

THE

ARCHITECTS'

APR 20 1960

FILE ARTS

JOURNAL



Standard

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every issue does not necessarily contain
all these contents, but they are
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No. 3390

[Vol. 131

ARCHITECTURAL PRESS

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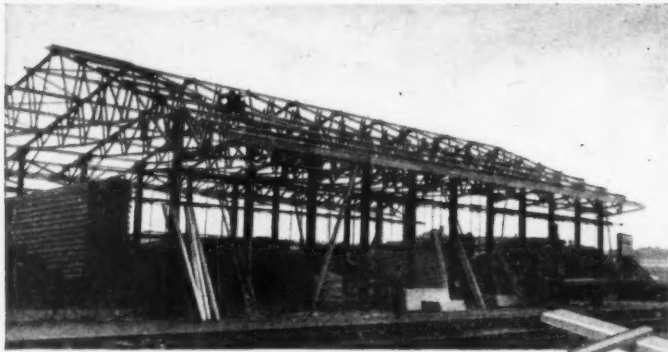
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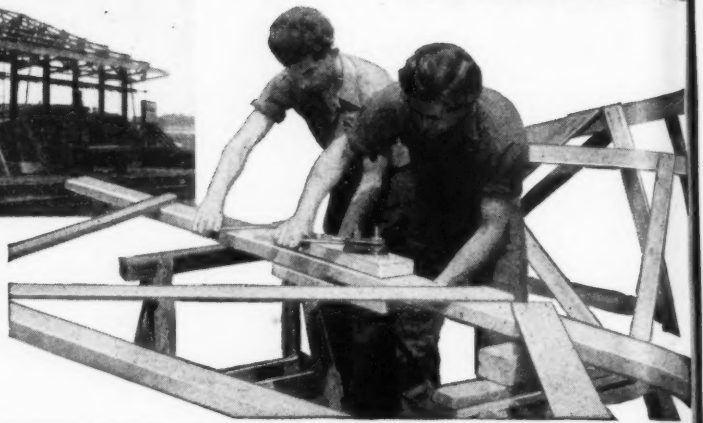
Registered as a Newspaper.

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

ILA	Institute of Landscape Architects. 1, Park Crescent, Portland Place, W.1.	Museum 3473
I of Arb	Institute of Arbitrators. Hastings House, 10, Norfolk Street, Strand, W.C. 2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197
IQS	Institute of Quantity Surveyors. 98, Gloucester Place, W.1.	Welbeck 1859
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 68, Gloucester Place, W.1.	Welbeck 9966
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
JFRO	Joint Fire Research Organisation (DSIR & Fire Offices' Committee).	
	Fire Research Station, Boreham Wood, Herts.	Elstree 1341/1797
LDA	Lead Development Association. 18, Adam Street, W.C.2.	Whitehall 4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MAFF	Ministry of Agriculture, Fisheries and Food. Whitehall Place, S.W.1.	Trafalgar 7711
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Hyde Park 7070
MOH	Ministry of Health. 23, Savile Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, W.C.2.	Gerrard 6933
MOT	Ministry of Transport, Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine Owners and Manufacturers Council.	
	14 Howick Place, Victoria Street, S.W.1.	Victoria 1600 & 6477
NAS	National Association of Shopfitters. 2, Caxton St., S.W.1.	Abbey 4813
NBR	National Buildings Record. 31, Chester Terrace, Regent's Park, N.W.1.	Whitehall 0619
NCBMP	National Council of Building Material Producers. 10 Storey's Gate, S.W.1.	Abbey 5111
NEFMAI	National Employers Federation of the Mastic Asphalte Industry.	
	21, John Adam Street, Adelphi, W.C.2.	Trafalgar 3927
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives.	
	Federal House, Cedars Road, Clapham, S.W.4.	Macauley 4451
NFHS	National Federation of Housing Societies. 12, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 58, Portland Place, W.1.	Langham 0064/5
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NRDB	Natural Rubber Development Board. Market Buildings, Mark Lane, E.C.3.	Mansion House 9383
NSAS	National Smoke Abatement Society. Palace Chambers, Bridge Street, S.W.1.	Trafalgar 6838
NT	National Trust for Places of Historic Interest or Natural Beauty.	
	42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Fountainbridge 7631
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5533
RICS	Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1.	Whitehall 5322/9245
RFAC	Royal Fine Arts Commission. 5, Old Palace Yard, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSH	Royal Society of Health. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, E.C.3.	Mansion House 3921
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	Langham 1984/5
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1.	Langham 7616
SNHTPC	Scottish National Housing. Town Planning Council.	
	Hon. Sec., Robert Pollock, Town Clerk, Rutherglen	
SPAB	Society for the Protection of Ancient Buildings.	
	55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association.	
	28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 75, Cannon Street, E.C.4.	City 5040
WDC	War Damage Commission, 6, Carlton House Terrace, S.W.1.	Whitehall 4341
ZDA	Zinc Development Association. 34, Berkeley Square, W.1.	Grosvenor 6636

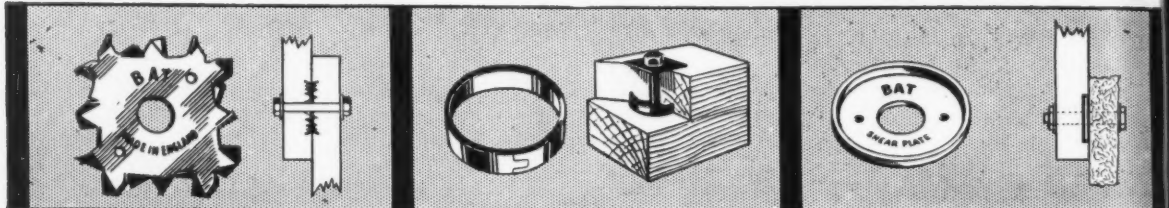


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Consultant Architect: Sir Hubert Worthington, R.A.

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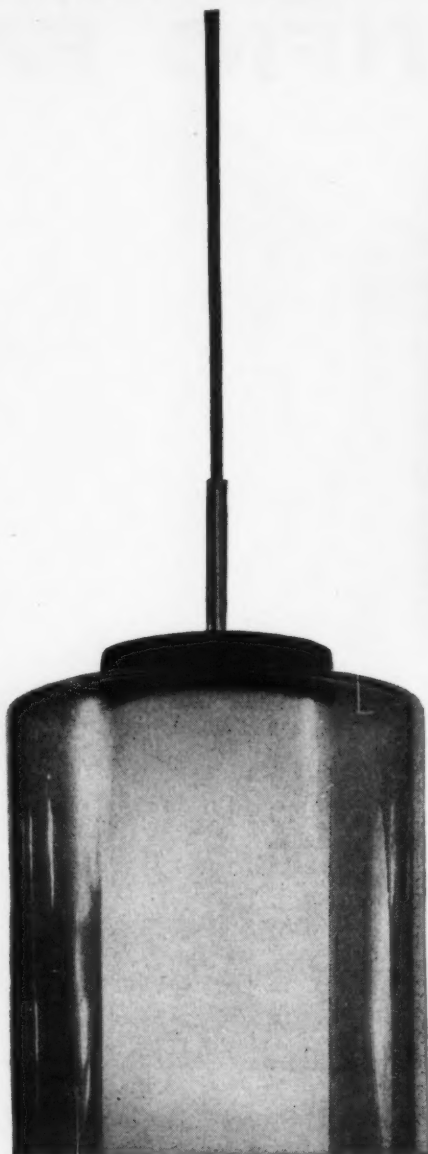
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atlas 'finlandia'

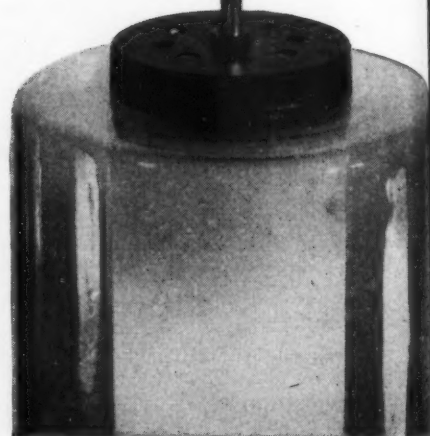
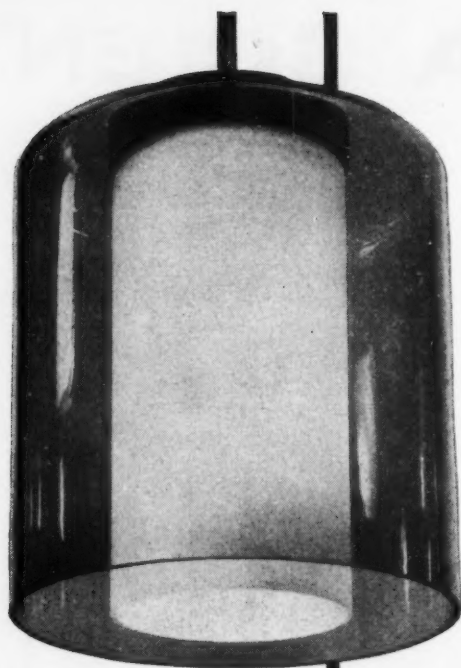


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Architects: Gollins, Melvin, Ward and Partners

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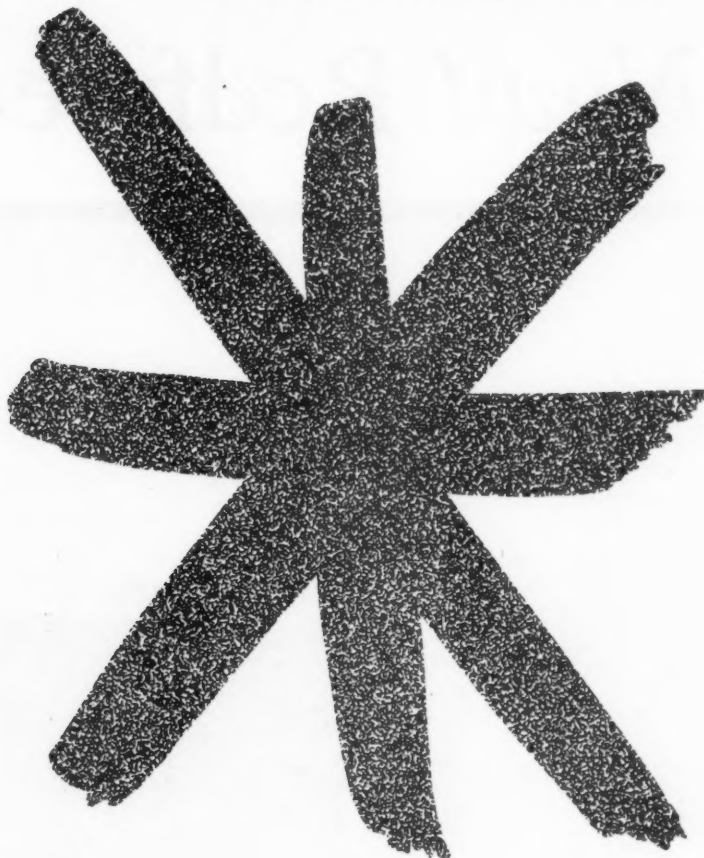
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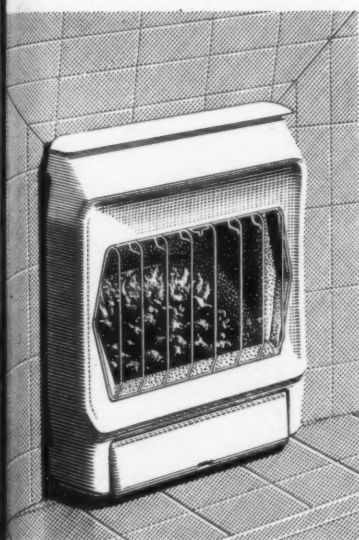
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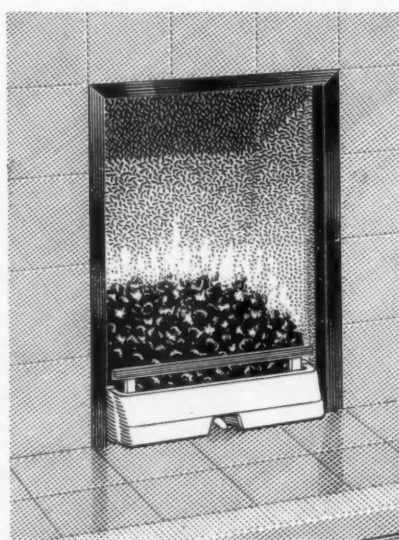
ing. And, as you'd expect from Redfyre, the whole range is very practical, very economical and remarkably low in initial cost.

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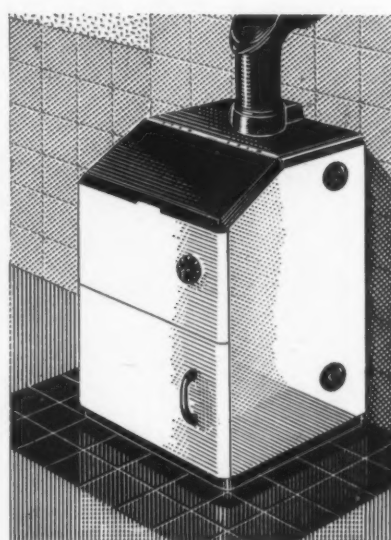
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Vinyl tiles



The cafeteria at 'Hilltop', combined public house and community-centre at Hatfield New Town, Herts. The architects were Brett, Boyd and Bosanquet; the floorcovering which they specified was Nairn Vinyl tiles. Interior designer: HULME CHADWICK. Flooring contractors:

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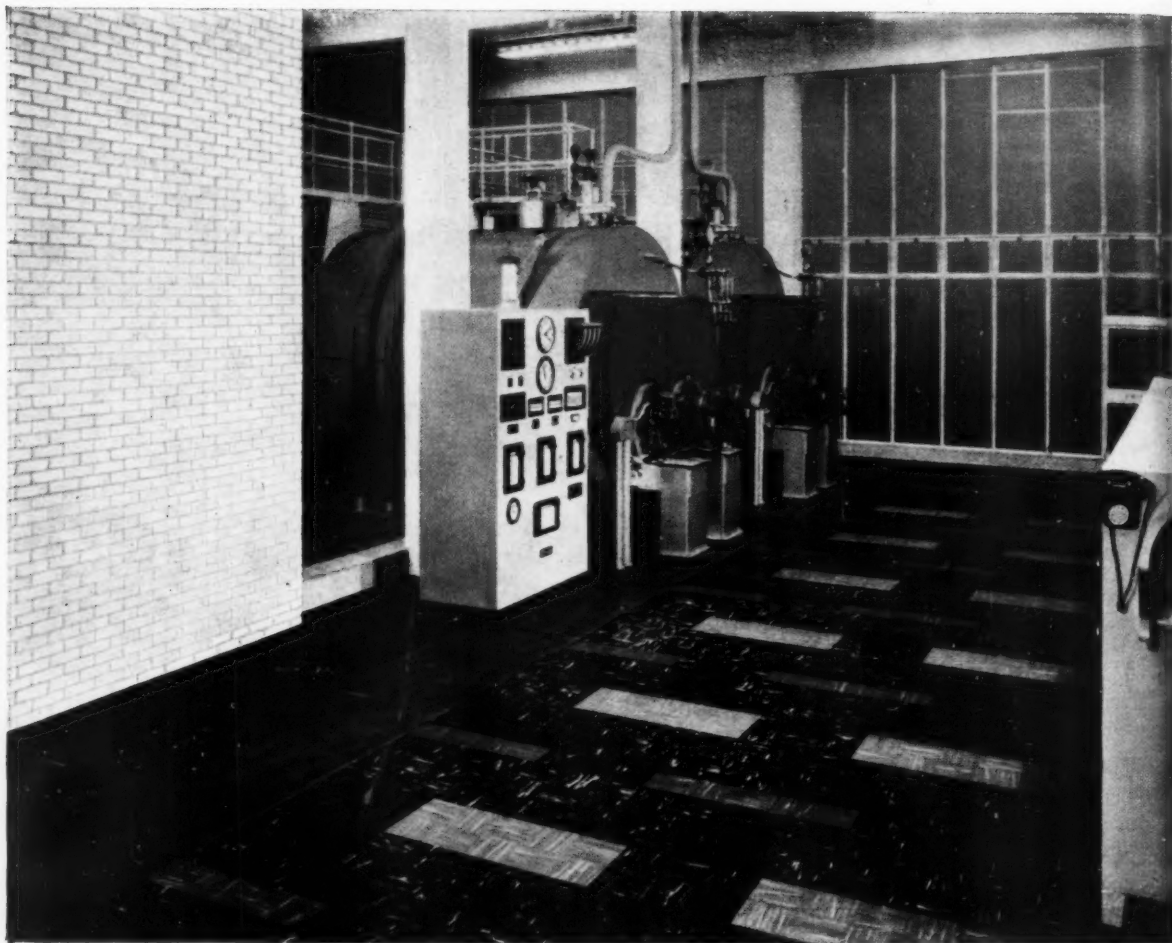
BIRMINGHAM 2: 65 Temple Row. Midland 5989 (2 lines).

BRISTOL 4: 349 Bath Road, Bristol 77840.

MANCHESTER 1: 4 Canal Street, Minshull Street, Central 1417 (3 lines).

GLASGOW C5: 113 Centre Street. South 1011 (3 lines).

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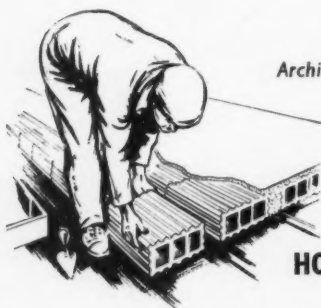
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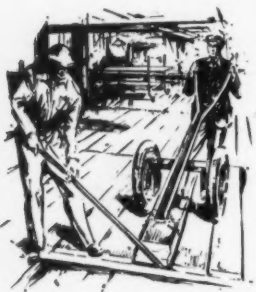
Flats at West Hill, Highgate
Architect: Eric Lyons, Esq.
F.R.I.B.A.

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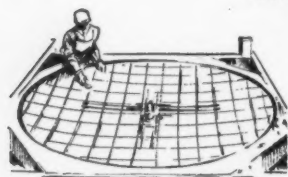
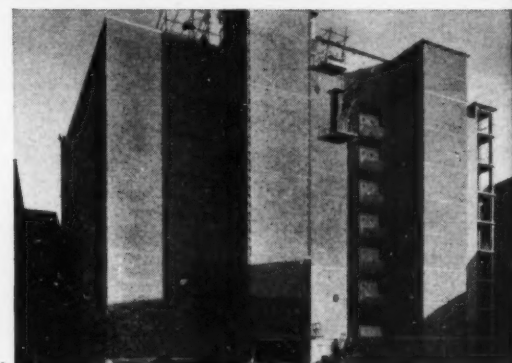
24-29 Hyde Park Square
Architects: Messrs. Clyde Young &
Bernard Engle,
F/A.A.R.I.B.A.

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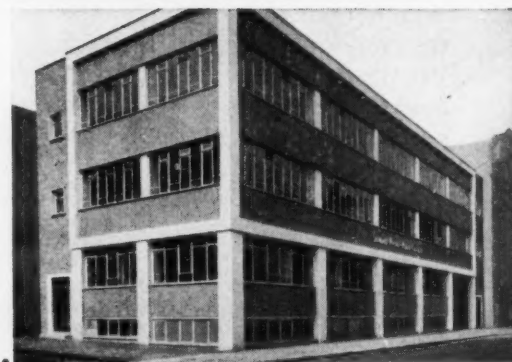
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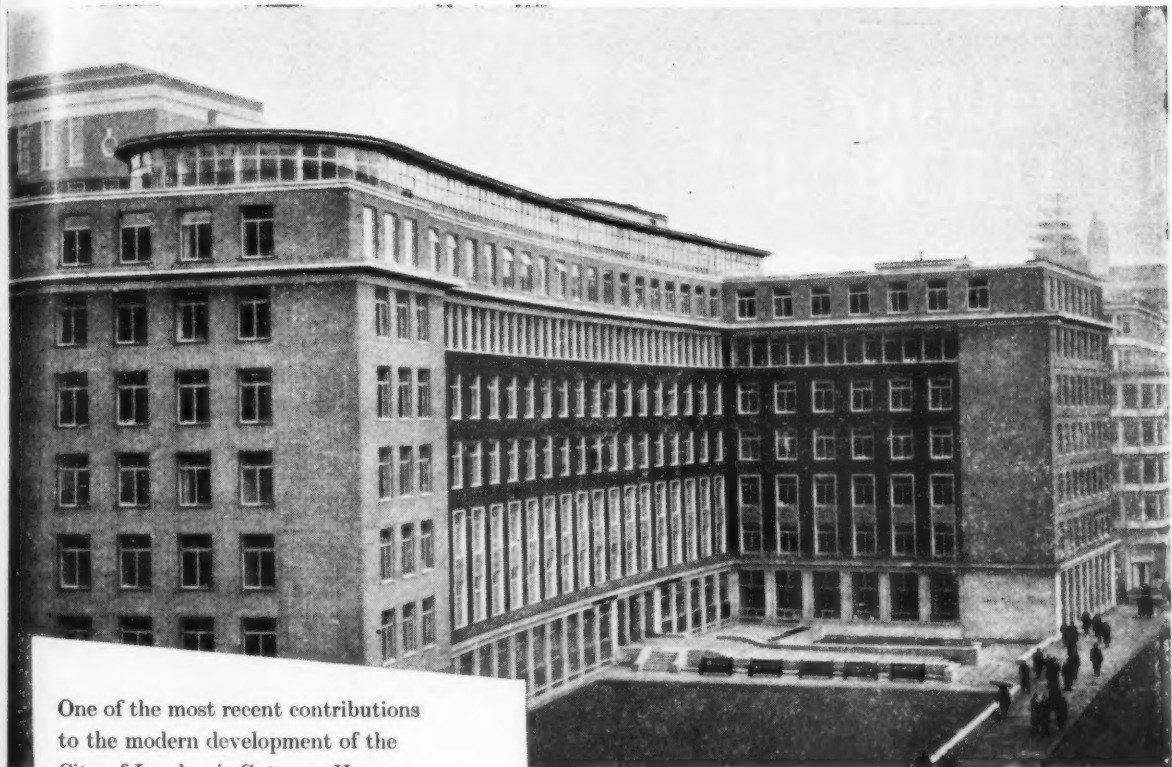
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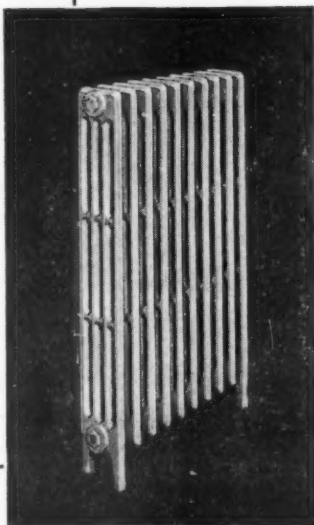
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ARCHITECTS

Trehearne & Norman, Preston & Partners,
London, W.C.2.

Left

The Crane "Pall Mall" 4-column cast iron
radiator, 5½" wide.

*

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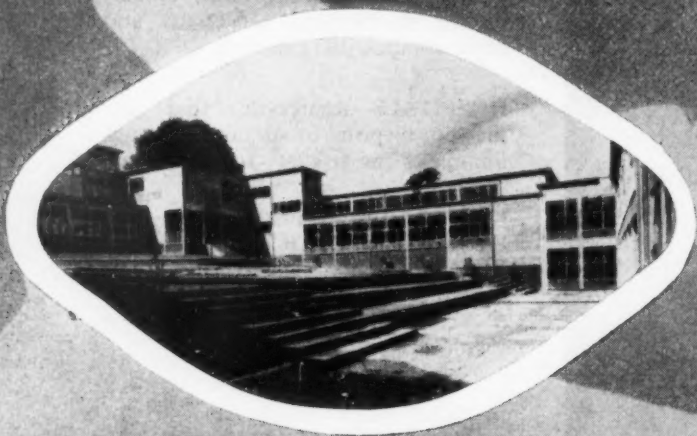
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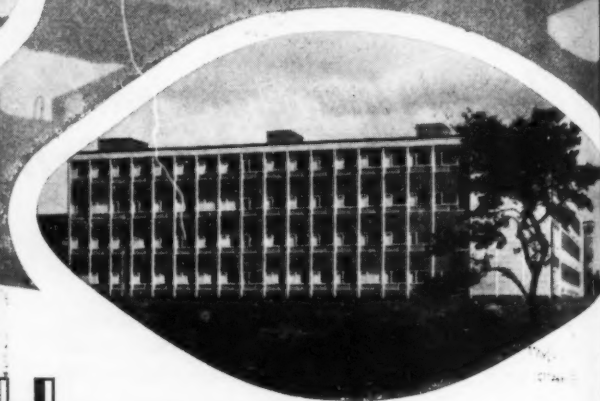
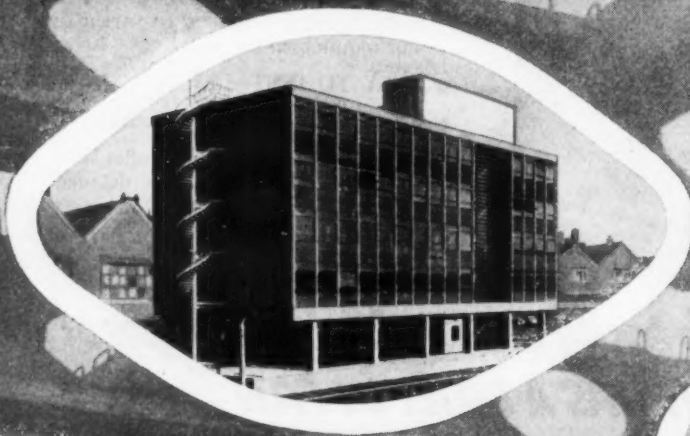
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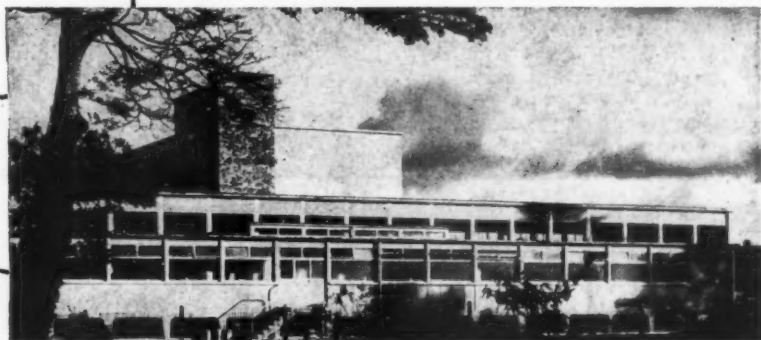
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Protim

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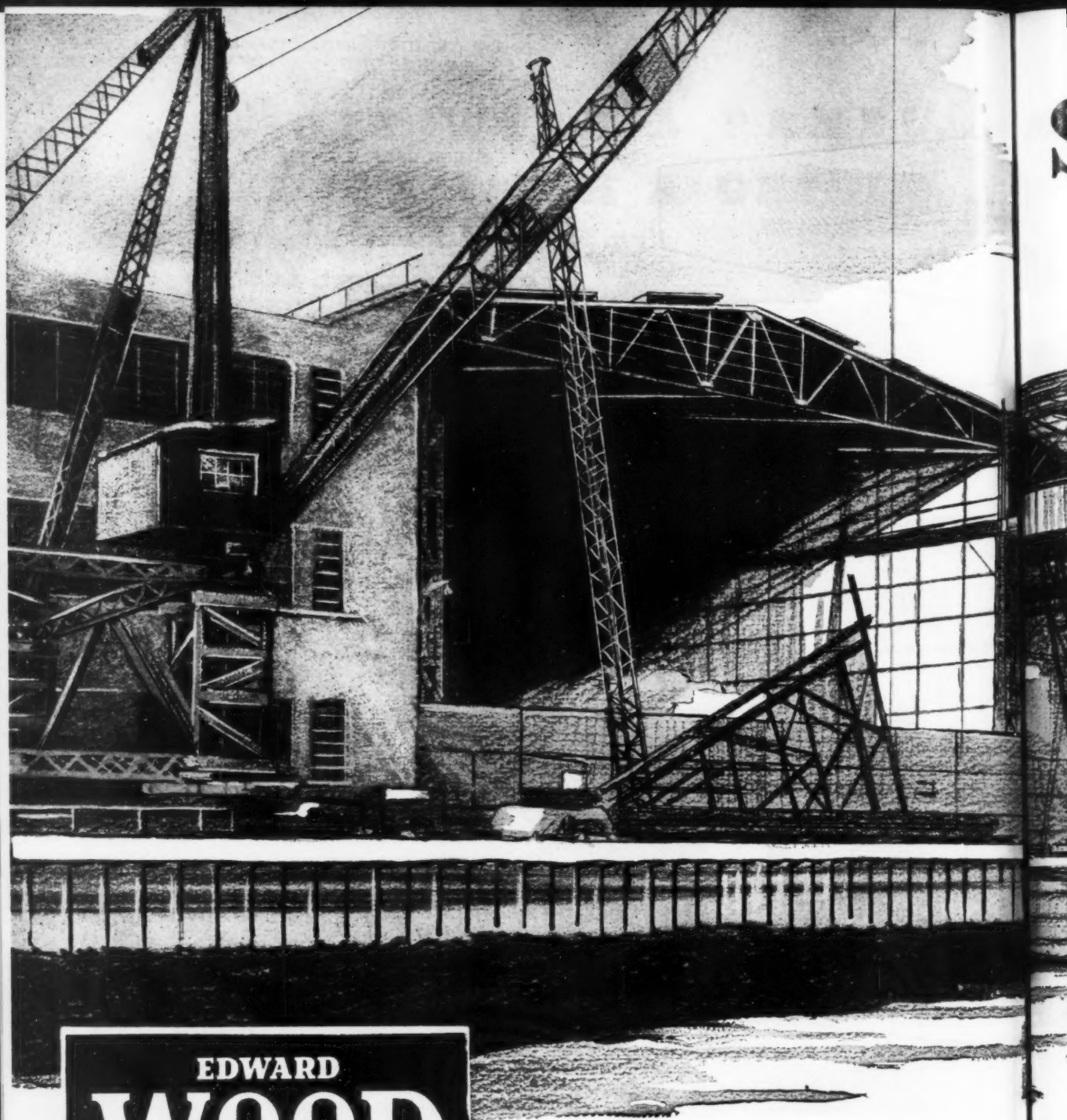
Wadebridge County Secondary School
where a great deal of Protimised timber
was used in its construction. By kind permission
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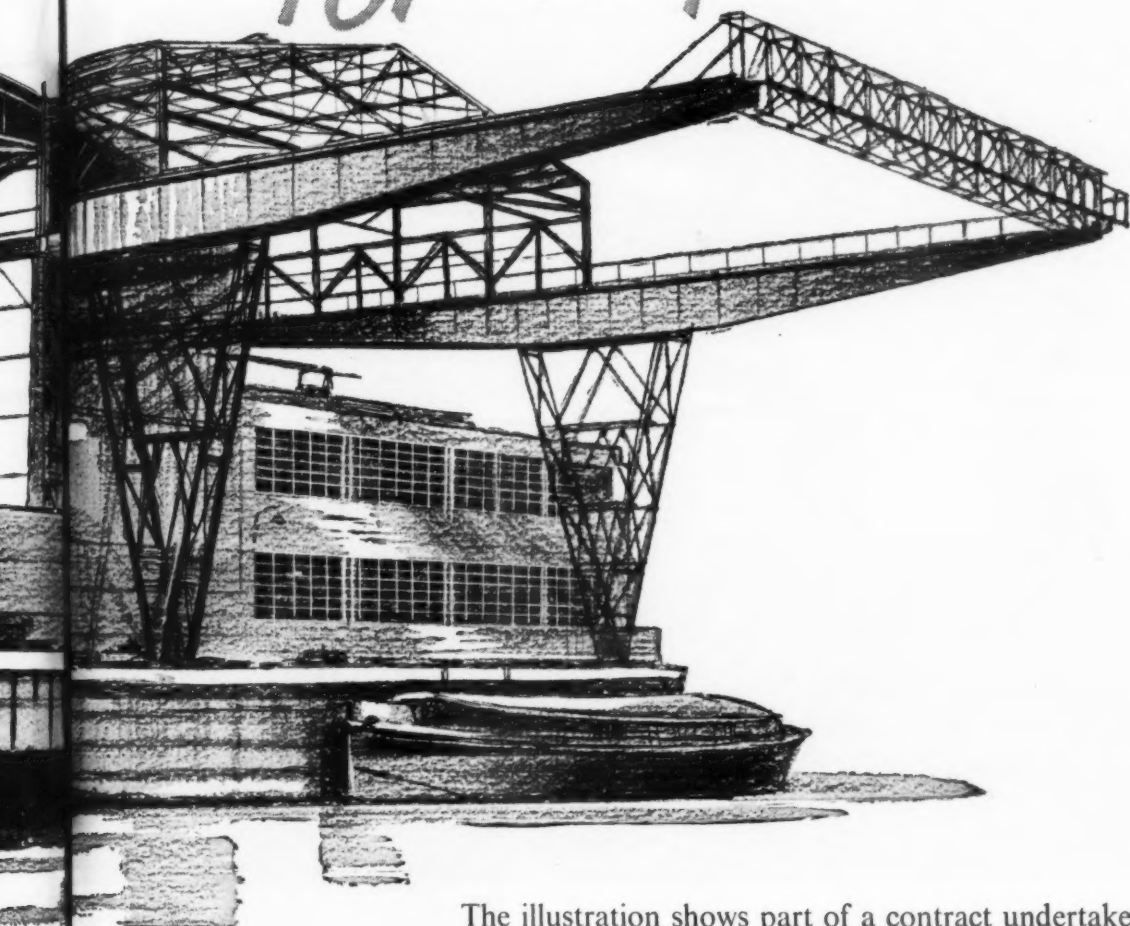
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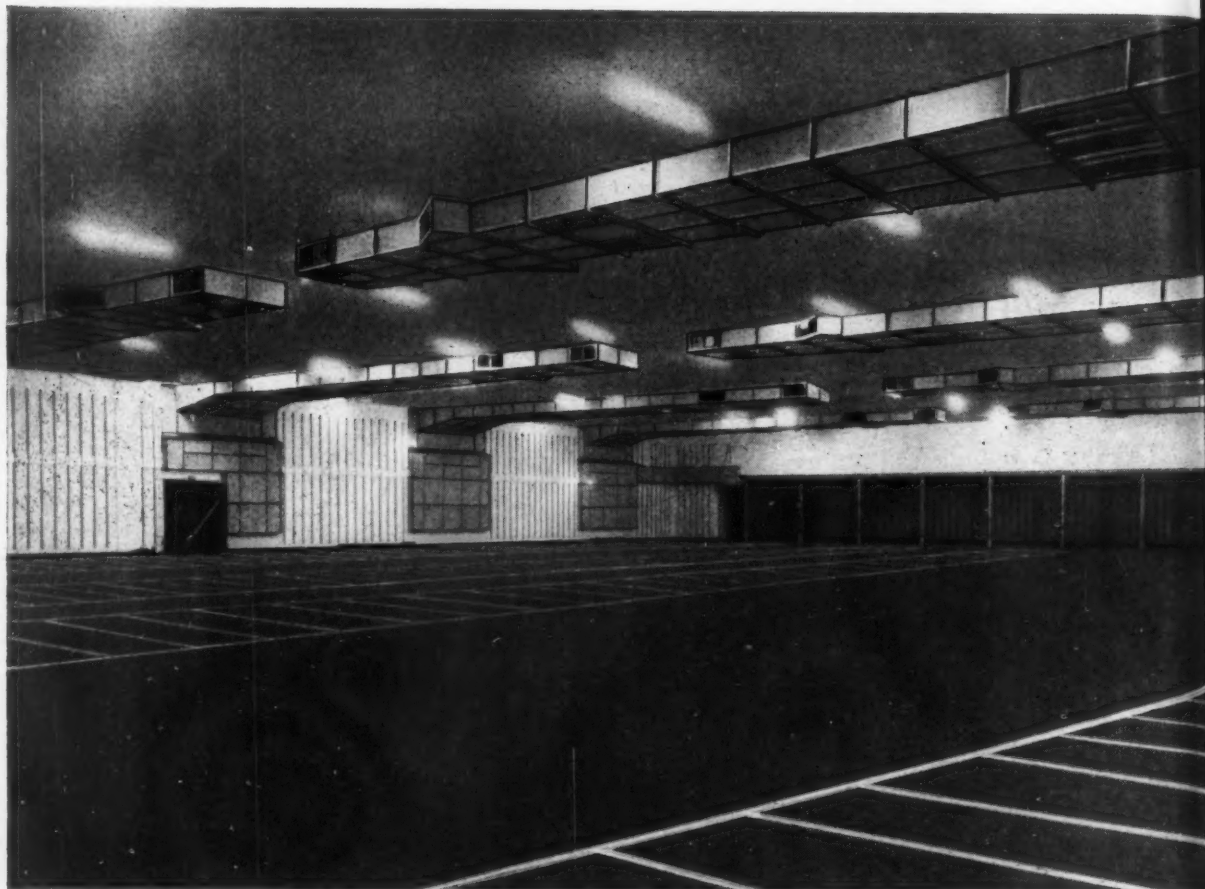
The illustration shows part of a contract undertaken for Thames Board Mills Limited, at Warrington, Lancashire. The project comprises large storage bays with direct loading facilities from the new diversion of the River Mersey at Arpley Meadows; the 50 ft. high gantry which will accommodate a travelling crane, has a 50 ft. projection over the quay side.

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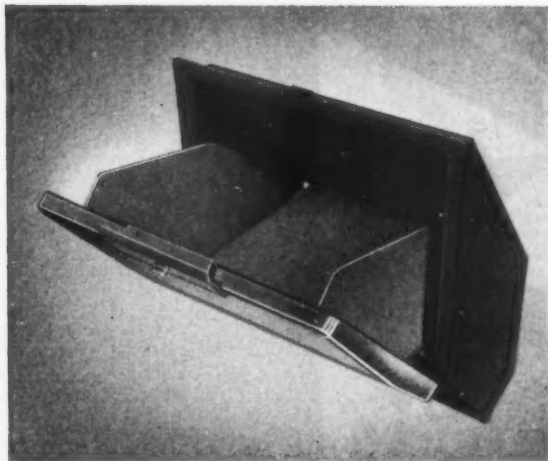
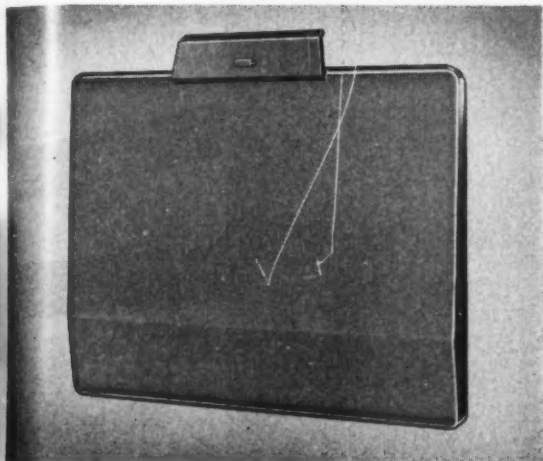
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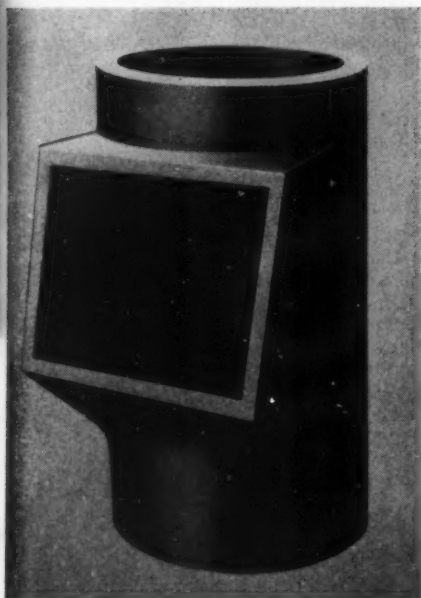
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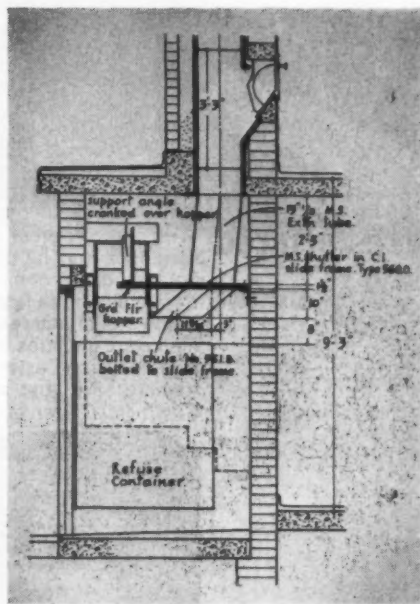
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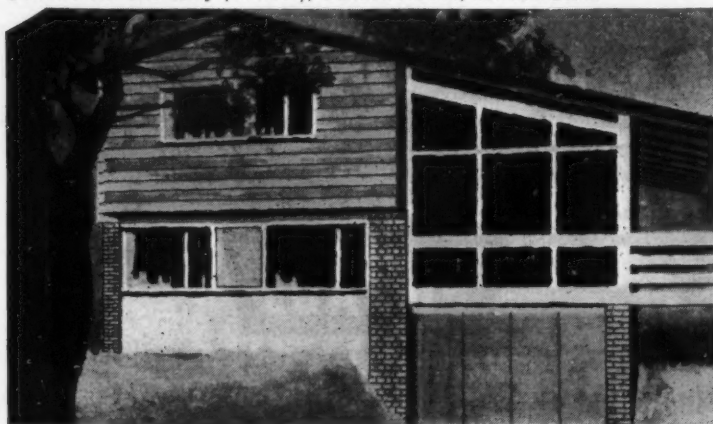
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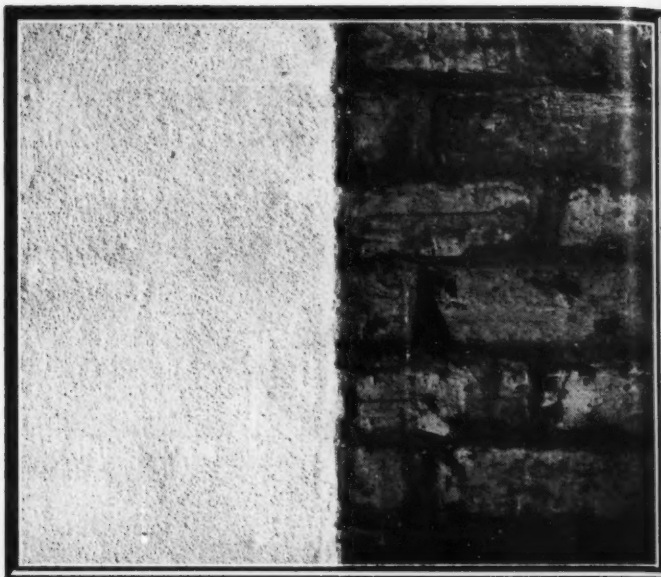
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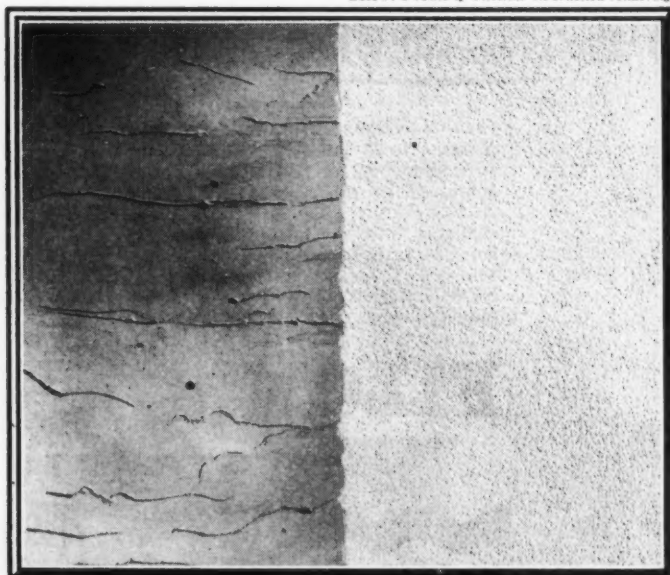
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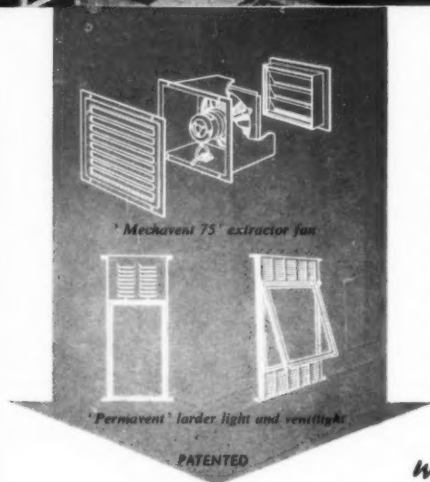
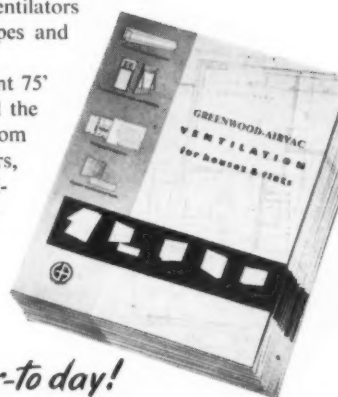


(above) 'The Cricketers,' Woodford—Architect: C. P. Sapin, (Chief Architect)
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(left) photograph by courtesy of Turner and Kitching A.I.A.R.I.B.A., Gravesend

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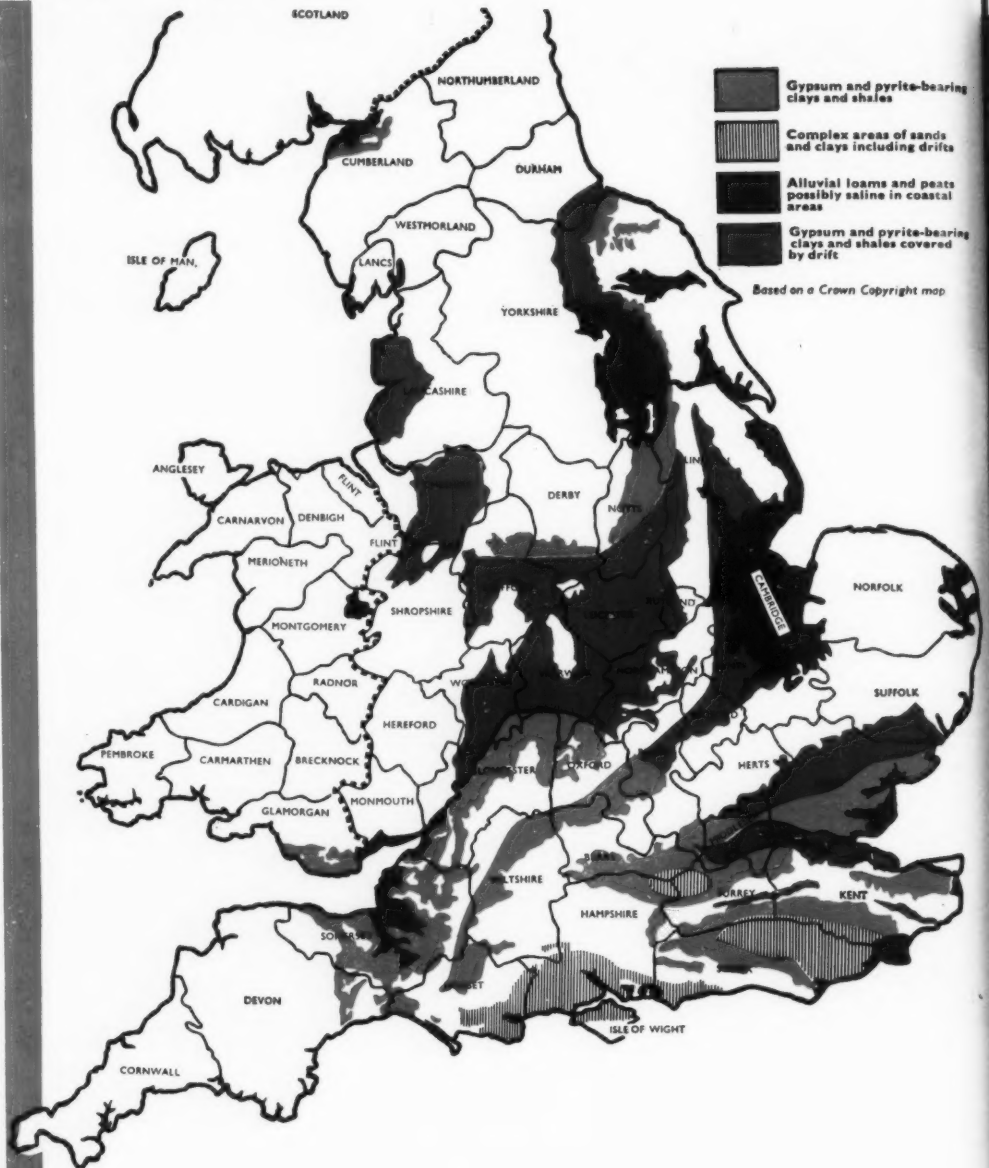
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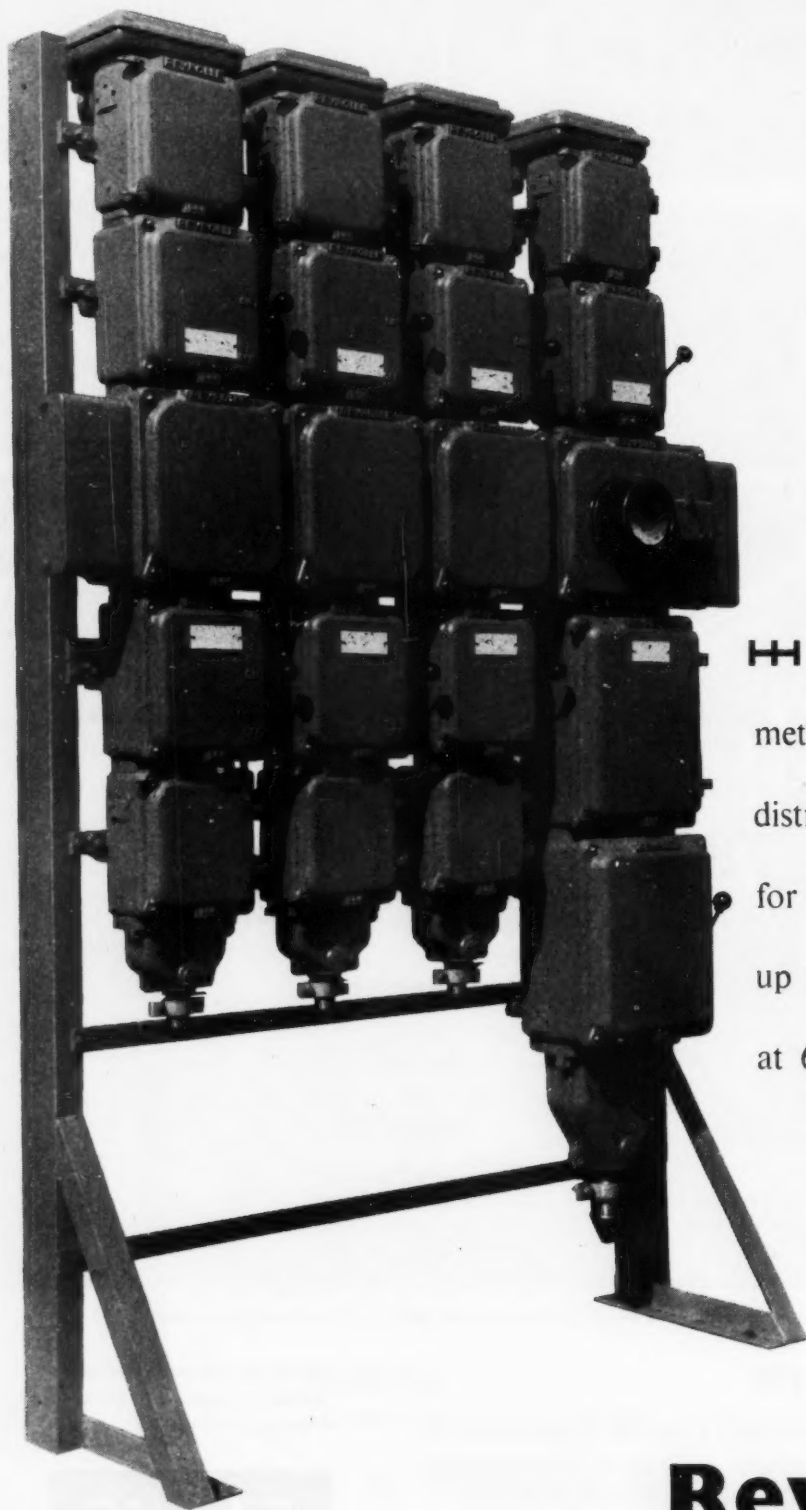
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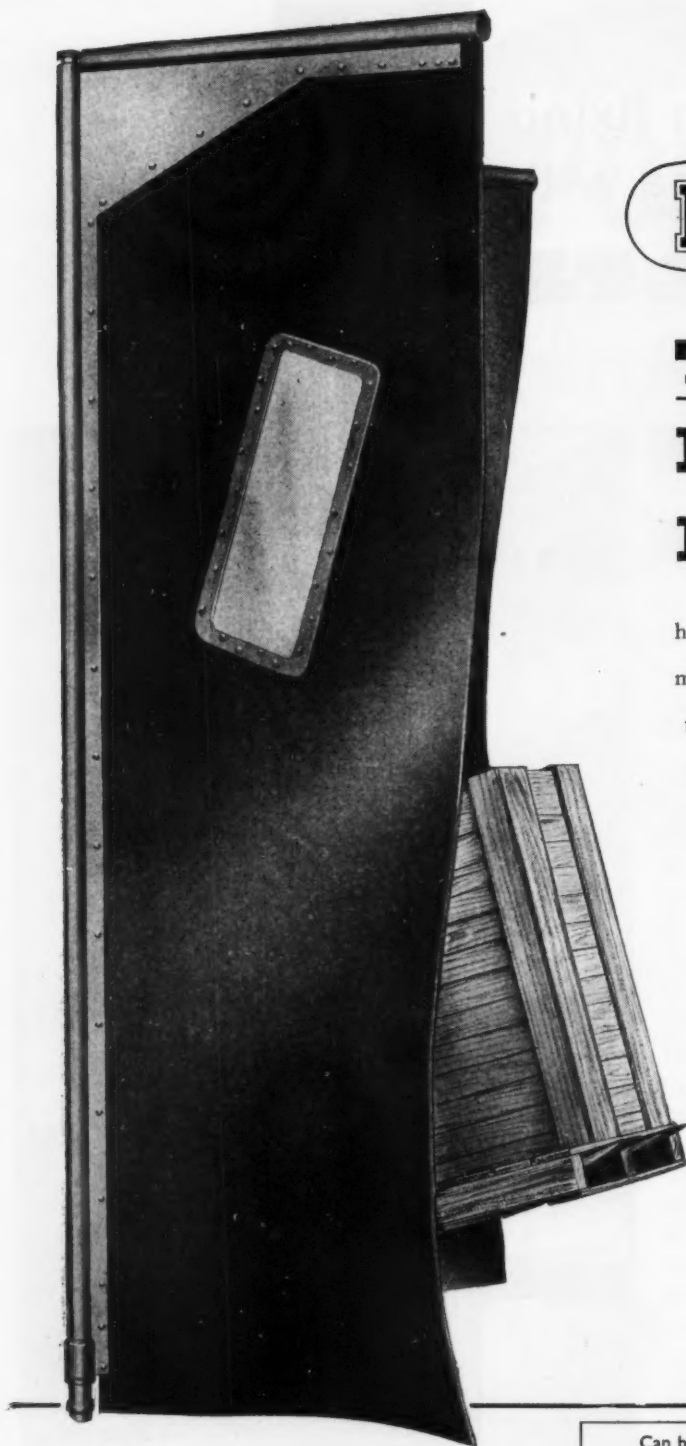
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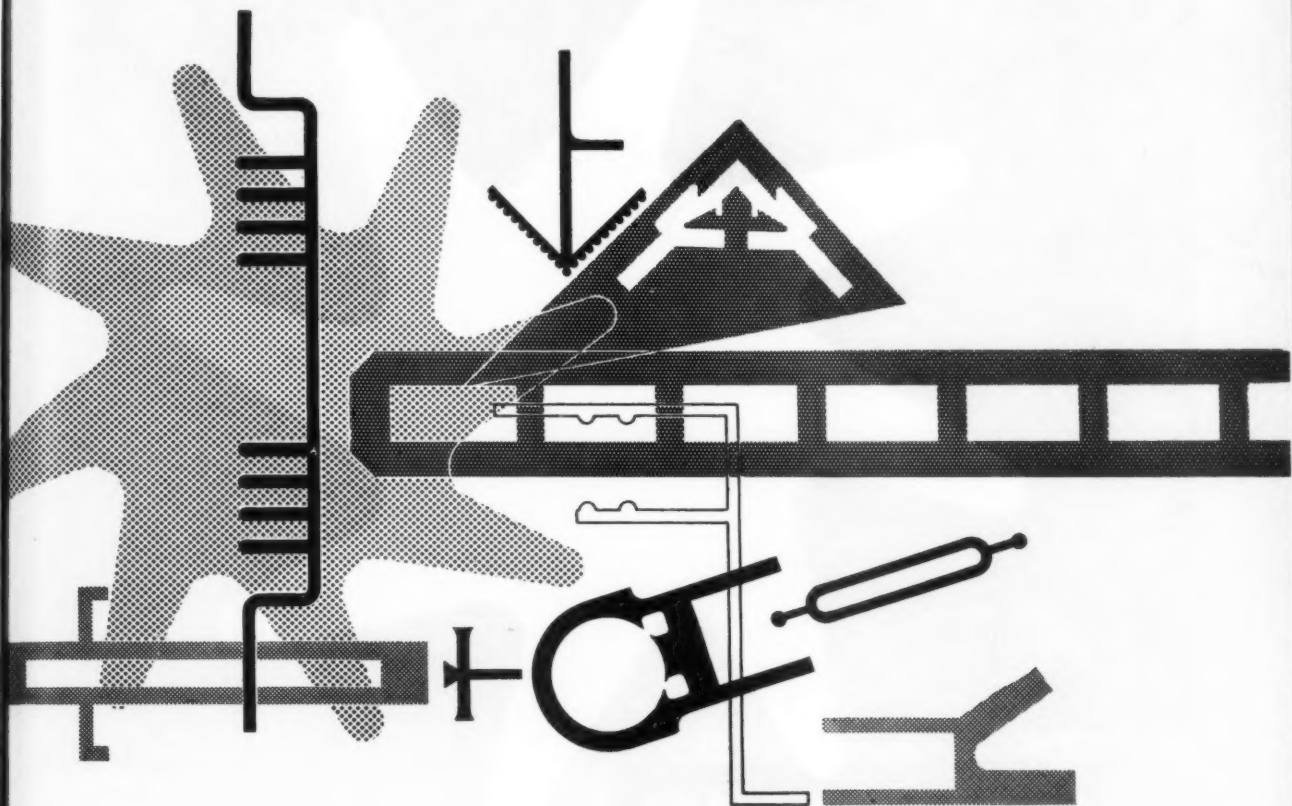
*See Neway Flexible Doors at the Building Centre, 26 Store Street,
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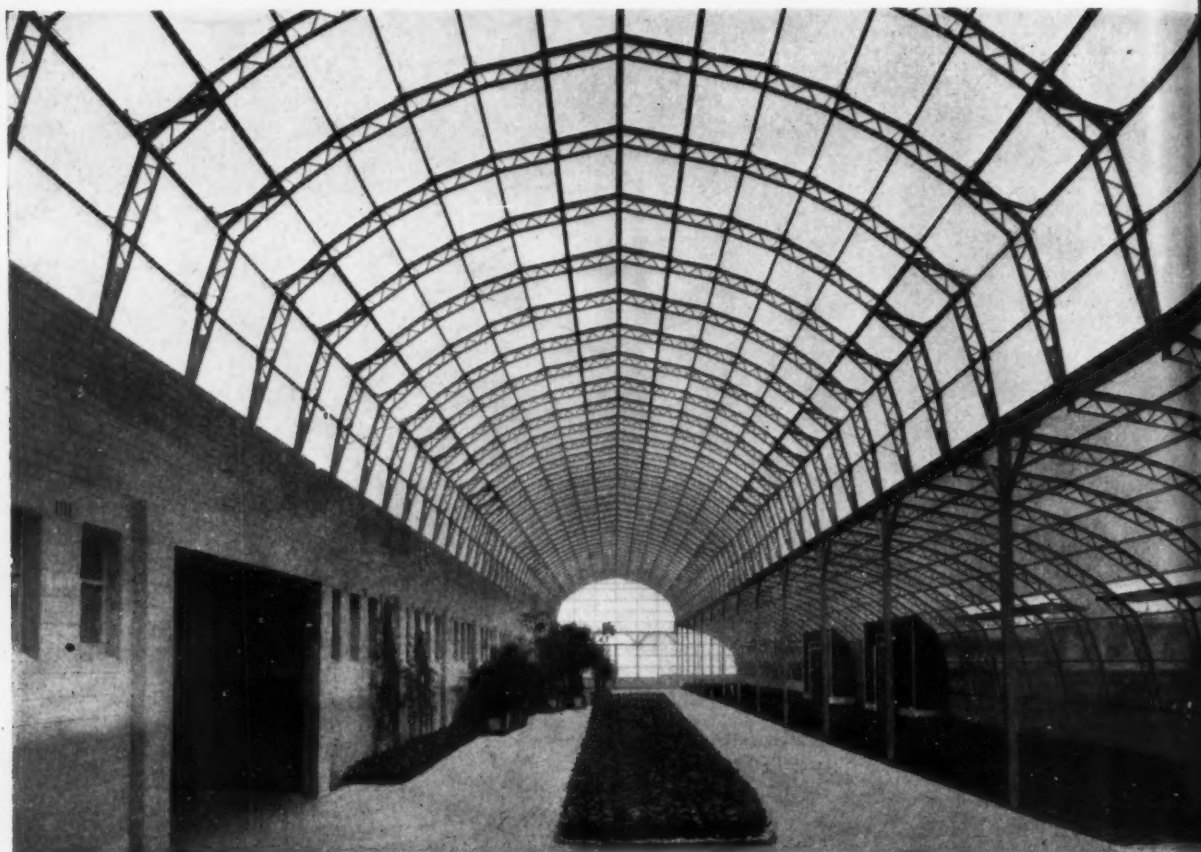
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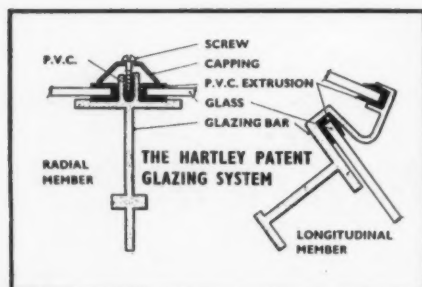
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212 ft. long x 43 ft. wide x 25 ft. high

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The Hartley range of glasshouses has been designed to meet the requirements of Parks, Research Establishments, Horticulturalists, Nurserymen and Private Gardeners, and include these outstanding features:—



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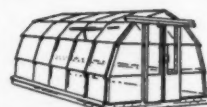
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Hartley "7" 7'3" Wide 7'7" High (Last)



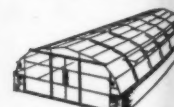
Hartley "10" 10'0" Wide, 7'1" High



Palm House 38'6" Wide, 18'8" High



Hartley "14" 13'3" Wide, 8'6" High



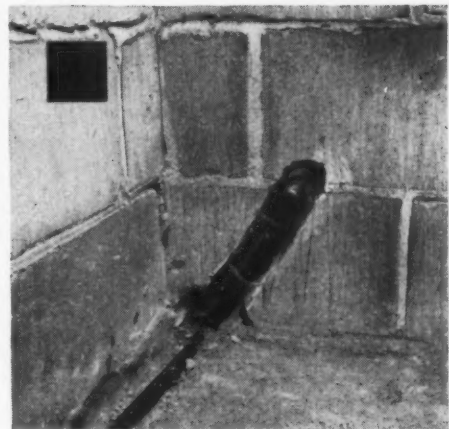
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Hartley "21" 21' 2 1/2" Wide 10'0" High



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THERMALITE

The photographs here show portions of a two floor detached house currently being built. The methods of construction shown comply fully with requirements and will provide a high standard of comfort in the complete house.

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1. Dry density 50 lbs ft. 3
2. Compressive strength to BS:2028 type A.
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6. Fire resistance 4" load-bearing plastered hot face—2 hour grade. Fire resistance 4" non-loadbearing unplastered—4 hour grade.

Loadbearing insulating building blocks

Load Bearing: Inner Leaf.

Here 4" Thermalite blocks are shown carrying the first floor joists. The inner leaf above the joists is continued in 3" Thermalite.

Load Bearing: Eaves Level.

This internal view shows the 6" Thermalite solid wall carrying lintel, roof plate and roofing members.

Load Bearing: Front Fac.

This 6" Thermalite solid wall provides simple direct fixing without battens. The wall when tile-hung will have a 'U' value of .16 B.T.U.'s. The end wall shown is in cavity construction using 3" Thermalite inner and 4 1/2" brick outer leaf with wall-ties spaced at 18" centres horizontally and vertically.

Chasing and Fixing.

Internal mains service arrangement and the direct, positive fixing of joinery, plumbing and etc. are greatly simplified. Thermalite will not cause corrosion of metal fixings.

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A **LAING** COMPANY

The Case for the Local Brick

IT HAS BEEN STATED that our island is built on coal. It may with greater truth be said to be built on clay or brick earth, for brickworks are far more evenly distributed geographically than are coal mines. Some of them follow the "coal measures" up and down the country, but many others are located either on the main clay beds which cross the country or on isolated pockets of clay or other materials which are highly suitable for brick making.

Apart from a few large producers, most of the works are small or medium-sized, and for centuries many of them have largely sustained building operations in their respective areas. They are a great convenience to the builder, enabling him to pick up small loads at any time and to arrange deliveries in accordance with site requirements.

The local brickworks is an asset to its locality. The bricks produced are of varied kinds, which both reflect and mould the character of the region's buildings. In normal times, the works provide steady and healthy employment, and contribute on a substantial scale to the local rates.

The spectacular rise in brick production, which enabled the country to carry out its vast building programme during the last decade, was only made possible by the ready co-operation of hundreds of these small and medium-sized producers. New brickworks were built, and the capacity of

old works increased, both at the cost of considerable capital. The whole approach to post-war building development has been imaginative and energetic, and the smaller manufacturers of the country may rightly feel that they have played an important part in the development programme.

The present curtailment of building is producing serious repercussions on the smaller works. Large stocks of bricks are accumulating and if, as appears likely, the slackening in demand continues, its impact on the less well-endowed units of an industry geared to a high level of demand will be very serious indeed.

Competition for the reduced volume of business has become intense, and local manufacturers are vying with producers outside their area. It is widely asserted that competition is good for trade, but it is a question whether, in the ultimate interest of the building industry and the community, some preference should not be given to the local producer. A healthy industry contributing to local prosperity is only possible if regional demand is addressed to regional supply, and a healthy local brick industry is essential to the building industry.

Any large-scale closing of brickworks at the present time would not only seriously curtail future supplies; it might well place the building industry in a difficult position both as to supply and prices of bricks when the present building restrictions are removed.

(Reprinted from 'The Brick Bulletin')



Issued by The National Federation of Clay Industries, Drayton House, London, WC1



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Ventura series by Merchant
Adventurers Limited provides archi-
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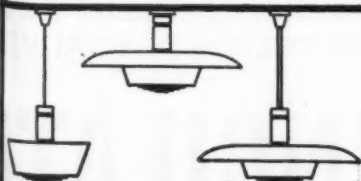
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A comprehensive leaflet giving full data and prices is available on request.

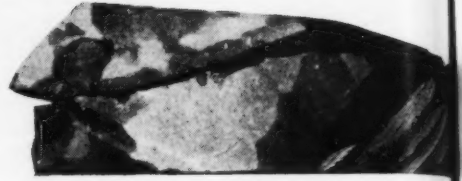
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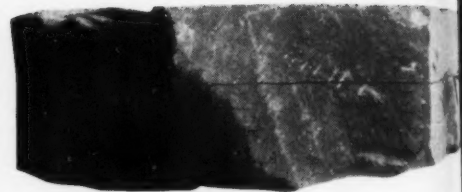
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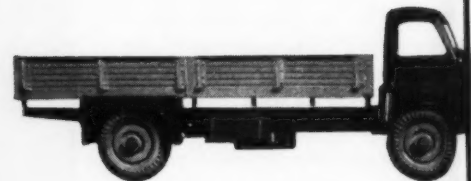
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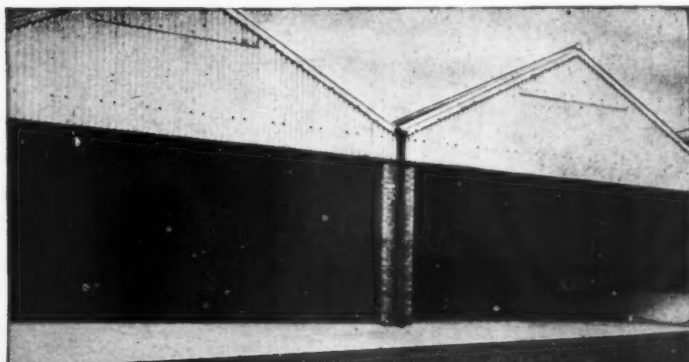
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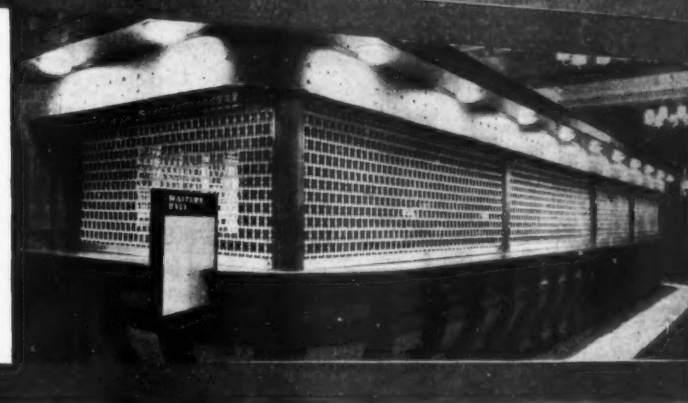
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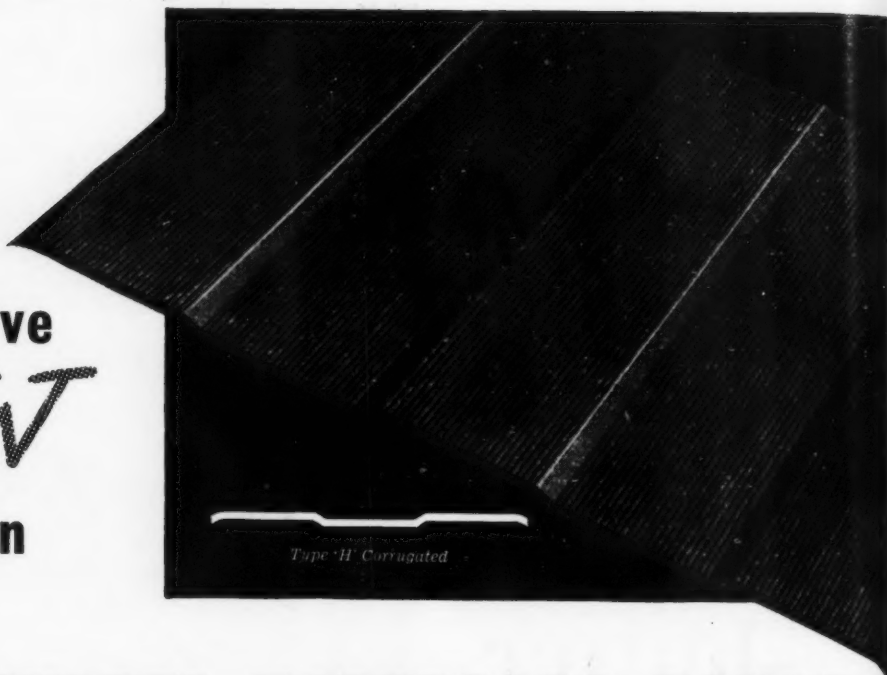
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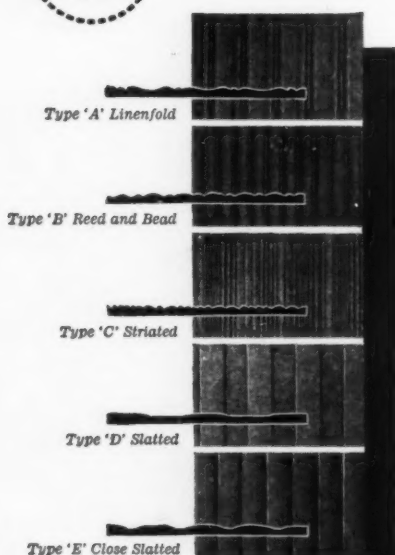
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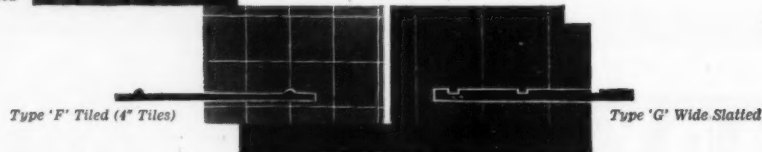
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Office extension for
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Architects: Malcolm Peck,
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Kenwood's problem was a familiar one — they were expanding rapidly — they needed extra space and they needed it quickly. Unfortunately, only half the plot adjoining their factory was available for them to expand into — the other half being occupied by two Victorian cottages that still had several years to run on the lease.

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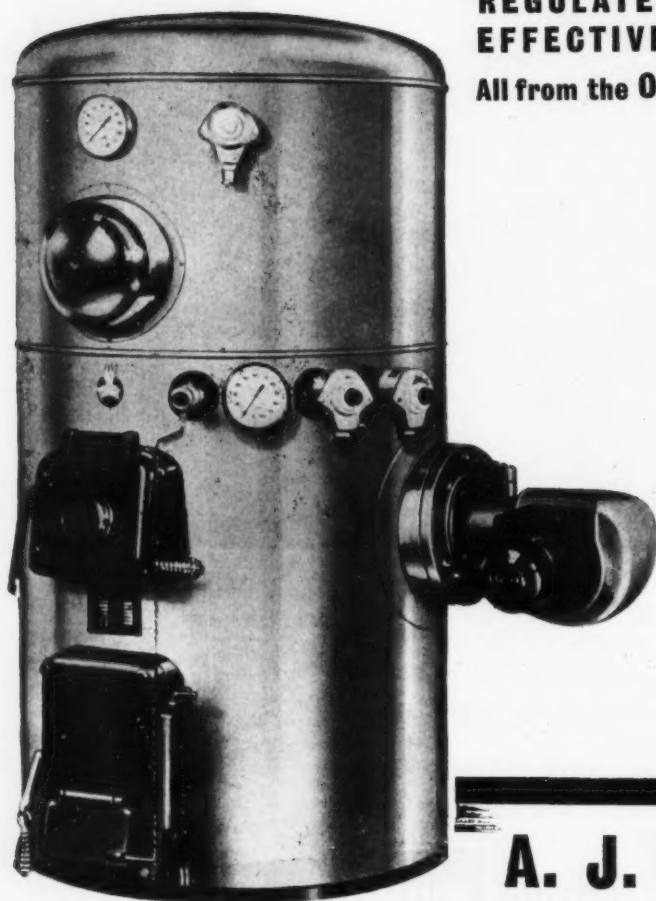
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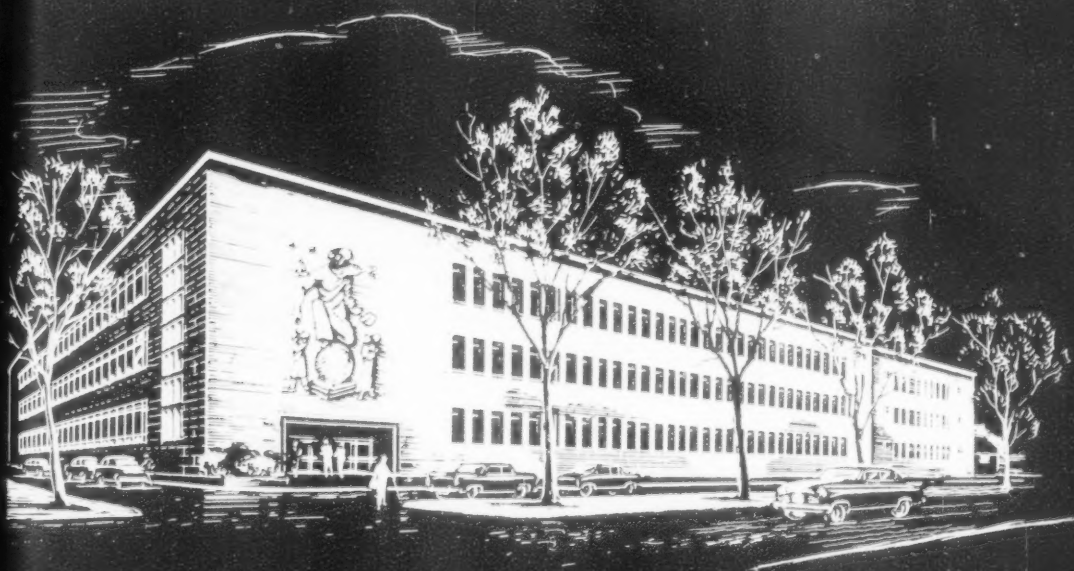
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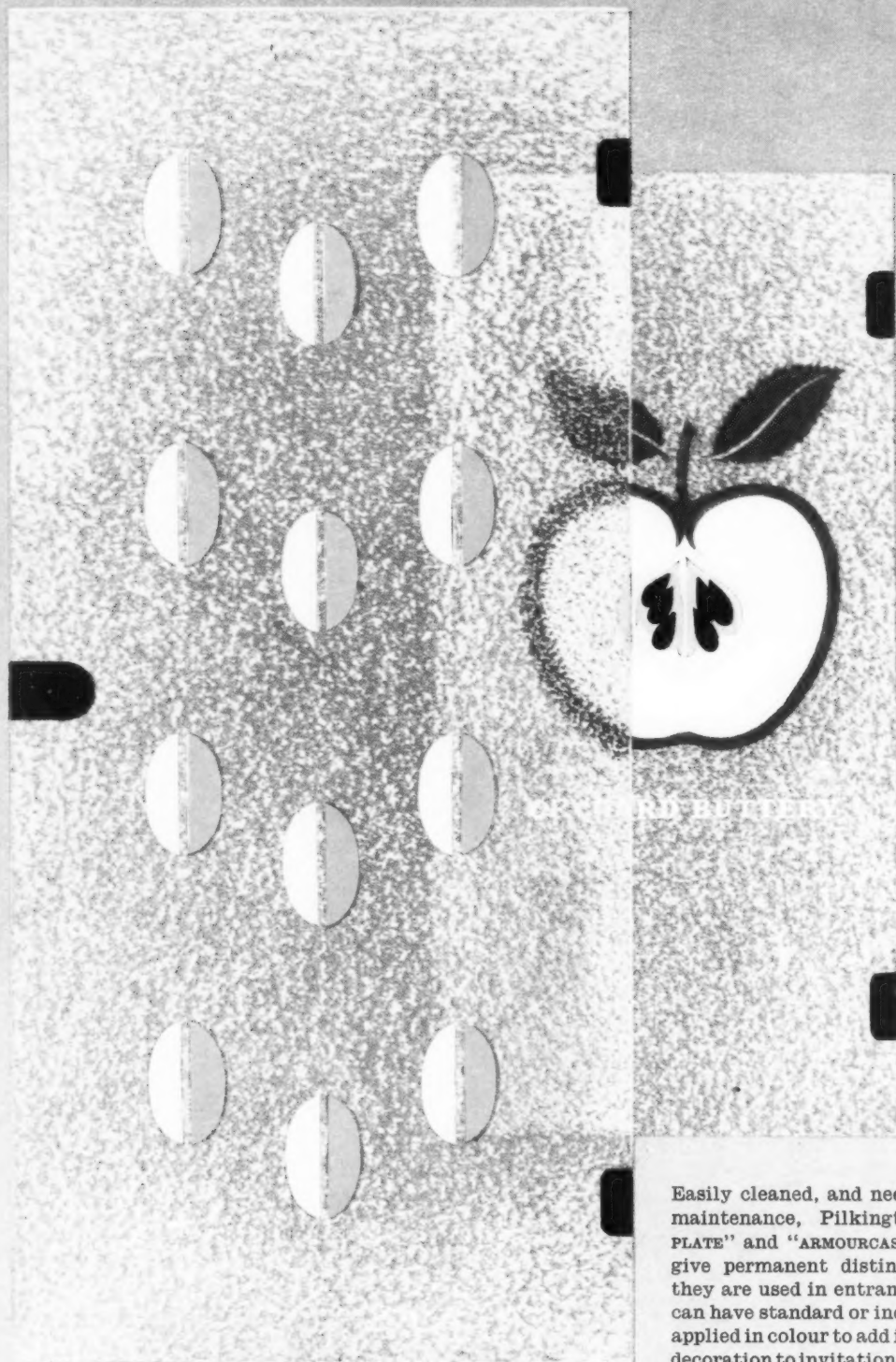


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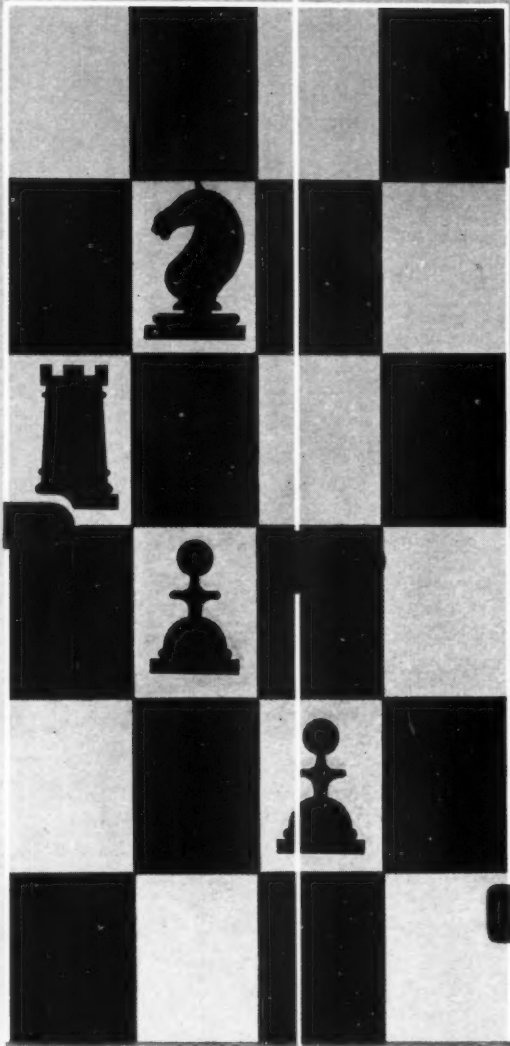
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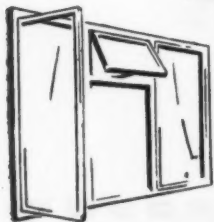
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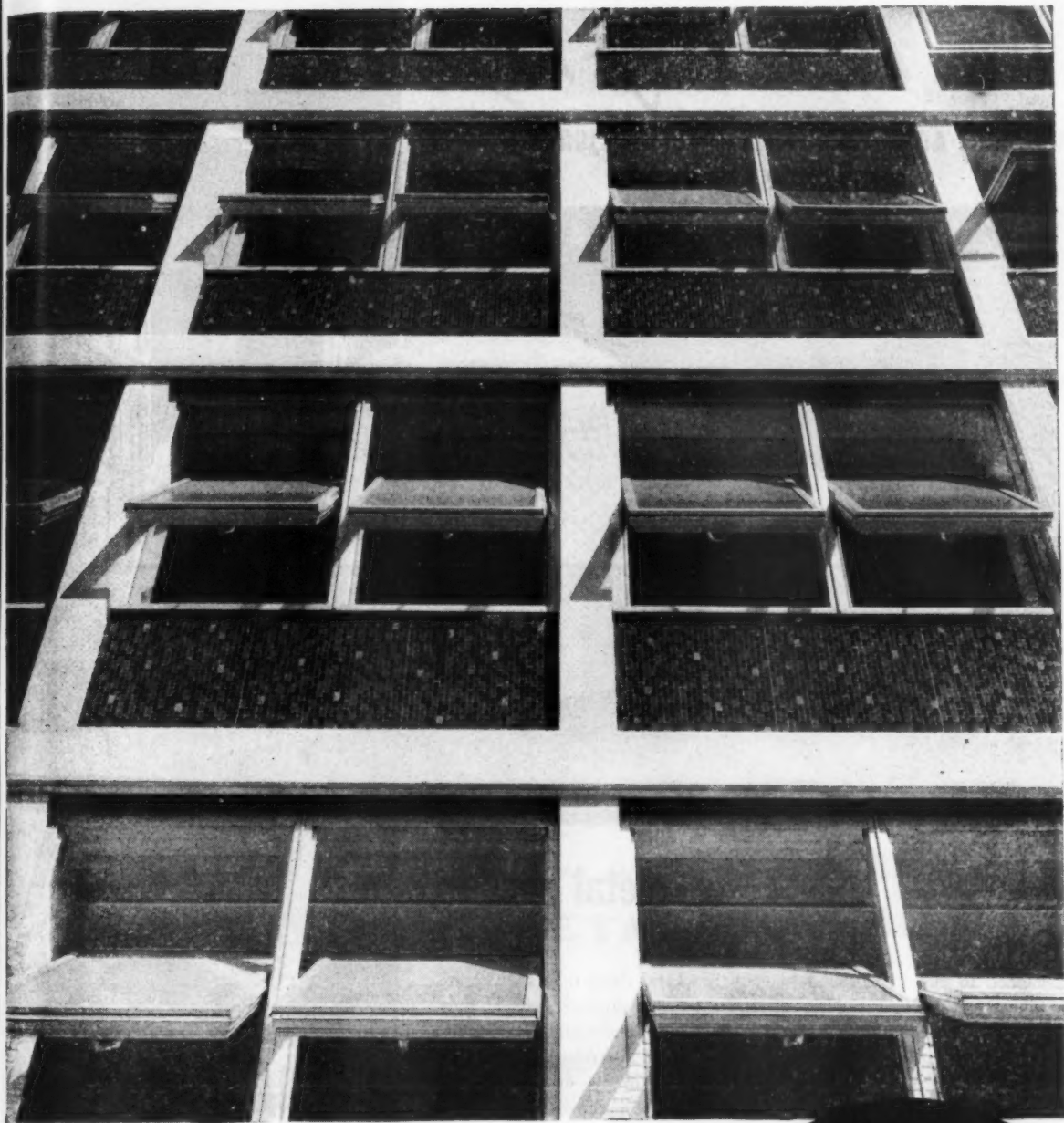
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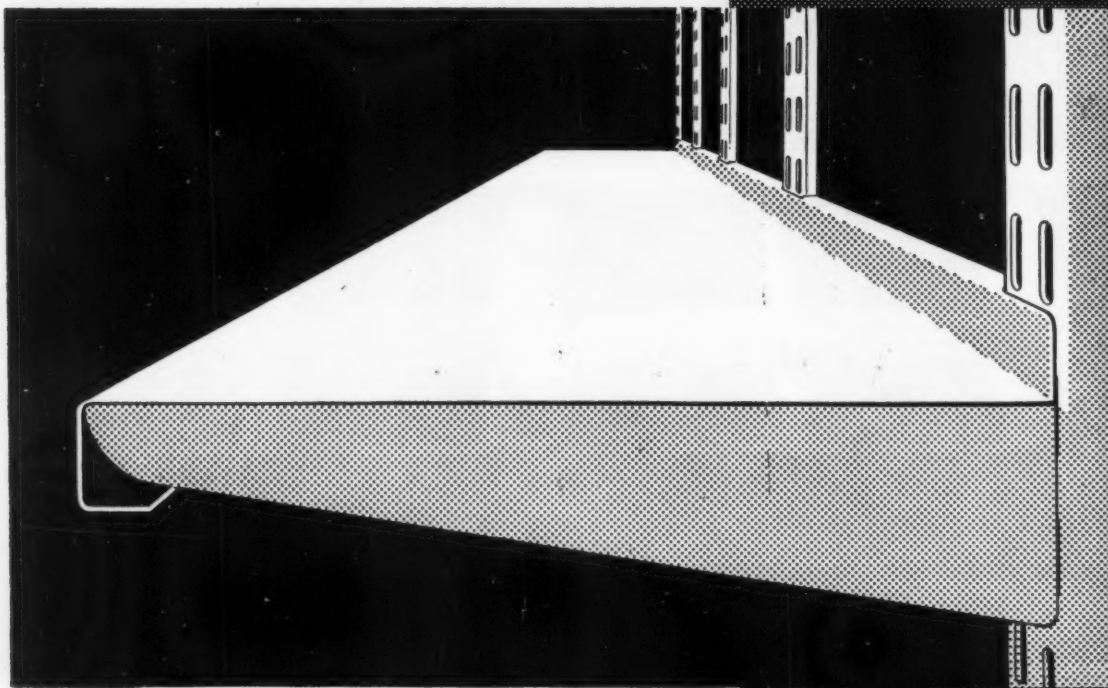
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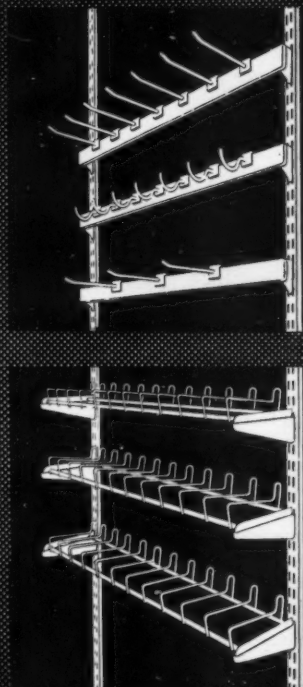
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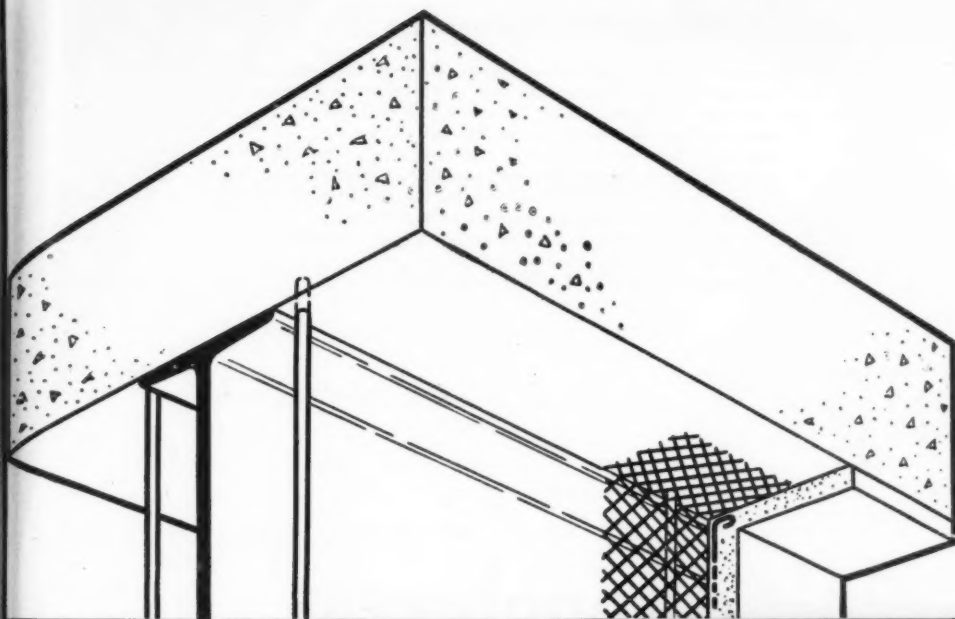
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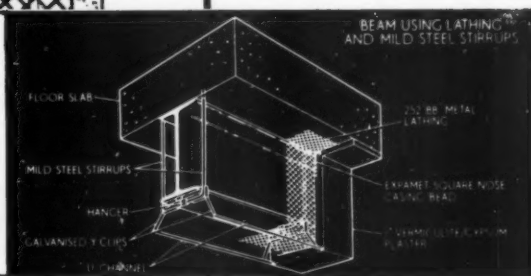
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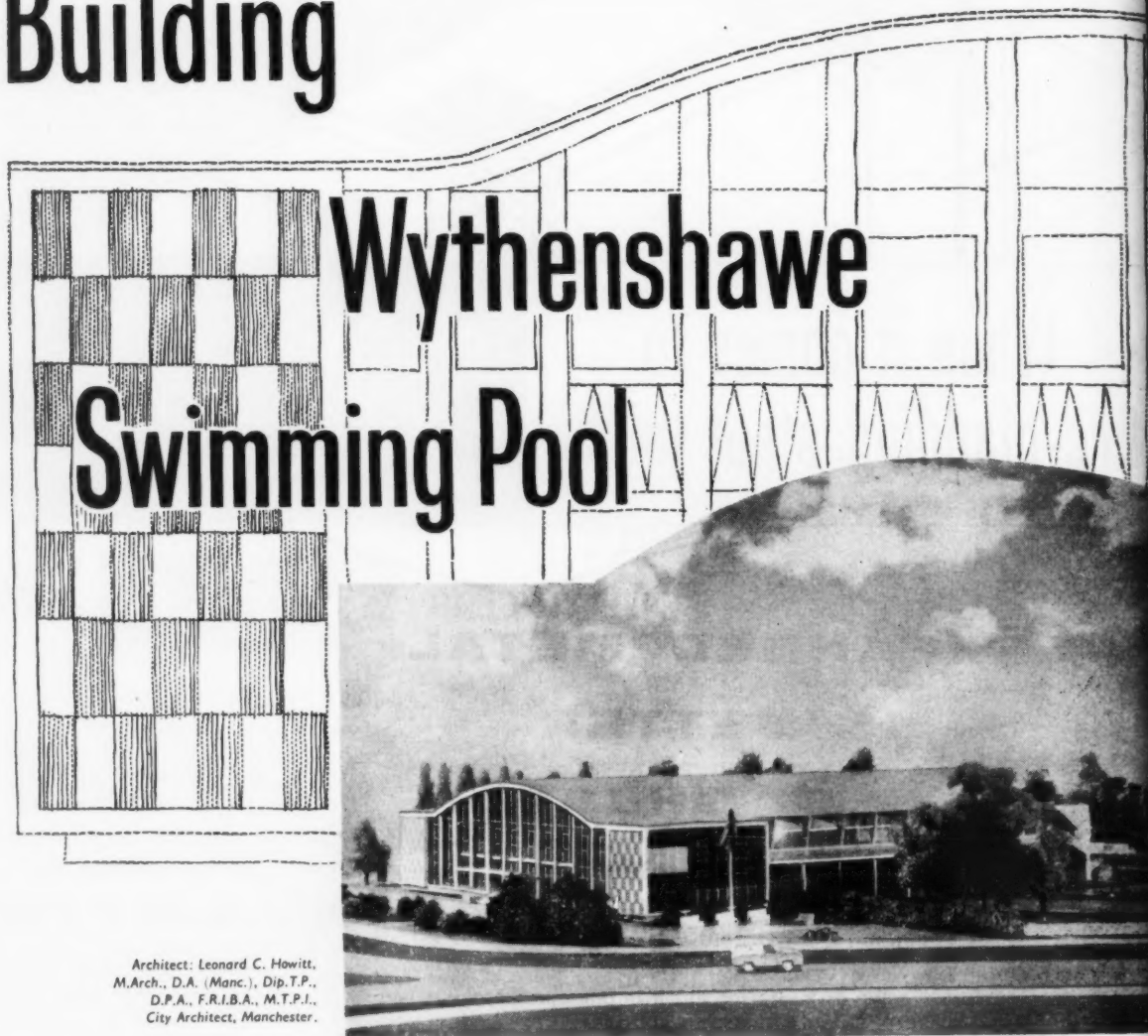
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D.P.A., F.R.I.B.A., M.T.P.I.,
City Architect, Manchester.

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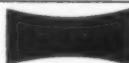
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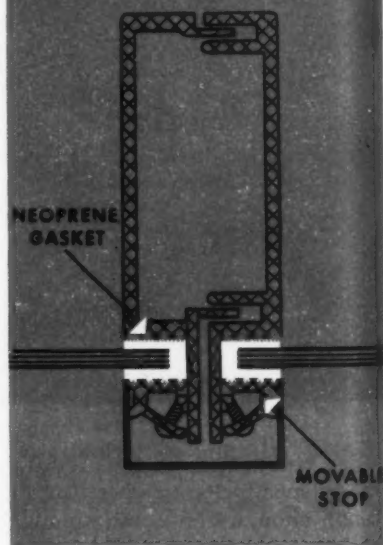
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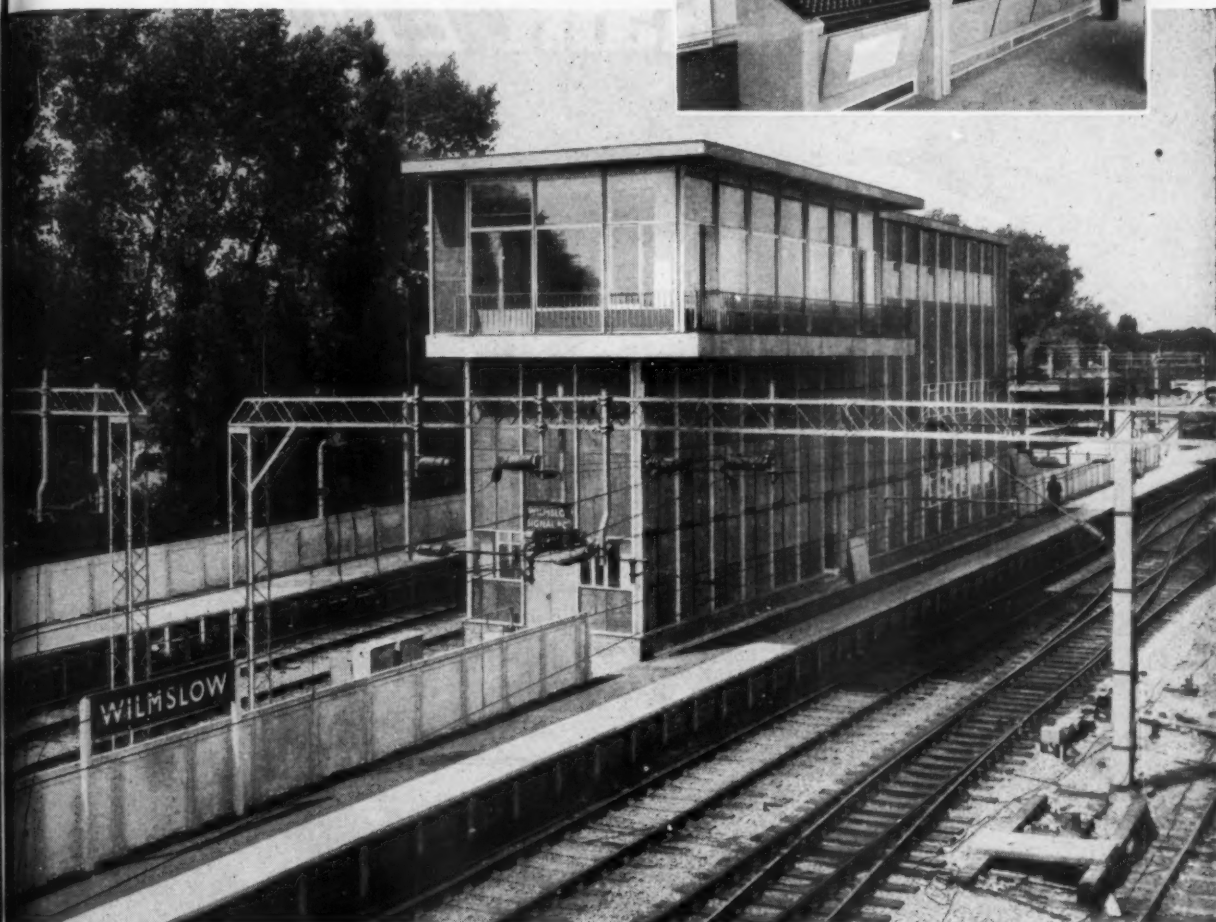
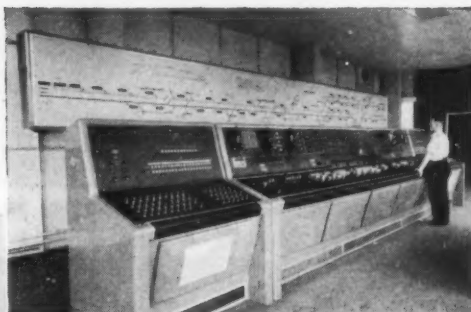
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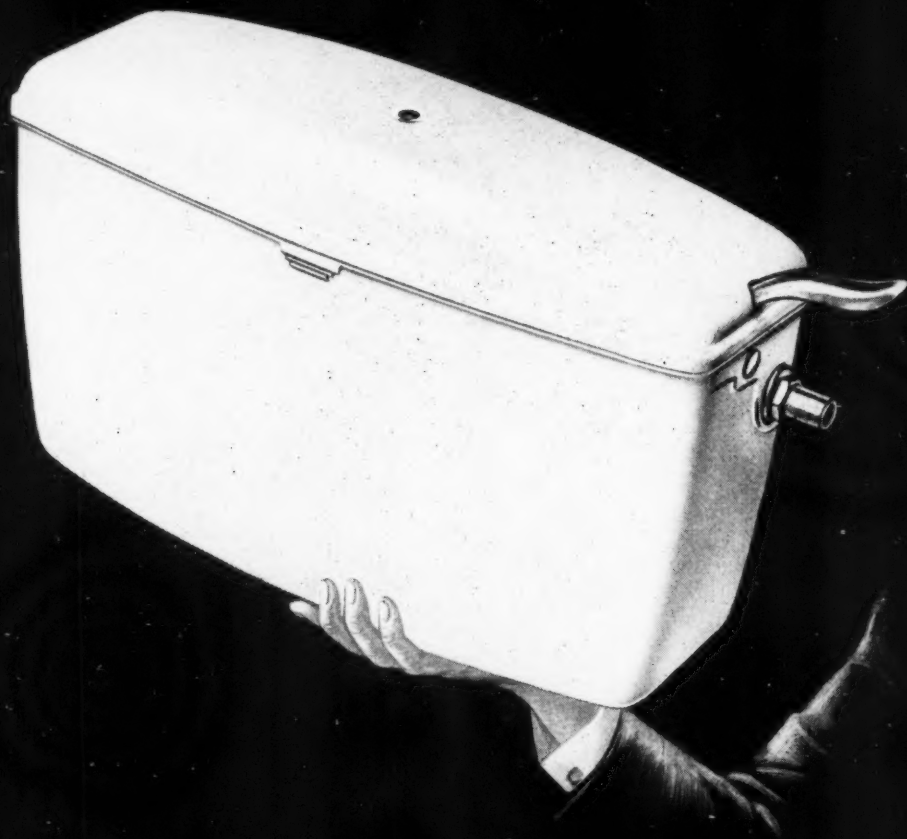
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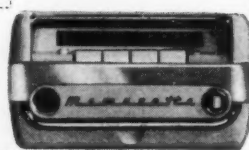


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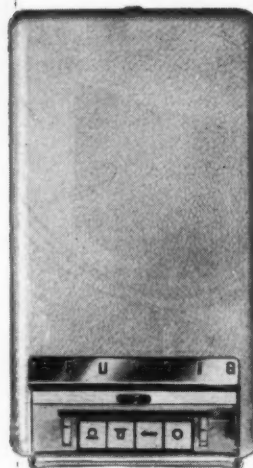
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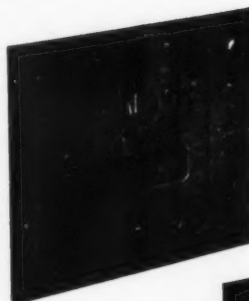
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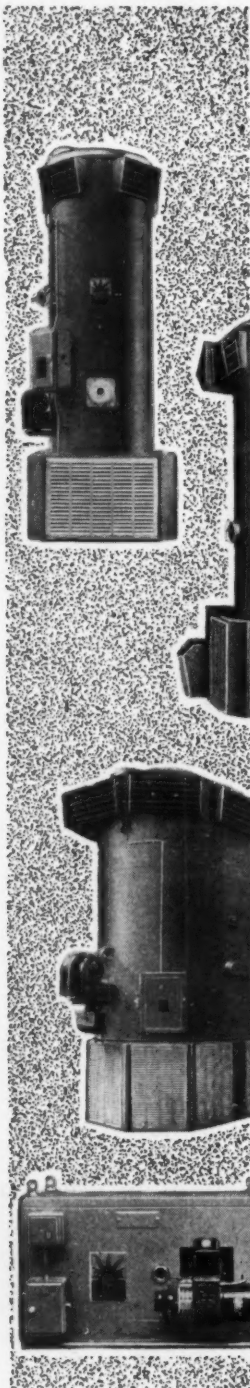


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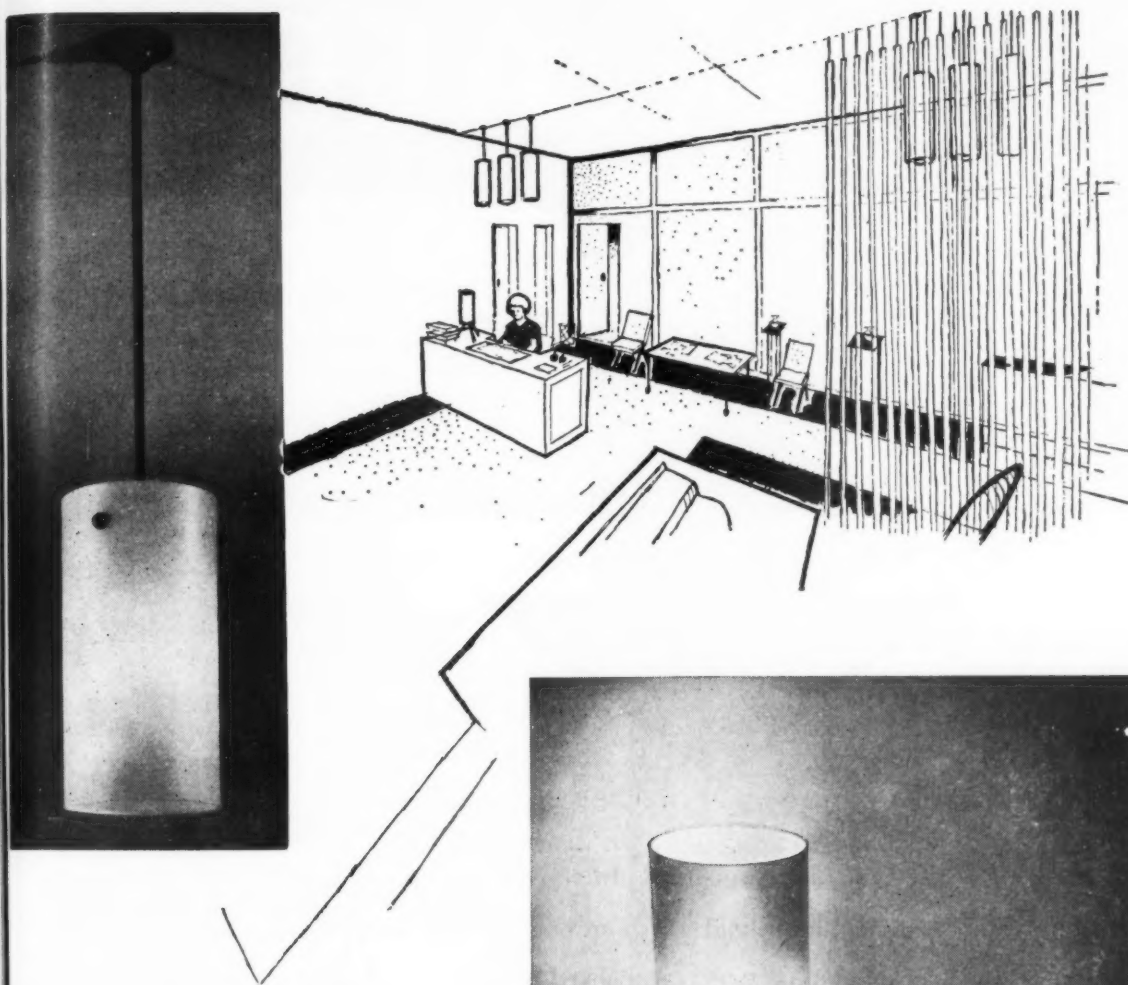
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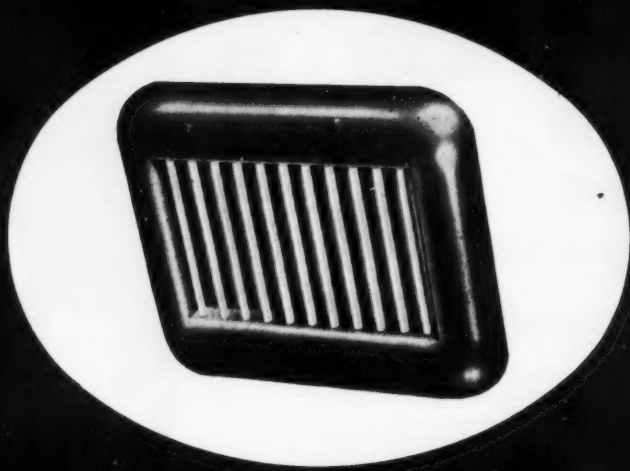
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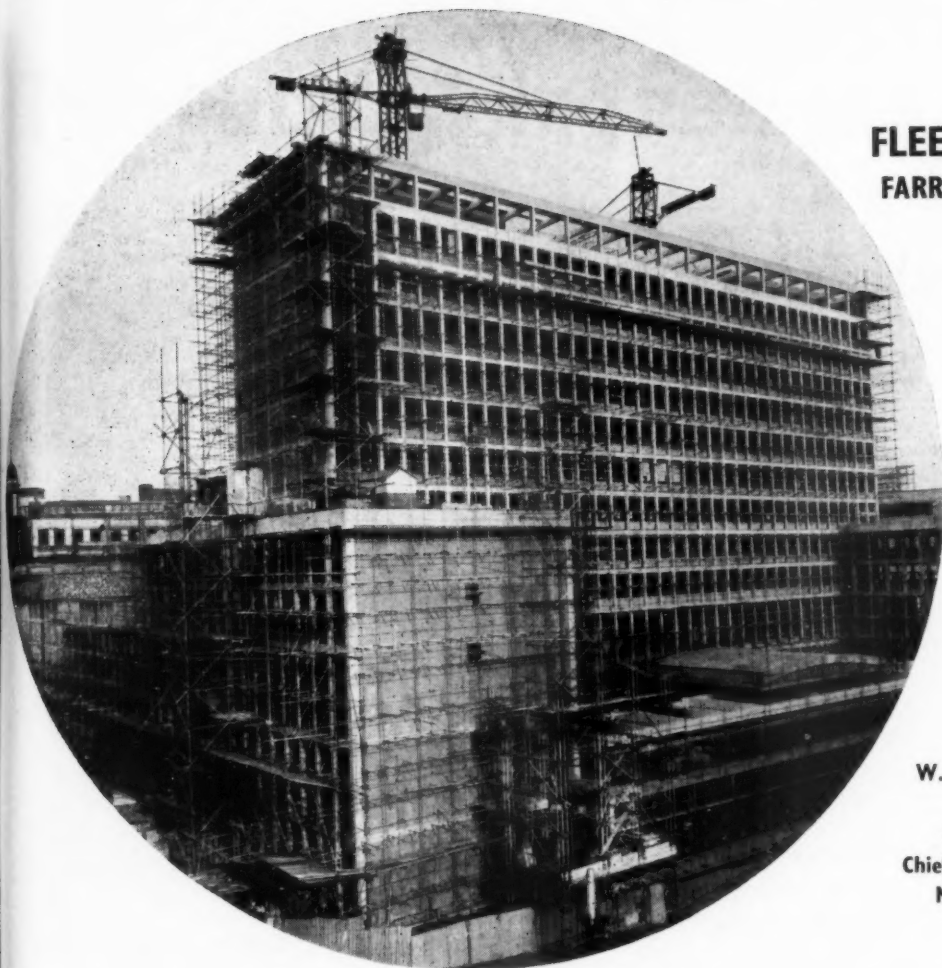
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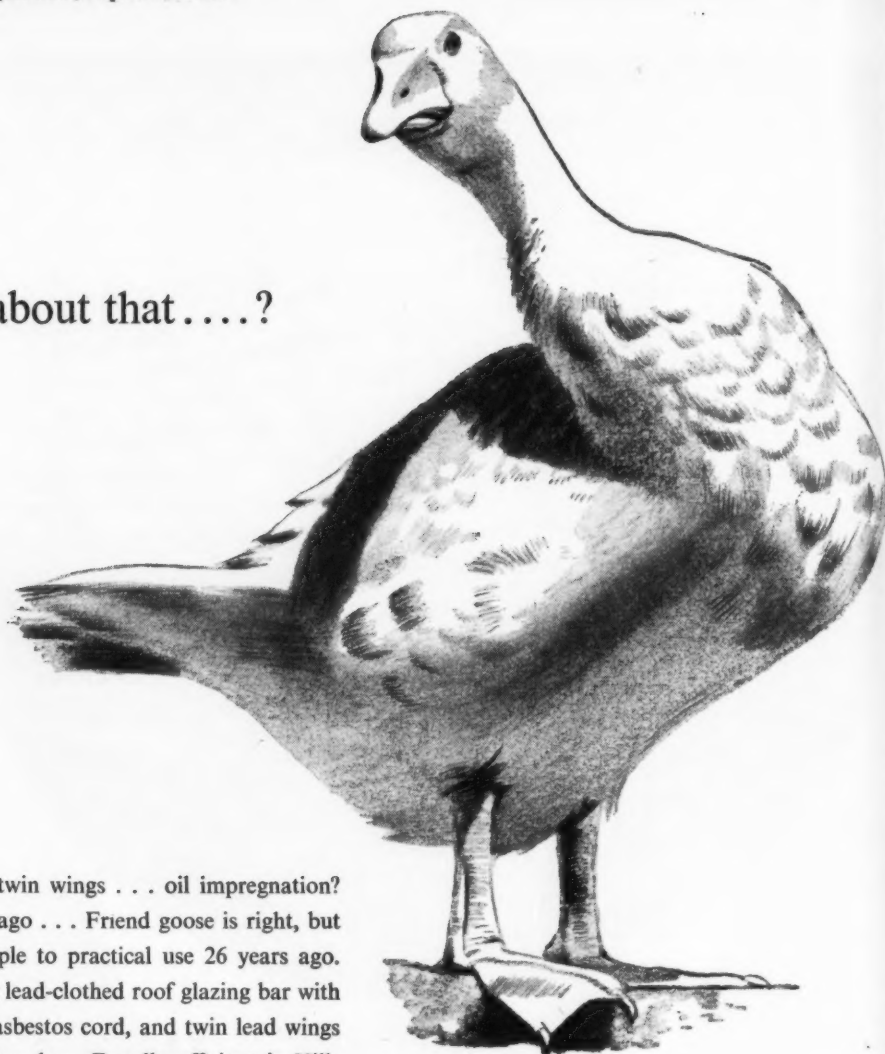
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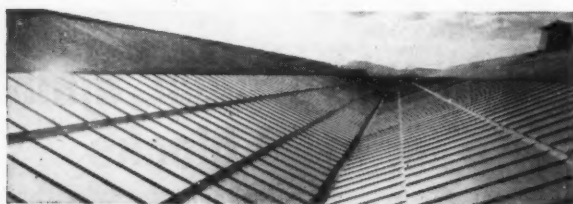
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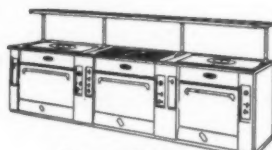
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THE ARCHITECTS' JOURNAL
for April 7, 1960

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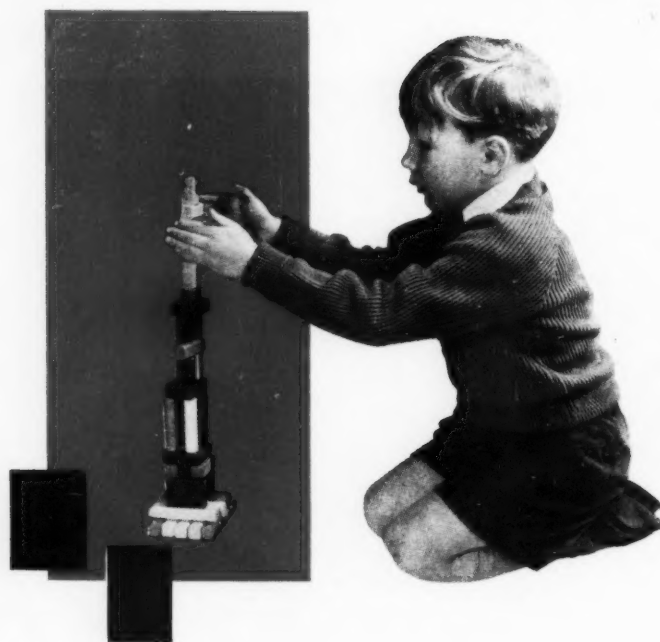
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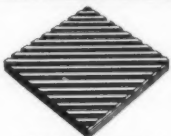


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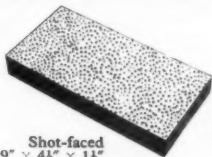
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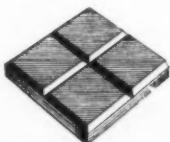
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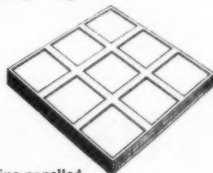
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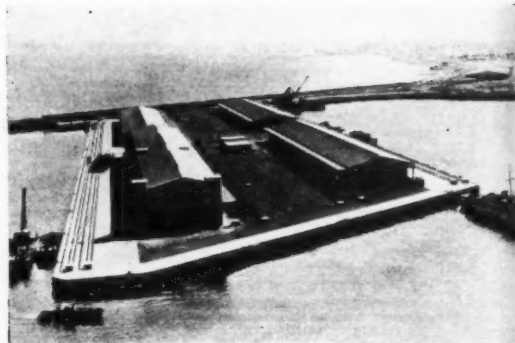


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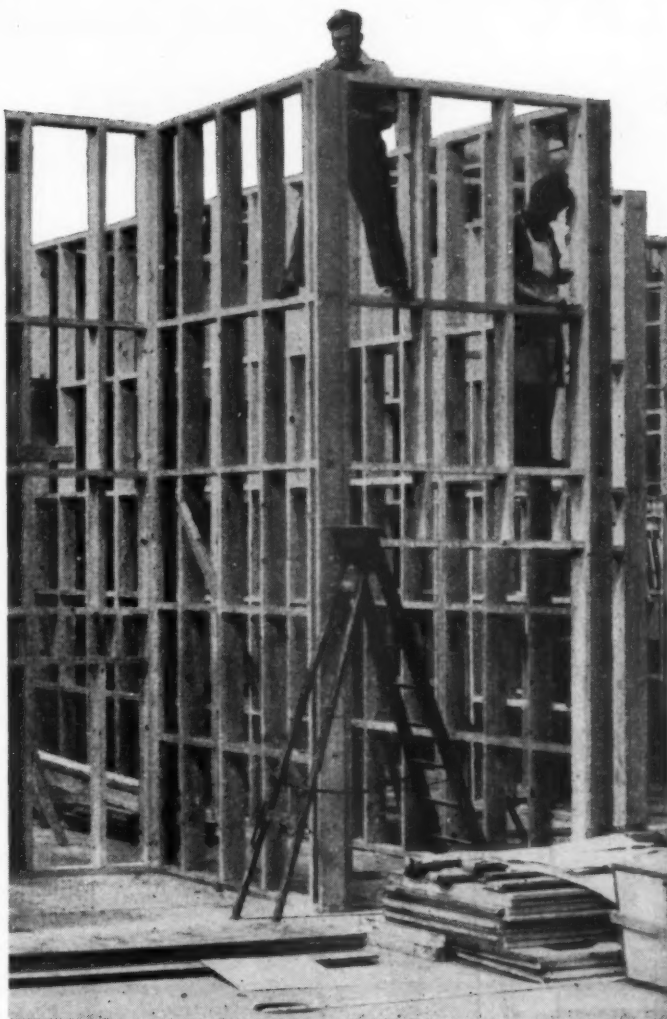
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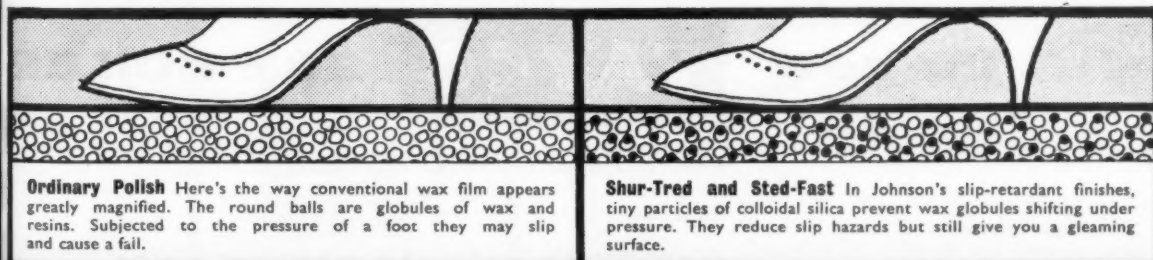
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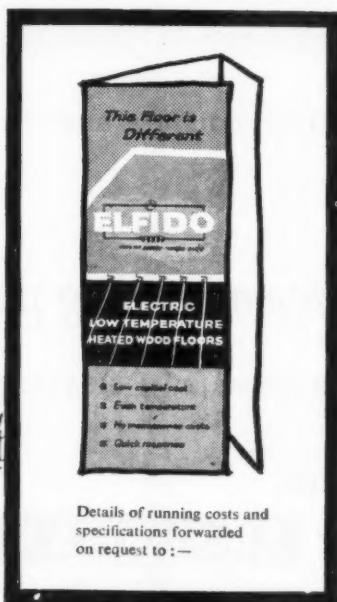
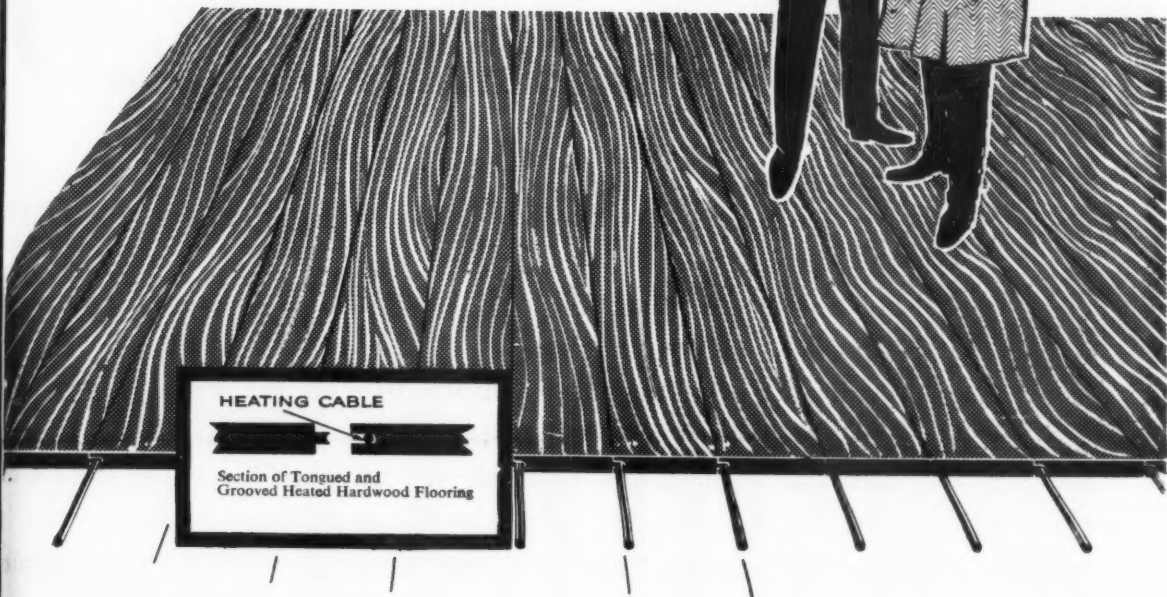
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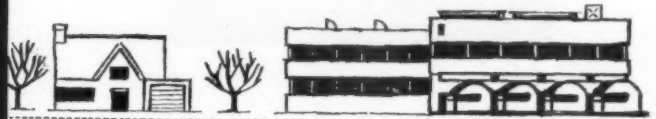
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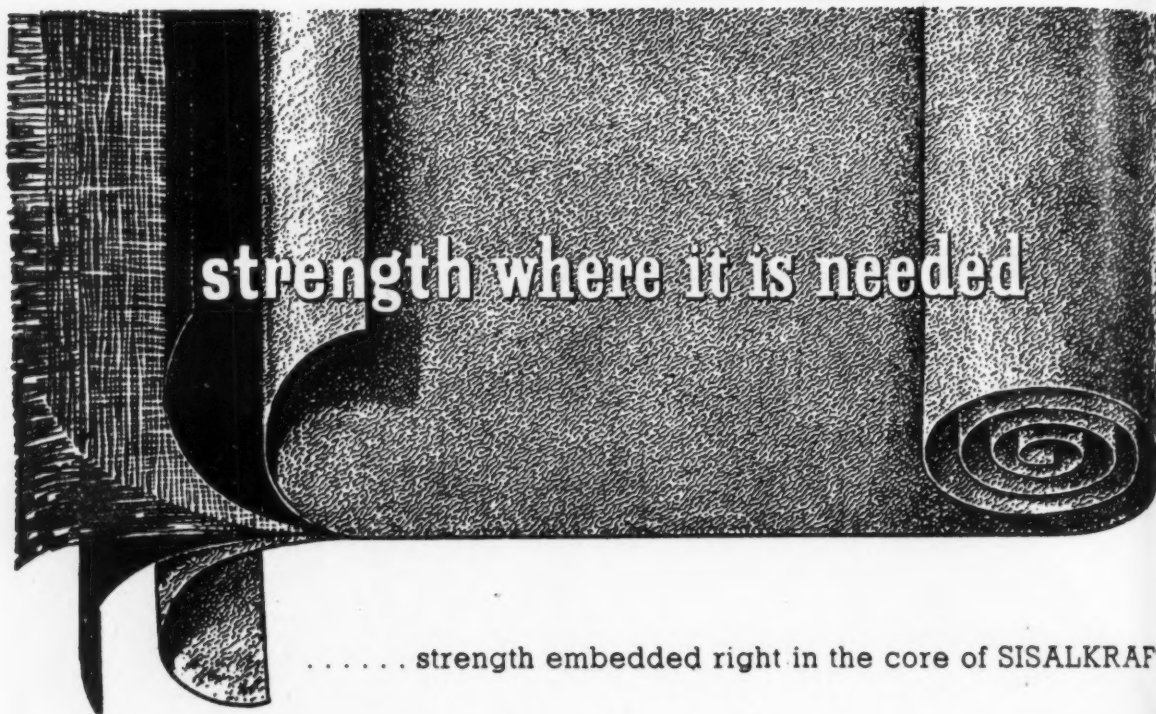


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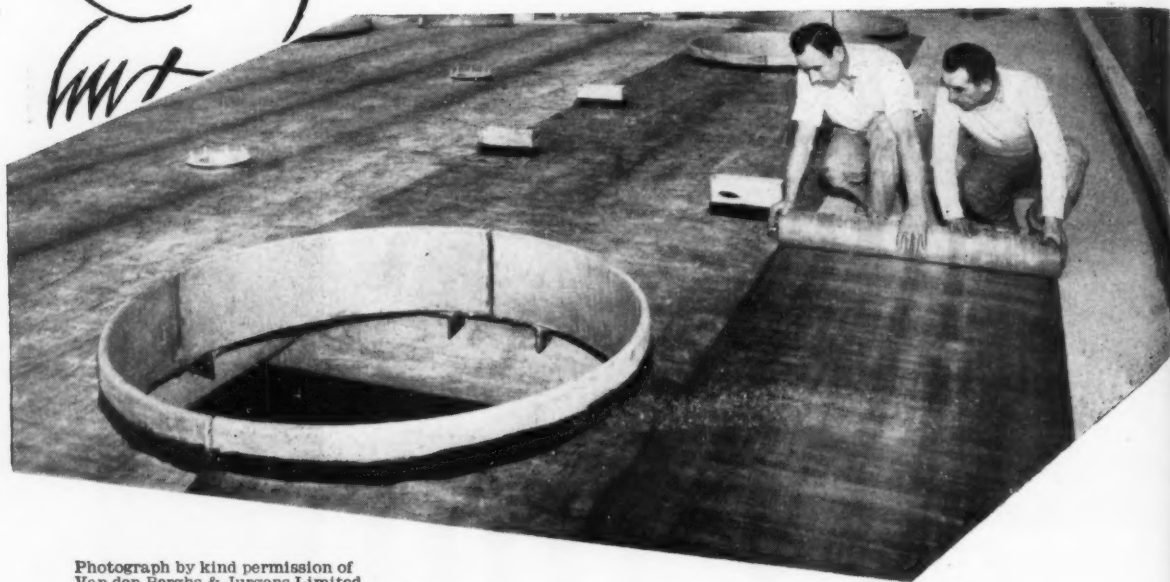
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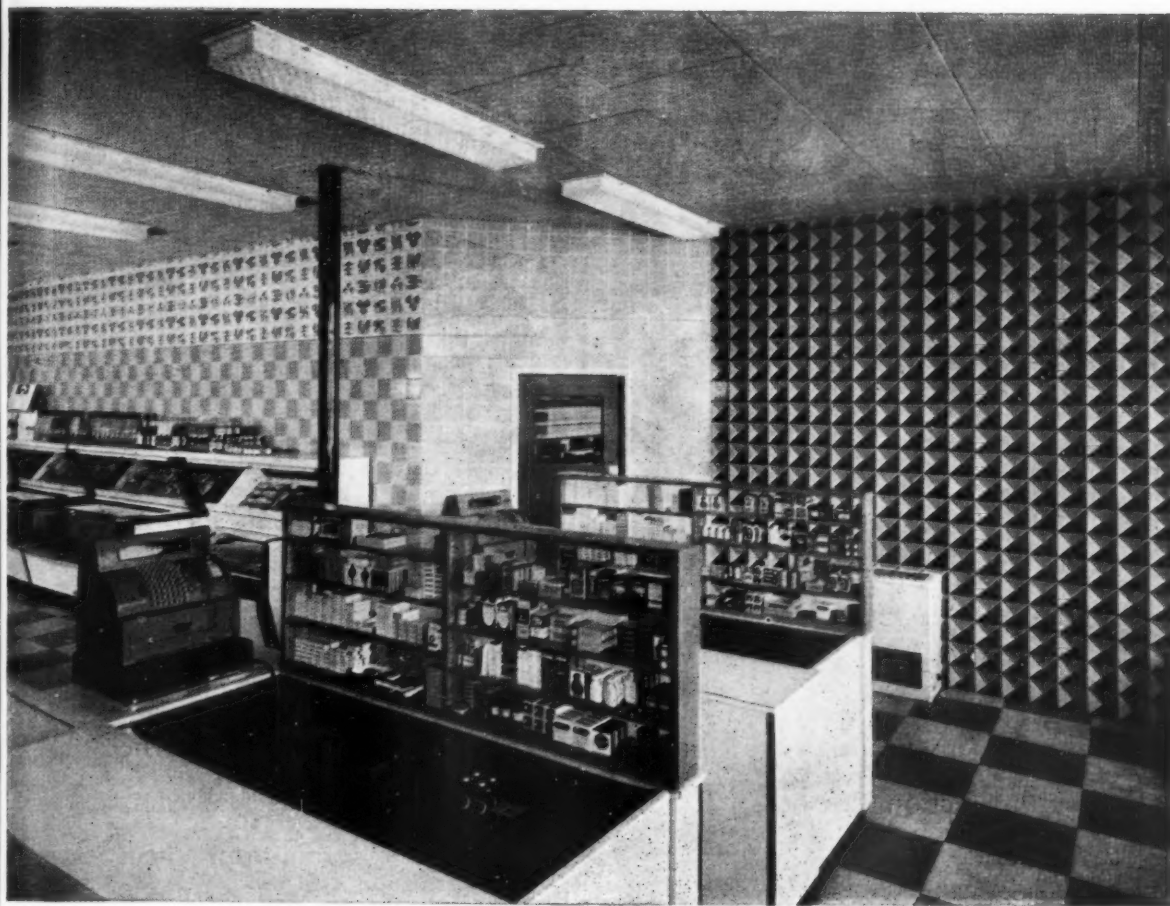
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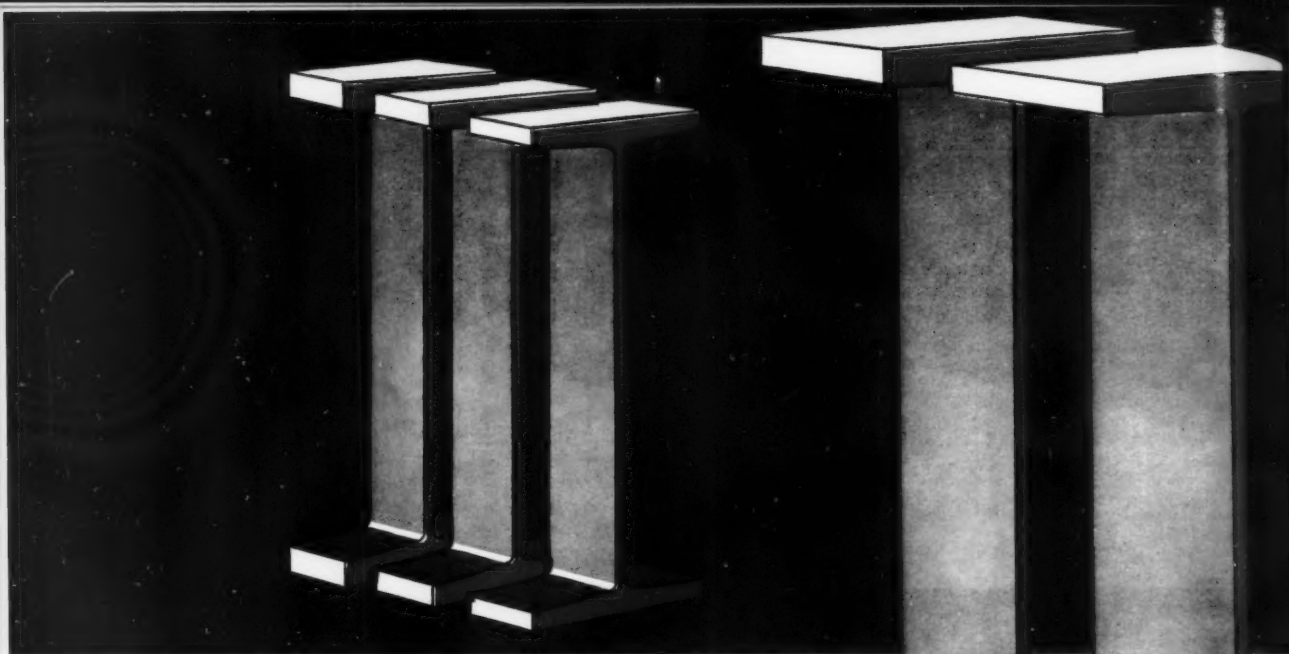
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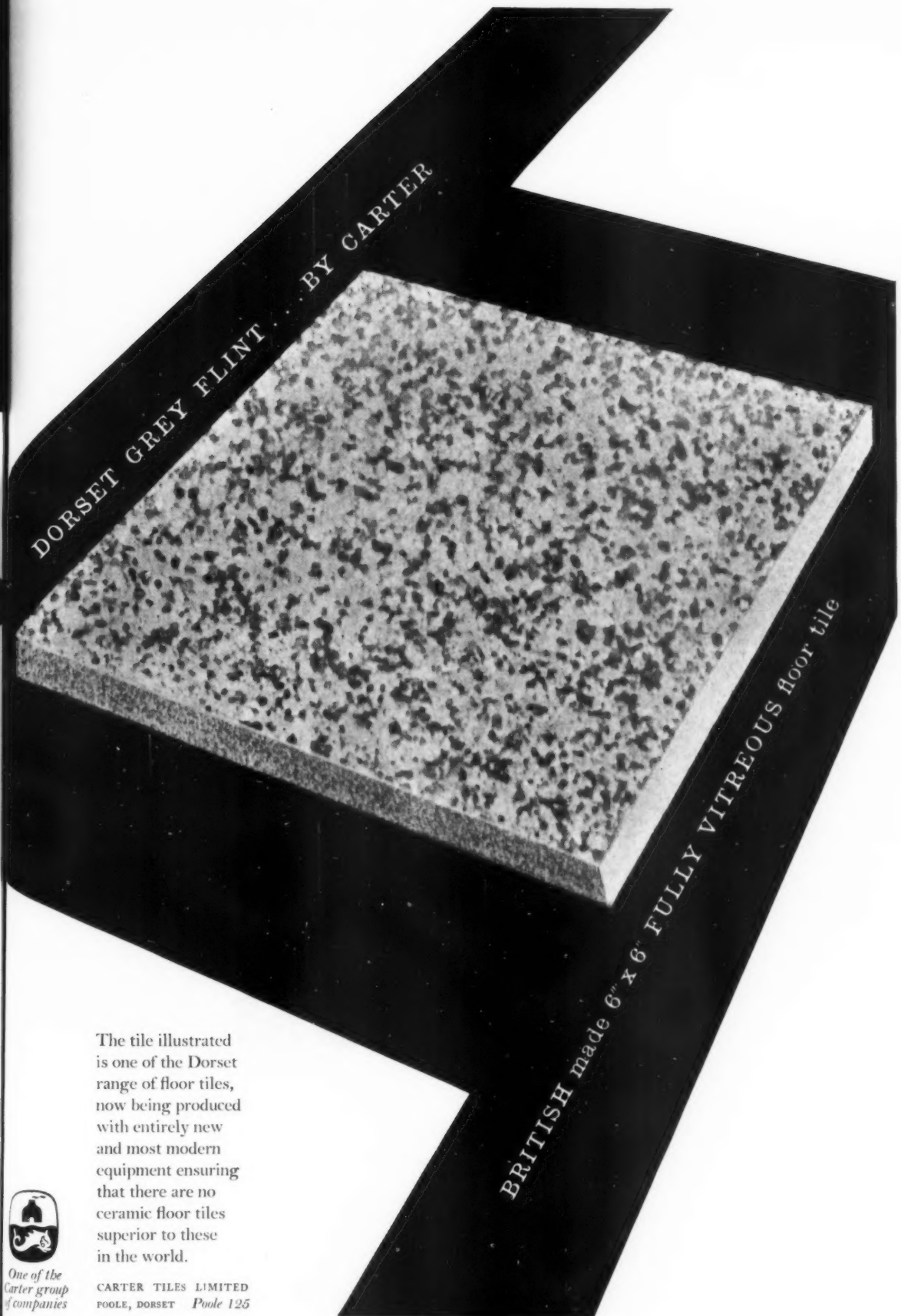
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The Architects' Journal

No. 3390. Vol. 131. April 7, 1960

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NOT QUITE ARCHITECTURE

The Sixties, they tell us, will be an age of enthusiasm. NQA hopes to do its best by the spirit of the times by publishing spasmodic gushers of enthusiasm about things people like, and thus embarrass everyone no end.

I'd Crawl a mile for... Playboy

Of course I buy it for the giant fold-out full-colour pin ups—*Playboy's* "Playmates" are one of America's greatest gifts to Western culture, and you know how I go for culture. And a very distinguished body of women they are too—one I particularly remember, who added new dimensions to the vernacular term "Broad" was a Fuller from Boston, like R. Buckminster ditto—obviously a most talented family.

*

But if I was a working hypocrite I could find a dozen other reasons for keeping abreast of *Playboy*. Its interpretation of the "male interest field" is considerably wider than say *Esquire's*: while it keeps one foot firmly planted in the bedroom door—a stance that *Esquire* has now abandoned—the other covers a lot of ground. For instance, *Playboy* handles some really hard stuff—quite a lot of Pentagon ears must still be humming after a Hit-them-where-they-live piece about radio-active fall-out and another must have hurt Washington dead-heads even with its title: "The Cult of the Aged Leader."

Item: it makes foul swipes at up-coming public idols; and recently took to pieces the much publicized reputation of Miss Shirley McLaine for repartee, with both scholarship and refreshingly ungentlemanly mockery. In fact its performance on the wit and scholarship kick is notable. Nice pieces they have on, e.g. writing on walls, including the Pompeian founders of the art, the original Kilroy (the American *Chad*) and an interview with a slogan-writer of world championship class.

*

Item, visual funnies—*Playboy* is one of the basic platforms for Feiffer, but it has other strong cards, including Gahan Wilson, a real weirdie who deserves to be better known in sick circles over here, and Shel Silverstein who is, I figure, a plain nut with a fancy beard.



factory extension for the Turnbridge Manufacturing & Supply Co. Ltd., London, S.W.17
the architect: Geo. E. Spicer, A.R.I.B.A. Builder: E. W. Sinfield

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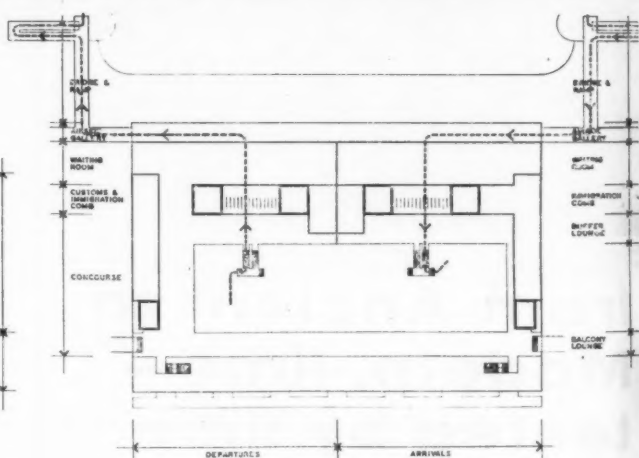
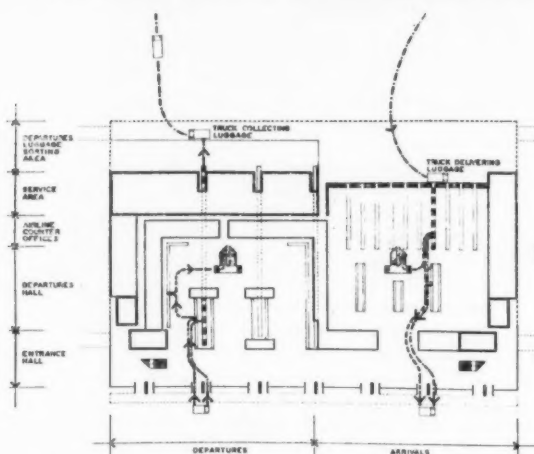
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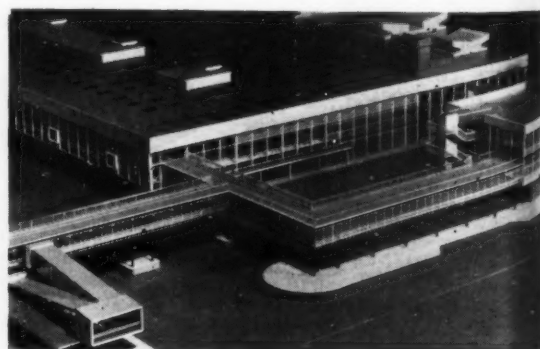


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The new "Long Haul" building at London Airport, designed by Frederick Gibberd, marks time architecturally and functionally, for it has been designed at a time when the Ministry of Civil Aviation has been unable to make up its mind on the best way to move passengers from the terminal to the aircraft. Gatwick introduced the "finger plan," and the Ministry is studying other possible solutions, including the "mobile lounge" from which passengers can step right into the aircraft. The building is designed so that whichever solution is ultimately adopted can be incorporated. Passengers are assumed, however, to have legs. There will be no escalators to take them to the first floor lounges, and on arrival passengers may have to carry their bags 50 yards or so from customs to the exits. The main block is 430 ft. by 260 ft. Building has begun, and will be completed by mid-1962. It is designed to handle 2½ million passengers a year (there were 720,000 in 1958) and to replace the clutter of huts on the Bath Road. The main block has a steel frame and is enclosed by glass panels between aluminium vertical members. The cost will be about £3 million.

Marking Time at London Airport



Item, to read: though too much of *Playboy's* fiction is the male equivalent of "women's reading" and wears the lineaments of slightly-too-easily-gratified desire, violence, etc.; there is also a distinctive line of *Playboy* fiction, and near-fact, planted in the music-biz end of the beat generation (*Playboy* has its own jazz festival) and the Shekley edge of science fiction.

Item, to look at: *Playboy's* typography and layout is among the most ruthless and imaginative that is commercially available, comparable British material just doesn't exist, but Bill Slack's cover for the *Motropolis* AJ lay a close second.

Item, architecture and interior design. (I will repeat that to show I am not kidding—architecture and interior design.) *Playboy* has over the years discussed and illustrated quite a lot of furniture, culminating in a *Playboy* Bed (where else did you expect it to culminate?) that makes most European dream beds look very thin and faint. It has also shown plans and perspectives (some perspectives!) of two projected buildings—the *Playboy* Penthouse and *Playboy's* Weekend Hideaway, neither of them by any designers you have ever heard of, but none the worse for that, and considerably better than any equivalent projects that one can remember in the *Home and Garden* magazines. Quite a lot of furnishing information is also transmitted (a) via features on Hi-fi and (b) in the backgrounds to the giant full-colour fold-out pin-ups, one of whom was photographed recently in the Guggenheim spiral.



But chiefly what sends this consumer of *Playboy* is an institutional advertisement which begins "What sort of man reads *Playboy* . . . ?" From this I have discovered quite a lot of very flattering information about myself. For instance I am one of those "for whom a dinner date is a regular and important event," with a "beautiful girl"—Furthermore I don't care about the size of the bill—this is because I "enjoy an income higher than other man's magazine readers," or possibly because I "live in 168 important metropolitan areas." But best of all, and for this I am forever grateful to *Playboy*, my age has remained steady for some months now at 28.3 years.

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

The Editors

A SCANDALOUS PROCEDURE

THE extraordinary way in which the Inverness Town Council has handled the "competition by tender" for the development of a key site adjoining the river and the Castle hill shows how urgent it is for the RIBA to announce its policy on this kind of competition for the guidance both of local authorities and of its own members. What has happened in Inverness is, indeed, scarcely credible. The Town Council did not consult its own planning committee, its planning officer, its architect, or its planning consultant before inviting developers to submit schemes and tenders, thus ensuring that proper consideration was given to none of the town planning and architectural problems involved.

Last week the competition was closed, and the Council met to decide how to pick the winner. The public and the press were excluded, on the plea that the subject (the development of publicly owned property) was "private"! The councillors have apparently decided to set about the job of picking the finalists themselves, without technical advice, and have allowed themselves a fortnight to study the models and the drawings. Having picked the finalists they then intend to invite their planning consultant to help them pick the winner. The public are not being allowed to see the designs.

This procedure, against which the Inverness Architectural Association, the Chamber of Commerce, and private citizens have protested in vain, is so outrageous as to call for intervention from two quarters. It raises the question whether the RIBA can permit any of its members to participate in a scandalous process which is so inimical to good planning and architecture, and to the interests of the people of Inverness. And the Secretary of State for Scotland will surely have to consider whether the local authority has shown itself unfit to exercise its town planning powers, leaving him with no alternative but to call in the planning application that will ultimately have to be made.

MAYFIELD REVISITED

The intention of the series of *Building Illustrated* articles has been to try to give as complete a picture of a new building as possible under the broad headings of planning aims and achievements, cost and specification and visual and physical quality. The buildings described have

been of many types and have been chosen for a variety of reasons, some because they represented good value for money, some because they pioneered a new system or structure, some because they served a new function or contained an exciting answer to a difficult planning problem, or simply because they have been considered beautiful. In the early days some buildings were illustrated simply because their costs were available, at a time when a cost analysis was harder to obtain than it is today. A few of the buildings published have been successful and interesting from many aspects and in achieving this harmony of parts have been recognised as significant architecture.

We believe it is not enough in such a series, to concentrate upon current buildings. On the contrary, to revisit notable buildings which have been in use for a number of years can result in valuable lessons in planning and design generally as well as in discovering the success or failure of detailing. This week, therefore, we publish the first of what will be a series of Buildings Revisited, making our first re-appraisal of one of London's earliest and still outstanding comprehensive schools, Mayfield in Putney, by Powell and Moya.



WHO CARES?

I'm not allowed to reveal just yet the RIBA's plans for interesting the public in architecture during and after Architecture Week (June 13). But I'm feeling more worried at the moment about how they can find a way of interesting *architects* in architecture. It is really appalling that the profession takes so little interest in discussions, at No. 66, on its

own future. Hundreds roll up to hear Doxiadis doing a restatement of what we all know, but recent papers presented at the Institute by William Allen (on the profession), Frederick Gibberd (on motorways) and Peter Trench (on the building industry) have attracted very few architects. And even those who did turn up didn't have much to contribute. We really can't complain about the general indifference shown towards our profession if we are equally indifferent ourselves.

MAKE NO MYSTIQUE

It was particularly disturbing to find such a small audience turning out for the cost planning evening at the Institute last week. I was also disturbed by the answer given by Grenfell Baines and James Nisbet on this occasion to my question about the teaching of cost planning in schools of architecture. They said that the subject has not yet been "sufficiently perfected" for use in schools. But why wait for perfection? It is ridiculous that students leave school without having received a working knowledge of the subject. If, as Nisbet said, there *are* bills of quantities which architects can analyse, why can't the schools study them?

*

Has this something to do with what Geoffrey Powell described as "the architect's real fear"—the fear that if

costs cease to be part of a design mystique everyone will know when the architect is "having fun" (as Grenfell Baines called it) at the client's expense.

WINDY ON TOP

Sometimes the cost man and the planner reach the same decisions for their own very different reasons. It was interesting to hear Graeme Shankland (LCC planner) and Cyril Sweett (surveyor) saying, in Network Three's "Building Matters," that comprehensive development was essential on large sites where tall buildings were proposed—the first for reasons of planning technique, the second for reasons of economy. "Very windy up there" said Basil Spence, speaking for all of us; and John O'Neill helped us to feel less windy by talking about problems encountered on the Shell building on the South Bank, such as how to pump concrete up 350 feet and to prevent contractors' equipment from blowing away.

*

This discussion on high building was the last programme in the present series of "Building Matters"—a series that has been well handled by Charles Crichton. I look forward to the second series, which begins in the autumn, but I hope the existence of a platform for architectural and building subjects won't mean that the BBC will give less attention to these subjects on other wavelengths. I'm afraid the audience for the Network Three series is restricted very much to people in the business.

HIGHER PURCHASE

If you're designing a retreat for a mountain top, a casino for a mid-stream island or something equally improbable, you'll be glad to know that helicopters will soon be available on hire for two or three hundred pounds a day. The county architect of Somerset, Oliver Harris, has already seen purlins lifted into place (within a one inch tolerance) on one of his schools, where the contractors (Hoskings) worked with Concrete Ltd. and Westland Helicopters. There are still a few snags to be overcome, but by the end of the year you should be able to hire a machine capable of two-ton lifts—and later on you will probably get a 25-ton lifter. On sites where mud or flooding prevent access with cranes and lorries the hire of a helicopter will be money well spent.

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SOS
There are two new threats to the Solent: one is sewage pollution, the other horizon pollution—the building of a nuclear power station on the north shore of the Isle of Wight, where it would dominate the finest stretch of unspoiled and protected water on the south coast, from the Needles to Cowes.* The Central Electricity Board is keeping quiet about the second proposal, so we don't know if other sites are being considered (nowhere could be worse). In the circumstances it is difficult for protection societies to be constructive. But at least they are active.

Condemnations have come from the RFAC, the National Parks Commission and the CPRE. And now the Solent Protection Society (recently victorious in securing an indefinite postponement of the Caltex Refinery scheme) has devoted its AGM to hearing three speakers (architects Lord Mottistone and Sir Hugh Casson, and Ewen Montagu, QC) describing new threats. After hearing a number of suggestions—including the selling of municipal compost and the flying of SOS (Save Our Solent) pennants by boat owners—the meeting backed the Society's pledge to fight to the last penny. If you want to make sure the last penny isn't spent too soon remember that the address of the Secretary is 15, Cumberland Place, Southampton.

CURTAIN RAISER

As you may know, the RIBA's annual conference in Manchester in June will deal with the subject of city reconstruction. I must congratulate Manchester's Professor of Building, Denis Harper, for getting something of a scoop as a local curtain-raiser to the conference. He has asked Rudolf Hillebrecht, Hanover's city architect and town planner, to speak at a symposium at the College of Building and Technology on May 18. And to show how much better a job Hillebrecht has done than most other German planners, Mr. Harper has arranged for a Hanover exhibition to be shown at the college from May 17 to 24.

This seems a good place to remind you that Otto Koenigsberger has ar-

anged a study day on urbanization in the tropics at the London School of Economics on April 30. It is one of the series organized by the British Group of the International Centre for Regional Planning and Development.

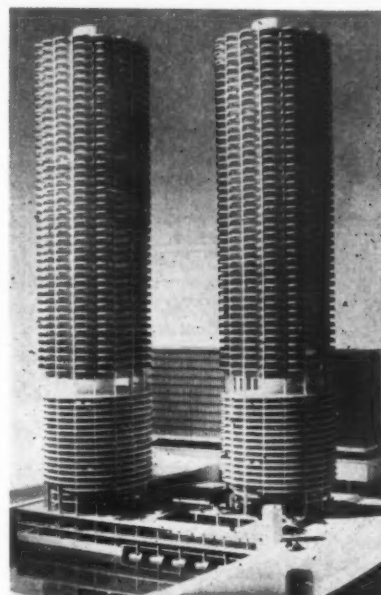
DRASTIC ULSTER

I've met a few of Ulster's architects and I must say I've been surprised that they have been so quiet about some of the dreary buildings put up around them. At last, however, a design has set off an explosive reaction from this taciturn race. A little corrugated tin hut used for bus control at Belfast's Castle Junction is to be replaced by a more permanent and much more pretentious structure of ceramic tiled walls and canopied roof, designed by the architect's section of the City Surveyor's Department.

One day recently, about 30 young architects gathered around the site and distributed leaflets to passers-by, protesting against the structure because it is dangerously sited and has little architectural merit. A black banner was hoisted bearing the one word "outrage" and shortly afterwards, watched by two policemen and a *Belfast Telegraph* reporter, the protest meeting adjourned. "The protest was quite orderly," said the *Telegraph*, rather sadly. Never mind. This is a welcome sign that the profession in Ulster—where there are no architectural students to fight complacency—is becoming aware of the need to make its views public.

FOR TOURISTS AND STUDENTS

Architects who venerate Rasmussen for his unsurpassed work on *London the Unique City* will probably be irritated by his latest volume *Experiencing Architecture*.* It is written in an exasperating nursery style, and it ignores the vital cords (if that's the word I want) which tie architecture to practical affairs. It is, however, addressed not to architects, but to laymen; and as such it is to be welcomed as one of the most comprehensive and balanced introductions to architecture yet available. As far as I know it is the first book of its kind to give acoustics, lighting and colour their due as essential ingredients of architecture—and indeed these chap-



"Corn on the Cob" would be a suitably irreverent name for what will be Chicago's tallest building—"Marina City," designed by Bertrand Goldberg and financed by the American trade union of building employees as a speculative investment costing more than £12 million. The twin towers contain garages in the first 18 storeys (can one drive 18 times round without becoming dizzy, or at any rate bored?), flats from the 20th to 60th storeys, and a theatre in between. The low block contains offices.

ters (while contributing little original thought) contain much that will interest architects themselves. In a book for the layman it is a pity so little is said about the everyday environment—which is, after all, the architecture laymen most often experience, and are usually unaware of. But many of the famous buildings mentioned are within the orbit of the tourist, who will find the book useful. Recommended both to first year students and to bishops attending Allied Society banquets.

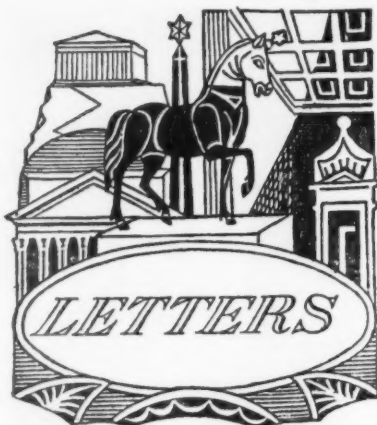
SO YOU SEE

A correspondent whose letter was published last week thought that the appointment of Fred Pooley, the Buckinghamshire County Architect, as the Planning Officer was a bad thing. Now another correspondent has written to remind me that in Radnor, Montgomery and Anglesey the County Architect is also the planning officer. The system, says my correspondent, works very well.

ASTRAGAL

*See *Architectural Review*, September, 1958.

*Steen Eiler Rasmussen, Chapman & Hall Ltd. 30s.



Derek H. Matthews, A.R.I.B.A.

R. J. A. Gazzard, A.R.I.B.A.

Ian Nairn

A. E. Ward,

Secretary, The Institute of Registered Architects.

Garages: Ramped or Mechanized?

SIR: You mention (AJ, March 24) that "informed opinion suggests that the ramped garage is likely to be the rule in this country and the mechanized garage the exception." I believe that the "informed opinion" quoted is probably misinformed on the facts of mechanical parking, and that your exception will become the rule. Many municipal authorities are at present attempting to solve the "parking problem" by providing centralized car parks holding on an average 600 cars, and some are projected at 1,000, and over. These monsters will not help the motorist wishing to get to some part of the town distant from the car park, and the high capacity may cause congestion in surrounding streets. The 2,400 car garage on the edge of Venice is an exception, as it is in the nature of a terminus for wheeled traffic, before one enters the city.

Our towns need a series of small parking units, holding about 100 to 150 cars, and scattered throughout the area, providing also the necessary services of lubrication and cleaning, within easy reach of each motorist's destination. I have such a project about to receive planning consent, for an original Pigeon-Hole car park for 100 cars, with petrol sales, car servicing and repair, all on a street site 40 ft. wide by 48 ft. deep, between other buildings. Only a mechanical car park can achieve this density, and no ramp garage could be built on such a site. The disadvantages of ramp garages are almost too numerous to list in this letter. They are extremely wasteful of space, re-

quiring the width of a car with its doors open, and ample circulating space. The space per car is 50 per cent more than with a mechanical park, and the cost of land and the construction cost per car is consequently far greater. Additional costs arise from the necessity for illuminating all parking floors and ramps, unnecessary with a mechanical system, and open-side ramp garages must have underfloor heating on ramps to prevent icing. Closed sided ramp garages need mechanical ventilation and the fire risk is higher, with the need for more expensive fire-precautions. There is a greater cost of maintenance, for the continuous circulation of vehicles moving under their own power inside the structure causes damage to walls, floors, ramps, and paintwork.

Less height is possible with a ramp garage for two reasons: there is a limit to the number of ramps that can be driven up without fatigue and accidents, as well as "customer resistance," and secondly the storey height has to be very much greater than with a mechanical system which is designed for the height of a car and not of a man. This is an important factor where town planning regulations limit height. With a ramp garage, cars are susceptible to denting, scratching, and theft. With Pigeon-Hole parking, the owner leaves his car locked, and with the brake on.

A further advantage of the space-saving technique of mechanical parking is in that, it is possible either to park more cars on a given site, or alternatively free part of the site for other revenue producing activities or uses, which can go towards a subsidy for the parking fee. A mechanical system can pack into the basement of a block of flats or offices a greater capacity than with conventional means.

Amersham

DEREK H. MATTHEWS

The Editors reply:

The costing of ramped and mechanical garages is still a very inexact science, and the costs per car place quoted in the catalogue of the British Road Federation's exhibition vary wildly. The cost per place, excluding land, of the Selfridges ramp garage is given as £1,000, and the cost of Mr. Matthews' mechanical Pigeon-hole garage is given as £450. On the other hand, the lowest figures quoted for ramp garages are £150, £200 and £215 a place, but the lowest figure quoted for a mechanical garage is £400, or approximately double. On these figures, which all exclude land, it seems that the mechanical garage is only cheaper where the saving in land outweighs the saving in constructional costs. It may be that on a balance of economy, taking into account the other factors mentioned by Mr. Matthews, that the sponsors of mechanical garages can prove them to be cheaper even on cheap land. But they have not done so yet.

Drive-in Banks

SIR: The "nasty and senseless" building you illustrated on March 24, 1960, is, in fact,

only an extension of the counter in the main banking hall and Head Office of the bank (a former royal residence) on the Place Royale. It occupies most of one side of a short one-way street with a wider foot-path for pedestrians on the other side. The building is in an inconspicuous position away from the main road.

A centralized book-keeping system provides the Banque de Bruxelles with a catchment area of customers covering the whole city which justifies the cost of a building equipped with "closed circuit" television and pneumatic cash distribution systems from the first floor control to the cashiers in the "pilotis" below.

With cars entering and leaving at the rate of two per minute, no other bank in Europe provides a similar service or makes the same contribution to traffic flow and the relief of kerbside waiting. By comparison, the British "drive-in" installations are little more than prestige advertising.

However, similar electronic accounting machines are now being installed in a British bank and arrangements for the payment of wages by one means or another are under consideration. Inevitably the space occupied in branch premises by ledger clerks' desks will have to be used to provide longer counters and larger waiting areas in order to "dispense" money on an unprecedented scale.

Branch bank design now requires a "filling station" approach with waiting, parking and circulating spaces for the vehicles of the "legless" as well as for those who still have their "legs" but who also may not wish to see the Manager, their statement or their securities box on every visit.

If only for reasons of security and personal safety, the problem of cash transference in bulk and by the pocketful must be tackled more sensibly than your criticism of this far from "senseless" building.

Bromsgrove

R. J. A. GAZZARD

Life with Doxiadis

SIR: I don't know whether Dr. Doxiadis designed the living areas shown in the illustrations to the report of his discourse. If he did, has he ever really put himself in the position of the man living in the n'th house of the m'th row of his West Baghdad?

We must design areas for *people*, in their variety and nonconformity and need for identification with a recognizable place. Dr. Doxiadis has his view of the Parthenon, from his office. It is his moral duty to provide the equivalent for Ali in house n. row m. Otherwise he is one more false prophet like the rest of them.

This is Pope's "something previous e'en to taste—'tis sense." Is it too much to ask from a profession which thinks too much and lives too little?

London

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Cut-Price Fees

THE following letter regarding development of a number of sites has been sent to a number of members by a public Property Company. This gives two sets of terms, either of which the architect is "at liberty to choose." The terms are:—

(a) 4½ per cent. of full RIBA scale and their conditions of payment and employment, or

(b) A nett 6 per cent. of the contract price if and when a building is erected.

Payment of fees would be deferred and would be made on the issue of certificates at a nett rate of 6 per cent. of the contract prices, and this would be the limit of the company's liability on any job.

If a scheme is not proceeded with, becomes abortive or is abandoned, or if the site is sold at any stage, no fees at all are payable, and this, says the company, is a risk the architect must take. If a site is sold the company would try to persuade the new owners to retain the architect, without disclosing the aforementioned terms, but the company itself would not then be liable for any fees if they fail to do so. In any event the architect will only be fully instructed by the company if they intend to complete a development.

The council of the institute deprecate such a letter, and all that it implies in offering tempting work at cut fees. Members of the institute have been advised not to accept these terms, as to do so would be a contravention of the Code of Professional Conduct by working for fees less than those defined in the accepted scale of fees.

A. E. WARD

Secretary, Institute of Registered Architects

The Editors write: This matter is under consideration by ARCUK.

DIARY

Symposium on Helicopters. At the Regent Street Polytechnic, 309, Regent Street, W.1.

APRIL 8-9

Concert—The Strolling Players Orchestra. World Refugee Year British Architects' Appeal. At Duke's Hall, Royal Academy of Music, Marylebone Road, N.W.1. Admission by programme only, available from the RIBA, AA, and IRA. 7.30 p.m.

APRIL 9

Art Training in a Technological Age. Conference arranged by the Association of Teachers in Technical Institutions (London Division) at the Central School of Arts & Crafts, Southampton Row, W.C.1.

APRIL 9

The Public Places. Talk by Sir William Holford. TCPA Planning Forum, 28, King Street, W.C.2. 6.30 p.m.

APRIL 11

Collaboration Between the Horticulturist and the Landscape Architect. Talk by H. Taylor and Dargan Bullivant at the ILA, 1, Park Crescent, Portland Place, W.1. 6.15 p.m.

APRIL 12



At the RIBA on Tuesday, March 29, a panel consisting of James Nisbet, G. Grenfell Baines, A. J. Harris, R. Ward, E. Goldfinger and G. Powell, presided over by R. Baden Hellard, were asked to give their views on the question "Are cost control and aesthetics incompatible?"

Astragal comments on p. 530.

RIBA

Aesthetics and Costs. Are they compatible?

It would be as pleasant as it would be astonishing if one could report a hard and fast conclusion on this question. The fact that this is not possible does not at all mean that the meeting was fruitless. In his introduction Mr. Hellard made it clear that the purpose of the meeting was to get this subject of Cost Control into some perspective after its five-year life as a controversial subject. The oceans of jargon that had grown up to confuse the subject had tended to cause a number of reactions. Cost Control was regarded as being "all right for the other chap but nothing to do with me," "just another new-fangled overhead," or encountered the lifemanship reactions: "been doing it for years, old boy" or "nothing to do with architecture."

For the panel Mr. R. Ward, an industrial consultant, speaking from forty years' experience, said that he felt architects failed to give most clients much confidence in the profession. This was not only his own view but, more frighteningly, the view of thirty major industrialists who had been asked to recommend an architect who had given complete satisfaction and had been found unwilling to do so. Mr. Ward thought it would be a good idea if architects devised some way of giving a client more help in preparing his brief. Perhaps some pamphlet could be drawn up which told clients what sort of information the architect wanted.

Getting back to the question under dis-

cussion ("Are Cost Control and Aesthetics Incompatible?"), Geoffrey Powell said that it was with great reluctance that he felt his answer could not be "No." He readily admitted that cost control seemed perfectly logical and good but he could not escape the feeling catching in the back of his mind that it amounted to a sort of conspiracy somewhere which would result in cost control becoming another rod to be beaten over the architect's back. He had a sneaking suspicion that it was all a plot so that the quantity surveyors could suddenly present clients with an explanation of where the architect had gone wrong. He also felt that this was going to add to the mountain of paper work that already existed. Nevertheless he was grateful to the quantity surveyors and thankful that they existed here (unlike on the Continent). Erno Goldfinger was also very pleased to have the help of quantity surveyors but strayed a little off the point in describing what he felt what was meant by the word aesthetic without relating it to costs. He gave the impression, however, that it was an important subject. The engineer on the panel, A. J. Harris, insisted he did not know what aesthetics were. He suggested that "aesthetic" might be one of those portmanteau words, like "amenity," born of bureaucracy, and meaning anything that people like but which falls outside the plan. He had a feeling that it might be a term used to describe "the prestige of conspicuous expenditure." Generally, however, he gave the impression that a tight budget tended to enhance design by enforcing simplicity.

James Nisbet, the chief quantity surveyor for the War Office, once again found it necessary for him to make it clear that cost control does not mean cost cutting and he thought that the non-acceptance of cost control and cost planning techniques was largely due to the fact that people were frightened of costs because they did not know how to handle them. The quantity surveyor's job was to help the architect with this and Mr. Nisbet answered Mr. Powell's criticisms by saying that to gain a client's confidence a sensible cost analysis was far more helpful than damaging.

George Grenfell Baines put his finger right on the spot by pointing out that if an architect's aesthetics were accident-prone he could catch a dose of cost control with fatal results. And further, that no-one who wants to practise architecture in today's society could ignore the economic factor. Mr. Baines could not see why cost control should be any more incompatible with aesthetics than the accurate calculation of bending moments. The trouble today was that although buildings were not falling down all over the place because of wrong structural design, the designs were falling down all over the place on the economic factor.

After the panel had finished their answers the subject was thrown open to general discussion and the first question came from Basil Spence, although he was not actually present. He asked whether the panel thought it more stimulating to design within a limited budget or whether they preferred to have carte blanche. Mr. Harris immediately apologized for his temerity but suggested that the

question be re-phrased to ask whether it was found more stimulating to design to a tight budget or to a generous but limited budget. He himself had never seen a blank cheque and didn't believe anyone else present had either. His answer to this question, with which the majority of the panel seemed to agree, was that he found the best designs resulted when money was scarce.

Two questions from ASTRAGAL (why were bills of quantities not prepared in a way to make them easily translatable into cost analyses, and why were cost analysis techniques not taught in schools?) were answered by Mr. Nisbet, who replied that all these techniques were still in an experimental stage. The introduction of an elemental bill might be useful but in general it would be foolish to give up an old and well tested form before the new one had proved itself. Similarly, it was impossible to teach students techniques that the profession had not yet accepted, although it was of course desirable to make students realize that economic considerations were going to play a large part in their lives. An even more practical answer to this question was that there is at present nobody who could teach the subject.

TCPA

The Declining Areas

At its recent meeting in Caxton Hall, the Town & Country Planning Association turned its attention away from the new towns towards what now appears to be a more fundamental problem in British planning—what can be done to revive and if possible rehabilitate the older and less prosperous industrial areas. For some time now London, the south-east and the midlands have continued to expand rapidly, while the older and less attractive regions are suffering from progressive decline.

Efforts have been made both by the Ministry of Housing and Local Government and the Board of Trade to create new jobs in these areas and steer new industries into them from the over-developed centres, but they have not proved sufficient to achieve the major objective. Recent studies have demonstrated that the pull of London and the Midlands is very powerful and growing fast.

New methods to act against this draw are needed. The Government's Local Employment Bill is intended to provide new and more effective incentives for industry to go where it is most needed. But, in spite of its direct relevance to planning at all levels, national, regional and local, the Bill is not a planning measure. It is concerned primarily with the prevention and cure of unemployment. The aim of the conference was to see what part planning policies were playing or could play in furthering the objectives.

A number of significant points emerged from the papers, and discussions. So far as industrial location policy is concerned the classic principle "work to the workers" remains unchallenged. In spite of its difficult

implications no practicable alternatives to it have yet been devised. The methods adopted to bring employment in—persuasions and incentive rather than direction—have been shown to be effective when forcefully applied. Ignorance, prejudice and inertia seem to be the chief barriers to movement rather than increased costs, although in this respect the balance of advantage lies as usual with the larger and more highly organized firm. On incentives, direct subsidies towards the cost of movement and construction appeared to be a more effective technique than artificially low rentals.

The role of the planning authority in stimulating industrial development seemed less well developed. A planning authority can act effectively through its development control policy and many authorities do this. But it can also work much more positively, by selecting suitable sites, providing for proper services to them and efficient layouts for the buildings that develop there. In "less favoured" areas this type of activity would be a powerful adjunct to the Local Employment Bill and needs to be encouraged.

It seems abundantly clear, however, that the provision of employment is not of itself sufficient to revitalize a declining area. Drabness, dullness, and the absence or poor quality of its facilities may contribute as much to the decay of a town as lack of opportunities for work. It was strongly emphasized that bad housing, poor schools, inadequate shopping facilities and amenities (all typical of the old industrial areas as a whole) are a powerful factor in bringing about the movement away of younger, skilled people. The steady drain of its skilled population is the most serious loss that any area can sustain. These circumstances have prevailed for some time in a considerable number of the older and more remote industrial areas.

No doubt the Local Employment Bill will do a great deal to steer new industries into such places. But new industries alone cannot make an unattractive town attractive again. Comprehensive planning schemes for central area redevelopment, new housing and better communications will have to be provided along with the industrial expansion if the long-term objective of revitalization is to be achieved in real terms.

The cost of doing this will be very heavy. A planned programme of re-investment involving building and development of all kinds seems essential. The local planning authorities must play an important part in such a plan of re-investment, but there seems to be a strong case for special measures. In many of the declining areas the most severe problems are regional rather than local. Some form of regional development board might provide a means of tackling the problem on the necessary scale.

Such an agency might also help to overcome one of the most difficult problems of all—the fact that, to be effective, re-investment would have to be concentrated on a few potentially attractive locations within the region and not spread thinly in the form of general aid over the whole area. This would involve very difficult decisions, but it is hard to see how they can be avoided.

PAUL BRENKOV

MOHLG

Chief Quantity Surveyor



D. W. Nunn has been appointed Chief Quantity Surveyor at the Ministry of Housing and Local Government. He will form a team of quantity surveyors to work in the development group now being formed under the Chief Architect, Cleeve Barr. The team is expected to undertake building projects in the housing field comparable with those undertaken by the Ministry of Education. Mr. Nunn, who has a keen interest in modern thinking on cost planning and research, and wide experience, is studying the possibility of applying to housing work cost yardsticks which will permit greater flexibility and initiative to the architect, while giving more positive and useful cost guidance at the early design stage.

NEWS IN BRIEF

The Town and Country Planning Association has awarded the Howard Memorial Medal to Clarence Stein, the American town planner and architect who was the author of the famous Radburn scheme in New Jersey. The presentation was made at a luncheon on March 28.

R. M. Wynne-Edwards, the joint managing director of Constructors, John Brown Ltd., has been appointed chairman of the Building Research and Road Research Boards for the period April 1, 1960, to March 31, 1965. This is the first time that the same person has been chairman of both boards, which advise the Department of Scientific and Industrial Research on the work of BRS and the Road Research Laboratory.

Basil Spence and C. D. Spragg have been elected Honorary Members of the Institute of Northern Rhodesian Architects.

Architects in private practice rarely operate pension schemes for their employees. But those who do are advised that, if they wish to contract out of the new graduated pension scheme, they must apply to the Registrar of Non-Participating Employments, Ministry of Labour, 10, John Adam Street, London, W.C.2.

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COMPREHENSIVE SCHOOL

designed by MAYFIELD, WEST HILL,
LONDON, S.W.15.
POWELL AND MOYA
FOR THE LONDON COUNTY
COUNCIL

assistants ROBERT HENLEY, PETER JONES,
PETER STEWART

consultants, structural OVE ARUP AND PARTNERS
heating J. ROGER PRESTON AND
PARTNERS

electrical CHIEF ENGINEER, LCC

quantity surveyors DAVIS, BELFIELD AND EVEREST

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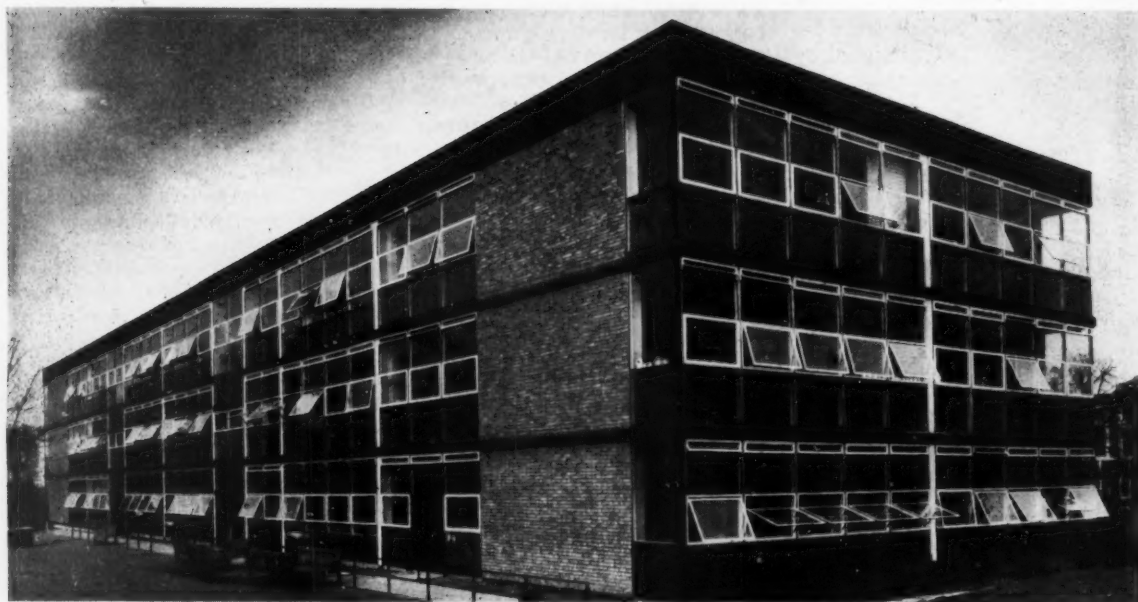
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Mayfield was one of Britain's first comprehensive secondary schools, and was the subject of a series of progress articles in the *AJ* on January 7, 1954, August, 18, 1955, and April 5, 1956, and of a Building Illustrated article on August 2, 1956. This week we revisit the school after five years of hard use.



building revisited

Block A



After five years' use the external materials show no sign of visual deterioration, often found when new constructional methods are used. This is due to the careful detailing and

the compatibility of the materials chosen. It can be seen that London's atmosphere has not destroyed the crispness or blurred the outlines apparent when the school was opened.

Completed in 1955, this building was fully described and cost analysed in the A.J. of August 2, 1956, and in preceding progress articles, so only a brief description is necessary here. The client required additional buildings to house 1,620 places, to convert an existing Edwardian grammar school for 500 girls into a girls' comprehensive school. On a nine-acre site, well wooded and comparatively flat, the new buildings were planned with three-storey classroom blocks radiating from a central single-storey hall and kitchen block. Three gymnasia, with changing rooms and boiler house occupy a separate block, joined by a covered way to the assembly hall.

The teaching blocks are of load-bearing brick cross-wall construction with pre-stressed plank floors, and the gymnasia also have load-bearing walls with trussed timber roofs. The assembly hall is steel framed with the roof supported on two welded steel space frames. The total area of the new buildings is 108,289 sq. ft. giving 67 sq. ft. per place with a net cost per sq. ft. of 53s. 4d. The cost per place worked out at £187 at a time when the M.O.E. ceiling was £250 per place. At the time it was considered that the clients could not but be pleased with a splendid building: five years of hard wear have not altered that judgment.

PLANNING ASSESSMENT

Communications: Of the general layout of the school there is little adverse criticism, the juxtaposition of rooms and groups of specialist accommodation in the teaching blocks works well. But a communications problem, unforeseen but now recognized at all large schools has arisen, and although it is a general problem and one that cannot easily be solved in the planning of a particular school, it may be worth discussing here.

The problem is that of getting many different groups of people from one place to another as quietly and quickly as possible; its solution depends almost on a national policy decision.

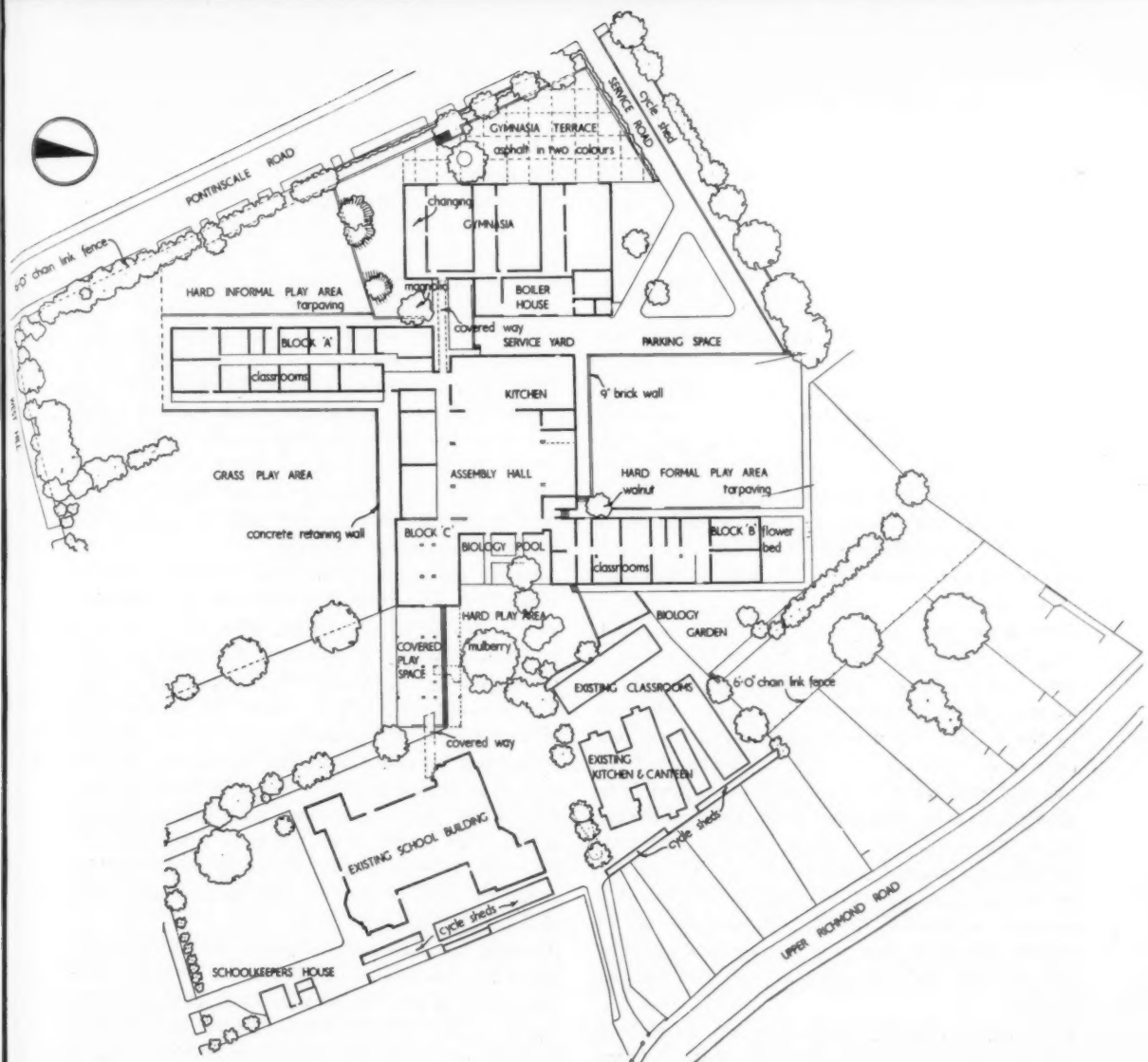
School timetables in this country take no account of the time required to sort out, say, 1,500 children at a class change, or for teachers to collect different books from a commonroom and speed to another class at the opposite end of a building in no time at all. In Sweden ten minutes is a normal time allowance for a class change and there would be less scurrying through the circulation spaces of our large schools if the same allowance were made here. However, good planning can also reduce to a minimum the amount of time wasted in such changes.

In all our large schools, after a period of experiment, it has now become reasonably established that the specialist rooms of a particular department, such as science, art or housecraft, shall be grouped together in the school, for ease of control by the department head, and also because the cost of services to such rooms is increased if they are dotted among ordinary teaching spaces. At the same time there has been a tendency to breaking down the scale of large schools, which implies a degree of decentralization of each department, as well as the addition of "houseroms" which are social centres and bases of administration. All this has further complicated circulation. It might help if, at the planning stage, architects discussed this problem with their clients and could then consider circulation problems in relation to probable timetables and room usage, which would give useful information about the necessary space-time relationship between groups of rooms.

A further communications problem which has arisen at

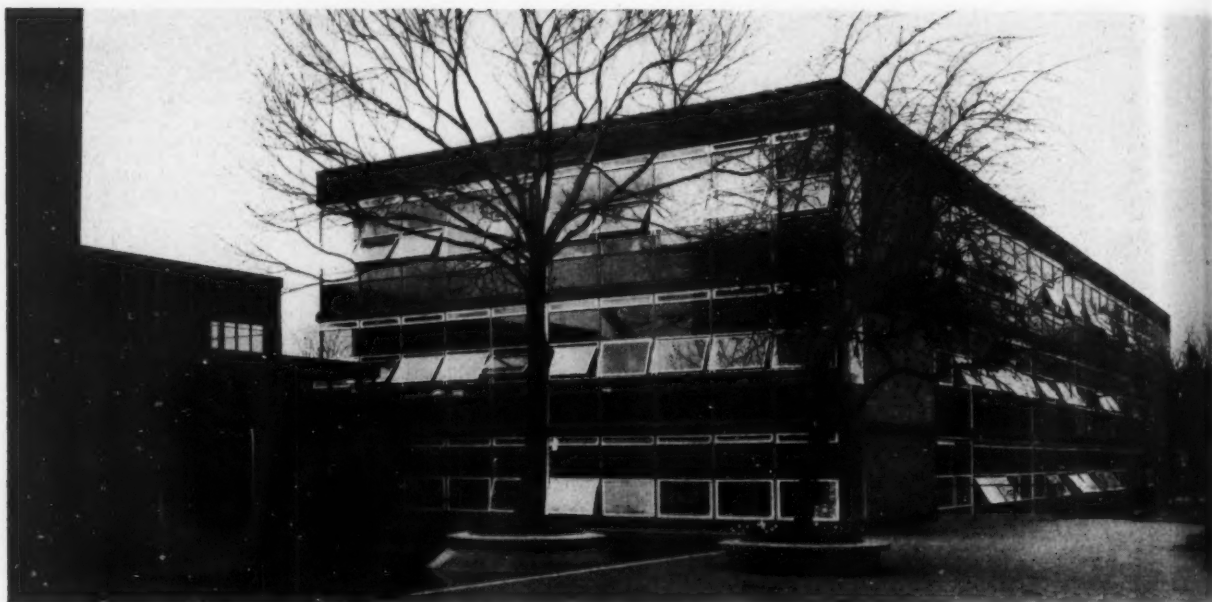
Block A

Block C



building revisited

Block B



Mayfield and elsewhere has a simple, mechanical solution: at Mayfield a school broadcasting system has been provided and a talk-back system with individual transmitting posts at key points. However, in practice the headmistress does not want to broadcast to the whole school when she wishes to talk to one child or a member of the staff. And the talk-back system is not really successful because it does not put the individual who is wanted in touch with the caller immediately, if at all, and for the simple reason that people lose their operation keys. All members of the staff at Mayfield felt that a far more selective method is required, such as an internal telephone system with extensions in every room, and the headmistress referred to a secondary school of 900 children in Upsala, Sweden, which has a complete internal intercom system.

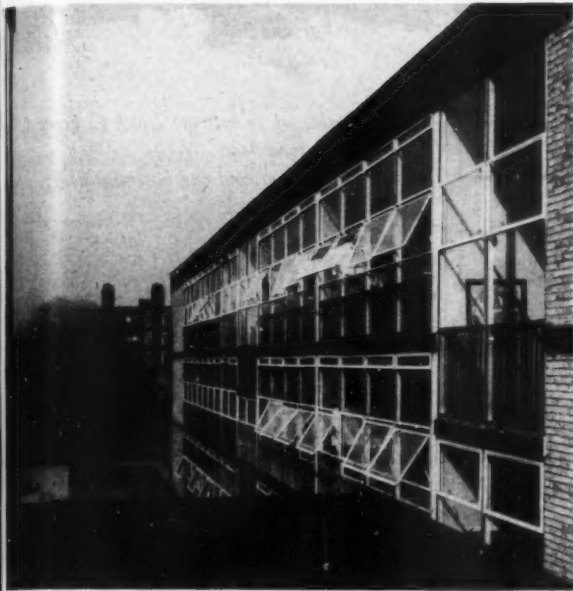
Orientation: This again is not a problem specific to Mayfield, where it is obvious that the orientation of the school is correct. Venetian blinds are provided on all south facing windows only (a normal requirement by the L.C.C.), but considerable trouble from solar glare occurs with low sun angles on the rooms facing east and west, which at times makes it impossible for chalkboards to be read, either through glare in the eyes or on the board. The venetian blinds on the south elevation are reasonably efficient at their job, but they are unpopular because of their fragility, which leads to constant maintenance troubles, because they are extremely difficult to clean, and because they are noisy. Nobody wants their use extended to the east and west rooms.

There may be planning solutions to help this problem, such as staggering rooms so that each block gave some

protection to the next against low oblique angles, but this would of course tend to increase the ratio of floor to wall area. The school staff did not consider permanent sun breakers necessary but felt that some form of external awning such as shop window blinds with side protection might be considered. It is doubtful if these would be a sound solution in maintenance terms. Permanent sun breakers would cause difficulties with regard to natural daylighting levels and it seems as if some experimenting on the lines of the sun protection screens recently erected on the south façade of the *Pavilion Suisse* might be considered. These are in effect external venetian blinds but with heavier, robust steel louvres, held in guides and operated from inside the room.

Airborne noise: Sound insulation between rooms at Mayfield is very good and there are no complaints with regard to structure-borne noise, but there is a problem, especially in summer, with airborne noise passing through open windows to the rooms around. This does not apply only to rooms with such teaching aids as tape recorders, record players, etc., the use of which is increasing in normal classrooms, and it is difficult to suggest an answer except in terms of three-dimensional planning, with set-backs and projections of blocks of rooms, or projection of cross walls and floor lines between rooms. Inevitably this would increase the ratio of external wall to floor area, with obvious effects on costs.

Assembly hall: This is the only space within the school which receives serious criticism from the users, and again much of the criticism is directed not at the building but at the architect's brief. This was planned as a multi-purpose area, the assembly hall linked by a



This oblique view along teaching block B from the assembly hall roof shows the apparent deflection of prestressed floors between cross walls (which are shown Right during construction). Evidently some loading is being transferred to windows below because there are instances



of top hung projectors not closing properly. In the right foreground, lead flashings to the slate facing in front of the half landing have been damaged by a window cleaner's ladder—a frequently recurring maintenance item.

complicated series of sliding-folding screens to two auxiliary halls at the opposite end to the stage. With the screens open it was intended that there could be a seated audience of 1,800, but this never proved successful and is rarely done because, owing to the size of the hall it is virtually impossible to see the stage from the back, and impossible to hear without the use of the loudspeaker system, which is a severe limitation in theatrical and choral productions. The hall is therefore always used with all the screens closed, except during lunch. But even so, the size of audience that can comfortably use the hall is limited by difficult angles of vision, caused by the great width of the room, and the stage itself is considered too small and its use severely limited by the low—10 ft.—proscenium opening. There is criticism too of the ventilation: a mechanical extract plant is concealed within the framing of the steel roof trusses and designed to give $2\frac{1}{2}$ air changes per hour. Presumably this is insufficient when the hall is full, and the problem is made worse during the day by the considerable solar heat gain through the large area of fixed high-level clerestory windows on all four sides.

Acoustics: Acoustics are reasonably good for most functions, and particularly successful during lunchtime, when noise levels are pleasantly low. However in any large multi-purpose area acoustic problems can rarely be solved for all functions without expensive moveable surfaces, and at Mayfield there is criticism of a deadening effect on choral work. The hall also suffers from the M.O.E. decision at the time when it was built that assembly halls must also be used for meals. On one side of the hall are the kitchens and servery, with a 30-ft. run of aluminium roller shutters. Noise from

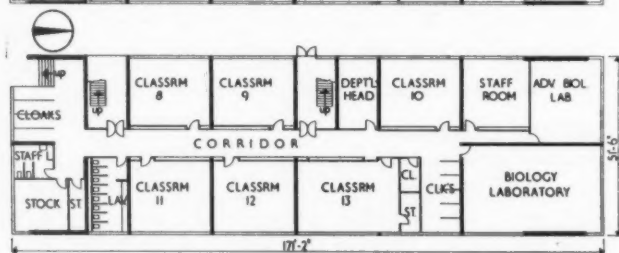
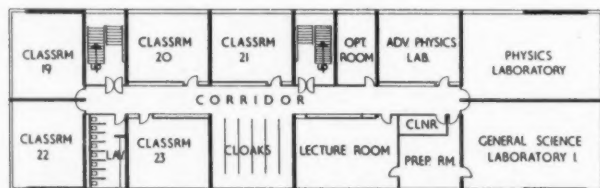
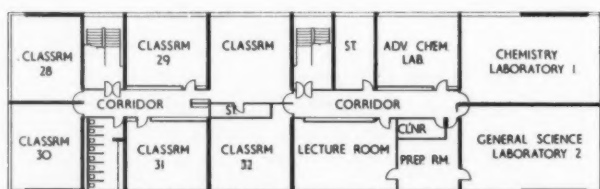
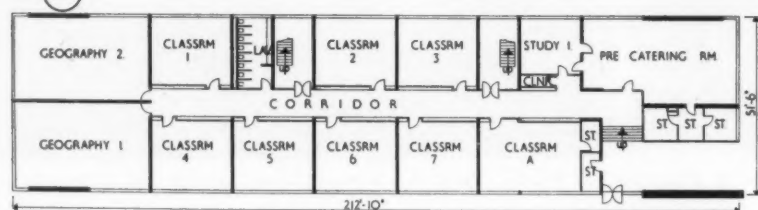
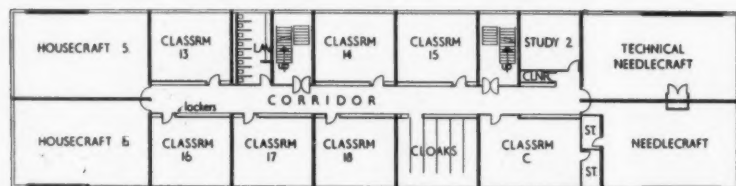
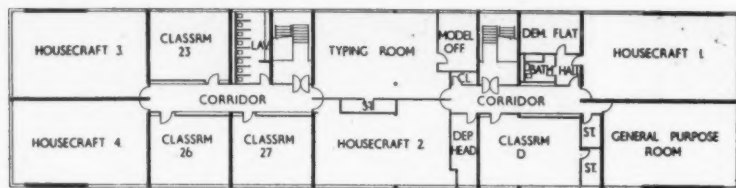
the kitchen through these shutters is considerable and the hall cannot be used between 11 a.m. and 3 p.m.—most of the school day, in fact. It might be possible however to deal with this problem by re-designing the servery hatches in two separate thicknesses. Nor are the small auxiliary halls at the back considered successful: the sliding folding screens which separate them from the corridor do not exclude noise sufficiently and the rooms are difficult to work into a timetable because they must be used every day for dining. Opinion among school staff is equally divided on the kind of halls required for comprehensive schools. Four departmental heads would prefer more smaller spaces catering for specific purposes, while the other four consider that one large space offers greater possibilities.

MINOR CRITICISMS

Sanitary accommodation: No swill down gulleys have been provided, which makes thorough cleaning difficult, particularly as the floor finish levels are the same as in the corridors. The type of hand-basin selected has an overflow in the horizontal plane, so designed that it is easy for soap and other small objects to become lodged inside, which besides being unsightly, tends to produce smells. W.C. water waste preventers are concealed within a duct which is not ventilated and there has been quite a lot of trouble with condensation in these ducts so that ventilating grilles have had to be built in.

Gymnasia: The only entrance to the gymnasium block from the covered way is approximately 5 ft. wide, and this has proved totally inadequate for the amount of traffic passing through, leading to confusion and waste

building revisited



of time. The glazed timber doors from the gyms to the outside play space (as well as in some other parts of the building) have no centre rail, and although glazing is in Georgian wired polished plate this is insufficient protection and one unpleasant accident has occurred. Removable crash rails have now been added. **Administrative suite:** No waiting space is provided for visitors except in the entrance hall downstairs, and it is considered that it would have been useful to have a waiting space nearer at hand. No cloakroom is provided near the staff room, and the small corridor which

leads to the general office, typing room and store is too narrow.

Service ducts: Maintenance staff complain—as they usually do—of the inaccessibility of control valves and branch drainage runs. They also complain about the shape of ducts, because in many cases the duct entrance is on the narrow side, so that the pipes nearest the entrance obstruct access to those behind. In the housecraft rooms, worktops pass over radiators with a flush grille let into the surface, so that food and other matter fell through onto the radiators, with consequent smells. These spaces have been boxed in, with grilles in the vertical plane.

MAINTENANCE ASSESSMENT

Maintenance costs: The London County Council's accounting arrangements do not provide for maintenance costs to be recorded against individual schools but against block allocations to services—primary, secondary, special, further education, etc. It is not necessary, therefore, for estimates to be prepared for the annual expenditure on each building, but it is possible when information is required specially for this to be extracted, and this has been done in respect of maintenance expenditure at Mayfield for the past two years. The maintenance architects said that in the light of their experience these figures were satisfactory. However, the figures did not include for a normal maintenance redecoration, which will take place this year at an estimated cost of £12,000. Redecoration normally takes place within four to five years of a new school being opened and thereafter a modified decoration after six years and full redecoration after another six, and so on. Also the figures did not include the cost of several important items upon which replacement is just started and which is described

below. **Left, top to bottom:** Block A second, first, and ground floors. Block B second, first and ground floors.

Right, top to bottom: Block C ground, first, and second floors.

Block D ground and basement floors. Gymnasia block

[Scale: $\frac{1}{8}$ in. = 1 ft.]

below. T costs ma imply th give a tr are of li Period fr Glazing. Waste pi Minor jo Precast c (intern Sundry s

Total:

ASSESSMENT

Materials: be judge inherent have fail design, o has prov **Studded** out circu of this r At the t M.O.E. expensiv entitled In the M worn thr linoleum seems a the adh showing tenance finish ov **Ceiling** tensively on to co sheets. ever it it has b reach b used) an there ha at the jo not be s this mat of its l redecora sional s replace **Concrete** plastered with ha corridor there is the doc off of th door. T continu duced.

below. This does not imply that Mayfield maintenance costs may not still turn out to be low, but it does imply that a two-year period is quite insufficient to give a true picture and therefore the following figures are of little use:

Period from October 1, 1957 to September 31, 1959:

Glazing	£364
Waste pipe blockages	£151
Minor joinery	£600
Pre-cast concrete sills (internal)	£45
Sundry small items	£695

Total: £1,855, or £927 per annum

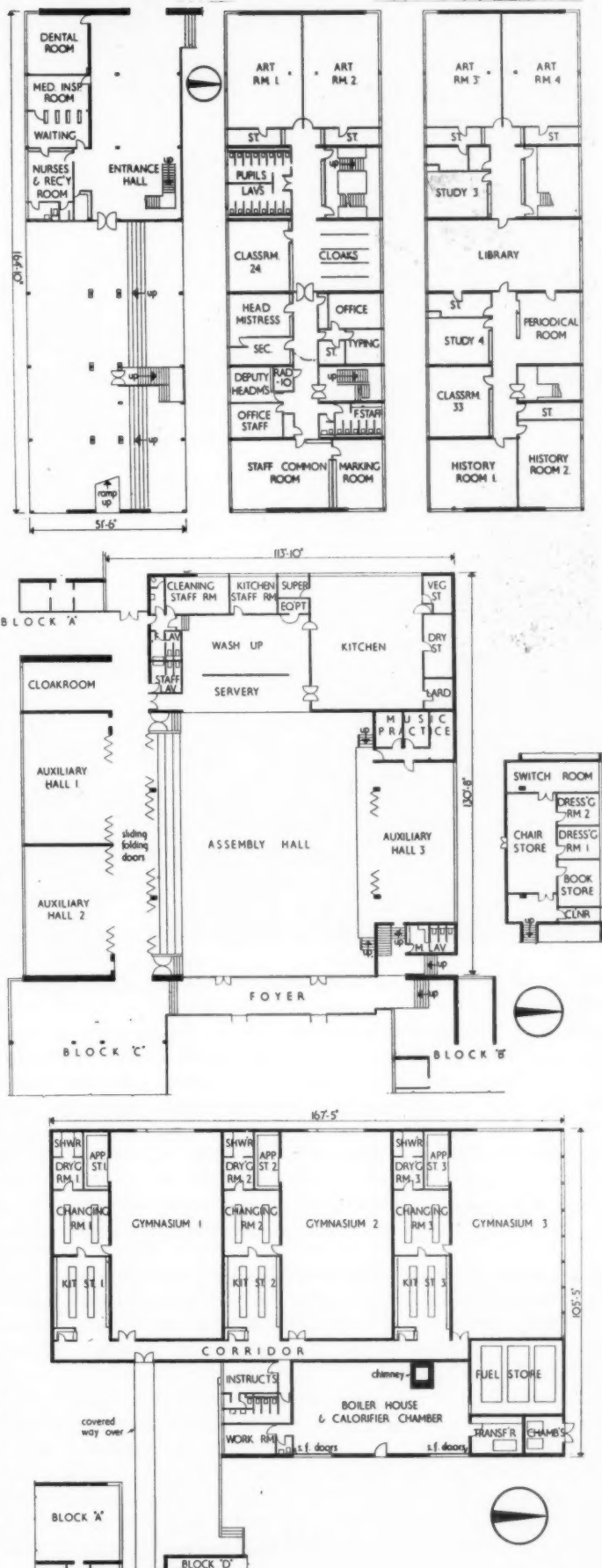
ASSESSMENT

Materials and Finishes: Materials and finishes must be judged by whether they have failed owing to inherent unforeseeable weaknesses, or whether they have failed through misuse, misapplication or faulty design, or a combination of all three. The first group has proved far the costliest at Mayfield.

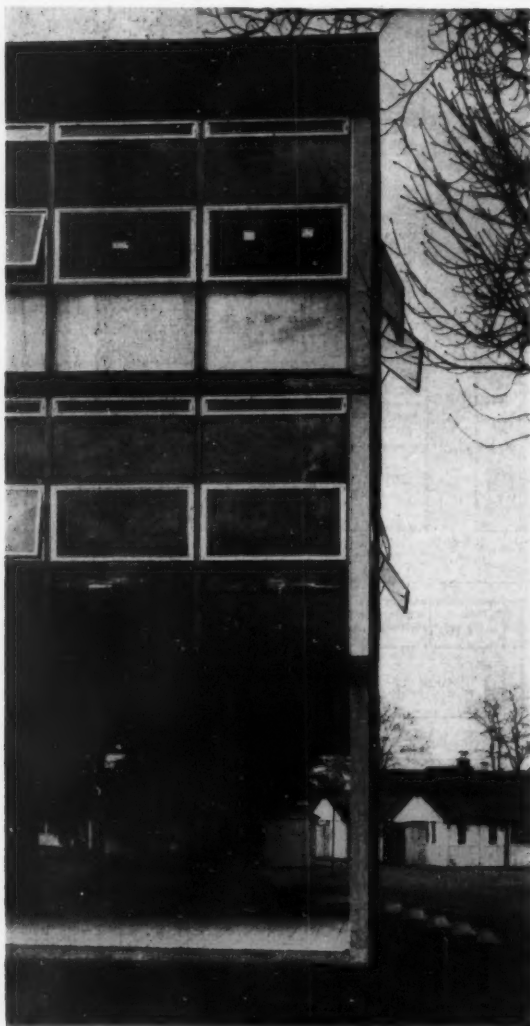
Studded rubber floors: Used very extensively throughout circulation and teaching areas, the serious failure of this material can only be described as staggering. At the time it was heavily tipped and used by the M.O.E. Development Group, and it is a relatively expensive finish but one which the architect was entitled to consider would last for at least 20 years. In the heaviest circulation areas at Mayfield it has worn through completely and is now being replaced by linoleum tiles. Apart from the problem of wear there seems also to have been something defective about the adhesive, because in places with light use tiles showing no wear have come up and been torn. Maintenance staff expect to have to replace most of this finish over the next few years.

Ceiling finishes: Sprayed asbestos has been used extensively in all circulation areas, sprayed direct either on to concrete soffits or on to $\frac{1}{8}$ in. asbestos cement sheets. It has failed in two respects. Firstly, wherever it has been possible for the children to reach it has been badly scored and scraped (where out of reach by hand balls, hockey sticks, etc., have been used) and every indentation shows quite plainly. And there has been extensive and very bad pattern staining at the joints in the asbestos cement sheets. This would not be so serious if it were possible to clean or decorate this material frequently, but this is not possible because of its loose, fibrous, fragile nature. In the modified redecoration which will take place this year a provisional sum has been included of £2,000 to cover up or replace the worst areas of failure.

Concrete block partitions and hardwood frames: 2½-in. plastered concrete blockwork is used in conjunction with hardwood door frames between classrooms and corridors. The concrete block is an infill panel and there is obviously considerable movement between the door frame and the panel, resulting in cracking off of the surface plaster on the hanging side of every door. This has been repaired, but the process will continue unless some form of strengthening is introduced.



building revisited

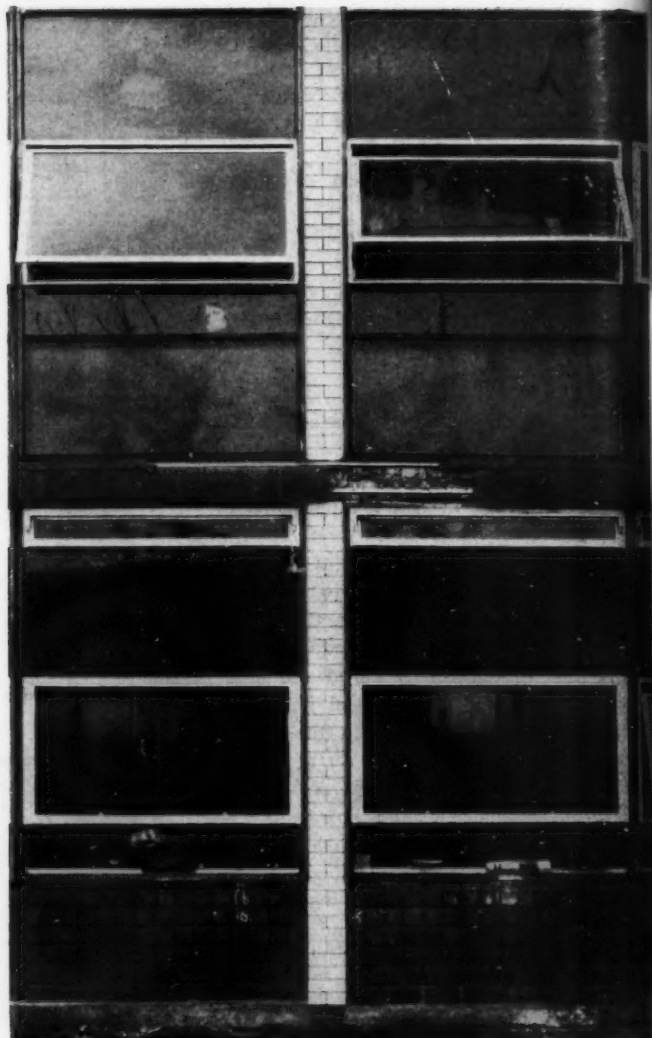


Some trouble has occurred with slate facings, several of which have fallen off. While in some cases this might be caused by the deflection already referred to, the two cases shown here are apparently due to a mechanical failure of the fixing method. The slate is held by a continuous aluminium angle grooved in and by dowels at the vertical joints which are grouted back into the floor. The space left behind the facing was then grouted up. It can be seen from the photographs of these failures (above and top left next page) that the grouting was not completely successful, and one view put forward is that window cleaners'

Book lockers: Top hung doors are subjected to considerable strain by being forced up against the handle of the locker door above. The problem is at its worst in the case of the lowest lockers.

Pressed aluminium coat pegs: As many, many schools architects have found out in the past few years, this type of fitting snaps quite easily without being subjected to heavy misuse.

Skirtings: These are generally part of the plastered wall, the last 6 in. of which is in Keene's cement. Consequently floor polishers have made a tide mark all round the walls, which would have been avoided



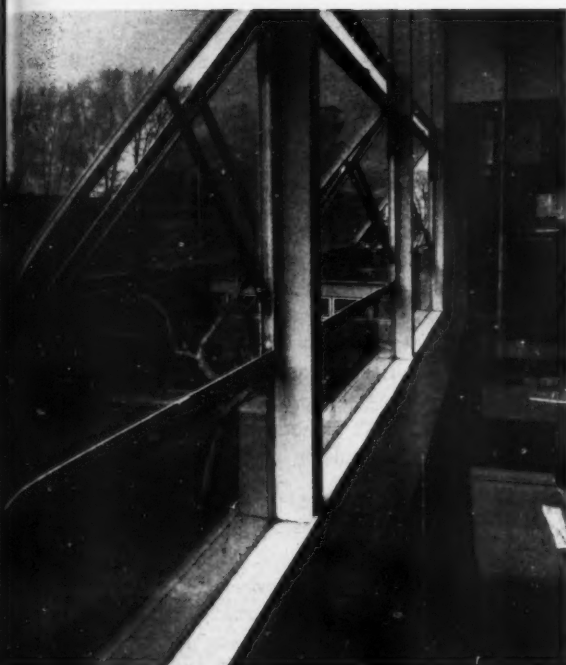
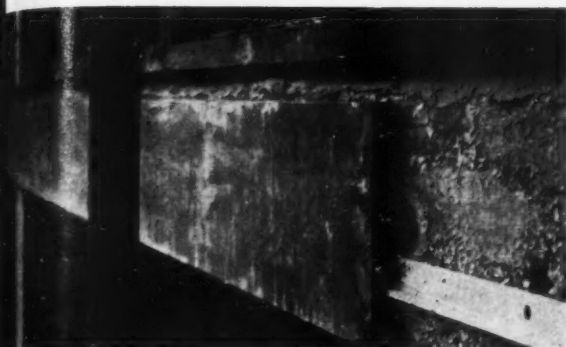
ladders, placed against the facings, have tilted them over at the top, so that the slate has pulled away from the continuous angle.

Faulty joints have occurred between the internal sills and the timber window units (next page, left below). This seems to be due to insufficient bedding for the precast concrete sills, many of which have been relayed. In two cases there is movement of the window units themselves, which seems to be caused by failure of the head and sill screw fixings. Generally, projecting top-hung windows are successful and easy to operate.

with a dark-painted skirting.

Pre-cast concrete internal sills: Many of these have come off and had to be rebbed. This could be due to an inadequate bedding on the block walls below sill level or could possibly be connected with the deflection problem referred to below.

External: Patent glazing to Assembly Hall: Large sheets of glass, approximately 2 ft. wide by 7 ft. high are held in position at the bottom by a small clip on either side of the sheet. Presumably constant movement of the glass, due to wind pressure, has slowly chipped away fragments of glass round the clips, so that the



Maintenance architects complain of the difficulty of getting at many of the internal drainage and pipe runs. In the corner of a housecraft room (bottom right) the drain from the sink on the left runs behind the fixed cupboards to a duct at the junction of the window and the wall, and to get at its junction with the main drain the cooker has to be removed. This view also shows a detail point which had to be revised in the light of experience: the vertical grille on the worktop is above a radiator, and has replaced a horizontal grille level with the worktop, through which food particles dropped on to the radiator.

whole sheet begins to slide down the glazing bars, with the result that the glass ultimately cracks. Many sheets have been broken through this cause.

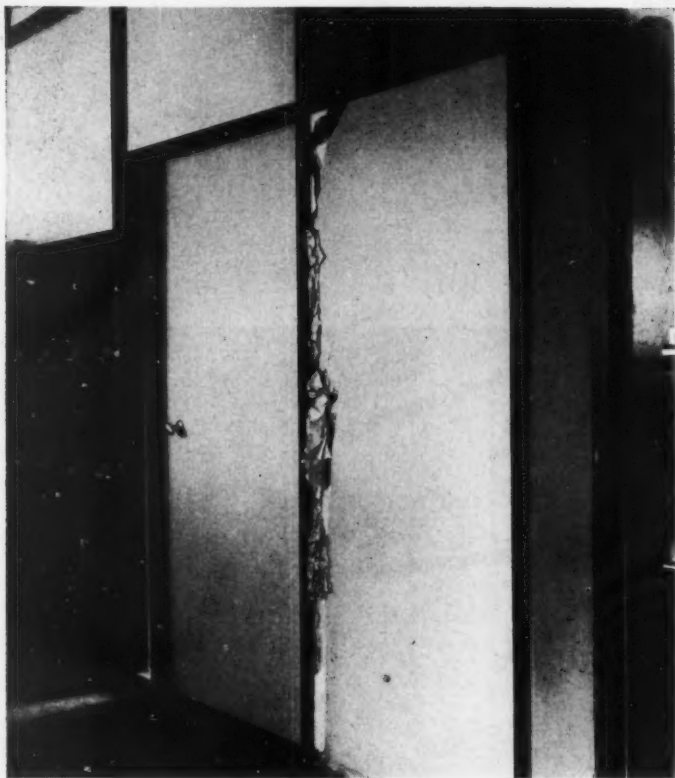
Deflection of timber roofs: The roof of the gymnasium block is carried by hardwood trusses, which have permanently deflected. There is no leakage through the felt finish as yet, although the water depth on the roofs is around 2-in. to 3-in. at centre span for most of the year, and ducks from a local park frequently use these roofs as a pond. As many as seven have been counted together swimming around quite happily. Maintenance architects are worried about the long term effect on the felt and fear that when a leak does occur very considerable quantities of water

Two failures have occurred with the sprayed asbestos ceiling finish, used over the majority of circulation areas. In most cases this was sprayed on to asbestos-cement sheets, and apparently the joints were not taped, and pattern staining occurred at the joints (above right). The problem is aggravated as it has been found practically impossible to clean or redecorate this finish as it is so soft and fragile. The second failure, to be seen faintly at the far end of the ceiling, is that this softness has apparently attracted the children to scrape and score the surface.

will enter the gymnasium with danger to the hardwood strip floors and the equipment.

Prefabricated timber wall panels, string courses and floors: It is difficult to know whether or not these points arise from one underlying fault, or whether the connected problems are a series of coincidences. Looking obliquely down the long sides of the three teaching blocks, and most apparent in the case of Block C, one notices what appears to be a deflection of the floors between the cross walls. In some cases this is visibly transferred to windows below for in several rooms projecting windows cannot be shut and are bowing visibly under pressure. In other cases floors appearing to deflect have not affected the

building revisited



Panels next to the classroom doors are of plastered 2½-in. concrete block, and obvious movement between the door frame and the panel has resulted in cracking in a good many cases. The melamine plastic-faced doors, however, show no sign of wear and look extremely well, as does the hardwood framing.

windows below and here it could be that the slate facings to the concrete floor beams have slipped: in fact, several of these have fallen off. Further, in two rooms some timber floor-to-ceiling window units 5 ft. 7 in. wide by 10 ft. high, which were prefabricated and joined on the site, have apparently come loose from the head and sill screw fixings and there is some movement when they are pushed. This could be due to the fixings failing because of movement due to deflection or could simply mean that the fixings were inadequate. Apart from replacing the slate facings, this problem is not yet serious, and may develop no further.

Lead flashings: These are dressed over the slate facings already referred to and have often had to be repaired due to the ravages of window cleaners' ladders.

Conclusion: A quite minor criticism may sometimes take quite an amount of space to make, and this is the case with most of these criticisms of Mayfield. To sum up, therefore, it should be said that Mayfield has not deteriorated visually and its compact planning has worked very well. When built it seemed to be splendid value for money and maintenance costs since have in no way disproved its true economy.

Visually the buildings are still sharp and clean without being ascetic and most of the materials look as well now as they will in twenty years time. There are failures, especially among the internal finishes, but generally the school is standing up well to hard and efficient use.

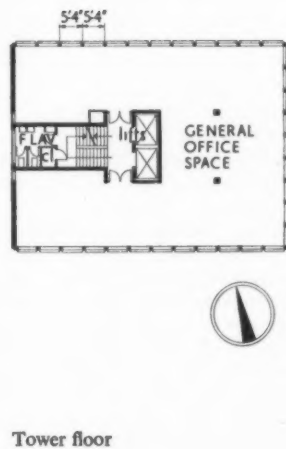
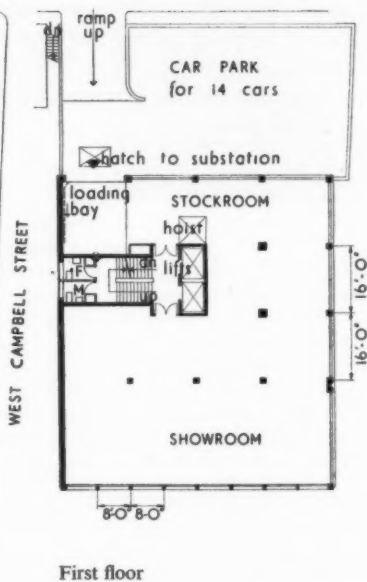
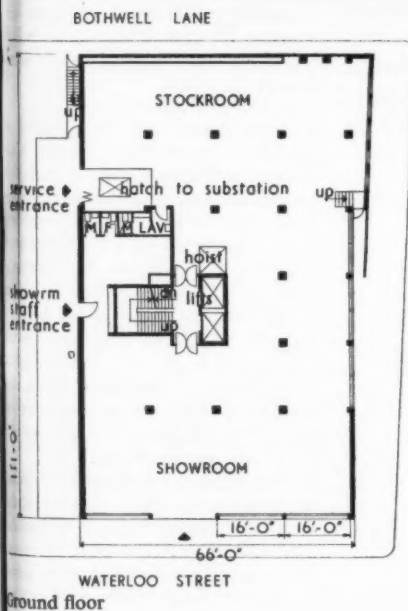
Having spotlighted the minor failures, here is one of many areas of the school which has been greatly enhanced by its occupation by 1,600 children, the spacious entrance hall, in which pots, paintings, needlework and other things made by them are permanently on view.



NEW OFFICES IN GLASGOW



Bovis Ltd. have started work on this new nine-storey office and showroom block in Glasgow. The building will eventually be occupied by the Scottish headquarters of Philips Electric Ltd. to whom it has already been let by the developers, Highland Engineering Company. Michael Laird, the architect, has obviously gone all out to achieve for his client the maximum exploitation of the plot ratio (in this case 5 : 1 at a reasonable first cost). The building is said to be costing £250,000 but it is regrettable that, once again, where a building by a speculative developer is concerned, no further cost figures are available for publication. It appears that the finishes are going to be fairly luxurious, as they have to be to attract the right sort of client. Aluminium framed double glazing is to be used throughout the upper floors, the spandrels are to be faced with mosaic (dark green, variegated) as is the in-situ concrete frame (off-white). Blue faced engineering bricks will be used for the flank walls on the ground and first floor levels. In spite of the expensive sound of some of these materials it is obvious that there must be an exceptional value in a building of such clearly articulated conception with almost column free lettable office area with the additional amenity of a car park. Highland House, as the building is to be called, should be finished by November this year.



BASA

Monthly supplement

The BASA Editors
The Building Centre
Store Street
London WC1

PROSPECTS

For the first time, as a result of the research carried out by the Royal Commission on Doctors' and Dentists' Remuneration, the earnings and status of the various professions have been compared. For students attending a five years' course at a school of architecture, or even a longer period of apprenticeship in an office, it is by no means gratifying to learn that the architectural profession receives the lowest financial rewards in almost every age group between 30 and 65.

Dr. Doxiadis, in his recent *Discourse* at the RIBA, estimated that the architectural profession controlled less than 4 per cent. of the total architectural creation. In an advanced economy such as ours this is obviously much higher and is on the increase, and there is little doubt the public is realizing the good value, financial and aesthetic, of the architect in terms of sound investment. Unfortunately, it is not willing to pay for it. Whatever the reasons for this parsimony—there must be many—the architect (and the student-architect) must face his social responsibility measured by his own yardstick, and not just the public's, and give of his best accordingly.

If any of us do hope to penetrate the surtax limits, we can console ourselves in possible failure by observing that only one quarter of the profession earned more than £1,570 in the 30-65 age group in 1955-56, 17 per thousand more than £6,000, and four per thousand more than £10,000. Generally speaking, the architectural profession is not a Klondike. Those students who are grinding away at their projects in the hope of later achieving a fat bank balance are advised to order a copy of the Report (H.M.S.O., price 15s.), or better still, get their libraries to purchase one, so that they can read and digest at leisure the first 50 pages of this 346 page publication. Afterwards, they might find themselves joining their local medical or dental schools.

On the positive side, the results of the Royal Commission's survey do provide a further prop to the new standard of entry into the schools of architecture. This undoubtedly will help reduce the marginal element which succeeds in gaining qualification to the detriment of the rest of the profession; and may cause society to value to a greater measure the good influence of well trained architectural talent.

STUDENT'S VIEW

The RIBA has now set up a committee to study the problem of technical assistants, their education and their form of qualification. BASA'S President, Hilary Chambers, has told me that he very much hopes the Association will be given the opportunity to present its views to the Committee before recommendations are made.

George Candilis visited the Architectural Association recently. He restated the CIAM philosophy, but the implementation of this theme in his explanation of his project at Bagnols-sur-Cèze was not very obvious. His answer to envious questioners as to how he got so much built so fast and so high was "Yes, we have bureaucracy but in every place there are some who know and some who do not know."

Sir Herbert Read in a later lecture also at the AA produced no new startling theories, but as happens in most aesthetic discussions, this one finally wound up on consciousness. To clear up some confusion during question time over the problem of consciousness Sir Herbert drew the analogy of the proficient archer who was much more conscious of his objective on the target board than he was of his "know-how" or technique. To hit the bull's eye, he no longer seemed to take aim. This reminded me of some of those air-shooting Western films where bullets find their mark with no effort whatsoever.

A long letter from the School of Architecture at King's College, University of Durham, tells of their first society dinner. Invitations were extended to all staff members and students, most of whom attended. Speeches were made by Professor W. B. Edwards, Professor J. H. Napper, Past President of the Northern Architectural Association, D. W. Chalk, a lecturer in the School, and R. A. Allot, the President of the Student Association. Such was the success of the evening, rounded off with a full-scale dance, that the event is to be made an annual one.

Durham's idea of a permanent showcase for exhibiting students' extra curricular work on a weekly basis is something other schools might consider. Schemes like this can stimulate creative talent in affiliated fields such as furniture

design. Society lectures at the School have been fewer than usual, perhaps owing to the time devoted to organizing an exhibition at the King's Hall as part of the City's Arts Festival where examples of all aspects of work going on in the Architectural, Town Planning and Fine Arts Departments were displayed. Two lectures of special note were arranged, however, one given by Mr. Ward of Gollins, Melvin and Ward on "Architecture in the USA," and the other by Mr. Sternfeld of Pilkingtons who showed a large selection of slides of European buildings employing glass as a building material.

Congratulations to the **Leicester Society of Architectural Students** on the first issue of their magazine *Agora* which I have just received. This publication caters not only for architectural students, but also addresses other like-minded people within and outside the architectural profession. In this first issue, articles range from architecture to jazz. A good practical standard of presentation has been achieved through student co-operation with the School of Printing, Leicester College of Art and Technology. The magazine's unpretentious format cannot cause too much of a drain on funds which should ensure that it will not fail for financial reasons. We hope Leicester will send their magazine to the libraries in other schools for all students to see. What one school can do, surely other schools can manage also. Good luck to Leicester for their next issue in the summer.

Nottingham report that their staff have wholeheartedly endorsed the resolutions of the Bristol Conference; and have added a word of welcome for the programme of student research that is proposed in the field of architectural education. Nottingham students seem to have been keenly provoked by Danilo Dolci who is presently devoting all his talents in an effort to help overcome the poverty, dirt, crime and misery of Western Sicily instead of skimming the cream of professional briefs in prosperous Northern Italy. As a man with a deep feeling for those around him, he left his lecture audience wondering whether they would have the courage to go to such lengths to effect similar convictions.

Disappointingly, **Anti-Ugly's** planned protest at the Ideal Home Exhibition had to be cancelled. The exhibition, as usual, is largely a commercial gimmick to be swallowed by an eager public actually queueing to be shown what is right and good. In fact it is difficult to attack the idea of such an exhibition since the demonstration of ideal homes is perfectly commendable in theory. Some things at Olympia are good, but I suppose even if you tried to fill the hall throughout with first-rate material it would be difficult as there is not that much available.

BASA INTERVIEWS DOXIADIS



Doxiadis chose to speak as he did last month at the RIBA, not about Ekistics or Dynopolis *per se*, but about Architecture in Evolution as a restatement of the principles that should motivate architects today. Until the function of architecture is completely comprehended with respect to its being generated by the creation of a total environment through the study of the science of human settlement, it will remain impossible to create specific buildings.

Accepting then Dr. Doxiadis's premises as discourses, the BASA representatives who met him the following day decided to discuss principally the education required to create the sort of men he believes to be necessary to produce the human environment of now and onwards. He used military organisations as his point of departure, the aim of education being to enable the formation of a hierarchy of functions with a unity of purpose. He was not adversely critical of the general staff as the *AJ* summary seems to indicate, but on the contrary, regarded it as absolutely essential that there should be some closely co-ordinated team of strategists from all disciplines and sciences concerned in the creation of environment. Co-ordination is in fact the keyword in Dr. Doxiadis's vocabulary, as it has to be when considering all the complex processes of synthesis. When questioned about politics he said he was non-party. He believed one could establish the sort of ekistical system required whatever the political framework happened to be. (Greece is obviously a much more dicey business than Britain, so what are we bitching about anyhow?)

To produce his hierarchy, Dr. Doxiadis found the existing schooling totally inadequate and suggested what he calls a three-cycle system. This would start with three years studying the habitat of the village environment in its entirety—economics, sociology, the lot—in close co-operation with all disciplines involved. Then, after say two years' practice, the student would be qualified to work either as a complete tactician at platoon level or as assistant at more complex levels. To move higher up the hierarchy would mean a further five years at college and probably two more as post-grad. This I like as it seems to spring from the feeling that all men are

Foreign architects invited to speak in this country have a habit of beginning at the beginning, thereby considerably disconcerting their English audiences. One feels that there is here some sort of unspoken agreement that, as the actual problems are so complex and the solutions so hard to implement, another set of problems should be tacitly substituted to create the sort of elaborate game that almost everyone is now busy playing. This is decadent and could be disastrous. It was therefore most courageous and valuable that Dr.

capable of understanding the principles and relevance of what they and everybody else are doing. Without this, humanity and Humanity are lost.

With regard to universal architecture, Dr. Doxiadis's views seem to parallel the CIAM application of mass-production to fulfil mass needs with the application of international solutions to internationally common problems, individual and local, being one-off jobs in, again, a hierarchy. This would be facilitated by some universal educational co-operation, much needed anyhow from the Mankind angle.

To conclude this too-short report (Doxiadis as a synthesiser is one of the most important around, synthesisers generally being probably the most-needed type nowadays), I can only excuse myself on account of the enormous amount written by Dr. Doxiadis himself both in his magazine *Ekistics* and in his book to be published this year. The complete RIBA *Discourse* (for he only gave half during the evening lecture) is to be published in the RIBA *Journal* in full, his lecture to the TPI Summer School at Southampton last September is already in print, and he is organising an international congress on *Ekistics* in 1961. See you there.

MICHAEL MACRAE

BASA ACTIVITIES

POOL OF LECTURERS

A need has been long felt for a national organisation to provide visiting lecturers of high quality to the schools.

It was decided at the Leicester Conference that BASA should run this scheme; and in due course tentative steps were made. Owing to the system, rather than the unwillingness of the lecturers to participate, little headway was made. In November last year this project was reorganised and the system outlined below was produced by Portsmouth students. This system is simply based on a send and reply card method which entails the minimum of writing; consequently it has less chance of running to a standstill owing to too much correspondence.

The success of this system depends on the schools participating, as its actual running is shared equally by them and BASA, and thus is in line with the present BASA policy of decentralisation. All schools have equal opportunity of participating.

Lecturers.—Firstly a central lecture pool is chosen by BASA. This is compiled from lists of past lecturers supplied from the Schools. Top members of the profession* are then invited to participate in the scheme.

In the past much duplication of lectures has taken place. We propose that schools and allied societies in an area should participate in this scheme, thus preventing duplication. It is hoped that the schools and allied societies will co-operate in choosing a lecturer, and to share the payment of the lecture.

Regions.—For simple geographical reasons the country has been divided into several lecturing areas. This is designed so one school in an area would invite all neighbouring schools and allied societies to its lecture, thus providing lectures for the smaller, listed and facility schools. The system of regions need not be adhered to strictly. The system will make use of the national architect visiting his sites around the country.

System of Correspondence.—BASA will create the lecturers' pool.

The schools will act as distribution centres for BASA by: (a) Notifying students in their areas. (b) Notifying allied societies.

The correspondence is based on a triangle between BASA, schools, and Lecturers.

For ease of correspondence a printed card system is proposed.

In detail the scheme will work as follows:

A A lecturer is invited by BASA and enclosed in his letter will be: (i) An explanation of the scheme. (ii) Regional map. (iii) A return card on which he will indicate: (a) If he is willing to lecture and on what subjects; (b) in which areas he is willing to lecture.

* The profession in its widest sense.

B Lists will then be issued to all the schools in the appropriate areas giving the names of lecturers willing to visit that area. These lists will be renewed every six months. With the lists BASA will send batches of correspondence cards to be used by the schools.

C At this point the schools assume the correspondence. A two-part card is sent to the lecturer containing: (a) The school's half, on which a series of potential lecture dates are suggested; (b) the lecturer's return half containing confirmation of one of these dates, or if inconvenient suggesting further dates. Obviously two schools in one area cannot be host to the same lecturer and it is decided by the lecturer at his own discretion which school he will attend.

D When a final date has been confirmed, information cards are sent by the host school to: (a) neighbouring schools and allied societies; (b) BASA editor for possible publication in the AJ BASA Supplement; (c) BASA organising sub-committee for reference purposes. With this card will be sent the lecture fee by crossed cheque or postal order made payable to the Honorary Treasurer, BASA. Settlement of the lecture fee is between BASA and the lecturer.

The above card is identical in all three cases, giving the lecture subject, its author, time and place.

As stated above all the correspondence is executed on three printed cards, one distributed by BASA and two by the schools.

This ensures participation of the schools in the actual running of BASA, closer co-operation between neighbouring schools, fostering exchange of ideas to the mutual good of each other, and a link with the profession by contact with the lecturer and the allied societies.

KENNETH CLAXTON

MARTIN HARVEY

Portsmouth.

VACATION WORK

At the Bristol Conference in January I was asked to organise what is loosely called "Vacation Work" during next summer in the British Isles.

This short article will, I hope, serve a twofold purpose. Firstly to publicise to all students that something is being done; and secondly to show any practising architects who may read this that BASA is taking practical steps to improve educational facilities. Some architects will receive more concrete evidence in the near future.

The main idea is to turn Brighton into a clearing house for information. Schools will be informed of possibilities, probabilities and jobs definitely available in their particular regional areas, and also in offices further afield. This will be effected by:

1 Sending this programme and explanatory letter to all schools, whether they

are BASA members or not. (This has already been done.)

2 This article will be followed shortly by circulars sent from Brighton to offices, Councils, local Chapters and Societies to find jobs.

3 Regional lists will then be compiled at Brighton.

4 These will then be sent to respective schools where BASA representatives can deal with individual enquiries.

The object of this scheme is to give a much wider range of choice within the regions than has hitherto been available. Any student who wishes to work further afield will receive the list of the appropriate region on application to Brighton. Next year, as the lists grow, the range of selection will be greater and we shall be able to start combating the "forced labour" offices where, in exchange for a pound a week for every year of experience, students slog out simple working drawings, never leaving the office and seldom seeing the principal.

Those offices which would like to help and take advantage of the scheme should write to me at the Brighton College of Arts and Crafts, giving details of the numbers of students they are willing to employ.

It is patently obvious that this scheme will founder without the active support of students, BASA representatives and the profession as a whole. I can only ask for your co-operation to make this scheme work for it is designed in your interest to fulfil a real need.

STUART FISHER

BASA DIARY

ARCHITECTURAL ASSOCIATION
April 7.
Annual Reception.

SCHOOL OF ARCHITECTURE,
COLLEGE OF TECHNOLOGY, DUBLIN
March 31 to April 15
(Dublin Building Centre).
Exhibition of Students' Work.

BASA REPRESENTATIVES

Will all BASA representatives send their names and addresses to the BASA Permanent Secretary, The Building Centre, 26 Store Street, London, W.C.1. Already three requests have been sent out to you for this information, but co-operation is not forthcoming. BASA cannot keep in touch with your school effectively unless it knows how to reach you; so please treat this notice as urgent.

LETTERS TO THE BASA EDITORS

BASIC NEEDS

SIR: In the Editorial of last month's issue you pointed out that students developed a specialized means of communication through their training in project and working drawings; and that this was at the cost of practice in the normal means of communication, namely speech and writing. In the same issue, the Welsh School of Architecture's survey of architectural education made the point that architectural students tended to form themselves into isolationist groups even when they were part of a university.

It has occurred to me that these two points may be closely linked. Since architectural students develop their specialized form of communication which lay people cannot enjoy to the same extent, they are inevitably forced to make close ties within their own fraternity to the exclusion of other groups. This, of course, must aggravate the phenomenon that the Welsh School have recorded and might even be the cause of it.

JAMES CHAPEL.

London, N.W.3.

APOLOGY

In February STUDENT mentioned that Mr. J. Gordon Woolatt had recently qualified at the Nottingham School of Architecture and that he had been the immediate past president of the student organization there. In fact, Mr. Woolatt was the immediate past president of the Nottingham, Derby and Lincoln Society of Architects and is, of course, by no means newly qualified into the profession. The editors apologise to Mr. Woolatt for misreading a letter from Nottingham and hope that this error has not upset the very good relationship we understand exists between the students and members of the profession in Nottingham.

THE INDUSTRY

From the industry this week Brian Grant describes paint and sprayed asbestos finishes, a fire-proof board, a humidity-proof door, duct formers for concrete, a plastic seal for expansion joints, and steel storage cupboards.

Paint finishes

Leyland Paint & Varnish have evolved a "wet on wet" decorative process, known as Sprelux, which allows painting to be completed with a minimum of delay. The different coats involved in the painting schedule are applied by spray gun, and they go on without waiting for the previous coats to dry. Assuming that the job has to start from the beginning and needs a primer the whole work can be completed in the day and all coats dry out overnight to give a hard and usable decoration the following day. The paints used are highly alkali resistant and are therefore very suitable for use in new buildings. (Leyland Paint & Varnish Co. Ltd., 75, Newman Street, Oxford Street, London, W.1.)

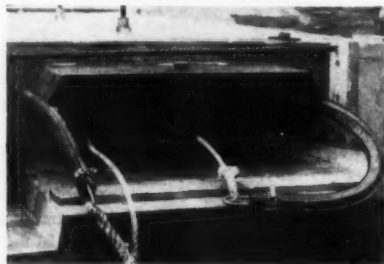
Fireproof board

A member of the Turner & Newall organization has recently introduced Limpet board, a compressed material with a high asbestos content. The board is strong, dense, and flexible enough to be bent to a radius of about 12 in., and can be worked with ordinary woodworking tools. It is made with a standard thickness of $\frac{1}{2}$ in. and in 8 and 10 ft. lengths, both with a width of 4 ft., but it can be cut to size if required. Owing to its high asbestos content the board is incombustible and is in BS 476 class 1, surfaces of very low flame spread, and when under test the surface supported no flame whatever. The board is easy to prime and can be

painted any colour: suitable proprietary brands of alkali resisting primers and paints are recommended on request. (J. W. Roberts Ltd., Chorley New Road, Horwich, Bolton, Lancs.)

Forming ducts in concrete

Oval and rectangular as well as circular ducts can be cast in concrete with Ovacore formers. A core of the required cross section is formed from steel sheet with a slot down one side, and is sprung open to accept a shaped rubber fillet, to which is attached a length of cord which is brought back through the length of the core. The Ovacore is then placed in the mould and is held down at intervals to prevent movement while the concrete is being placed. When the concrete has set the cord is withdrawn, pulling away the rubber fillet and allowing the two edges of the longitudinal slit to snap back into the closed position, breaking the bond with the concrete so that the core can be withdrawn. Rectangular section cores are



Ovacore duct formers.

generally made in halves, with two rubber fillets, and should be somewhat easier to remove from the concrete. The cores are oiled before use, and while the oval versions have a guaranteed life of 150 uses, the two part cores last about four times as long. Standard core lengths may be up to 30 feet, but greater lengths must be welded together on site. The cores can be supplied in any reasonable shape and have already been supplied in sizes up to 24 by 12 inches. P.v.c. cores, needing no lubrication and having a guaranteed life of 50 uses, are recommended for circular ducts with diameters between 4 and 12 inches. (P.C. Floors Ltd., 64/66, Battersea High Street, London, S.W.11.)

Doors for humid atmospheres

For use in pithead baths where there is a permanently humid atmosphere and a temperature in the middle 70's twenty-four hours a day, the Scottish division of the



Permaply doors at pithead baths.

National Coal Board needed plywood door facings which would not delaminate. Permaply, a phenol impregnated ply, was chosen. The ply was bonded to the cores with Aerolite thermo-setting resin, and about 40 doors have been used in baths, canteens and kitchens, apparently with success. (Venesta Ltd., Vintry House, Queen Street, London, E.C.4.)

Expansion joints

Compri-Strip is a bitumen impregnated foamed plastic which has great elasticity but which regains its shape quite quickly after compression. It is fixed with an adhesive, supplied by the makers, and can be used to seal expansion joints in concrete slabs, curtain walling, patent glazing, and round window frames. Where the strip is to be exposed to severe weather conditions it is recommended that it should be compressed to about 20 per cent of its original size. The elasticity of the strip makes it suitable for sealing uneven surfaces and is made in a range of nine sizes, from $\frac{1}{2}$ to $1\frac{1}{2}$ by 3 $\frac{1}{2}$. (Thomas W. Ward Ltd., Albion Works, Sheffield.)

technical section

Storage cupboards



The illustration above shows the Helmsman steel cupboard, which measures 36 by 18, with a depth of 15 in., and which is intended for small scale storage in factory or office. There is an internal shelf and the door has a box section stiffener. There is a 6-lever lock and master keys can be supplied if a quantity of cupboards is ordered. The whole unit is very rigid and is finished in mid-grey stove enamel. Price is £4 5s. including delivery and the cupboard is easy to assemble. (W. B. Bawn & Co. Ltd., Byron Works, Blackhorse Lane, London, E.17.)

Sprayed asbestos

Chancery Insulations have recently become members of the U.A.M. Group and have issued a leaflet setting out the advantages of their Seel sprayed asbestos. The density of the coating varies between 7 and 9 lb. per cubic foot and it has a thermal conductivity (K) of 0.32. Sprayed on 3 in. corrugated asbestos cement or metal sheeting a thickness of $\frac{1}{2}$ in. will improve the U factor from 1.6 to 0.26, or to 0.18 with a thickness of 1 in. Apart from thermal insulation, the material is also used for fire protection, to prevent condensation and corrosion, as well as for sound insulation and dust exclusion. Spraying makes the material easy to apply in any thickness, particularly to uneven surfaces. Decoration of the finished surface is possible but not normally necessary, and the makers claim that the material adheres strongly to the base and so will not crack, flake, or be otherwise affected by vibration. The leaflet is clearly set out and is to A4 size. (U.A.M. Group Advisory Service, Tolpits, Watford, Herts.) E.17.)

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8 ESTIMATING

current wage rates, market prices and measured rates

It is important to note that the prices feature this quarter has been revised to include the increase in wage rates which will come into force on April 18. It is too early yet for the wage increase to have affected the cost of materials but, obviously, there will be a tendency towards a general all round rise boosted, of course, by any increase in haulage rates as a result of the Guillebaud Report. The prices are prepared by Davis, Belfield and Everest, Chartered Quantity Surveyors.

Wage rates

Rates of wages as from April 18, 1960, will be as follows:

	Craftsmen		Labourers	
	s	d	s	d
London District	5	1	4	5½
Within 12 miles radius	5	0½	4	5
From 12 to 15 miles radius				
Liverpool and District	5	1	4	5½
Grade classifications				
A	4	11½	4	4
A1	4	11	4	3½

Market prices

Prices are given for the major items in each trade, they are intended as average prices and include delivery in the outer London area. They do not include overhead charges and profit.

Measured rates

Prices are for work carried out in the Outer London area and include 10% to cover overhead charges and profit except in the case of work which would be carried out by specialists when 5% has been allowed. The prices given in italics represent the total value of the materials included in the measured rates, including an allowance for waste and 10% for overhead charges and profit. The cost of labour included in the measured rates (including its proportion of overhead charges and profit) can be ascertained by subtracting the prices in italics from the prices in heavier type.

Abbreviations

Inches: in. Feet: ft. Yards: Y. Yards cube: YC. Yards super YS. Feet cube: FC. Feet super: FS. Ton: T. Feet run: FR. Thousand: M. Square: Sq. Number: No. Hundredweight: C. Pound: lb. Gallon: Gal.

Preliminaries

To all estimates based on prices for measured rates add, if required, for Preliminaries, water, insurances etc. depending on the nature of the job

Price changes

* Shows changes in market prices and measured rates since the last issue (December 24, 1959.)

technical section

EXCAVATOR

s d

Market prices

Carting away, up to 8 miles	YC	
Hand loaded	*6	0
Machine loaded	*5	0
Hardcore	YC	10 0

Measured rates

Hand excavation and disposal

NB: the following are applicable to excavation in heavy soil.

Excavating over site to remove top soil and vegetable matter, 6 in. deep	YS	*1 4
As above, 12 in. deep	YS	*2 8

Excavating over site to reduce levels and getting out	YC	*10 8
---	----	-------

Excavating for basement and getting out	YC	
Depth up to 5 ft.	*12	0
Depth between 5 & 10 ft.	*17	4
Depth between 10 & 15 ft.	*22	8

Excavating surface trenches and ditto	YC	
Depth up to 5 ft.	*14	8
Depth between 5 & 10 ft.	*20	0
Depth between 10 & 15 ft.	*25	3

Excavating basement trenches and ditto	YC	
Commencing 5 ft. below existing ground level	*20	0
Commencing 10 ft. below existing ground level	*25	3
Commencing 15 ft. below existing ground level	*30	7

Wheeling surplus excavated material not exceeding 100 yards and depositing	YC	*5 4
--	----	------

Add to last for: Roughly spreading and levelling	YC	1 7
Spreading, levelling and consolidating to make up levels	YC	*3 6

Returning, filling-in and well ramming excavated material around foundations	YC	*4 8
--	----	------

Loading surplus material into lorries and carting to tip, not exceeding 8 miles	YC	*13 7
---	----	-------

Excavating from spoil heaps selected top soil, wheeling not exceeding 100 yards, and spreading, levelling and consolidating, not exceeding 6 in. to receive turf	YS	*2 4
--	----	------

Mechanical excavation and disposal

Excavating for shallow surface excavation and loading into lorries or dumpers (using $\frac{3}{4}$ yd. cube excavator)	YC	3 0
--	----	-----

Excavating for surface excavation and removing,		
---	--	--

spreading and levelling not exceeding 200 yds. (using 6 yd. cube scraper)	YC	2 11
---	----	------

Removing excavated material and depositing, not exceeding 200 yds. (using 3 yd. cube dumper)	YC	2 2
--	----	-----

Planking and strutting

Planking and strutting to sides of surface or basement excavation	FS	
---	----	--

Depth up to 5 ft.	8
Depth up to 10 ft.	10
Depth up to 15 ft.	1 0

Planking and strutting to sides of surface and basement trenches	FS	
Depth up to 5 ft.		2
Depth up to 10 ft.		3
Depth up to 15 ft.		

Hardcore, etc.

Hardcore filled-in in layers, each layer well rammed	YC	*20 9
		13 9

Bed of ditto, 4-in. thick	YS	*3 6
		1 7

CONCRETOR

Market prices

Portland cement, 6 tons and over	T*111	6
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Rapid hardening, 6 tons and over	T*122	0
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$\frac{3}{4}$ -in. down, washed, crushed and graded shingle	YC	*15 6
---	----	-------

1 $\frac{1}{2}$ -in. ditto	YC	*14 6
----------------------------	----	-------

Sharp sand	YC	*19 6
------------	----	-------

$\frac{3}{8}$ -in. diam. mild steel rods to BS 785 delivered station	T	860 0
--	---	-------

$\frac{3}{8}$ -in. ditto	T	922 6
--------------------------	---	-------

Measured rates

Portland cement mass concrete in foundations etc.	YC	
---	----	--

1 : 12, 1 $\frac{1}{2}$ -in. "all-in"		
aggregate	*58	8
	36	10
1 : 3 : 6, 1 $\frac{1}{2}$ -in. aggregate	*66	3
	44	5
1 : 2 : 4, $\frac{3}{4}$ -in. aggregate	*73	11
	52	1
1 : 1 $\frac{1}{2}$: 3, $\frac{1}{2}$ -in. aggregate	*75	10
	54	0

Add for: Working around rod or mesh reinforcement	YC	*5 4
---	----	------

Walls not over 6-in. thick	YC	*26 7
Walls 6-in. to 12-in. thick	YC	*18 8
Walls over 12-in. thick	YC	*13 4

Columns not over 72 sq. inches	YC	*50 7
--------------------------------	----	-------

Columns 72 to 144 sq. inches	YC	*39 11
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Columns over 144 sq. inches	YC	*31 11
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s d

Suspended floors and roofs not over 4 $\frac{1}{2}$ -in. thick	YC	*21 4
--	----	-------

Suspended floors over 4 $\frac{1}{2}$ -in. to 6-in. thick	YC	*18 8
---	----	-------

Suspended floors over 6-in. to 12-in. thick	YC	*16 0
---	----	-------

Beds not over 4 $\frac{1}{2}$ -in. thick	YC	*10 8
--	----	-------

Beds 4 $\frac{1}{2}$ -in. to 6-in. thick	YC	*8 0
--	----	------

Beds 6-in. to 12-in. thick	YC	*2 8
----------------------------	----	------

Hollow tile floor of clay tiles 4-in. thick at 15-in. centres laid on formwork (measured separately), nibs filled in with concrete (1 : 2 : 4) and finishing top of tiles with bed of concrete 1 $\frac{1}{2}$ -in. thick including tamping around reinforcement (measured separately)	YS	*17 9
		10 2

Ditto, but tiles 8-in. thick	YS	*27 4
		17 8

Sundries

Finishing concrete with trowelled face to receive linoleum	YS	*1 4
--	----	------

Applying horizontal damp-proof membrane of Synthaprufe in three coats to surface of concrete and blinding with sand to form key	YS	5 10
		4 1

Supplying floor clips (p.c. 6d. each) and fixing	No.	1 1
--	-----	-----

Formwork

Formwork including strutting easing and striking:		
---	--	--

Vertical faces of foundation	YS	*18 11
		9 6

Vertical faces of wall	YS	*19 8
		6 10

Soffite of floors not over 12-ft. high	YS	*19 5
		8 6

Sloping soffit of stairs	YS	*23 7
		9 3

Sides of columns	FS	*2 7
		11

Sides and soffits of lintols and beams	FS	2 8
		1 0

Add to the above for wrought formwork including rubbing down concrete	YS	*2 8
---	----	------

Reinforcement

$\frac{3}{8}$ -in. diameter mild steel rods, hooked, bent and tied and fixing	C	*69 8
		52 3

$\frac{1}{2}$ -in.	C	*75 3
		54 2

$\frac{3}{4}$ -in.	C	*82 2
		55 11

technical section

Concretor continued

1-in. C *96 4
60 8

Steel wire mesh fabric
weighing 4-32 lb. per yd.
super and laying in concrete

YS 4 1
3 5

Ditto weighing 6-57 lb. per
yd. super

YS 6 0
5 3

Ditto weighing 9-32 lb. per
yd. super

YS *8 6
7 4

Precast concrete

Precast concrete (1:2:4)
finished fair on exposed faces
and hoisting setting and
jointing:

4½-in. × 6-in. lintols rein-
forced with one ½-in. rod FR *2 11
2 5

4½-in. × 9-in. ditto with two
½-in. rods

FR *4 5
3 7

Piling

Reinforced pre-cast concrete
piles, approximate prices for
supplying, unloading, pitching
and driving

12-in. × 12-in. up to 30 ft.
long FR 35 0

14-in. × 14-in. up to 50 ft.
long FR 41 0

Sheet steel piling, ditto T 1165 0
to
1230 0

BRICKLAYER

Market prices

Soft sand YC 18 0

Hydrated lime T 110 0

Plain Flettons M 118 0

Second hard stocks M 320 0

Lingfield Engineering wire
cuts Grade B M*267 6

Hessian base damp-course
to BS 743 YS 5 8

Damp course slates, 14"×9"100 76 3

Wall ties, galvanised 100 *15 8

Partitions

Clinker concrete, solid YS
2½-in. *5 7
3-in. *7 1
4½-in. *9 4

Thermalite YS
2½-in. 7 0
3-in. 8 5
4-in. 11 0

Hollow clay YS
2½-in. 4 5
(6 cavity) 3-in. 5 5
(ditto) 4-in. 6 10

Normal quality wood wool
slabs YS
2-in. 8 10
2½-in. 10 2
3-in. 11 5

Measured rates

Reduced brickwork in
cement lime mortar,
Lingfields in cement mortar

YS
Flettons *34 3
17 4
Second stocks *56 0
39 1
Lingfield Grade B *53 6
34 0

Half brick wall ditto YS
Flettons *19 0
8 3
Second stocks *29 10
19 2
Lingfield Grade B *29 2
16 6

11-in. hollow wall with 2-in.
cavity and wall ties YS
Flettons *41 3
16 10

Second stocks *63 0
38 7

One brick wall built fair and
pointed both sides. YS
Flettons *41 3
17 4

Second stocks *63 0
39 1
Lingfield Grade B *59 4
34 0

Sundries

Extra over common brick-
work for internal fair face
and flush pointing YS *1 6

Horizontal damp proof course
of two courses of slates and
bedding and pointing FS *4 3
2 4

Horizontal damp proof course
of hessian base bitumen FS *1 0
9

Facings

Extra over ordinary brick-
work with bricks P.C. 118s.
per 1,000 for facings as
described

To solid wall in Flemish
bond YS
Facings P.C. 250s per M *16 2
9 7
Facings P.C. 350s per M *23 5
16 11
Facings P.C. 450s per M *30 9
24 2

To cavity wall in stretcher
bond YS
Facings P.C. 250s per M *13 5
7 4
Facings P.C. 350s per M *18 11
12 11
Facings P.C. 450s per M *24 6
18 5

Half brick wall in facings
built fair and pointed on
one side YS
Facings P.C. 250s per M *31 0
16 0
Facings P.C. 350s per M *36 7
21 6
Facings P.C. 450s per M *42 2
27 1

Partitions

Clinker concrete solid
partition blocks and setting
in cement lime mortar YS

2½-in. *12 3
6 10
3-in. *15 0
8 8
4½-in. *19 0
11 5

Thermalite ditto YS
2½-in. *12 11
8 6
3-in. *15 3
10 3
4-in. *19 5
13 4

Hollow clay ditto YS
2½-in. *10 11
5 6
(6 cavity) 3-in. *13 1
6 9
(ditto) 4-in. *16 2
8 6

Wood wool slabs ditto YS
2-in. *14 3
10 4
2½-in. *16 6
12 2
3-in. *18 9
13 9

DRAINLAYER

Market prices

Salt glazed stoneware pipes
and fittings. "Best" quality:

Ordinary pipes FR
4-in. 1 5
6-in. 2 1½
9-in. 3 10
Bends No.
4-in. 4 3
6-in. 6 4½
9-in. 17 2½

Pitch fibre pipe FR
3-in. 1 10½
4-in. 2 6
6-in. 5 0½

Cast iron s. and s. pipe to
BS 437 YR
4-in. 28 2
6-in. 41 3
9-in. 77 3

Spun iron s. and s. pipe to
BS 1211, Class B YR
4-in. 13 3
6-in. 21 4
9-in. 35 10

Measured rates

Trenches and beds

Excavate trenches by hand in
heavy soil, including planking
and strutting, part returning,
filling and ramming and
wheeling and spreading
surplus, for pipes 4-in., 6-in.
and 9-in. dia. YR
Average depth of trench 3-ft. *17 8
4-ft. *23 7
6-ft. *40 7

Excavate trench as last but
by mechanical trencher YR
Average depth of trench 3-ft. *13 7
4-ft. *18 7
6-ft. *33 8
9-ft. *55 7

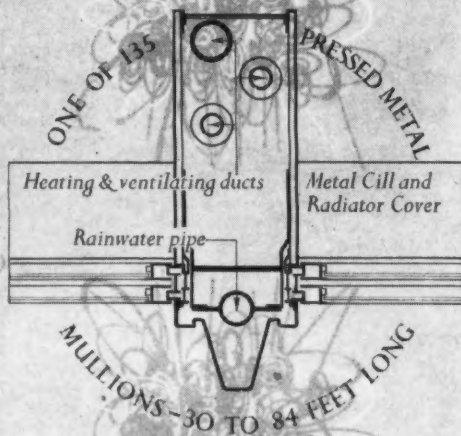
SANDERSON

NEW BUILDING, BERNERS STREET, LONDON, W.1

Slater and Uren, F.F.R.I.B.A., Architects

HOPE'S WINDOW WALL

with aluminium double hung sliding sash



HENRY HOPE & SONS LTD

Smethwick, Birmingham & 17 Berners St., London, W.1

BACKGROUND BASED ON SANDERSON FABRIC DESIGN H346/1

technical section

Drainlayer continued s d

6-in. concrete bed and
benching for 4-in. pipes YR *9 3
5 4
As above, for 6-in. pipes YR *10 9
6 3

6-in. concrete bed and
surround for 4-in. pipes YR *15 0
8 8
As above, for 6-in. pipes YR *18 1
10 5

Stoneware drains

"Seconds" quality salt
glazed stoneware drain pipes
and laying and jointing in
trench FR

4-in. 2 3
1 6
6-in. 3 2
2 2
9-in. 5 2
4 0

"Best" quality salt glazed
stoneware drain pipes and
laying and jointing in
trench FR

4-in. 2 6
1 9
6-in. 3 7
2 7
9-in. *5 11
4 8

Extra over "Seconds"
quality pipes for:

Bend

No. 4-in. *3 5
2 10
6-in. *4 11
4 3
9-in. *14 2
13 5

Single junction

No. 4-in. *5 11
4 4
6-in. *8 6
6 7
9-in. *18 0
15 9

Double junction

No. 4-in. *9 11
7 3
6-in. *14 2
11 0
9-in. *27 5
23 8

Stoneware gullies

Salt glazed trapped gully
with galvanized grating
including setting gully on
and surrounding with concrete
and jointing to drain No.

6 in. x 6 in. grating 4 in.
outlet 23 11
19 6

9 in. x 9 in. grating 6 in.
outlet 43 9
38 2

Grease and mud gully 9-in.
diameter with 4-in. outlet
galvanized bucket and grating
and setting gully on and
surrounding with concrete
and jointing to drain No. *82 6
71 0

Road gully with 6-in. outlet
including setting on and
surrounding with concrete
and jointing to drain No.

15-in. dia. 30-in. deep *112 10
89 4
18-in. dia. 48-in. deep *225 5
186 6

Pitch fibre drains

Pitch fibre drain pipes and
laying and jointing in trench FR

3-in. 2 3
2 1 1/2
4-in. 2 11 1/2
2 9 1/2
6-in. 5 10
5 8

Extra over pitch fibre pipe
for 45° sweep bend No

3-in. *10 0
9 1
4-in. *14 6
13 7
6-in. *27 8
26 7

Cast iron drains

Cast iron spigot and socket
drain pipes and laying and
jointing in trench FR

4-in. *13 2
10 11
6-in. *19 2
16 3
9-in. *36 6
30 4

Extra over cast iron pipes for
bend No.

4-in. *31 1
24 6
6-in. *72 6
62 9
9-in. *185 2
168 5

Spun cast iron spigot and
socket drain pipes and laying
and jointing in trench FR

4-in. *7 5
5 3
6-in. *11 4
8 7
9-in. *20 4
14 6

Cast iron gullies

Cast iron gully trap with high
invert and setting on and
surrounding with concrete
and jointing to drain No.

4-in. *43 9
36 5
6 in. *108 1
97 7
9 in. *242 11
228 2

ASPHALTER

Measured rates

Damp proof course and tanking

1/2-in. vertical damp proof
course in two thicknesses on
brick or concrete YS
BS1097 17 4
BS1418 22 0

1/2-in. horizontal damp proof
course in one thickness on
brick or concrete YS
BS1097 10 6
BS1418 14 2

Vertical tanking in three
thicknesses YS
BS1097 24 8
BS1418 30 5

Horizontal tanking in three
thicknesses YS

s d

BS1097 17 4
BS1418 26 3

Roofing

1/2-in. flat laid to falls in two
thicknesses on and including
felt underlay YS

BS988 12 1
BS1162 18 8

6-in. skirting with angle
fillet at bottom and rounded
edge at top turned into
groove FR

BS988 2 1
BS1162 2 7

6-in. fascia with solid water
check roll at top and under-
cut drip at bottom FR

BS988 4 2
BS1162 4 9

PAVIOR

Market prices

Granite chippings, 1/2 in. to
dust T 45 1
Red quarry tiles, 6 in. x
6 in. x 3/4 in. YS 13 8
2-in. Noelite paving YS 13 11

Measured rates

Cement and sand floated
screed to receive pavings YS
3/4-in. 4 1
2 3
1-in. 5 0
2 11
1 1/2-in. 5 7
3 4

Cement and sand paving
trowelled hard and smooth YS

3/4-in. 4 7
2 3
1-in. 5 6
2 11
1 1/2-in. 6 1
3 4

Granolithic paving laid on
concrete YS

1-in. *7 3
5 1
1 1/2-in. *9 4
6 8

1/2-in. red composition paving
laid on prepared screed YS 16 6

3/4-in. terrazzo paving laid on
prepared screed YS 38 4

1/2-in. rubber flooring and
laying in rolls YS 39 5

1/2-in. rubber flooring and
laying in rolls YS 63 0

1/2-in. cork tile flooring,
12 in. x 12 in. and fixing
with mastic and including
polishing YS 39 5

1/2-in. thermoplastic tile
flooring and laying-on screed
to YS 12 0
21 0

4.5mm coloured linoleum and
fixing with mastic to cement
screed or boards YS *25 3

A Bilston ATLANTA

will be perfect...



NOW WHICH SIZE?

It's no problem! Whether the plan allows for a small or large bathroom, there is a Bilston Atlanta that will fit. Selected for the Design Centre, the Atlanta is made in five sizes. Every home owner will enjoy the bath that has the famous Bilston finish and durability, and the skilful design that makes the Atlanta the safest, most comfortable bath of all. The Atlanta costs no more than an ordinary bath.

54"

60"

66"

61"

72"



All this with the ATLANTA-

Flat bottom

the Atlanta flat bottom helps to prevent slipping... ensures comfort. Particularly suitable where a shower is to be fitted.

Safety

the low sides make the Atlanta safer for young and old. It can be fitted to give an overall height of only 16".

Taps

can be fitted centrally, or on either corner to facilitate installation and maintenance.

Fittings

the Atlanta is supplied with or without overflow... with or without hand grip. The feet can be adjusted to accommodate all types of trap, including the Bilston "Wastefflo" pre-fabricated waste, trap and overflow unit. Also available with the Bilston O.P. Hand Grip specially designed to meet the needs of the elderly or infirm.

Colours

the Bilston range includes white or the exact colour required for any decorative scheme.



- Atlanta
- Magna
- Cresta
- Marina
- Mermaid
- Bermuda

**BILSTON—the bath
SPECIALISTS**

Bilston Foundries Ltd. Bilston, Staffordshire. Illustrated literature is available on request

technical section**Pavior continued** s d

3·2 mm. coloured linoleum and
fixing with mastic to cement
screed or boards YS *20 5

$\frac{3}{4}$ -in. red quarry tiles laid on
prepared screed YS *25 1

$\frac{3}{4}$ -in. red quarry tiles
laid on prepared screed YS *28 3

2-in. Noelite paving laid on
prepared bed, in random sizes
and mixed colours YS *20 5
16 1

12 in. \times 12 in. anchor steel
plates laid complete YS *60 0

MASON**Market prices**

Stone in blocks in truckloads
at stations in the London area:

Beer FC *9 2

Portland FC *9 4

Woodkirk Blue building
quality FC 18 7

Broughton Moor slate in
blocks at stations in the
London area FC 55 0

Marble in blocks at works:
Dove FC 70 0

Roman stone FC 65 0

Measured rates

Stone and all labours in
pilasters and quoins FC
Portland *55 2
Beer *52 6

Jambs FC
Portland *57 9
Beer *55 0

Lintels FC
Portland *58 10
Beer *56 0

Arches FC
Portland *71 11
Beer *68 6

Ashlar average 7-in. on bed
with plain dressed face FS
Portland *32 7
Beer *31 0

Extra for each additional 1-in.
thickness FS
Portland *4 3
Beer *4 1

$4\frac{1}{2}$ in. \times 4 in. sill sunk,
weathered, throated and
grooved for water bar, set and
jointed in cement mortar FR
Portland *11 9
Beer *11 2
Artificial 4 11

4 in. \times 12 in. coping,
weathered and twice throated
FR
Portland *22 7
Beer *21 6
Artificial *12 0

Marble and slate

$\frac{3}{4}$ -in. Dove marble lining and
fixing on brick backings FS 37 10

$\frac{3}{4}$ -in. Roman stone lining FS 35 9

$\frac{3}{4}$ -in. Broughton Moor slate
lining FS 23 1

**SLATER, TILER AND
ROOFER****Market prices**

Welsh slates, best quality M
16-in. \times 10-in. 1116 0
20-in. \times 10-in. 2050 0

Best hand made sand faced
plain tiles, $10\frac{1}{2}$ -in. \times $6\frac{1}{2}$ -in. M*340 0

Grey corrugated asbestos
cement sheets YS 7 0

Measured rates

16-in. \times 10-in. best Welsh
slates laid 3-in. lap Sq. 300 0

20-in. \times 10-in. best Welsh
slates, 3-in. lap Sq. 400 0

Westmorland green slates in
random sizes laid 3-in. lap Sq. 550 0

Best hand made sand faced
plain tiles, $10\frac{1}{2}$ in. \times $6\frac{1}{2}$ in. laid
to a 4-in. gauge Sq.*216 0

Best hand made sand faced
plain tiles, $10\frac{1}{2}$ in. \times $6\frac{1}{2}$ in.
hung vertically to $4\frac{1}{2}$ -in
gauge Sq.*241 0

Berkshire hand made sand
faced red pantiles, $14\frac{1}{2}$ in. \times
10 in. laid $2\frac{1}{2}$ -in. head and
 $1\frac{1}{2}$ -in. side lap Sq.*210 0

Grey corrugated asbestos
cement sheets fixed to wood
roofs Sq. 123 0

Grey corrugated asbestos
cement sheets fixed vertically
Sq. 133 0

Cedarwood shingles laid 5-in.
gauge Sq. 240 0

Metal roof decking and fixing
with hook bolts, finished
with $\frac{1}{2}$ -in. insulation board
and three layers self finish
felt roofing YS

18 gauge for
spans up to 10 ft. 62 0

20 gauge for
spans up to 8 ft. 6 in. 54 6

Two layer one ply bitumen
felt and fixing with bitumen
to concrete or boarding YS 9 6

Three layer bitumen felt YS 12 7

Patent ribbed aluminium
roofing and fixing to purlins
Sq. 297 6

CARPENTER**Market prices**

Softwood, carcassing quality
Std. 1640 0

Softwood, joinery quality
Std. 2100 0

$\frac{1}{2}$ -in. fibre board Sq. 46 6

$\frac{1}{2}$ -in. standard hardboard Sq. 40 0

$\frac{3}{4}$ -in. insulating gypsum
wallboard YS 3 0

Measured rates s d

Softwood and fixing in plates,
sleeper joists and lintels FC *13 11
11 11

In floor and ceiling joists FC *16 5
11 11

In stud partitions, purlins
and struts FC *18 8
11 11

In hip and valley rafters FC *21 6
11 11

Battening and boarding

Slate or tile battens $1\frac{1}{2}$ in. \times
 $\frac{3}{4}$ in. and nailing to fixing for
Sq.

16-in. \times 10-in. slating to
 $6\frac{1}{2}$ -in. gauge 38 3

20-in. \times 10-in. slating to
 $8\frac{1}{2}$ -in. gauge 32 0

$10\frac{1}{2}$ -in. \times $6\frac{1}{2}$ -in. plain tiling
to 4-in. gauge 58 9

$14\frac{1}{2}$ -in. \times 10-in. pantiles to
12-in. gauge 22 0

S.E. boarding in batten widths
close jointed and fixing to
flat or sloping roofs Sq.
 $\frac{3}{4}$ -in.*111 0
75 9
1-in.*135 0
99 9

T. & g. boarding in batten
widths close jointed and fixing
to flat or sloping roofs Sq.
 $\frac{3}{4}$ -in.*145 0
100 9
1-in.*177 0
132 9

$\frac{3}{4}$ -in. wrot and cross tongued
eaves soffit FS 2 2
11

$\frac{3}{4}$ -in. \times 6-in. wrot and
grooved eaves fascia p.o. FS 9
5

**Wall and ceiling boards fixed
to softwood**

$\frac{1}{2}$ -in. fibre board YS *6 10
5 0

$\frac{1}{2}$ -in. hardboard *5 10
4 4

$\frac{3}{4}$ -in. insulating gypsum
wallboard *5 7
3 9

$\frac{3}{4}$ -in. asbestos cement flat
sheeting *8 10
4 11

$\frac{1}{2}$ -in. asbestos cement flat
sheeting *10 7
6 8

2-in. Stramit, showerproof
quality fixed to joists with
butt joints *16 0
11 6

JOINER**Measured rates****Floors and skirtings**

Tongued and grooved soft
wood flooring and nailing to
joists Sq.
 $\frac{3}{4}$ -in.*162 9
121 6
1-in.*179 0
137 9

1-in. nominal double grooved
t. and g. Swedish softwood



for the



where



must do more than decorate



ASSOCIATED LEAD

MANUFACTURERS LIMITED

CLEMENTS HOUSE, 14 GRESHAM ST., LONDON, E.C.2 • CRESCENT HOUSE, NEWCASTLE • LEAD WORKS LANE, CHESTER

technical section

Joiner continued	s	d
block flooring set in mastic and polished	YS	29 5
European beech	YS	31 6
African Muhuhu	YS	34 8
Burma teak	YS	36 9
Moulded skirtings, 3-in. to 6-in. sectional area planted on (per inch in sectional area)	FR	
	Softwood	3
	Oak	2 1/2
		9 8
Extra for grounds plugged to brickwork	FR	
	Softwood	*10 2
Windows		
2-in. rebated and moulded sashes divided into squares	FS	
	Softwood	3 10
	Oak	11 7
Extra for side hanging	Each	
	Softwood	*3 0
	Oak	*4 6
Doors		
2-in. framed, ledged and braced doors, filled in with 1-in. t. and g. and V jointed boarding and hanging	FS	
	Softwood	*6 6
		5 8
Four panelled door square both sides and hanging	FS	
	Softwood	7 0
	Oak	6 3
		20 7
		19 6
1 1/2-in. Standard flush door, hardboard faced size 2 ft. 6 in. x 6 ft. 6 in. and hanging	No.	*44 5
		32 5
Linings and frames		
Window and door linings, 6-in. to 12-in. sectional area (per inch sectional area)	FR	
	Softwood	4
	Oak	3
		10 9
Frames wrot all round and framed (per inch sectional area)	FR	
	Softwood	3 1/2
	Oak	9
Mullions, transomes and sills (per inch sectional area)	FR	
	Softwood	4
	Oak	10
Mouldings, architraves, etc. 4-in. to 6-in. sectional area (per inch sectional area)	FR	
	Softwood	4
	Oak	3
		11 10
6-in. window boards, 1-in. thick with rounded nosing tongued at back and including bearers	FR	
	Softwood	*3 3
		1 9

	s	d
Oak	*5 9	3 8
Shelving and fittings		
3/4-in. shelving of 2-in. slats spaced 1-in. apart on bearers (measured separately)	FS	
	Softwood	*2 8
		2 0
3/4-in. solid shelving on bearers	FS	
	Softwood	2 5
	Oak	2 0
		4 10
		4 3
2-in. shelf bearers plugged to wall	FR	
	Softwood	*8 5 1/2
	Oak	*1 4 1
Staircases		
1-in. treads and 3/4-in. risers tongued together on and including framed carriages	FS	
	Softwood	*4 11
		3 9
	Oak	*14 6
		12 10
1 1/2-in. x 11-in. wall string plugged to brickwork	FR	
	Softwood	*4 9
	Oak	*12 3
		10 9
1 1/2-in. x 9-in. outer string	FR	
	Softwood	*3 8
	Oak	*7 8
		6 9
Ends of treads and risers housed to strings	No.	
	Softwood	1 4 1/2
	Oak	6 9
2 1/2-in. x 3-in. moulded handrail	FR	
	Softwood	*3 4
	Oak	2 8
		*6 11
		5 11
1 1/2-in. x 1 1/2-in. square balusters	FR	
	Softwood	*9 6 1/2
	Oak	1 5
		1 2
Framed ends to balusters	No.	
	Softwood	7
	Oak	*10
IRONMONGER		
Market prices		
As prices for ironmongery vary so greatly depending upon the type and quality required, no prices are quoted here		
Measured rates		
The rates which follow are for fixing only and are inclusive of profit		

	s	d
3-in. steel butts	Pr.	
	to softwood	*4 9
	to hardwood	*6 4
Double action floor springs	No.	
	to softwood	*23 11
	to hardwood	*31 11
6-in. barrel bolts		
	to softwood	*2 2
	to hardwood	*2 11
Cupboard locks		
	to softwood	*4 6
	to hardwood	*6 0
Cylinder night latch		
	to softwood	*7 6
	to hardwood	*10 0
Mortice latch		
	to softwood	*6 0
	to hardwood	*8 0
Mortice lock		
	to softwood	*7 6
	to hardwood	*10 0
Casement fastener		
	to softwood	*1 10
	to hardwood	*2 5
Casement stays		
	to softwood	*1 10
	to hardwood	*2 5

STEEL & IRONWORKER

Market prices

Structural steel joist sections, basis sizes, ex mills T*792 6

Extras for other than basis sizes vary between 10s. and 70s. per ton

Measured rates

Rsj in steel framed structures hoisted and fixed complete T 1625 0
Riveted compound girders including plates and rivets T 1915 0
Rs stanchions including caps, bases, cleats etc. T 1885 0

Metal windows including cutting and pinning lugs to brickwork and bedding frames in cement mortar No.

Domestic type 4 ft. high to BS 993
Type ND2F 3 ft. 3 1/2 in. wide *95 1
78 1
Type HD2F 3 ft. 3 1/2 in. wide *102 5
85 5
Type ND11F 6 ft. 6 1/2 in. wide *163 1
133 1

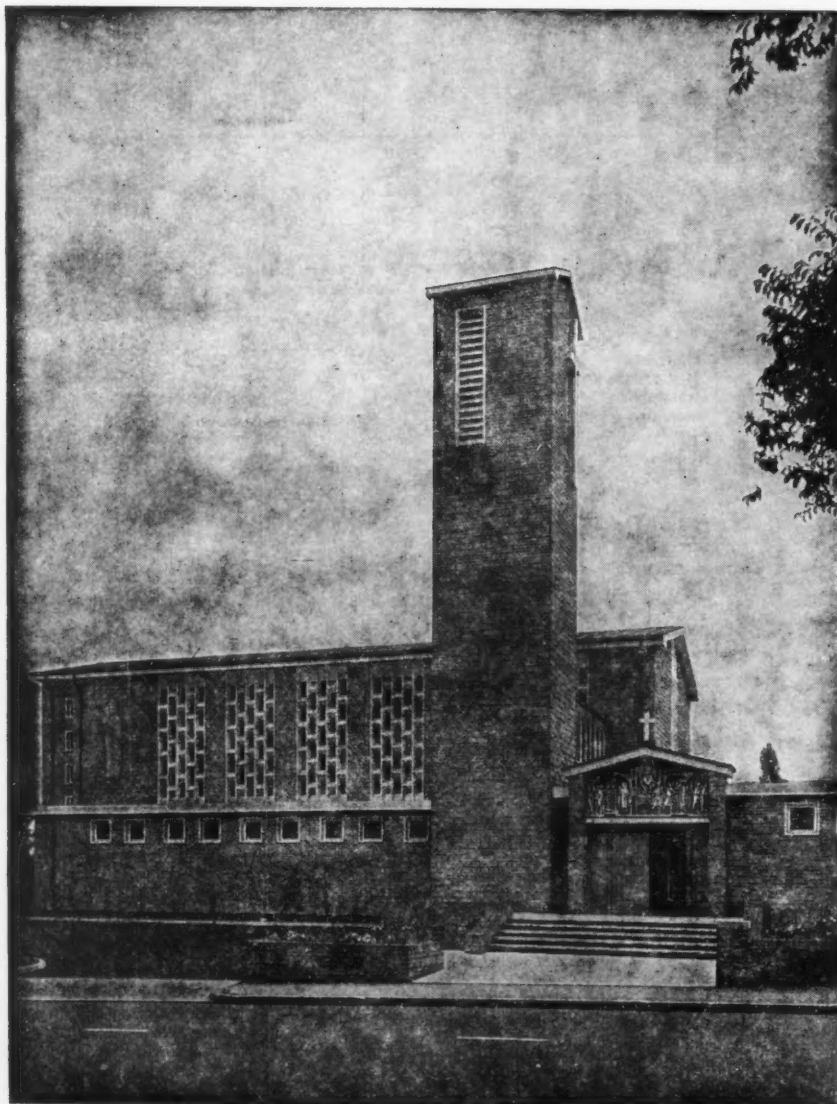
"Z" range, 4 ft. high
Type ZND1 2 ft. 0 1/2 in. wide *64 6
53 2
Type ZND4F 6 ft. 0 1/2 in. wide *164 6
134 7

PLASTERER

Market prices

Plastering sand YC *19 6
Plaster to BS 1191

The ROMAN CATHOLIC CHURCH **OF ST. THOMAS OF CANTERBURY** **Rainham, Kent**



Photograph : "The Builder" Newspaper

Send for Sample and full details

Ibstock

FACING BRICKS

IBSTOCK BRICK & TILE COMPANY LIMITED, Ibstock, near Leicester. Telephone : Ibstock 591 (3 lines)
London : L.M.R. Goods Depot, Wright's Lane, Kensington, W.8. Telephone : Western 1281 (2 lines)

Architects:

E. G. Dodds and
K. C. White, A.A./R.I.B.A.

Bricks:

2 $\frac{3}{8}$ " Buff Multi Rustle
Supplied through
R. Passmore & Co. Ltd.

General Contractor:

J. H. Durrant & Son.

Ibstock Buff Multi facing bricks were used for this new Roman Catholic Church because of their pleasant appearance and durability. Ibstock Facing Bricks are particularly suitable when it is desired to blend with the existing surroundings and are produced in a large range of colours.

technical section

Plasterer continued		s	d
Class B in loads of 2 tons to 3 tons 19 cwt.	T		
Browning	168	9	
Fibred browning	171	9	
Board finish	168	9	
$\frac{3}{4}$ in. plaster lath, over 600 yds.	YS	2	3 $\frac{1}{2}$
$\frac{1}{4}$ in. \times 6 in. \times 6 in. white glazed wall tiles	YS	17	0
Measured rates			
Metal lathing			
No. 24 gauge expanded metal lathing and fixing	YS		
To softwood soffits	*6	11	4 3
To metal	*7	8	4 3
Lime plaster			
Render float and set on brick walls and partitions	YS	*7	5 2 3
R.F. and S. on concrete including hacking	YS	*9	2 2 3
R.F. and S. on expanded metal lathing	YS	*7	6 2 4
Gypsum plaster			
Render in cement-lime-sand (1 : 1 : 6) and set in gypsum plaster on brick walls and partitions	YS	*5	11 1 11
Render in gypsum fibred browning-sand (1 : 1 $\frac{1}{2}$) and set in gypsum on concrete soffits including bonding coat	YS	*9	7 3 7
Render and set on expanded metal lathing including pricking up coat	YS	*9	1 3 11
Plaster board			
$\frac{3}{4}$ -in. gypsum plaster lath fixed to softwood soffits finished to receive plaster	YS	*4	10 2 10
Gypsum board finish setting coat on last	YS	*4	5 1 2
Plain face			
$\frac{1}{4}$ -in. Portland cement and sand (1 : 3) plain face trowelled smooth on brick walls	YS	*6	9 1 10
Tyrolean rendering			
Render in cement, lime sand (1 : 1 : 6) and finishing with three coats patent coloured mix preparations applied with hand operated machine	YS	*10	4 2 4

Splayed "Limpet" asbestos		s	d
Approximate prices for splayed "Limpet" asbestos on the following surfaces to the thickness shown for quantities of 1,000 yds. super. Normal pressed finish.			
New concrete soffits and beams	YS		
$\frac{1}{4}$ -in.	14	5	
$\frac{3}{4}$ -in.	19	8	
1-in.	21	9	
New structural steelwork			
	YS		
$\frac{1}{4}$ -in.	16	6	
$\frac{3}{4}$ -in.	21	9	
1-in.	23	10	
Extra over the above prices for coloured texture finish	YS	3	5
Wall tiling			
6 in. \times 6 in. \times $\frac{1}{4}$ in. standard quality white glazed wall tiles set and jointed on prepared screed	YS	*42	0
Egg shell matt or glossy glazed enamelled tiles	YS	*59	4
EXTERNAL PLUMBER			
Market prices			
Sheet lead, 3 $\frac{1}{2}$ lb. and upwards, in quantities of 5 cwt. to 1 ton	C*114	9	
Copper sheeting, 23 gauge, in 1-ton lots	C*350	0	
Zinc sheeting, 14 gauge, in 1-ton lots	C*128	0	
Aluminium sheeting 20 SWG C			
Super purity*522	8		
Commercial quality*336	0		
Cast iron rainwater and soil goods			
Medium weight pipe to BS 416 and BS 460 in 6 ft. lengths	No.		
$2\frac{1}{2}$ -in.	18	10	
3-in.	21	0	
4-in.	26	10	
Half round gutter in 6 ft. lengths	No.		
$3\frac{1}{2}$ -in.	7	11 $\frac{1}{2}$	
4-in.	10	4	
6-in.	16	11	
The above are Standard-List prices plus 22 $\frac{1}{2}$ %.			
Measured rates			
Milled sheet lead	C		
Flat roofs*201	0		
Gutters and flashings*201	0		
24 SWG copper sheet	FS		
Flat roofs	*6	1	
Gutters and flashings	*6	1	
23 SWG copper sheet	FS		
Flat roofs	*6	11	
Gutters and flashings	*6	11	
14 gauge zinc	FS		
Flat roofs	*3	8	
Gutters and flashings	*3	8	
20 SWG super purity aluminium	FS		
Flat roofs	*5	4	

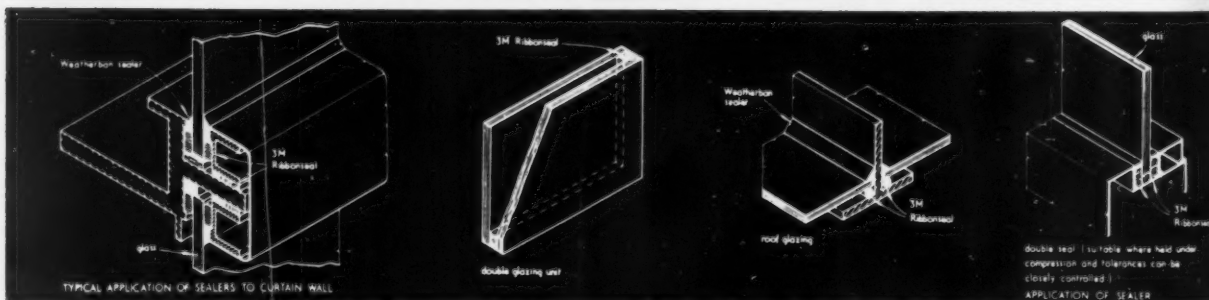
Gutters and flashings		s	d
20 SWG commercial quality aluminium	FS		
Flat roofs	*4	1	
Gutters and flashings	*4	1	
Rainwater gutters and pipes			
$\frac{1}{4}$ -in. cast iron half round eaves gutter jointed and fixed to fascia with brackets	FR		
4-in.	3	6	
6-in.	5	2	
18 gauge pressed steel half round eaves gutter	FR		
4-in.	3	2	
6-in.	4	3	
Asbestos cement half round eaves gutter	FR		
4-in.	2	11	
6-in.	4	2	
Aluminium half round eaves gutter	FR		
4-in.	3	11	
Cast iron medium section rain water pipes jointed and fixed to walls with pipe nails	FR		
3-in.	*5	11	
4-in.	*7	5	
Pressed steel	FR		
3-in.	4	6	
4-in.	6	4	
Asbestos cement	FR		
3-in.	*3	10	
4-in.	*4	11	
Aluminium	FR		
3-in.	5	4	
4-in.	7	2	
Soil and ventilating pipes			
Lead soil, waste and ventilating pipes (15 lb. per yd. for 3-in. and 19 lb. per yd. for 4-in. diameter) fixed to walls with lead tacks	FR		
3-in.	*11	7	
4-in.	*15	5	
Cast iron soil, waste and ventilating pipes with caulked joints fixed to walls with pipe nails	FR		
3-in. heavy	*7	3	
4-in. heavy	*8	10	
Asbestos cement soil and ventilating pipe fixed to walls with holder bats	FR		
3-in.	*3	11	
4-in.	*5	0	



Experience
has shown that

RIBBONSEAL

is an effective and
durable joint sealing
strip — particularly
where held under
compression



RIBBONSEAL is one
of the range of 3M
adhesives and sealers for
the building industry

3M Brand RIBBONSEAL Joint Sealing Strip is a synthetic rubber sealer which provides an effective and durable waterproof seal where it can be held under compression and tolerances closely controlled.

RIBBONSEAL can be used in glazing, between glass and rebate, between infill panels, between metal assemblies, or as a seal in double glazing units.

RIBBONSEAL has the outstanding property of resistance to all types of fungal attack. This has been demonstrated by the complete absence of growth of common air-borne moulds such as *Apergillus* sp. and *Penicillium* sp. in optimum conditions while some sealers of similar type tend to support heavy to moderate growths

even in normal temperature and humid conditions.

RIBBONSEAL is available in a wide range of pre-formed sections and diameters supplied in cartons and in handy reels. This pre-form has many advantages over conventional methods. No special flow or air pressure equipment is necessary, waste is eliminated and little or no clean up is required. Application is therefore very quick and the sealer can be put in place immediately if required.

Write now for your copy of the RIBBONSEAL leaflet.



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technical section

INTERNAL PLUMBER

Market prices

Lead pipe in quantities of 5 cwt. to 1 ton	C	
BS 602*117	0	
BS 1085*124	0	

Polythene tubing, heavy gauge, in quantities of 500 to 999 ft.	per 100 ft.	
$\frac{1}{2}$ -in.*112	0	
$\frac{3}{4}$ -in.*152	6	
1-in.*194	6	

Steel tubes to BS 1387 medium weight galvanised	FR	
$\frac{1}{2}$ -in.	0 9	
$\frac{3}{4}$ -in.	1 1	
1-in.	1 5	
$1\frac{1}{2}$ -in.	1 8	

The above are Standard List
prices less 36 $\frac{1}{2}$ %.

Galvanised malleable fittings.	No.	
Bend		
1-in.	*2 8 $\frac{1}{2}$	
$\frac{3}{4}$ -in.	*4 1	
$\frac{1}{2}$ -in.	*5 10	
Tee		
1-in.	*0 11 $\frac{1}{2}$	
$\frac{3}{4}$ -in.	*1 4 $\frac{1}{2}$	
1-in.	*1 11 $\frac{1}{2}$	
$\frac{3}{4}$ -in.	*2 8 $\frac{1}{2}$	
$\frac{1}{2}$ -in.	*3 10 $\frac{3}{4}$	

The above are Standard List
prices less 26%, less 6 $\frac{1}{4}$ % plus
40%.

Copper tubes to BS 659	FR	
$\frac{1}{2}$ -in.	*1 0 $\frac{1}{2}$	
$\frac{3}{4}$ -in.	*1 5 $\frac{1}{2}$	
1-in.	*2 3	
$1\frac{1}{2}$ -in.	*2 8 $\frac{1}{2}$	

The above are calculated on a
basic price of 2s. 7 $\frac{1}{2}$ d. per lb.
plus C.T.A. extras.

Measured rates

Lead pipe to BS 602

Main supply and laying in
trench (measured separately)
at the following sizes and
weights in lbs.

	FR	
$\frac{1}{2}$ -in. 7	*3 11	
	2 10	
$\frac{3}{4}$ -in. 11	*5 9	
	4 5	
1-in. 16	*8 0	
	6 6	
$1\frac{1}{2}$ -in. 28	*13 7	
	11 3	
$1\frac{1}{2}$ -in. 35	*17 5	
	14 0	

Main supply fixed to walls
and ceilings

	FR	
$\frac{1}{2}$ -in. 7	*4 6	
	2 11	
$\frac{3}{4}$ -in. 11	*6 5	
	4 6	
1-in. 16	*8 9	
	6 7	
$1\frac{1}{2}$ -in. 28	*14 4	
	11 4	
$1\frac{1}{2}$ -in. 35	*18 9	
	14 1	

Distributing pipes fixed to
walls and ceilings

	FR	
$\frac{1}{2}$ -in. 4	*3 3	
	1 9	
$\frac{3}{4}$ -in. 5	*3 9	
	2 2	
1-in. 7	*4 11	
	3 1	
$1\frac{1}{2}$ -in. 9	*5 9	
	3 11	
$1\frac{1}{2}$ -in. 12	*7 6	
	5 3	

Flushing and warning pipes
fixed to softwood

	FR	
$\frac{3}{4}$ -in. 4	3 7	
	1 8	
1-in. 5	4 6	
	2 0	
$1\frac{1}{2}$ -in. 6	5 7	
	2 6	
$1\frac{1}{2}$ -in. 7	6 1	
	2 10	

Waste pipes and fixings to
softwood

	FR	
$1\frac{1}{2}$ -in. 6	5 7	
	2 7	
$1\frac{1}{2}$ -in. 7	6 1	
	3 0	

Joints to fittings

	No.	
$\frac{1}{2}$ -in.	6 3	
	1 5	
$\frac{3}{4}$ -in.	7 1	
	2 2	
1-in.	7 6	
	2 10	
$1\frac{1}{2}$ -in.	8 3	
	3 7	
$1\frac{1}{2}$ -in.	9 0	
	4 3	

Extra for:

	Bend No.	
$\frac{1}{2}$ -in.	2 9	
$1\frac{1}{2}$ -in.	3 10	

Branch joints

	No.	
$\frac{1}{2}$ -in.	7 11	
	1 5	
$\frac{3}{4}$ -in.	9 1	
	2 2	
1-in.	9 6	
	2 10	
$1\frac{1}{2}$ -in.	11 2	
	3 7	
$1\frac{1}{2}$ -in.	12 9	
	4 3	

Polythene tubing to BS 1972

Heavy gauge as supply pipe
laid in trench (measured
separately)

	FR	
$\frac{1}{2}$ -in.	*1 8	
	1 3	
$\frac{3}{4}$ -in.	*2 2	
	1 9	
1-in.	*2 8	
	2 3	

Heavy gauge as supply or
distributing pipe fixed to
walls

	FR	
$\frac{1}{2}$ -in.	*2 6	
	1 4	
$\frac{3}{4}$ -in.	*3 0	
	1 10	
1-in.	*3 6	
	2 4	

Galvanised steel tubing to BS 1387

Heavy weight with screwed red
lead joints as supply pipe
laid in trench (measured
separately)

	FR	
$\frac{1}{2}$ -in.	2 9	
	10	
$\frac{3}{4}$ -in.	3 2	
	1 0	
1-in.	3 4	
	1 5	
$1\frac{1}{2}$ -in.	*3 11	
	1 10	
$1\frac{1}{2}$ -in.	*5 1	
	2 2	

Medium weight tubing fixed to
walls

	FR	
$\frac{1}{2}$ -in.	2 8	
	10	
$\frac{3}{4}$ -in.	3 1	
	1 0	
1-in.	*3 4	
	1 3	
$1\frac{1}{2}$ -in.	*3 10	
	1 8	
$1\frac{1}{2}$ -in.	*5 0	
	2 0	

Extra for malleable iron:

Bend No.

1-in.	*5 1	
	3 0	
$1\frac{1}{2}$ -in.	*7 2	
	4 4	
$1\frac{1}{2}$ -in.	*9 4	
	6 5	

Tee No.

$\frac{1}{2}$ -in.	*3 1	
	1 0	
$\frac{3}{4}$ -in.	*3 4	
	1 4	
1-in.	*4 0	
	2 1	
$1\frac{1}{2}$ -in.	*5 6	
	3 0	
$1\frac{1}{2}$ -in.	*6 10	
	4 3	

Copper tube

Copper tube to BS 1386 as
supply pipe laid in trench
(measured separately) to the
following size and gauge:

	FR	
$\frac{1}{2}$ -in. 18	2 2	
	1 4	
$\frac{3}{4}$ -in. 17	3 1	
	2 2	
1-in. 16	4 2	
	3 2	
$1\frac{1}{2}$ -in. 16	5 6	
	4 3	
$1\frac{1}{2}$ -in. 15	7 1	
	5 6	

Copper tube to BS 659 as
distributing pipe fixed to
walls

	FR	
$\frac{1}{2}$ -in. 19	2 3	
	1 2	
$\frac{3}{4}$ -in. 19	2 9	
	1 8	
1-in. 18	3 8	
	2 6	
$1\frac{1}{2}$ -in. 18	4 7	
	3 0	
$1\frac{1}{2}$ -in. 18	5 4	
	3 7	

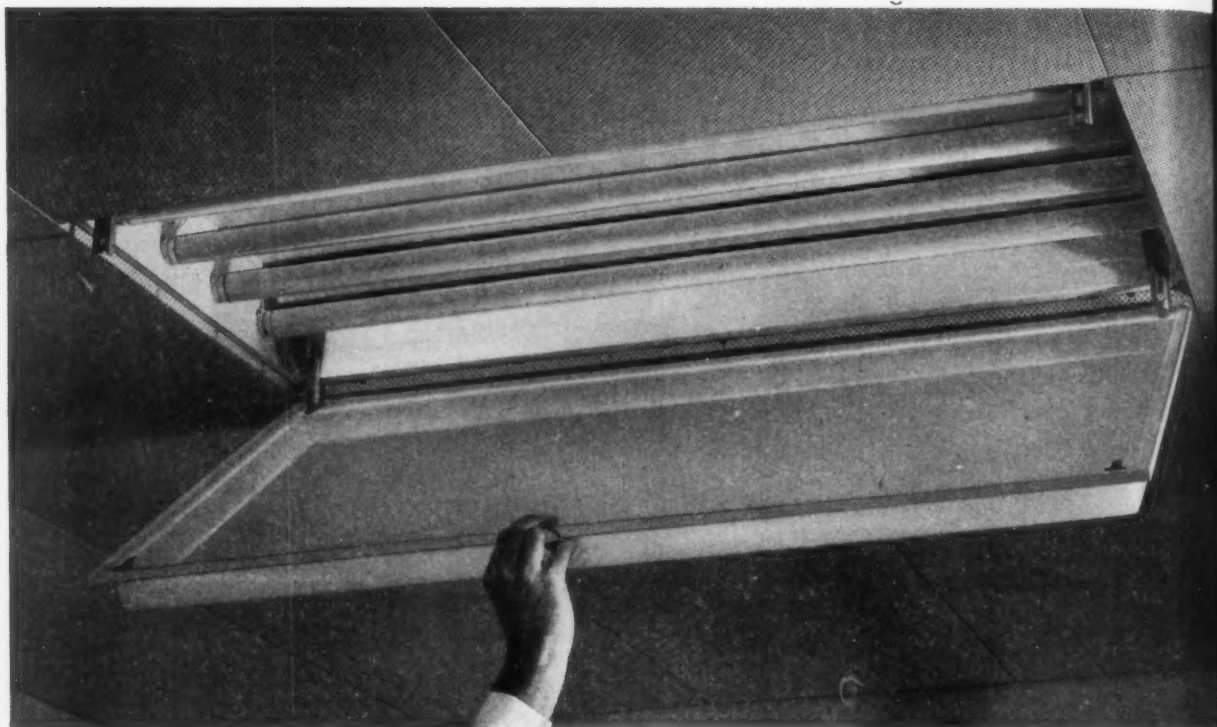
Extra for brass compression
fittings joining copper to
copper

No.

Coupling $\frac{1}{2}$ -in.	5 1	
	3 3	
$\frac{3}{4}$ -in.	6 4	
	4 0	
1-in.	8 11	
	5 10	
$1\frac{1}{2}$ -in.	11 2	
	7 7	
$1\frac{1}{2}$ -in.	15 3	
	11 0	
Bend $\frac{1}{2}$ -in.	6 4	
	4 6	
$\frac{3}{4}$ -in.	7 11	
	5 6	

ALLOM HEFFER

AND COMPANY LIMITED



The recessed fittings illustrated are made in various sizes and incorporate a completely new method of securing simple maintenance by means of the Allom Heffer patent locking device (Patent Application No. 32933/59) which provides:

- A positive method of opening and shutting on a pull-push principle.
- Hinging on either side of the fitting when fully clear of the ceiling.
- Complete detachment of the diffuser when required.

Apply for Brochure series 707



technical section

Internal plumber continued s d

1-in.	11	4
	8	3
1½-in.	14	2
	10	6
1½-in.	23	1
	18	11
Tee ½-in.	9	4
	6	1
¾-in.	10	10
	7	0
1-in.	15	10
	11	4
1½-in.	21	6
	16	5
1½-in.	32	1
	26	5

GLAZIER

Market prices

Sheet glass cut to size	FS	
24 oz.	*0	11½
32 oz.	*1	6½

¼-in. Polished plate glass,
glazing quality in plates
not exceeding:

	FS	
2 ft. super	4	7
5 ft. super	5	7
45 ft. super	6	9
100 ft. super	7	4

Rolled plate glass	FS	
½-in. rolled plate	*1	2½
½-in. Georgian wired	6	2

Attention is drawn to
reduction in certain glass
prices offered by manufac-
turers for acceptance of
specified minimum quantities
of one size and substance
delivered to one address at
one time

Measured rates

Glazing to wood

Ordinary quality sheet glass
and glazing with putty in
squares

	FS	
24 oz. O.Q.	1	6
32 oz. O.Q.	2	1

½-in. rolled plate glass	1	8
--------------------------	---	---

½-in. rough cast glass	2	1
------------------------	---	---

Prismatic glass	2	9
-----------------	---	---

½-in. wired glass	2	5
-------------------	---	---

½-in. Georgian wired plate glass	8	4
-------------------------------------	---	---

½-in. Polished plate glass (glazing quality) in plates 5 to 45 ft. super	8	7
--	---	---

Glazing to metal

Add to above rates 1d.
per ft. super

Sundries

Hacking out broken sheet glass	FS	1 3
-----------------------------------	----	-----

Black ribbon velvet and bedding to edge of glass	FR	8
---	----	---

Double glazing
Insulight units of two skins
of glass with lead spacers

and glazing with mastic for
beads (supplied). In panels
16 to 40 ft. super FS
32 oz. sheet 10 11
½-in. polished plate 22 3

Patent glazing

Patent glazing with rolled
steel lead capped bars for
8-ft. spans and glazing with
½-in. Georgian wired cast FS 4 10

Aluminium alloy patent
glazing FS *4 9

PAINTER

Market prices

Washable distemper C 120 0

Emulsion paint Gal. 45 0

Hard gloss paint: Gal.
Undercoat 46 0
Finishing 46 0

Measured rates

On walls and ceilings YS

Twice whitened plastered
ceilings *1 6
3

Two coats distemper on
plastered walls or ceilings *2 3
1 0

Two coats distemper on
fair-faced brick or concrete
walls *2 9
1 3

Two coats emulsion paint on
walls or ceilings *2 11
1 8

Prepare, prime and apply one
coat oil colour on plastered
walls *3 11
1 9

Add for each additional coat *1 9
10

On metal

Prepare, prime and apply one
coat oil colour on general
surfaces YS

Basis price *3 8
1 6
Add for each additional coat 1 8
10

On metal casements YS
Basis price *5 11
1 6

Add for each additional coat *2 7
10

On bars, angles etc., not
exceeding 6-in. girth YR
Basis price *1 0
3

Add for each additional coat 5
2

On small pipes YR
Basis price *1 0
3

Add for each additional coat 5
2

On large pipes YR
Basis price *2 0
6

Add for each additional coat 10
3

Prepare, prime and apply one
coat heat-resisting paint on
heating surfaces of radiators

YS
Basis price *4 3
1 4

Add for each additional coat *1 11
8

On wood

Knot, prime, stop and apply
one coat oil colour on
general surfaces YS

Basis price *4 1
1 8

Add for each additional coat 1 8
10

On work not exceeding 3-in.
girth YR

Basis price 6
1½

Add for each additional coat 2½
1

For each additional 3-in.
girth YR

Basis price *6
1½

Add for each additional coat 2½
1

Stain and varnish

Prepare, size, stain and twice
varnish on general surfaces
of woodwork YS

*4 6
1 9

On work not exceeding 3-in.
girth YR

7
1½

For each additional 3-in.
girth YR

6
1½

Oiling and polishing

Twice oiling general surfaces
of hardwood with linseed oil

YS 2 7
1 1

On work not exceeding 3-in.
girth YR

3
1

For each additional 3-in.
girth YR

3
1

Staining and wax polishing
general surfaces of hardwood

FS 1 1

Staining bodying-in and fully
French polishing on general
surfaces of hardwood

FS 2 8

Papering

Preparing and sizing walls
and hanging plain lining
paper Piece

*11 1
3 3

Hanging wall paper, p.c. 10s.
per piece Piece

*21 1
12 9

Hanging border p.c. 1s. per
yd. YR

1 9
1 3

The Brandon Estate at Southwark, where FF Joints have been used to complete the plumbing installation for this 18-storey block of L.C.C. flats.



The **FF** Joint

accepted by over 100 Local Authorities
The established development
for all plumbing systems

Literature is available showing the FF Joint's many applications in all types of plumbing layouts for multi-storey flats and two-storey houses including the Single Stack System.

The FF Joint is a Federated Foundries product.

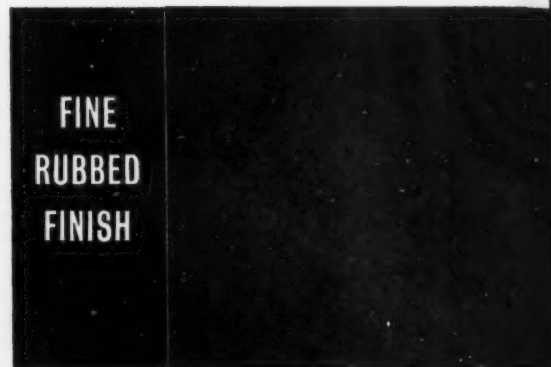
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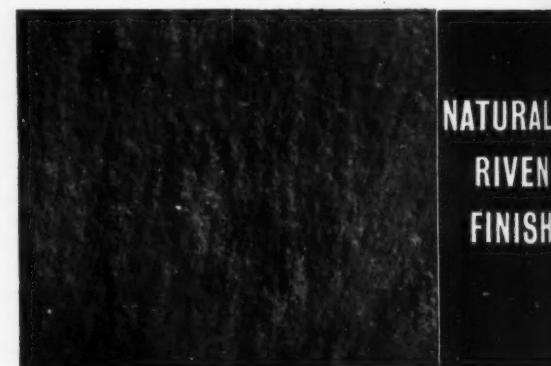
Lasting beauty



in Broughton Moor



Green Slate



Technical pamphlets showing typical methods of fixing are available on application:

1. Flooring
2. Facings.
3. Coping.
4. Cills
5. Riven Face Slabs.

In three distinct colours:

Light Sea Green, Olive Green and Pale Green

Barred

Broughton Moor

GREEN SLATE QUARRIES LTD.

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working detail

(31) d2

WINDOWS: 78

WINDOW: HOSPITAL IN SWINDON

Powell and Moya, architects

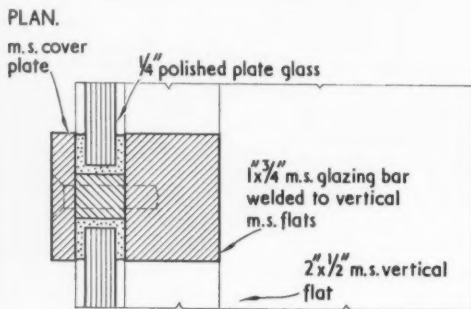
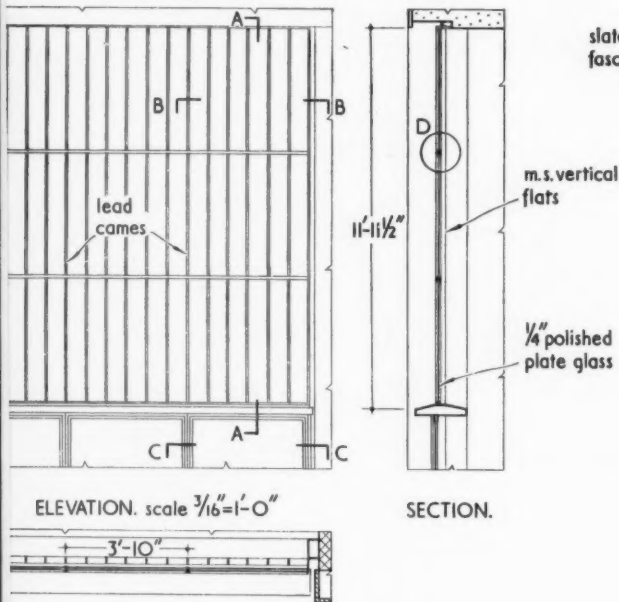
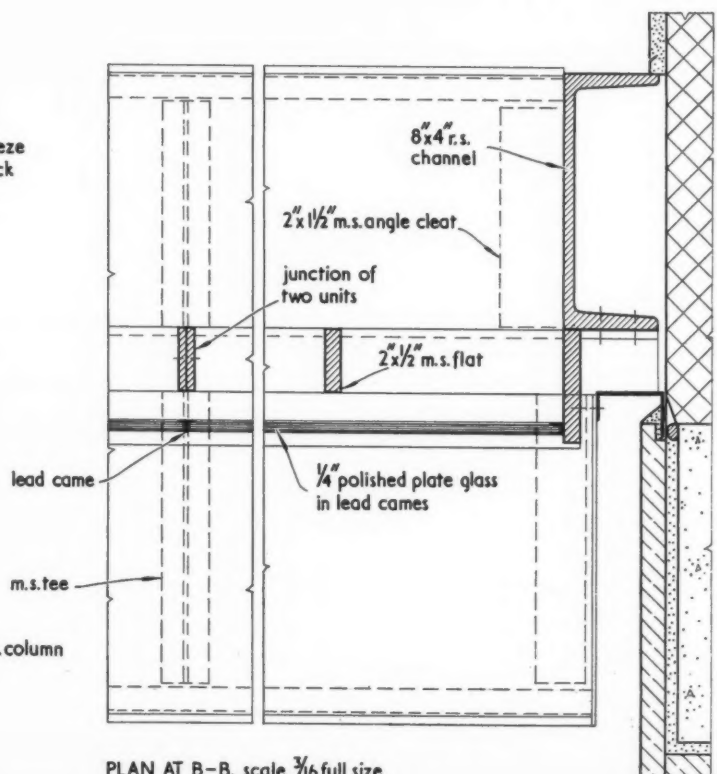
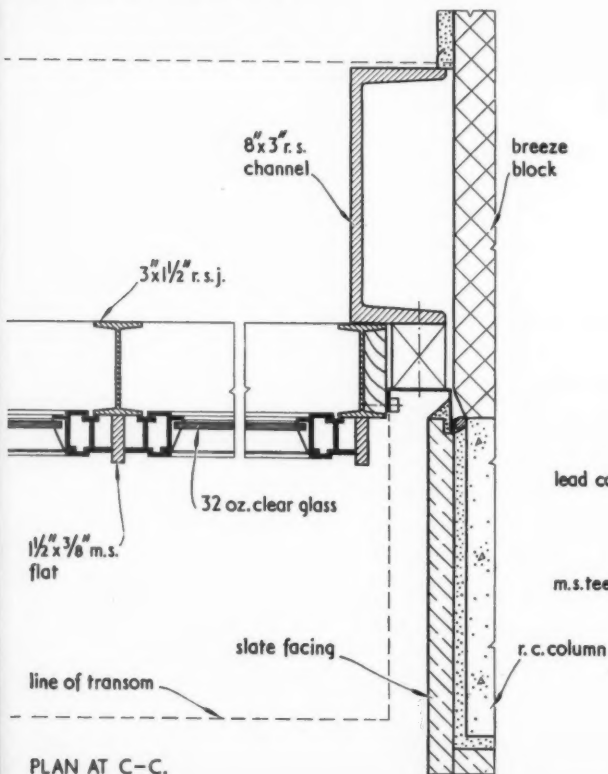
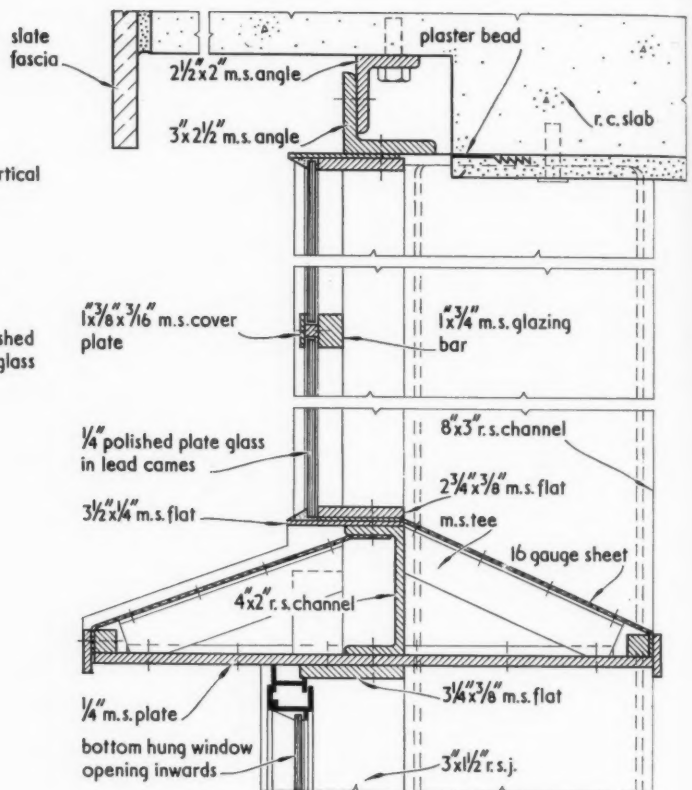


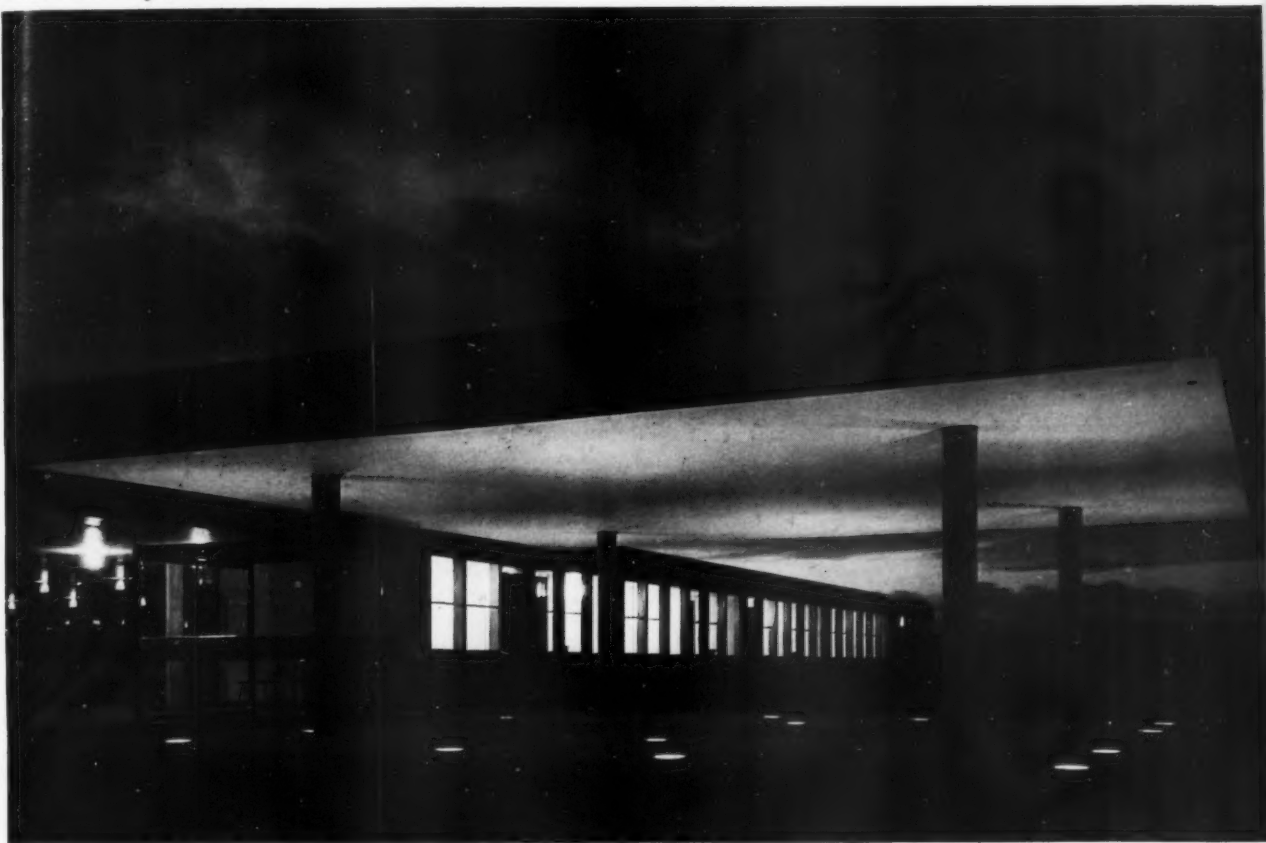
The original purpose of the fin-like mullions of this window was to direct the gaze of those inside towards the magnificent distant view. This purpose has not been perfectly fulfilled, but the window remains an interesting example of detailing in steel. The steel members are sufficiently slight to give the open-air sense which comes from structure-to-structure glazing, yet they are sufficiently frequent and substantial to make an architectural plane and not merely a void.

working detail

WINDOW: HOSPITAL IN SWINDON

Powell and Moya, architects

DETAIL AT D. scale $\frac{3}{4}$ full size

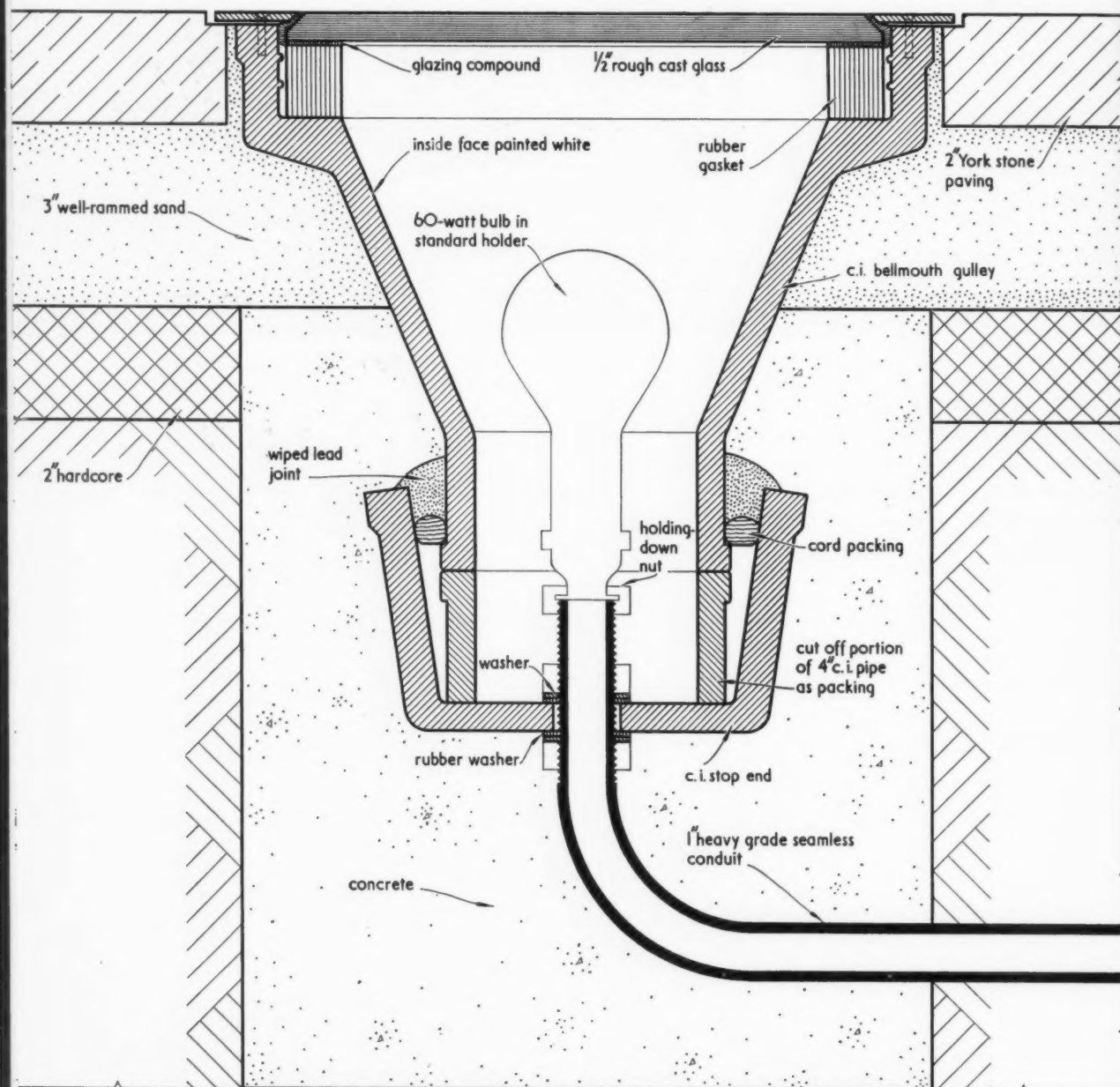
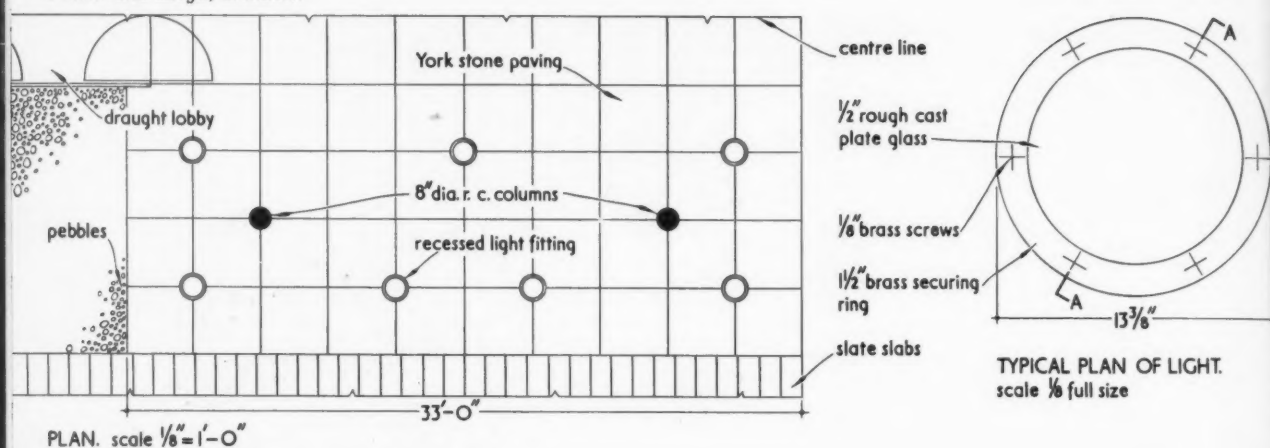
working detail**FLOOR LIGHTS: HOSPITAL IN SWINDON***Powell and Moya, architects*

This ingenious adaptation of standard cast-iron drain-ware enables an exceedingly sophisticated lighting effect to be obtained at modest cost. Though the fact is of no practical and only slight visual importance, most of the ½-in. rough cast glass covers have cracked and some stronger material in this position is called for.

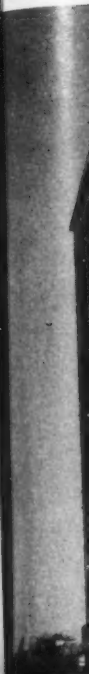
working detail

FLOOR LIGHTS: HOSPITAL IN SWINDON

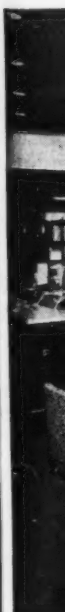
Powell and Moya, architects

SECTION A-A. scale $\frac{3}{8}$ full size





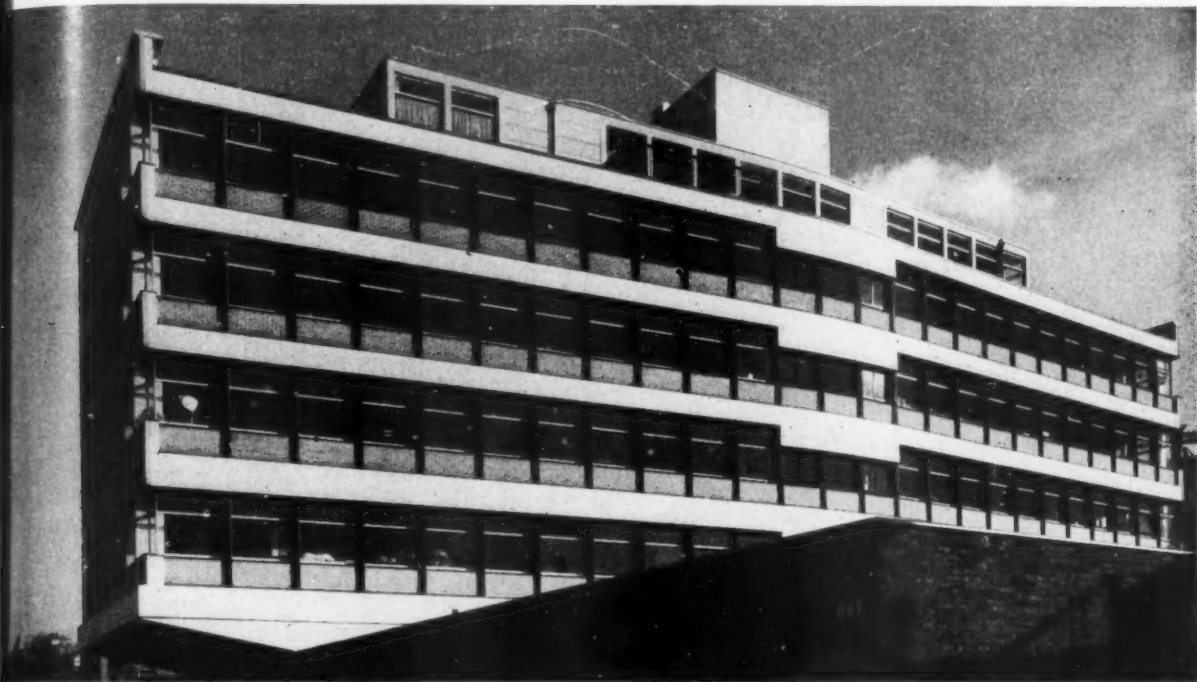
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BRON

LCC SCHOOL EQUIPMENT CENTRE IN LAMBETH



London's new School Equipment Centre in Kennington Lane, Lambeth, replaces premises scattered all over London, and provides all kinds of equipment for the schools. It has been designed by Hubert Bennett, architect to the LCC, on a "propped-cantilever" system of construction in reinforced post-stressed concrete, so that it could accommodate 60-ft. long display galleries showing the best prize books, films, pictures and apparatus to teachers coming to select their requirements. The building contains offices, workshops and kilns, and maintenance facilities and stockrooms.

Where cleanliness is part of service...



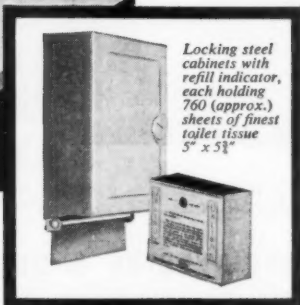
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Box Co. Ltd., London • Vauxhall Motors Ltd., Luton • The Steel Company
of Wales and many others.

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ONLIWON

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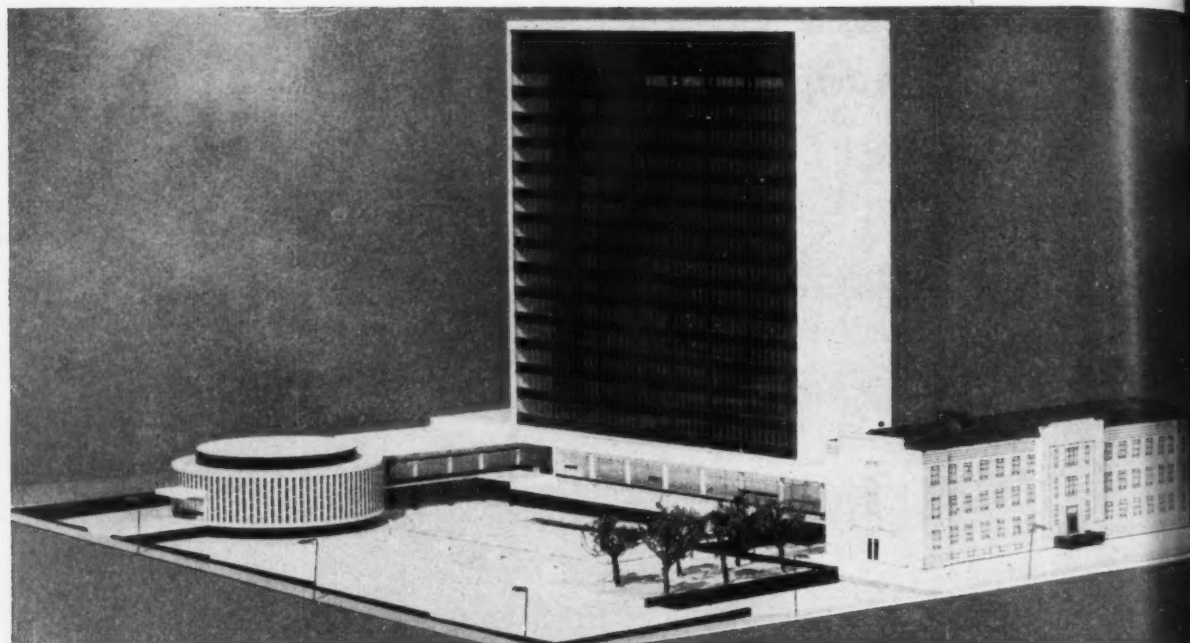
teamed with toilet tissue
for washroom hygiene

Locking steel cabinets in green
or white, each holding 150 large,
strong, absorbent paper towels.



BRONCO LTD., formerly British Patent Perforated Paper Co. Ltd., London, E.9. Tel: AMHerst 4777 (5 lines). Manufacturers of Bronco toilet rolls and packets

MODEL OF NEW COUNTY OFFICES FOR LANARK



Lanark will have the most up-to-date county buildings in Scotland when these new buildings, designed by D. G. Bannerman, consultant architect, (consultant engineer, W. V. Zimm), are completed. Clearance of the 3.7-acre site starts in June, apart from the block of county offices built in 1936 seen on the right. The scheme consists of a 17-storey office block with extended ground and first floors and a 2-storey wing at right angles to the tower, linking it with the circular council chamber on the left. The tower will provide 93,000 sq. ft. of office accommodation, designed for sub-division by movable unit partitions; its north and south elevations will consist of anodised aluminium curtain walls with glass infill panels—all fixed as the building will be air conditioned throughout.



Architects: Messrs. Stanley Peach & Partners.
Quantity Surveyors: Messrs. W. S. Fidgen & Sons.

Wherever the sign of Howard Farro appears, there is work in progress.

This photograph illustrates the factory and office buildings, engineering services, external roads and other works for Corocraft Ltd., at Crawley Industrial Estate.

Work in progress includes sewerage tunnelling, concrete structures, factory and domestic buildings.

A folder giving a selection of Howard Farro contracts covering a wide field of projects gladly be sent on request.

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THE DURGAPUR STEELWORKS

PROJECT The photograph shows a view of the Soaking Pit Building in course of erection. This is one of several buildings which were designed, fabricated and erected by Joseph Parks and Son Ltd. for the Durgapur Steel Project in India.

When you design a loading bay



what size lorry do you cater for?



Until there is a British Standard for lorries, the loading dock itself must move to fit varying heights—and that means a Hunter counterbalanced loading ramp. Lewis Berger (Great Britain) Ltd., like most big manufacturers, run a mixed fleet of transport, and so in their new Chadwell Heath Warehouse they have incorporated Hunter ramps in the loading dock. The famous 'Bergermaster' paints, in pallet loads of 15 cwt to 1 ton, are trolleyed straight on to road vehicles—whatever their height.

The Hunter counterbalanced ramp is completely self-contained and needs no power supply, it is easily raised or lowered by hand to the correct height. It can withstand a load of six tons and has a working range extending 15" above and 9" below the dock height. Hunter ramps can be recessed into the dock, or extended outwards from the face of the dock. They are inexpensive and need little maintenance.

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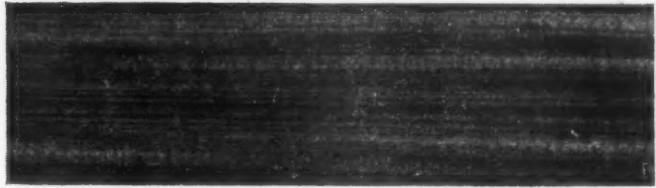
TA 3546

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*Rich colour —
fine grain*

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Mellow and warm in colour Beauty Plank gives a sense of dignity and permanence to the room, office or shop in which it is used.



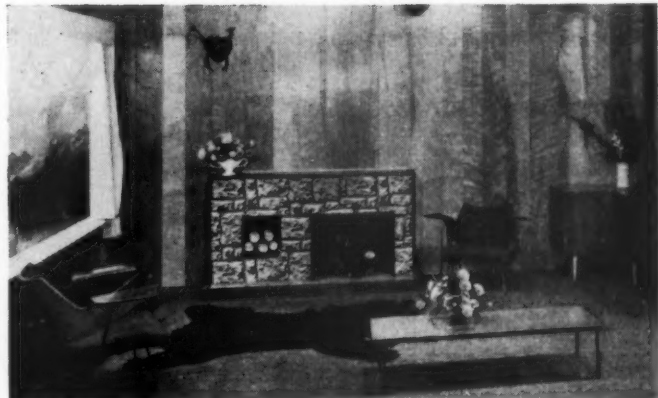
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American Black Walnut



Rotary Cut Red Oak



NATURAL BIRCH clear fine grain, TIAMA reddish brown in colour, AMERICAN BLACK CHERRY a delicate brownish colour, AFRICAN MAHOGANY uniform in tone, ASH bold grain, ROTARY CUT RED OAK distinctive rose tone, AMERICAN BLACK WALNUT dark lustrous wood, RIFT RED OAK deep rich grain.

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AT4a Technical details, N.P.L. Report, and extract from Joint Fire Research Organisation report.

ATH2 Radiantly heated by hot water.

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AT7 Module sizes, introduction to Motif Tile.

AT8 Fire report on Radiantly heated ceiling.

AT8 RIBTILE Introduction to the new Burgess Ribtile.

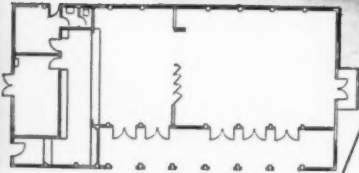
SHEETS 1 TO 4 Details of Burgess suspension system.

Leaflets illustrated are available on request together with price list and names of distributors.

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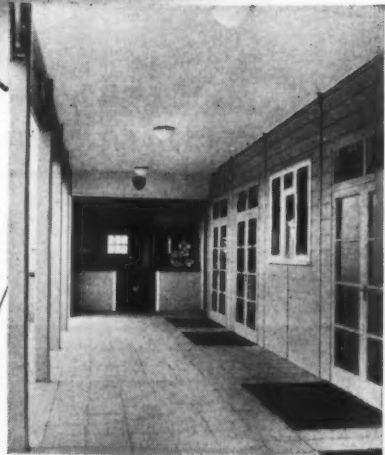
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Photographs by courtesy of Hart's Holiday Club, Leysdown, Isle of Sheppey

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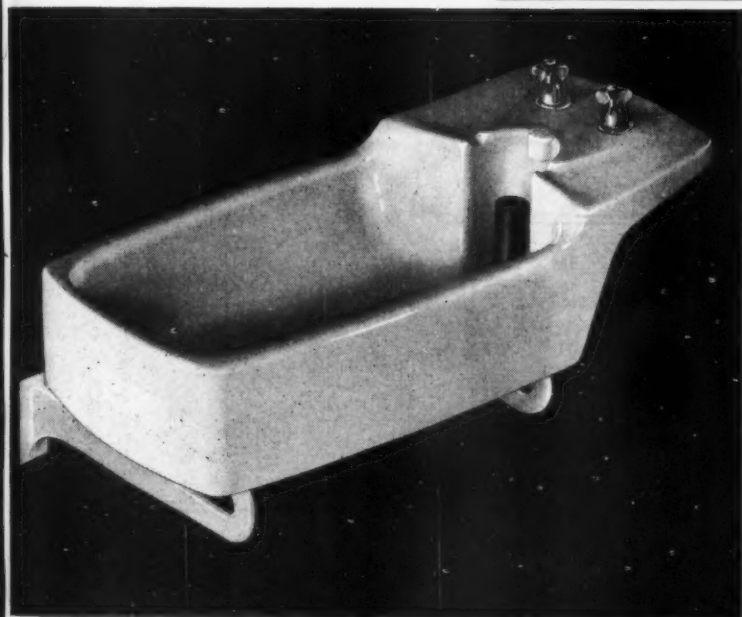
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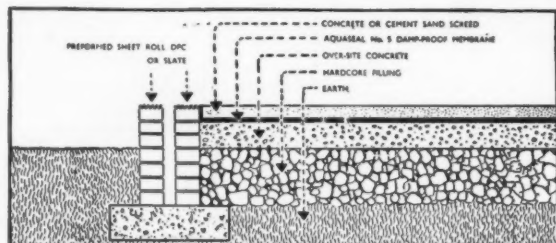
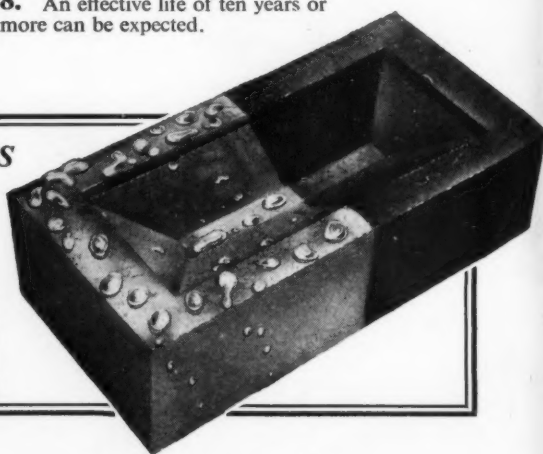
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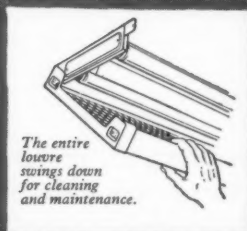
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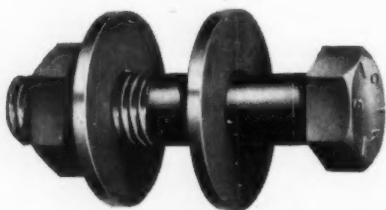
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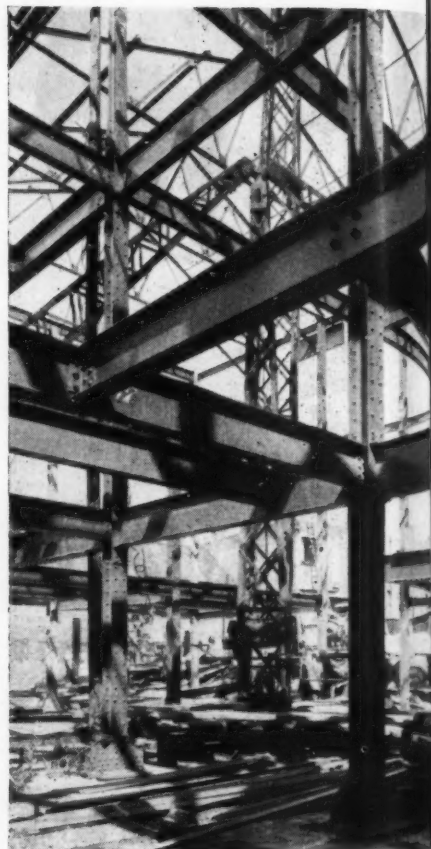
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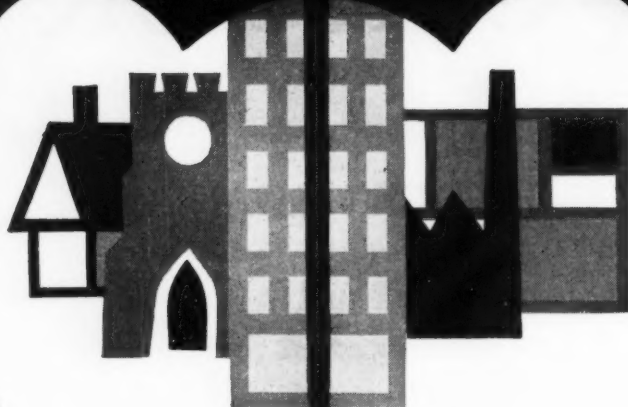
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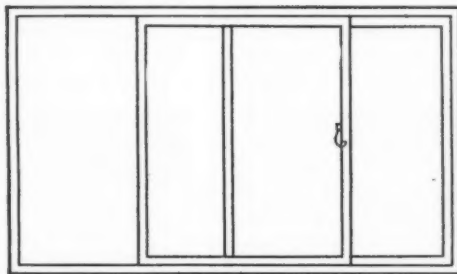
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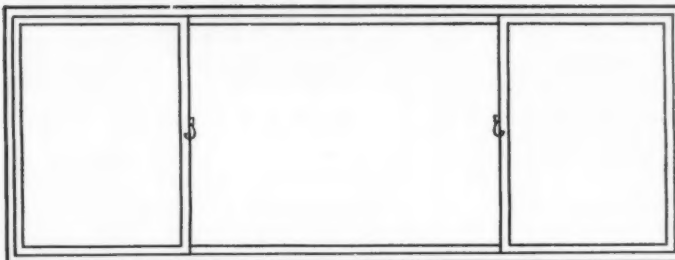
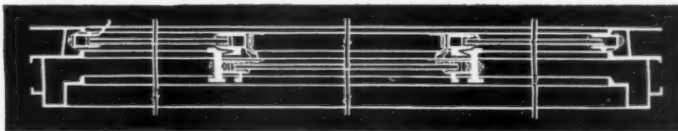
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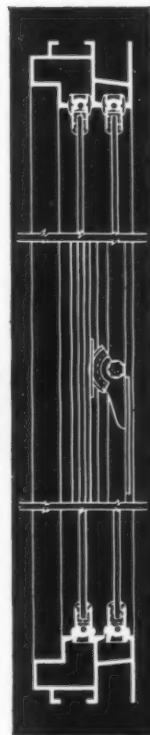
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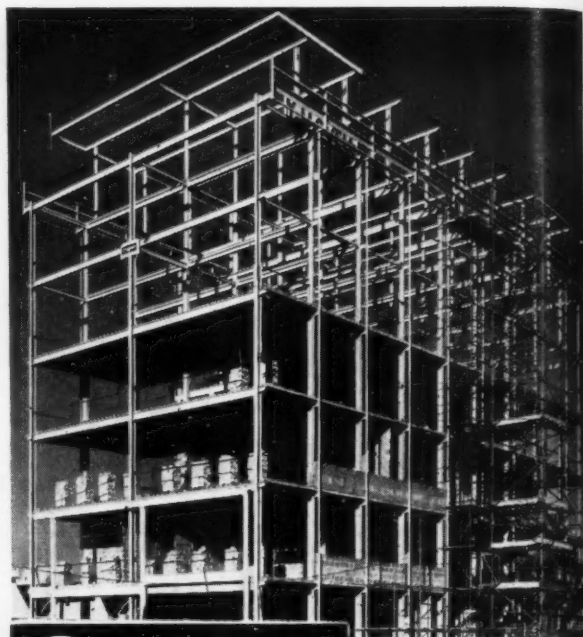
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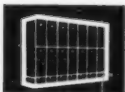
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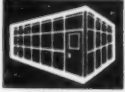
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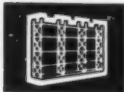
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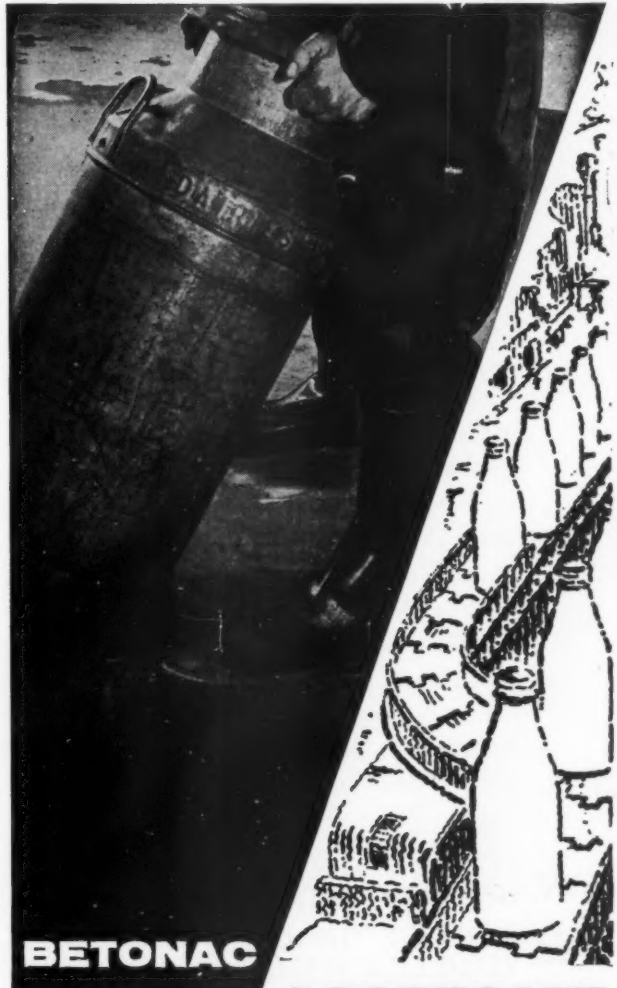


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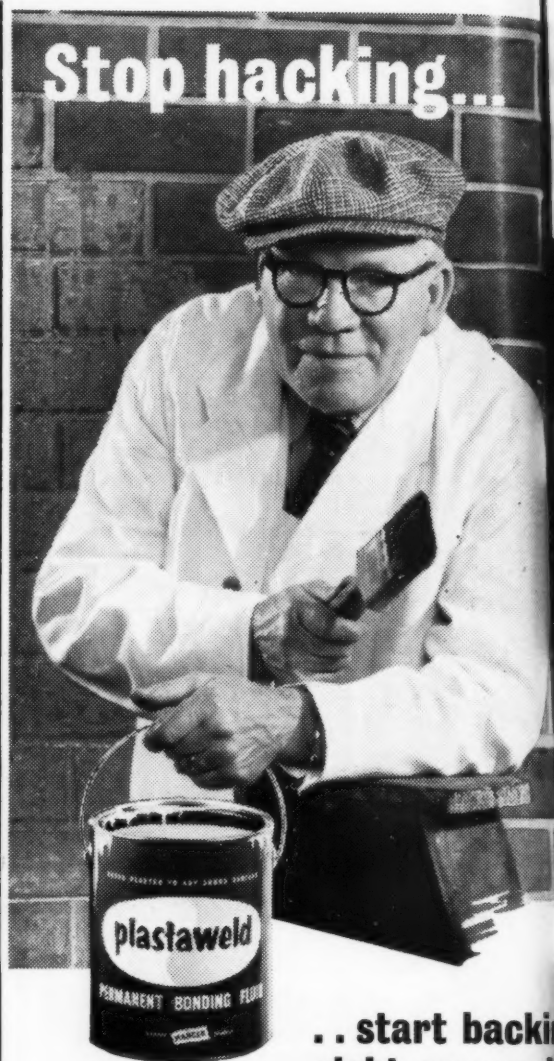
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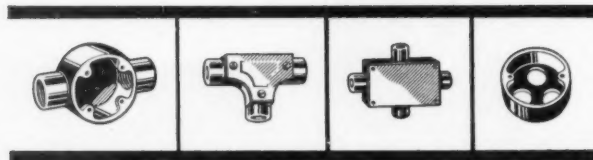
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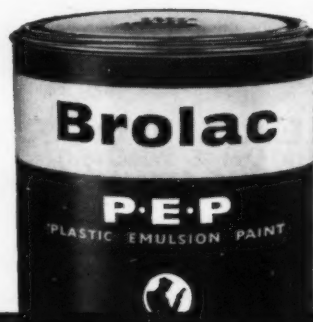


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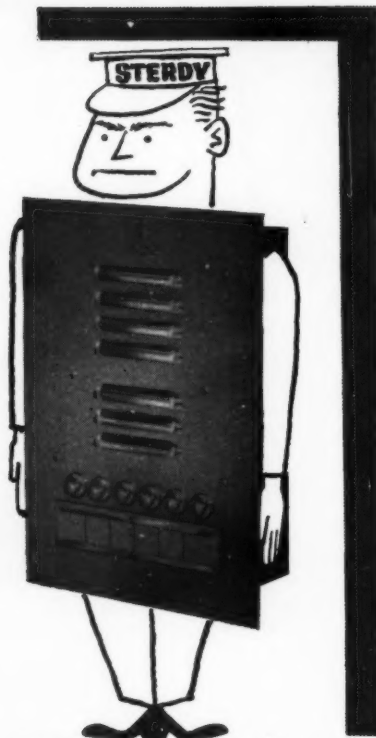
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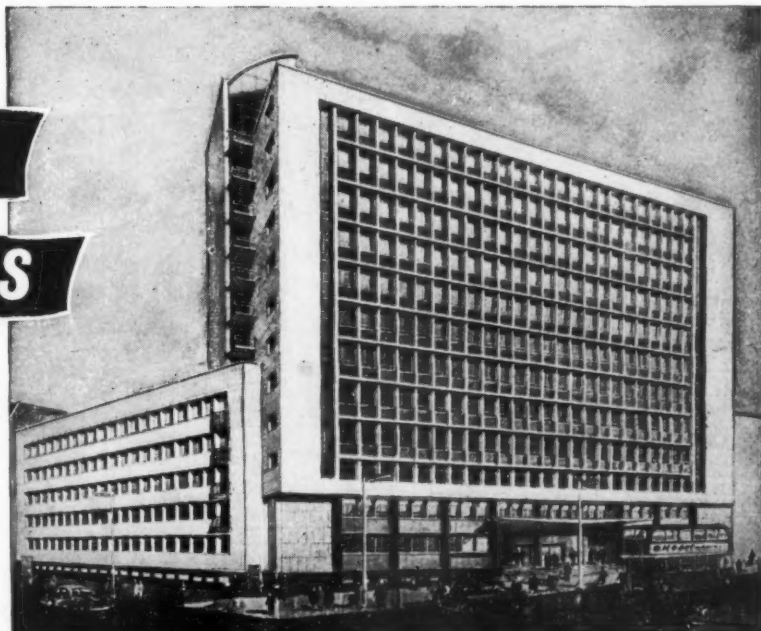
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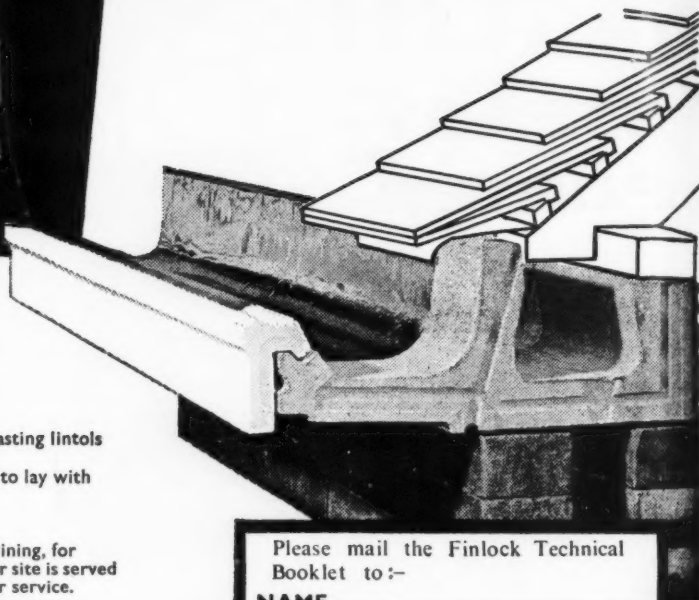
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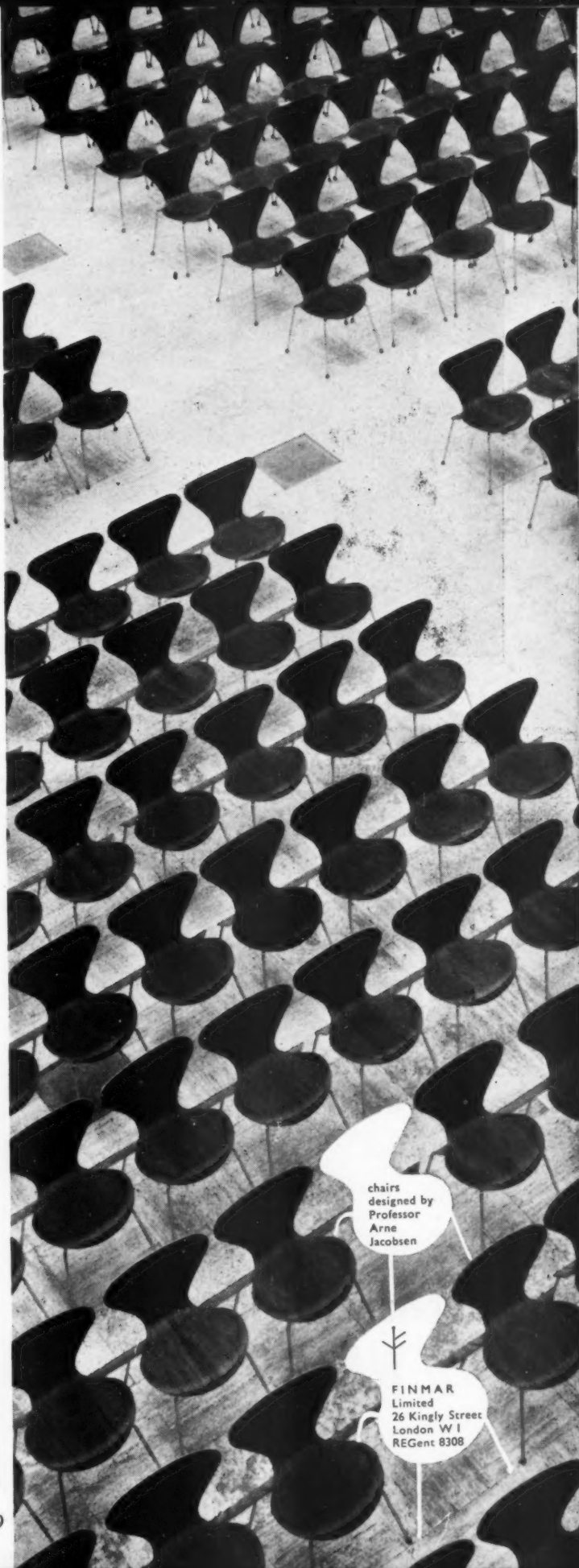
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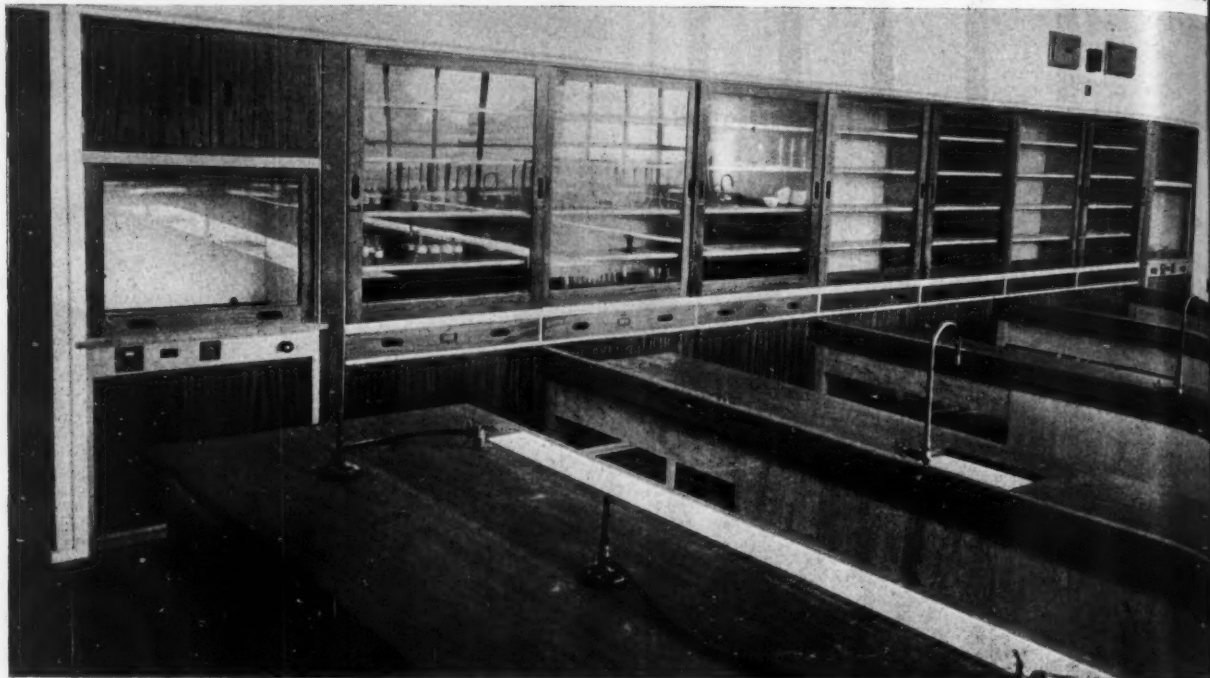
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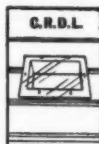
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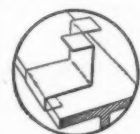
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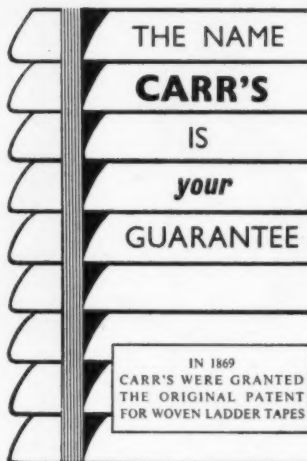
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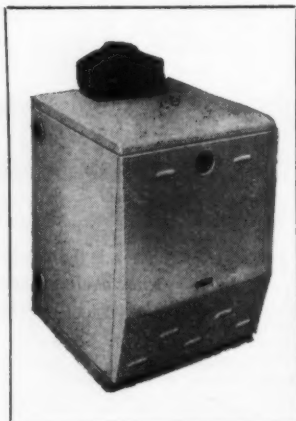
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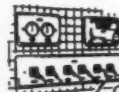
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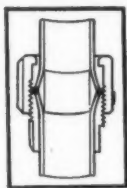


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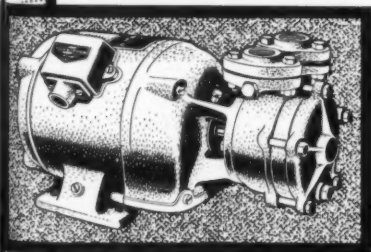
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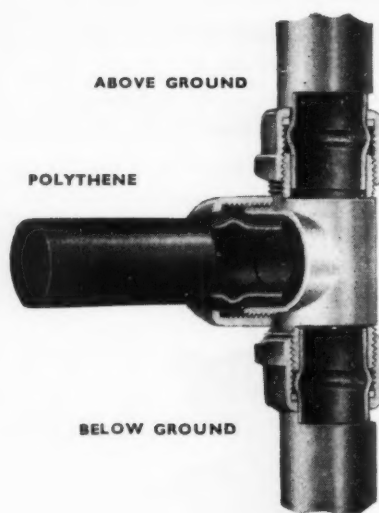
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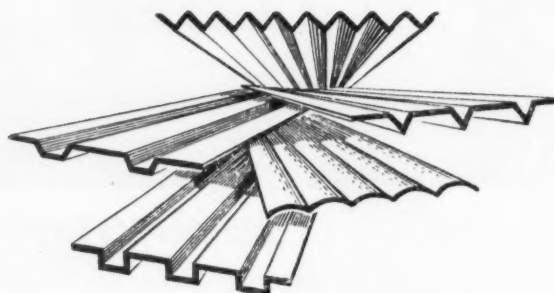
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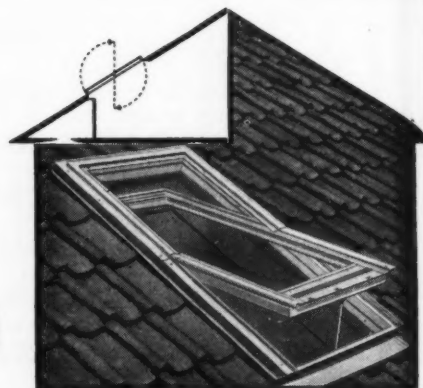
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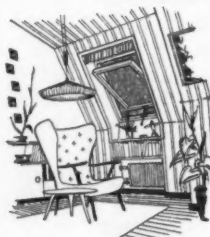


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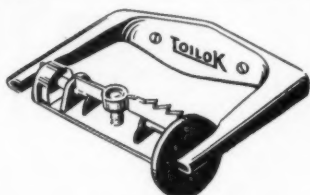
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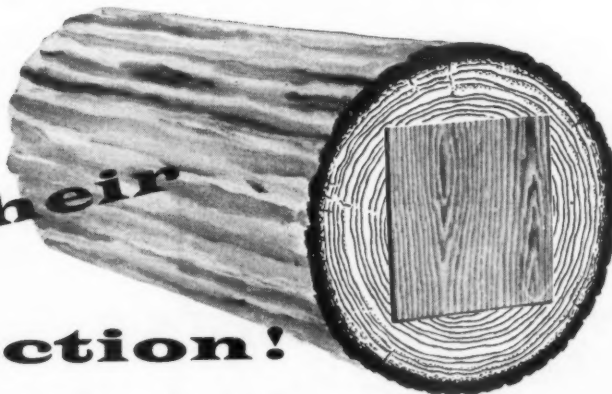
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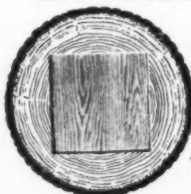
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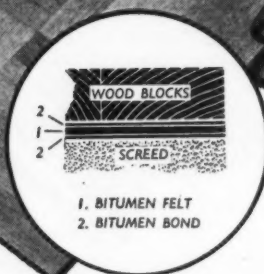
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All the necessary components are supplied for assembly by unskilled labour. Alternatively they can be supplied and erected by Marley experts. Prices from £55 cash or attractive credit terms.

All garages may be extended in length by multiples of 1' 4"



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Width 7' 10"
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MARLEY MEDIUM

Width 9' 2"
Lengths 14' 1" to 22' 4"



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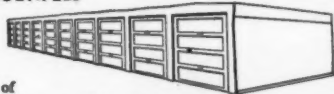
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Width 8' 6"
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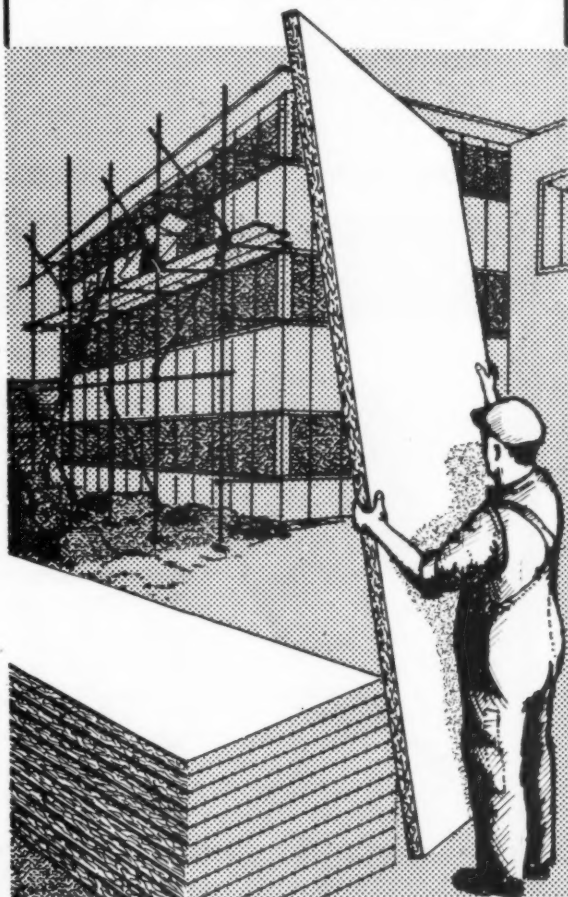
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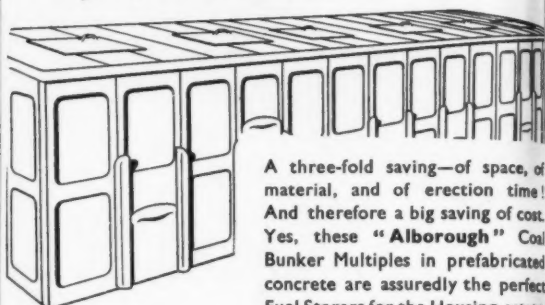
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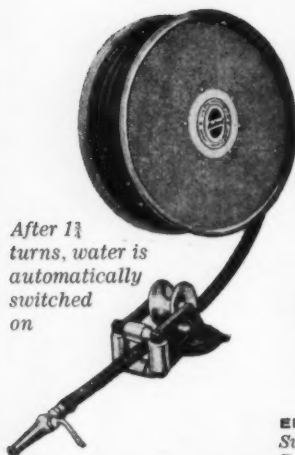
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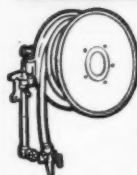
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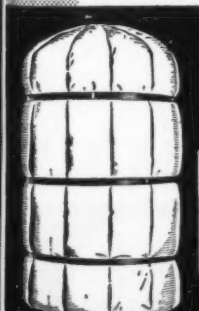
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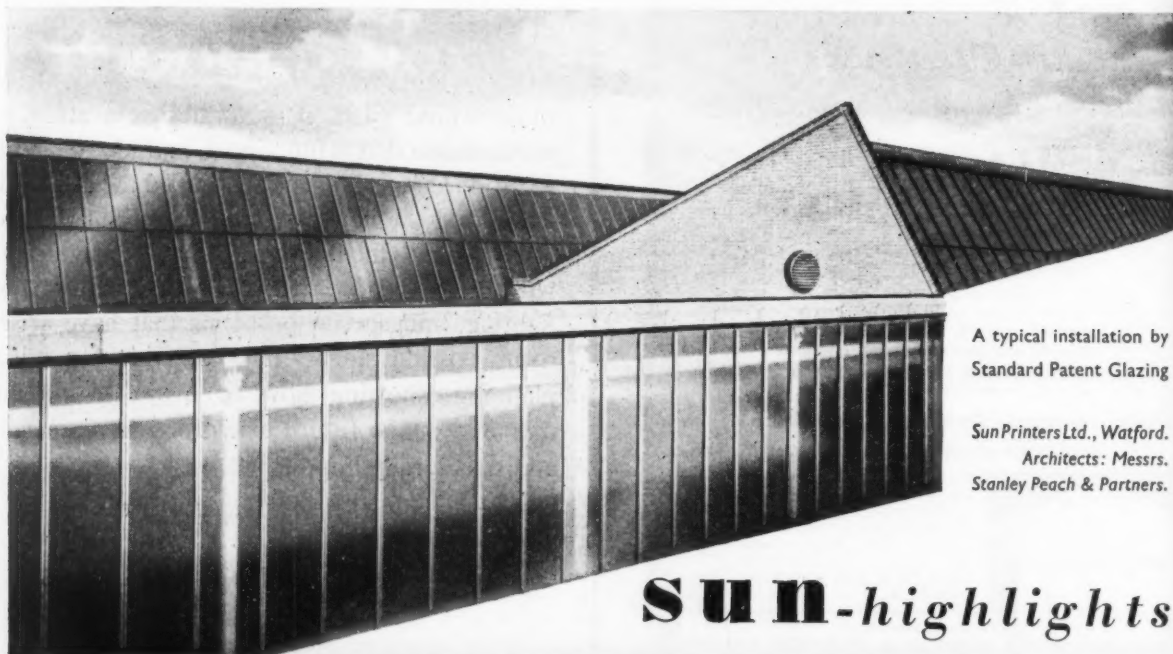
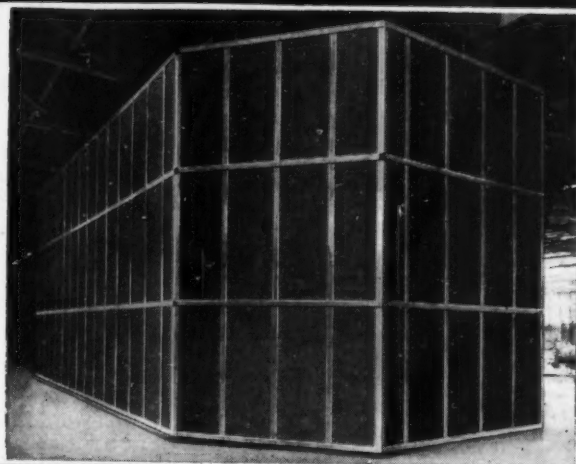
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CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1. Normal printing arrangements have been altered to allow for the Easter holiday. The latest dates for receiving advertisements for the April issues are as follows:—

April 14 issue—Thursday, April 7.

April 21 issue—Tuesday, April 12.

April 28 issue—Friday, April 22.

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

AIR-MAIL SERVICE available on request.

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

Public and Official Announcements

3s. per inch; each additional line, 3s.

BOROUGH OF ENFIELD BOROUGH ENGINEER & SURVEYOR'S DEPARTMENT

Applications are invited for the post of ARCHITECTURAL ASSISTANT, Grade A.P.T. I £610-£765 per annum, plus a London Weighting allowance of £10-£30 per annum according to age.

Applicants must have had experience in the preparation of plans, specifications, etc., including the maintenance of public buildings.

Saturday mornings are normally free of duty. Application forms obtainable from H. D. Peake, M.Sc.(Eng.), M.I.C.E., Borough Engineer & Surveyor, 7 Little Park Gardens, Enfield, Middx., returnable to the undersigned.

CYRIL E. C. R. PLATTEN,
Town Clerk. 8454

BUILDING SURVEYORS
Architect's Department, L.C.C., has vacancies in Building Regulation Division and District Surveyors' Service for work in connection with applications under London Building Acts and Byelaws. District Surveyors' Offices are located in Metropolitan Boroughs and work involves negotiations with developers and supervision of works in progress.
Up to £1,135 (under review) commencing according to qualifications and experience. Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/AJ/494/4a), County Hall, S.E.1. 9076

CORPORATION OF GLASGOW ARCHITECTURAL AND PLANNING DEPARTMENT

ASSISTANT QUANTITY SURVEYORS
Vacancies exist for a number of qualified assistants as above. Salary scale £795-£1,240 with placing according to experience.
Applications should be addressed to the City Architect and Planning Officer, 20, Trongate, Glasgow, C.1. Those who have submitted applications during the past 12 months should not reply to this advertisement.

A. G. JURY,
City Architect and Planning Officer. 9015

ARCHITECTS AND BUILDING SURVEYORS
Vacancies in Architect's Department, L.C.C., for Architects or Building Surveyors experienced in surveying existing buildings, preparing sketch schemes, working drawings and specifications and supervising works in progress, for the complete internal replanning and modernisation of the older blocks of Council flats (jobs up to £50,000).

Applicants should have initiative, a real interest in this type of work and ability to act on their own judgment since the maximum opportunity will be afforded for each to carry his job through from survey to completion. Salaries range £700-£1,135 (under review). Promotion by merit.

Application form from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/AJ/620/4a), County Hall, S.E.1. 9139

METROPOLITAN BOROUGH OF BATTERSEA

Applications are invited for the following permanent appointments:—

- (i) ASSISTANT ARCHITECT—
A.P.T. Grade III £680-£1,065 per annum.
- (ii) ARCHITECTURAL ASSISTANT—
A.P.T. Grade I £610-£765 per annum.

London Weighting £10-£30 per annum according to age, also payable.
For appointment (i) applicants should be registered architects or have passed the final R.I.B.A. Examination and have had several years thorough office experience. Previous Local Government experience is not essential. The commencing salary will be according to qualifications and experience.

Further particulars and application forms obtainable from the Borough Engineer and Surveyor, Town Hall, S.W.11. Closing date 25th April. 9470

HAYES & HARRINGTON U.D.C.

Applications are invited for:—

- (a) ASSISTANT ARCHITECT. Salary within Special Grade, i.e., £785-£1,070 p.a.
- (b) ARCHITECTURAL ASSISTANTS (Two). Salary within Grade A.P.T. II, i.e., £765-£880 p.a.

Plus appropriate London weighting in all cases, 21-25 years, £20 p.a.; 26 years and over, £30 p.a. Preference will be given to candidates for (a) who have passed the examination for Associateship of the R.I.B.A. and who must be capable of preparing sketch designs, full working drawings, specifications, supervision of building contracts, etc. Applicants for (b) should have passed the intermediate examination of the R.I.B.A. and must have good general architectural experience. Five-day week. Housing accommodation if required will be made available for (a) and for one of the appointments (b). Further particulars and conditions of service and form of application obtainable from the undersigned, which when completed must be returned by 19th April, 1960.

GEORGE HOOPER,
Clerk and Solicitor.

Town Hall,
Hayes, Middlesex. 9226

COUNTY BOROUGH OF DUDLEY

ASSISTANT ARCHITECT A.P.T. SPECIAL GRADE (£795-£1,075)

Applications are invited for the above permanent appointment in the Borough Architect's Department.

Applicants must be A.R.I.B.A., and the commencing salary will be according to qualifications and experience.

The successful applicant will be required to pass a medical examination.

Applications, stating age, details of training, qualifications and experience, present and previous appointments and salary, together with the names and addresses of two referees, must be received by me by Thursday, 21st April, 1960.

P. D. WADSWORTH,
Town Clerk.

The Council House,
Dudley,
Worcs.
24th March, 1960. 9329

CITY OF HALIFAX, NOVA SCOTIA, CANADA PLANNING ASSISTANT

Urgently required to assist in work on an extensive redevelopment programme and master plan for the City. Candidates to this new post should be qualified planners or when experience in planning work. Additional qualification in architecture would be an advantage.

Salary range \$4,455 to \$5,632, plus 5% per annum depending on qualifications and experience. Help in defraying travelling expenses from overseas a strong possibility for the successful candidate.

The work will include design for commercial and residential redevelopment of the central areas and preparation of master plan for the whole of Halifax. It will offer excellent opportunities to the successful candidate for progressive planning work and professional advancement.

Apply by Air Mail enclosing a recent photograph and stating age, marital status, education, training, details of experience, names and addresses of three references and when available to K. M. Munnich, D.A., S.P.Dip., A.R.I.B.A., A.M.T.P.L., Director of Planning, City Hall, Halifax, Nova Scotia, Canada. Persons who have already replied to previous advertisements need not apply again. Their applications will be automatically reconsidered. 9371

THE RURAL DISTRICT COUNCIL OF GODSTONE

CHIEF ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment in the Engineer & Surveyor's Department at a salary in accordance with A.P.T. Grade V of the National Scales (£1,220-£1,375 p.a.). A car allowance on the essential user basis (not exceeding 10 h.p. or 1,199 c.c.) is payable.

The Council have a varied and interesting building programme on hand, including blocks of 3-storey shops and flats, aged persons' flats, and various other building projects, including a community centre.

The appointment will be subject to: (i) the provisions of the Local Government Superannuation Acts, (ii) The National Scheme of Conditions of Service, (iii) one month's notice in writing on either side.

The Council will assist in the provision of housing accommodation, if required.

Applications, stating age, qualifications and experience, together with the names and addresses of two persons to whom reference may be made should reach the undersigned not later than the 13th April, 1960.

M. HAWORTH,
Clerk of the Council.

Council Offices,
Oxted, Surrey. 9280

LONDON COUNTY COUNCIL ARCHITECTURAL DRAUGHTSMEN

Unqualified ARCHITECTURAL ASSISTANTS required in Housing Division, Architect's Department. Candidates must have drawing board experience in an architect's office. Preference to those proposing to qualify by evening study though others will be considered. Full programme of new work. Promotion opportunities. Starting salaries according to age and experience. Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/AJ/619/4a), County Hall, S.E.1. 9154

CITY OF LEEDS

CITY ARCHITECT'S DEPARTMENT
Applications are invited for vacancies in the following grades:—

1. SENIOR ASSISTANT ARCHITECTS
Grade A.P.T.V. (£1,220-£1,375).
2. SENIOR ASSISTANT ARCHITECTS
Grade A.P.T.IV. (£1,065-£1,220).
3. ASSISTANT ARCHITECTS
Grade A.P.T.III. (£880-£1,065).
4. ASSISTANT ARCHITECTS
Grade A.P.T.II. (£765-£880).
5. ARCHITECTURAL ASSISTANTS
Grade A.P.T.I. (£610-£765).

Applicants for Posts Nos. 1 and 2 should be fully qualified and members of the R.I.B.A. Applicants for posts Nos. 3 and 4 should preferably have passed the intermediate R.I.B.A. examination.

In addition to large annual programmes for both housing, including multi-storey dwellings, and schools, a number of interesting projects are likely to be carried out in the near future, e.g., public baths, abattoir and meat markets, fruit and vegetable markets, civic hall extensions, branch colleges and hostels.

The recently appointed City Architect, Mr. J. R. Sheridan-Shedden, Dip.Arch., F.R.I.B.A., will be taking up his appointment in the near future and, as groups of architects are being formed to deal with these projects, applicants will be considered on their capability for design, experience, contemporary outlook and suitability for inclusion in such groups.

The appointments are superannuable and the successful applicants will be required to pass a medical examination.

Application forms may be obtained from the Acting City Architect, Priestley House, Quarry Hill, Leeds 9, to whom they must be returned not later than 12 noon on Friday, 22nd April, 1960.

Canvassing in any form, either directly or indirectly, will be a disqualification.

P. B. HASWELL,
Acting City Architect.

Priestley House,
Quarry Hill,
Leeds, 9. 9480

BOROUGH OF SOLIHULL

APPOINTMENT OF LANDSCAPE ARCHITECT

Applications are invited from members of the Institute of Landscape Architects who have had considerable experience, for appointment as Landscape Architect in the Borough Engineer and Surveyor's Department at a salary in accordance with A.P.T. Grade IV—£1,065-£1,220 (1) + £50(2)—£1,220.

The rapid growth of the Borough has necessitated the development of public open spaces and playing fields, as well as the landscaping of housing estates, etc.

Half the reasonable cost of removal expenses will be paid and where applicable housing accommodation made available as soon as possible.

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

Applications, giving full particulars as to present and past experience, together with the names and addresses of two referees, should be submitted to the Borough Surveyor, 90, Station Road, Solihull, not later than 26th April, 1960.

W. MAURICE MELL,
Town Clerk.

The Council House,
Solihull,
30th March, 1960. 9496

GLENROTHES DEVELOPMENT CORPORATION

ARCHITECT/PLANNER required on grade £1,220-£1,375 with placing according to qualifications and experience. Applicants must hold the Final examination of the Town Planning Institute. An additional architectural or engineering qualification would be advantageous. Candidates should have sound planning experience including the layout of large residential developments, central and industrial areas. Medical examination for Superannuation Scheme. House to rent available if required. Application forms from Secretary and Legal Adviser, Glenrothes Development Corporation, Glenrothes, Fife, to be returned by 16th April, 1960. 9315

ARCHITECTS required by Director General Navy Works Department of Admiralty at Headquarters (Pinner, Middlesex), Portsmouth and Devonport. Duties embrace design of sleeping, messing and recreation buildings for single officers and men, houses, flats and housing estates, instructional buildings, office blocks, hospitals and industrial buildings. Candidates work under superintendence of Senior Architect and expected to take charge of group of architectural assistants. Quails A.R.I.B.A., British subjects with first class design ability and sound working knowledge of up-to-date forms of construction, materials and costs. Scope for development and application of new ideas in design of Naval buildings. Posts are main grade, inclusive salary range of £1,285 to £1,730 (slight variations depending on location), non-pensionable, but long term possibilities. Entry normally at minimum but higher starting salary may be offered to outstanding candidates. Five-day week and five weeks annual leave. Forms quoting reference J103/OA from Ministry of Labour, Technical and Scientific Register (K), Almack House, 26 King Street, London, S.W.1. 9440

**LONDON TRANSPORT EXECUTIVE
INVITES APPLICATIONS FROM
ARCHITECTS**

for the following vacancies in the office of the Architect.

ASSISTANT ARCHITECTS. Salary range £1,020 p.a.—£1,185 p.a. Ref. F/EV 784/A.

Candidates must be fully qualified and capable of supervising staff.

ARCHITECTURAL ASSISTANTS. Salary range £855 p.a.—£1,020 p.a. Ref. F/EV 784/B.

Candidates should be qualified to R.I.B.A. Intermediate standard with previous office experience.

Appointments are subject to medical examination. Successful applicants will qualify for free travel and will be required to join a contributory superannuation fund after a probationary period. No Saturdays.

Applications quoting reference number of post applied for and giving age, qualifications and full details of previous experience should be sent to:—

Staff and Welfare Officer,
London Transport Executive,
55 Broadway,
London, S.W.1. 9402

**COUNTY BOROUGH OF BARNSELY
EDUCATION COMMITTEE
COLLEGE OF TECHNOLOGY**

Required for 1st September, 1960, LECTURER IN BUILDING with degree or equivalent qualifications such as A.I.O.B., A.R.I.B.A., A.R.I.C.S., A.M.I.C.E., A.M.I.Struct.E., with good industrial or professional experience.

Salary: £1,370 by £35 to £1,550, in accordance with the Burnham Technical Report.

Further particulars and application forms from the Principal, College of Technology, Church Street, Barnsley, to whom completed forms should be returned within 14 days of the advertisement.

H. A. REDBURN,
Director of Education. 9499

**CITY OF MANCHESTER
HOUSING COMMITTEE**

Applications invited from suitably qualified persons for the following appointments.

DEPUTY CHIEF ASSISTANT ARCHITECT. Senior Scale "A", £1,250-£1,420 per annum.

SENIOR ASSISTANT ARCHITECT, A.P.T. V. £1,220-£1,375 per annum.

SENIOR ASSISTANT ARCHITECT, A.P.T. IV. £1,065-£1,220 per annum.

Details from the Director of Housing, Town Hall, Manchester, 2, to whom applications should be returned not later than the 23rd April, 1960. 9266

**CUMBERLAND COUNTY COUNCIL
COUNTY ARCHITECTS' DEPARTMENT**

Applications are invited for the appointment of a SENIOR ASSISTANT ARCHITECT within A.P.T. Grade V (£1,220-£1,375). Commencing salary according to experience. Essential User Grade D travelling allowance. Housing accommodation may be available.

Applicants must be A.R.I.B.A. with experience of handling large contracts, and supervision of other staff. N.J.C. Service Conditions. Post pensionable. Subject to medical examination.

Application forms and further particulars obtainable from A. Lumb, A.R.I.B.A., Deputy County Architect, 15 Portland Square, Carlisle, to whom completed applications should be returned not later than FRIDAY, 22nd APRIL, 1960.

G. N. C. SWIFT,
Clerk of the County Council. 9396

**BOROUGH OF TAUNTON
ASSISTANT ARCHITECT**

Applications are invited for appointment of Assistant Architect in the Borough Architect's Department, Special Grade, Salary £785-£1,070 per annum.

Superannuable post, subject to medical examination, and to National Conditions of Service. Applications stating age, present position and salary, qualifications, experience and names of two referees to be sent to C. Bacon, F.R.I.B.A., Borough Architect, Flook House, Station Road, Taunton, by Monday, 25th April, 1960.

K. A. HORNE,
Town Clerk. 9494

**COUNTY BOROUGH OF STOCKPORT
BOROUGH ARCHITECTS' DEPARTMENT**

Vacancies for:

(1) ARCHITECTS, A.P.T. IV (£1,065-£1,220). Candidates must be members of the R.I.B.A.

(2) ASSISTANT ARCHITECTS, Special Grade (£785-£1,070) or A.P.T. III (£880-£1,065) and A.P.T. II (£765-£880) depending on qualifications.

Commencing salaries according to experience. Large programme of modern buildings—design ability more important than Local Government experience, which is not essential.

Full particulars (age, experience, two referees) to Borough Architect, Town Hall, Stockport, by 14th April, 1960.

The Corporation have a scheme for advancing, in approved cases, loans for house purchase up to 100 per cent. Posts pensionable, subject to medical examination. Canvassing disqualifies. Applicants must disclose whether related to any member/senior officer of Council. 9397

**COUNTY COUNCIL OF THE WEST RIDING
OF YORKSHIRE**

OFFICE OF THE COUNTY ARCHITECT

The Council require SENIOR ARCHITECTS in salary grades A.P.T. IV (£1,065-£1,220) and Special Grade (£785-£1,070) for their extensive and interesting building programme which includes schools, colleges, old people's and children's homes, clinics, ambulance, fire and police stations, and other public buildings. Architects appointed will be employed at the Central Office in Wakefield solely upon capital works dealing with building projects from sketch plans to completion.

Applications are also invited for the under-mentioned posts at the Central Office:—

JUNIOR ARCHITECTURAL ASSISTANTS

Grade A.P.T. II (£765-£880).

Grade A.P.T. I (£610-£765).

Applications to be submitted as soon as possible on forms to be obtained from and returned to the undersigned.

A. W. GLOVER, F.R.I.B.A.,
County Architect.

Bishopgarth,
Westfield Road,
Wakefield. 6607

JUNIOR ARCHITECTURAL ASSISTANT

required for British Transport Hotels and Catering Services, located London. Applicants should have completed their National Service and have some architectural training either in an approved Architectural School or Architect's Office. Salary according to age and experience. Apply in writing, giving full personal details to Officer for Personnel, British Transport Hotels and Catering Services, St. Pancras Chambers, London, N.W.1. 9417

ASSISTANT ARCHITECTS

required for British Transport Hotels and Catering Services, located London. R.I.B.A. qualifications or equivalent degree preferable. Apply in writing, giving full personal details to Officer for Personnel, Hotels and Catering Services, St. Pancras Chambers, London, N.W.1. 9418

COUNTY ARCHITECTS' DEPARTMENT

CUPAR—Qualified ARCHITECT required. Salary Scale: Admin. Grades C and D, i.e. £980/£1,120 per annum. Applicants must be associates of the R.I.B.A. and have contemporary outlook in design and use of modern materials and techniques and experience of school work (both new buildings and large extensions and modernisations). Superannuation Scheme. Applications, stating age, qualifications, post held, and previous experience, with details of present salary and accompanied by copies of recent testimonials by 19th April, 1960, to the County Clerk, County Buildings, Cupar, Fife. 9423



Felix
Walter
F.R.I.B.A.

THE FIRST comprehensive illustrated book on the subject of the conversion and improvement of all kinds of house property. It is designed to help architects, local housing authorities and private owners. Mr. Walter thoroughly illustrates and describes a large variety of successful conversions, from luxury Belgravia terrace houses to remote rural cottages, giving full details of building costs, rent and rates for most of them. And specialist authors contribute chapters on law, finance, management and town planning.

**HOUSE CONVERSION
AND IMPROVEMENT**

Size 9½ by 7½ in. 258 pages including over 420 illustrations.
42s. net, postage 1s.9d.

THE ARCHITECTURAL PRESS 9-13 QUEEN ANNE'S GATE WESTMINSTER S.W.1

**THE MONTAGUE GROUP OF COMPANIES
WISH TO RETAIN ARCHITECTS**

Who submit suitable schemes for Development and Redevelopment of Shop and Office Property
FULL SCALE FEES OR SUBSTANTIAL INTRODUCTORY BONUS

Architects are invited to send full details in confidence to the Chairman, Mr. M. Phillips

THE MONTAGUE GROUP OF COMPANIES

FAIR GREEN, MITCHAM, SURREY

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QUANTITY SURVEYING ASSISTANTS.
Grade III, required by AIR MINISTRY in the PROVINCES. Duties include abstracting and linking, site measurement and preparation of estimates. Candidates must hold O.N.C. (Build-ers' Quantities) or equivalent and have rooming experience under Quantity Surveyor or Building Contractor. Knowledge W.D. Schedule advantage. Financial assistance and time off given for recognised courses of study. Promotion and pension prospects. Five-day week with 18 days leave a year initially. Overseas tours for which special allowances granted. £260 to £350, commencing salary dependent upon age, qualifications and experience. Applicants, who must be natural born British subjects, should write stating age, qualifications and previous appointments including type of work done, to Manager (P.E.2) Professional and Executive Register, Ministry of Labour, Atlantic House, Farringdon Road, London, E.C.4. No original testimonials need be sent. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only applicants selected for inter-view will be advised. 8336

BOROUGH OF EPSOM AND EWELL
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT
SENIOR PLANNING ASSISTANT.
Applications are invited for the above posts in the Borough Engineer and Surveyor's Department at a salary on Scale A.P.T. IV (£1,065-£1,220) plus London weighting, together with an essen-tial user transport allowance.
Candidates for post (a) must be Associate Members of the Town Planning Institute and for post (b) Associates of the Royal Institute of British Architects.
Conditions of appointment and application forms are obtainable from Mr. Colin Cobbett, M.I.C.E., M.I.Mun.E., Borough Engineer and Surveyor, Town Hall, Epsom, to whom they must be returned, together with the names of three referees, by Friday, the 29th April, 1960.
EDWARD MOORE,
Town Clerk.

Town Hall,
Epsom,
Surrey. 9456

COUNTY OF ESSEX
COUNTY PLANNING DEPARTMENT
Applications are invited for the following posts:
PRINCIPAL PLANNING OFFICER, J.N.C.
Scale "D" (£1,520-£1,755).

The successful applicant for this important Headquarters executive post will be required to be in charge of the Development Plan and Control Section. He will be responsible for the work in connection with the production and progress through all stages, of review of the County Development Plan, with additional Town Maps and Comprehensive Development Areas, together with Headquarters work on Development Control, including Minerals and liaison with the New Town Development Corporations, and on foot-ways and amenities generally.
Candidates must be Corporate Members of the Town Planning Institute and should also hold an appropriate University degree or other professional qualification. They must also have had extensive experience in both Development Plan and Control work of a large local planning authority, and be capable administrators.
ARCHITECT/PLANNER, J.N.C. Scale "C"
(£1,385-£1,620).

The successful applicant for this Headquarters post will be required to take charge of the Detailed Planning and Design Section. He will be responsible for advising upon third-dimen-sional design and grouping of buildings, in ultimate scale, in central redevelopment and in the design projects and the care and improve-ment of buildings under preservation orders; and on aesthetic considerations generally.
Candidates must be competent, experienced and qualified designers, capable of original thought in initiating design of central area proposals and be able to give guidance to Area Officers in course of development control. They must be Corporate Members of the Royal Institute of British Architects, and should also be Corporate Members of the Town Planning Institute or of the Institute of Landscape Architects. They must also have had extensive allied architectural and planning experience and be capable admin-istrators.

SENIOR PLANNING OFFICER, A.P.T.
Grade V (£1,220-£1,375).
The successful candidate will be required to act as one of two sub-section leaders in the Development Plan and Control Section at Head-quarters directly under the person to be appointed to post (a). They must be Corporate Members of the Town Planning Institute, should hold an additional appropriate professional qualification and be suitably experienced both in development plan and development control work in the office of a large local planning authority.
SENIOR PLANNING OFFICER, A.P.T.
Grade V (£1,220-£1,375).
The successful candidate will be required to be in charge of a small section in an Area Office in Romford to deal mainly with redevelopment schemes for central areas, including civic design projects. Candidates should be Corporate Mem-bers of the Royal Institute of British Archi-tects and the Town Planning Institute, and have of considerable allied architectural and plan-ning experience in large redevelopment and central area schemes.

(e) SENIOR PLANNING OFFICER, A.P.T.
Grade V (£1,220-£1,375).

Applicants must be Corporate Members of the Town Planning Institute and should possess another appropriate professional qualification. They should have had considerable experience in the preparation of development plans in highly urbanised areas and be capable of organising and analysing the various surveys in connection therewith.

(f) SENIOR PLANNING ASSISTANTS, A.P.T.
Grade IV (£1,065-£1,220).

Vacancies as Section Heads either in the Development Plan or Control Sections at Area Offices at Chelmsford, Colchester, Romford and Wansstead.

Candidates must be Corporate Members of the Town Planning Institute or other appropriate professional institution and have had considerable experience in either development plan or control work in the office of a large local planning authority.

(g) SENIOR PLANNING ASSISTANT, Special
Grade (£785-£1,070), in the Detailed Design Section at Headquarters.

Candidates should be Corporate Members of the Town Planning Institute or Royal Institution of British Architects, or be well advanced in their studies towards this end.

Candidates should have experience in, and will be required to assist with, the work mentioned under post (b).

(h) SENIOR PLANNING ASSISTANTS, Special
Grade (£785-£1,070).

Vacancies exist in various Area Offices in the Development Plan or Control Sections.

Candidates should be Corporate Members of the Town Planning Institute or other recognised professional institution, or be well advanced in their studies to this end.

They must have had experience in Plan or Control work in the office of a large local planning authority.

(i) SENIOR PLANNING ASSISTANT (RE-SEARCH), Special Grade (£785-£1,070).
Candidates should possess an appropriate University Degree in Geography or Economics and be prepared, if they are not already doing so, to study for the Final Examination of the Town Planning Institute. They should have had experience in Research and Survey work in the office of a large local planning authority.

Five-day week; medical examination; super-annuation. Day release facilities in appropriate cases. Canvassing directly or indirectly dis-qualifies.
Applications, with names of three referees, to the County Planning Adviser, at Broomfield Place, Broomfield, Chelmsford, Essex, by 25th April, 1960. 9484

CITY OF WORCESTER
APPOINTMENT OF ARCHITECTURAL ASSISTANT
Applications are invited for this appointment within Salary Scale A.P.T. I (£610-£765 per annum). The appointment is superannuable and subject to a medical examination.
Housing accommodation will be offered if necessary, and the Corporation are prepared to make a contribution towards removal expenses.
Casual User's Car Allowance will be applicable.
Applications, stating age, present and previous appointments and experience, are to be sent to the City Engineer and Surveyor, 22, Bridge Street, Worcester, by Wednesday, 20th April, 1960.

BERTRAM WEBSTER,
Town Clerk.

Guildhall,
Worcester. 9457

METROPOLITAN WATER BOARD
ASSISTANT ARCHITECT
required for permanent appointment in Surveyor's Department.

Salary scale £1,090-£1,210 per annum. Commencing point according to age and experience. Applicants must be corporate members of the Royal Institute of British Architects and should have had experience in the design, preparation of plans and working drawings and specifications for the erection of houses and offices.

Forms of application obtainable from the undersigned (quote reference AJ) must be returned by Tuesday, 19th April, 1960.

S. D. ASKEW,
Clerk of the Board.
New River Head,
Rosebery Avenue, E.C.1. 9436

MERIONETH COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of **JUNIOR ARCHITECTURAL ASSISTANT, Grade A.P.T. I (£610-£765).** Preference will be given to applicants who have passed the Inter-mediate Examination of the R.I.B.A. or its equivalent.

Full particulars of the appointment, together with application form, may be obtained from the County Clerk, County Offices, Peniarth, Dolgellau, by whom applications must be received by not later than 18th April, 1960. 9452

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

ARCHITECT/PLANNERS required. Tasks include three-dimensional planning in Compre-hensive Development Areas and all other impor-tant areas of new development throughout London, including those associated with road improvements. Up to £1,335 (under review) according to experience and qualifications.

Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/AJ/527/4a), County Hall, S.E.1. 9077

BBC requires **ARCHITECTURAL STAFF** in London for work in connection with studios, office blocks, transmitting stations, etc. Can-di-dates should have an interest in contemporary design and a sound knowledge of construction.
(a) ARCHITECTURAL ASSISTANT. Salary in scale £935-£1,185 p.a. Applicants should have Final R.I.B.A. with two years' office experience.
(b) ARCHITECTURAL ASSISTANT. Salary in scale £800-£1,025 p.a. Applicants should be students R.I.B.A. with two years' office experi-ence. Requests for application forms to Engineer-ing Recruitment Officer, Broadcasting House, London, W.1, quoting ref. 60.E.45.AJ. 9442

HEREFORDSHIRE COUNTY COUNCIL
ARCHITECTURAL ASSISTANT required on Special Scale (£785 to £1,070 per annum). Pros-pects of immediate promotion to Grade IV (£1,065 to £1,220) on election A.R.I.B.A. in approved cases.

Superannuated post, subject to medical examina-tion and one month's notice either side. Separation allowance to married men for limited period in certain cases (25s. per week and fare home every two months).

Interesting and varied programme. Five-day week.
Hereford is situated in the beautiful Wye Valley.

Application forms from County Architect, Bath Street, Hereford, to be submitted by 19th April, 1960. 9454

COUNTY BOROUGH OF MERTHYR TYDFIL
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments on the permanent staff of the Borough Architect.

1. **CHIEF ASSISTANT ARCHITECT**
Grade A.P.T. V (£1,220-£1,375).

2. **SENIOR ARCHITECT**
Grade A.P.T. IV (£1,065-£1,220).

3. **ASSISTANT ARCHITECT**
Special Grade (£785-£1,070).

4. **TWO ARCHITECTURAL ASSISTANTS**
Grade A.P.T. II (£765-£880).

There is to be a large programme of re-development, and all types of municipal buildings are to be erected. Every facility will be given for design and contract experience.

Appointments will be made within the grades according to qualifications and experience. Applica-tions, stating age, experience, particulars of present and past appointments, together with the names of two referees, should be received by the Town Clerk not later than 20th April, 1960.

Housing accommodation will be provided within a reasonable time if required.

The appointments are subject to the provisions of the Local Government Superannuation Acts 1937/53 and to the passing of a medical examina-tion, and are terminable by one month's notice on either side.

Canvassing in any form will disqualify.
T. S. EVANS,
Town Clerk.

Town Hall,
Merthyr Tydfil.
31st March, 1960. 9437

LANCASHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the permanent appointments of:-

(a) SENIOR ASSISTANT ARCHITECT
£1,065-£1,220.

(b) ASSISTANT ARCHITECT £750-£1,070.

(c) MEASURING SURVEYOR £730-£850.

Salary point within the scale will be decided according to experience.

Posts (a) and (b) afford an opportunity to qualified Architects of initiative, keen on design and modern constructional methods to work on large and varied building programmes covering all classes of public buildings.

The successful applicant for (c) will be engaged in the measuring of variations and site works for major projects and the settle-ment of contractors' accounts, and applicants should have had experience of similar work in a quantity surveyor's or building con-tractor's office.

Application forms and details of office organisa-tion obtainable from the County Architect, P.O. Box 26, County Hall, Preston, to be returned by 18th April, 1960, quoting reference A/AJ. 9493

WILTSHIRE COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

Applications invited for **ASSISTANT ARCHITECT** (Salary Scale £785-£1,070). Superannuable. Applicants must have passed Parts I and II of the R.I.B.A. Final (or equivalent).

Applications to the Clerk of the Council, County Hall, Trowbridge, not later than 14 days after appearance of this advertisement, stating age, qualifications, particulars of training and experience, with names of three referees. 9449

WEST SUSSEX COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:-

ARCHITECTURAL ASSISTANTS and **ASSIS-TANT ARCHITECTS** at salaries ranging up to £1,070 per annum. Commencing salary according to qualifications and/or experience.

Further particulars should be obtained from the County Architect, County Hall, Chichester, to whom all detailed applications must be sub-mitted not later than 22nd April, 1960.

T. C. HAYWARD,
Clerk of the County Council.
County Hall,
Chichester. 9324

CITY OF SALFORD

Applications are invited for the following appointments in the office of the City Engineer & Surveyor (G. A. McWilliam, B.Sc., A.M.I.C.E., A.R.I.C.S., M.I.Mun.E.).

- (a) **JUNIOR ASSISTANT ARCHITECT APT. I-III** (£510-£1,065 per annum). Duties will comprise the development of designs and working drawings for and supervision of erection of new building projects.
- (b) **ARCHITECTURAL ASSISTANT APT. I-II** (£510-£880 per annum). Duties will comprise assisting in the development of designs and working drawings.

A five-day week is operated in the Department, and the work affords experience in a wide variety of architectural projects carried out for all Committees of the Council. Facilities for completion of professional training may be given to successful candidates, and housing accommodation will be provided in approved cases.

The commencing salary will be dependent upon qualifications and experience. The posts are subject to the provisions of the Local Government Superannuation Acts, the National Schemes of Conditions of Service, the Standing Orders of the City Council, the passing of a medical examination, and are terminable by one calendar month's notice.

Applications stating age, education, qualifications, and details of experience, together with the names and addresses of two referees, should be sent to the City Engineer & Surveyor, Town Hall, Salford, 3, Lancs., to arrive not later than 19th April, 1960.

R. RIBBLESDALE THORNTON,
Town Clerk.
9377

COUNTY COUNCIL OF DUNBARTON

APPLICATIONS are invited for the following posts in the COUNTY ARCHITECT'S DEPARTMENT OF THE COUNTY COUNCIL:-

- CHIEF ASSISTANT ARCHITECT**—£1,510 x (3) £56,154 to £1,480 per annum.
- SENIOR ASSISTANT ARCHITECT**—£1,150 x (3) £53,638 to £1,310 per annum.
- ASSISTANT ARCHITECTS**—£795 x £35 to £1,075.

Applicants for the posts of Chief and Senior Assistant must be A.R.I.B.A. preferably with considerable experience in housing, schools, and other local authority work. The posts are superannuable under the Local Government Superannuation (Scotland) Acts 1937 to 1953. Placing on the scale will be given to Assistant Architects according to experience and qualifications. Canvassing in any form will disqualify and relationship to any member or senior officer of the County Council must be disclosed. A house will be available on a fairly early date.

Applications stating age, experience and qualifications, along with the names and addresses of two referees, should be lodged with the County Architect, Ferry Road, Old Kilpatrick, on or before 13th April, 1960.

JOHN F. MILLER,
County Clerk.
9483

LONDON ELECTRICITY BOARD

VACANCIES—DRAUGHTSMEN

Applications are invited for the under-mentioned positions.

ARCHITECTURAL DRAUGHTSMAN in the Architect's Section of the Chief Engineer's Department at Waterloo, S.E.1.

Applicants should be neat draughtsmen and have had experience in an Architect's office. Preference will be given to those who are taking a recognised course of study with a view to obtaining architectural qualifications.

ENGINEERING DRAUGHTSMAN in the Board's Southern District in South London.

Applicants should have a good general and technical education and be in possession of the Ordinary National Certificate, be neat and capable draughtsmen and be experienced in one or more of the following subjects: drawing office routine, electrical diagrams, layout of plant in transformer chambers, mains survey and recording of mains work. A knowledge of building construction would be an advantage.

The posts are graded under Schedule "D" of the National Joint Board Agreement as Grade 6-£560 to £780 per annum, inclusive of London Allowance.

Application forms obtainable from the Personnel Officer, 46, New Broad Street, London, E.C.2. Please quote ref. PER/V/2915/A. 9410

COUNTY BOROUGH OF DARLINGTON

BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the posts of:-

- (a) **SENIOR ASSISTANT ARCHITECT**, A.P.T. Grade III-IV (£880-£1,220).
- (b) **ASSISTANT QUANTITY SURVEYORS**, A.P.T. Grade III-IV (£880-£1,220).
- (c) **ARCHITECTURAL LEARNER**—Gen. Div. £210-£465 (£430 at age 22).

The Authority has a large building programme, including Schools, Technical College, Civic Buildings, etc.

For (a) and (b) preference will be given to candidates with experience in Local Government, and holding professional qualifications. Starting salary by negotiation. Housing accommodation available. Applicants for (c) should be about 21 years of age.

Applications, stating age, experience, qualifications, present salary, and nominating two referees, should be received by E. A. Tornbohm, A.R.I.B.A., A.M.T.P.I., Borough Architect, Central Buildings, Darlington, by 21st April, 1960. 9380

CITY AND COUNTY OF BRISTOL

EDUCATION COMMITTEE
BRISTOL TECHNICAL COLLEGE

The Governors invite applications for a **LECTURER** in the Department of Building to teach **BUILDING CONSTRUCTION** and associated subjects in Senior and Advanced Courses. Suitable academic and technical qualifications and sound industrial and teaching experience essential.

Burnham Technical Scale salary—£1,370 to £1,550.

Forms of application and details from the Registrar, College of Technology, Ashley Down, Bristol, 7. 9394

BIRMINGHAM REGIONAL HOUSING BOARD

ARCHITECT'S DEPARTMENT

(a) **ASSISTANT ARCHITECTS** (ref. Arch. 1).

Salary scale £730-£1,055 per annum. Starting salary according to age and experience. Applicants must be registered architects having passed the requisite examinations. Experience of hospital planning and construction an advantage. Sound knowledge of architectural design, working drawings, surveying and specifications essential.

(b) **ARCHITECTURAL ASSISTANTS** (ref. Arch. 2).

Salary £545 (at age 21 years or over)—£765 per annum. Point of entry according to experience. Intermediate R.I.B.A. essential.

(c) **ASSISTANT QUANTITY SURVEYORS** (ref. Arch. 3).

Salary scale £730-£1,055 per annum. Starting salary according to age and experience. Final R.I.C.S. and experience in taking off and preparing bills of quantities and settlement of final accounts essential.

(d) **SURVEYING ASSISTANT (BUILDING)** (ref. Arch. 4).

Salary scale £545-£765. To assist in survey of existing hospital buildings and preparation of record plans. Intermediate R.I.C.S. (Buildings Division) essential. Must be a neat draughtsman with experience in measurement and plotting of surveys to all scales.

All salary scales now under review.

All posts supernumerary. Five-day week. Written applications, quoting reference of post desired and naming two referees to Secretary, R.H.B. 10, Augustus Road, Birmingham, 15, by 25th April, 1960. 9398

BOROUGH OF EDMONTON

BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of a **TOWN PLANNING ASSISTANT**. Salary Grade A.P.T. I (£610-£765) plus London weighting according to age.

Preference will be given to candidates who have passed the Intermediate Examination of the Town Planning Institute and Joint Examination Board or equivalent examinations recognised by the Town Planning Institute. Applicants should also have had experience of development control and positive planning.

Applications on forms obtainable from the Town Clerk, Town Hall, Edmonton, must be delivered by the 16th April, 1960. 9400

STAFFORDSHIRE COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

Applications are invited from suitably qualified candidates for the following posts:-

ASSISTANT ARCHITECTS

SPECIAL GRADE (£785-£1,070). These posts are particularly suitable for recently qualified Architects.

GRADE A.P.T. IV (£1,065-£1,220). Candidates must be Associates of R.I.B.A., and be suitably experienced.

The appointments will be subject to:-

(a) The National Scheme of Conditions of Service.

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

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

There is a possibility that housing may be made available in special circumstances.

Forms of application, which must be returned by the 22nd April, 1960, may be obtained from the County Architect, Green Hall, Lichfield Road, Stafford.

T. H. EVANS,
Clerk of the County Council.
9401

BRACKNELL DEVELOPMENT CORPORATION

Applications are invited for the post of **ASSISTANT ARCHITECT**, salary range £1,065-£1,220. Applicants must be Corporate Members of the R.I.B.A. Superannuation schemes, medical examination. Housing available. Apply by 23rd April, 1960, giving age, education and qualifications, experience and appointments held (with dates and salaries), and names of two referees, to General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. 9495

GLASGOW SCHOOL OF ART

DEPARTMENT OF ARCHITECTURE

Applications are invited for the post of **ASSISTANT Grade I**. Applicants should be registered architects and have teaching experience, particularly in the subject of History of Architecture. Particulars of the appointment can be obtained from—The Secretary, Glasgow School of Art, 167 Renfrew Street, Glasgow, C.3. 9488

BRITISH RAILWAYS

LONDON MIDLAND REGION
EUSTON

SENIOR QUANTITY SURVEYORS (Reference 101 A.J.). Salary range £1,095-£1,200. Most A.R.I.C.S. with wide experience in all branches of quantity surveying and capable of supervising staff.

QUANTITY SURVEYORS (Reference 102 A.J.). Salary range £990-£1,034. Intermediate A.R.I.C.S. essential. Duties consist of "Taking Off," preparation of estimates and site measurement.

Superannuation Fund. Five-day week. Beneficial travel and other travelling facilities. Applications in writing, quoting references, number and stating age, qualifications and experience, to:-

W. R. HEADLEY, A.R.I.B.A., A.A.Dipl.,
Regional Architect,
Chief Civil Engineer's Office,
British Railways (L.M.R.),
5a, Euston Grove, London, N.W.1.

CITY OF SHEFFIELD EDUCATION COMMITTEE

COLLEGE OF TECHNOLOGY

DEPARTMENT OF BUILDING

Applications are invited for the following posts, which arise mainly from the development of full-time and sandwich courses:-

(a) **LECTURER** to teach Building Construction Quantities, Contracts and Specifications in the sandwich and part-time courses in Civil and Structural Engineering, and to assist in the teaching of Theory of Structures.

(b) **LECTURER** to teach Administration and Management in the sandwich and part-time courses in Building and Civil Engineering, and to assist in the teaching of Civil Engineering subjects.

Candidates for the above posts should be members of an appropriate professional body and have had suitable industrial and teaching experience.

(c) **ASSISTANT (GRADE B)** to teach General Building subjects and Mathematics in the Building and Quantity Surveying courses. Candidates should possess appropriate qualifications and have had suitable industrial and teaching experience.

Salary Scales: Lecturer: £1,370 x £35-£700 per annum. Assistant (Grade B): £700 x £27-£1,150 per annum, with appropriate additions for degree and training. Forms of application, obtainable from the undersigned (s.a.e.) at P.O. Box 67, Sheffield, should be returned within 14 days of the appearance of this advertisement.

T. H. TUNN,
Director of Education.

WEDNESFIELD URBAN DISTRICT COUNCIL

ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the position of **CHIEF ASSISTANT ARCHITECT** at a salary in accordance with A.P.T. Grade IV (£1,065-£1,220).

Candidates must be qualified and have had considerable experience in the appointment for which they make application.

The district is developing rapidly and offers exceptional experience.

The National Joint Council Conditions of Service will apply and the successful candidate will be required to contribute to a Superannuation Scheme and also undergo a medical examination.

Housing accommodation will be provided, necessary, and reasonable removal expenses will be paid.

Applications, stating age, qualifications, experience, with the names of two referees, must be received by the undersigned by not later than 25th April, 1960.

J. HENWOOD JONES,
Clerk of the Council.

Council Offices,
Alfred Square Road,
Wednesfield,
Staffs.

COUNTY LONDONDERRY EDUCATION COMMITTEE

ARCHITECTURAL ASSISTANTS

Applications are invited for the appointment of Two Architectural Assistants in the Committee's Offices in Coleraine. Applicants should hold the Intermediate R.I.B.A. Certificate and have had a minimum of six years' experience as an Architect's Office.

Salary will be within the range £585-£695 per annum according to qualifications and experience. Applicants holding the Intermediate R.I.B.A. Certificate will enter the Scale at 4 per annum.

Application forms and Conditions of Appointment may be obtained from the Education Office, New Row, Coleraine, and completed forms must be returned not later than 12 noon on 22nd April, 1960.

ROXBURGH COUNTY COUNCIL

NEW COUNCIL OFFICES AT NEWTOWN

ST. BOSWELLS

Open competition for **ARCHITECTS** practicing or resident in Scotland. Assessor: Mr. W. Kinmonth. R.S.A., F.R.I.B.A., F.R.I.C.S. Premiums: 500 gns., 300 gns., 200 gns. Last day for submitting designs: 31st October, 1960. Conditions obtainable from County Clerk, Council Offices, Newtown St. Boswells, Roxburghshire after 30th April. Deposit 2 gns.

BOROUGH OF LEYTON

Municipal Borough in the County of Essex.
Population approximately 100,000.

BOROUGH ENGINEER'S DEPARTMENT

Applications invited for appointments of ASSISTANT ARCHITECTS at salaries within the scale of £785 per annum rising to £1,070 per annum (plus London weighting) in accordance with the provisions of the National Scheme of Conditions of Service for Local Authority Staffs (Special Classes).
Housing accommodation will be made available to successful applicants if required. Five-day week is operated.
Apply by letter to Borough Engineer, Town Hall, Leyton, E.10 (giving names of two referees) not later than Friday, 22nd April, 1960.
D. J. OSBORNE,
Town Clerk.

9427

BUCKS COUNTY COUNCIL

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

(ONE) ASSISTANT ARCHITECT, A.P.T. Grade IV (£1,065-£1,220 p.a.).
(TWO) ASSISTANT ARCHITECTS (Special Scale, £785-£1,070 p.a.).
(ONE) ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade IV (£1,065-£1,220 p.a.).
(TWO) ASSISTANT QUANTITY SURVEYORS, A.P.T. Grade I (£610-£765 p.a.).
The appointments are superannuable and subject to medical examination, and applicants should be suitably qualified.
A weekly allowance of 25s. and return fare on any one every two months may be paid for and for months to newly appointed married officers and Civil Engineer unable to find accommodation.
Application on forms provided, must be submitted by 18th April, 1960.
F. B. POOLEY,
County Architect.

9428

BOROUGH OF WORTHING

APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of Architectural Assistant on the permanent establishment of the Borough Engineer and Surveyor's Department at a salary in accordance with Grade A.P.T. I (£610-£765 p.a.).
Candidates should have passed the Intermediate Examination of the R.I.B.A. and should have had a sound experience in the preparation of drawings and specifications for Local Authority building contracts.
The appointment will be subject to the National Scheme of Conditions of Service of Local Government Officers, to the Local Government Superannuation Act 1937, and to the successful candidate passing satisfactorily a medical examination.
Applications, endorsed Architectural Assistant, stating age, status, qualifications, present and previous appointments, and experience with titles, together with the names of three persons to whom reference may be made, should be addressed to the Borough Engineer and Surveyor, Town Hall, Worthing, and should be received by him not later than Monday, 11th April, 1960.

ERNEST G. TOWNSEND,

Town Clerk.

9429

BOROUGH OF LEYTON

(in the County of Essex)

COMMITTEE FOR EDUCATION

APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the permanent appointment of Architectural Assistant, Grade P.T. II (£765-£880 per annum, plus London weighting). The successful applicant will be employed by the Essex County Council, and will work in the School Architect's Section of the Borough Engineer & Surveyor's Department, Town Hall, Leyton, E.10. Five-day week is operated.
Details and forms of application from the Borough Education Officer, Education Offices, Icklade Road, Leytonstone, E.11, to whom they should be returned within 10 days from the appearance of this advertisement.

D. J. OSBORNE,

Town Clerk.

9431

KINGSTON UPON HULL EDUCATION

COMMITTEE

REGIONAL COLLEGE OF ART AND CRAFTS

Principal: A. D. S. SUGDEN, A.R.E., A.R.C.A., F.I.R.D.
Applications are invited for the following post, to commence in September, 1960:

SCHOOL OF INDUSTRIAL DESIGN

ASSISTANT (Grade B) for display and exhibition design to N.D.D. Special level and interior decoration to Intermediate and Final standard in the School of Architecture.

Salary: Burnham Technical Scale—£700 × £121.12 10s. × £37 10s.—£1,150 for men, and corresponding scale for women with appropriate equal pay increments. (Increments will be paid in respect of suitable teaching, professional and/or industrial experience, plus additions for training and graduate qualifications.)
Further particulars and application forms, to be returned as soon as possible, may be obtained from the Chief Education Officer, Guildhall, Kingston upon Hull.

9378

A SENIOR ASSISTANT is required in the Architect's Department of the Milk Marketing Board. Applicants should be capable of preparing working drawings and details of factory and office buildings. The appointment will be for at least 12 months in the first instance, and the salary will be in accordance with qualifications and experience. Applications, giving brief details of qualifications and experience, should be sent to the Personnel Officer, Milk Marketing Board, Thames Ditton, Surrey, Ref. 279. 9376

BRACKNELL DEVELOPMENT CORPORATION

Applications are invited for the post of QUANTITY SURVEYOR. Salary range £1,065-£1,220, according to age and experience. Candidates must be Corporate Members of the R.I.C.S. Duties embrace Housing, Town Centre and Industrial Buildings. Superannuation schemes, medical examination. Housing available. Apply by 18th April, 1960, giving age, education and qualifications, experience and appointments held (with dates) and names of two referees, to General Manager (Q.S.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. 9430

CITY OF BATH

Applications are invited for the appointment of (a) an ARCHITECTURAL ASSISTANT at a salary within the Special Grade (£785-£1,070 per annum). Applicants for this post should have passed Parts I and II of the R.I.B.A. Final Examination. (b) JUNIOR ARCHITECTURAL ASSISTANT at a salary within Grade A.P.T. I (£610-£765). The programme of building works is extensive and interesting and the appointments afford an opportunity for good experience. The Council is prepared to provide housing accommodation if required.

Applications, giving details of age, experience and qualifications, together with the names and addresses of three referees, should be addressed to the City Planning Officer and Architect, 7, North Parade Buildings, Bath. The last day for the receipt of applications is Wednesday, 20th April, 1960.

JARED E. DIXON,

Town Clerk.

9477

GUILDHALL,

Bath.

SURREY COUNTY COUNCIL

Applications invited for the following appointments:—

GRADE IV (£1,065-£1,220 p.a. plus £30 p.a. London Allowance)

ARCHITECTS: Must be Assoc. Mem. R.I.B.A. and have had experience in preparation of drawings and specifications, and be capable of assuming responsibility for medium to large-scale contracts.

GRADE II (£765-£880 p.a. plus up to £30 p.a. London Allowance, according to age)

ARCHITECTURAL ASSISTANTS: Must be of good general training. Preference given those who have passed Intermediate R.I.B.A.

Candidates will be appointed at the appropriate point within the scale according to age and ability.

Full details, present salary and three copy testimonials to County Architect, County Hall, Kingston, as soon as possible.

9381

Architectural Appointments Vacant

3s. per line: minimum 12s. Box Number, including forwarding replies 2s. extra.

TWO ARCHITECTURAL ASSISTANTS required—Intermediate R.I.B.A. standard—who have had good office experience. Salary £600-£1,000 according to experience. Housing accommodation could be provided. Reply, giving particulars of age and experience and salary required, to: Francis W. Keyworth, L.R.I.B.A., 20, Park Road, Melton Mowbray, and 31, Friar Lane, Leicester. 8776

ARCHITECTURAL ASSISTANT required. Intermediate/Final standard. Varied and interesting work. Good draughtsmanship, sound knowledge of construction and ability to manage jobs, essential. Five-day week. Apply, stating age, experience and salary required, to George Lowe & Partner, 79, George Street, CROYDON 3608/9. 8645

ARCHITECTURAL ASSISTANTS required. Starting salary £915 per annum. Glasgow office, five-day week. Schools, Offices, etc. State experience. D. Harvey & A. Scott, 2, Lynedoch Place, Glasgow, C.3. 8992

ARCHITECTURAL ASSISTANTS required. Starting salary £750 per annum. Glasgow office, five-day week. State experience. D. Harvey & A. Scott, 2, Lynedoch Place, Glasgow, C.3. 8993

SENIOR and Intermediate Standard ARCHITECTURAL ASSISTANTS required for London and Weston-super-Mare. Write full particulars including salary required. E. H. Gallannaugh, L.R.I.B.A., 54, Queen Anne Street, London, W.1. 8999

MORRISON, BONE & PARTNERS have immediate vacancies for First Class ASSISTANTS, Final and Intermediate standard. Salary by arrangement. Tel.: LAN. 8061, 4, Wimpole Street, W.1. 9029

QUALIFIED ARCHITECTS and ASSISTANTS of Intermediate standard requiring highly paid positions, with an interesting variety of work, please telephone AMB. 8189 for an appointment. 9065

ASSISTANT ARCHITECT required by Haaker & Hall, L.F.R.I.B.A., for responsible position in their London office, 13, Welbeck Street, W.1. (WEL. 0061.) 9061

KENNETH LINDY & PARTNERS' City Office requires experienced ASSISTANT ARCHITECT. Varied practice. Salary to £1,100. AVENUE 5629 or 4430. 9057

ARCHITECTURAL ASSISTANTS required in busy Bloomsbury office with varied practice. Good salary and prospects for suitable applicants. Five-day week. Write giving particulars of age, qualifications, experience, etc., to Box 910, c/o 7, Copie Street, W.C.1. 8615

SENIOR ARCHITECTURAL ASSISTANTS required in salary range £700-£1,000 to take control of varied and interesting jobs of all sizes. Experience in colour and design of interiors and fittings and good presentation draughtsmanship an advantage. Five-day week, excellent working conditions and holidays. Please write, giving full details of experience and qualifications, to Deacon and Laing, 65, Goldington Road, Bedford. 8878

ASSISTANT ARCHITECTS required in busy Nottingham Office. Intermediate or Final A.R.I.B.A. Salary £750-£1,000 p.a. dependent on experience. Reply, stating age, qualifications and experience, etc., to Box 8986. 8985

ASSISTANT ARCHITECTS required in busy Manchester Office. Intermediate or Final A.R.I.B.A. Salary £750-£1,000 p.a. dependent on experience. Reply, stating age, qualifications and experience, etc., to Box 8985. 8985

SEVERAL ARCHITECTURAL and SURVEYING ASSISTANTS required in progressive office. Quick draughtsmen. Good salary and prospects. B. Newton, 307, Finchley Road, N.W.3. 8981

YOUNG ASSISTANT required. Good draughtsman, Intermediate standard. Five-day week. Bernard Gold & Partners, 4/6, Saville Row, W.1. Phone: REGENT 7551. 8979

ASSISTANT ARCHITECTS required by firm with offices in Middlesbrough and Billingham-on-Tees. The work is interesting and of considerable variety. Salary according to experience and ability. Elder and Lester, A./A.R.I.B.A., Grosvenor Buildings, 65, Albert Road, Middlesbrough. 8820

ASSISTANTS required capable of taking responsibility for the preparation of working drawings and supervision of contracts. Interesting projects with opportunity to gain worthwhile experience. Telephone Mayfair 311 for appointment or write giving details of experience to Box 8930. 8930

ARCHITECTURAL ASSISTANTS required by Haaker & Hall, L.F.R.I.B.A., in their offices in London and Warwickshire. Good salary, with scope for initiative and responsibility. Write to 13, Welbeck Street, W.1. or telephone WEL 0061 or Knowle (Birmingham) 3502. 9062

DEVEREUX & DAVIES require capable and enthusiastic ASSISTANT ARCHITECTS salary £1,000 per annum or according to experience and ability. 3, Gower St., Bedford Sq., London, W.C.1. 8629

W. H. WATKINS, GRAY & PARTNERS require ASSISTANTS of Intermediate and Final standard. Pension scheme and luncheon vouchers. Salary range £700 to £900. Apply 57, Catherine Place, London, S.W.1. 8720

RONALD WARD & PARTNERS have immediate vacancy for ASSISTANT ARCHITECTS with initiative and some experience, for interesting commercial, industrial and civic projects. Salaries commensurate with ability. Apply, 29, Chesham Place, S.W.1. BELGRAVIA 3361. 8638

TREHEARNE & NORMAN, PRESTON & PARTNERS have vacancies for ARCHITECTS and ASSISTANTS with imagination and designing ability to assist with important new developments in the London area. Apply in confidence to 83, Kingsway, London, W.C.2. (HOL. 4071.) 8429

ELIE MAYORCAS requires SENIOR ASSISTANTS with minimum of three years' office experience in this country. Write, giving particulars of architectural education and experience, and salary required, to: 13, David Mews, Baker Street, W.1. 8089

LARGE SCALE Development in London and Industrial Buildings in Home Counties. High office blocks and residential flats. Four ASSISTANT ARCHITECTS required. Senior and Intermediate standard. West End Office. Five-day week. Good salaries and bonuses. Box 8085. 8085

LEWIS SOLOMON, KAYE & PARTNERS, rapidly expanding practice require ARCHITECTS and ASSISTANTS with initiative and competence to work on major design projects in the London area. These projects include Comprehensive Development Schemes, Hotels, Schools, Offices, and Luxury Flats. Good salaries according to ability and experience. Luncheon vouchers, five-day week, and excellent working conditions. Write 5, Holborn Circus, Thavies Inn House, W.C.1. or telephone CITY 8811, quoting SLB in both instances. 7700

ARCHITECTURAL ASSISTANT required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20, Bedford Square, London, W.C.1. 7282

TWO ASSISTANTS required: one at Intermediate standard and one qualified with some years office experience, for small busy office. Salary according to experience. Ring **LANGHAM** 1732 or write to **F. G. Frizzell, A.R.I.B.A.**, 90, Portland Place, W.1. 8022

VACANCIES exist for **ASSISTANTS** of Intermediate to Final Grades. Salary Range £500-£900 per annum. Interesting work and good prospects. Apply in writing to: **H. Hubbard Ford, F.R.I.B.A.**, 35 South Audley Street, London, W.1. 8498

ARCHITECTURAL ASSISTANT (Intermediate standard) required, capable of making site surveys, preparing sketch plans, working drawings and specifications. Please apply, stating age, experience and salary required, to **R. E. AKERMAN, F.R.I.B.A.**, Chief Architect, United Dairies Ltd., 31, St. Petersburg Place, W.2. 8489

MONRO AND PARTNERS require **ARCHITECTURAL ASSISTANTS** of Intermediate/Final R.I.B.A. standard in their London, Watford, and Glasgow offices for work on interesting industrial and commercial projects. Salary range £800-£1,000 p.a. Non-contributory Pension Scheme. Five-day week. Apply in writing to 32, Clarendon Road, Watford. 8609

SENIOR ASSISTANT urgently required for pleasant office in Gray's Inn. Interesting and varied practice. Salary up to £1,100. Telephone Chancery 8387. 8335

CHIEF ARCHITECTURAL ASSISTANT required immediately for established firm on the South Coast. Excellent opportunity for the right man who will be expected to take charge of and be responsible for various large contracts. Must be an Associate of the R.I.B.A. Salary bracket £1,200/£1,500 p.a., dependent upon experience and ability. Write: **Thomas, Jolly, Grant & Kelsey**, 26, Kent Road, Southsea, Hants. 9145

SIR ROBERT TASKER & PARTNERS immediately require **ARCHITECTURAL ASSISTANTS** (Final and Intermediate) in office with varied practice. Write to No. 3, Field Court, Gray's Inn, W.C.1, or telephone Chancery 5957 stating salary required. 4913

SEELY & PAGET have immediate vacancy in their City office. Standard near Final R.I.B.A. with office experience. Holiday arrangements respected. Salary range £842 x £82 (4)-£1,050 plus luncheon vouchers. Write 41, Cloth Fair, E.C.1, or telephone MET 8511. 9155

WARWICK-ARCHITECTURAL ASSISTANT of Intermediate standard required immediately for varied practice. Reply stating experience and salary required to **Tropes, Harley-Smith and Steel**, 1 Church Street, Warwick. Tel Warwick 19. 9211

SENIOR ASSISTANT required to work on a variety of large and interesting projects. Modern approach essential, with an ability to take complete charge of jobs from planning stage to completion. Salary £900-£1,000 p.a. Apply to **R. Mountford Pigott & Partners**, 3, Cromwell Place, S.W.7. KENington 1244. 9216

ARCHITECTURAL ASSISTANTS, senior and junior, required by firm in High Wycombe for commercial and industrial schemes. Scope for responsibility and experience. Five-day week. Box 9143.

AN Experienced ARCHITECTURAL ASSISTANT, holding Intermediate R.I.B.A., required immediately for established firm on the South Coast. Opportunity presented to obtain further experience on various large contracts. Salary bracket £800/£850 p.a. Write stating age and experience: **Thomas, Jolly, Grant & Kelsey**, 26, Kent Road, Southsea, Hants. 9146

OPPORTUNITY for first-class **ARCHITECTS** with initiative to take responsibility for a variety of contemporary work. South Yorkshire area. Salary according to ability. Bonus, Pension and Life Assurance Schemes. Travelling, Removal and Interview expenses paid. Box 9448

SCOTT, BROWN RIGG & TURNER, at Guildford, London and Woking, require **ARCHITECTS** and **ASSISTANTS**. Qualifications: Design ability and experience in modern constructional techniques. Work in hand: Large and small contracts including Theatres, Hotels, Shops, Offices, Schools, Houses, Laboratories and Factories. Salary based on ability as well as experience. Apply in writing to: 32, London Road, Guildford. 9238

MORRIS DE METZ, F.R.I.B.A., requires an assistant for interesting work. Salary from £950 according to ability and experience. 29, Gloucester Place, W.1. Telephone HUNter 2581/3. 9150

FOUR-FIGURE SALARY. SENIOR ASSISTANT required in Architects' West End office. Varied interesting work. Applicants must be capable of taking responsibility and controlling drawing office team. Box 9096.

FOUR-DAY WEEK. Opportunity for Juniors and/or post Intermediate Students to keep abreast with their school work and undertake interesting and varied office work including Schools, Hospitals, and Public Houses. Good salary according to qualifications and experience. Five-day working and overtime when desired, luncheon vouchers. Appointment by telephone **ROYAL 6216. Stewart Hendry & Smith, F.R.I.B.A., A.M.T.P.I.**, 90, Fenchurch Street, London, E.C.3. 9096

EXPERIENCED ARCHITECTURAL ASSISTANTS required to work in District Architects Office of Multiple Company at **NORBURY**. Applicants should be capable of carrying out surveys, preparing working drawings and details, organizing and controlling new buildings, extensions, alterations, etc., to completion with a minimum of supervision. Five-day week. Dining facilities. Superannuation scheme. Apply giving details, age, experience and salary required to Box 9213.

IN January I recommended a London firm of Architects and as a result several senior assistants have joined the staff. There are still vacancies in this First Rate Practice. I invite anyone interested to visit us by appointment for an informal discussion when I will give opportunities to see work in progress and the general method of working. This invitation is open to all grades of assistants and to final year students who think of starting work this Summer. Profit sharing and Pension schemes are available. Salaries are realistic and regularly revised. Write Box 9202 or 'phone Hunter 1711.

SIR ALFRED MCPALPINE & SON LIMITED **ARCHITECTURAL STAFF.** Vacancies for Intermediate and qualified **ARCHITECTURAL ASSISTANTS** and experienced **ARCHITECTURAL DRAUGHTSMEN**. Varied commercial and industrial works. Salary according to experience. Hours 9.00 a.m. to 5.30 p.m. and 9.00 a.m. to 12.00 noon alternate Saturdays. Staff Canteen. Apply by post to—**F. H. Marvan, A.R.I.B.A.**, Sir Alfred McAlpine & Son Ltd., Hooton, Little Sutton, Wirral, Cheshire. 9218

WELL known London and Provincial firm of architects urgently require a number of **ASSISTANT ARCHITECTS** chiefly for commercial and flat development schemes. Salary up to £1,100 according to ability and experience. Reply Box No. 9109.

EXPERIENCED ARCHITECTURAL ASSISTANT, capable of handling job from design stage to completion of working drawings. Reply stating age and salary required, Architects' Department, **Sir Lindsay Parkinson & Co. Ltd.**, 6, Lambeth Road, London, S.E.1. 9370

A SMALL EXPANDING PRACTICE in Hampstead carrying out varied and interesting projects requires the services of a **QUALIFIED ARCHITECT**, also an intermediate standard **ASSISTANT**, aged 25/30, with drive and initiative, willing and able to accept responsibility, in return for the fitting rewards of a progressive practice. Will applicants kindly write details of age, experience and salary required to **Kenneth C. Saunders**, Lymington House, 341, Finchley Road, London, N.W.3. 9333

ARCHITECTS and **Students** interested in schemes for new hospitals, offices, a university library, high flats, windmills, ships' ball-rooms, a prestige restaurant, and amusing details such as lavatory pans, are still desperately required. All work is done from our new offices in High Paddington. Please write or telephone for a meeting to **GEORGE, TREW & DUNN**, 50, Eastbourne Terrace, W.2. PADDington 6611. 9332

EXCELLENT opportunity for a senior post line **ARCHITECT** who would like to be associated with three of the largest architectural projects in the country giving opportunity for designing almost every type of building. Accommodation provided in Georgian house in Edgbaston. Apply **John H. D. Madin, A.R.I.B.A.**, Chartered Architect, 83/85, Hagley Road, Edgbaston, Birmingham. 9263

BIRMINGHAM OFFICE of Ebery & Partners require **ASSISTANT** in Design Group specialising in modern housing. Salary up to £1,100 p.a. according to qualifications. 'Phone Victoria 4724 or write 24, Wordsworth Road, Birmingham, 10, stating experience.

A FIRM of Industrial Consultants have vacancies for the following staff in their Architectural Dept. These appointments offer opportunities to work on a varied and expanding programme of Industrial Work in close co-operation with the Civil, Structural and Services Engineering Departments of the Company.

(a) **SENIOR ARCHITECTURAL ASSISTANTS**. Qualifications: Students R.I.B.A. Able to produce rapidly and accurately, under minimum supervision, working drawings and details. Salary: Related to ability and experience within the range £950-£1,100.

(b) **ARCHITECTURAL ASSISTANTS**. Qualifications: Able to produce under supervision accurate working drawings and details. Salary: Related to ability and experience within the range £750-£950 p.a.

The company offer, in addition to salaries, optional pension scheme, payment for overtime, five-day week, annual salary review. Detailed applications for the appointments, which are available in London, Bristol and Reading, should be sent to the Chief Architect, Box 9284.

COUNTRY practice with varied work including new public houses; church and parsonage restorations; restoration of historic houses; country house alterations; Public School works; private estates, shops and small industrial jobs. **ASSISTANT** required of R.I.B.A. Intermediate to Final Standard, interested in accepting full responsibility from sketch plan stage to final accounts, including correspondence and site supervision. Please write giving age and experience to **Forsyth Lawson, Cunningham & Partners**, Chartered Architects, 30, Horse Fair, Banbury, Oxon.

ARCHITECTS and **ASSISTANT ARCHITECTS** required for interesting commercial, industrial and civic projects. Responsibility and initiative encouraged. Five-day week, good salary commensurate with ability and experience. **Ronald Ward & Partners**, 29, Chesham Place, S.W.1. BELgravia 3361.

CASSIDY, FARRINGTON & DENNY require **ASSISTANTS** of Intermediate standard with previous office experience. Five-day week. Luncheon vouchers. Salary according to ability.

A PROGRESSIVE and expanding building and civil engineering organisation requires the services of an **ARCHITECTURAL ASSISTANT** in the Housing Division. Applicant should be experienced in the design and execution of working drawings in connection with Housing and Flat Development Schemes. Permanent and progressive position. Pension and Luncheon Voucher Schemes. Salary according to ability and experience. Write or 'phone **Percy Bilton Ltd.**, Bilton House, 64-68, Uxbridge Road, Ealing, W.5. Tel.: EALing 7777.

CLIFFORD CULPIN, 39 Doughty Street, W.C.1, requires at once an experienced responsible **SENIOR ASSISTANT ARCHITECT** as leader of a team about to start work developing a large project from approved designs. The successful applicant should possess efficiency and drive. He must be fully conversant with the London Building Acts and used to handling large schemes through all stages. Salary £1,400 p.a. Write or telephone for appointment (CHA. 5395).

CLIFFORD CULPIN, 39 Doughty Street, W.C.1, requires at once a **SENIOR ASSISTANT** to take responsibility throughout ALL stages of important projects. Starting salary £1,000 p.a. £1,150 according to experience. Full holiday this year. 'Phone or write for appointment CHA. 5395.

CLIFFORD CULPIN, 39 Doughty Street, W.C.1, requires at once a post-Inter. **ARCHITECTURAL ASSISTANT** for work on all stages of a variety of projects. Opportunities for advancement for men with ability and a sense of responsibility. Write or telephone for appointment CHA. 5395.

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ELDEN MINNS & SON require an experienced ASSISTANT for expanding practice with a variety of work. Excellent prospects for applicant with initiative. Giving details of age, qualifications, previous experience and salary required, to No. 10, Glossop Road, Sheffield, 10. 9255

EDDS Office requires an experienced and fully qualified ARCHITECTURAL ASSISTANT for work on industrial and commercial projects. Excellent working conditions. Commencing salary up to £1,200 according to qualifications and experience. Apply Bithwaite & Son, F.R.I.B.A., 7, South Parade, Leeds, 1. 9258

SENIOR and JUNIOR ASSISTANT required for Intermediate-Final standard in busy office, Portsmouth. Varied and interesting work; day week in operation. Salary according to experience. Thomas K. Makins, A.R.I.B.A., 4, Portcreek Terrace, Portsmouth. 9259

JUNIOR ARCHITECTURAL ASSISTANT required by a world-wide organisation with office in London. Applicants must be experienced, Intermediate standard students of the R.I.B.A., and have had at least three years' experience in the preparation of drawings and details. Apply in writing, giving full information to Personnel Dept., Cable and Wireless Limited, Mercury House, Theobalds Road, London, W.C.1. 9262

LONDON Architects with Manchester Office require qualified ARCHITECT with several years' experience, preferably though not essential in schools. Five-day week. Apply in writing or telephone Scherrer & Hicks, 60, Gardens, Manchester, 2. 9263

800 to £1,200 ASSISTANTS with ability required for Colleges, Hostels, etc. Write Charles Pike, 14, Lincoln's Fields, W.C.2, or phone HOL. 3532 for appointment. 9264

REQUIRED-SENIOR ASSISTANTS, for Stoke on Trent practice, capable of taking charge of contracts. Salary up to £1,200 annum, according to qualifications and experience. Five-day week, mileage allowance for car. Full particulars and salary required Box 9234. 9264

ASCAL J. STIENLET & SON require enthusiastic ASSISTANT ARCHITECT for work on R.C. Churches, Schools and Commercial projects. Full holiday this year. Write, stating particulars of experience and salary required, to 4, Queen's Square, Saville Row, Newcastle upon Tyne, 1. 9235

JUNIOR ASSISTANT ARCHITECTS to take control of industrial, commercial and national projects from design stage to completion. First class design ability and experience necessary. Five-day week, car expenses, bonus pension schemes. Apply, giving all details salary required, to Hellberg and Harris, F.R.I.B.A., 13, Queen Victoria Road, Coventry. 9236

M. AUSTIN-SMITH AND PARTNERS require qualified ASSISTANTS (maximum 30) to be responsible for jobs both on their own and in conjunction with more senior assistants. Apply in writing, giving all relevant details to 29, Sackville Street, London, W.1. 9311

ASSISTANT ARCHITECTS of Intermediate or Final standard for Liverpool and many offices for work on interesting large scale, small scale industrial, commercial and national projects. Five-day week, car expenses, bonus and pension schemes. Apply, giving all details and salary required, to Hellberg and Harris, 13, Queen Victoria Road, Coventry. 9237

S. W. STONE & PARTNERS, F.F.A.R.I.B.A., 20, The Crescent, London, Somerset, require ASSISTANT for busy office practice. Previous experience in Architectural office essential. Salary according to ability and experience. 9229

PROGRESSIVE City Firm engaged in industrial and commercial work requires ASSISTANT of final standard with several years' office experience. Five-day week. Luncheon vouchers. Apply by arrangement. Box 9227. 9227

ARCHITECTS and ASSISTANTS of ability and enterprise are urgently required for possible positions dealing with a wide variety of contemporary projects and interesting development work. Salary range £400-£1,000, good prospects, pleasant working conditions, five-day week. Interview expenses paid. Write or telephone Morrison and Partners, 103, Belper Road, Tel. 42927. 9218

BYRAN & NORMAN WESTWOOD & PARTNERS urgently require JUNIOR and SENIOR ASSISTANTS. Salary will be according to experience. Please write or telephone for interview. 21, Suffolk Street, S.W.1. TRAFALGAR 4411. 9278

OSCAR GARRY & PARTNERS require ASSISTANTS of Intermediate and Final standard. Salary according to office experience. Please ring for appointment: WELbeck 2507-8-9. 9279

REQUIRED immediately, qualified ASSISTANT for work in Nigeria. Write, giving particulars, etc., to Box 9277. 9277

HEPPERDSON & DIXON, of 2, Museum Street, Ipswich, urgently require additional experienced ARCHITECTURAL ASSISTANTS for their Ipswich and Colchester Offices. 9293

YOUNG SENIOR ASSISTANT ARCHITECT required, fully qualified. Successful applicant will be responsible for completion of a number of large contracts in hand, together with designing and supervising new developments. Interest in shopfitting an advantage, but not essential. Superannuation scheme, five-day week. Minimum salary £1,000 p.a. Apply, stating age and experience, to: Staff Architect, United Drapery Stores, Ltd., Cardigan Crescent, Kirkstall Road, Leeds, 4. 9282

£750 - £950 to young man with initiative, Intermediate standard. Good prospects with progressive firm. Norrish & Stainton, 2, Augustus Road, Edgbaston, Birmingham, 15. 9283

ARCHITECTURAL ASSISTANTS, Junior and Intermediate level, required for Manchester Office of Bank Architect's Department, having an extensive programme of new construction and improvements. Applications, giving age, experience and salary required, to Box 9287. 9287

OPPORTUNITY for first class ARCHITECTS with initiative to take responsibility for a variety of contemporary work. South Yorkshire area. Salary according to ability. Bonus, Pension and Life Assurance Schemes. Travelling, removal and interview expenses paid. Box 9292. 9292

ASSISTANT required in London Office. Intermediate standard. Knowledge of licensed premises an advantage. Salary according to experience. Box 9327. 9327

TAYLOR & CROWTHER, Chartered Architects of Truro, Cornwall, require qualified, preferably school trained, ASSISTANT. Work will be of an interesting modern nature and the applicant will have to prove his real interest, efficiency, acceptance of responsibility and awareness in his application. Age limit 28. Married if possible. 9297

POSITION vacant for a LADY ASSISTANT in busy country practice near London. Intermediate standard or above essential. Drive car an advantage. Write Box 9303. 9303

QUALIFIED ASSISTANT required for medium sized office in pleasant surroundings for varied work, housing, churches, community buildings, etc. Pension scheme, canteen facilities, car allowance. Possibility of housing. Salary in range £1,000 to £1,300 according to experience. Apply S. J. Clewer, F.R.I.B.A., Bourneville Village Trust, Oak Tree Lane, Birmingham, 30. 9309

JOHN BATTY & SON require experienced practical ARCHITECTURAL ASSISTANT. Applicants please state qualifications, experience and salary required to 142-4, Minories, E.C.3. 9231

ROBERT MATTHEW & JOHNSON-MARSHALL have vacancies in their Edinburgh and Dundee offices for ASSISTANTS at salaries from £800 upwards. Wide variety of University, Hospital and Housing projects. Applications should be marked "Confidential" and addressed to 31, Regent Terrace, Edinburgh, 7. 9314

QUALIFIED and UNQUALIFIED SENIOR ARCHITECTURAL ASSISTANTS required. Salaries by arrangement. After qualifying period a Bonus scheme is in operation, together with a non-contributory Pension and Life Assurance scheme. Telephone CHANCERY 3526 or write to Woodroffe, Buchanan & Coulter, 5, Bedford Row, W.C.1. 9272

COMPETENT SENIOR ASSISTANTS required by expanding contracting organisation in the north-west. Successful applicants will be in charge of varied contracts spread over several counties in the north of England, mainly of an industrial nature. Salaries of £1,100 to £1,200 per annum are offered with these positions and an incentive bonus scheme is in operation. Please reply in writing, stating age, experience and qualifications, to: Box 9316. 9316

PROGRESSIVE City Firm requires recently qualified ASSISTANT capable of taking charge development projects. Minimum salary £1,000 p.a. Box 9319. 9319

ARCHITECT, Northampton, requires ASSISTANT of Final standard or qualified. Salary by arrangement. Write giving details of experience and age to Box 9325. 9325

SMALL office urgently requires CHIEF ASSISTANT who is able to handle a number of jobs of all sorts. Philip Jebb, 140 Sloane Street, S.W.1. SLO 6383. 9339

J. M. AUSTIN-SMITH & PARTNERS require fully qualified ARCHITECTURAL ASSISTANTS with office experience and the ability to design, run and supervise contracts on their own initiative. Salary according to age (limit 35) and experience. Apply in writing to 29 Sackville Street, London, W.1. 9341

ROBERT J. WOOD & PARTNERS require ASSISTANTS for work in the U.K. and abroad, salary up to £1,100. Apply with details to Lewes Road, Bromley, Kent. RAV. 1083. 9353

GEORGE WIMPEY & CO., LTD. require additional ARCHITECTURAL ASSISTANTS to cope with an expanding programme of Industrial, Commercial and Domestic Projects. Permanent appointments, with good salaries are immediately available in the Manchester Region. Pension Scheme available for successful applicants wishing to make a career with the Company. Apply in writing to 629, Eccles New Road, Salford, 5. 9351

ARCHITECTURAL ASSISTANTS for a wide variety of interesting projects in small Architects' Department of leading Building and Civil Engineering Contractors in the Manchester area. Canteen facilities. Salary £350 to £1,050. Apply Box 9350. 9350

MANNING AND CLAMP require ASSISTANTS of intermediate and final standard for their Richmond Green and London offices, mainly for multi-storey housing and industrial work. Salary range £750, 0.0.-£1,000, 0.0. Apply in writing to-19, The Green, Richmond. 9346

QUALIFIED or experienced SENIOR ARCHITECT required for responsible position in busy provincial office. Salary approx. £1,000 p.a. according to qualifications, plus profit sharing, plus superannuation, assistance with accommodation. Box 9343. 9343

£1,000 / £2,000 p.a. will be paid to experienced competent ARCHITECTS by a private practice in the City of London. The work will be primarily on the drawing board on new and interesting projects of magnitude. A high standard of design and detailing ability is required. Please apply in writing to Box 9360. 9360

ASSISTANT, inter-final standard, five-day week-day release student or part-timer with own practice. CHANCERY 3615. 9355

TWO ARCHITECTURAL ASSISTANTS required-intermediate to final standard-small personal office. Reply giving full particulars to LUSH & LESTER, Craven House, 121, Kingsway, London, W.C.2-Telephone HOLborn 5101. 9366

J. SEYMOUR HARRIS & PARTNERS, 3-4, Greenfield Crescent, Birmingham, 15. Tel. Edg. 4571. QUALIFIED ARCHITECTS required to work in small design groups on interesting development schemes in Birmingham and other cities throughout the United Kingdom. Good opportunities in an expanding practice with offices in Birmingham and London. Progressive salary scales, incentive bonus scheme, luncheon vouchers, five-day week and three weeks' holiday. 9387

J. SEYMOUR HARRIS & PARTNERS, 3-4, Greenfield Crescent, Birmingham, 15. Tel. Edg. 4571. ARCHITECTURAL ASSISTANTS with some experience required to work in design construction groups on interesting redevelopment schemes in Birmingham and other cities throughout the United Kingdom. Good opportunities in an expanding practice with offices in Birmingham and London. Progressive salary scales, bonus scheme and holiday in accordance with service, luncheon vouchers, five-day week. 9388

J. SEYMOUR HARRIS & PARTNERS, 3-4, Greenfield Crescent, Birmingham, 15. Tel. Edg. 4571. QUALIFIED ARCHITECT required to work in small design group on interesting development schemes in the London area. Good opportunities in an expanding practice with offices in London and Birmingham. Progressive salary scales, incentive bonus scheme, luncheon vouchers, five-day week and three weeks' holiday. 9389

ARCHITECT'S ASSISTANT. Capable Assistant required for expanding practice in East Cornwall. Good draughtsmanship and ability to survey buildings essential. Time off for study if required. Reply in writing, stating age, training, experience and salary required, to G. R. Vaughan Ellis, Chartered Architect, N.P. Bank Building, Liskeard, Cornwall. 9412

ASSISTANTS of Intermediate standard required in medium sized busy and progressive practice in Regents Park area. Wide variety of experience to be gained. Study time allowed, holiday arrangements honoured, five-day week. Box 9421. 9421

EXPERIENCED ARCHITECTURAL ASSISTANT wanted urgently, specialising in flat and housing work. Write giving details of experience to Kenneth Parker & Associates, 4, Liverpool Terrace, Worthing, Sussex. 9422

ARCHITECTURAL ASSISTANT OFFICE MANAGER required in West End office of Architect to Multiple Firm, number of architectural staff 10-12. Architectural qualification not essential but must be first-class draughtsman and have experience of office management and administration of contracts. Good salary for right man. Luncheon Vouchers and Pension Scheme available. Apply Box 9424. 9424

JUNIOR ARCHITECTURAL ASSISTANTS required in Croydon office, good draughtsmanship and ability to prepare working drawings essential. Five-day week and holiday this year. Reply stating age, experience and salary required to Box 9425. 9425

CITY FIRM (Chartered Architects & Surveyors) require capable and enthusiastic ASSISTANTS of Intermediate R.I.B.A. or R.I.C.S. standard for interesting and varied projects in London and Provinces. Salary scale £800-£1,000, generous Pension Scheme, L.V., five-day week. Write Box MA/167 c/o 95, Bishopsgate, London, E.C.2. 9379

NIGERIA. Godwin & Hopwood require ASSISTANT ARCHITECTS, single, age 25-30, available July/August 1960. Interest in tropical architecture and research essential. Initial contract of 18 months' tour with three months' paid leave. Write stating experience to Box 9382. 9382

ASSISTANTS required, Intermediate to Final standard, with minimum two years' office experience. Small busy practice. Please apply R. Jelinek-Karl, F.R.I.B.A., 6, Buckingham Street, W.C.2. 9383

ASSISTANTS required in Croydon area. Intermediate or near Intermediate standard, to assist on varied and interesting projects. Five-day week. Two weeks' holiday this year. Apply giving details of education, experience and salary required. Box 9390.

CROYDON. ARCHITECTURAL ASSISTANTS required for preparation of working drawings and details for large scale projects. Salary according to experience. Five-day week. Holidays this year. State training and experience. Box 9391.

JAMES A. ROBERTS, A.R.I.B.A., requires Intermediate and Final standard ASSISTANTS, salary range £750-£1,200 depending upon ability, experience and personality. Interesting and varied work with scope for initiative and responsibility. Please write: 86, New Street, Birmingham, 2. 9395

DEREK PHILLIPS primarily engaged in consultant work in lighting and servicing, requires ASSISTANT to help with expanding architectural practice in Hertfordshire. Transport almost essential. Apply stating age, experience and salary required to No. 1, Bovingdon Green, Nr. Hemel Hempstead, Herts. 9403

ARCHITECTURAL ASSISTANTS required, capable of carrying through a variety of contracts from rough sketch stage to final account. Plenty of scope for people with initiative. Telephone MAYfair 9550 for appointment or write Box 9404.

ARCHITECTURAL ASSISTANT with experience and willing to travel periodically to supervise work—including building of assembly halls for schools and villages for children in need of special care required for London office. Permanent position. Salary £700-£900. Write to Box 9405.

ARCHITECTURAL ASSISTANTS of Final or Intermediate standard required by London Architects with varied practice. Salary by arrangement. Five-day week. Ring WHI 2552 for interview. 9406

ARCHITECTURAL ASSISTANT able to prepare working drawings and details from sketch plan stage, required by Sparrow & Clater, F.A.R.I.B.A., 52, North Hill, Colchester. Salary commensurate with experience. Write stating age, full details of training, etc. 9407

ARCHITECTURAL ASSISTANT with good knowledge of building construction required for working drawings and perspectives, both for projects and for trade literature and exhibition work. Salary up to £750 according to experience. Write to Michael de St. Croix, A.R.I.B.A., Truscon Ltd., 35, Lower Marsh, London, S.E.1, or phone WAT 6922. 9409

ARCHITECTURAL ASSISTANT, Intermediate standard, required in Luton Office, to deal with survey work, estate layouts, working drawings and details for domestic, industrial and other projects. Pension Scheme in operation after probationary period. Apply in first instance with details of experience and salary required, etc., to Box 9414.

ARDIN & BROOKES & PARTNERS have vacancies for keen ASSISTANTS of Intermediate Standard. Some office experience with good, quick draughtsmanship essential. Progressive office with varied commercial work including offices, shops, etc., 5-day week. Good salary to suitable applicants. Apply 129, Mount Street, London, W.1. GROS. 7728. 9411

GUY MORGAN & PARTNERS require **ARCHITECTURAL ASSISTANTS** in their London office. Salary range £750-£1,200 per annum. Please telephone BELgravia 4581 for appointment. 9503

GERALD LACOSTE & PARTNERS require ASSISTANTS. Salary according to experience. 5-day week. Holiday arrangements respected. Telephone WEL: 5758 or Write 40/42, George Street, W.1. 9508

BROXBORNE, Herts. JUNIOR ASSISTANT required urgently by JOHN SNELLGROVE for a rapidly expanding practice. Salary according to ability. Practice includes commercial, housing and schools projects. Telephone HOD 4772 for urgent appointment. 9507

URGENTLY Required: ARCHITECTURAL ASSISTANTS, Intermediate and Final Standard, for Small Contemporary Office. Top Salaries according to Experience and Qualifications. E. Norman-Bailey & Partners, Ring VICTORIA 7088 for appointment. 9506

ASSOCIATE ARCHITECT required for busy practice in Central Essex. Interesting and varied work including multi-storey flats, shops, housing and industrial developments. Flat provided in Colchester. ARCHITECT ASSISTANTS also required. Applicants should apply giving details of age, experience and salary required to Box 9505.

NORMAN & DAWBARN require experienced architects for interesting projects both here and overseas. Applicants should be interested in good design. Salaries from £900 upwards. Phone or write for an appointment to: 7 Portland Place, W.1. 9504

RICHARD SHEPPARD, ROBSON & PARTNERS require ARCHITECTURAL ASSISTANTS, Intermediate or Final standard. 5 Southampton Place, W.C.1. CHancery 4261. 9510

SOUTHAMPTON office requires ARCHITECTURAL ASSISTANTS for large scale commercial projects. Applicants should be at least Intermediate standard with good office experience, capable of producing clear and accurate working drawings. Salary by arrangement. Apply in writing, stating age, experience and present salary to Healing & Overbury, Rodney Lodge, Rodney Road, Cheltenham. 9500

ARCHITECTS' CO-PARTNERSHIP require a qualified or nearly qualified ASSISTANT with some experience for work on Special School. Write to 44, Charlotte Street, W.1, or Phone LANGham 5791. 9498

ASSISTANT, 3rd-4th year Evening School standard with initiative and contemporary outlook, required by small Development Company in Beckenham. Salary £600-£650 p.a. Apply to Company Architect, Box 9490.

SENIOR ARCHITECTURAL ASSISTANT

required for special duties in Dorset, preferably qualified and experienced in Industrial Design and alteration work. Salary range £900/£1,000 p.a. according to age and experience.

also DRAUGHTSMAN

Salary range £750/£850 p.a.

Five-day week. Reply with full details, age and experience to Box No. DL6268, c/o Whites, 72, Fleet Street, London, E.C.4. 9471

ARCHITECTURAL ASSISTANT required. Salary scale £700-£900 per annum. Excellent opportunity offered to suitable applicant. Five-day week. Superannuation scheme in operation. Write giving full particulars of experience to Sandon & Harding, A./A.R.I.B.A., 14, Lower Brook Street, Ipswich. 9434

GRANGEMOUTH. ASSISTANT ARCHITECT required to work on recent competition award. Age 24-27. Well trained—school or office. Salary in direct proportion to competence. Write full details to Philip S. Cocker, A.R.I.B.A., Old Council Chamber, Charing Cross, Grangemouth, Stirlingshire. 9437

KEEN, energetic ASSISTANT ARCHITECTS required to receive good salaries in progressive and contemporary-minded Architects' offices. The appointments offer considerable scope and a superannuation scheme is available. Apply in writing to Chippindale & Edmondson, Chartered Architects, Empire House, Piccadilly, Bradford 1. 9438

COOK, CULLING & ILLINGWORTH have a vacancy for experienced SENIOR ASSISTANT ARCHITECT in busy practice dealing largely with industrial buildings. Candidates should have had at least five years' full-time office experience. Apply: Meeting Lane, Gold Street, Kettering. 9453

ARCHITECTS AND ASSISTANTS. Telephone NOW, Wrexham 4151, or write, H. Anthony Clark, F. C. Roberts & Partners, 41, Regent Street, Wrexham, North Wales. Interesting variety of high standard work. Exercise of initiative and responsibility encouraged. Capabilities will be recognised by remuneration up to £1,000 p.a. 9441

TRIPE & WAKEHAM, Chartered Architects, require ASSISTANTS in all grades to work in their London office on interesting projects both in this country and abroad. Salary by arrangement. Telephone WELbeck 7744 or write to 16, Fitzhardinge Street, London, W.1, for an appointment. 9443

TRIPE & WAKEHAM, Chartered Architects, require a SENIOR ASSISTANT to supervise construction of interesting and important project abroad. Salary by arrangement. Telephone WELbeck 7744 or write to 16, Fitzhardinge Street, London, W.1, for an appointment. 9444

EXCELLENT opportunities for young ARCHITECTS with ambition to fill two responsible positions in expanding South Coast Practice with two Offices: A SENIOR ARCHITECTURAL ASSISTANT, qualified or Final standard. A JUNIOR ASSISTANT of Intermediate or approaching Intermediate standard. Write giving full details, together with previous experience which will govern salary. Box 9445.

MULTIPLE Store Group requires INTER-MEDIATE ASSISTANT with either the experience or interest in shop design. Salary £900-£1,000 per annum. Box 9446.

BRIAN PEAKE requires JUNIOR STAFF interested in gaining experience by running small contracts. Tel. GRO 7888. 9446

ARCHITECTURAL ASSISTANTS required with housing experience in all or any of the following aspects: design, construction, detailing and planning. Excellent opportunities for keen and enterprising types in a rapidly expanding organisation operating throughout the country. Good conditions of service but housing not provided. Salary commensurate with experience and ability. Write to the Secretary, The Homeville Company Ltd., 12, Craufurd Rise, Maidenhead. 9450

SAFFRON WALDEN, Essex. ASSISTANT required, qualified, Final or Intermediate standard, for varied progressive country practice—Shops, Offices, Housing, Restorations, etc. Versions, etc. Initiative and good draughtsmanship essential. Commensurate salary. Apply H. Mobbs, A.R.I.B.A., Barclays Bank Chambers, Saffron Walden, Essex. Telephone 2307. 9510

AN experienced ARCHITECTURAL ASSISTANT, holding Intermediate R.I.B.A. required immediately for established firm on South Coast. Opportunity presented to obtain further experience on various large contracts. Salary bracket £750-£850 p.a. Write stating age and experience, Thomas, Jolly, Grant & Kelly, 26, Kent Road, Southsea, Hants. 9511

ARCHITECTURAL STAFF, all grades, required for interesting work. Good salary bonus, superannuation scheme. House Purchase Assistance Scheme. Excellent working conditions. Five-day week. Please apply, giving details of qualifications, experience and salary required to George Brown & Partners, A./A.R.I.B.A., F.I.A. and Eric Ross, F.R.I.B.A., Equity & Law Building, Baldwin Street, Bristol, 1. 9512

ARCHITECTURAL ASSISTANTS, all grades, required for interesting and varied private practice with principal office in Guildford. Write stating age, experience, and salary required. Box 9459.

ARCHITECTURAL ASSISTANTS required immediately by well-known City Firm. Industrial and Commercial projects. Salary scale £900 to £1,200, generous pension, L.V. 5-day week. Box MA/188, c/o 95, Bishopsgate, London, E.C.2.

ARCHITECTURAL ASSISTANT for interesting and varied work. Intermediate standard. Good conditions and prospects. Five-day week. Salary up to £800. Doffman & Leach, A.R.I.B.A., 17, Wolvenhampton Road, Staffs. 9513

EDWARD D. MILLS & PARTNERS require further ASSISTANTS for positions of responsibility on interesting work in England and abroad. Write with full details to 911, Richmond Buildings, Dean Street, Soho, London, W.1. 9514

ASSISTANT ARCHITECT. Richard Costello Limited have a vacancy at their H. Office for an ASSISTANT ARCHITECT. Applications are invited from men aged 23-28, qualified or near qualifying, who wish to broaden their experience in the field of industrial architecture and who are capable of undertaking responsible work entailing design, working drawings, site visits, etc. Please write to: Person Officer, 111, Westminster Bridge Road, London S.E.1. 9515

OPPORTUNITY for ASSISTANT who want to design and handle jobs from start to finish with minimum supervision. Salary up to £1,000 per annum. Telephone Carl Fisher Associates, LANGham 0016.

ARCHITECTURAL ASSISTANT required. Intermediate standard, capable of work with minimum supervision. Salary £650-£750 according to experience. Apply to: S. Bede & Son, L./A.R.I.B.A., Museum Buildings, Princes Gate, Peterborough, Notts. 9516

ARCHITECTS A LARGE retail organisation wishes to expand its Architectural staff in the London area. Qualified and experienced Architects seeking interesting work with considerable scope for visibility are invited to apply.

ASSISTANTS Men not yet qualified and wishing to design teams under qualified Architects are needed. Box 9491.

W. S. HATTRELL & PARTNERS Architects, COVENTRY require keen, capable ASSISTANTS of Intermediate to Final Standard to prepare working drawings, specifications, etc., under supervision and able and willing to take responsibility on smaller contracts.

Progressive Salary (£750-£1,000) depending on ability. Pension Scheme. 5-day week. Travel expenses paid to interviewed applicants. HOUSE AVAILABLE.

Remitts to 1, Queens Road, Coventry.

LITTLEWOODS MAIL ORDER STORES LIMITED require ARCHITECTS A/R.I.B.A.

We have a large and varied building programme and wish to increase our present number of qualified Architects.

We also need Architectural Assistants of Intermediate or at least H.N.C. standard.

Salary will be generous and will depend on qualifications and experience.

Other conditions include a good Pension Scheme and five-day week.

Applications to:—
Employment Manager,
(Ref. A & A/38/AJ),
Littlewoods Mail Order Stores Ltd.,
Swinney House,
Church Street,
Liverpool, X.

ARCHITECTURAL ASSISTANTS of Intermediate and Final standard are urgently required in our Halifax and York Offices. Please apply in writing giving full particulars to Richard Pickles & Partners, A./A.R.I.B.A., 1, Harrison Road, Halifax. 9517

Senior Architects
Assistant Architects
Architectural Draughtsmen
Cruden Design Service have vacancies in their Architects' Department, for work on multi-storey housing and school projects. Students requiring summer vacation work and those qualifying this year are invited to apply with full details to:
Joint Chief Architect,
Crudens Limited,
Musselburgh
(near Edinburgh). Tel. 2244. 9489

EXPANDING practice with varied work in different parts of the country, require keen Intermediate standard ASSISTANTS. Salary and prospects for the right men, commitments honoured. Dairling and Partners, 14, Bloomsbury Square, W.C.1. CHANDLER. 9469

EXPANDS Development Company requires ARCHITECTURAL or SURVEY ASSISTANT immediately. Should be Intermediate or approaching or with equivalent experience. Car driver advantage. Varied and interesting work over wide area. Excellent prospects. Write stating age, experience, qualifications and salary required to Lapworth Development Limited, 21, High Street, Stourport-on-Worce. 9473

ARCHITECTURAL ASSISTANT wanted for private office, working on smaller buildings, homes, exhibitions, and interiors. Good pay. Ring P/Tney 3800. 9474

SENIOR AND INTERMEDIATE STANDARD ASSISTANTS required for West End Offices. Day week. Salary £650-£1,200 according to experience. Six monthly salary reviews. Telephone 6907 for appointment. 9475

ARCHITECTURAL ASSISTANT required. Messrs. Steane, Shipman & Cantacuzino, a architectural firm of two practising partner and secretary, require Assistant of at least years' full-time office experience. Eight days Mondays to Fridays. Salary by agreement. 18, Buckingham Street, Strand, W.C.2. TRA 2774. 9478

ARCHITECTURAL ASSISTANT required for busy West End office. Salary according to experience. Apply to Maurice Sanders, B.A., 24, Harley Street, W.1. 9479

Architectural Appointment Wanted
3s. per line; minimum 12s. Box Number, including forwarding replies 2s. extra.

PL. ARCH. A.R.I.B.A., 30, seven years' post grad. experience London, four years' P.T., fully conversant all aspects London work. Average earnings £1,800 p.a. Seeks work with definite prospects for future or consider working for architects on fee basis. Able assess possibilities of sites and problems/clients/areas quickly. High design, drawing, and administrative abilities. Will consider ordinary Senior/Chief Assistant position. Available soon. Box 9261.

A.R.I.B.A., wide experience, seeks spare-time work. Dartford/Sevenoaks area. Phone 3099. 9432

ASSISTANT with six years' varied experience, school trained, seeks post in London. Box 9432

ENGINEERING WOMAN ARCHITECT, Final standard, wants part-time work. Some office experience. Interested in all kinds of work. G. Wilson, 8, Lyme Farm Road, S.E.12. 849. 9399

Other Appointments Vacant
3s. per line; minimum 12s. Box Number, including forwarding replies 2s. extra.

SIGNER required for Shopfitting, Interior work and Exhibitions. Permanent position. Pension scheme in operation. Apply: Messrs. W. Clifford Ltd., 29, Vauxhall Bridge S.W.1. 8963

ENGINEERS and DRAUGHTSMEN urgently required as permanent additional staff in various London Office for both reinforced concrete and steelwork. Attractive salary. Ring Mr. Stevens COV 3136. 9111

ASSISTANT HEATING and VENTILATING ENGINEER required large London Architectural office. Applications in writing stating age, qualifications, salary. Box No. 9128.

ESTIMATING CLERK, age around 30 years, for Wood Flooring Contractors, East London. Some experience in the Building Trade an advantage, able to take off quantities, etc. Write in confidence, details of career, salary and references to Box 9347.

SURVEYING ASSISTANTS required for Architect's office. Should be proficient in chain surveying and levelling, a good draughtsman and of Intermediate R.I.C.S. standard. Good salary offered in accordance with ability. Applications to John H. D. Madin, 85, Hagley Road, Birmingham, 16. 9233

BUILDING SURVEYOR required in Manchester in Bank Architect's Department. Work will consist mainly of drawings, specifications and supervision of minor improvements to widely scattered premises. Apply, stating age, experience and salary required, to Box 9286.

ARCHITECTURAL DRAUGHTSMAN required about Intermediate standard in small private office. Every opportunity given to right applicant. Reply with all particulars including salary required to Hopson Hill & Partners, 42, Leyton Green, Harpenden. 9472

ARCHITECTURAL DESIGNER, preferably A.R.I.B.A. but not essential, with experience in the preparation of designs and specifications for building and civil engineering work covering industrial and office buildings. Required to join a team of designers for initiating development work at a large steel works near Sheffield. Superannuation scheme in operation. Applicants to state age, education and training qualifications, present and past appointments with types of work undertaken, and give indication of salary expected. Applications should be addressed to the Chief Engineer, Samuel Fox and Company Limited, Stocksbridge Works, Nr. Sheffield. 9451

A KEEN ARCHITECTURAL TRACER or JUNIOR required for varied and interesting work on building and electrical drawings. Apply Haines & Sheppard Ltd., Bush House, Aldwych, London, W.C.2. 9476

THE BRITISH ARCHITECTURAL STUDENTS ASSOCIATION is compiling a list of offices willing to take students during the vacation this summer. Will those offices which are interested in this scheme please write to: S. D. Fisher, B.A.S.A. Vacation Work Adviser, School of Architecture, Brighton College of Art and Crafts, Grand Parade, Brighton, Sussex, with details as to number of vacancies, minimum period of employment, type of work and possible salary scale. 9481

ARCHITECTURAL DRAUGHTSMAN for Luton Office, with minimum three years of training, capable of undertaking work of varied nature, including nominal supervision on site. Pension Scheme in operation after probationary period. Apply in first instance with details of experience and salary required to Box 9413.

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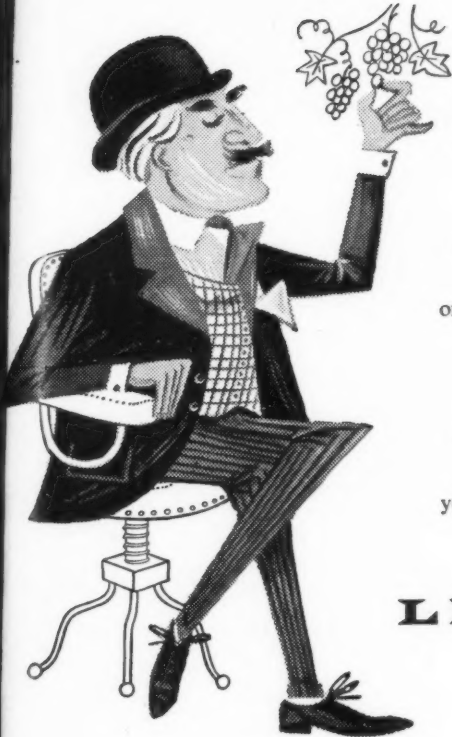
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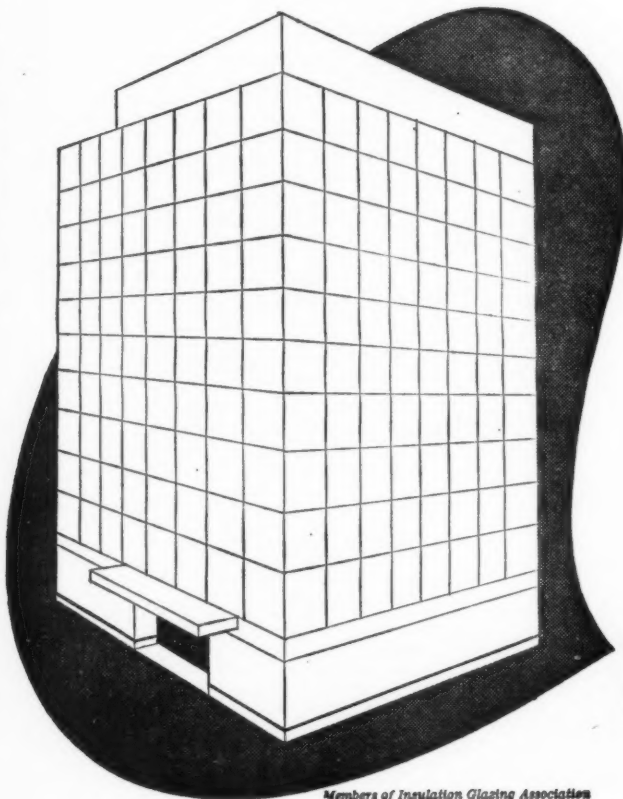
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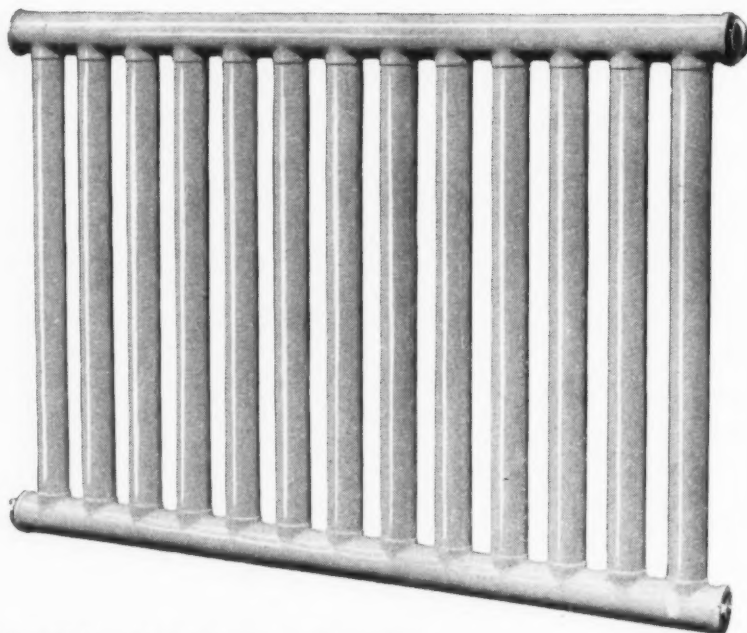
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