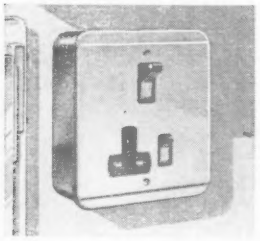
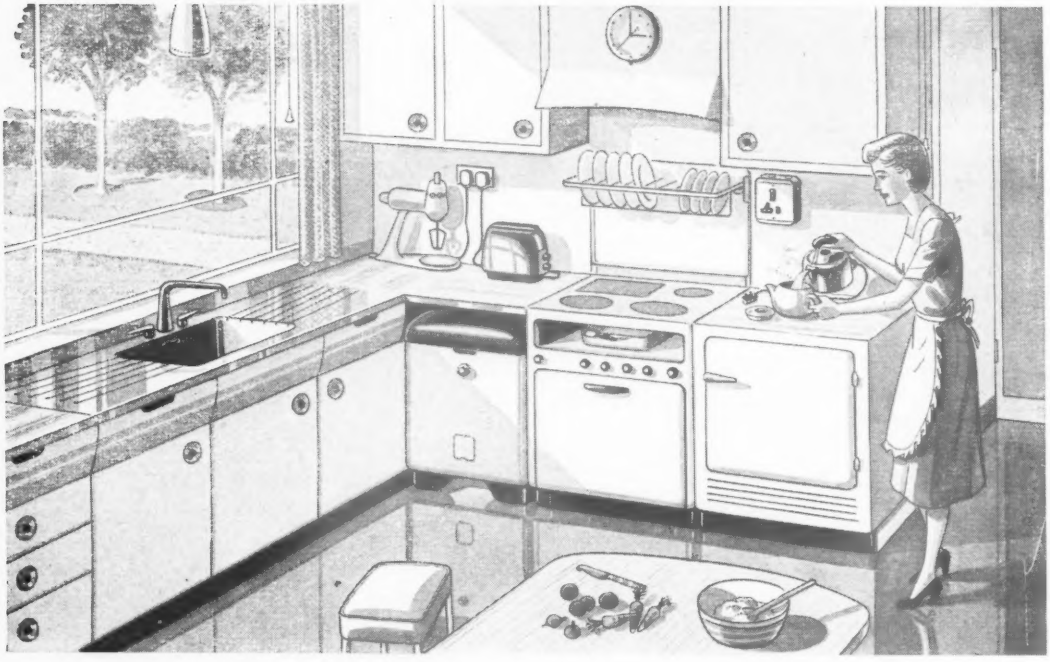
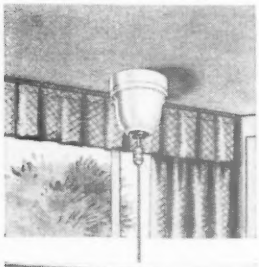
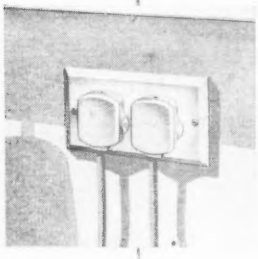


Contemporary Kitchens







Illustrations are :
5080 30 amp. Surface Cooker Control unit to BS 1833.
3101 White 5 amp. Surface Ceiling Switch.
731 646 White 13 amp. Two-gang Flush Socket-outlet.

NOWHERE do we see the changing pattern of life more clearly than in the modern kitchen. Contemporary techniques of design and manufacture have made the kitchen a joy to see—and an even greater joy to work in. How apt then that MK accessories should complete the picture, bringing light, heat and power to the service of the housewife. In design, manufacture and appearance they are perfectly matched to their task.

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★ BIRMID is produced to BSS design throughout.

★ All pipes are fitted with cast-on sockets.

★ All sockets are fitted with BIRMID patented projecting ears.

★ Pipes are available from 1ft. to 18ft. in length, socketted.

All the above advantages are offered at highly competitive prices.

BIRMID
The ORIGINATORS of
ALUMINIUM ALLOY RAIN-WATER GOODS

BIRMID RAIN-WATER GOODS

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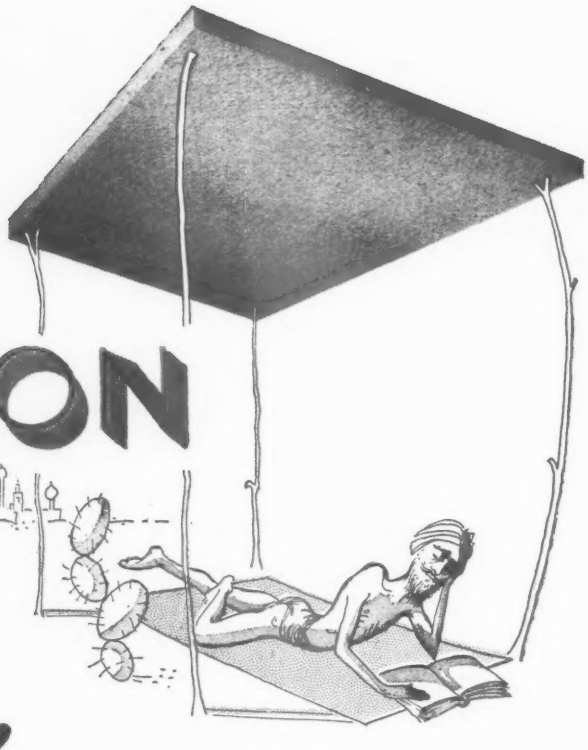

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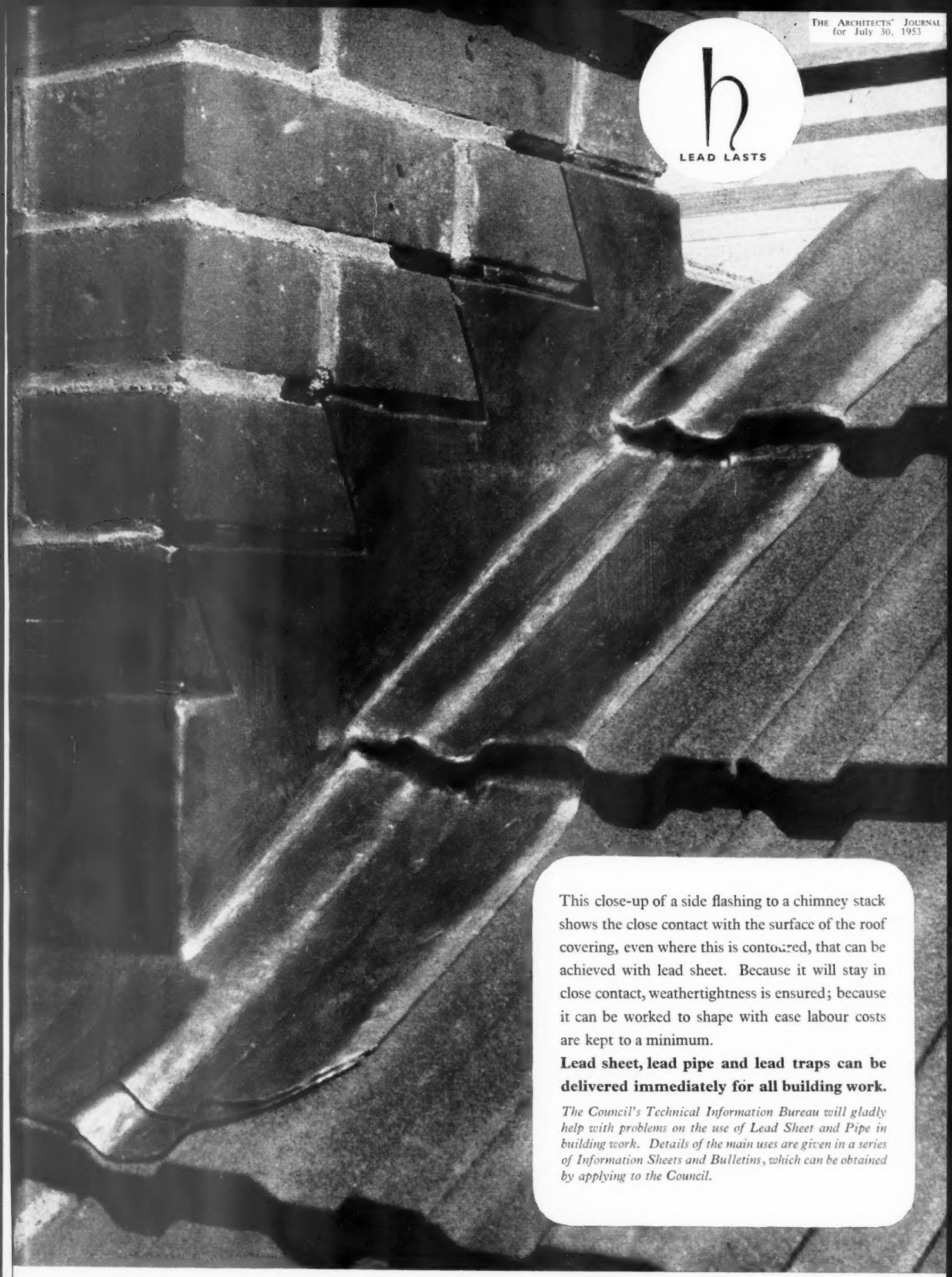

This close-up of a side flashing to a chimney stack shows the close contact with the surface of the roof covering, even where this is contoured, that can be achieved with lead sheet. Because it will stay in close contact, weathertightness is ensured; because it can be worked to shape with ease labour costs are kept to a minimum.

Lead sheet, lead pipe and lead traps can be delivered immediately for all building work.

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

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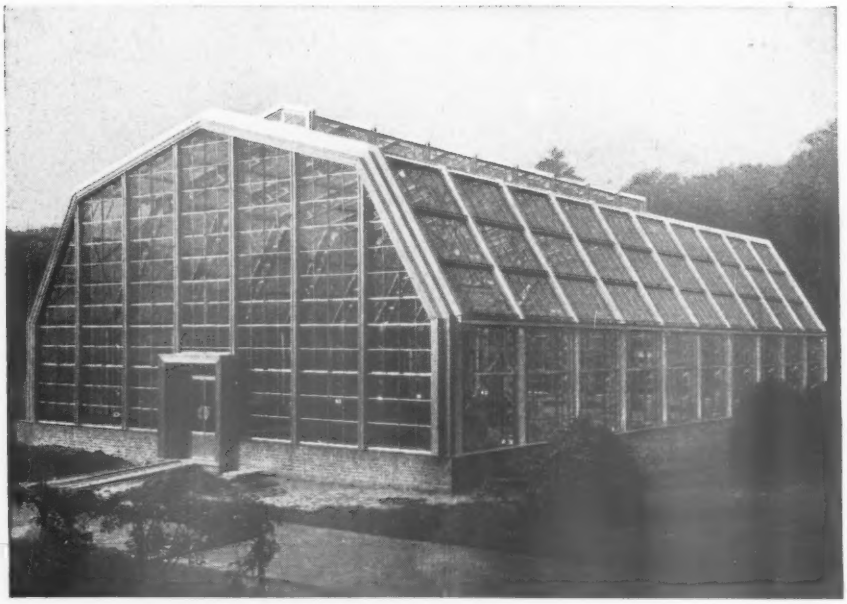
B93/12

CRITTALL WINDOWS



THE NEW AUSTRALIAN PLANT HOUSE, KEW

for

THE ROYAL BOTANIC SOCIETY

Architect: F. L. ROTHWELL (of the Ministry of Works)

This house was made and erected by the Crittall Manufacturing Company Ltd. It is constructed from Standard Aluminium window or roof glazing sections on a lattice framework of specially designed members. The ribs are formed of pressed aluminium sheet.

The dimensions are: Length 90 ft. 0 ins. Width 52 ft. 0 ins.

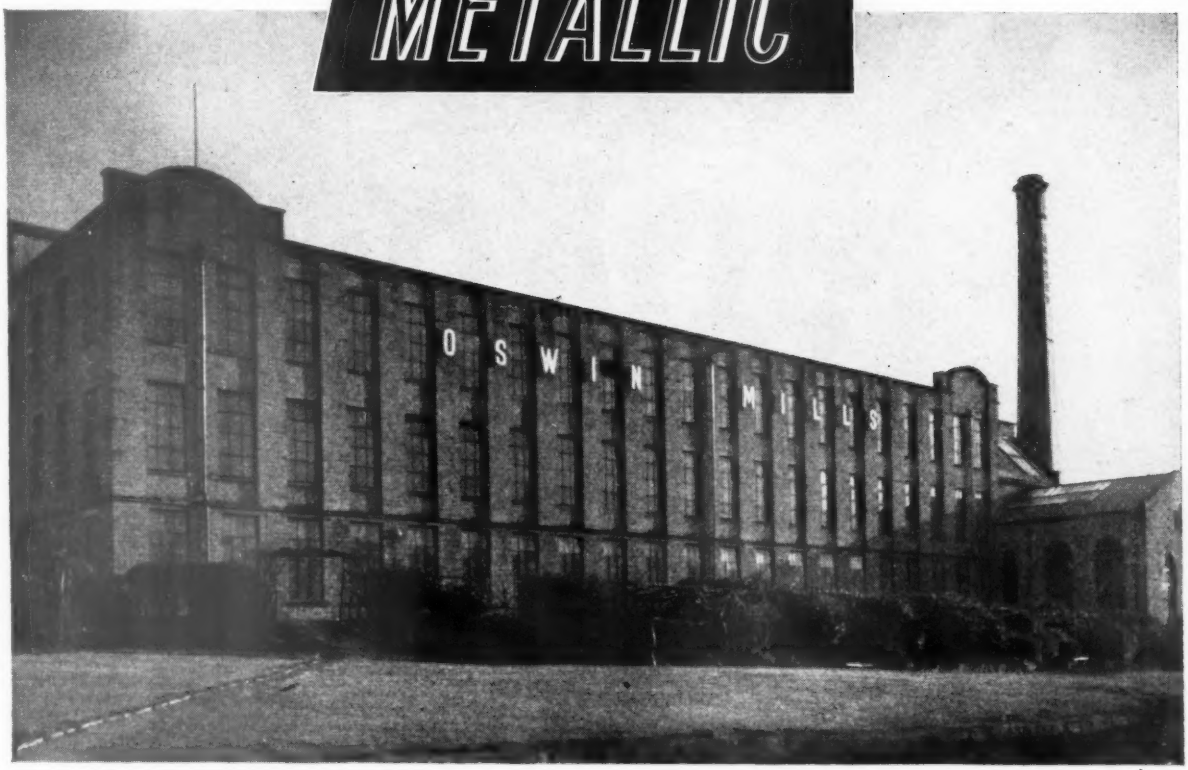
Height 33 ft. 6 ins. Total floor area: 4,680 sq. ft.

Other Crittall products in aluminium include purpose-made anodised aluminium casements, double-hung sash, and sectional greenhouses and garden frames.

THE CRITTALL MANUFACTURING CO. LTD · BRAINTREE · ENGLAND

CONDUIT & FITTINGS SUPPLIED BY

METALLIC



Oswin Mills, Frizinghall, Bradford

Photo by courtesy of Samuel Rushworth Ltd.

A TI COMPANY

It may be a School, it may be a Factory, a Power Station or a Housing Estate, but more often than not the electrical specification will be—METALLIC.

This Yorkshire mill is no exception, being fitted throughout with METALLIC Conduit and Fittings—unequalled for quality and consistent accuracy.

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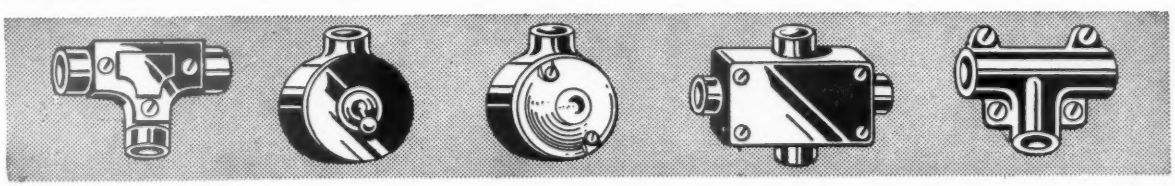

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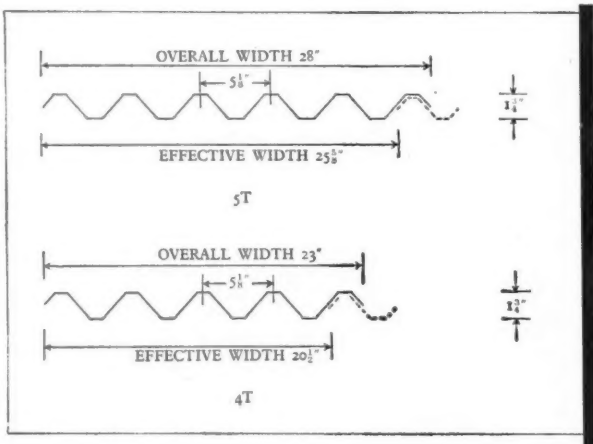
'Rigidal'

Trough Section

corrugated aluminium sheet

'Rigidal' Trough Section sheet, manufactured in two widths and two gauges, is capable of spanning purlins at up to 9′ 0″ centres and may be used on roof pitches as low as 9°. Curved sheets can be supplied to a minimum radius of 8′ 0″.



Purlin spacings and recommended maximum design loads

Purlin Spacing	Design loads (lb./sq. ft.)	
	18 swg	19 swg
6′ 0″	87	71
6′ 6″	76	61
7′ 0″	64	52
7′ 6″	56	46
8′ 0″	49	40
8′ 6″	44	36
9′ 0″	40	32
9′ 6″	36	28
10′ 0″	32	25
10′ 6″	28	*

**Not recommended*

Notes 1. The above design loads are based on a maximum working stress of 11,000 lb./in.² giving a factor of safety of 2 on the 0.1% proof stress (yield).
2. The zigzag line indicates the maximum purlin spacings which may be employed when working to B.S. Code of Practice C.P.3., Ch. V Para. 7b. Use of purlin spacings below the line depends upon the pitch of the clad surface, the maximum spacings shown being those recommended for vertical walls.
3. The recommendations tabulated above are based on an assumed minimum roof pitch of 10°, with sheets fixed in accordance with recommended practice, including seam bolts at 18″ centres.

'Rigidal' sheet lights can be supplied to match Trough Section sheet.

The British Aluminium Co Ltd

NORFOLK HOUSE ST JAMES'S SQUARE LONDON SW1

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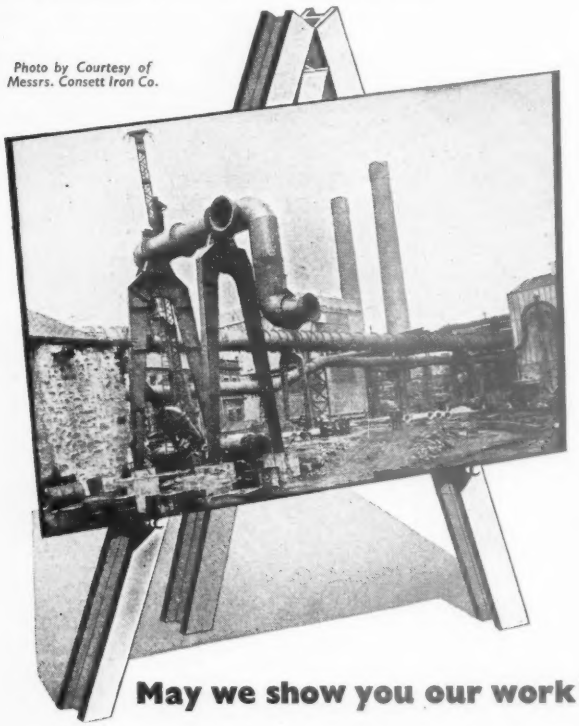
Photo by Courtesy of Messrs. Consett Iron Co.



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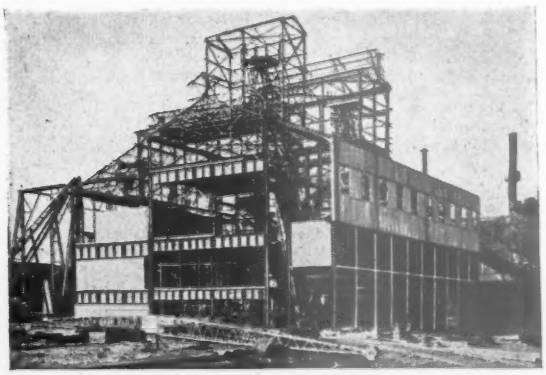


Furnace Plant

LONDON OFFICE: Regent House, Kingsway, W.C.2. Tel.: HOLborn 9811

ELECTRICITY for more prosperity

PAST

There were only six occasions during each of the past two winters when the demand for electricity exceeded the available supply. In those periods, interruptions by power cuts were brief and affected relatively few people.

The first task of British Electricity—restoration of the pre-war reliability of electricity supply—has, in fact, been substantially achieved. Supply service will improve further in the years ahead.

PRESENT

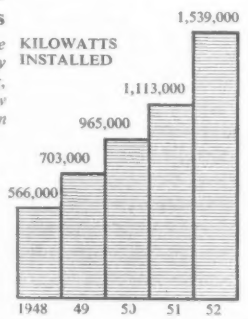
Today there is plenty of electricity for all consumers, industrial, commercial and domestic. The power stations are producing only about half their full potential output during the working week; at weekends there is a still larger surplus capacity.

FUTURE

This vast potential electricity supply — approximately equal to the 57,000,000,000 units sent out from the power stations last year — is on tap at the touch of a switch.

Five years' Progress

In the five years since the British Electricity Authority came into being, record amounts of new generating plant have been installed each year.



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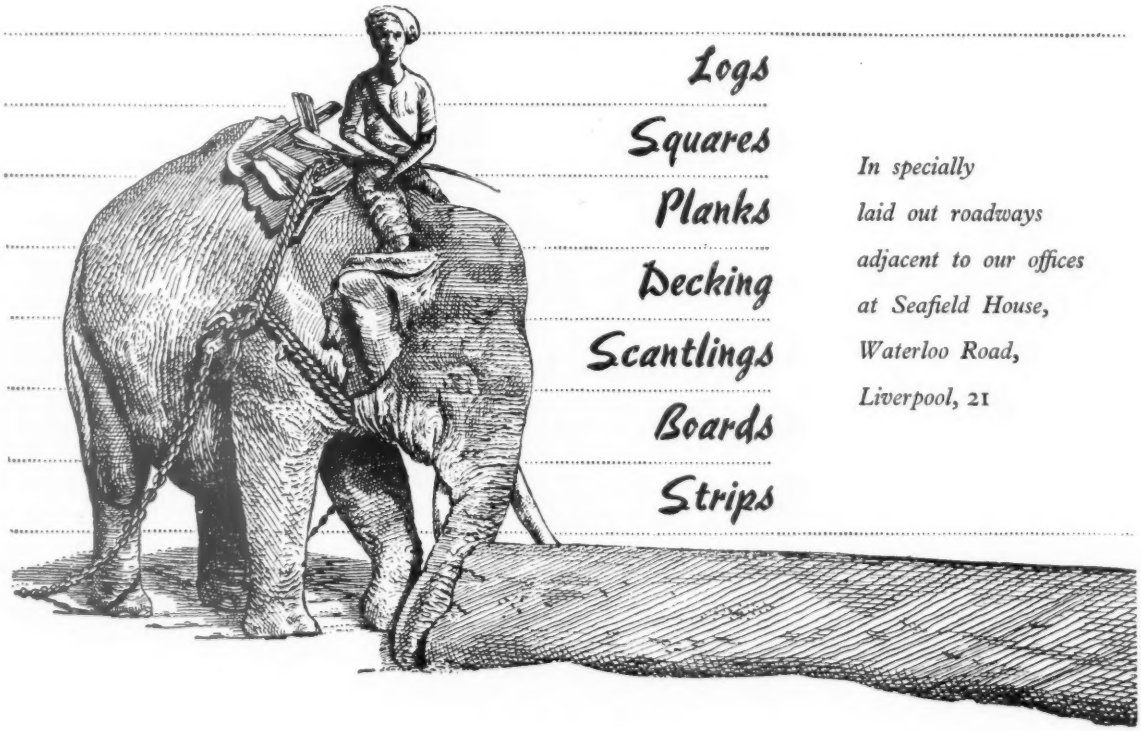

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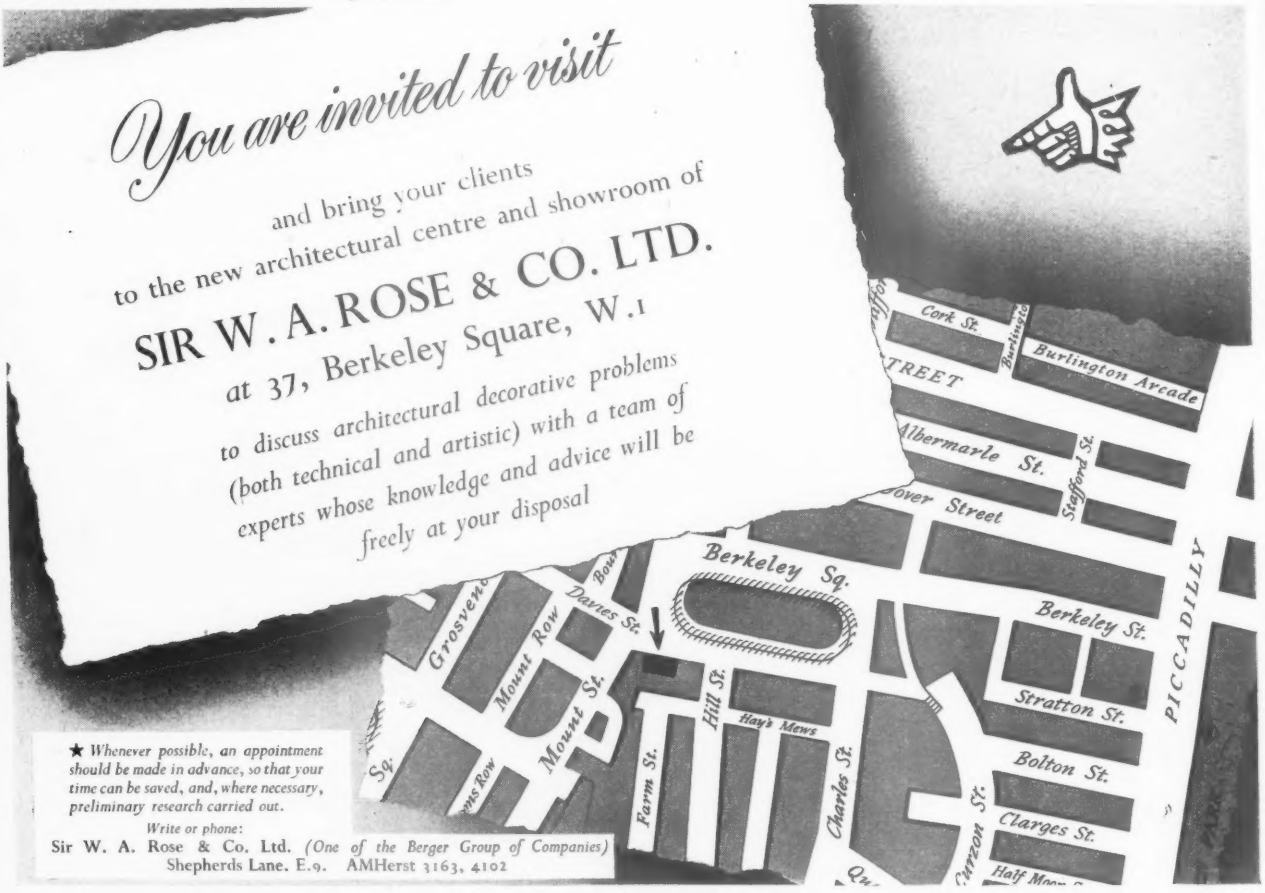

★ *Whenever possible, an appointment should be made in advance, so that your time can be saved, and, where necessary, preliminary research carried out.*

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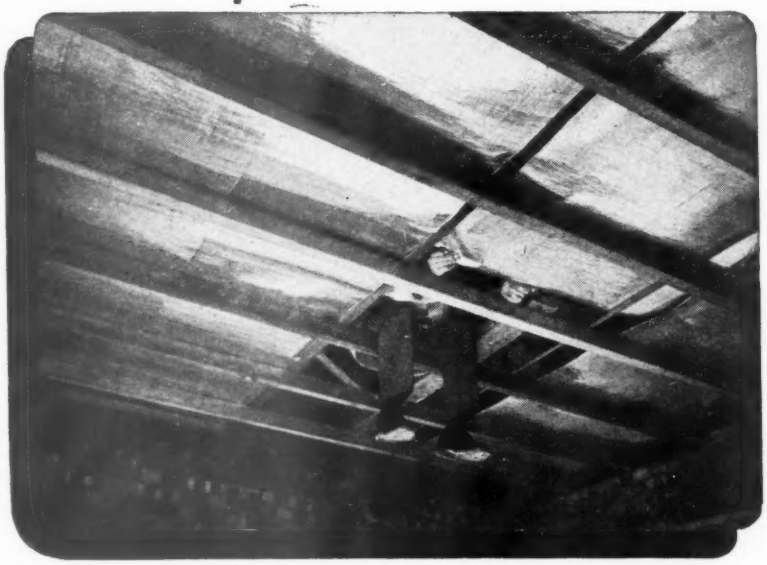

Illustrating single-sided sisalation being applied over ceiling joists in a traditional house.

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See Folder No. 116 *Architects' "Classifile"*

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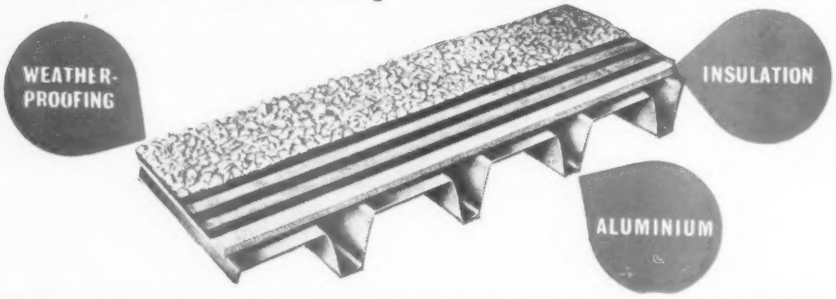

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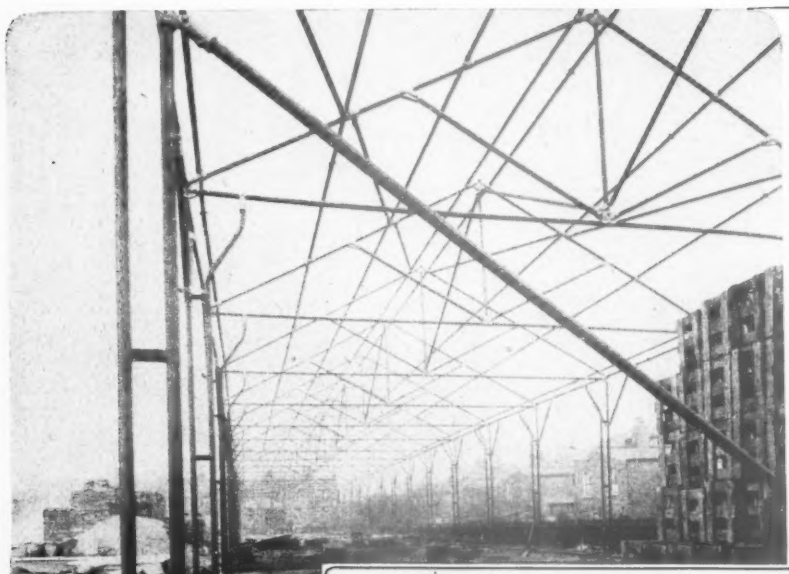

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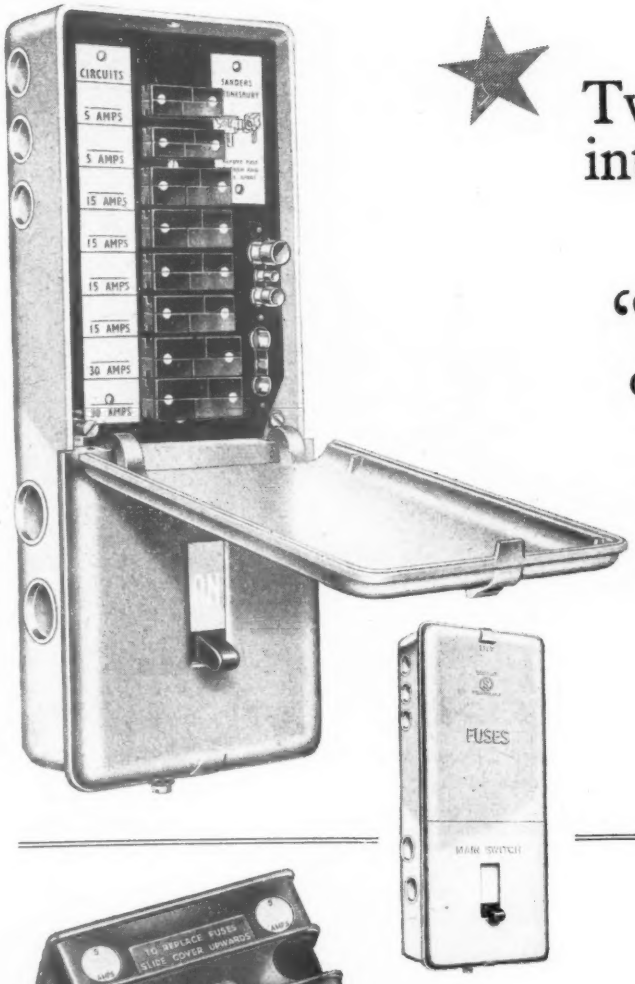

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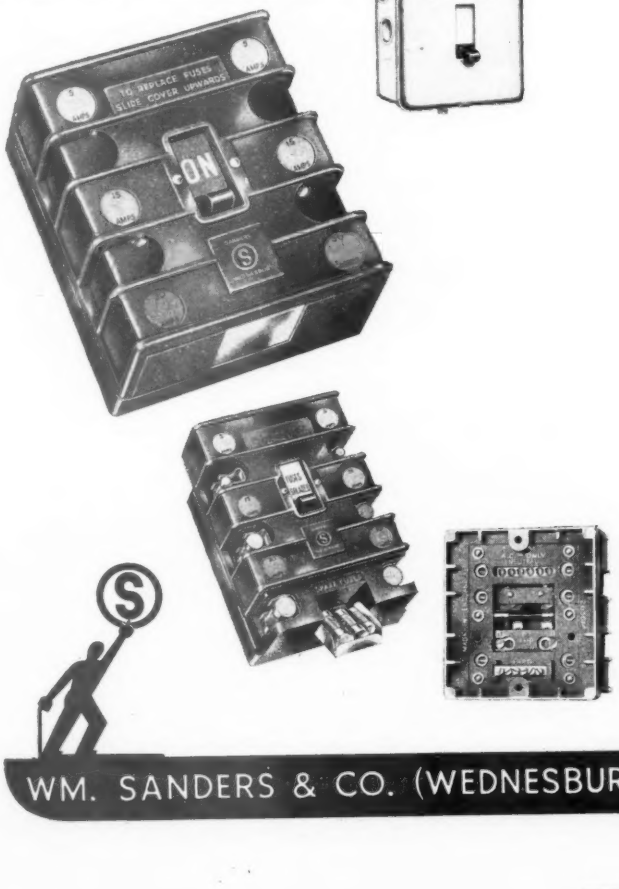

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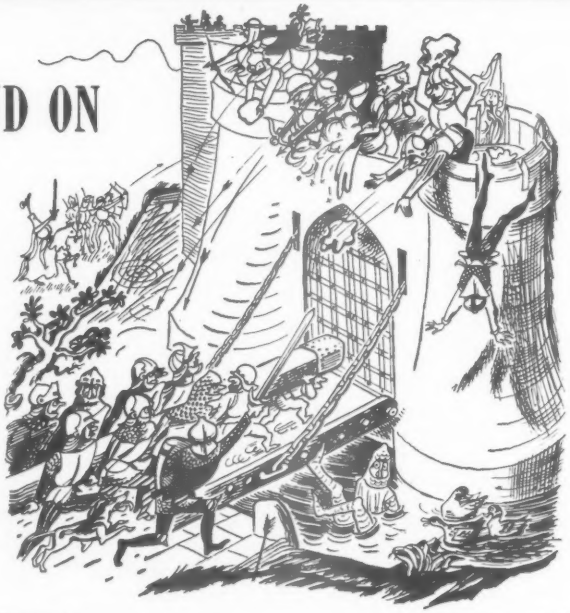

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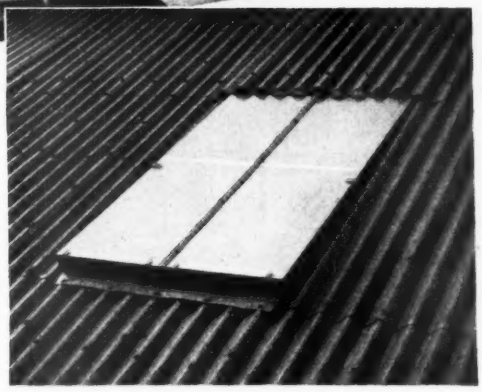

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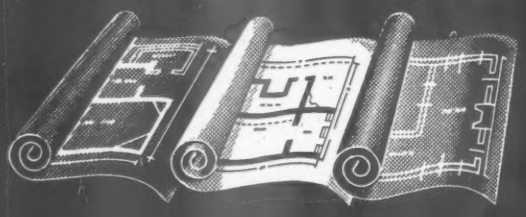

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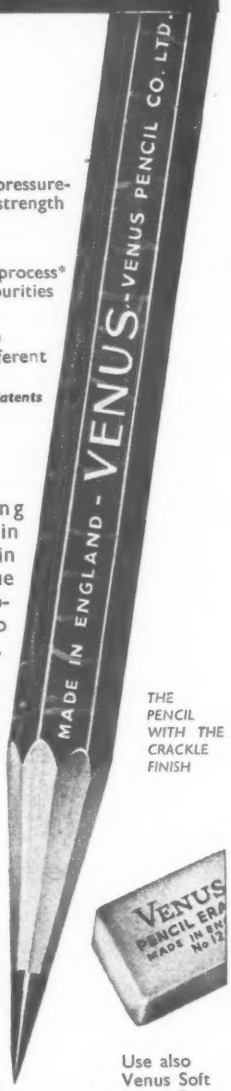

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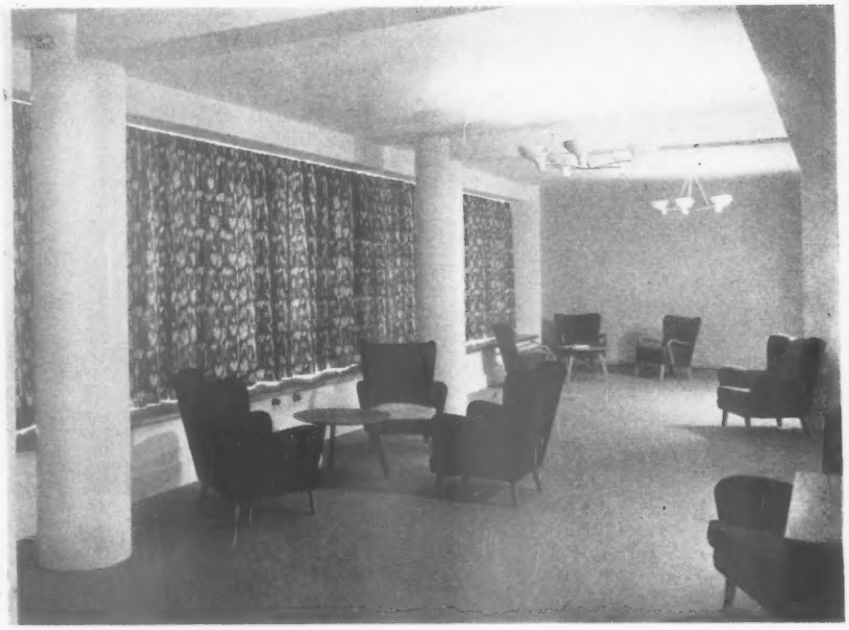

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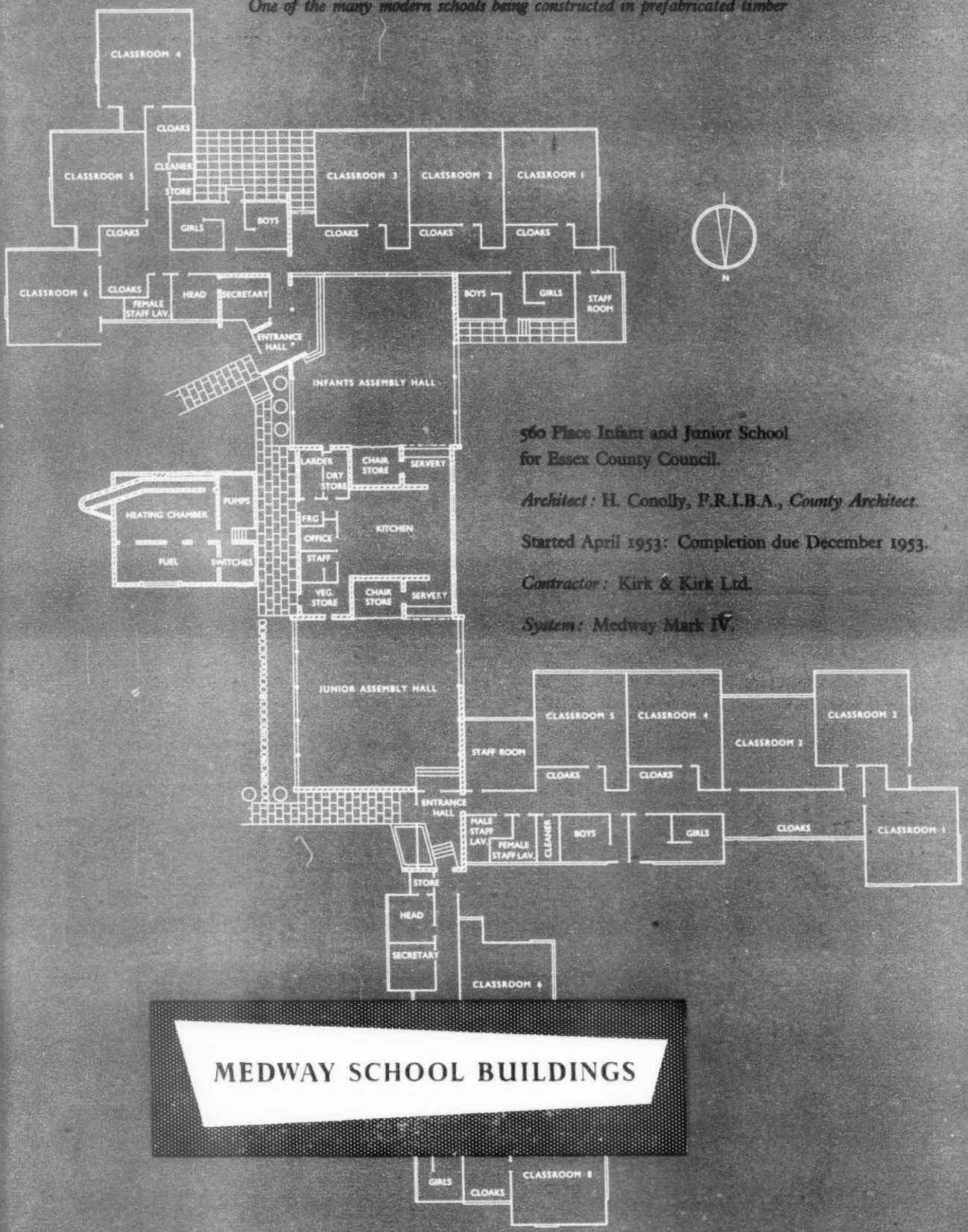

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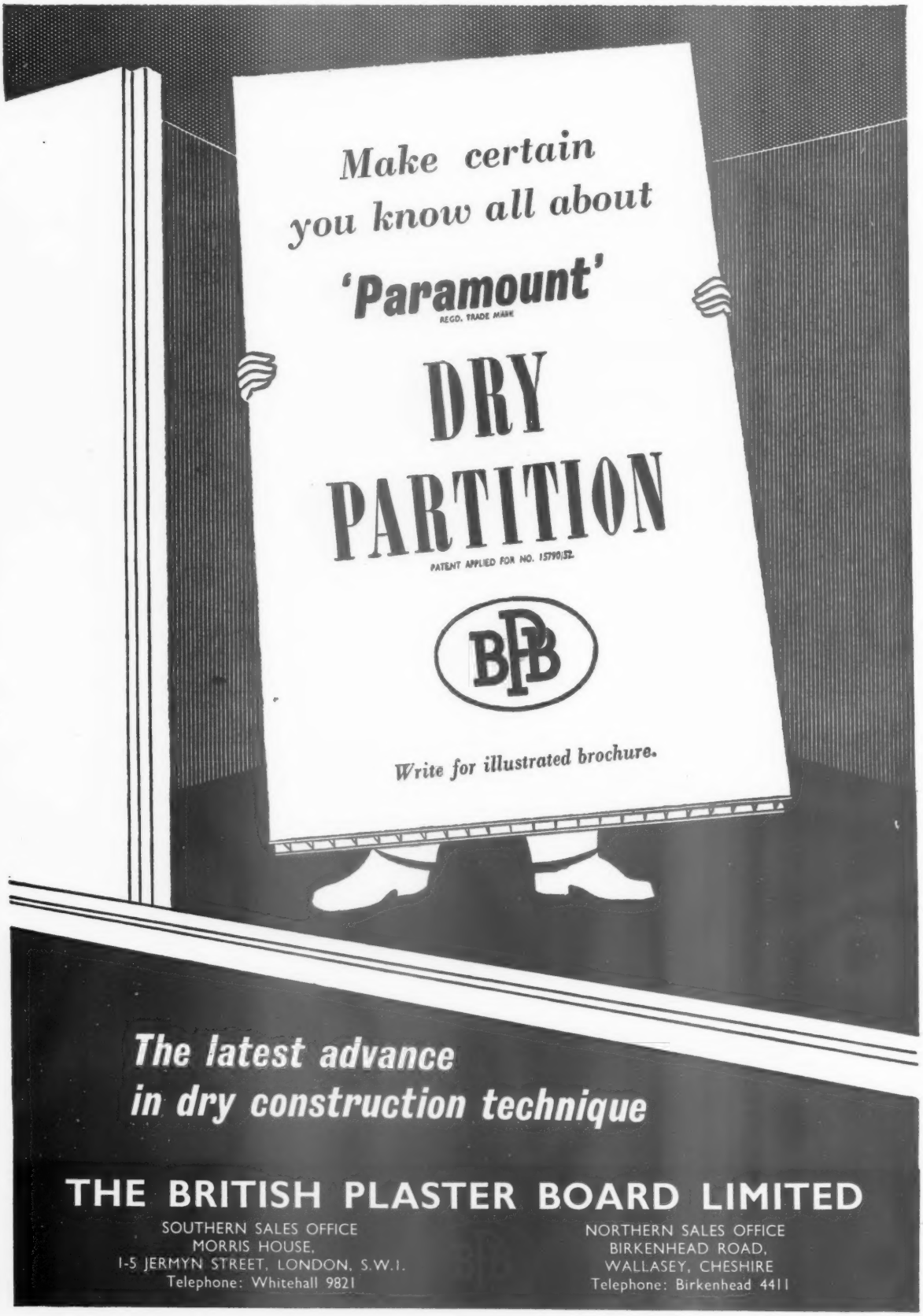
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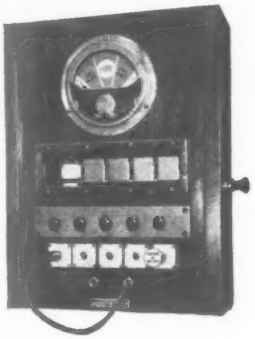

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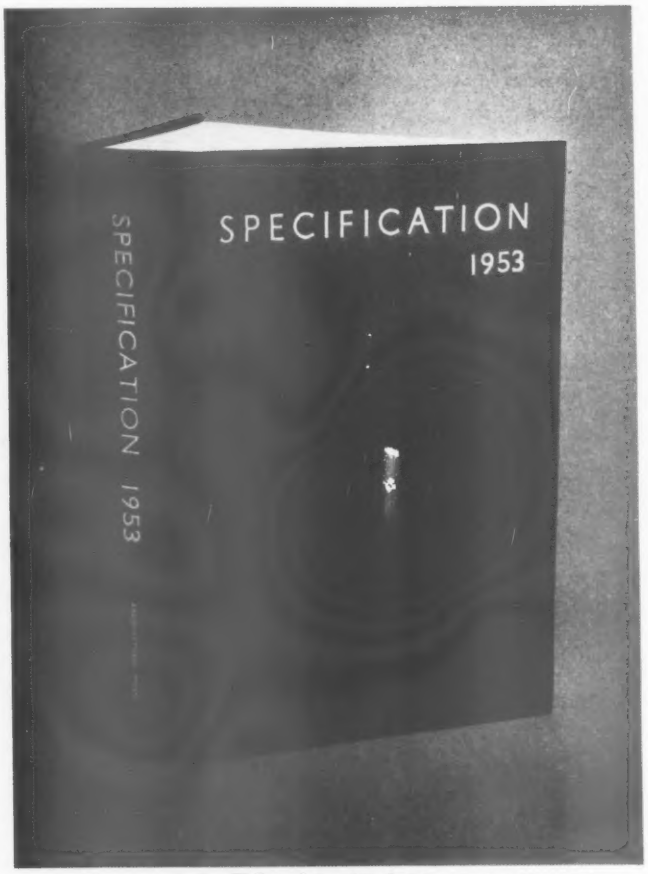

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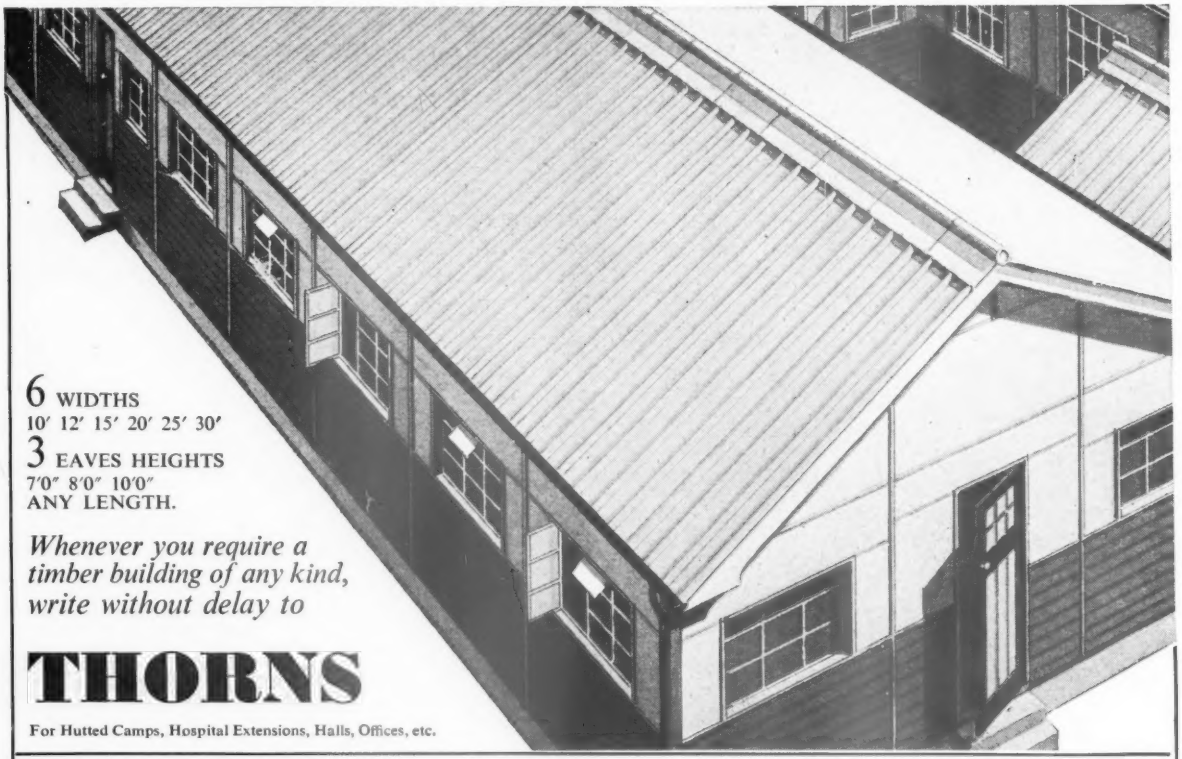

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RIVER REVIEW

ASTRAGAL, who has the entrée (at least once) to all the distinguished events of the London season, surveyed last week's River Pageant from the roof of one of London's largest office blocks to the rattle of cocktail shakers, party conversation and flag halliards. To the east the river curved away beneath the belching stack of the Bankside Power Station—yes, yes, I know it's only condensed steam not smog. To the west the clouds massed menacingly, but happily inactive, behind Big Ben. To the front was the Royal Festival Hall—its promenades gay with bunting and little gilt chairs. Even the tiny 1851 Crystal Palace at the foot of the Shot Tower encased its private party. (Was the model, one wondered, still breaking into regularly spaced renditions of the Hallelujah chorus ?)

*

Through binoculars it was possible to see the sudden stir, the rush at the fringe of the crowds which always denotes a Royal arrival and a quick approach of VIP's down the gangway to the pier. (The *un*carpeted one was used, causing, it appeared, some moments of agony to a top-hatted receptionist, who darted like a worried terrier from one place to another in what was—even at 200 yards distance—clearly desperate indecision). And finally the Royal party established itself in the centre of a row of—could they be real or phoney—Hepplewhite chairs on the dais. (ASTRAGAL noted with the greatest relief that the really horrible cream-painted tubular chair which MOW seem so often to produce at the Trooping the Colour and at other state occasions was missing.)

*

Punctually the parade started, less punctually it finished. A sort of Lord Mayor's show afloat with girls in wimples waving spiritedly from cardboard battlements—(why don't girls wave from upper windows as much as they used to ?)—men in armour standing in the bows, aldermen in the stern. A hat was blown overboard . . . an empty beer-crate floated by . . . Handel's water-music (" sponsor anonymous ") turned up very late but welcome . . . a Wraaf band steamed by with a male conconductor in charge . . . " floats " (and I mean " floats ") were towed past carrying stuffed sheep, model refineries and replicas of New Delhi, Durban or Runnymede.

Altogether an excellent, uninhibited, enjoyable show, with the added romance that water always gives to anything from battles and music to commerce or seduction. The highspot of the review ? ASTRAGAL'S vote for the " Tonga Triumph Trophy " went to the giant Civil Defence figure which, opposite the reviewing base, halted and smoothly saluted before resuming it's monstrous gliding walk, and the " Waterlily "—a little Thornycroft launch built in 1867 and still at work, as elegant and trim as Water Rat's skiff in the *Wind in the Willows*. A final word of congratulation to Guy Shepherd who designed most of the " floats." Very pretty they looked.

UP AND ATTINGHAM

ASTRAGAL was in on that recent Anglo-American event in Shropshire—the Summer School on the " Great Houses of England," which is sponsored jointly by the National Trust and the Shropshire Adult College at Attingham Park. Now in its second year, this high-pressure course of study and visits looks all set to run another twenty at least, and its personnel is distinguished, to say the least. The lecturers included Professors Pevsner, Wittkower and Webb, Francis Watson of the Wallace Collection, Ellis Waterhouse and the Duke of Wellington, while among the students were curators and governors of museums in the USA and Holland, one of the Regents of Mount Vernon (George Washington's House), architects and architectural historians.

*

It struck ASTRAGAL, when he took a short breather from high level conversations on Palladianism and John

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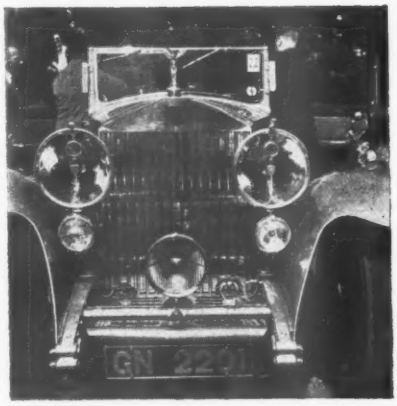
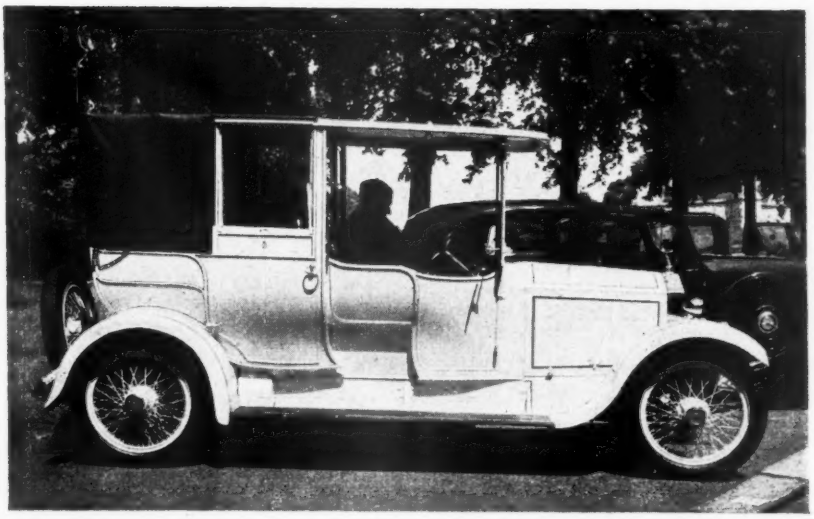
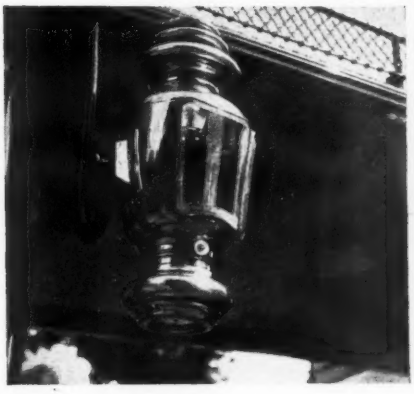






Seen at the Rolls-Royce Rally in Hyde Park. Left : top, 1907 " Silver Ghost " ; centre, 1930 " Phantom II " ; bottom, 1953 " Silver Wraith." Above : top, 1910 Landaulet made for Napier and transferred to Rolls-Royce chassis in 1923 ; left, oil lamp on 1911 " Silver Ghost " ; right, horn on 1914 " Silver Ghost." See ASTRAGAL'S *note below.*

Nash's mannerist perspective, that this kind of international get-together, at which experts put over their ideas to one another about a real and visible theme (there is nothing abstract about Chatsworth or Stokesay Castle) is probably more likely to do something for international relations than some of the high-principled and woolly-minded assemblies we have seen elsewhere. Even after a full day of visits and lectures, staff and students would be up half the night straightening out points of difference and misunderstanding. And even if the precise meaning of the term " transome " is not as important as some other matters outstanding between the Anglo-Saxon powers, it is at least one that was settled on this occasion.

TIME ROLLS ON

Two Sundays back, on his weekly pilgrimage to pay homage to Albert the Good, ASTRAGAL was delighted to find below the Memorial steps a great rally of Rolls-Royce cars dating from 1905 to the present day. It was a Coronation Concours d'Elegance organized by the 20-Ghost Club, and strolling about there in the sunshine were the usual Rolls types, from homburgs to corduroy caps.

*

The really aged models only were roped off—[cars not types]—for these are beyond price. And, if one discards with difficulty the subjective nostalgia these old models evoke, are they not still the most beautiful? And how about performance? That first Silver Ghost was fabulous—the first car to run from London to Edinburgh all the way on top gear; it could reach 62 m.p.h., and it remained in production for over eighteen years, the longest period of uninterrupted production of a single model in the history of automobile engineering. When the prototype had run a trial of 15,000 miles, the entire replacements required cost only £2 7s. 6d.

*

In the latest models the old vitality of design has gone. Although they have at least avoided that brutal Dollar Grin, there is something timid and repressed about them and the attempt to unify and incorporate into the body the bits and pieces on the front has failed. The famous angular radiator top, however, runs through the years and—happy architectural topic—it is said to have been inspired by the tympanum of a classic temple; even the Greek re-

KEY

1 Manresa college.
2 Maryfield Convent.
3 Mount Clare.
4 Downshire House.
5 Hartfield House
6 11-storey maisonnettes.
7 11-storey point blocks.
8 8-storey maisonnette block
9 4-storey maisonnettes.
10 3-storey maisonnettes with shops under.
11 3-storey houses.
12 2-storey houses.
13 Old peoples' houses.
14 School.
15 Church.
16 Pub.

Proposed LCC Development

This scheme for the development of large sites in the Putney-Wimbledon area, prepared in the Housing Division of the LCC architects' department under Dr. J. L. Martin, architect to the council (in succession to Robert H. Matthew), is discussed opposite and described on page 132. More details will be published later.

finements are there, for each plane surface is slightly curved to preserve the illusion of flatness.

*

Particular delights for ASTRAGAL'S envious eye were the yellow Napier body of 1910 on a 1923 RR chassis (once Lord Lonsdale's), and the details of the more elderly models—the scintillating oil lamp, the proud and polished horns (not so much a sound as a vibration), a Louis Quatorze interior with petit-point upholstery, Cherubim lamp-holders, a painted allegorical ceiling inside a 1927 coupé, and the turning of the RR nameplate on the radiator from red to black in 1933 as a mark of respect for Sir Henry Royce who died in that year. A nice, not to say romantic, human touch rarely encountered in the impersonal, mechanized world of the industrialized Midlands.

FETE ACCOMPLI

Whatever the reason—TV revenge or sheer good sense—it was an admirable idea of AA President, Sir Hugh Casson, to invite a painter to give away the prizes (and advice) at the AA the other day. As Barnett Freedman (the named victim) remarked, the AA had been in existence over a century and could have asked in its history Cezanne, Turner, Rosetti or Renoir to address it, but in fact only once before had a painter been invited—Sir Winston Churchill.

*

As usual his words were packed with cheerful, dogged wisdom, and the afternoon passed more quickly and agreeably than such occasions often permit. The exhibition of students' work seemed slightly better than last year's, the raspberries were as good as always, and so another regular fête is satisfactorily accompli.

ASTRAGAL

POINTS FROM THIS ISSUE

The Editors

PRESERVING AND MIXING

ONE of the happiest features of the latest enormous housing project approved by the London County Council this week (see pages 128 and 132) is the retention and restoration, as part of the scheme, of two interesting eighteenth-century mansions. At a time when so many architectural gems of the past are falling, or have fallen, into ruins—so that the cost of reinstatement or conversion has become prohibitive—this is good news indeed.

The larger but less exciting of the two buildings is Downshire House, an uncompromising, square, brick, Georgian mansion, with rubbed brick dressings, built about 1770. The architect for the house and its outbuildings, which are now known as Cedars Cottages, was Brettingham. They will be used by the LCC " in due course " as a community centre and health centre. The other building is Mount Clare, a magnificent Palladian villa, with stucco walls, a fine octagonal hall, and a Doric portico, with curved stairs. The architect was probably Henry Holland. The grounds were laid out by Capability Brown.

The grounds of these two mansions, and other properties which are included in the 100-acre site, with their magnificent cedars, carefully planned vistas, orchards and woods set the architects a difficult problem in layout. However, the LCC policy of " mixed development " of tall blocks and low blocks of flats, maisonnettes and houses with gardens, lends itself to the development of such a site to the best advantage. The big expanse of open grass, known as Downshire Field, which forms a vista closed by the house itself, is retained, and will be flanked on its north side by 11-storey " slabs." " Point-blocks " are used to maintain an effect of spaciousness in parts of the site from which Mount Clare may be seen. Most of the forest trees will be preserved.

This is, we understand, the last of the large open sites left within the LCC area for re-development. The architects are to be congratulated on the way it has been handled.

11-storey maisonnette blocks ; No. 6 on photo opposite.

In his last article (July 16) Professor Ian Bowen described the method used by the JOURNAL *in carrying out its enquiry into the state of the architectural profession. This week Professor Bowen explains why the results of the* JOURNAL *enquiry, which will be published in September, will be more useful than the results of the RIBA's 1950 report. (The names shown in the headpiece below were taken at random from the Architects' Register and are not related to the article.)*

FOCUS ON

PITT, *Roland Arthur*, 28 Langleys
PITTAWAY, *Harold*, 13 Church Lane Drive, Ho
PITTENDRIGH, *Hector Bevester*, 99 Kenlor Road,
PITTER, *Geoffrey William Knowles*, County Educat
PITTMAN, *George Robert*, 31 Bolingbroke Grove, W
PITTS, *Gordon MacLeod*, 1158 Beaver Hall Square,
PITTS, *James Noel*, County Architect's Dept., 123 Lo
PITTS, *Leslie George*, 12 Parliament Street, York.
PLACE, *Harry*, Reform Club Buildings, Peel Stree
PLACKETT, *Arnold*, 15 Derby Road, Long Eaton
PLANT, *James William*, 55 Birches Head Road, F
PLANT, *Mrs. Ruth*, The Court, Tickenham, Clev
PLANT, *Walter Geoffrey*, "Danum," Hill Barto
ANT, *William*, "Glenfield," Newport P
TT, *Denis Kay*, 96 Harrowside

YOU

Guest Editor :

Professor IAN BOWEN

In November, 1948, a committee was appointed to meet under the chairmanship of Sir Percy Thomas and to report within " a time limit of six months " on the present and future position of architects in private practice. Six months proved to be too short a time, and the report was not submitted to the Council of the RIBA until July 25, 1950.

The Committee, which sent questionnaires to every member and student of the RIBA, performed a very valuable service to the profession. Perhaps its most important work was its preparation of recommendations on policy. Among other things it recommended a greater use of architectural competitions, the introduction of bonus or profit-sharing schemes into architectural offices, the enlargement of partnerships (senior members being recommended to take more young members into partnership), the consideration by the RIBA Council of the use of " panels " of architects by public authorities, the more frequent use of architects on public works, or in association with official architects (or as consultants to them), and in planning work under the Town & Country Planning Act of 1947.

There may be little to find fault with in the report's recommendations—but is this not, perhaps, because they are too nearly platitudinous to be helpful? Just why are private architects failing to take an increased interest in public work. This question is not answered (or even asked) in the RIBA report.

THE "JOURNAL'S" SURVEY

There are several ways in which the JOURNAL'S survey can add to what is already known about the profession. It is the most recent survey to be made, and because it is carried out on a sample basis (described on July 16) it has been finished quickly and is likely to be more accurate than a long, drawn-out, incomplete census. In addition we have received information which the RIBA did not ask for.

The RIBA report relied on a sample just as much as we shall do in our report. It accepted results from 7,212 of its (non-student) members as an accurate representation of its total membership (9,973 at that time). It assumed, therefore, that the members who did not reply had the same characteristics as those who did. For example, the figure of 2,848 *known* to be in public service was scaled up to 4,200 *assumed* (or estimated) to be in public service.

The trouble with this kind of calculation is that the margin of error cannot be estimated. The 7,212 sample, though large, is probably a biased sample, *i.e.*, it probably includes many more public architects than private architects. Supposing that 90 per cent. of the 2,761 people who did not reply were private architects. If this were so the estimate of public architects would be only 3,124.

The JOURNAL'S very small random sample, where all (or nearly all) results have been accounted for, should yield a lower margin of error than this.

On July 16 we asked readers to comment on proposals made by a local authority architect for a new salary scale for architects in government, municipal and industrial employment. A selection from the letters received is published below. The proposed salary scale is shown again on the opposite page.

SALARIED ARCHITECTS

READERS COMMENT ON PROPOSED SALARY SCALE

A. W. Cleeve Barr, A.R.I.B.A., "Local Authority Architect," *P. P. Grom, John Frears, A.R.I.B.A., "Four Assistant Architects."*

SIR,—Your correspondent is to be congratulated on his excellent article in your issue of July 16. His figures of the salaries paid by a particular local authority in relation to the value of their architectural work are of great interest and one would like to see more of this kind of factual evidence of the remuneration of salaried architects. Extremely low rates of salary of the level described undermine the status not only of salaried staffs but of the whole profession. Your correspondent's suggestion for a salary scale, or at least for certain ranges of salaries with fixed minima at various stages—*e.g.*, " on qualifying," " qualified with three years' experience," " in charge of a major job "—will, I think, meet with wide approval in principle, although there is bound to be discussion to what levels, within ten per cent. or so, to fix the various minima. Where I disagree fundamentally with your correspondent is in the suggestion for founding yet another new architectural association.

I had some experience before the war, as secretary of the organization which is now the ABT, in the problems of organizing such a body. The cost of maintaining such an organization in an effective state—with a very small London office, a small staff and the minimum necessary organization to negotiate with the hard-bitten executives and committees of industrial firms and local authorities—is considerable and, in my opinion, would require a subscription of at least £2 a week. This is borne out, though in a different sphere, by the prospectus and appeal for membership launched this month by the newly-formed Modular Society (though this has industrial backers as well). To

what extent can ordinary salaried architects and assistants afford to go on multiplying their basic subscriptions to their professional organizations? If they really intend to do something about their salaries and conditions, the practical thing to do, I suggest, is to make the existing organizations work!

The RIBA is our largest and most representative organization—in fact, in the eyes of the public it *is* the profession, but it is ineffective in doing anything about salaries largely on account of the grossly disproportionate representation on the Council and Committees of those who feel the pinch least, *i.e.*, the Fellows and the more prosperous private architects. Recent elections have, however, shown a slightly more encouraging trend for the better, and the remedy is surely in the hands of the majority of members. Yet there is considerable doubt whether, under the terms of its Charter, the RIBA can in fact ever function as a trade union.

The ABT, on the other hand, has a legal status as a registered union, is represented on the TUC (but with no affiliation to the Labour Party) and is recognized by Whitley Councils and other important negotiating bodies. Yet it is ineffective because it represents only a minority of salaried architects. This, in my opinion, is largely because it scatters its energies over too wide a field of technicians. I think that the architects within the ABT should form their own Salaried Architects' Association (whilst maintaining their links with the other technicians in a kind of loose federation), and some means should be found of permitting this association to function, in so far as its joint members are concerned, as a kind of Salaried Architects' Allied Society of the RIBA.

Of the other organizations in which salaried architects are in various ways involved there are, I suggest, none which has the same potential as the RIBA and the ABT. The RIBA has a huge membership and wide prestige. The ABT has legal status as a union and a wealth of experience in negotiations. Is it not time that these two organizations got together, and pooled their resources, and agreed a positive course of action to improve the status of their salaried members? Status, of course, should include such things as salaries, recognition for work done, the organization of large offices and all the other matters discussed at length last year by your own Guest Editors.

A. W. CLEEVE BARR.

London.

SIR,—The proposed new salary scale paints a very rosy picture.

A survey of present salaries, number of staff and the amount of work carried out would show that in many cases the proposed basic salary for the qualified architect would be justified but often higher than that of the chief official.

Designation	Salary range	Increments
Junior Architect, unqualified ..	£200–£400 (£200)	8 at £25 (not established)
Junior Architect, Intermediate examination	£450–£550 (£100)	4 at £25 (not established)
Assistant Architect, on qualifying	£600–£750 (£150)	3 at £50 (established)
Assistant Architect, qualified, three years' experience	£800–£950 (£150)	3 at £50 (established)
Architect in charge of Section or major building	£1,000–£1,150 (£150)	3 at £50 (established)
Deputy or Deputy Borough Architect	£1,200–£1,350 (£150) or two-thirds RIBA scale for Borough Architects	3 at £50 (established)
Chief or Borough Architect ..	£1,600–£2,000, or RIBA scale for Borough Architects	4 at £100

The " unqualified" scale should be £200–£750 (£550) 22 at £25. (Establishment at £600 at discretion of the employer.)

In order that a proper incentive shall be provided for the staffs of government, municipal and industrial offices, the work, where practicable, should be measured and the excess net profit over 20 per cent. proportionately distributed, subject to the proviso that the RIBA scales for state-aided houses and layouts (which have become unsatisfactory) are revised, and preferably put on a percentage basis.

Very few local authorities would then employ a qualified architect, and architectural work would be mainly carried out by unqualified assistants or by engineering assistants.

Before any steps towards raising the present salaries are taken, it seems necessary first to obtain the support of the RIBA and the MOHLG. Then we should insist on an Act of Parliament ruling that any architectural work costing over £1,000 should be designed and supervised by a qualified architect.

P. P. GROM.

Workington, Cumberland.

SIR,—The proposed scales outlined in the charts seem to me quite fair, and at least form a good basis for discussion.

The larger increments would give one a much better impression of personal progress than those at present existing.

The profession is undoubtedly becoming overcrowded; this will result in newly-qualified architects having to accept posts in lower and lower grades in the years to come. This will, I think, tend to cheapen the Associateship of the RIBA, and this should certainly be avoided.

In view of this, I support the formation of a Salaried Architects' Association, and think that the numbers entering the profession should be restricted.

JOHN FREARS.

Carlisle.

SIR,—I wish to support heartily the proposal for a new salary scale.

At this stage I have the following comments to make on the proposed salaries:—

Assuming £1,000-£1,150 to be a fair scale for a section chief, then an architect in charge of a major building should be on a lower scale and I think the scale of £800-£950 should apply to him. I think the architect (qualified) with three years' experience should be on a lower scale than this.

I am branch architect for educational buildings with a staff which includes six assistant architects, each controlling a major building, besides five other assistants—surely my scale should be higher than that of the six?

Incidentally, my salary is £835 (Grade VIII).

LOCAL AUTHORITY ARCHITECT.

SIR,—We consider the proposed salary scale to be fair and reasonable, and would welcome the establishment of a Salaried Architects' Association to ensure its adoption.

We were surprised by the figure contained in the summary of accounts prepared in the office of a county borough, and doubt if any architect in private practice would be satisfied with a profit of £10,800 for an outlay of £28,000. As assistants we would be ashamed to admit that, in return for an average salary of £517 per annum we could only earn a profit of £400 per annum for our principals; we suggest that the latter figure should be in the region of £1,200 per annum.

In costing the last three jobs to pass through this office, each in the region of £100,000, we find that the percentage of net profit on gross charges is no less than 80 per cent. We feel, therefore, that some amendment would be called for in respect of the suggested limitation of net profit to 20 per cent., before the scale would be acceptable to architects in private practice.

FOUR ASSISTANT ARCHITECTS.

Belfast.

(*More letters on page* 138)

LCC

Housing Development

Five schemes for housing development were presented for the approval of the LCC at a council meeting on Tuesday. These schemes will provide 2,900 dwellings at a cost of £7,500,000. They included two schemes in Stepney for 283 dwellings, one in Camberwell for 681 dwellings and a scheme in Poplar for 30 dwellings.

The largest project is for the provision of 1,875 dwellings, at a cost of £5,025,000, on sites in the Putney-Wimbledon area, which cover nearly 100 acres. This scheme has been prepared by the housing division of the LCC architect's department and has been approved by the housing committee of the LCC.

The areas are bounded on the south-west by Richmond Park, on the north by Clarence Lane, to the north-west by Roehampton Lane and to the south-east by Alton Road. The site includes park land, wooded areas, orchards and gardens. Within the boundaries are two large houses belonging to Manresa College and Maryfield Convent. An exchange of land has been arranged with the owners, which has resulted in an improved layout of the housing on the site. There are four buildings of historic interest on the site, which are to be preserved. The most interesting of these is Mont Clare, a house with three wings, the oldest part having been built in 1772. Its use has not been decided upon. The LCC has already done extensive work to preserve the house and it will be kept in its proper setting. Downshire House, a brick building in the Georgian tradition, will become a community centre and health centre. Cedars Cottages and Harfield house, neither of great architectural interest, will also be preserved.

The proposed scheme is designed to give a density of 28 dwellings, or 100 persons to the acre. A model of the proposed development appears on page 128. There are to be 5 eleven-storey maisonnette blocks on the north side of the site. Each maisonnette will be 705 sq. ft. in area and each block will contain 75 maisonnettes. The maisonnettes are connected by an access gallery to a staircase and two lifts.

There will be 15 eleven-storey point blocks with a total of 660 flats. Each floor will consist of 2 one-bedroom flats and 2 two-bedroom flats. One eight-storey block on the west side of the site and 26 four-storey maisonnette blocks will contain 615 dwellings. In addition there will be 30 maisonnettes and six flats in the shopping centres, 29 three-storey houses with 15 ft. frontage and an area of 1,124 sq. ft., 104 two-storey houses,

(*continued on page 134*)

General Hospital, Nassau, Bahamas

Above, the ward block of the Bahamas General Hospital in Nassau. The building contains accommodation for 204 beds, two delivery rooms and two operating theatres. It was designed by Geoffrey C. Stubbs, director of public works. The construction consists of r.c. frame with plastered concrete block panels. The hollow r.c. slab roof supports a false pitched roof which is timber framed. The cost was £340,000.

BUILDINGS IN THE NEWS

Primary School, Leominster

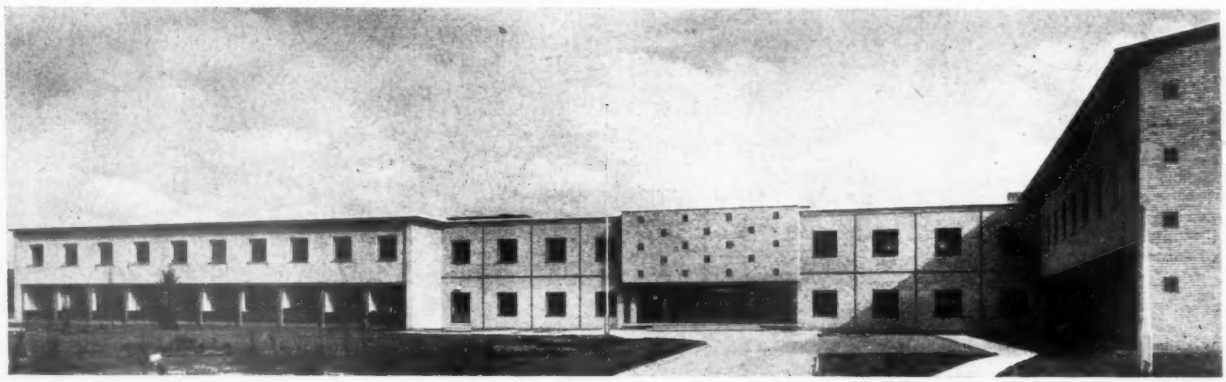
Below, the main entrance and entrance hall of the primary school for 360 children at Leominster, designed by McKewan, Fillmore and McKewan. The wood wool slab roof is supported on a steel frame; stanchions are at 6 ft. 8 in. centres in classrooms and 10 ft. elsewhere. Walls are of brick externally, clinker block internally. The cost per place was £156.

Secondary School at Hoddesdon, Hertfordshire

Above, the first secondary school of the Hertfordshire programme for 1950, *at Hoddesdon. It is a three-form entry modern school for* 450 *children and was designed to a price limit of £*296 *per place. The prefabricated steel frame construction is based on an* 8 *ft.* 3 *in. module. The layout is of the pavilion type. From left to right, the gymnasium, kitchen block, entrance block (library on first floor, administration on both floors) assembly hall behind. County architect, C. H. Aslin; assistants-in-charge, Richard Eve and Selwyn Wyatt.*

Offices at Gosforth, Cumberland

Below, the head office building for Thomas Hedley and Co., Ltd., at Gosforth, near Newcastle, which was designed by Sidney Burn. There are four wings, each 50 *ft. wide, containing offices, a dining room, kitchen and recreation rooms. The building has been designed to provide* 65 *sq. ft. of floor space per person. It is steel framed; stanchions are spaced at* 12 *ft.* 6 *in.*



56 houses for old people, 26 shops, 73 garages and two public houses. Sites are being reserved for a children's home, three nursery schools, two primary schools, a secondary school, a non-conformist church, a health centre, community centre, and shopping centres. Central heating and domestic hot water for the eleven-storey blocks will be supplied from a central oil-fired boiler house.

The architects concerned with the scheme were R. Matthew, former architect to the council; Dr. J. L. Martin, architect to the council; Whitfield Lewis, principal housing architect; Michael Powell, assistant housing architect; Colin Lucas, architect in charge; G. F. Bailey, assistant architect in charge; John Partridge, Stan Amies, Bill Howell and John Killick.

The first part of the scheme for the Putney-Wimbledon area, designed to provide 655 dwellings on the Portsmouth Road site which is to the south-east of the present project, was illustrated in the JOURNAL for November 15, 1951. Floor plans of the present project will be illustrated in a future issue of the JOURNAL.

UNO

Building Research

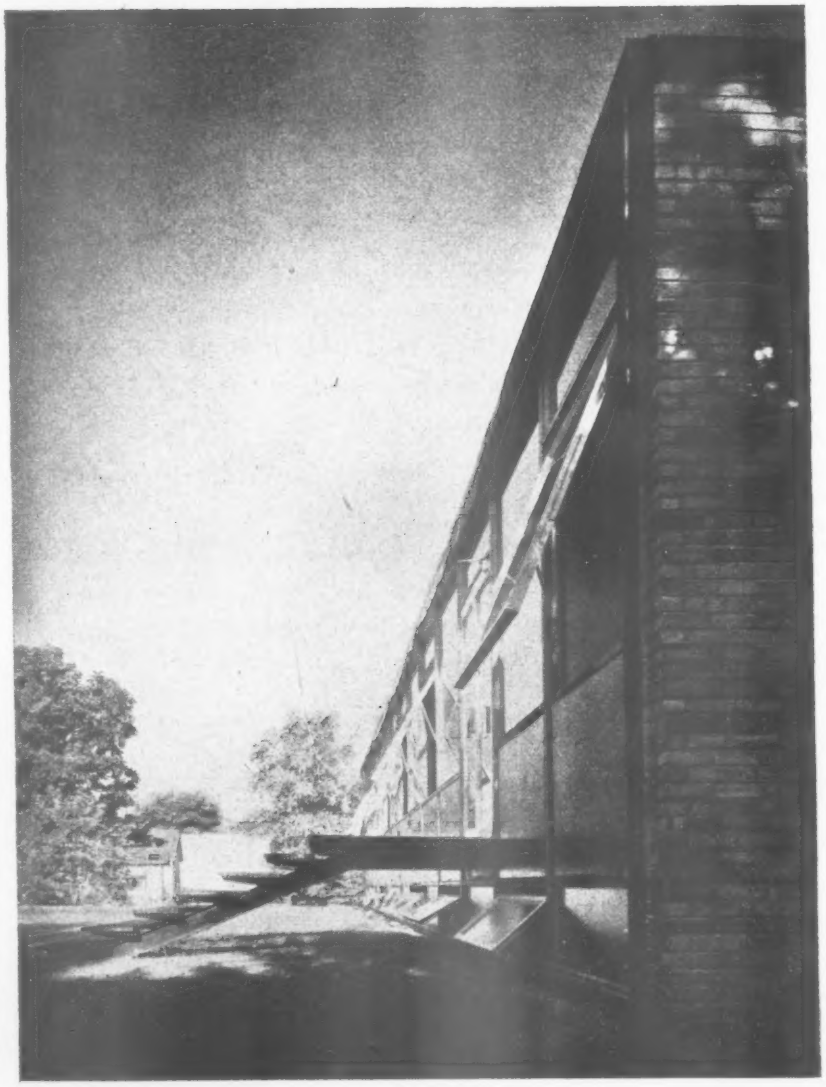
At the first general assembly of the International Council for Building Research, the formation of which was announced in the JOURNAL for July 16, programmes of work were drawn up for each of the three sections.

The documentation section, under its president, J. van Ettinger, of the Netherlands, will continue the work of the International Council for Building Documentation. It will study the most effective methods of distributing documents and information from the three sections. It will aim at increasing the circulation of information. The section will set up a working party to study existing provisions in the offices of architects, engineers and other building technicians for the use of information. It will also set up a working party to study, in co-operation with UNESCO and the International Organization for Standardization, the possibility of establishing an international terminology for building.

The studies and application of results of research section, under its president, A. Marini of France, has prepared a preliminary programme of subjects for study. Among these subjects are the following:— 1. A comparative study of the technical provisions and regulations in various countries for sound-proofing, especially for the floors of multi-storeyed buildings, and the effect of the regulations on the cost of buildings. 2. A comparative study of the technical provisions and regulations in various countries for the thermal insulation of houses, and their effect on building costs and operating expenses. 3. A study of the influence of the height and lay-out of rooms on the building costs of houses. 4. Determination of the effect of accidental overloading and occasional natural forces (snow, wind, earthquakes, temperature variations) on the various parts of houses. 5. A study of the possible standardization of r.c. house structure taking into account the latest data available on steel and concrete. 6. A comparative study of the effectiveness (and of the measures taken to ensure such effectiveness in the various countries) of methods of standardization; the influence of these on the cost of houses. 7. A comparative study of economic, financial and technical provisions in various countries for promoting the modernization of the equipment of craftsmen and private builders. 8. A comparative study of the attempts in various countries to find out the housing requirements of people and the way in which the information is found out. 9. A comparative study of economic, financial and technical measures in various countries to pro-

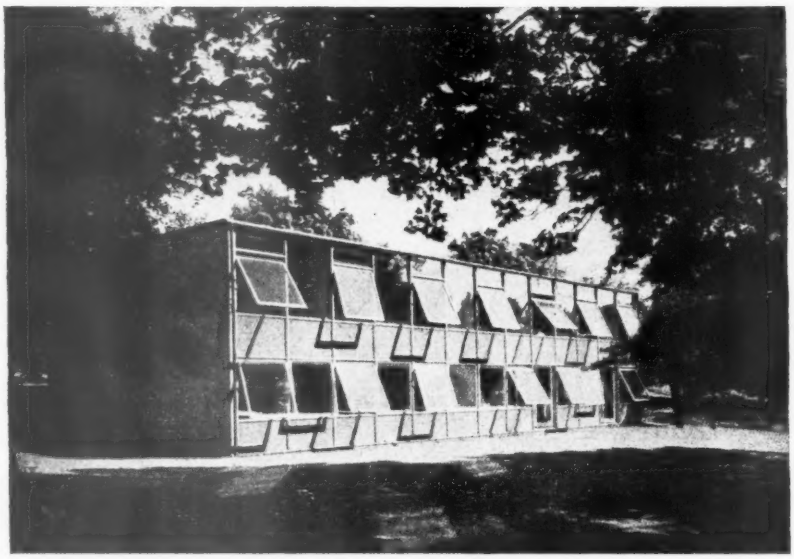
(*continued on page 136*)

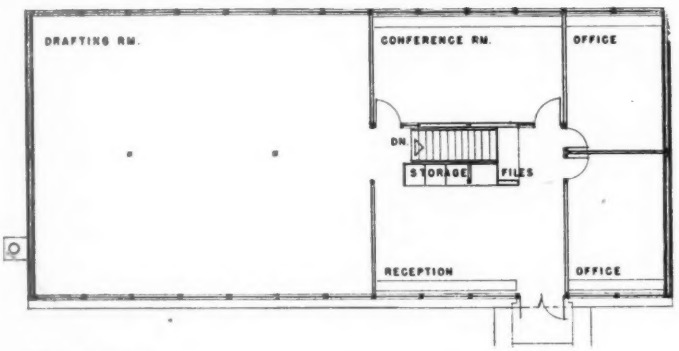
ARCHITECT'S OFFICE IN BLOOMFIELD



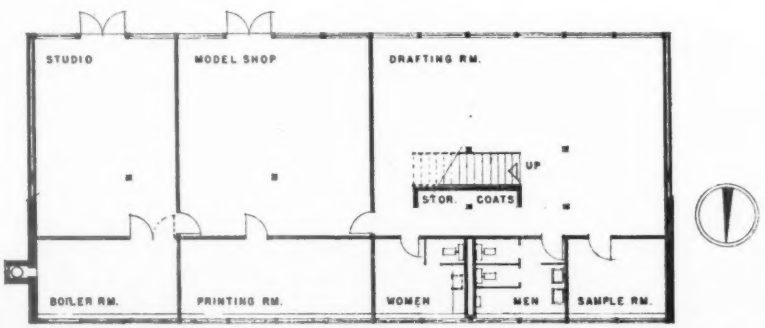
HILLS, MICHIGAN, USA

This office building was designed by Eero Saarinen for his own use. The boiler room, printing room and lavatories on the south side are lit by narrow windows just above ground level. Drawing office windows face north. End walls are of brick, side wall panels of plywood. Roof beams and fluorescent light fittings are exposed. Rooms are 9 ft. 10 in. high on the first floor and 9 ft. 4 in. on the ground floor. The cost was approximately £4 5s. per sq. ft. Left, a view of the drawing office on the first floor. Below left, the north facade. Below, the south facade. (Reproduced from *Architectural Forum*, USA.)

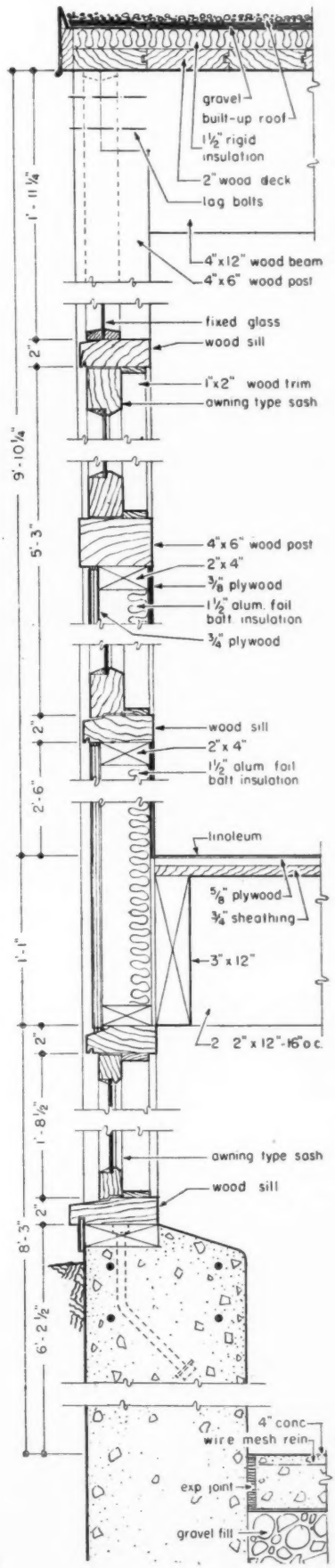




First floor plan



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



Section through south wall [Scale : 1" = 1' 0"]

mote the modernization of rural housing. 10. A comparative study on methods of analysing slum clearance and re-housing.

The experimental research section, under F. M. Lea of BRS, will arrange the exchange of information on research organizations and on research work in all stages. It will synthesise the theoretical results of research with the studies section and collaborate in their practical application and diffusion.

The section is to continue the publication of the Directory of Building Research and Development Organizations in Europe. A new edition will be presented at the next general assembly in 1956. It hopes to include non-European organizations (other than those in the United States).

The section is to study research on the following subjects:—(*a*) transport and handling materials on the site; (*b*) building methods using heavy components; (*c*) methods of construction economising in the use of wood. The section is also to *carry out* research on two subjects. Firstly, the construction and strength of flat terrace housing roofs. This is a subject which has been studied in Sweden, Norway and the UK and their findings will be used as a basis for joint study with other countries. Secondly, heat losses in buildings. Views have already been exchanged on this subject between Austria, Denmark, France, Western Germany, the Netherlands and Switzerland. It is felt that international co-operation will be more economical.

Countries undertaking joint studies are to submit progress reports to the section. Countries undertaking research work may ask the section for advice as to the value of the work they propose to do.

The possibility of financing exchanges of staff belonging to research organisations, particularly by means of fellowships obtainable through technical assistance programmes is to be investigated.

INDIA

Low-cost Housing Exhibition

The Indian Ministry of Works, Housing and Supply, is to hold an exhibition of low-cost housing from January 20 to March 5, 1954, at New Delhi. The ministry intends to include full-size replicas of low-cost houses designed in India and other countries. It is hoped that these examples will remain after the exhibition closes. Houses constructed for the exhibition must not cost more than 5,000 rupees (approximately £360). Building materials, tools, light and heavy machinery will also be on exhibition.

BCC

Conference

The BCC is to hold the tenth conference for members of the council concerned with interior decoration at Bath from October 5 to 8. Further details can be obtained from the BCC, 13, Portman Square, W.1.

MOHLG

Air Pollution

A committee has been set up by the Minister of Housing and Local Government, the Secretary of State for Scotland and the Minister of Fuel and Power to examine the nature, causes and effects of air pollution and the effectiveness of present preventive measures. It is also to consider what further preventative measures are practicable. Sir Hugh Beaver is to be the chairman of the committee, which will be assisted by assessors from MOHLG, MOH, DSIR, Ministry of Fuel and Power, Department of Health for Scotland and the Welsh Board of Health.

CCA

Papers on Prestressing Available

The proceedings of the symposium on prestressed concrete statically indeterminate structures, held in London in September, 1951, are now available from the CCA in one volume, containing 180 pages and more than 220 diagrams and illustrations.

The symposium was the first to be held on this subject, and both the theoretical and practical aspects of continuity using the three main systems of post-tensioning in use in Britain—Freyssinet, Magnel-Blaton and Lee-McCall—were discussed. The seven papers presented at the symposium and the discussions which took place at the various sessions are included in the proceedings, which form the first authoritative collection of papers on the subject of continuity in prestressed concrete. The titles and authors of the papers presented at the symposium were:—"Continuity of prestressed concrete structures: the practical aspect," by A. J. Harris; "The analysis of statistically indeterminate structures subjected to prestress," by D. W. Cracknell and W. A. Knight; "Some experimental work on interconnected prestressed beams," by P. B. Morice; "Continuity in prestressed concrete," by Professor G. Magnel; "Determination of continuity bending moments in prestressed continuous beams," by E. G. Trimble; "Continuity using post-tensioned high-tensile alloy steel bars," by G. O. Kee and S. Jampel; "A theoretical treatment of continuity in prestressed concrete," by Y. Guyon. Requests for the papers should be accompanied by a remittance for 25s. made payable to "Cement and Concrete Association," and addressed to Symposium Proceedings, CCA, 52, Grosvenor Gardens, S.W.1.

DIARY

AA Students' Work. Exhibition at 36, Bedford Square, W.C.1. Weekdays 10 a.m. to 6 p.m.; Saturdays until 2 p.m.
UNTIL JULY 30

1953 *House and Garden Colours for Summer Living.* At the House and Garden Decoration Centre, 16, Grafton Street, W.1. Weekdays, 10 a.m. to 5 p.m.; Saturdays, until 12.30 p.m.
UNTIL JULY 31

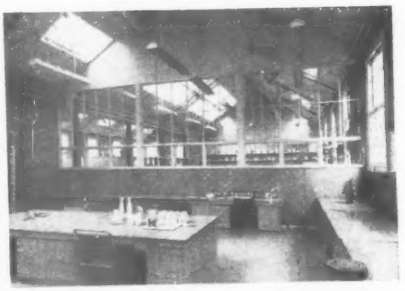
Ten Selected "News Chronicle" Coronation House Designs. At Heal's, 196, Tottenham Court Road, W.1. Weekdays, 9 a.m. to 5.30 p.m.; Saturdays, until 1 p.m.
UNTIL JULY 31

Contemporary Brazilian Architecture. Exhibition at the BC, 26, Store Street, W.1. Weekdays, 9.30 a.m. to 5 p.m.; Saturday, until 1 p.m.
UNTIL JULY 31

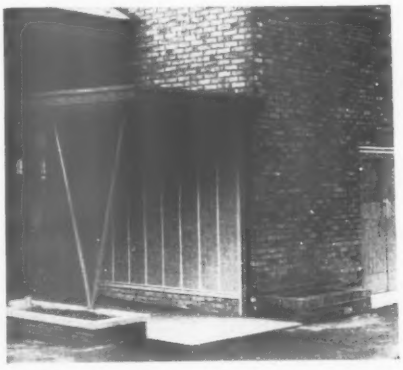
Furnishing to a Figure. At Heal's, 196, Tottenham Court Road, W.1. Weekdays, 9 a.m. to 5.30 p.m.; Saturdays, until 1 p.m.
UNTIL JULY 31

Home and Surroundings. RIBA travelling exhibition at the Town Hall, Croydon. Weekdays, 9 a.m. to 6.30 p.m.; Saturday, until noon.
AUGUST 5-13

NEW SCHOOL OF

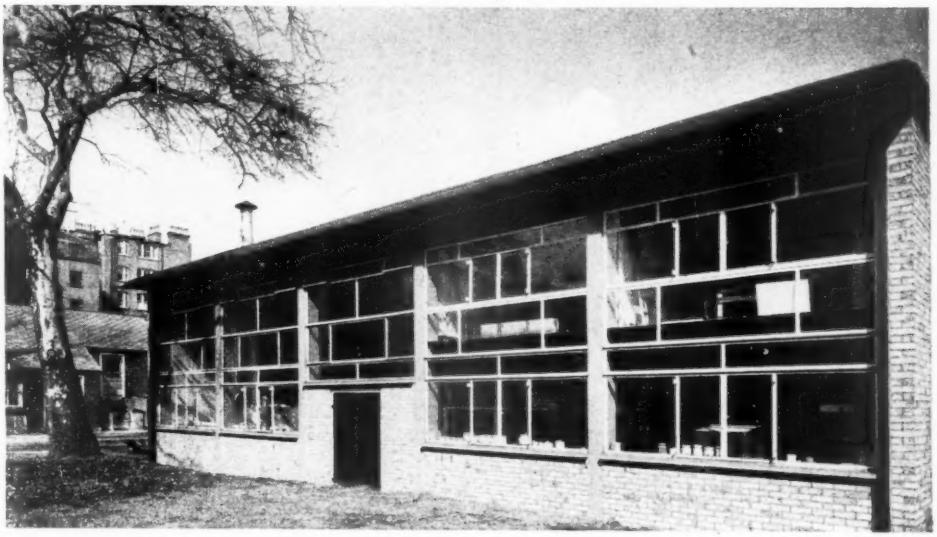


A new building for the recently established School of Ceramics at the Royal College of Art has been designed by Ramsey, Murray and White (partner-in-charge, Professor Basil Ward). In 1951, during expansion and re-arrangement of the College accommodation, the old students' common room in Queen's Gate was vacated and converted into a School of Ceramics, with the addition, at the Queen's Gate end of the site, of a new kiln room. This new wing is seen top, on the opposite page; bottom right is an interior view showing the glazed wall to the first floor studio;

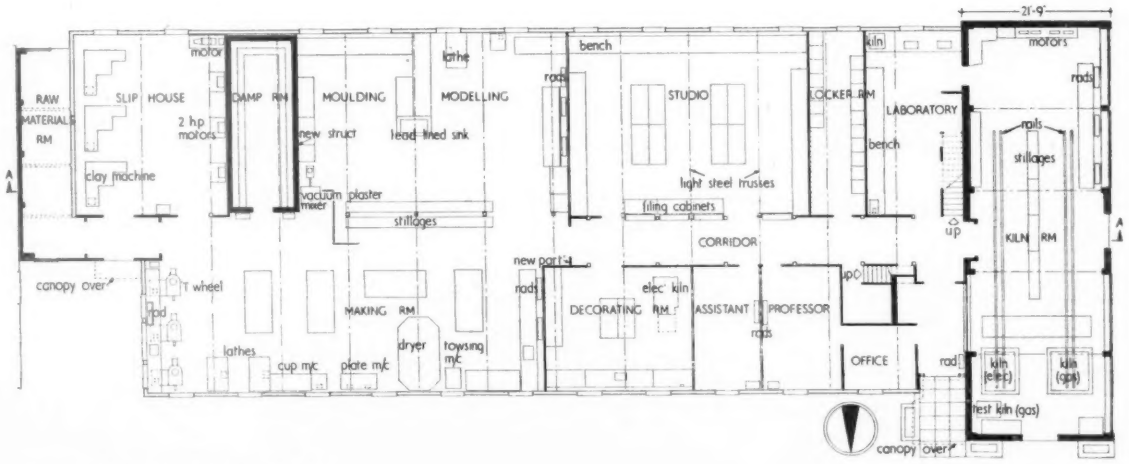


CERAMICS AT THE ROYAL COLLEGE OF ART

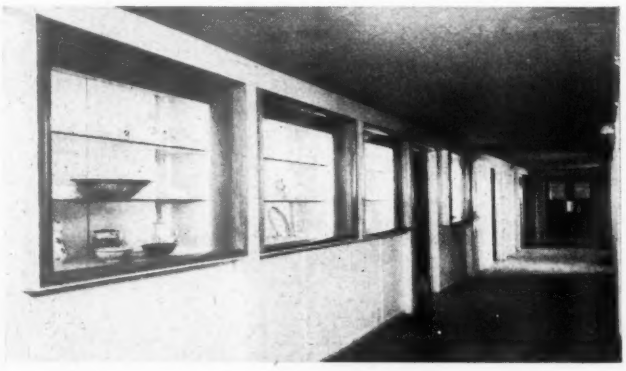
left, centre, is the gas-fired kiln, and below it is the entrance at the corner of the new wing, where it joins the original structure. Top, on the opposite page, is the interior of the old hut-type building and bottom left, on this page, showcases in the central corridor. The kiln room is fireproof. The general contractors were Hall, Beddall & Co., Ltd. Subcontractors, page 154.

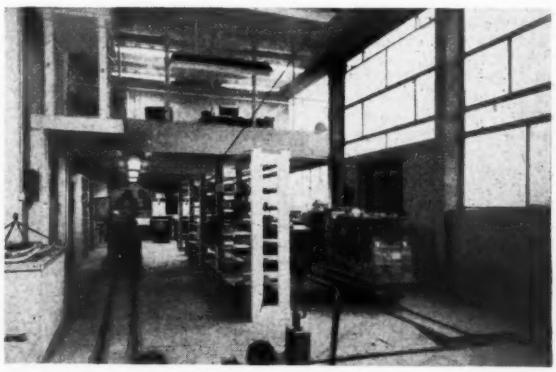


Section A-A



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





LETTERS

Ben Prince, A.R.I.B.A.
Derrek Barrington

We Have Been Warned

SIR,—Mr. Mumford's recent address to the AA (JOURNAL for July 9) comes as a timely warning of the dangers which will befall us if we fail to exercise the broader appreciation of architecture which is the nature of architecture itself. It is timely because with the official recognition at long last accorded to Le Corbusier, there is already a growing amount of powerful propaganda in the form of Press photographs and reports of his works and activities which, if misunderstood, would cease to contribute to the continued progress of architecture.

There is the danger of our failing to absorb the benefit of his broader teachings while attempting the impossible task of imitating his personal genius. We will then be in the "blind alley" referred to by Mumford and will have lost public confidence.

Subsequently, it will remain for another genius to restate Le Corbusier's principles, just as he restated those which had been formulated at the beginning of the Victorian period.

BEN PRINCE.

Stafford.

Exhibition Design

SIR,—ASTRAGAL rightly says that stage designers do not make good architects. He also quotes John Gloag as saying that the design of exhibition stands and displays is an activity in which architects excel, and that this is not far removed from the work of stage designers. Then he goes on to say that when both men are at their best their works should surely have no similarity.

Now this is the point which I wish to make. The designer of stage and, I would add, film sets is far better prepared to tackle an exhibition stand than the average architect. He is generally an artist, a painter who has trained primarily in the visual arts, this being largely illustration. He is used to seeing things in their right proportion and filling in the background. In other words, he knows how to make some things important and others secondary. His primary task is not, as ASTRAGAL says, to provide an unobstrusive background, by means of flimsy material to whatever the author has to say, but to visualize first what it is the author has to say and make that the focal point. He will generally take the script and illustrate the whole story by a series of sketches. The most important thing in these sketches will probably be the characters although inanimate objects occasionally take pride of place. The thing is that he is designing his set not just as a background but as an integral part of the story.

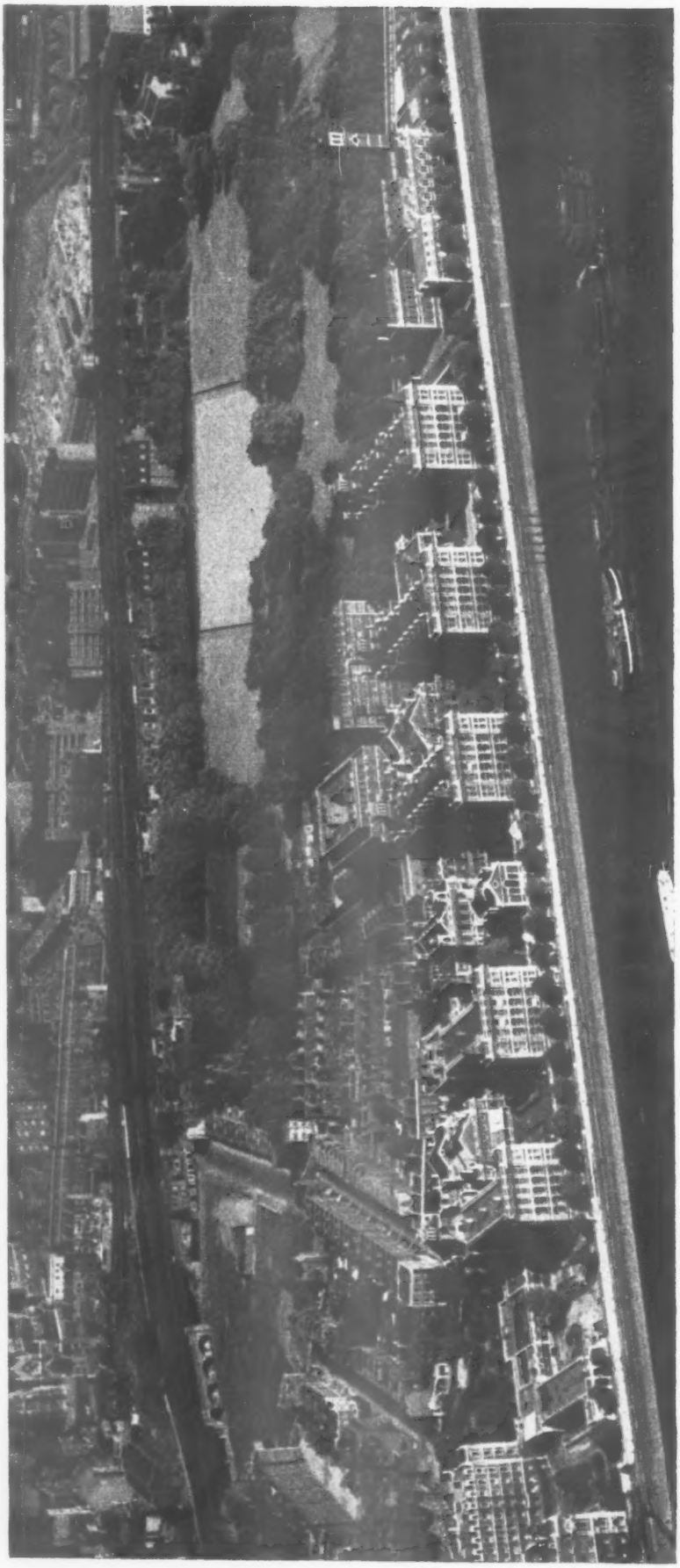
Hence my reasons for saying that I think the stage designer is betted qualified than the architect to design exhibition stands. Like the theatre or film set designer he will first ask the client for the story. Around this story he will design his display so that the story can be better understood and in a way that will appeal.

Some things, I agree, are better handled by the architect designer but I feel that he should only be used as an occasional tool and then only lightly. Some of his stands in recent years have undoubtedly been the wonder of the architectural profession. I have stood in awe, with my mouth wide open, and learned much—but nothing about what the exhibitor was showing.

DEREK BARRINGTON

London.

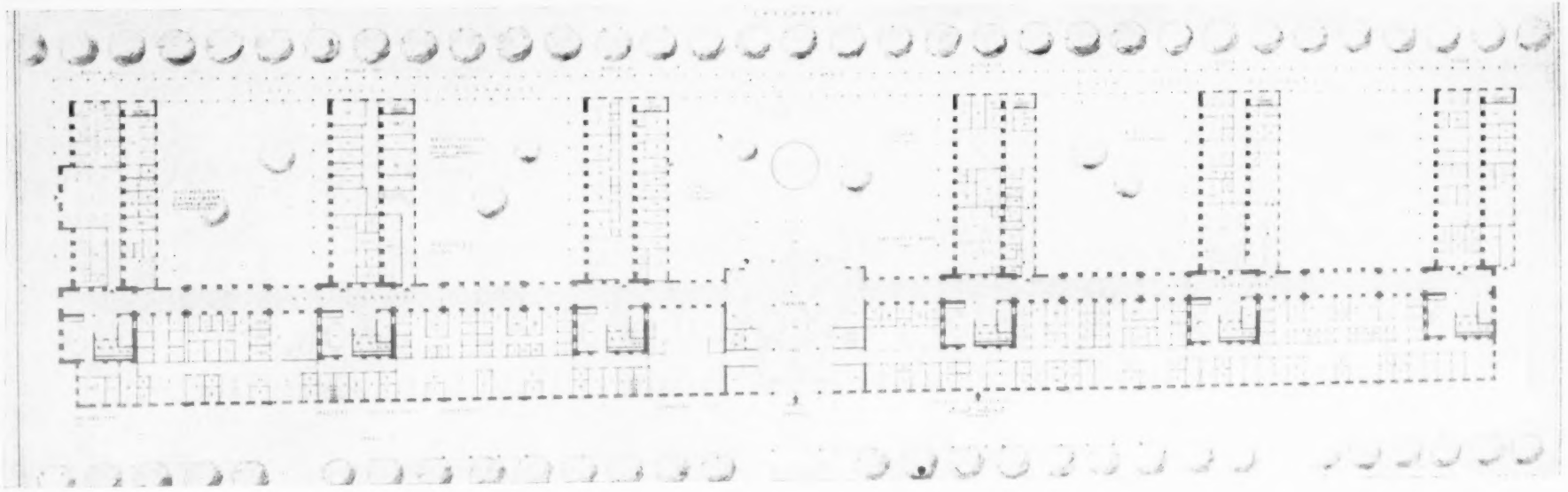
RECONSTRUCTION OF ST. THOMAS'S HOSPITAL AND DEVELOPMENT OF SURROUNDING AREA



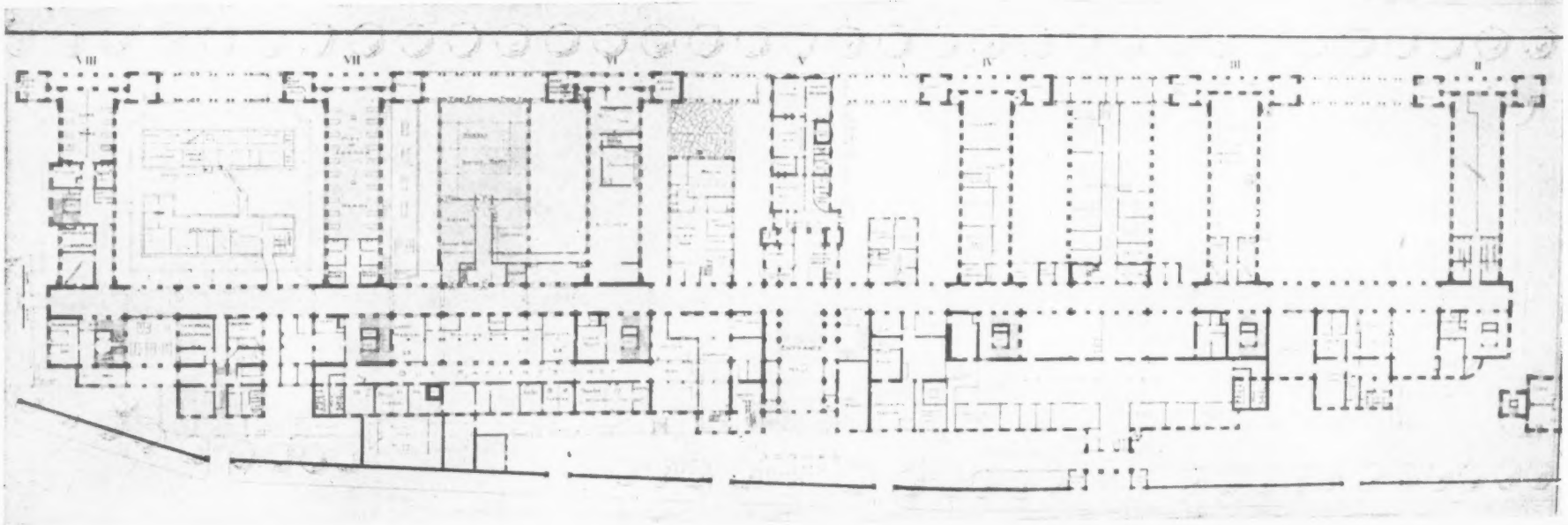
Above, proposed reconstruction. Top picture, the area as it is today. (Aerofilms Ltd.)

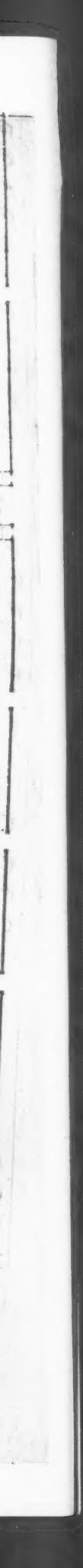
Building operations have begun on a scheme by Sir William G. Holford and Leslie G. Greed for the expansion of St. Thomas's Hospital, London, from nine to eighteen acres, and the development of the blitzed and derelict area lying behind the hospital (see model above). The whole area covers nearly 30 acres. The hospital will accommodate a medical school, a students' hostel, residential accommodation for nurses and lay and medical staff, medical training establishments, service departments, etc. Its expansion will not interrupt the work of the hospital. The plan of the existing hospital building is to be retained and existing wards are to be adapted wherever possible. Plans overleaf show a typical floor before and after reconstruction. All the buildings to the east of the main hospital building are new except the two residential blocks on the south-east boundary, overlooking Lambeth Palace Gardens. (Westminster bridge is to the north of the north-south river line in the photo of the model.) The area behind the hospital precinct is to consist mainly of offices and shops. A block of flats to the south will overlook Lambeth Palace Gardens. The whole scheme is expected to cost something in the region of £8,000,000.

Proposed ground floor plan



Existing ground floor plan





WORKING DETAIL

ASSEMBLY HALL BALCONY: SCHOOL AT OXHEY

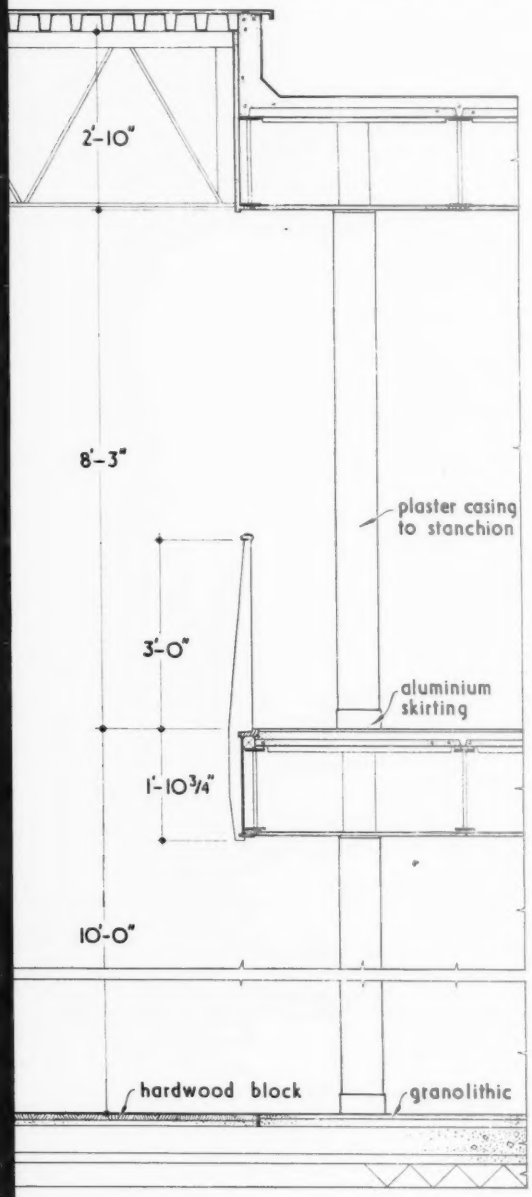
C. H. Aslin, Architect to the Hertfordshire County Council; R. A. de Yarburgh-Bateson, architect-in-charge

The shaped hardwood supports to the balustrade are notched over the edge of the balcony and are secured to the lattice beam behind the fascia.

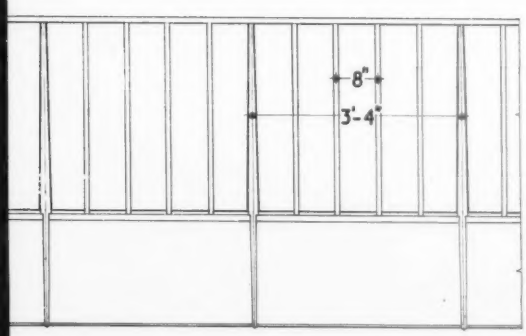
WORKING DETAIL **BALCONIES: 6**

ASSEMBLY HALL BALCONY: SCHOOL AT OXHEY

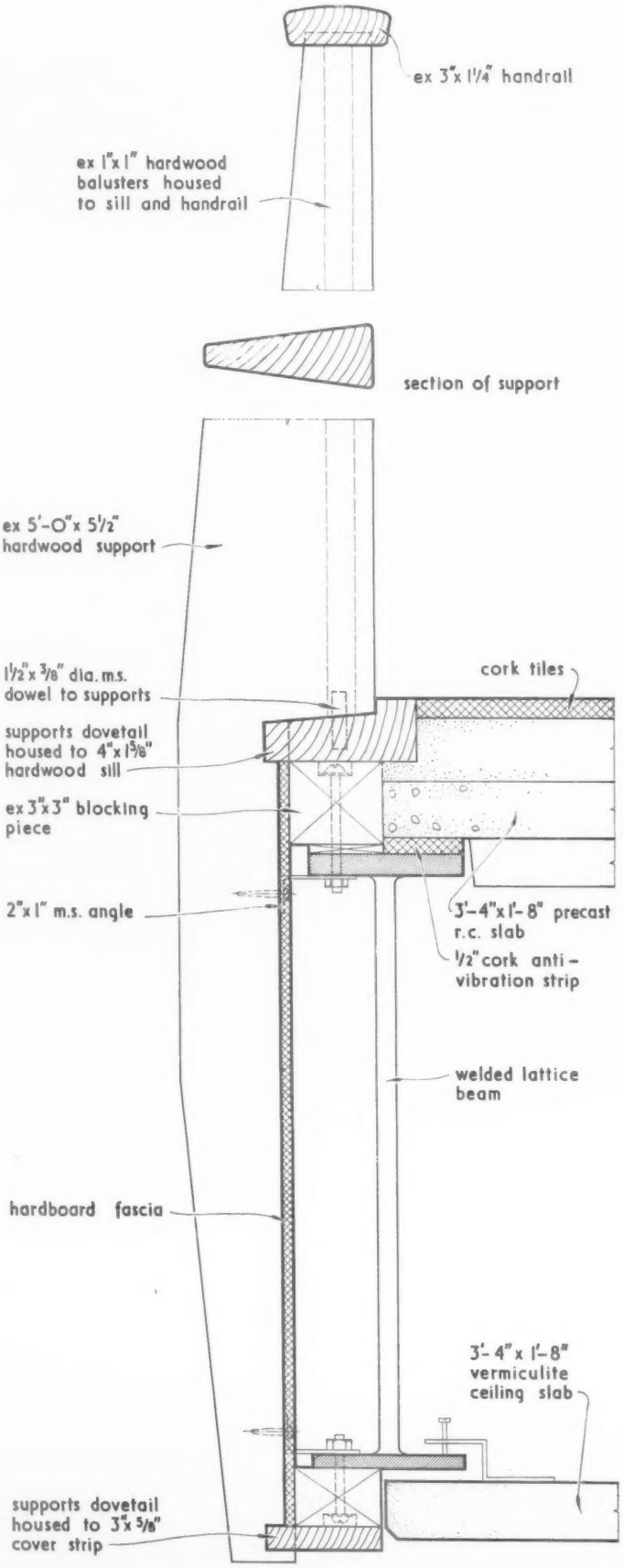
C. H. Aslin, Architect to the Hertfordshire County Council; R. A. de Yarburgh-Bateson, architect-in-charge



SECTION THRO' BALCONY. scale ⅜"= 1'-0"



ELEVATION OF BALUSTRADE. scale ⅜"= 1'-0"



DETAIL OF BALUSTRADE. scale ¼ full size

WORKING DETAIL **WALLS AND PARTITIONS: 9**

GLAZED WALL: SCHOOL AT OXHEY

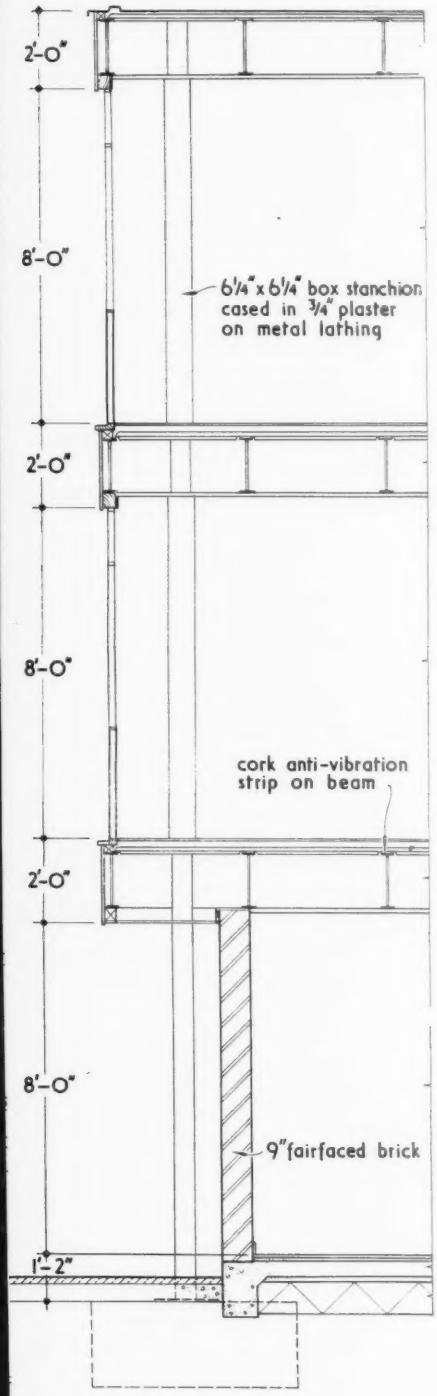
C. H. Aslin, Architect to the Hertfordshire County Council; R. A. de Yarburgh-Bateson, architect-in-charge

The walls, built clear of the stanchions, are composed of glass and cellular plastic sheeting in light alloy frames.

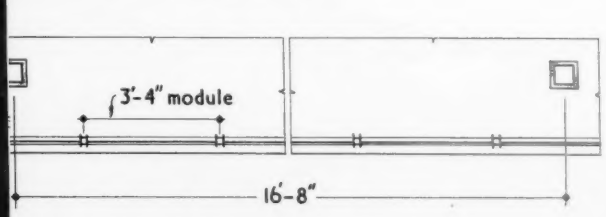
WORKING DETAIL

GLAZED WALL: SCHOOL AT OXHEY

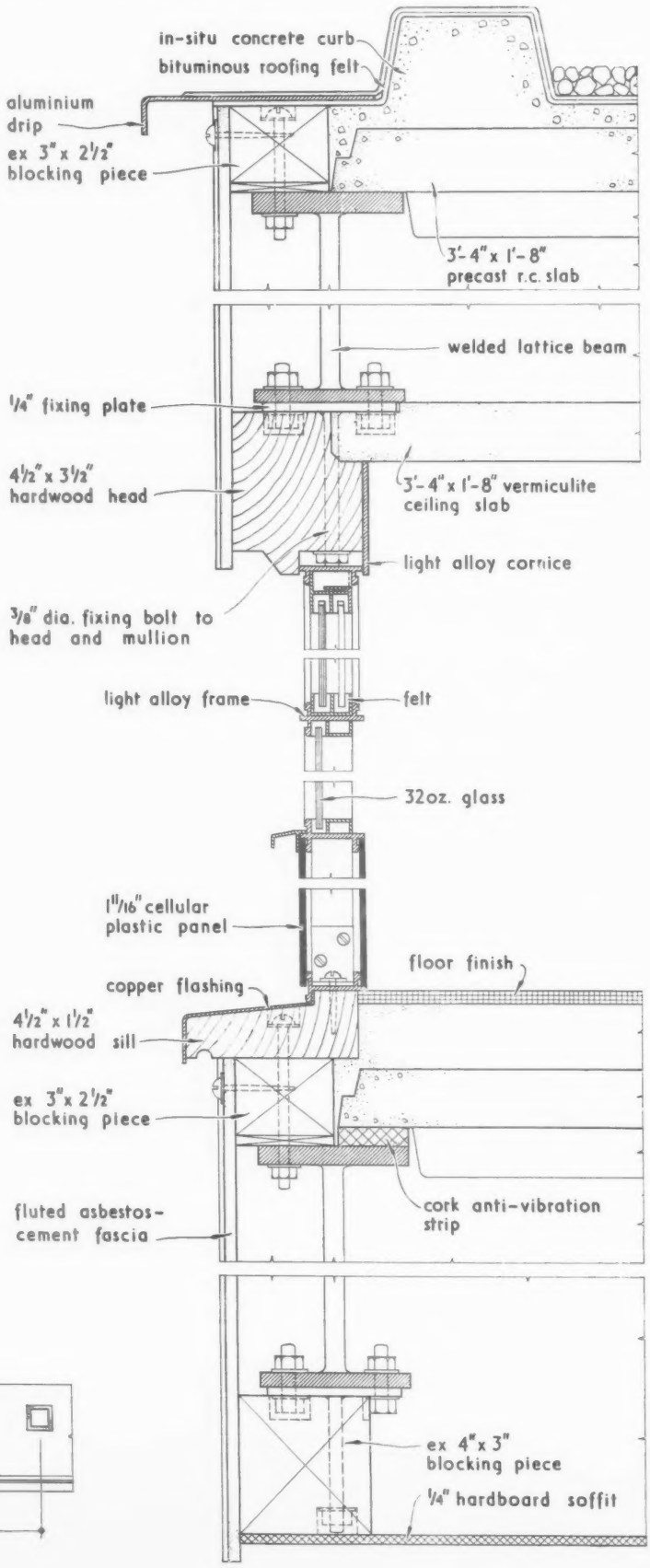
C. H. Aslin, Architect to the Hertfordshire County Council; R. A. de Yarburgh-Bateson, architect-in-charge



EY SECTION. scale ¼"=1'-0"



LAN OF BAY. scale ¼"=1'-0"



SECTION THRO' GLAZING. scale ¼ full size

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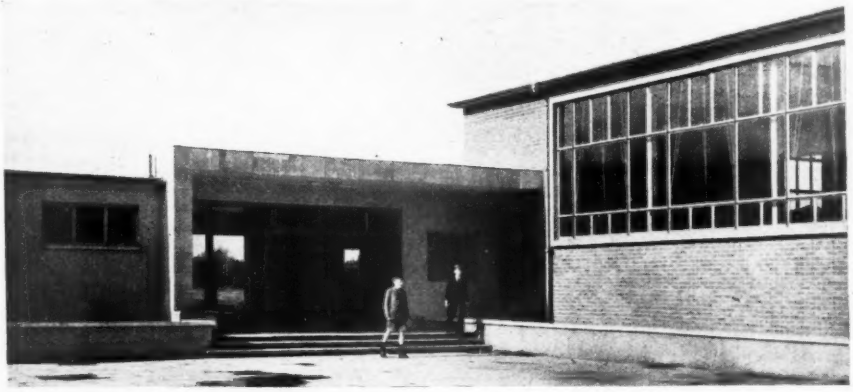
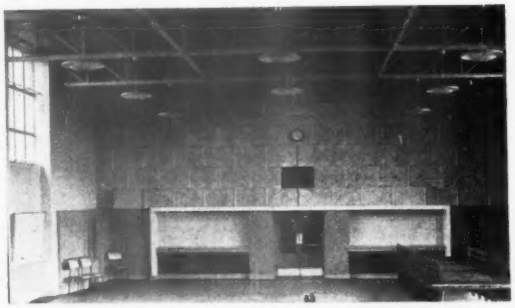
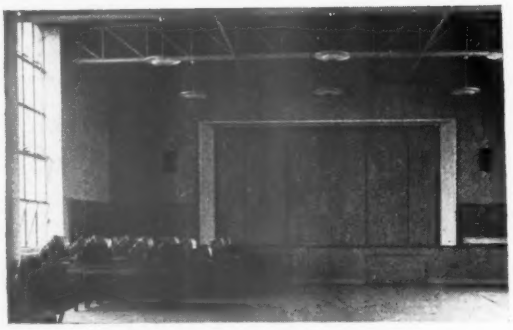
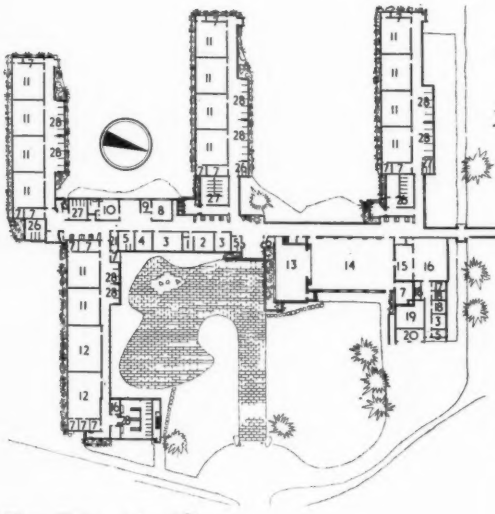
PRIMARY SCHOOL IN LEITHLAND ROAD, POLLOK, GLASGOW

This primary school for the Corporation of Glasgow was designed by John McNab, architect to the Corporation Education Department. Due to the urgency for classroom accommodation in the Pollok-Priesthill area and the liability of the site to mineral subsidence, it was decided to use a single-storey prefabricated aluminium construction with low foundation loading



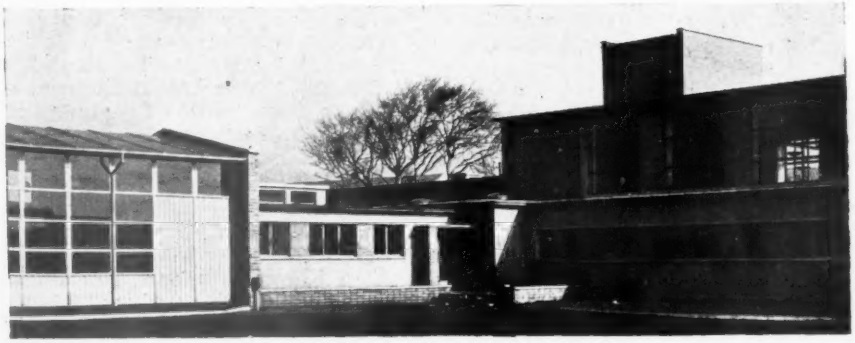




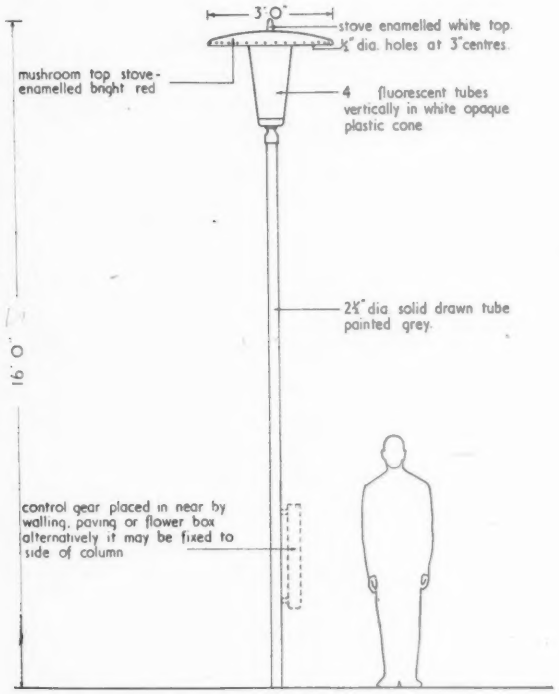


Plan [Scale : $\frac{1}{128}$" = 1' 0"]

and quick erection time for classroom blocks. In the bottom photograph can be seen part of one of the classroom blocks on the left and the west side of the assembly hall on the right. Top right is a view of the main entrance from the south-east and the east facade of the general purpose room; top left, north end of the assembly hall—with kitchen servery; above, left, the sliding doors which divide the assembly hall from the general purpose room, which also acts as a stage. Apart from the classroom blocks, the construction is of cavity, load-bearing brick external walls and roofs of precast concrete units screeded with 2-in. vermiculite and cement and finished with 3-layer bitumen felt with granite chips. Roofs over general purpose room, assembly hall and gymnasium are of aluminium decking on purlins and steel lattice girders. The main entrance has a terrazzo door surround in a blue tiled wall and an outer surround and return wall faced with Bath stone. The rear wall of the assembly hall is faced internally with 1-in. wood wool slabs on wood battens, leaving 1-in. air space. Floors are covered with European oak blocks in classrooms, linoleum tiles in assembly hall, quarry tiles in kitchen and showers, thermoplastic tiles in corridors, staff rooms, etc. The general contractors were Angus M. Macdougall & Co. Ltd. Sub-contractors on page 154.



LAMP STANDARDS AT HARLOW NEW TOWN, ESSEX



Elevation (Scale ½" = 1'0")

This street standard lamp was designed by Alex J. McCowan of Harlow Development Corporation (in close conjunction with the General Electric Co., Ltd., the manufacturers) to illuminate certain "dead" spots in the Stow shopping centre, where the lighting is mainly by lamps fixed on wall mountings. The fittings contain four 40-watt 24-in. fluorescent tubes.

Wladimir De Souza, who represented the Brazilian government at the opening of the Contemporary Brazilian Architecture exhibition at the Building Centre, London, gave the following talk at the Centre yesterday.

BRAZIL'S ARCHITECTURE

BY WLADIMIR DE SOUZA

IT would be impossible to appreciate the form in which Brazilian architecture, both past and present, expresses itself, without an understanding of the factors, both social and mesological, which govern it.

The wide variations in climate, and the topographical features and geological formation found in various parts of the country obliged builders, from the beginning, to find solutions in which economic factors played an important part.

It is, nevertheless, strange, at first sight, to note the almost total absence of *wooden* buildings in a country which contains immense forests and is rich in timber of the highest value

This can be explained by the fact that the Portuguese are, by tradition, master stonemasons. That is why stone was selected for carrying out durable work. Churches, convents and government buildings arose in stone, sculptured or otherwise.

Brazil's chief preoccupation in the past was to satisfy the requirements of a social nature. The religious building programmes were considered of first importance; second to these were government administration schemes. And the domestic programme slumbered. The home dwelling—mud plaster over a slight and rough framework of wood—expresses something done in a hurry; as it were the instability of a gold prospector or a colonist on his way through to the hinterlands.

However, from the inquietude of these generations there arose works of a particular charm, thanks to their adaptation of traditional principles. Such details as the overhanging guttering and eaves, of framework for roof, door and window, the knowledge of mouldings, would not have been possible without a background of technical experience.

This "know-how" reached Brazil from Portugal. Through her master-masons and foremen the Portuguese stamped with their mark the work they left behind in Brazil. Portuguese Colonial—that is what Brazilian architecture represented until the end of the eighteenth century. However, local influences, material and workmanship modified the original Portuguese style.

The diversity of methods of construction used in Brazil is due largely to the immense distances between the various sites. The construction in the south, for instance—in the territory of the Missions—differs in essence from the

"profane" buildings in Ouro Preto or St. John del Rey, in the gold mining districts, as well as in the adobe houses of Diamantina, or in the north-east corner of Brazil.

Colonial architecture remains, therefore, as the most authentic mesological expression of the original settlers—as an understanding and agreement between geography and architecture, topography, the resources of the soil and construction.

The aboriginal contribution is of singular importance, although it plays a smaller part here than it does in Peru or Mexico. In Brazilian art the negro, the river Indian and the half-breed made their influence felt in the execution of forms.

PLASTIC CHARACTERISTICS

The architects of Brazil have been confronted with the characteristic problems of today: residences, communications buildings, structures to house the meetings of large masses of people, buildings to be designed for purposes of education, culture, the practice of medicine and surgery, religion, manufacture and processing—in fact the whole range of human activity. They have faced these problems courageously with the intention of getting results that will be useful, economical, lasting and yet pleasing to the eye.

They have already broken with the standards of what passed for tradition, perhaps because they were not hampered, as in countries with a thousand years of culture behind them, by the legacy of a famous past and perhaps, also, because of a youthfulness which has an irresistible appeal. This youthful urge has had a wide repercussion in their environment, as much in the attitude of official organizations as among the public in general. Buildings to work and to relax in, cheerful residences bathed in light, clean-cut in design, pure in line and airy and transparent—these are some of the typical features of Brazilian construction work.

The most daring conceptions are admissible. Forms are developed freely in space and the designs of Oscar Niemeyer, for instance, illustrate an intrinsically new mode of expression, enriched by an amazing inventiveness. Nevertheless, it must be conceded that there have been abuses which lean towards a new formalism. Architecture is a work of man's hands and as such it succumbs at times to human weaknesses; we should not dwell too long on details, at the risk of blurring our vision of the whole.

On the other hand, the opportunities awaiting painter, sculptor and landscape gardener are innumerable. The taste for decorative panels executed in mosaic or tile is characteristic and gardens planted with evergreen species and tropical shrubs, for which climate and soil conditions are particularly suitable, embody a guiding formula that is really original.

ARCHITECTURE AND TOWN-PLANNING

The noteworthy endeavours of Brazil's architects have not, unfortunately, been accompanied by a corresponding urban reform. Cities like Rio de Janeiro, for instance, have been irremediably marred by the excessive greed of speculators, uncontrolled housing developments and defective conditions of utilization of areas which have risen astronomically in value.

The reclamation of land by the tearing down of hills, such as the one of Santo Antonio, in the centre of the town, would enable large blocks of fine buildings and public gardens to be designed. But this has been continually put off for financial reasons.

In the case of Santo Antonio Hill, a plan has been drawn up in detail by Affonso Reidy, architect and town-planner, and sooner or later this will endow Rio de Janeiro with a district of admirable perspective.

There remains a terrible problem to be solved in the large Brazilian cities—the question of traffic. As in Europe, our urban centres were not planned to support the intense traffic of today. Thus it is that hundreds of thousands of vehicles block the thoroughfares, particularly when, as in Rio de Janeiro, matters are worsened by the long distances that have to be covered.

In compensation, the layout of the city of Sao Paulo has been largely brought up to date in the last few years. This has been the work of the well-known expert in town-planning, Prestes Maia, whose project, much of which has already been carried out, has proved to be highly efficient.

ORIGINS AND EVOLUTION

A little more than twenty years ago a young architect was called upon to direct the National School of Fine Arts (Escola Nacional de Belas Artes), attached to what was then the University of Rio de Janeiro. This young man was an artist whose gifts as a fine draughtsman and expert in Brazilian art of the past were well known to all of us. Lúcio Costa, of whom I am speaking, was responsible for infusing an enlivening spirit into the teaching of architecture in the school.

From then on isolated, faltering experiments with a new kind of architecture began to be made, though it was still easy to discern an imitation of what had been created in Europe since the beginning of the century. A little later the work of the Bauhaus, and above all the ideas of Le Corbusier, began to be disseminated. With the aim of harmonizing residential designs more closely with the life of the times and seeking an outlet for vigorous social aspirations, the younger architects threw themselves heart and soul into a work which was as much a crusade as an expedition into uncharted domains. Needless to say, many of these attempts were ill-fated. We must consider the first experiments to have been inconclusive and hesitant.

It was not long, however, before a trail was blazed towards an authentic form of expression. Problems arising out of climatic conditions, the presence of Le Corbusier—both in person and in inspiration—the very enthusiasm of the architects who sought the basic motifs for their spiritual characterization in the primary sources of the architecture of our forefathers and the configuration of our countryside—all this, in a few brief years, was to lead to the prevalence of an architecture in which originality is certainly not the least remarkable feature. It is, indeed, eminently original, and well adapted to the local, material, human and spiritual conditions peculiar to the country. It is not the achievement of a comic opera or picture post-card regionalism, but of something which seems of lasting value, for its roots plunge deep into the native soil.

THE FUTURE

It is impossible to plot the course which the architects of Brazil will eventually take. The continuous improvement of technical conditions, the use of local materials and—at the same time—the increase in industrial capacity provide contemporary architects with far-reaching possibilities in a country like Brazil, which is passing through a period of active development.

On the other hand, instruction in this art is essentially liberal and a constant effort is being made to stimulate creative initiative. Without neglecting a thorough training which aims at keeping students in touch with up-to-date techniques, particularly in the branch of reinforced concrete, higher education has lost nothing of its humanistic character and covers, as far as possible, the more important cultural aspects of the profession. On graduating from the course, the students are awarded a degree and usually embark upon their professional life right away. As a general rule, post-graduate training, so widely adopted in other countries, is not favoured. The absence of this is compensated for by the practice of second-year students working in the drawing-office of an experienced architect, and thus profiting by a sort of parallel training to the normal course.

Far be it from me to boast of the unsurpassable quality and superiority of Brazilian architects! It cannot be denied, however, that in the course of some twenty years or so a group of young architects has succeeded in carrying out, materially, a work of considerable scope. This has been possible owing to a particularly fortunate conjunction of circumstances, enabling vast projects to be executed along new lines in accordance with modern living conditions. And indeed it is the "work done" which justifies us in foreseeing the continuation of numerous important projects now in course of execution.

BUILDINGS FOR RELIGIOUS ORDER

in BUTCHER ROW, STEPNEY, E.14

designed by R. E. ENTHOVEN

GORDON ROBSON, chief assistant

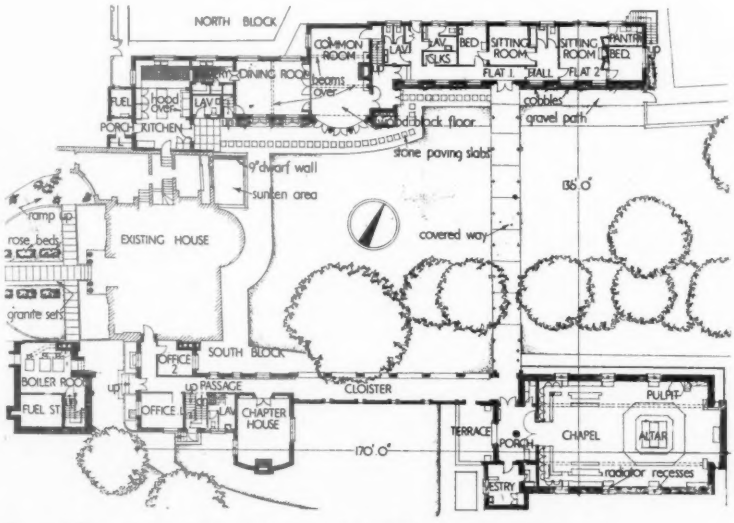
The Regent's Park headquarters of the Royal Foundation of St. Katherine's—an Order concerned with charity and education—were damaged during the war. The new buildings, which include a chapel, a common room, a dining room, a chapter house and flats, were constructed around the vicarage of the destroyed church of St. James's Ratcliffe.

The covered way leading from the chapel to the north wing.

PLAN.—The existing house round which the new buildings are grouped is now occupied by the warden. Two wings have been added to this house. They have been placed close to the boundaries of the site, leaving an open area in the centre. The south block contains a boiler house and fuel store in the basement, offices and chapter house on the ground floor and two flats for sisters on the first floor. The north block contains a dining room, kitchen, common room and two flats for brothers—all on the ground floor. On the first floor are another flat, eleven bedrooms and three maids' rooms. A chapel is linked to the south block by a cloister and to the north block by a covered way.

CONSTRUCTION.—The ground was found to be made up to a depth of about 8 ft. and load-bearing

Top, the buildings from the north-east. On the left of the picture is the existing house, which is now the warden's house. On the right of the picture is the north block, which contains bedrooms for visitors, the dining room and kitchen. The covered way in the foreground links the north block with the cloister. Above, the existing house from the south-west. On its right is the south block, which contains a boiler room and fuel store in the basement, offices and chapter house on the ground floor and two flats on the first floor.

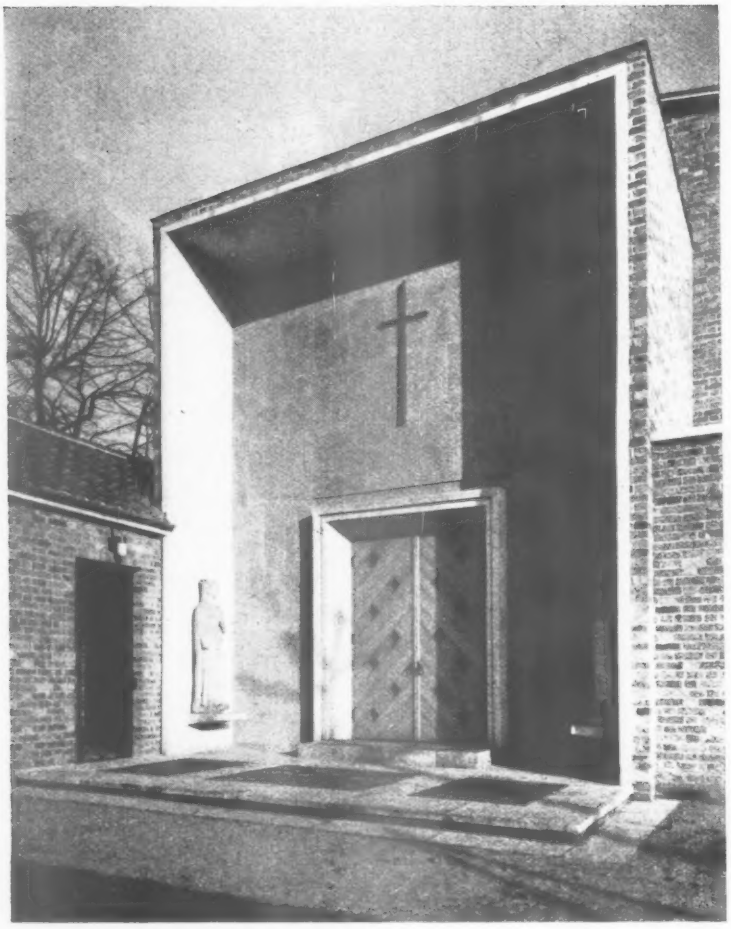


Ground floor plan and basement plan of south block [Scale: $\frac{1}{32}$" = 1' 0"]

BUILDINGS FOR RELIGIOUS ORDER

in BUTCHER ROW, STEPNEY, E.14

designed by R. E. ENTHOVEN



Above, the chapel from the west. The door on the left of the picture opens on to the cloister, seen left, in which old tablets and monuments are preserved. The door at the far end of the cloister leads to a passage in the south block. Below left, a view of the chapel's west door.

partitions were minimized. Strip foundations were used for the outer walls, partitions being carried on beams, and the covered way stands on a RC raft. Walls are of solid brick construction, partitions are of hollow blocks, floors are of hollow tiles and concrete, and roofs are finished with sand-faced pantiles, copper or asphalt.

The contract price was £43,600. The cost was 4s. 3½d. per cub. ft. and 60s. per sq. ft.

The general contractors were James Shackell & Co., Ltd. For sub-contractors, see page 154.

TECHNICAL SECTION

Aluminium is potentially an excellent structural material and it is already being used on a significant scale in the building and engineering industries. However, by volume it is three times the price of steelwork, and economical structures of aluminium alloy can only be achieved by means of efficient design.

Unfortunately, there is a tendency, in using aluminium (just as there was in the early use of reinforced concrete), simply to copy steelwork design. For example, the aluminium alloy sections in BS 1161 are based on steel sections, whereas, since aluminium has a comparatively low buckling strength, new sections should be designed with thickened outer edges and less material between. In this way, the buckling strength can be increased *and* the amount of aluminium used in the section reduced. Similarly, the design of new sections should take into account the fact that aluminium members are extruded, not rolled, and should have, therefore, smooth flowing shapes. Sections that enclose the die, such as ⊏⊐, should be replaced by re-designed sections using the same amount of material, thus : ⊔.

Architects badly need a handbook for aluminium similar to the popular steelwork handbooks, with their tables of safe loads, etc., and it is to be hoped that ADA or one of the enterprising aluminium firms will set about producing one in the near future.

This week's survey

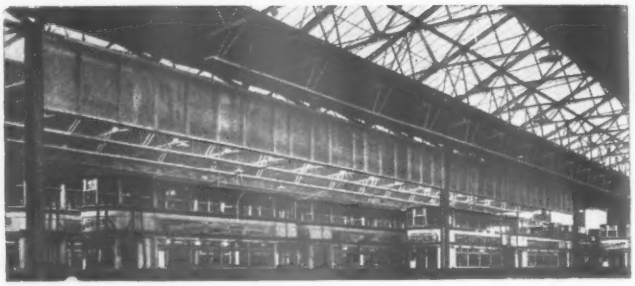
12 MATERIALS: METAL
the use of aluminium in building (continued)

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

J. McHardy Young concludes, below, the survey of the use of aluminium in building which he commenced in last week's JOURNAL. *As with other new materials, there has sometimes been a tendency since the war to use aluminium alloys for purposes for which they are neither suitable nor economical. This has partly been due to the fact that the people with experience in using aluminium (aircraft engineers) knew little about the building industry, while structural engineers knew insufficient about the use of aluminium. However, as engineers and architects learn more, we may see light alloys bring about as great a change in the form of our buildings as has the use of reinforced concrete.*

Used structurally, aluminium alloys are economical mainly for two purposes: firstly, for small-span members, particularly for transportable buildings; secondly, for large-span roofs, in the form of arches, portal frames, domes or space frames. For large spans, aluminium may be used for the entire structure or aluminium members may be used in conjunction with steel members, as in the Dome of Discovery.

Several examples of the use of aluminium for large-span structures were given last week. A good example of its use for small-span structures is the prefabricated aluminium



Garage at Birmingham; the use of aluminium plate girders, left, has made possible the removal of alternate stanchions, and lightened the load on those remaining. The photograph above shows the garage while the change-over was taking place.

school-building system described in the article on MOE development work, which also appeared in last week's JOURNAL.

EXISTING STRUCTURES

The use of aluminium is also justified when it is essential to minimize dead loads; for instance, when adding to or altering an existing building. A recent example of this is the reconstruction of the roof over a garage by the City Transport Organization in Birmingham. By supporting the steel trusses on aluminium alloy plate girders, it was possible to remove alternate stanchions and yet to reduce the loads on the remaining stanchions and, hence, on the foundations. The alloy girders span 67 ft. and are 5 ft. 9 in. deep.

The roof structure of London Bridge Station is also being replaced by aluminium alloy members; partly to reduce the dead load on this war-damaged building, partly to reduce maintenance (*i.e.*, mainly re-painting) costs.

Another example of the use of aluminium in an existing structure is the interior dome of the Royal Albert Hall. This was suspended from the existing roof trusses and the weight had to be limited to 35 tons, although the area is 20,000 sq. ft. The aluminium dome weighs only 30 tons and wood-wool insulation brings the total up to 35 tons.

The use of aluminium made possible the addition of an extra storey to the 4-storey building of the Royal Society of Medicine. The brick cladding was faced with aluminium sheeting, instead of masonry as on the existing storeys, and circular steel columns were enclosed by cast aluminium casings.

CLADDING

Aluminium sheeting, in various forms, has now been in use for about 50 years—long enough to judge its value for cladding. Having withstood the test of time, it is now included in the model byelaws as a suitable material for roofing. British Standard Specifications and Codes of Practice are to be prepared covering the use of aluminium for wall and roof cladding (BS's have already been issued covering its use for rainwater goods).

For cladding purposes, aluminium is used in the commercially pure form. For roofing, it is sometimes used "fully supported," *i.e.*, in the same way that copper and zinc are traditionally used. In this case, the material is used in flat sheets or strips of 18, 20, or 22 S.W.G. At the Sunbury-on-Thames housing estate (designed by Basil Spence & Partners), aluminium was used in this way. Strips of 22-S.W.G. aluminium, 2 ft. wide, were laid on 1-in. fibreboard, supported on 2-in. × 1-in. wood battens at 2-ft. centres. The light weight of the covering effected a considerable saving in the quantity of timber required for the roof structure.

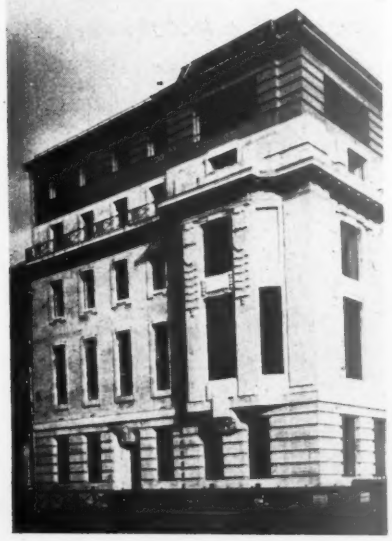
CORRUGATED SHEETING

Corrugated sheeting is the second, and more common, form in which aluminium is used for cladding purposes, both as roofing and as wall cladding.

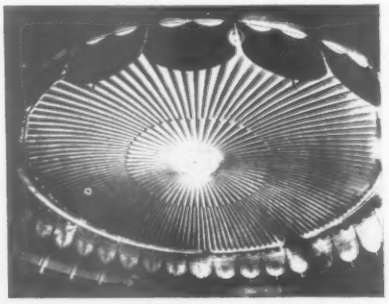
In addition to its high strength/weight ratio and its resistance to corrosion, it has the advantage of improving thermal insulation, as a result of its high reflectivity and low emissivity.

An early use of corrugated aluminium sheeting for roofing was the roof over a boiler house at Warrington. When inspected, this sheeting was found to be in perfect condition after 20 years' continuous exposure to sulphurous fumes.

Corrugated aluminium sheeting is manufactured in two forms: (i) for industrial and agricultural buildings; (ii) for general use. The first is manufactured to comply with BS C of P (CP3), Chapter V, Loading. It must be able to span 7 ft. 6 in., at a minimum slope of 10 deg., with a suction or pressure load of 20 lb./sq. ft., or a concentrated load of 200 lb. distributed over an area of 5 sq. ft. One form of sheeting that has been evolved to meet these requirements is made from alloy "NS3," which has an ultimate tensile strength of 11½ ton/sq. in., with a thickness not less than 0·036 in. and corrugations at 5-in. centres. Other forms of sheeting that satisfy requirements



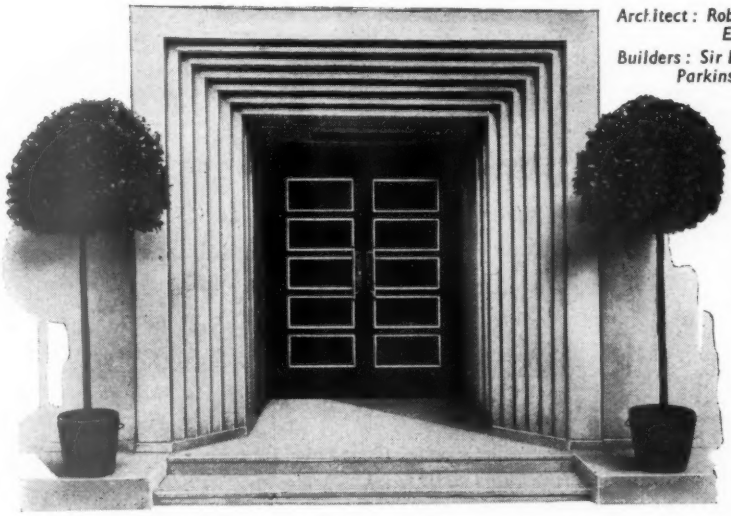
The use of aluminium in existing structures—left, the extra storey added to the headquarters of the Royal College of Medicine (designed by the late J. J. Joass and Leslie K. Watson); below, the suspended fluted aluminium ceiling in the Royal Albert Hall (designed by R. H. Steele).



making an entrance . . .

The entrance is the first feature of a building to meet your eye. And a lot can depend on that initial impression. Here is a case in point—the entrance to Broadwalk Court, The Mall, Kensington. What visitor could fail to be attracted by its magnificent " Royal " doors and frames? Made from polished Honduras mahogany, they have been a constant reminder of the skill and experience of Southerns' craftsmen for the past fifteen years. Other well-known brands of Southerns Doors are " Sasco ", " Marvelite " and, of course, the world-famous " Royal Flush " Doors.

" Sasco " Doors are priced to suit your housing scheme.



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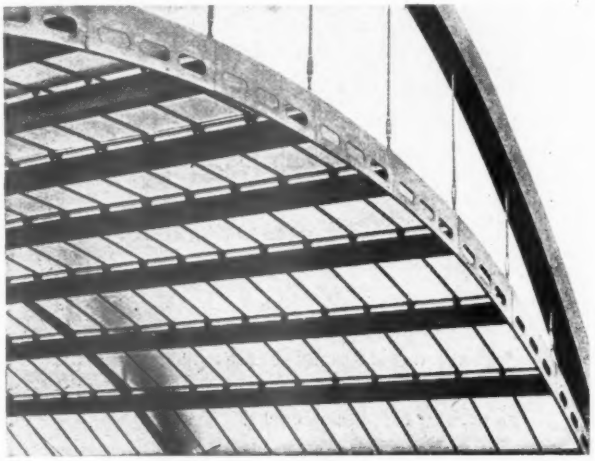
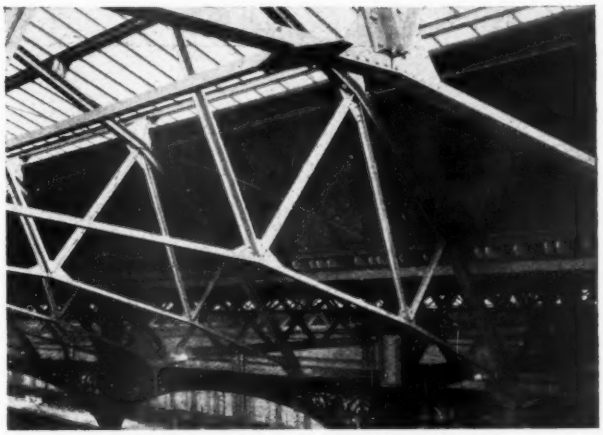
Below, suspended roof over what is now the Waterloo Air Terminal : constructed throughout of medium-strength aluminium alloy to minimize the load on the laminated timber arches.





Above, new roof over London Bridge Station, consisting of 10 aluminium alloy trusses, at 18-ft. centres, and spanning 88 ft. The trusses are similar in shape to the cast-iron trusses they replace, but are so much lighter that they need not coincide with the columns. Purlins and glazing bars are also of aluminium.

of the C of P are also manufactured.

No standard design has been formulated for sheeting for general use, but most of the sheeting used has 3-in. corrugations, ¾-in. deep; the alloy used being either "SJC" or "NS3," and the minimum thickness being 24 S.W.G.

ROOF GLAZING

Aluminium alloy is also used for roof glazing, *in lieu* of lead covered glazing bars. Its lightness and resistance to corrosion and the ease with which it can be extruded into the complicated sections required for roof glazing bars, make it an excellent material for this purpose, particularly where there is a danger of impurities in the atmosphere. Alloy bars exposed to the action of tannic acid in a sawmill were still in good condition after 8 years' service, although tannic acid destroys the lead covering to steel bars and causes the steel to rust rapidly. And alloy bars have given good service in boiler houses and under other conditions of severe exposure.

Aluminium can also be used in the form of tiles (either cast or pressed from the sheet), when æsthetic considerations are more important than considerations of cost.

WALL CLADDING

A recent example of aluminium cladding applied to an industrial building is the strip mill at Rogerstone, Mon., where nearly 200 tons of corrugated sheeting was used. The cladding consists of an outer layer of 20-S.W.G. sheeting with 3-in. corrugations, an inner layer of 26-S.W.G. sheeting with 3-in. corrugations and "packs" of aluminium-foil insulation between.

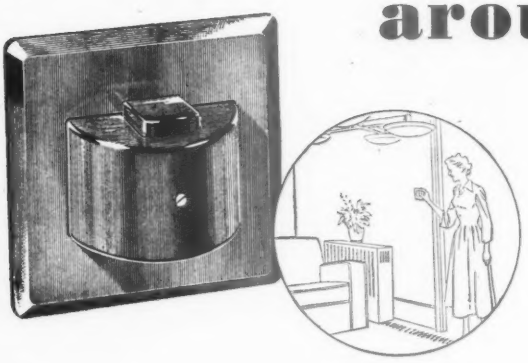
It is admitted that this form of cladding is expensive, but it has been estimated that its use has reduced the space heating requirements for this particular job by 33⅓ per cent. Thus, the saving in the capital cost of the heating plant offset nearly 60 per cent. of the cost of the insulation, and the remaining 40 per cent. was saved by the reduction in fuel consumption over the first 18-months' heating.

An interesting example of aluminium facing (rather than cladding) is the Alcoa Building, Pittsburgh, USA. This 30-storey building (410 ft. high) is claimed to be the lightest permanent office building in the world. It is faced with storey height, 12-ft. by 6-ft., panels of ⅛-in. thick stamped aluminium sheets. The entire building is faced either by these panels, each containing a window, or by special panels that cover the faces of the columns—altogether 188,000 sq. ft. of cladding. Insulation is provided by a 4-in. skin of perlite sprayed internally on to expanded metal lathing. The aluminium has an external skin of a 5 per cent. silicon/aluminium alloy which was electro-chemically treated to provide a permanent grey finish.

A £12,000 saving was estimated to have been made on another American building by the use of aluminium instead of masonry facing. This is the Laurentien Hotel, Montreal, where 70,000 sq. ft. of fluted aluminium sheeting was used. This is in the form of extruded sections, 12 in. wide, which

"Fully-supported" aluminium roofing ; extreme left, housing at Sunbury-on-Thames (architects, Basil Spence and Partners): above, batton square roll with vertical abutment : left, standing seam with folded junction at drip.

SWITCHING around the house



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were joined together to form large panels, and attached to slotted tees fixed between the columns.

Aluminium spandrels are now quite common in New York and the other principal cities of the USA, and, although the savings due to the light weight of aluminium are most impressive for skyscrapers, it is evident that they would be not insignificant for some of our taller buildings, even though these seldom exceed 10 storeys.

JOINTING

Aluminium can be jointed most successfully by riveting. Cold-driven aluminium rivets are now widely used; they produce better results than steel, but have to be larger, since there is less friction and the load is all taken in shear.

Certain alloys can be welded without difficulty. By using the "Argon Arc" process, in which the area to be welded is protected by an "envelope" of inert gas, the use of flux is avoided, the danger of flux or slag getting trapped in the weld eliminated, and distortion minimized.

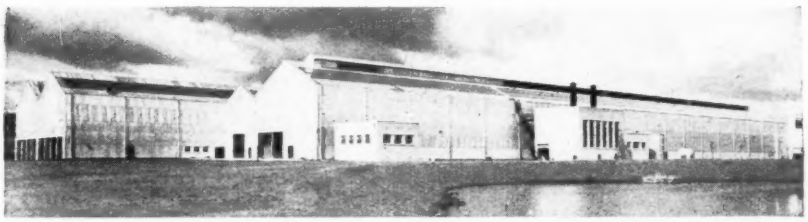
CORROSION

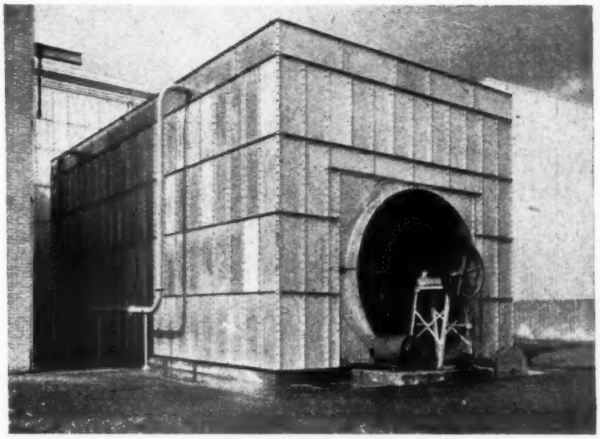
Aluminium and its alloys is much more resistant to corrosion than structural steels. This is due to the fact that a thin film of oxide is formed on the surface, which is non-porous, tough and chemically inert. It also has the property of attempting to re-form when it is broken down either chemically or mechanically. Some alloys, even when un-treated, suffer little corrosion when exposed to the action of industrial, rural or marine atmospheres. Other alloys, however, need painting.

It should be noted that the depth of corrosion is independent of the thickness of the metal. For this reason, some tests on thin materials give misleading results since they state corrosion losses as percentages of the original weights. It should be noted also that the rate of corrosion diminishes rapidly due to the protective layer mentioned above, whereas the rusting of steel is a progressive action.

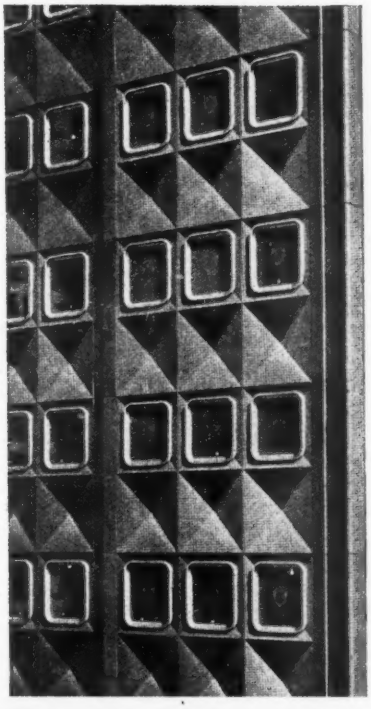
In general, the higher strength alloys are more susceptible to corrosion than the lower strength alloys, and heat-treated alloys are more susceptible than work-hardened alloys. Since pure aluminium is highly resistant to corrosion, the stronger alloys can be protected by a thin skin of aluminium. (This process is used for sheets and plates but not for extrusions.)

Corrosion can be accelerated by high temperatures and humidity. Care should be taken to avoid cavities and pockets where moisture can be trapped. Such places should be suitably protected. The most serious danger is from electro-chemical action, since this can be progressive. Aluminium can

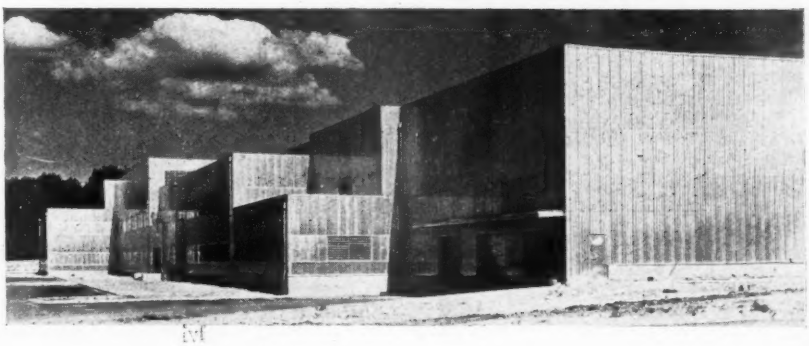




Aluminium wall and roof cladding —the strip mill at Rogerstone, Mon. (consulting architect, G. T. Gardner). Above, general view from the east; right, water cooling tower, constructed entirely of aluminium.



Aluminium cladding in the USA— right, the 30-storey Alcoa Building, Pittsburgh; above, the Laurentien Hotel, Montreal; below, the Forsyth Mill, Pennsylvania (a steel-framed building, clad throughout with 16-s.w.g. corrugated aluminium sheeting).



Insulated roof and floor screeds

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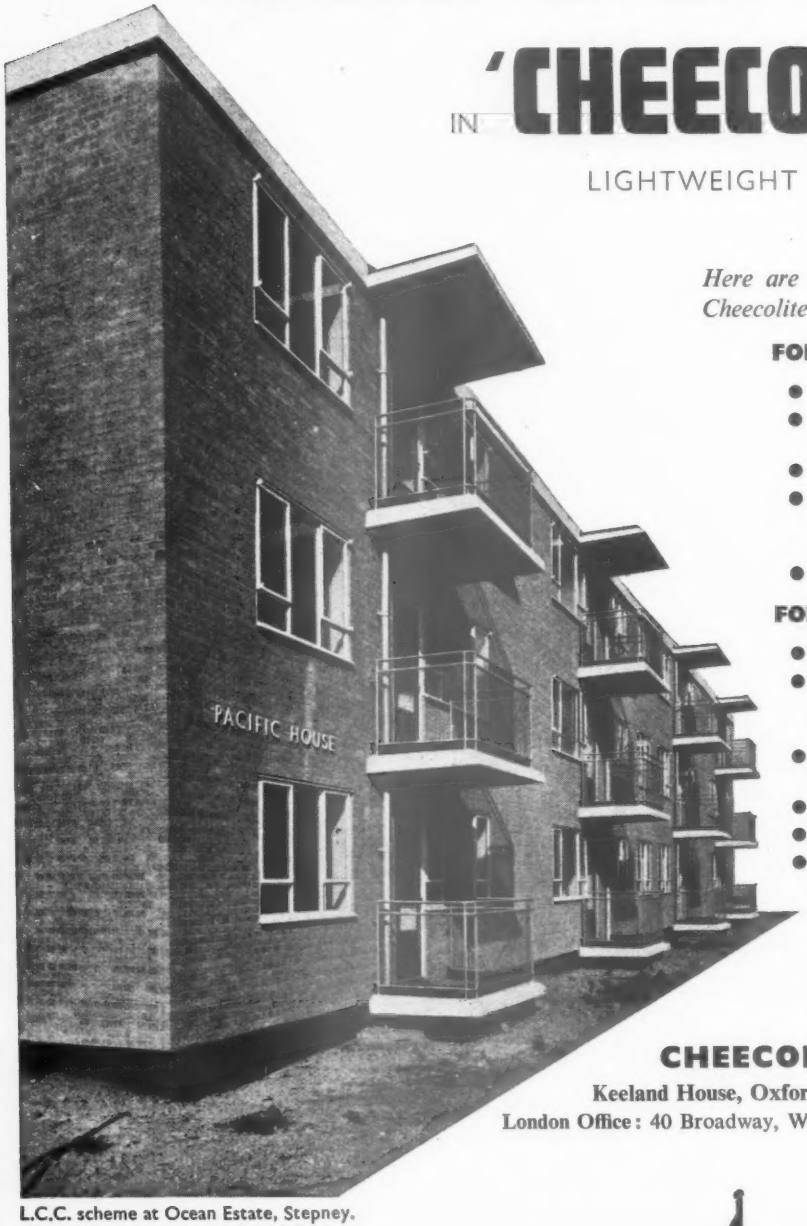

L.C.C. scheme at Ocean Estate, Stepney.
Cheecolite used on all roofs and floors.
Architect to the Council: Robert H. Matthew, C.B.E., A.R.I.B.A.
Principal Housing Architect: H. J. Whitfield Lewis, A.R.I.B.A.
Contractors: Simms Sons & Cooke.

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Departure Building at London Airport. Cheecolite used on roof.
Photo reproduced by permission of Ministry of Civil Aviation and Messrs. Wates Ltd. (Contractors).

suffer loss if in contact with iron, steel, lead, copper, nickel, or chromium. On the other hand, zinc is anodic to aluminium and, hence, galvanizing or zinc spraying will act as a protection. (Aluminium spraying and cadmium plating can also be used.)

PAINTING

When aluminium or aluminium alloy requires painting, the surface should first be de-greased by some agent such as de-oxidine. Since the surface is very smooth, it is necessary to use an etchant or mordant in the priming coat or to roughen the surface by wire-brushing. Priming coats should be resistant to moisture and contain corrosion inhibitors, such as zinc or barium chromate. The undercoats and finishing coats may be of various kinds, according to the appearance required or the conditions of exposure, but lead compounds or graphite should be avoided, especially where there is any risk of exposure to sea water.

Anodizing or chemical dipping may be used as a preparation for painting. Anodizing is an electrolytic process which builds up a coat of oxide up to 0·001 in. thick above the natural coating, thereby providing additional resistance to corrosion. This film can be dyed for decorative purposes.

Where alloys are in contact with others metals, where electro-chemical action may take place or where it is necessary to exclude moisture, soluble inhibitors should be applied to all meeting faces. These are compounds which never completely harden, so that relative movement can take place without breaking the seal.

Aluminium alloys are attacked by free lime in cement, mortar, concrete and plaster, although this action is usually only temporary and superficial, but bituminized paper can be used to protect the alloy, particularly if it is of thin section. High alumina cement should be used for grouting light alloys.

NEW STRUCTURAL FORMS

In addition to the space frame, mentioned last week, there is another new structural form particularly suited to the use of aluminium; this is the " tension field beam." This is like a plate girder in appearance, but the web is made very thin (it may be as little as 0·025 in. thick, whereas the minimum thickness of steel to resist corrosion is 0·06 in.), and allowed to " wrinkle " under the effects of the shear stresses. In spite of the wrinkling, the web acts satisfactorily in tension, and the extra weight of aluminium required in the other members is far less than the weight of aluminium saved by using the very thin web.

CONCLUSIONS

The use of light alloys in the building industry has clearly passed the experimental stage, although many of the problems involved in their use are still the subject of research and development. However, if aluminium is to play its full part in the building programme, there must be the closest collaboration between architect, engineer and manufacturer. This is, perhaps, more important with aluminium than with any other material, since knowledge of its properties, fabrication methods and design have so far been confined to a comparatively small section of the industry. The nomenclature of the various alloys, with its multiplicity of trade names, is, in itself, confusing to the architect, who is advised to adhere strictly to the nomenclature of the appropriate BS (a list of which appears below), and to seek the advice of an expert when in doubt.

BRITISH STANDARDS

Rainwater goods, cast and extruded	1430 : 1947
Wrought, sheet and strip	1470 : 1948
Anodic oxidation finishes for	1615 : 1949
Bars, rods and sections	1476 : 1949
Sections	1161 : 1951
Wrought, forgings	1472 : 1951
Wrought, plate	1477 : 1951
Rivets, large	1974 : 1953

INFORMATION CENTRE ITEMS ON ALUMINIUM

Aluminium and Aluminium Alloys in Building, BRS Digest, Part I	16.83 : 27.3.52
Aluminium in Building	16.85 : 17.4.52
Aluminium and Aluminium Alloys in Building, BRS Digest, Part II	16.86 : 26.6.52
Aluminium and Aluminium Alloy Sections, Addendum	

INFORMATION CENTRE

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

7.38 practice: DRAWING OFFICE PRACTICE

Drawing Office Practice for Architects and Builders. BS 1192:1953. (British Standards Institution. 7s. 6d.)

The first edition of BS 1192, published in 1944, received criticism, but was undoubtedly useful in a number of ways. The present edition contains many revisions. Standard sizes for drawings, standard notation for materials, etc., and standard methods of folding should be adopted by all offices.

10.106 design: building types COST OF HOUSING

The Cost of House Construction. (United Nations Economic Commission for Europe. Ref. E/ECE/165 IM/HOU/51.Rev.1. May, 1953.)

Summarized in the JOURNAL for July 16, 1953, this preliminary study of measures to reduce housing costs deals also with the development of the building industry. It shows that many of the troubles so frequently discussed in this country are also common to other countries of Europe, although its treatment of them is only of a very general nature.

Over 30 pages deal with cost reduction, organization of demand and organization of the industry. There is then a brief summary of conclusions and recommendations. Among the recommendations of special interest are those which deal with the need for action on the following: scale and continuity of demand and its influence on cost; development of model codes and regulations; examination of contract practice; the role of the architect and engineer; trends in mechanization; the need for more research and particularly for better dissemination of the results of research.

11.33 materials: general FUNGI AND MOULDS

Methods of Testing Fungal Resistance of Manufactured Building Materials. BS 1982:1953. (British Standards Institution. 2s.)

A number of organic materials other than natural timber may suffer attack from fungi or moulds. This BS describes methods of testing the resistance of fibre-boards, chipboards, " improved " woods, cork slabs, woodwool slabs, plaster boards, compressed straw slabs, and insulating quilts, but does not cover paints or other decorative finishes.

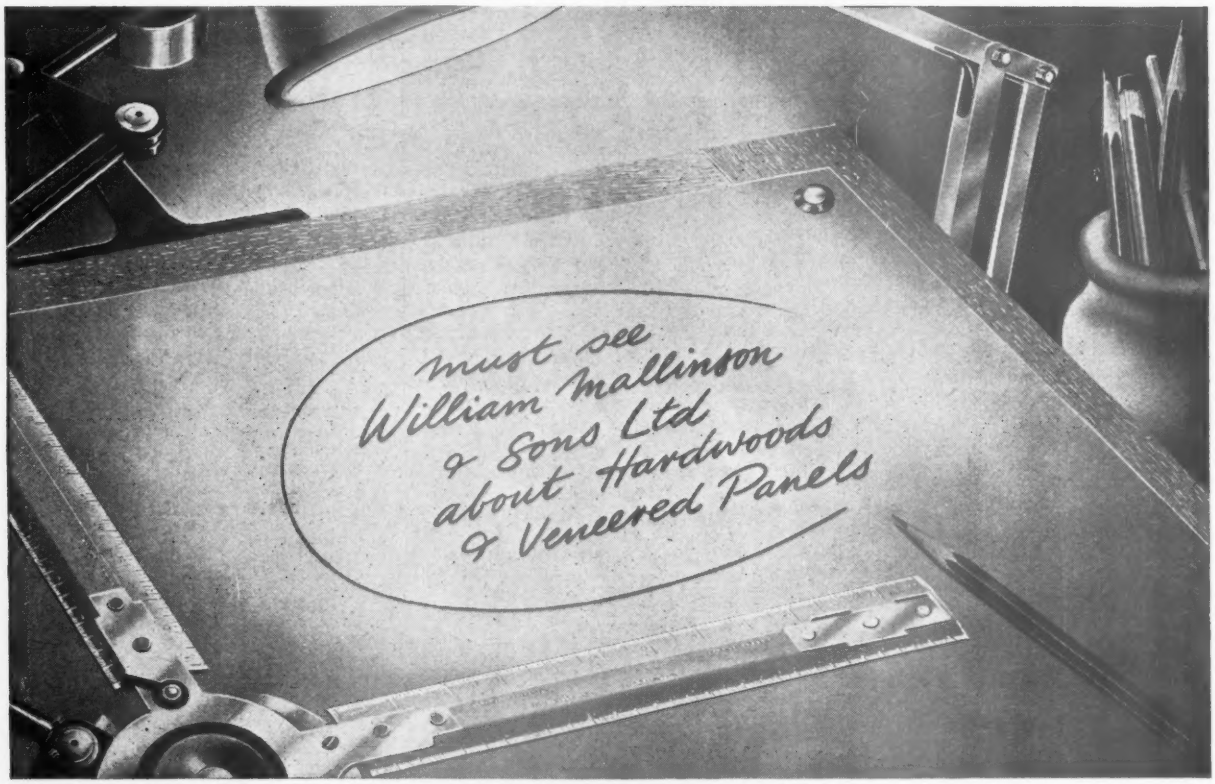
18.133 construction : theory STRUCTURAL STEELWORK

The Structural Use of Steel Tubes in Buildings. CP 113.201. (British Standards Institution, 1953. 5s.)

This Code, prepared by a committee convened by ISE, is complementary to CP 113 and CP 113.102—the codes on structural steelwork. Recommendations are given for the design, fabrication and erection of steel tubes in structural work. It does not apply to steel scaffolding. Welding has increased the possibilities of using tubes, and recommendations regarding types of welded connection and permissible stresses are given.

The main value of a tube is in compression, where the fact that the material is distributed uniformly and at the farthest distance from the centre of gravity provides a minimum slenderness ratio in any axis for a given area of section. Tubes are less liable to local buckling than rolled sections and may, therefore, be supplied in thinner sections. Tubes also have great resistance to torsion.

The main snag at the moment is the range of tubes which is readily available. Small diameter, small gauge tubes are fairly easy to obtain but the delivery date for the larger diameter tube may be 6 months or more. Moreover, they are usually obtainable only in 22-30 ton steel, and, for use as columns. The usual range of tube thicknesses is inadequate.



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SHIRES & CO. (LONDON) LTD., Greenbottom Works, Guiseley, Yorkshire

23.183 heating and ventilation
PANEL HEATING

Losses from Heated Floors. N. S. Billington. (Journal of IHVE. Vol. 21. June 1953, pp. 104-108.)

Experiments with Intermittently Operated Floor Panels. N. S. Billington and E. W. Shaw. (Journal of IHVE. Vol. 21. June 1953, pp. 109-113.)

Valuable research papers on the relative importance of under-floor and edge insulation of heated floor panels.

It is shown, in the first paper, that, for a floor 20 ft. square, edge losses account for about a quarter of the input, while the downward loss accounts for only about a thirtieth of the input. Clearly, edge insulation is the more important, but it is shown in the second paper that the insulation under the slab serves to reduce the heating-up time. An un-insulated floor took 8 hr. to heat up, but one with ½-in. insulating board under the panels took only 4 hr.

We can conclude that, if the panel is required to be heated more or less continuously, it is only worth while to insulate the edge and, say, 2 or 3 ft. back from the edge. If heating is to be intermittent, as in schools, then the whole panel should be insulated.

25.98 water supply and sanitation
BASIN AND SINK BRACKETS

Brackets and Supports for Lavatory Basins and Sinks. BS 1255: 1953. (British Standards Institution. 2s. 6d.)

Revised Standard for quality and dimensions. It would be helpful if some notes had been added on types of wall to which the various kinds of support can be fixed safely.

25.99 water supply and sanitation
BALLVALVES

Floats for Ballvalves (Copper). BS 1968: 1953. (British Standards Institution, 3s. 6d.)

Cross references with BS 1212 but uses lighter gauge metal, as 5-oz. floats have been found satisfactory. Permits floats to be specified, manufactured and sold separately, rather than combined with ballvalves as in BS 1212.

25.100 water supply and sanitation
TAPS AND STOP VALVES

Draw-off Taps and Stop Valves for Water Services. (Screwdown pattern.) BS 1010: 1953. (British Standards Institution. 6s.)

Revised BS, applies only to screw-down types. Chief revision is to allow for lighter fittings.

26.108 services and equipment: miscellaneous
MECHANICAL HANDLING

Materials Handling in Industry. (British Electrical Development Association. 1953. 9s.)

Mechanical handling of materials in factories is dealt with by describing rather briefly a very large variety of conveyors and handling equipment and giving notes on their applications. General chapters deal with the benefits of mechanical handling and simple rules for its use. A specialist book, but one of considerable general interest to designers of industrial buildings and likely to give them good background knowledge on which to quiz their clients at the early stage of a job. 140 pp., well illustrated and indexed.

44.D1, *REFERENCE BACK*

Readers are asked to note the following amendment and to correct their copies of the Information Sheet in question:
The latter part of the first paragraph under "Applications" should now read: "Plastering is done after the steel channel has been screwed to the lintel and is allowed to dry thoroughly before the track is fitted. The spring clips should be evenly spaced along the track, the first and last being 3 in. from the ends. One edge of each clip is then placed into one side of the channel: a screwdriver inserted in the clip on the opposite side and pressed firmly upward will cause the clip to snap into place."

THE INDUSTRY

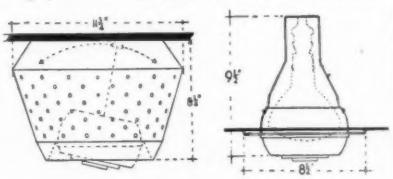
In a brief report from the Industry, Brian Grant mentions this week some new lighting fittings and a well-produced catalogue of metal windows

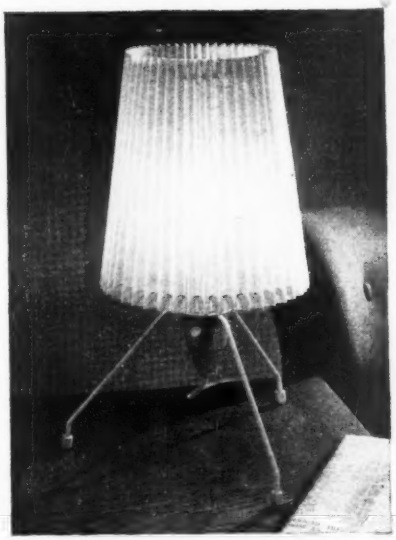
METAL WINDOWS

A new catalogue (No. 98) from Williams & Williams shows a number of different windows and doors purpose made from the universal section, which will fulfil most purpose-made requirements and give plenty of scope for the ingenuity of the designer. The sections are rolled from mild steel or extruded from bronze or aluminium alloys. Numerous examples are shown of recent work in schools, industrial buildings and flats, and most of the photographs are accompanied by constructional details showing the sections used and the methods of fixing. A handsome publication; very well-produced. (*Williams & Williams Ltd., Reliance Works, Chester.*)

LIGHT FITTINGS

The illustrations below show surface and flush-mounting versions of the new "Gimbaliter" fitting recently marketed by Courtney, Pope. It is an adjustable spotlight designed to take the new 75-watt internally silvered lamp, as well as ordinary lamps, and is intended for use in showroom





and window displays. Recessed and surface mounted models are produced and a range of colour filters is also produced. Prices are from £2 15s. to £5 10s. The same firm also has a new range of "Petite" reflectors at prices from 25s. to 38s. 6d. (*Courtney, Pope (Electrical) Ltd., Amhurst Park Works, Tottenham, London, N.*15.)

Mention was made in these notes not long ago of some relatively inexpensive wall lights made by Cone Fittings. This firm has now produced a table lamp, above, which sells at 32s., plus 5s. 3d. purchase tax. (*Cone Fittings Ltd., 9, Rosemont Road, Hampstead, London, N.W.*3.)

Readers requiring up-to-date information on building products and services may complete and post this form to the Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1

ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal." (BLOCK LETTERS, and list in alphabetical order of manufacturers' names please).

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Please ask manufacturers to send further particulars to:—

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AJ 30.7.53

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Buildings Illustrated

School of Ceramics, Royal College of Art, South Kensington, London, S.W.7. (Pages 136-137.) Architects: Ramsey, Murray and White; Partner-in-charge: Professor Basil Ward, F.R.I.B.A., HON.A.R.C.A. General contractors: Hall, Beddall & Co. Ltd. Sub-contractors: heating and water services, Ellis (Kensington) Ltd.; metal windows, Aygee Ltd.; gas fired kilns, tracks and rail tracks, Thermic Equipment & Engineering Co. Ltd.; electrical work, Grierson Ltd.; linoleum, Catesbys Ltd.; ironmongery, Teuten & Co. Ltd.; show cabinets, Harris & Sheldon Ltd.; sanitary goods, John Bolding & Sons Ltd.; steel staircase, Safety Tread Syndicate Ltd.

Primary School, Leithland Road, Pollock, Glasgow, for the Corporation of Glasgow, Education Department. (Page 141.) Architect: John McNab, L.R.I.B.A., F.R.I.A.S. Architect and Property Superintendent, Corporation of Glasgow, Education Department. Consultants for the foundation: George Davie, Crawford & Partners. General contractor: Angus M. Macdougall & Co. Ltd. Sub-contractors: aluminium classroom units, Bristol Aeroplane Co. (Western) Ltd.; asphalt, Limmer & Trinidad Lake Asphalt Co. Ltd.; bricks, Dunbrik Ltd.; stone, Bath & Portland Stone Firms Ltd.; structural steel, Ayrshire Dockyard Co. Ltd.; tiles, Toffolo Jackson & Co. Ltd.; special roofings, Wm. Briggs & Sons Ltd.; glass, James Thow Ltd.; domelights and "Armourplate," Pilkington Bros. Ltd.; classroom flooring, National Flooring Co. Ltd.; stage and gymnasium flooring, A. M. Macdougall & Son Ltd.; "Accotile," National Flooring Co.; linoleum, J. G. Robertson & Son Ltd.; central heating, Brightside Engineering Co.; gasfittings, plumbing, Wm. Fleming & Co.; electric wiring, Central Electrical Workshops Section—City Engineer, Corporation of Glasgow; electric light fixtures, dining hall and staff rooms, A.S.E.A.; stairtreads, National Flooring Co. Ltd.; door furniture, George Boyd & Co.; casements, Crittall Manufacturing Co. Ltd.; bells, Central Electrical Workshops; roller shutters, G. Brady & Co.; plaster, R. J. Ritchie & Co. Ltd.; metalwork, Jas. Robertson & Co.; joinery, Edward Gibbon & Sons Ltd.; textiles, Stage Furnishings Ltd.; furniture, D. MacDonald & Bros.; school fittings, Education Supply Association Ltd.; cloakroom fittings, Fyvie Gate Co.; clocks, Smiths Electric.

Chapel, Cloisters and Chapter House, Offices and Domestic Accommodation, The Royal Foundation of St. Katharine, Butcher Row, Stepney, London, E.14. (Pages 144-146.) Architect: R. E. Enthoven, F.R.I.B.A. (chief assistant: Gordon Robson, A.R.I.B.A.). Consultants: Andrews, Kent & Stone. Quantity surveyors: Drower & Son. General contractor: James, Shackell & Co. Ltd. Sub-contractors: demolition, French & Co.; asphalt, Holborn Asphalt Co. Ltd.; bricks, Crowborough Brick Co. Ltd.; stone, W. T. Stevenson & Co. (1947) Ltd.; artificial stone, Malcolm Macleod & Co. Ltd., and Girlings Ferro Concrete Co. Ltd.; fireproof construction, The Kleine Co. Ltd.; tiles, H. J. Greenham (1929) Ltd.; special roofings (copper), Frederick Braby & Co. Ltd.; glass, Aygee Ltd.; woodblock flooring, Zeta Wood Flooring Co. (1910) Ltd.; patent flooring, G. Stephenson & Co. Ltd. (cork), Macnab & Co. (Flooring) Ltd. (composition), Limmer & Trinidad Lake Asphalte Co. Ltd (asphalt tiles); central heating, Wenham & Fowler Ltd.; grates, Bratt Colbran Ltd.; boilers, Ideal Boilers & Radiators Ltd.; electric wiring, S. B. Hopkins & Co. Ltd.; electric light fixtures, Troughton & Young Ltd.; sanitary fittings, John Bolding & Sons Ltd.; door and window furniture, bells, Mears & Stainbank; iron staircases, Haywards Ltd.; joinery, P. H. Barker & Son Ltd., and E. A. Higginson & Co. Ltd. (chapel doors); tiling, A. J. Tatham Ltd.; shrubs and trees, John Waterer Sons & Crisp Ltd.; church fittings, Sims and Sims Ltd., and Chas. Gessman Ltd.; signs, The Lettering Centre.

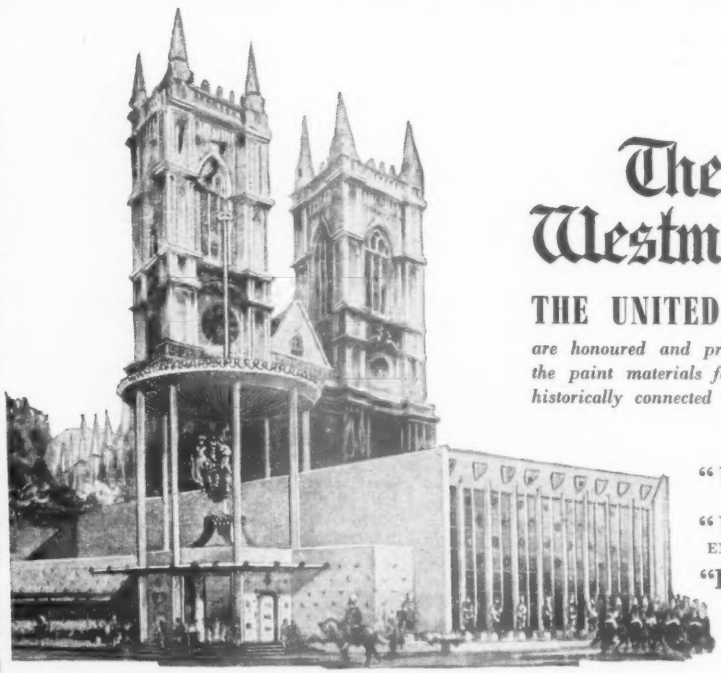
Announcements

We regret to announce the death of James Walker, the founder of James Walker (Architectural Decorations) Ltd. He was born in Glasgow and migrated to England as a craftsman. In 1919 he founded his business. His craftsmanship is to be found in St. Paul's Cathedral, where he undertook the wood-carving in the style of Grinling Gibbons in the Chapel of St. Michael and St. George. His stone-carving can be found in many public buildings, from the Law Courts, Belfast, to the Supreme Court of Justice, Lagos, West Africa. His business will continue on the same lines as before.

The annual golf match between the golf clubs of the LMBA and MOW ended with a slight lead for the LMBA. It was played at Porters Park on July 15. In the morning foursomes were played and the score was even at 3 all. In the afternoon the same couples played in fourball matches. The LMBA secured a lead of one point, the score being 3½ to 2½, giving them the victory with a score of 6½ to 5½. All matches were under handicap.

The Industries Branch of the BOT's Commercial Relations and Exports Department has moved to Lacon House, Theobalds Road, W.C.1. (Tel.: Chancery 4411.) The department will now be known as the Export Services Branch.

On and after July 27 all communications in connection with advertising for the Avon India Rubber Co. Ltd. should be addressed personally to Philip Hutchings, advertising manager, The Avon India Rubber Co. Ltd., Melksham, Wilts. (Tel.: Melksham 3101.)



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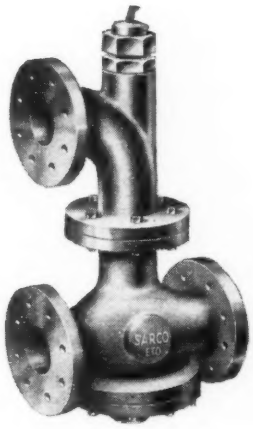

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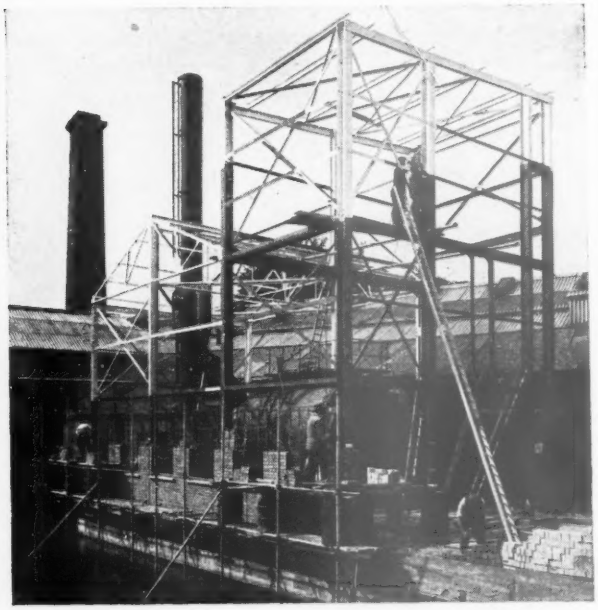

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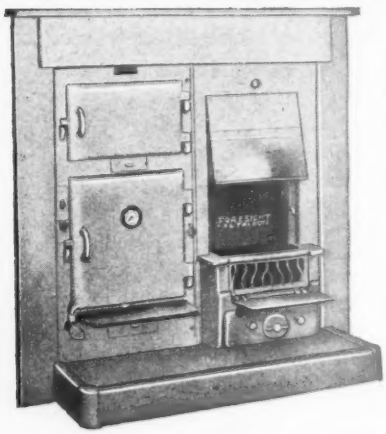

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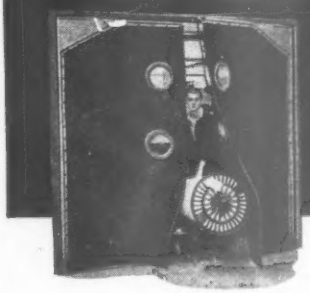

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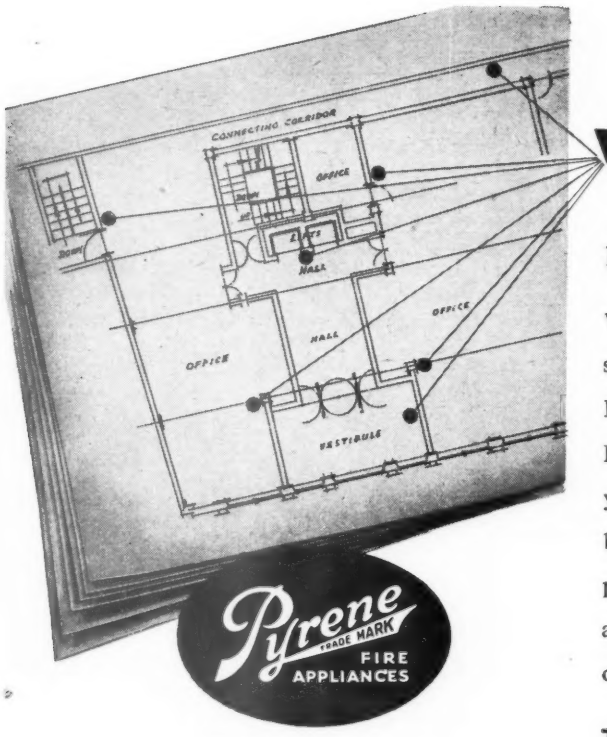

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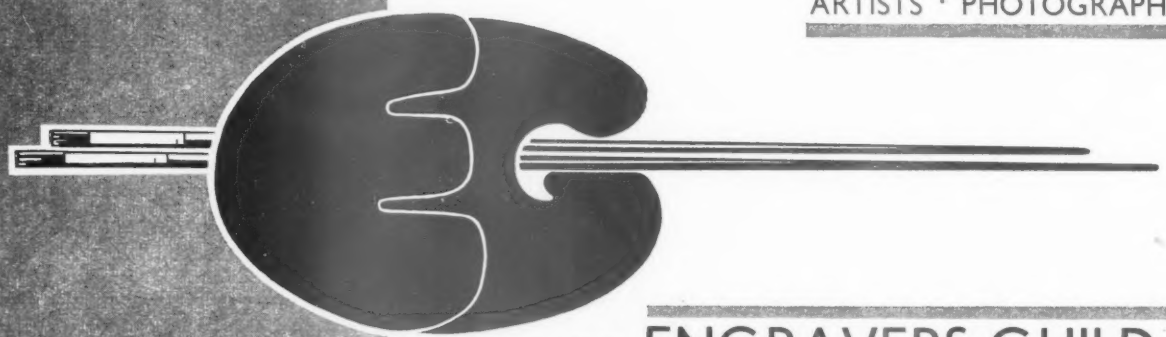

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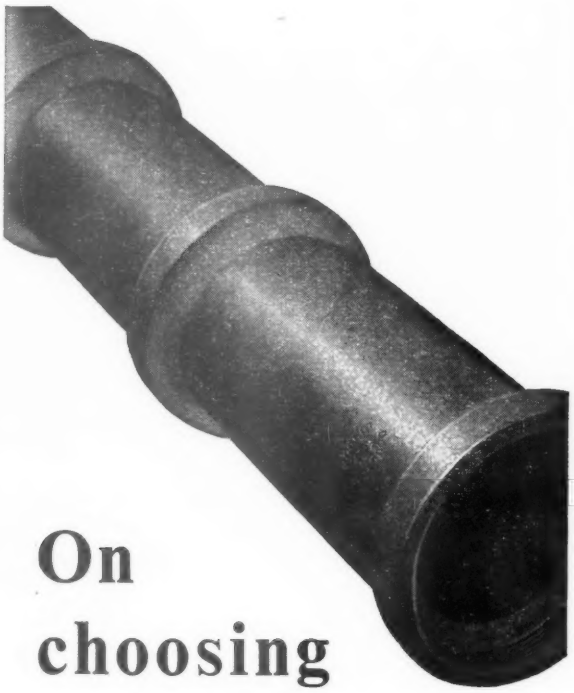

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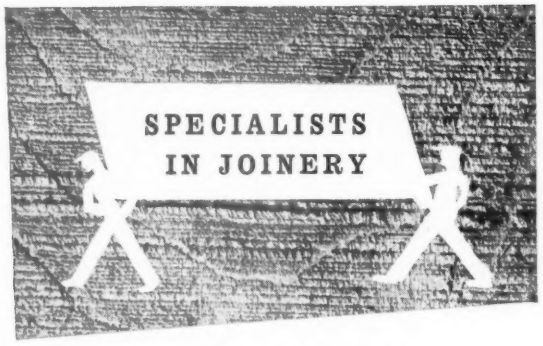

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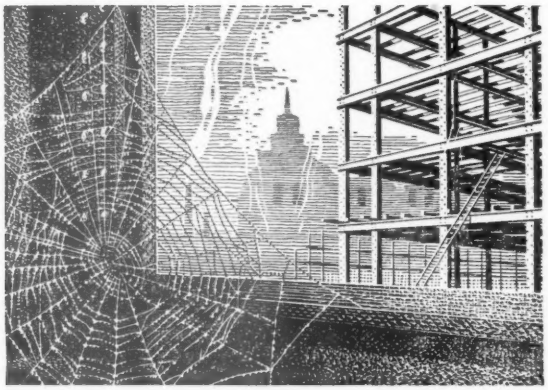

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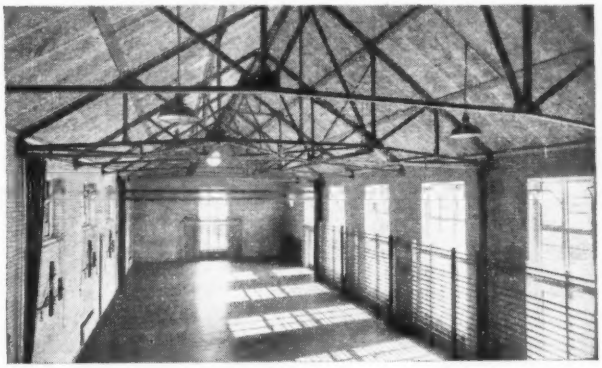

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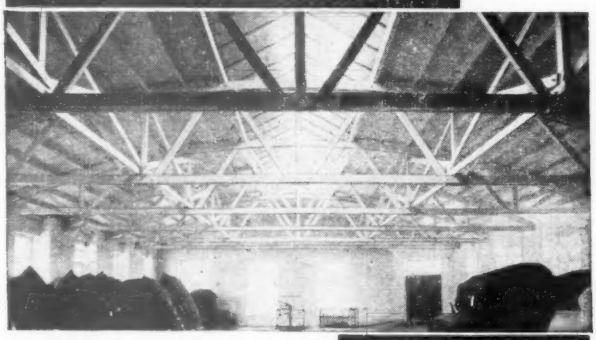

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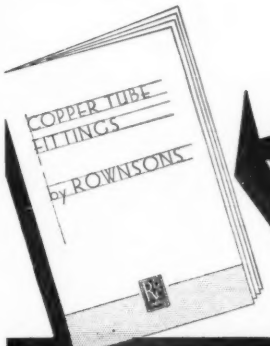

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9184

METROPOLITAN BOROUGH OF SHOREDITCH.
CHIEF ASSISTANT ARCHITECT.

Applications are invited for the above appointment. Salary: A.P.T., VIII (£790-£865). Subject to medical exam., Council's Supn. Scheme and N.J.C. Conditions.

Applicants must be Corporate Members of R.I.B.A., with considerable experience in multi-storey housing, including administration of contracts.

Applications, stating age, training, and details of experience, and giving three referees, to arrive by 17th August, 1953.

C. A. JAMES,
Town Clerk.

Town Hall, Old Street, E.C.1.
July, 1953. 9208

BOROUGH OF OLDBURY.
APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

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

(*a*) ASSISTANT ARCHITECT, Grade A.P.T. V(*a*)—(Housing).

(*b*) ASSISTANT ARCHITECT, Grade A.P.T. V(*a*)—(Education).

Applicants for the above appointments should be qualified members of the R.I.B.A. and preferably having previous experience with a local authority. Candidates for (*a*) should be experienced in the layout of contemporary housing schemes, the design and construction of municipal houses, flats and shopping centres and capable of administering building contracts.

For appointment (*b*) candidates should be qualified to take charge of the maintenance of education and public buildings, including the preparation of estimates, working drawings and specifications and administration of building contracts.

The appointments will be subject (*a*) to the conditions of the service of the National Joint Council for Local Authorities Administrative, Professional, Technical and Clerical Service, (*b*) to the Local Government Superannuation Act, 1937 and (*c*) to the successful candidate passing a medical examination.

Applications giving particulars of age, experience, etc., together with the names of two referees, should be addressed to the undersigned not later than Saturday, 8th August, 1953.

Housing accommodation will be made available to married applicants if required.

KENNETH PEARCE,
Town Clerk.

Municipal Buildings,
Oldbury. 9218

HEMEL HEMPSTEAD DEVELOPMENT CORPORATION.

Applications invited for post of JUNIOR ASSISTANT ARCHITECT. Salary range: £240-£425. Conditions of service similar to Local Government Charter. Superannuation scheme. Housing accommodation may be available for successful candidate.

Applicants should have good architectural drawing office experience, and ability to execute drawings in connection with housing construction, and should be studying for R.I.B.A. examinations. Interest in model making an advantage.

Applications, endorsed "Vacancy No. 45," with names of two referees, to reach undersigned by 11th August.

W. O. HART,
General Manager.

Westbrook Hay, Hemel Hempstead, Herts. 9251

BOROUGH OF BRENTFORD AND CHISWICK.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for this appointment in the Borough Engineer and Surveyor's Department, at a salary according to Grade VI of the A.P.T. Division of the National Scheme (£670-£735 p.a., plus London weighting), commencing 1st year. Forms (containing further particulars and conditions) obtainable from the undersigned, by whom applications must be received not later than the 7th August, 1953.

W. F. J. CHURCH,
Town Clerk.

Town Hall, Chiswick, W.4.
16th July, 1953. 9215

LONDON COUNTY COUNCIL.
ARCHITECT'S DEPARTMENT.

ARCHITECTS and SURVEYORS required for safety regulations of Theatres and Special Buildings and for general building regulation work. Salaries up to £837 10s., according to experience. Particulars and application form returnable by 17th August, from Architect, County Hall, S.E.1, quoting AR/EK/TBR/3. (793) 9225

BOROUGH OF WREXHAM.

Applications are invited for the following appointments in connection with Capital Works:—

(*a*) CHIEF ENGINEERING ASSISTANT. Salary: A.P.T., Grade VI, £670 to £735 per annum.

(*b*) ARCHITECTURAL ASSISTANT. Salary: A.P.T., Grade V, £595 to £645 per annum.

Applicants for appointment:—

(*a*) Should be an Associate Member of the Institution of Municipal Engineers and/or Associate Member of the Institution of Civil Engineers, and should have had a thorough knowledge and experience in the preparation and supervision of Contracts for Civil Engineering Works.

(*b*) Should be an Associate Member of the R.I.B.A. or equivalent qualification, and have general experience in the design and development of Neighbourhood Units, Municipal Buildings and Housing. Experience in Civic Design will be an advantage.

The Council is prepared to offer Housing accommodation to the successful applicants, if married.

Form of application and Conditions of Service may be obtained from Mr. J. N. Davies, Borough Surveyor, 31, Chester Street, Wrexham.

Applications on the prescribed form, together with copies of two recent testimonials, should be delivered to the undersigned in an envelope, "Chief Engineering Assistant" or "Architectural Assistant," not later than the first post on Monday, 10th August, 1953.

PHILIP J. WALTERS,
Town Clerk.

Guildhall, Wrexham.
20th July, 1953. 9236

NORTH RIDING COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited from Registered Architects for the appointment on the permanent staff of an ASSISTANT ARCHITECT, A.P.T., Grade V (£595-£645).

Appointment, superannuable and subject to medical examination.

No form of application is issued, but further information may be obtained from County Architect, County Hall, Northallerton. Applications, stating age, qualifications and experience, with particulars of present and previous appointments, and names and addresses of three referees, to be received by undersigned not later than 6th August, 1953.

Canvassing, directly or indirectly, will disqualify, and candidates should state whether they are related to any member of or senior officer under the Council.

H. G. THORNLEY,
Clerk of the County Council.

County Hall, Northallerton.
20th July, 1953. 9235

WESTMORLAND COUNTY COUNCIL require PLANNING ASSISTANT, A.P.T.I., £465-£510, commencing according to ability. N.J.C. Service conditions, superannuable, medical examination, one month's notice. Must have keen interest in the planning of a National Park and areas of high scenic value.

Apply, giving age, education, technical training, qualifications, appointments held (with dates and salaries), one testimonial and two referees, to County Planning Officer, County Hall, Kendal, by 22nd August, 1953. 9252

COUNTY OF LEICESTER.

BUILDING SURVEYOR. A.P.T., Grade VI/VII. Salary: £670-£685. Age 30 to 45. Capable producing plans and specifications for alterations and minor works. Apply by 17th August on forms to be obtained from County Architect, 123, London Road, Leicester. 9253

BOROUGH OF WATFORD.
APPOINTMENT OF ASSISTANT ARCHITECTS.

(*a*) Grade A.P.T., VI.

(*b*) Grade A.P.T., II-IV.

Applications are invited for Assistant Architects within the above Grades, according to qualifications and experience. Applicants for (*a*) should be Registered Architects.

Forms on application, returnable by 10th August, 1953.

Consideration will be given to the provision of housing accommodation if required.

F. C. SAGE, A.M.I.C.E., M.I.Mun.E.,
Borough Engineer, Surveyor and Architect.

Town Hall, Watford. 9254

BRITISH ELECTRICITY AUTHORITY.
EAST MIDLANDS DIVISION.

Applications are invited for the following positions within the Division:—

CIVIL ENGINEERING DRAUGHTSMEN, Construction Department. (Vacancy No. 22/53.)

Candidates should have experience in design and detail of re-inforced concrete structures, piled and slab foundations for heavy plant, culverts, cable subways, etc., for general building construction drainage and sanitation schemes, associated with office and administrative buildings.

The salary will be in accordance with Grade 5 (£567-£671 per annum) or Grade 6 (£433-£567 per annum) of Schedule D of the National Joint Board Agreement.

ENGINEERING DRAUGHTSMEN (MECHANICAL), Construction Department. (Vacancy No. 44/53.)

Senior Draughtsmen are required in the Mechanical section of the Construction Department at North Wilford Power Station. Candidates should have experience in one or more of the following:—

(i) Design and layout of Power Station equipment, including Turbo-alternators, Boiler Plant, Coal and Ash Plant, and General Station Auxiliaries.

(ii) H.P. and L.P. steam and feed pipework. Condensing plant and feed heating systems.

(iii) Conveyor plant, coal handling systems and material handling of station auxiliary equipment.

Salary and conditions of service will be in accordance with the National Joint Board Agreement, Grade 5 (£567-£671 per annum) and Grade 6 (£433-£567 per annum) of Schedule D, according to experience.

ENGINEERING DRAUGHTSMEN (ELECTRICAL), Construction Department. (Vacancy No. 61/53.)

Candidates should have experience in the preparation of layouts and diagrams for the installation of E.H.T. and L.T. Switchgear, transformers, E.H.T. and L.T. cables; knowledge of protective gear systems would be an advantage.

The salary will be in accordance with Grade 5 (£567-£671 per annum) or Grade 6 (£433-£567 per annum) of Schedule D of the National Joint Board Agreement.

The above appointments will be superannuable within the provisions of the British Electricity Authority and Area Boards Superannuation Scheme.

Applications should be submitted on the official form, which may be obtained from the Divisional Establishments Officer, British Electricity Authority, Barker Gate, Nottingham, and should be returned to the Divisional Controller. Please quote Vacancy Number.

L. F. JEFFREY,
Divisional Controller.

9219

COUNTY COUNCIL OF DURHAM.
COUNTY PLANNING DEPARTMENT.

Applications are invited for the following permanent appointments in the County Planning Department:—

(*a*) TWO PLANNING ASSISTANTS. Grade III, A.P.T. (£525-£570).

(*b*) ONE PLANNING ASSISTANT. Grade III, Misc. Div. (£375-£440).

Applicants for (*a*) must have passed the Intermediate Examination of the Town Planning Institute or its equivalent.

Applicants for (*b*) must be of good educational standard and have had experience in draughtsmanship, preferably in a Planning Office.

Further details and forms of application (returnable by the 22nd August, 1953), obtainable from the County Planning Officer, 10, Church Street, Durham.

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

Shire Hall, Durham.
17th July, 1953. 9229

WILTSHIRE. Applications invited for superannuable appointment of ASSISTANT ARCHITECT. Salary: £595-£645. Applicants should be Members of R.I.B.A. Canvassing disqualifies. Application forms obtainable from the County Architect, County Hall, Trowbridge, returnable within 14 days of appearance of this advertisement.

P. A. SELBORNE STRINGER,
Clerk of the Council.

9237

CITY OF WAKEFIELD.
CITY ENGINEER'S DEPARTMENT.
APPOINTMENT OF CHIEF ARCHITECTURAL ASSISTANT—GRADE VIII.

Applications are invited for the above appointment, at a salary in accordance with Grade VIII (£760 × £25 (3) to £835 p.a.).

Applicants, who must be A.R.I.B.A., will be required to supervise the Architectural and Quantity Surveying staff, and must have a wide experience in Municipal work, including Housing, Schools and General work.

Applications, endorsed "Chief Architectural Assistant," stating age, qualifications, present and previous appointments, and details of experience, together with the names of two referees, to be sent to me not later than 24th August, 1953. Canvassing will disqualify.

THE COUNCIL WILL CONSIDER THE PROVISION OF HOUSING ACCOMMODATION.

W. S. DES FORGES,
Town Clerk.

Town Hall, Wakefield. 9250

BOROUGH OF WIDNES.
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of ASSISTANT ARCHITECT, at a salary in accordance with A.P.T., Grade VI, of the National Scale of Salaries, commencing at the minimum of the grade.

Applicants must be Registered Architects and Associate Members of the Royal Institute of British Architects; they must have had considerable experience in the design and construction of modern schools.

The appointment will be subject to the National Scheme of Conditions of Service as adopted by the Council, and to the Local Government Superannuation Act, October, 1937, and to the successful candidate passing a medical examination.

Housing accommodation will be provided if needed.

Applications, stating full particulars of age, experience and qualifications, present position and salary, etc., together with names and addresses of two referees, should be sent to the Borough Architect, Brendon House, Widnes Road, Widnes, not later than Monday, 24th August, 1953.

Canvassing directly or indirectly will disqualify.

FRANK HOWARTH,
Town Clerk.

Town Hall, Widnes.
20th July, 1953. 9228

BOROUGH OF RICHMOND (SURREY).
TOWN PLANNING ASSISTANT.

Applications are invited for the appointment of a Town Planning Assistant on the Temporary Staff of the Borough Engineer and Surveyor's Department, at a salary in accordance with A.P.T. Division, Grade III of the National Scale of Salaries, i.e., £525—£570 per annum, plus the appropriate London Weighting (£20—£30 per annum, according to age).

The appointment is subject to the provisions of the National Scheme of Conditions of Service.

Applicants should be competent draughtsmen, and preferably have had previous Town Planning experience and a knowledge of buildings and building construction.

Applications, stating age, qualifications and experience, with particulars of present and previous appointments, together with the names of two referees, should be delivered to the Borough Engineer and Surveyor, Hotham House, Heron Court, Richmond, Surrey, not later than noon on Tuesday, 11th August, 1953.

Candidates shall, when making application, disclose in writing whether to their knowledge they are related to any member of the Council or Senior Officer of the Council. Canvassing will disqualify.

The Council is unable to assist in the provision of housing accommodation.

CLIFFORD HEYWORTH,
Town Clerk.

Town Hall,
Richmond, Surrey. 9238

SALOP COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF ASSISTANT BUILDING SURVEYOR.

Applications are invited for this appointment. Salary grade A.P.T. V. (£595 p.a. rising by annual increments to £645 p.a.).

Applicants should have passed the Final Examination of the R.I.C.S. (Sub-Division III(B)) and must be capable of preparing plans, working drawings and specifications for minor alterations and improvements to buildings, including the installation of small sewage disposal plants.

A separation allowance of not exceeding 30s. per week will be paid to a married officer taking up this appointment, together with third-class return railway fare once a month to visit his family, such allowances to be limited to a period of six months or until such time as the officer is able to obtain accommodation for himself and his family in Shropshire, whichever is the earlier.

Application forms may be obtained from the County Architect, Column House, London Road, Shrewsbury, to whom they must be returned, accompanied by copies of three recent testimonials, not later than Friday, 21st August, 1953.

G. C. GODBER,
Clerk of the Council.

Shrewsbury.
July, 1953. 9248

SALOP COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF ASSISTANT CHIEF MAINTENANCE OFFICER.

Applications are invited for this appointment. Salary grade A.P.T. V. (£595 p.a. rising by annual increments to £645 p.a.).

The person appointed will be required to assist the Chief Maintenance Officer in the maintenance and repair of public buildings, including the organisation and supervision of Building Inspectors. Applicants must have had practical experience of building maintenance, including the preparation of reports and specifications. Preference will be given to a candidate who has passed the Final Examination of the R.I.C.S. (Sub-Division III(B)).

A separation allowance of not exceeding 30s. per week will be paid to a married officer taking up this appointment, together with third-class return railway fare once a month to visit his family, such allowances to be limited to a period of six months or until such time as the officer is able to obtain accommodation for himself and his family in Shropshire, whichever is the earlier.

Application forms and particulars of the appointment may be obtained from the County Architect, Column House, London Road, Shrewsbury, by whom they must be received, accompanied by copies of three recent testimonials not later than Friday, 21st August, 1953.

G. C. GODBER,
Clerk of the Council.

Shrewsbury.
July, 1953. 9249

CITY AND COUNTY OF BRISTOL.
CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following permanent staff appointments:—

SENIOR ASSISTANT ARCHITECTS:
(*a*) Grade VII (£710-£785 p.a.).
(*b*) Grade VI (£670-£735 p.a.).
(*c*) Grade V (£595-£645 p.a.).

Applicants must be Associate Members of the R.I.B.A. or hold equivalent qualifications, and have had considerable experience in design, construction, and contract administration, preferably with a large local authority. For appointments (*a*) and (*b*) experience in Education building is desirable. Appointments superannuable, subject to satisfactory medical examination and to one month's notice in writing on either side.

HOUSING ACCOMMODATION PROVIDED, IF NECESSARY, AT AN ECONOMIC RENT.

Applications, stating age, training, qualifications, experience, present appointment, grade, salary, and the names of two referees (including present employer), by 8th August, 1953, to:

J. NELSON MEREDITH, F.R.I.B.A.,
City Architect.

The Council House, College Green,
Bristol, 1.
21st July, 1953. 9244

CITY OF STOKE-ON-TRENT EDUCATION COMMITTEE.
COLLEGE OF ART.
DEPARTMENT OF ARCHITECTURE.

Part-time STUDIO MASTER required for up to 12 hours per week, to commence duties in September. Applicants should possess A.R.I.B.A., or equivalent qualifications, be school trained, and preferably have teaching experience, and will be required to instruct 4th and 5th year students in architectural design. Applications by letter as soon as possible, to the Principal, College of Art, Queen Street, Burslem, Stoke-on-Trent.

H. DIBDEN,
Chief Education Officer.

Education Offices, Town Hall, Hanley,
Stoke-on-Trent. 9233

BERWICKSHIRE COUNTY COUNCIL.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT in the Property and Works Department. Salary scale: A.P.T., VI, £675 to £740. Applicants should be Registered Architects, preferably Associates of the R.I.B.A., and with Local Authority experience.

The appointment is superannuable. Canvassing, direct or indirect, will disqualify.

Applications, stating age, qualifications and experience, to be lodged with the undersigned, along with copies of three recent testimonials, not later than Saturday, 29th August, 1953.

ROBERT MARTIN,
County Clerk.

County Buildings, Duns. 9255

SINGAPORE IMPROVEMENT TRUST.
PLANNING OFFICER.

An Improvement Planning Officer is required by the Singapore Improvement Trust, the appointment in the first instance being on a three-year agreement. Age preferably under 30 years.

(2) Applicants must hold a Civil or Municipal Engineering Qualification, and have had practical experience in Statutory Planning with a Local Planning Authority.

(3) Salary scale: $630-$1,200 per month, the point of entry depending on the age, qualifications and experience of the appointee. Expatriation allowance: $205-$275 per month, according to basic salary. Cost-of-living allowance up to maxima of (i) single officers $170 p.m., (ii) married officers (no children) $275 p.m., (iii) married officers (with children) $400 p.m. For example, a married man with children appointed on a basic salary of $750 p.m. would draw the equivalent of £1,847, including cost-of-living and expatriation allowances, during the first year of his agreement. An allowance will also be paid to cover cost of duty transport. All allowances are subject to revision. $1 (Malayan) = 2s. 4d.

(4) Strict medical examination.

(5) Provident Fund, to which the appointee must contribute 7½ per cent. of basic salary: the Trust contributes a minimum of 7½ per cent., rising by stages to 20 per cent. after 20 years' service.

(6) Leave and passages in accordance with Regulations.

(7) Quarters (with heavy furniture) are provided at a rental of 6 per cent. of salary, or a housing allowance (10 per cent. of salary) paid in lieu.

(8) Applications in duplicate, giving full personal and technical information, with duplicate copies of three recent testimonials, to Messrs. Allen & Williams (Agents to the Trust), 1, Victoria Street, London, S.W.1, before Thursday, 13th August, 1953. 9241

BOROUGH OF RADCLIFFE.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the above-mentioned permanent appointment, at a salary in accordance with A.P.T., Grade III.

The person appointed must be experienced in the preparation of plans, specifications, etc., for housing, public buildings and general municipal work, and must have a thorough knowledge of present day building.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to passing a medical examination.

A COUNCIL HOUSE WILL BE MADE AVAILABLE IF REQUIRED.

Applications, stating age, qualifications and experience, and the names of two persons to whom reference may be made, must be received by me not later than first post Saturday, 15th August, 1953.

Canvassing will disqualify.

H. A. FOX,
Town Clerk.

Town Hall, Radcliffe, Lancs.
22nd July, 1953. 9242

CITY AND COUNTY OF NEWCASTLE UPON TYNE.

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

(*a*) ASSISTANT STRUCTURAL ENGINEER—A.P.T. Division Grade VI (£670—£735 per annum).

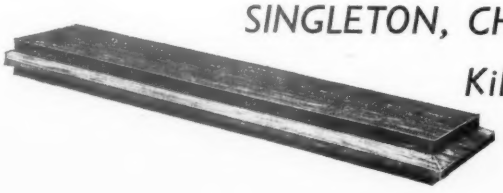
(*b*) ASSISTANT ELECTRICAL ENGINEER—A.P.T. Division Grade V(*a*) (£625—£685 per annum).

Applicants for post (*a*) should be experienced in the design of steel or reinforced concrete structures, and will be required to assist the Chief Structural Engineer in the preparation of calculations and working drawings for framed buildings and structural work generally. The possession of a recognised qualification in Structural Engineering will be considered an advantage.

Candidates for post (*b*) should hold a National Certificate in Electrical Engineering or equivalent, and should be experienced in the preparation of schemes and specifications for electrical installations in buildings, in the preparation of estimates, and the supervision of electrical installations. In addition, some experience of Heating and Domestic Hot Water

For high-class flooring blocks and strip flooring in all timbers

J. H. and F. W. GREEN LTD., CHARLTON SAWMILLS



SINGLETON, CHICHESTER (Singleton 232/3). The selection, Kilning, and manufacture are entirely controlled on the same premises

installations will be considered an advantage.

The appointments will be subject to the National Conditions of Service as adopted by the City Council, to the provisions of the Local Government Superannuation Act, 1937, and to one month's notice on either side. The successful candidates will be required to pass a medical examination.

Applications, stating position applied for, age, qualifications, particulars of training and experience, present and past appointments, and accompanied by copies of two recent testimonials or the names and addresses of two persons to whom reference may be made, should be addressed to Geoge Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle upon Tyne, 1, not later than Saturday, the 15th August, 1953.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.
21st July, 1953. 9243

BOROUGH OF ILFORD.
APPOINTMENT OF TEMPORARY CLERK OF WORKS.

Applications are invited for the position of Clerk of Works on the temporary staff of the Borough Engineer's Department.

Applicants for this appointment must have had considerable experience in a similar capacity, have a sound knowledge of building construction, and be capable of supervising housing contracts, including multi-storey flats.

Salary will be in accordance with Grade A.P.T., II, *viz.*, £495-£540 per annum, plus the appropriate London weighting.

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

Applications on forms obtainable from the Town Clerk, Town Hall, Ilford, should be submitted by the 8th August, 1953. 9230

Architectural Appointments Vacant

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

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 *inclusive or a woman aged* 18-59 *inclusive unless he or she is, or the employment, is excepted from the provisions of the Notification of Vacancies Order,* 1952.

ARCHITECTURAL DRAUGHTSMEN, up to Inter. R.I.B.A., standard, required. Westminster area. Write, stating experience and salary, to Box 9187.

ASSISTANT required for large general Architectural Practice with offices in Maidenhead. Some experience in specification writing essential. Salary £300 to £500, according to experience. Box 8933.

ILFORD, LIMITED, require Architectural Assistants with at least two years' office experience. Minimum standard R.I.B.A., Intermediate. Five day working week with pension scheme and staff canteen in operation. Applications in writing, giving age, training, and experience to Chief Staff Architect, Ilford Limited, Romford, Essex. 9182

ASSISTANTS required in Architect's Department of large commercial organization. Sound all round training in the profession essential, including supervision of work. Excellent opportunities for men of initiative. Apply in writing, giving details of experience, age, and salary required, to Box 3646/1, Foster Turner & Everetts Ltd., 11, Old Jewry, E.C.2. 9193

SENIOR ARCHITECT ASSISTANT required by London Architects. Must be experienced in design and construction, and capable of superintending contracts. Box 9247.

ARCHITECT'S ASSISTANT required; Intermediate Standard. Experienced in general provincial practice. Apply in writing giving details of experience and salary to Frank M. Dewing, A.R.I.B.A., 40, Prince of Wales Road, Norwich. 9239

ARCHITECTURAL ASSISTANT, aged 28/40 years, experienced in design of Industrial premises, all stages, including Surveys, supervision of works in progress, Contractors' accounts. State salary required, qualifications, earliest time available. Walker & Collinson, Architects & Surveyors, 12, The Exchange, Bradford, Yorks. 9224

LARGE Retail Organisation, with department stores in seven important industrial cities, requires qualified ARCHITECT, aged between 30 and 40 years, to assist in planning, designing, and equipping store interiors and in maintaining fabric and equipment of their stores. Good salary. State qualifications. Box 9232.

QUALIFIED ASSISTANT required for a contemporary architect's office. Applicants should state experience and salary required. Samuel Morrison & Partners, 39, Full Street, Derby. 9245

ASSISTANT ARCHITECT required, qualified or having completed school training. Apply stating qualifications, experience, salary required and availability to Hellberg and Harris, 13, Queen Victoria Road, Coventry. 9240

IMPERIAL CHEMICAL INDUSTRIES, LTD., General Chemicals Division, invite applications for the position of ASSISTANT ARCHITECT in the Chief Engineer's Department, Runcorn. The applicants should be Associates R.I.B.A. and have had experience in the design and construction of Factory Amenities, Laboratories and Offices. The successful applicant will be required to act as Section Leader and take charge of a section of the Civil Drawing Office, under the Architect. The position is of a permanent nature, subject to the Company's Superannuation Fund, and offers good prospects. Applications, in writing, stating age, qualifications, experience, and salary required, should be sent to The Staff Manager, Imperial Chemical Industries, Ltd., General Chemicals Division, Cunard Building, Liverpool, 3. 9231

ARCHITECTURAL ASSISTANT required immediately. Intermediate/Final Standard, quick, neat draughtsman essential. Morrison & Rose, 8, Park Street, W.1. GROsvenor 7522. 9257

Architectural Appointments Wanted

CHARTERED ARCHITECT (Canadian), with experience in Canada and England, 4 years as chief assistant in large general practice, responsible for design, drawings production, specifications, and supervision, desires position, with minimum salary, £750. Box 723.

SENIOR ASSISTANT, day school to Inter., then 6 years' office experience, seeks part-time job, or work at home. Surveys, Details, Working Drawings. Used to working alone. London area. Box 9141.

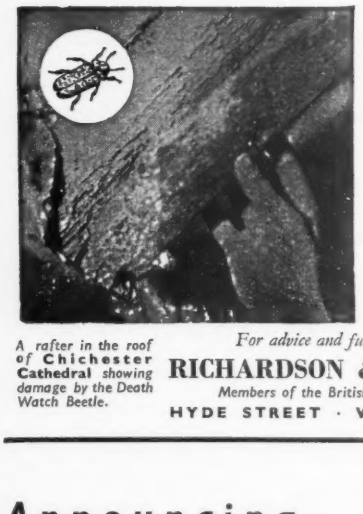
A R.I.B.A., aged 35, varied experience, seeks responsible position as Chief or Senior Assistant. Salary not less than £900 per annum. Box 9211.

ARCHITECT (34), A.R.I.B.A., Dipl. Arch., hard worker, good mixer, wishes to purchase an Architectural Practice or Partnership in an established City office. Box 9202.

LICENTIATE, R.I.B.A. (39), with wide experience, including industrial work, seeks part-time work from Architects in Greater London. Free, evenings and week-ends. Any proposition considered. 9246

ASSISTANT (25), recently qualified B.A.(Arch.), seeks position, with prospects; preferably London or Surrey. Box 735.

ARCHITECTURAL STUDENT taking Inter. in November requires post in Edinburgh from second week in September. Box 734.



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The insidious workings of the Death Watch Beetle are often not apparent until serious damage has been done. Only the scientific use of a penetrating and persistent insecticide will eradicate these borers. "WYKAMOL" polychlornaphthalene can be confidently recommended and the experience and technical skill of our staff is at your disposal.

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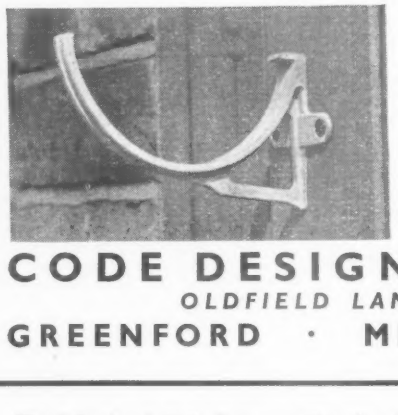

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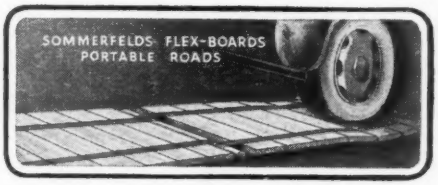

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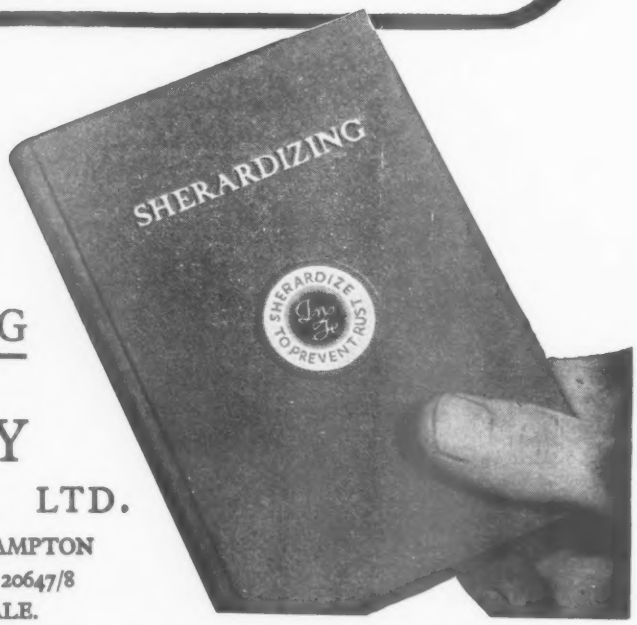

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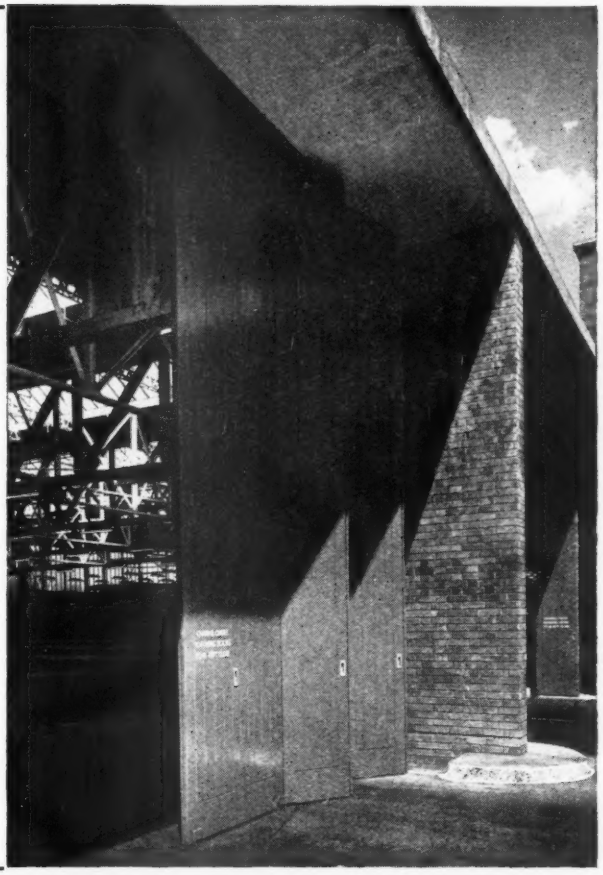

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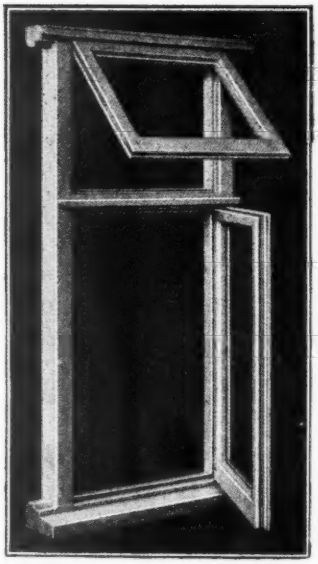

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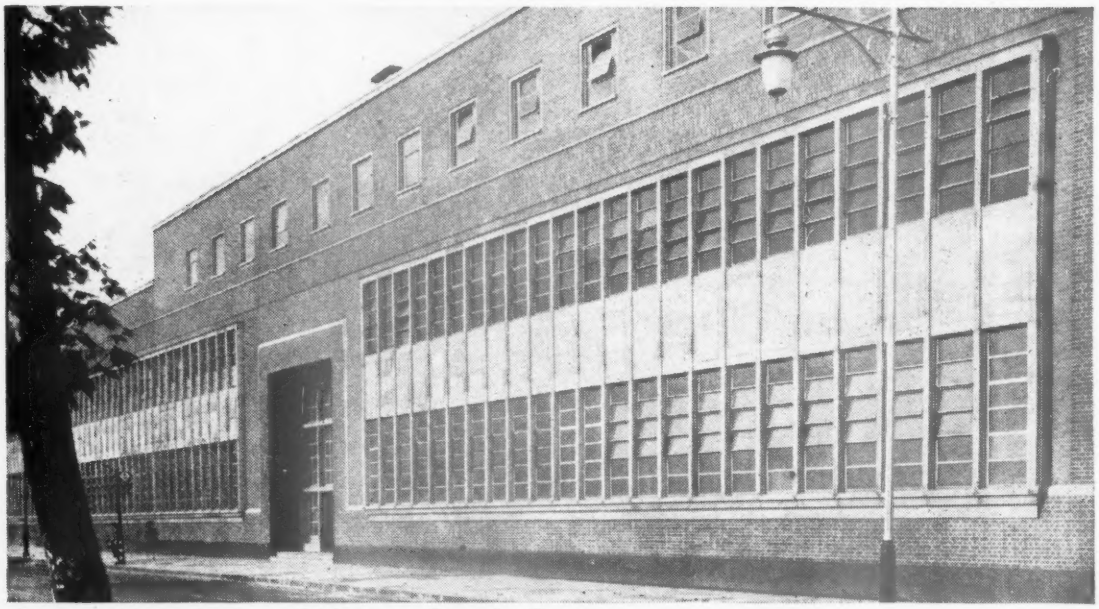

South-west elevation, featuring artificial stone panelling and mullions

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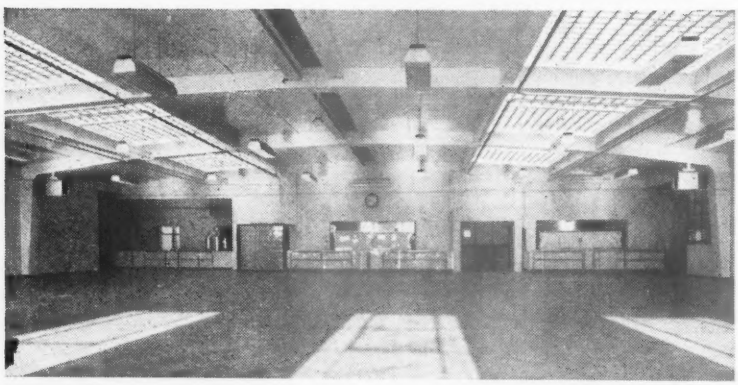

Main hall and works canteen, showing service counter. The floor is of Rhodesian teak

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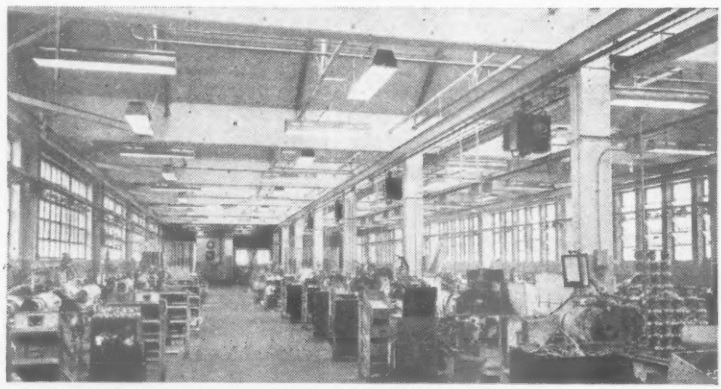

Light machine shop. One of the ground floor shops of the factory

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