

MAY 11 1960

The Architects' JOURNAL for April 21, 1960

THE ARCHITECTS' JOURNAL

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MAY 11 1960



Standard contents

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

NEWS and COMMENT

Magal's Notes and Topics

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TECHNICAL SECTION

Information Sheets

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Industry

CURRENT BUILDING

Major Buildings described:

ails of Planning, Construction,

ishes and Costs

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[Vol. 131

THE ARCHITECTURAL PRESS

11 and 13, Queen Anne's Gate, Westminster,

W.1.

'Phone: Whitehall 0611

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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 in 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. Welbeck 0619
NCBMP	National Council of Building Material Producers. 10 Storey's Gate, S.W.1. Abbey 5111
NEFMAI	National Employers Federation of the Mastic 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. Macaulay 4451
NFHS	National Federation of Housing Societies. 12, Suffolk St., S.W.1. Whitehall 1693
NHBRC	National House Builders Registration Council. 58, Portland Place, W.1. Langham 0064/5
NPL	National Physical Laboratory. Head Office, Teddington. Molesey 1380
NRDB	Natural Rubber Development Board. Market Buildings, Mark Lane, E.C.3. Mansion House 9383
NSAS	National Smoke Abatement Society. Palace Chambers, Bridge Street, S.W.1. Trafalgar 6838
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1. Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1. Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. Fountainbridge 7631
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1. Langham 5533
RICS	Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1. Whitehall 5322/9245
RFAC	Royal Fine 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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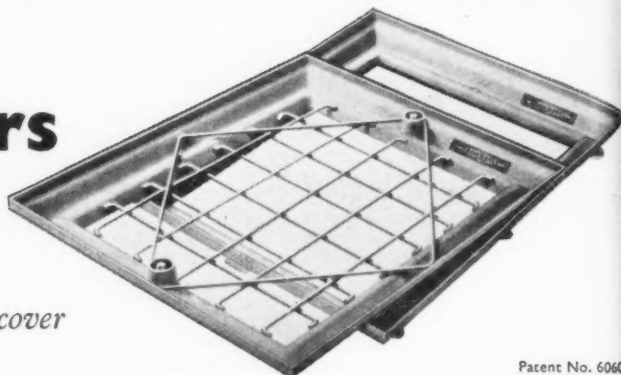
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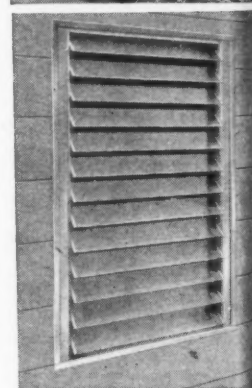
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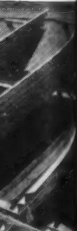
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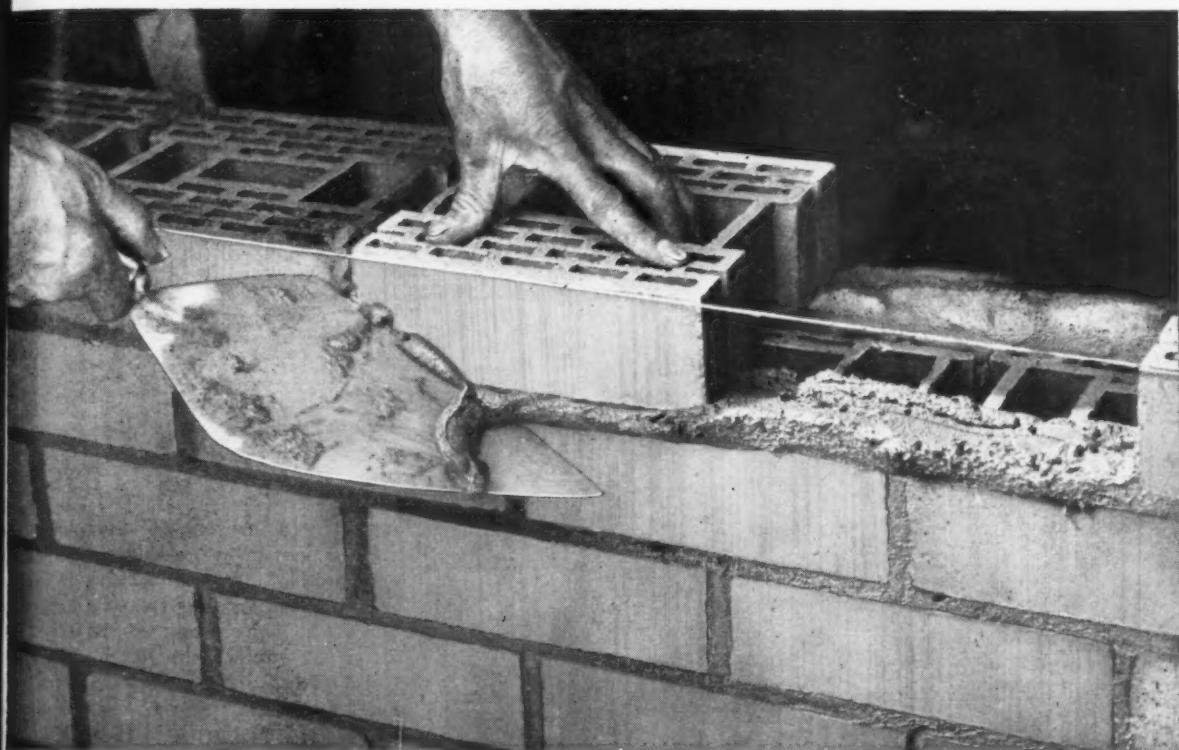
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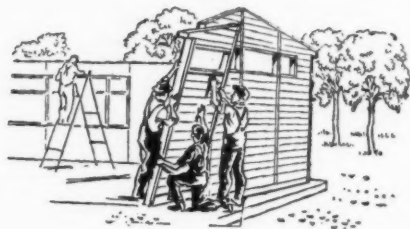


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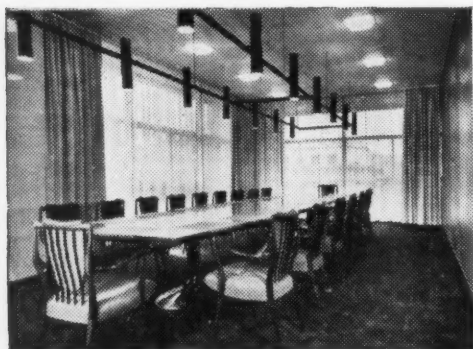
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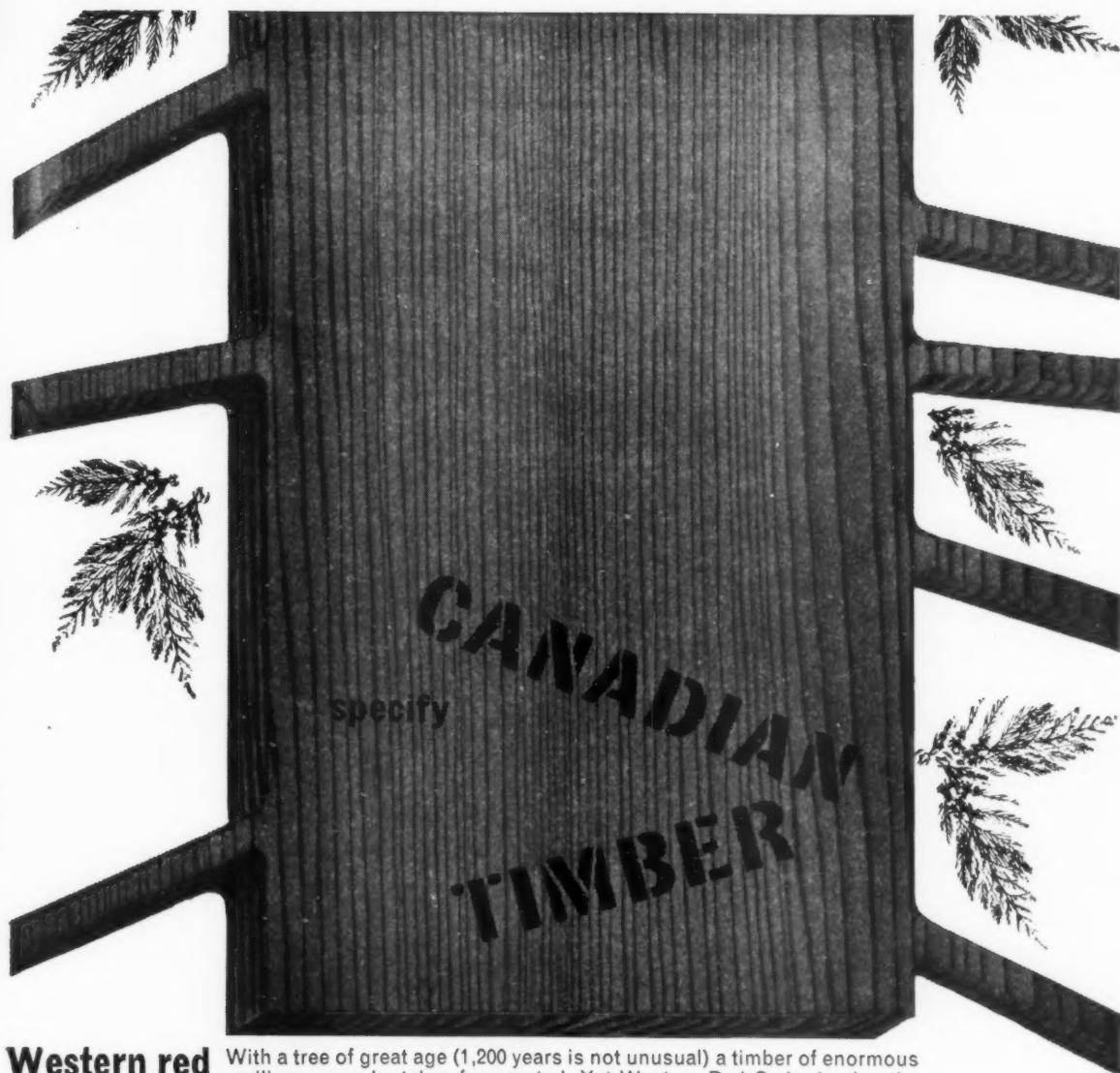
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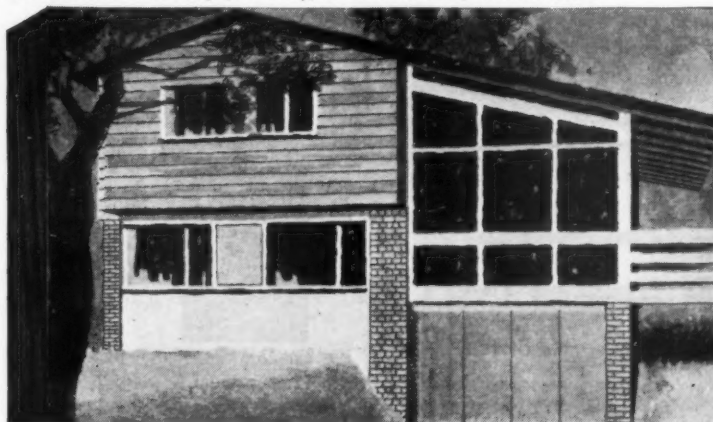


Architects for Castrol House: Messrs Gollins, Melvin, Ward and Partners, in association with Sir Hugh Casson and Neville Condor.



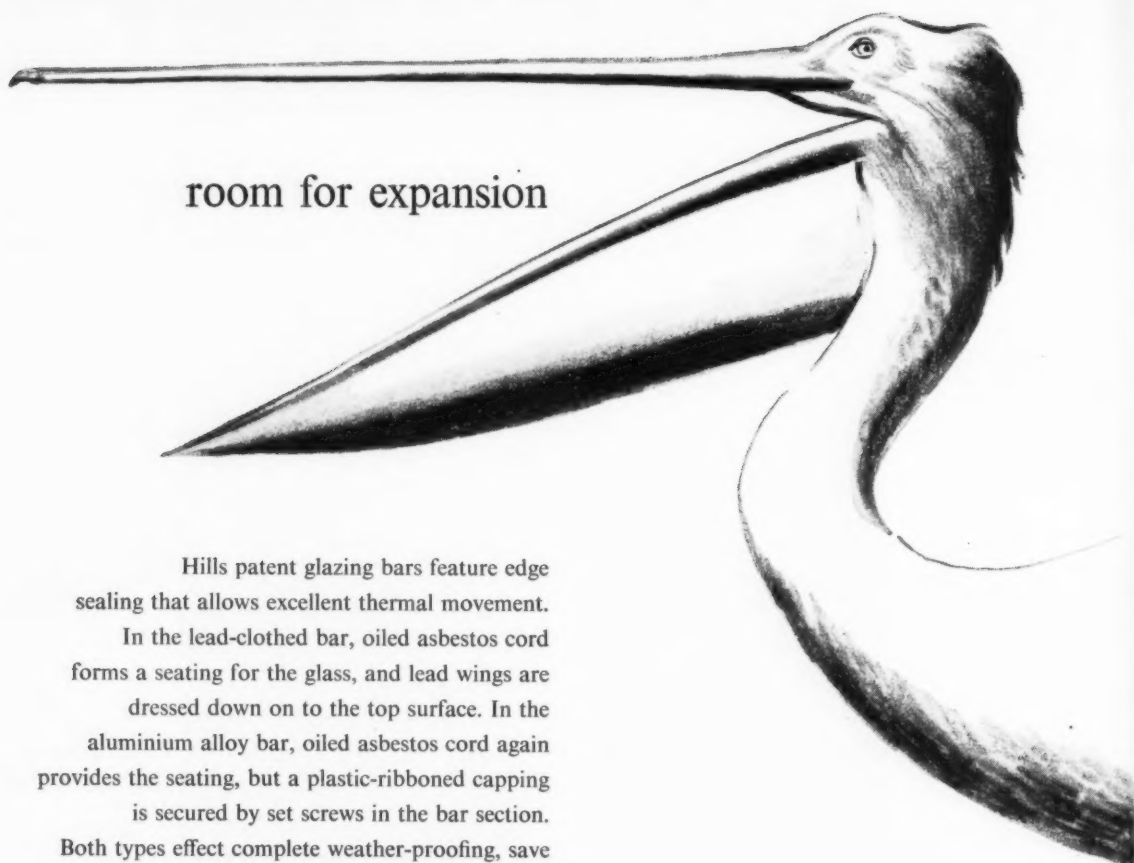
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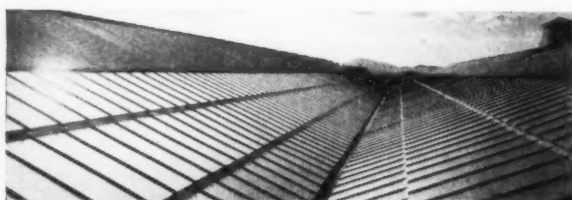


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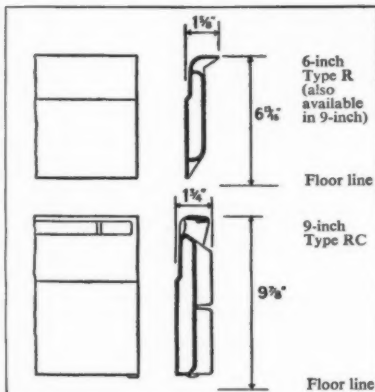
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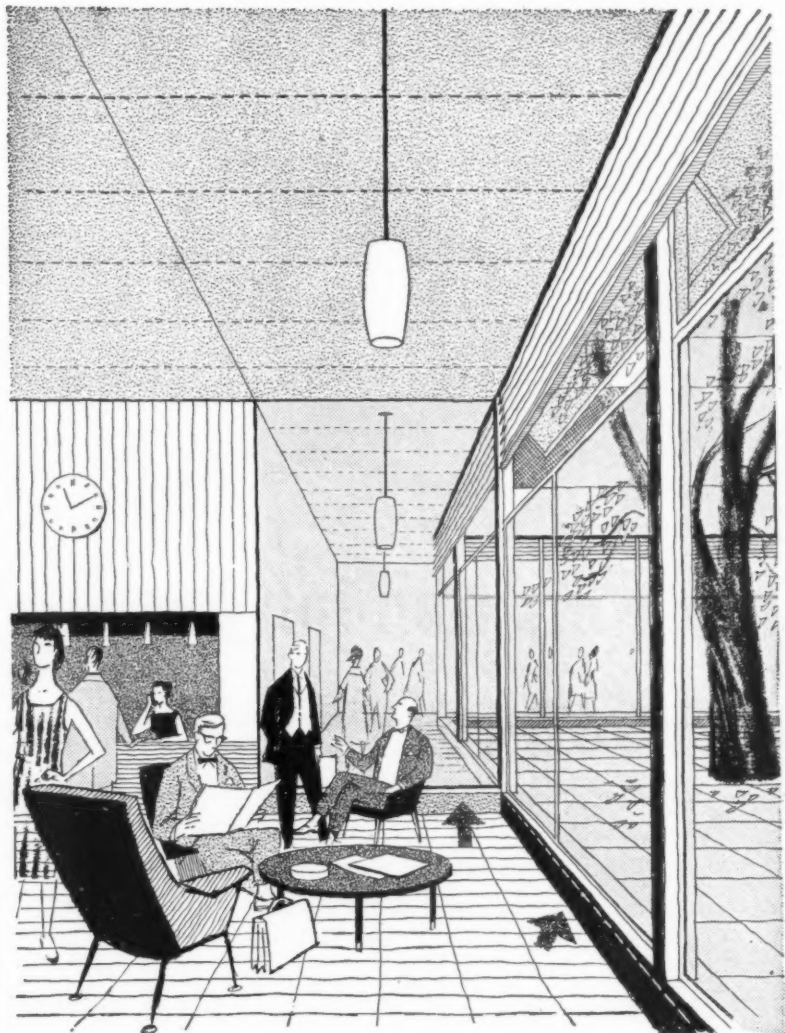
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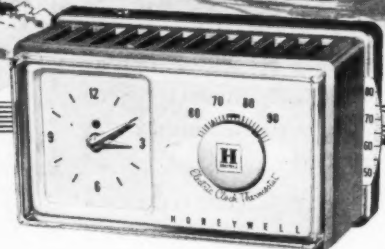
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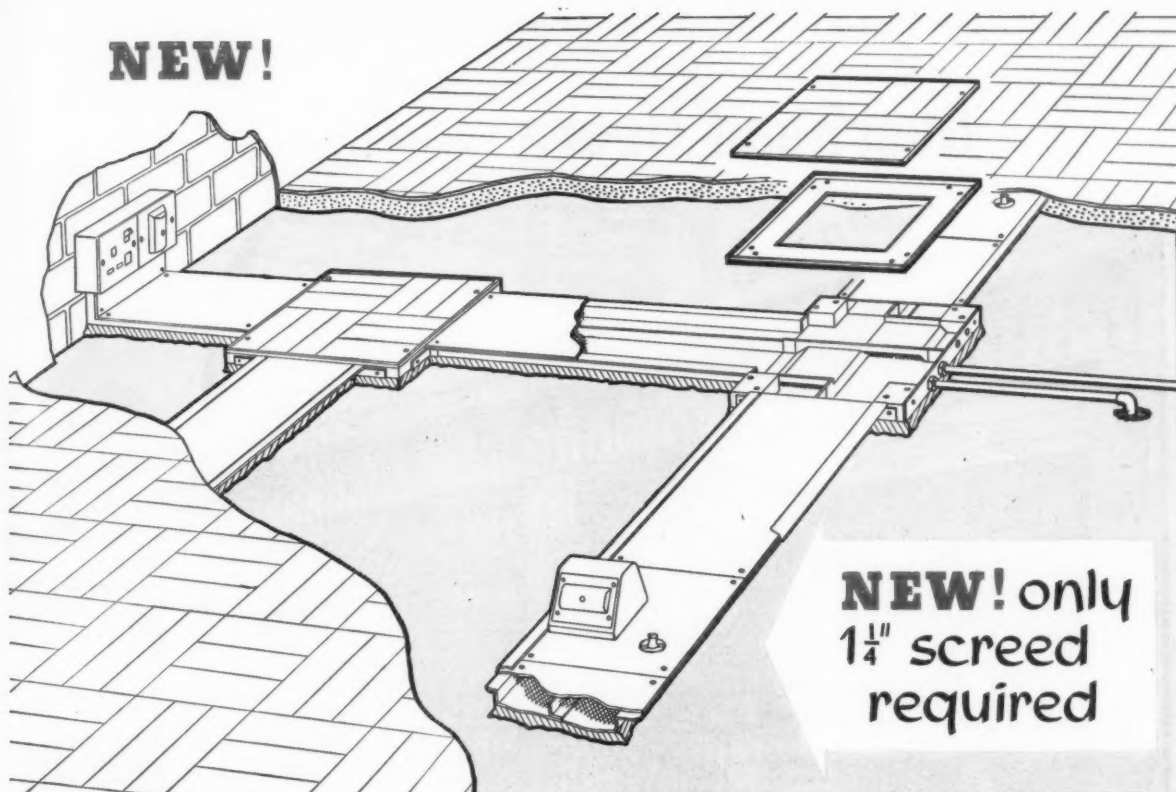
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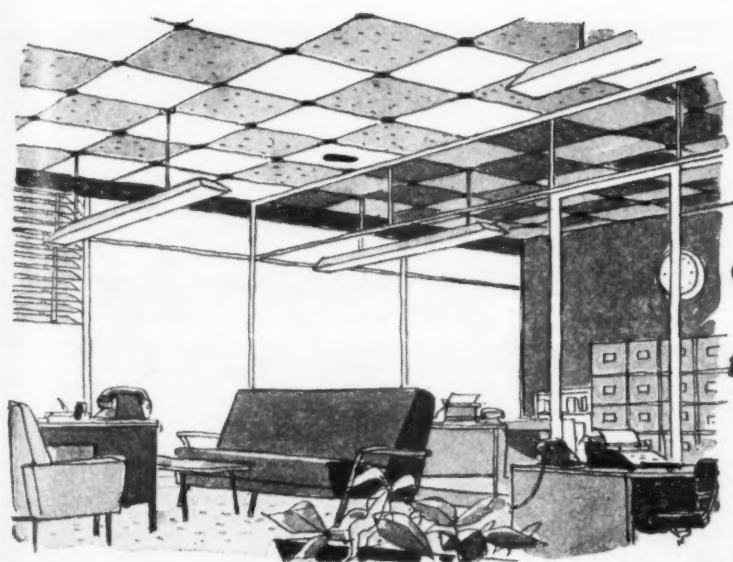
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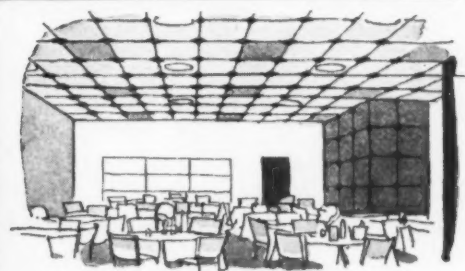
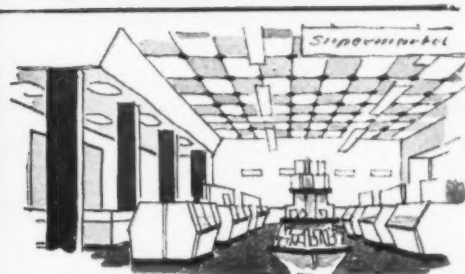
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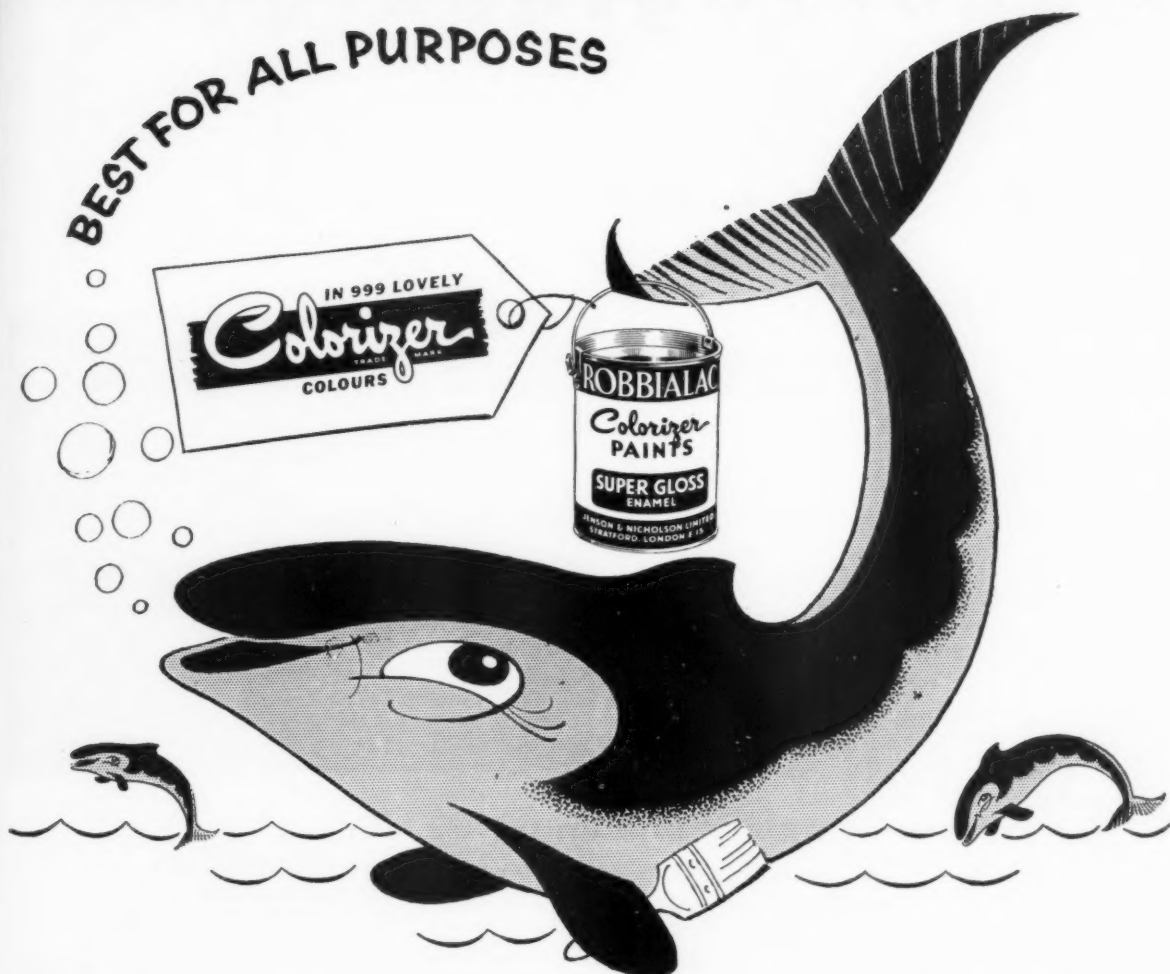
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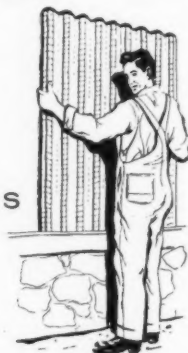
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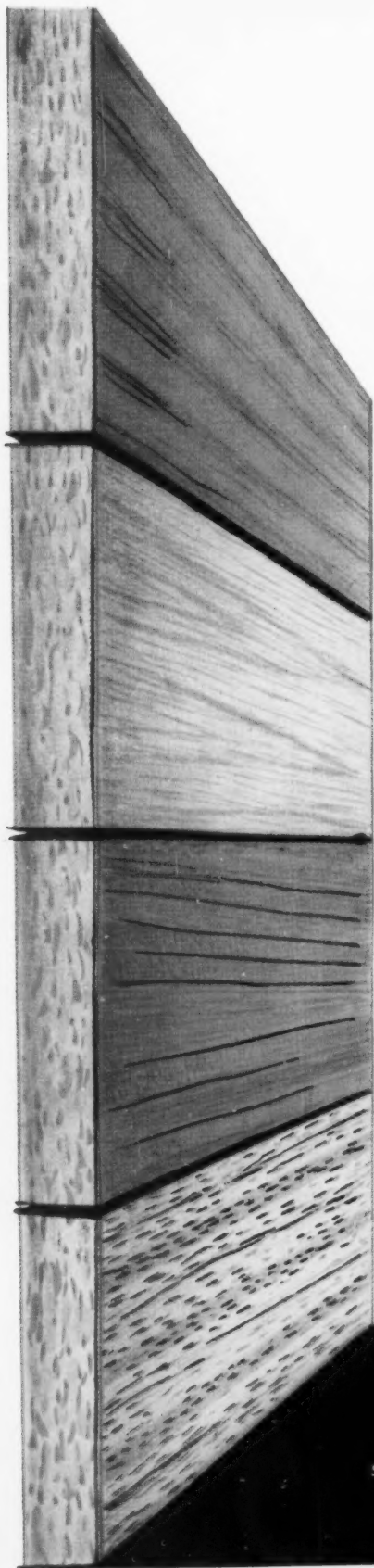
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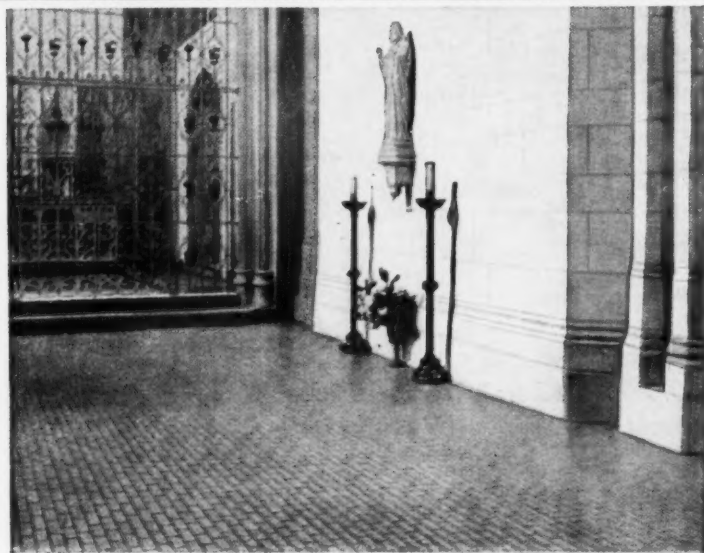
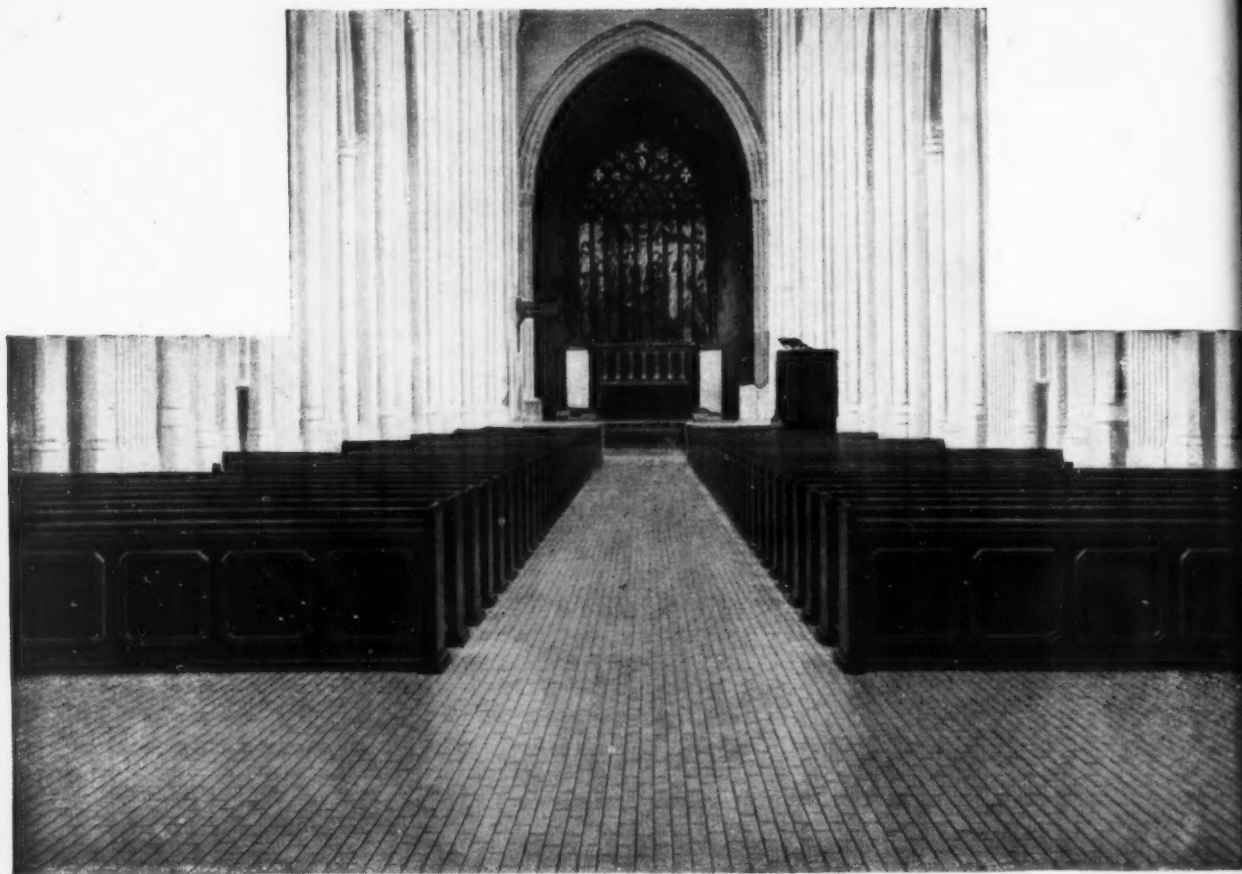


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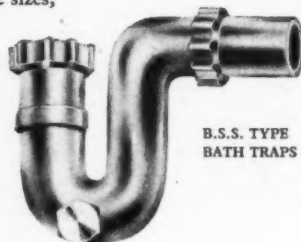
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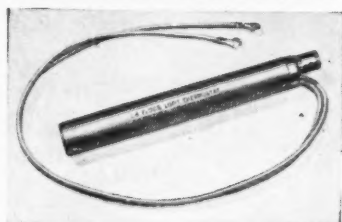
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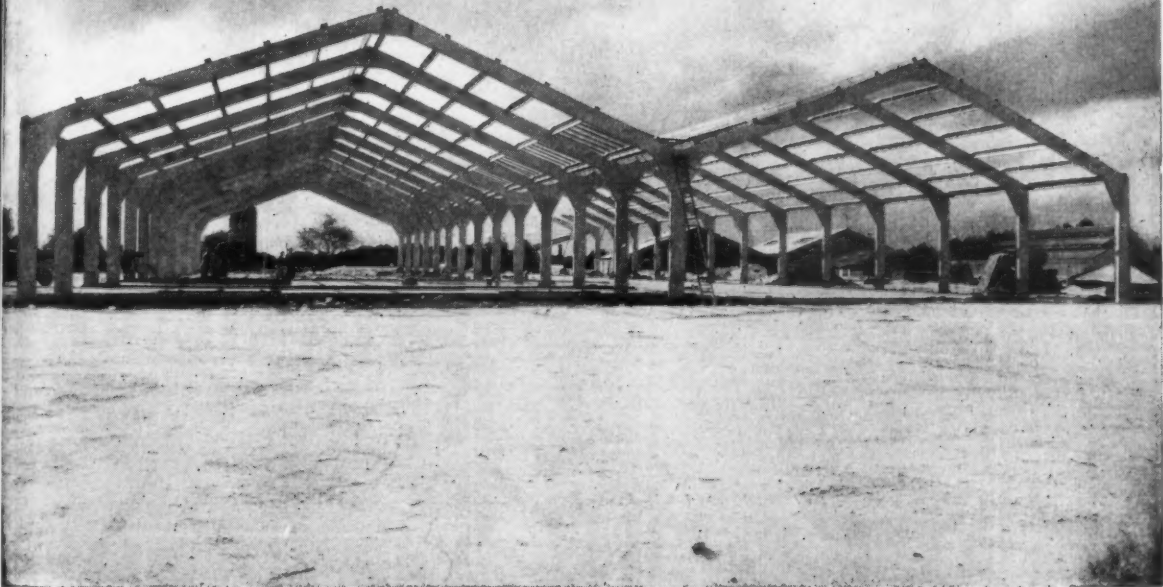
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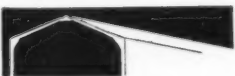


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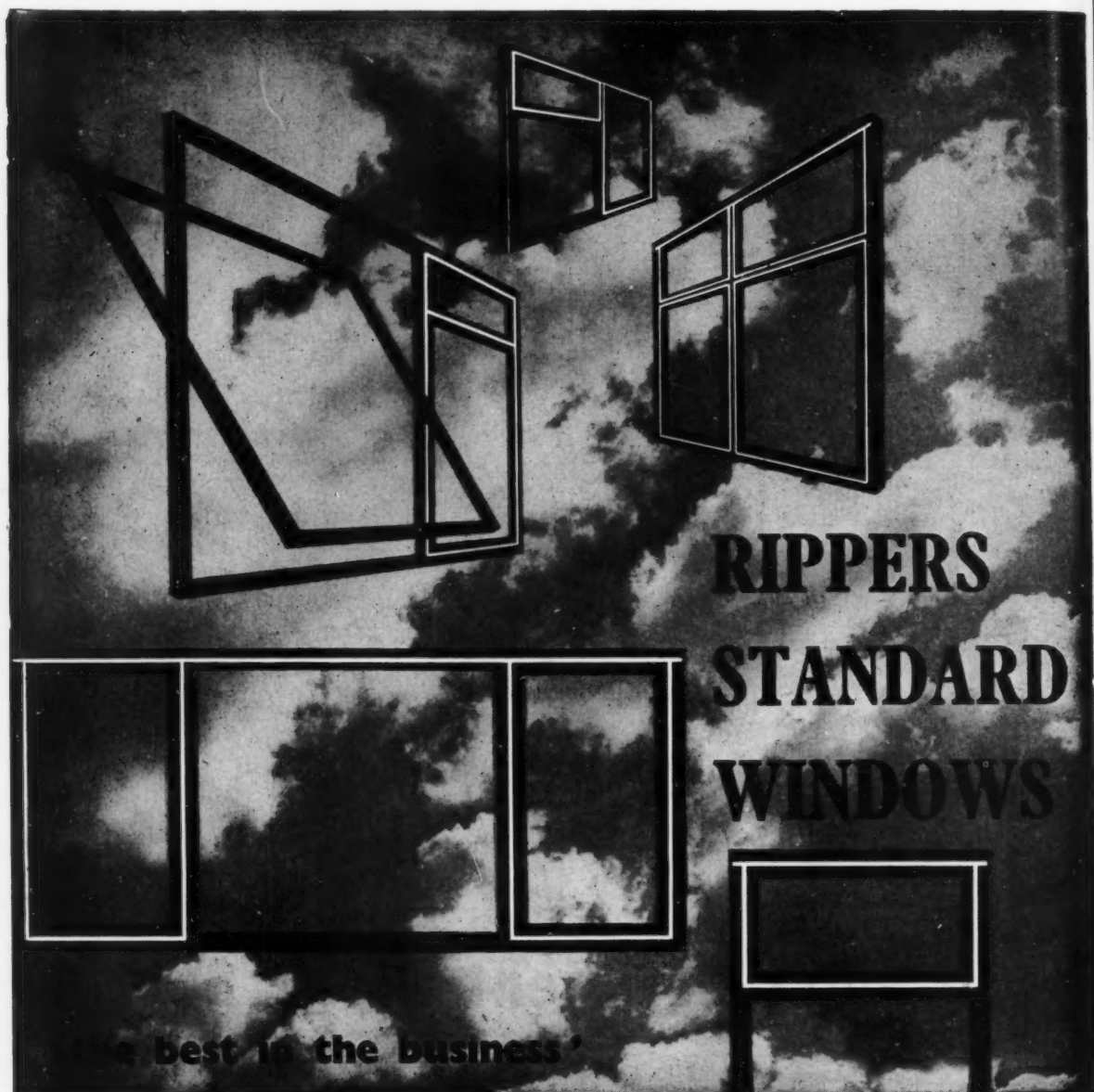


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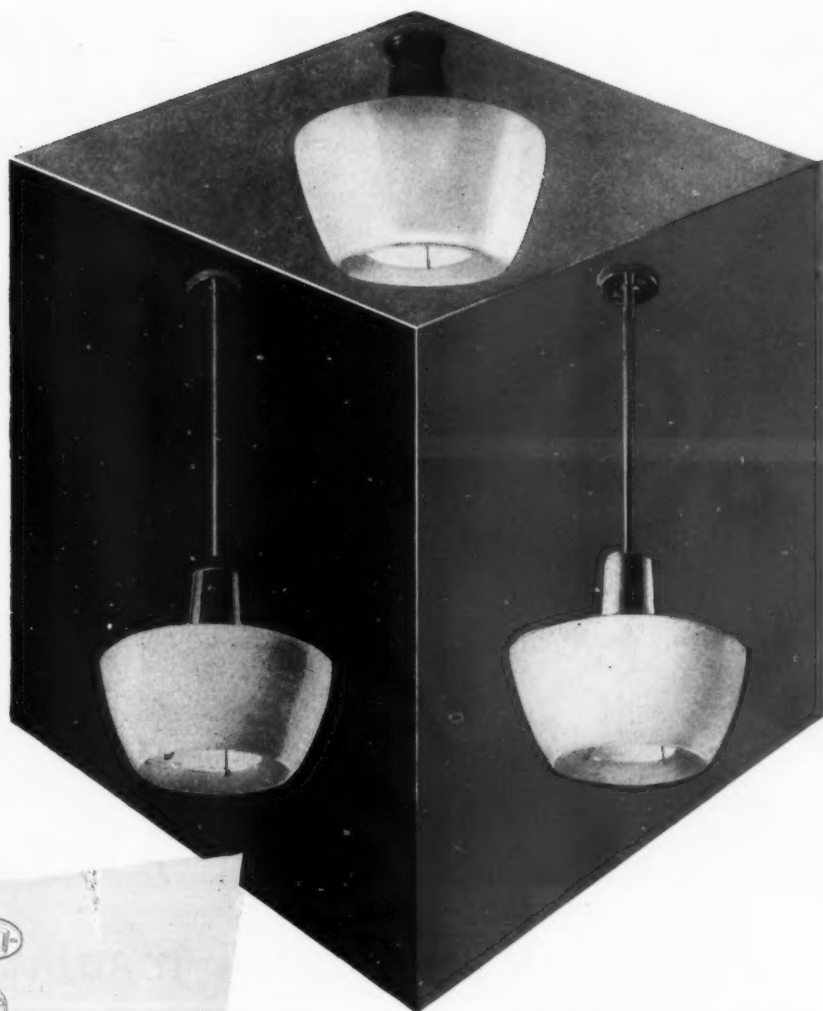
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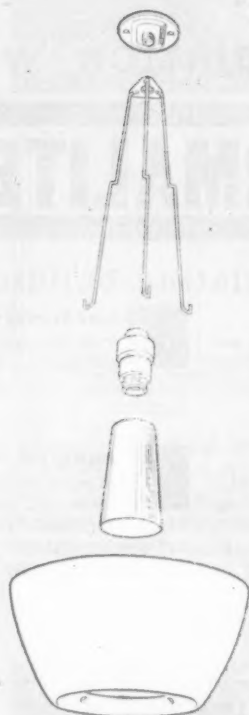
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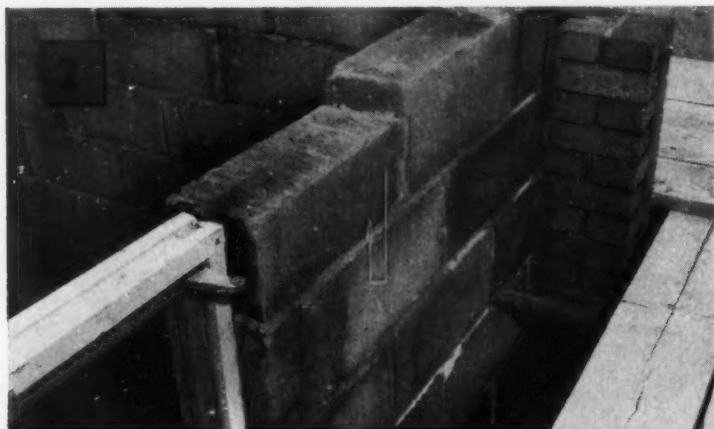
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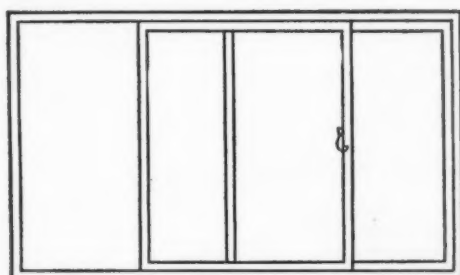
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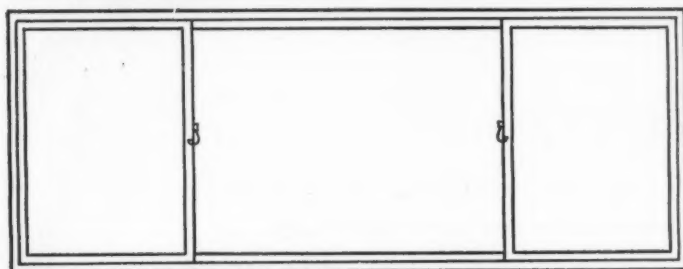
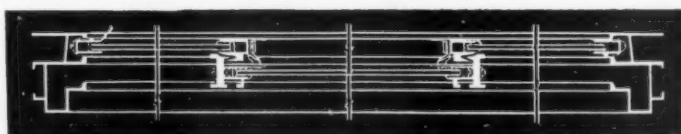
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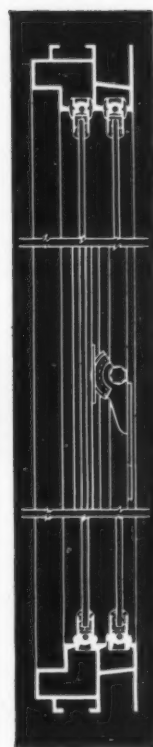
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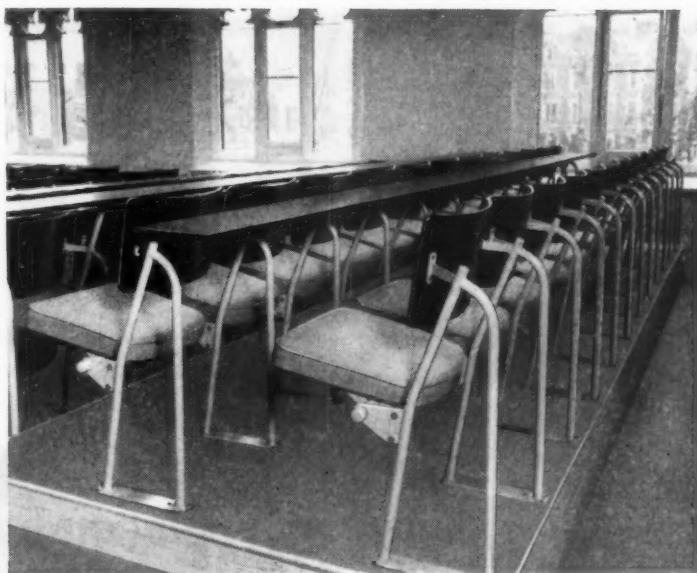
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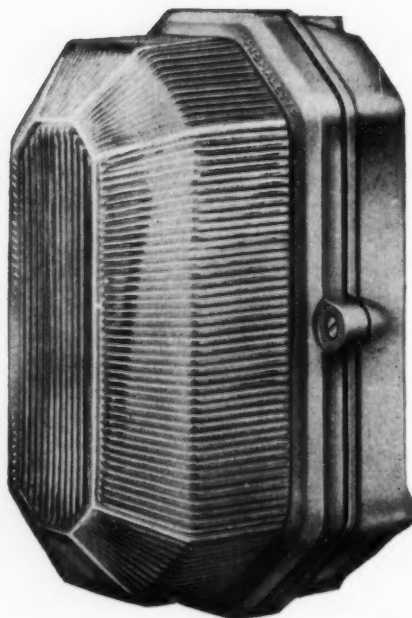
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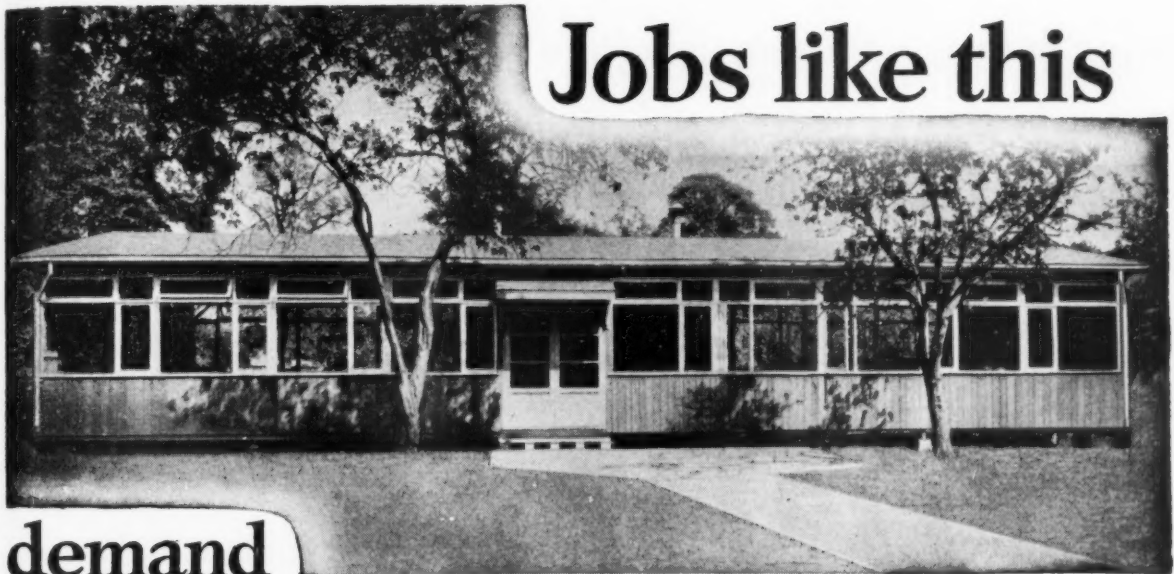
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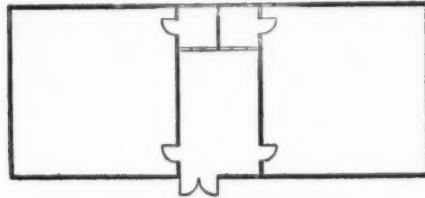


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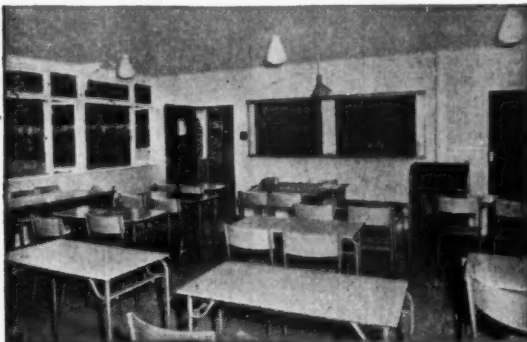
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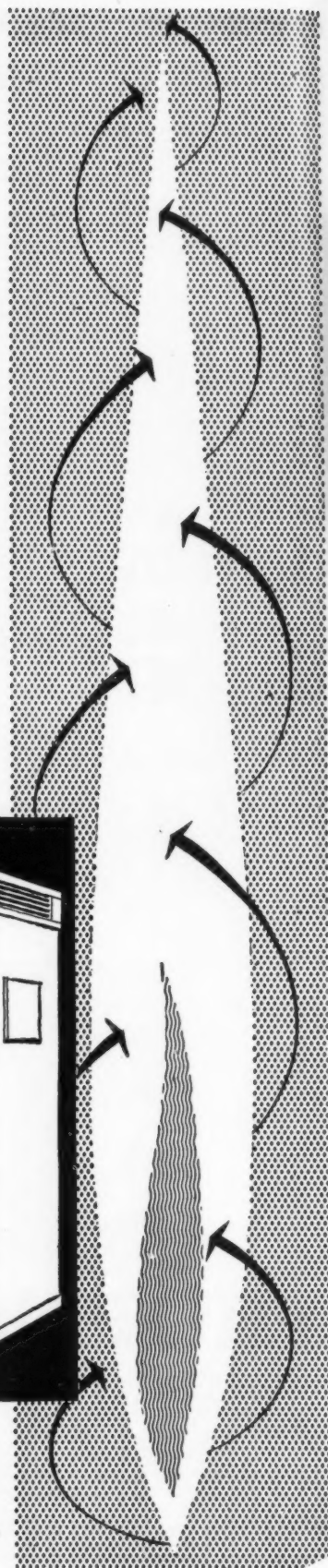
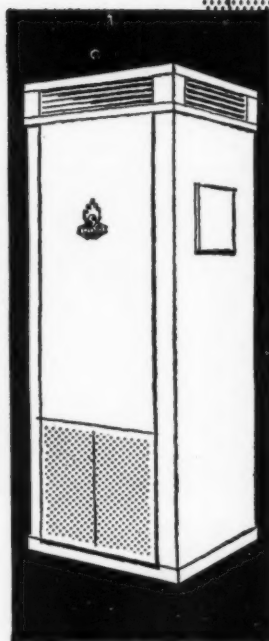
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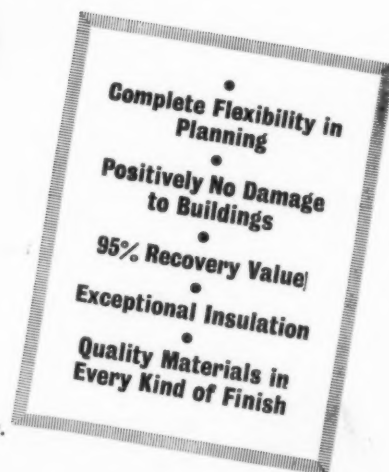
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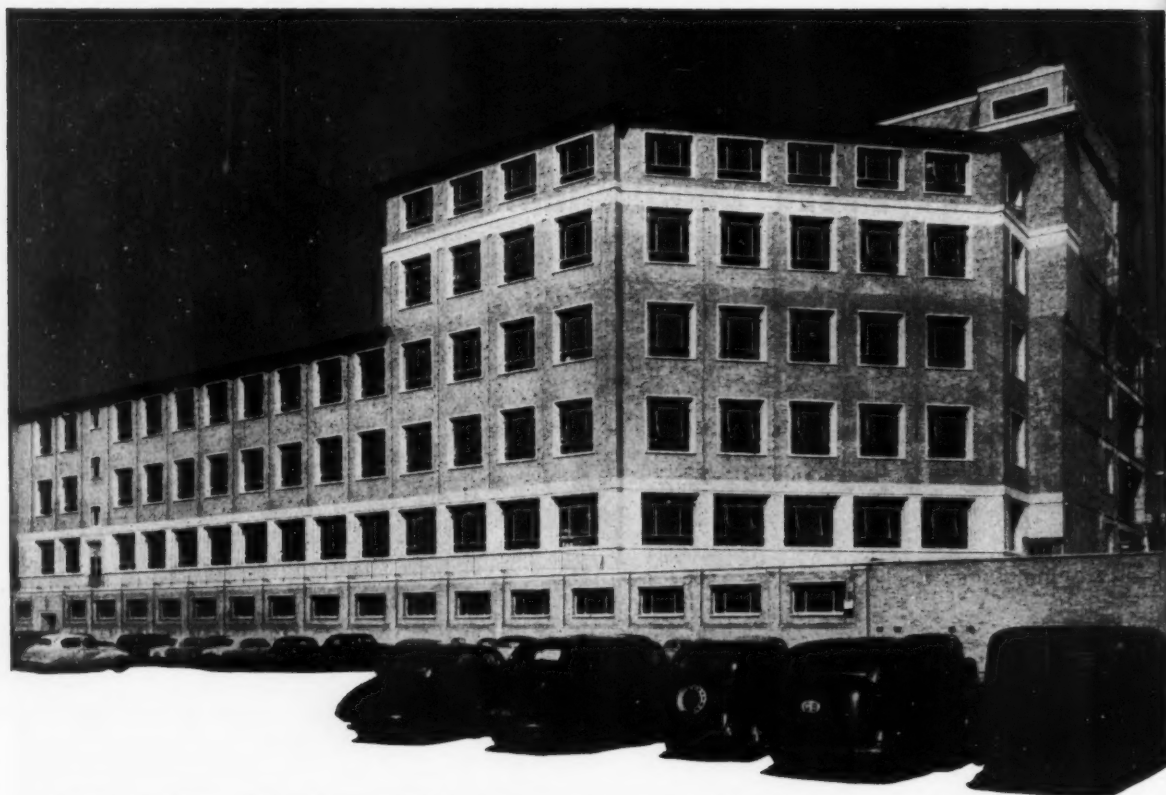
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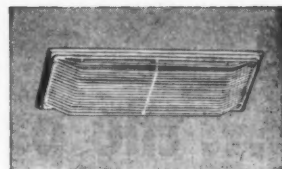
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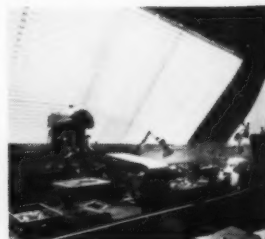
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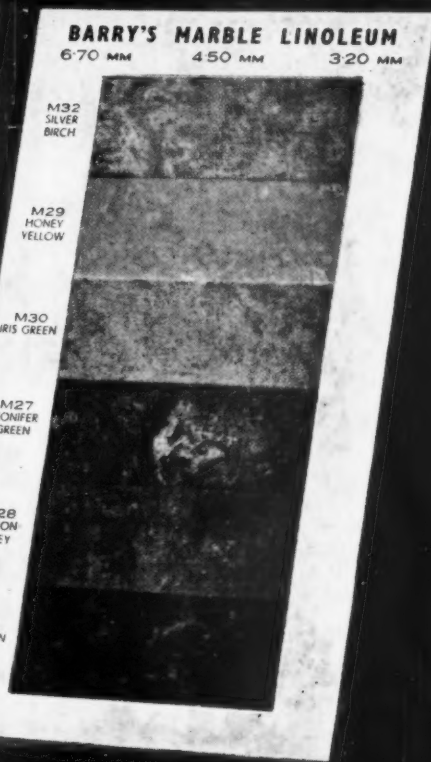
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0 001	*	*	*	*	4 051	*	*	*	*
0 002	*	*	*	*	4 052	*	*	*	*
0 003	*	*	*	*	4 053	*	*	*	*
0 004	*	*	*	*	4 054	*	*	*	*
0 005	*	*	*	*	4 055	*	*	*	*
0 006	*	*	*	*	4 056	*	*	*	*
0 007	*	*	*	*	4 057	*	*	*	*
0 008	*	*	*	*	5 058	*	*	*	*
0 009	*	*	*	*	5 059	*	*	*	*
0 010	*	*	*	*	5 060	*	*	*	*
0 011	*	*	*	*	5 061	*	*	*	*
0 012	*	*	*	*	5 062	*	*	*	*
0 013	*	*	*	*	5 063	*	*	*	*
0 014	*	*	*	*	5 064	*	*	*	*
1 015	*	*	*	*	5 065	*	*	*	*
1 016	*	*	*	*	5 066	*	*	*	*
1 017	*	*	*	*	5 067	*	*	*	*
1 018	*	*	*	*	5 068	*	*	*	*
1 019	*	*	*	*	5 069	*	*	*	*
1 020	*	*	*	*	5 070	*	*	*	*
1 021	*	*	*	*	5 071	*	*	*	*
1 022	*	*	*	*	5 072	*	*	*	*
1 023	*	*	*	*	5 073	*	*	*	*
1 024	*	*	*	*	5 074	*	*	*	*
1 025	*	*	*	*	5 075	*	*	*	*
2 026	*	*	*	*	7 076	*	*	*	*
2 027	*	*	*	*	7 077	*	*	*	*
2 028	*	*	*	*	7 078	*	*	*	*
2 029	*	*	*	*	7 079	*	*	*	*
2 030	*	*	*	*	7 080	*	*	*	*
2 031	*	*	*	*	7 081	*	*	*	*
2 032	*	*	*	*	7 082	*	*	*	*
2 033	*	*	*	*	7 083	*	*	*	*
2 034	*	*	*	*	7 084	*	*	*	*
2 035	*	*	*	*	7 085	*	*	*	*
3 036	*	*	*	*	7 086	*	*	*	*
3 037	*	*	*	*	8 087	*	*	*	*
3 038	*	*	*	*	8 088	*	*	*	*
3 039	*	*	*	*	8 089	*	*	*	*
3 040	*	*	*	*	8 090	*	*	*	*
3 041	*	*	*	*	8 091	*	*	*	*
3 042	*	*	*	*	8 092	*	*	*	*
3 043	*	*	*	*	8 093	*	*	*	*
3 044	*	*	*	*	8 094	*	*	*	*
3 045	*	*	*	*	8 095	*	*	*	*
4 046	*	*	*	*	8 096	*	*	*	*
4 047	*	*	*	*	8 097	*	*	*	*
4 048	*	*	*	*	8 098	*	*	*	*
4 049	*	*	*	*	8 099	*	*	*	*
4 050	*	*	*	*	8 100	*	*	*	*
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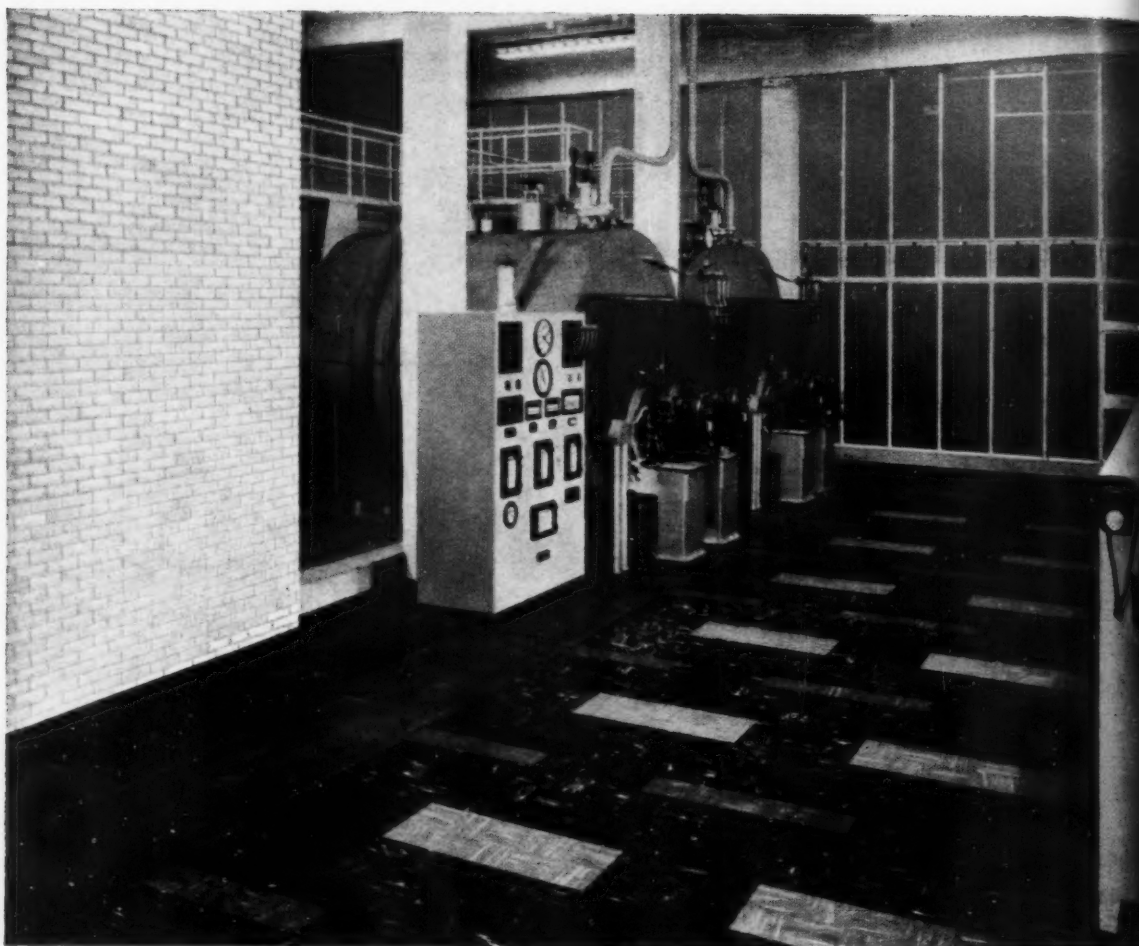
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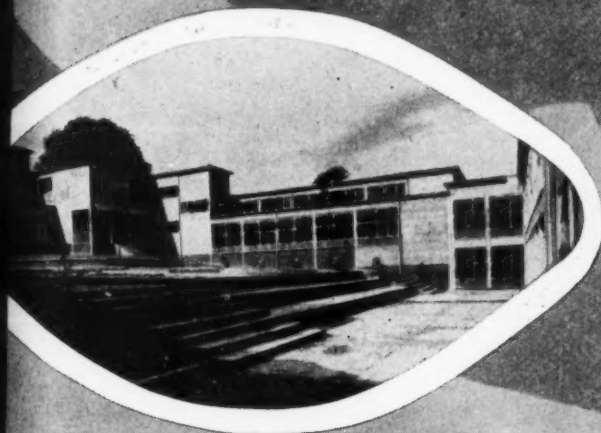
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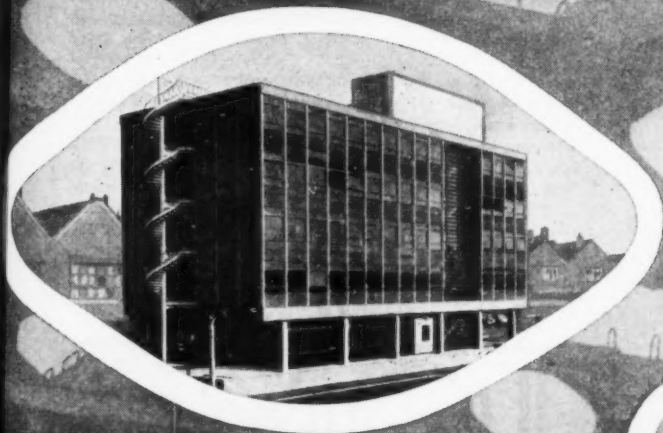
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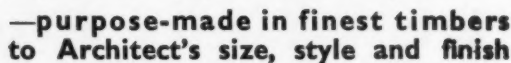


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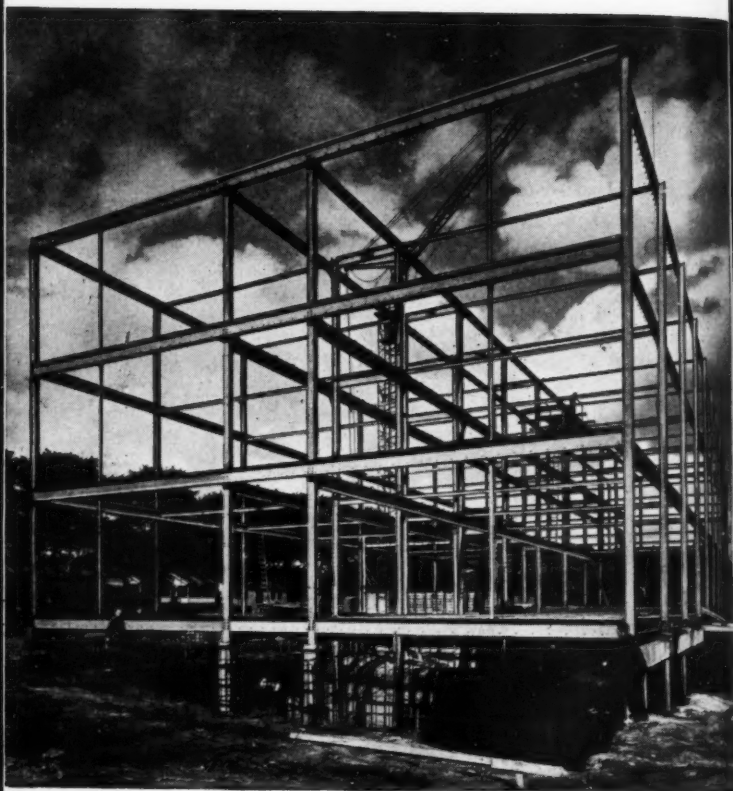
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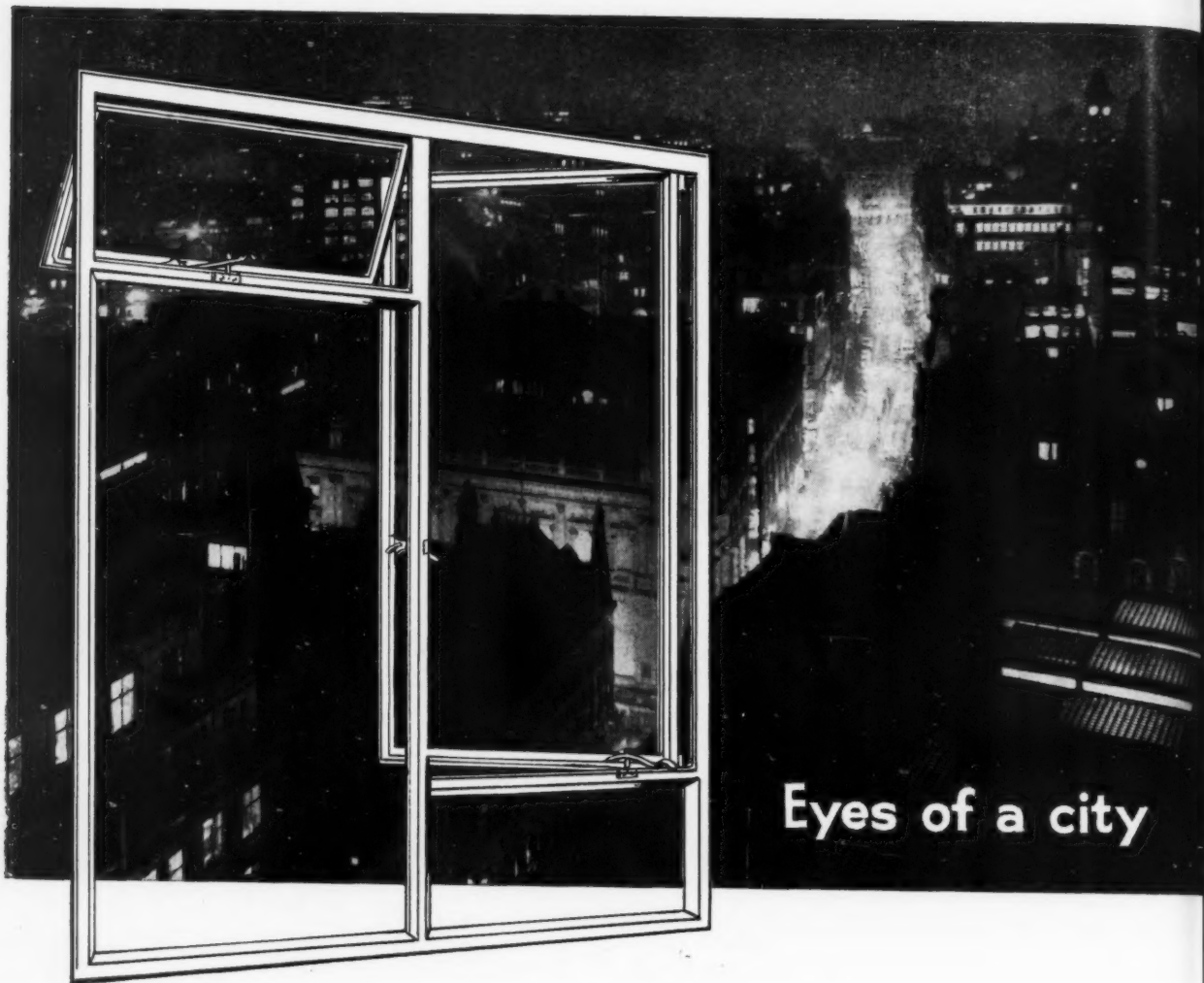
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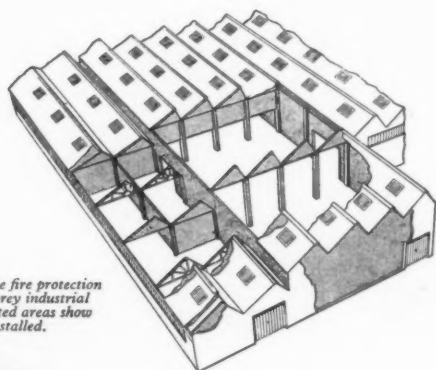


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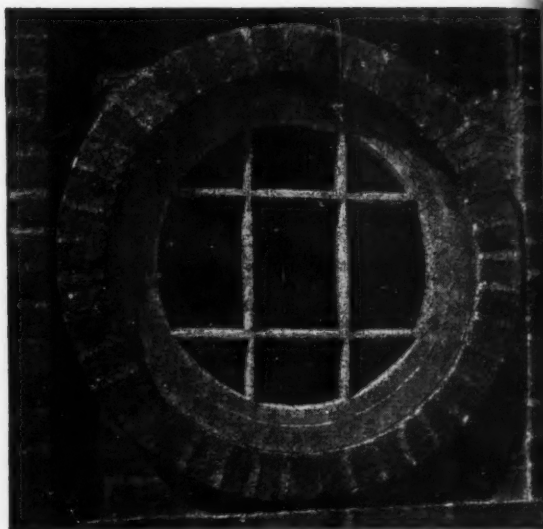
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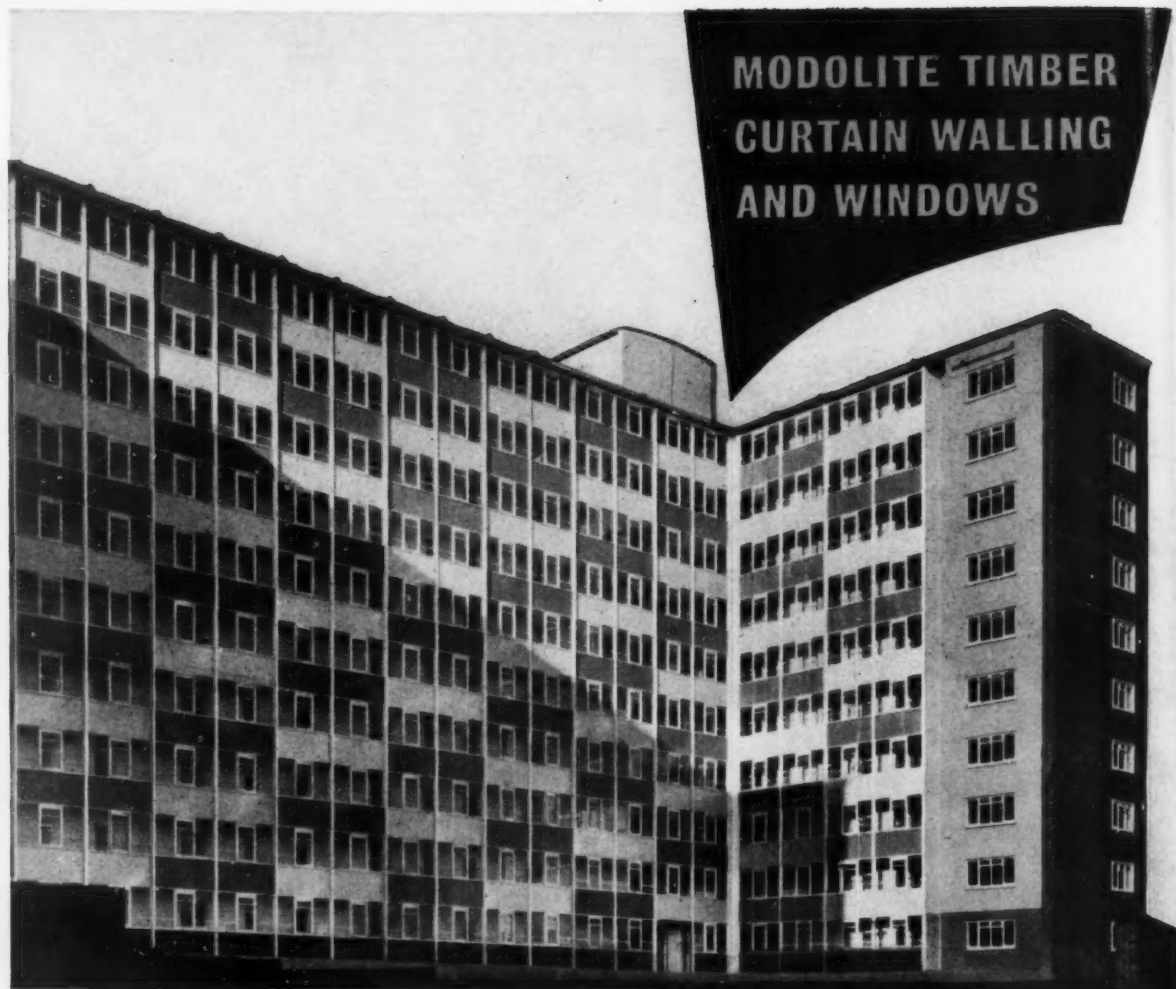


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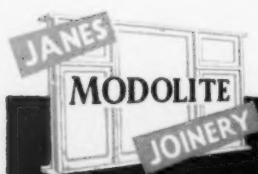
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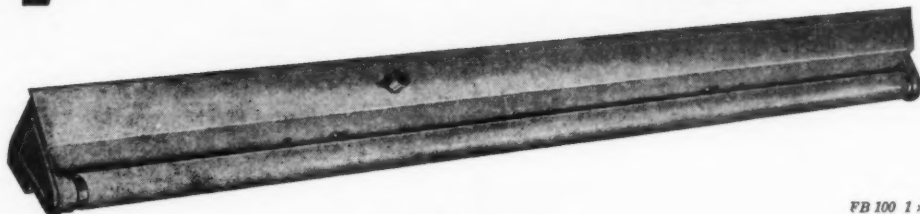
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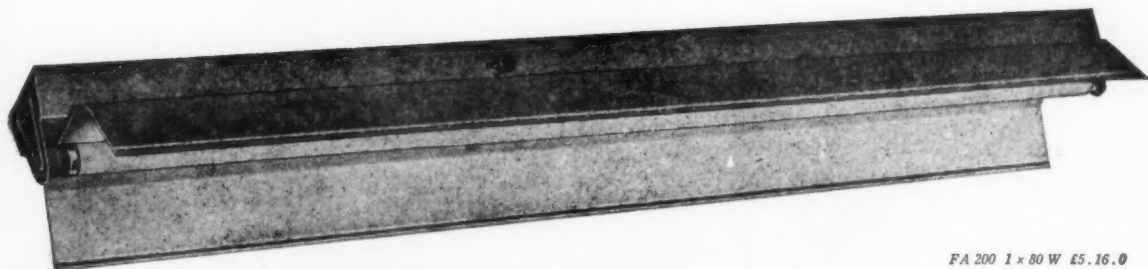
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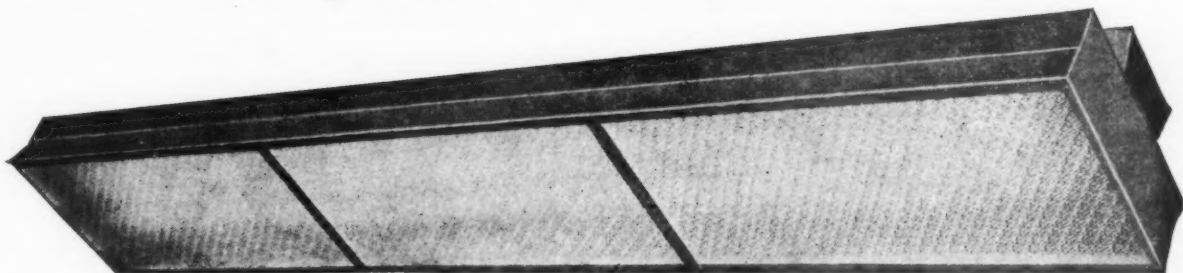
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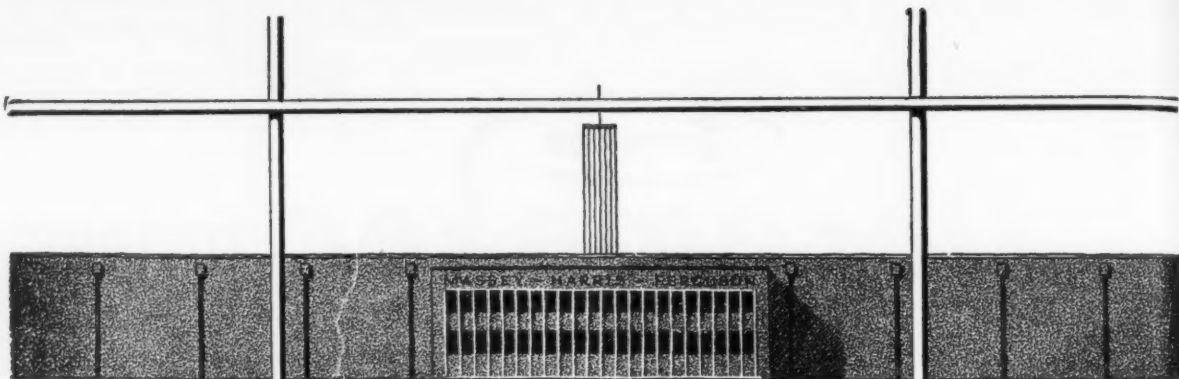
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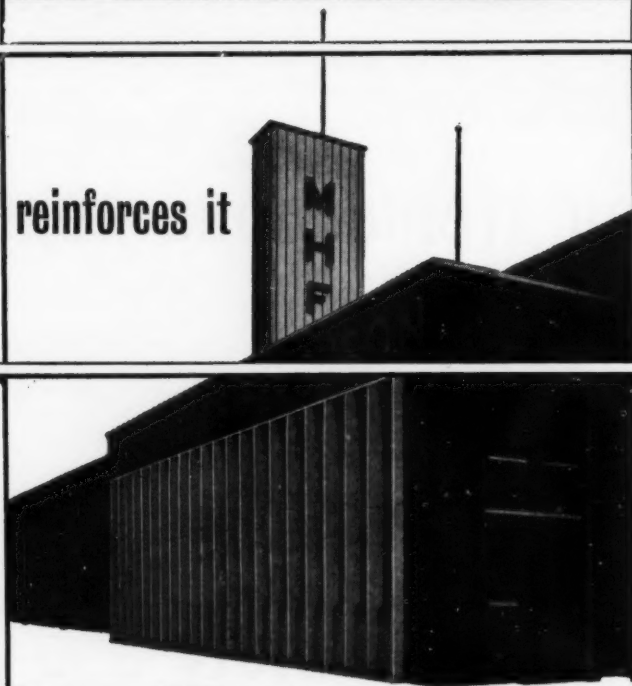


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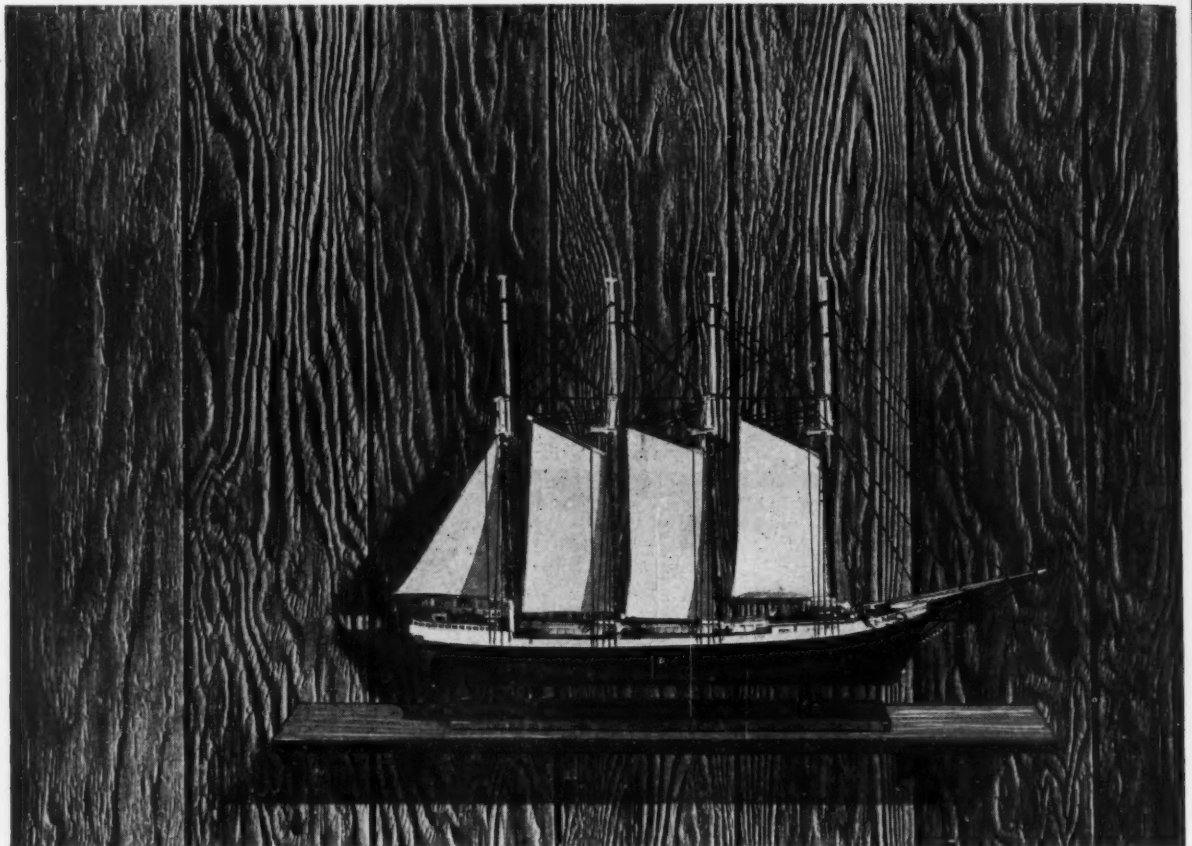
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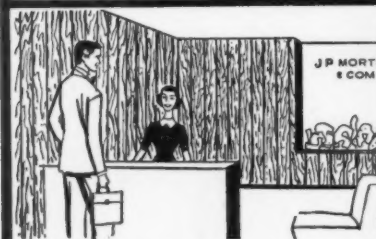
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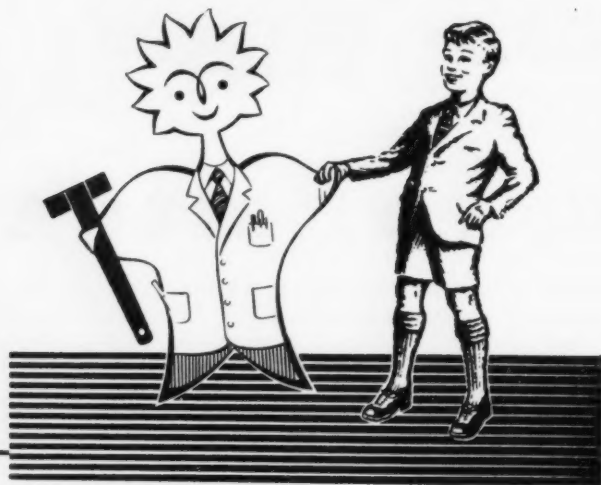
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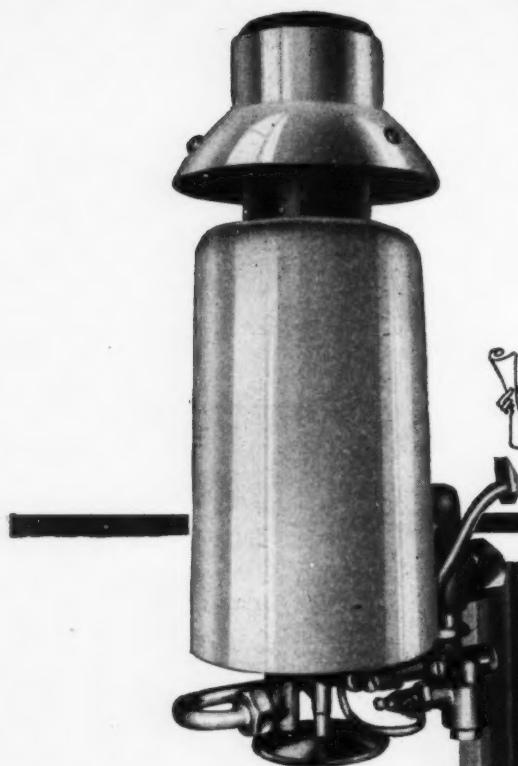
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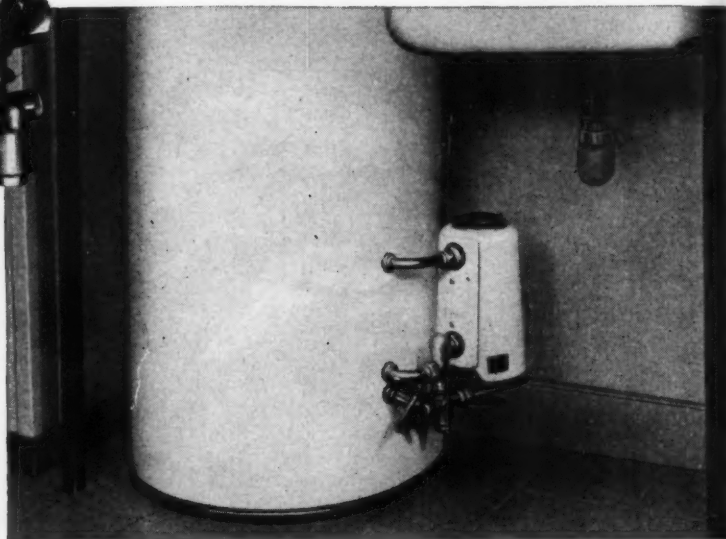
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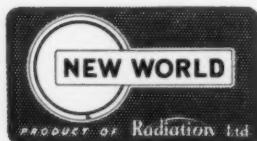


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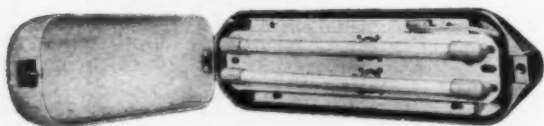


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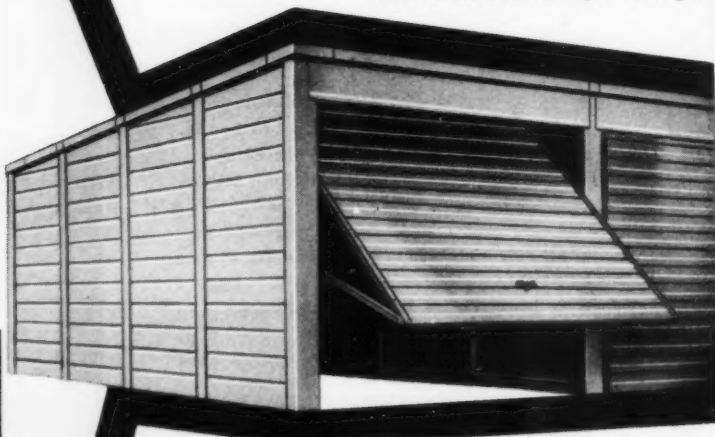
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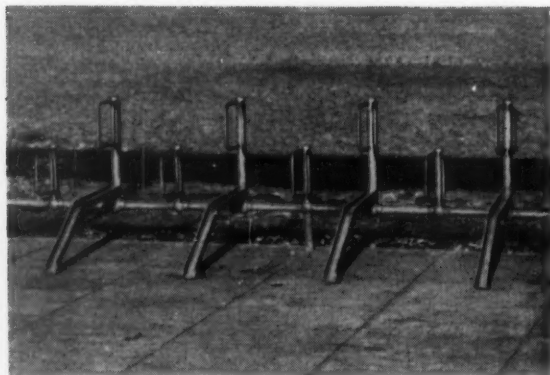


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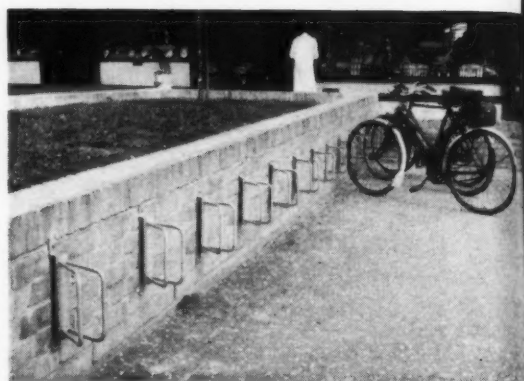
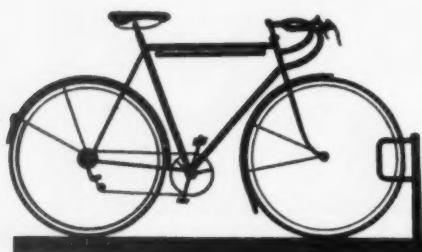
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*Architect: H. S. Howgrave Graham, Esq., A.R.I.B.A. A.M.T.P.I.,
Chief Architect, Crawley Development Corporation*



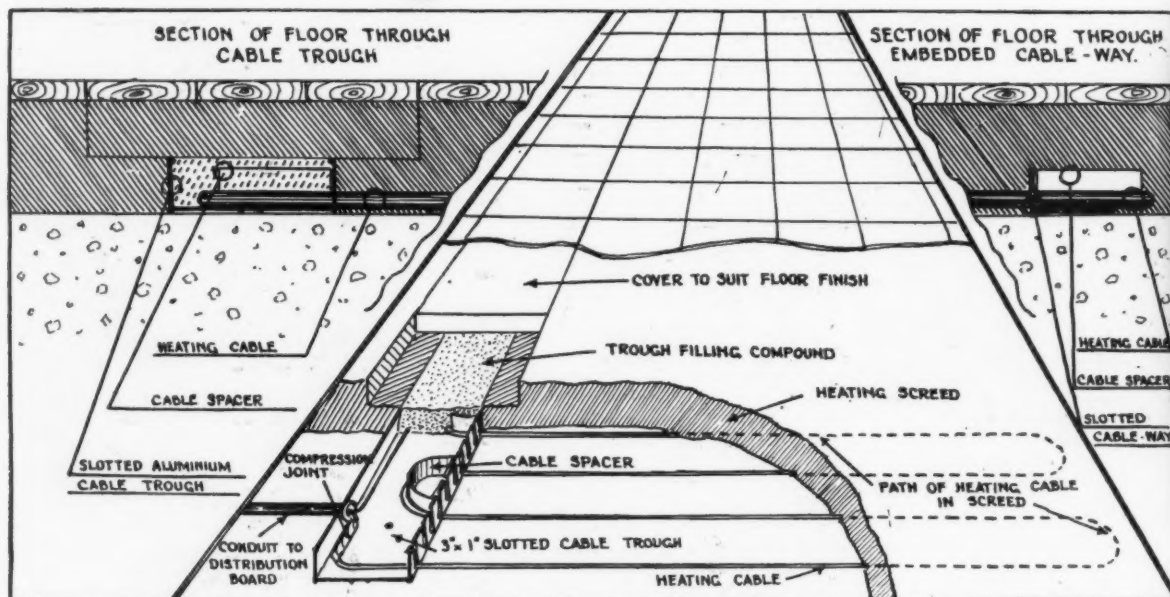
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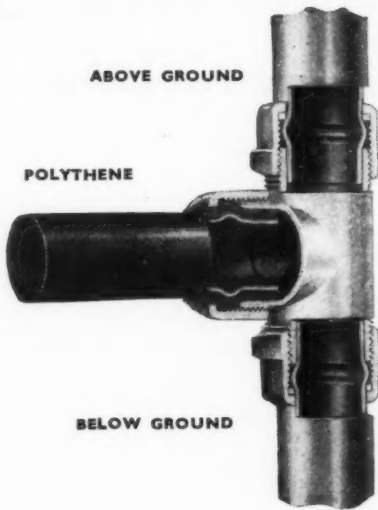
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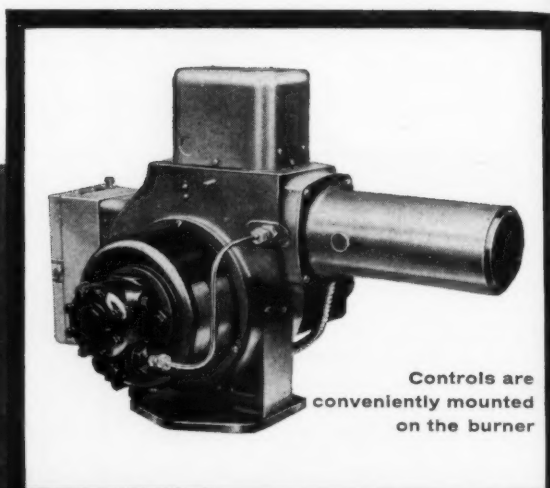
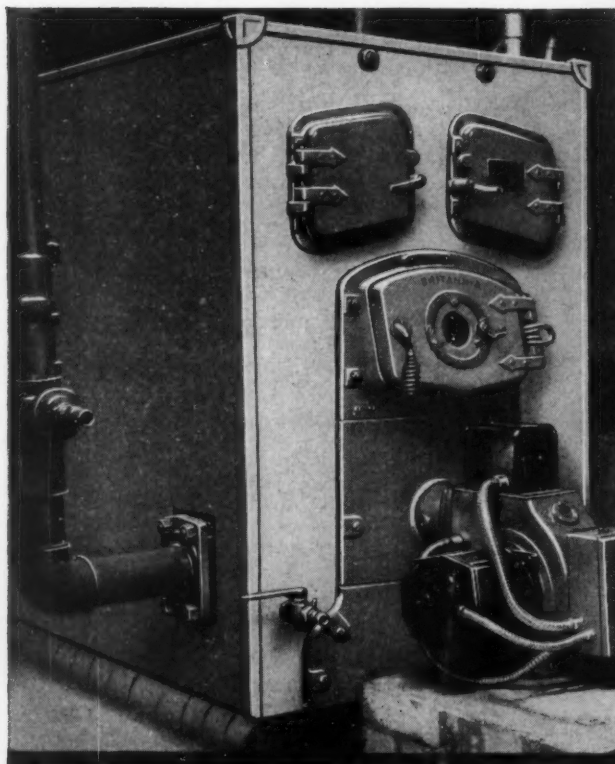
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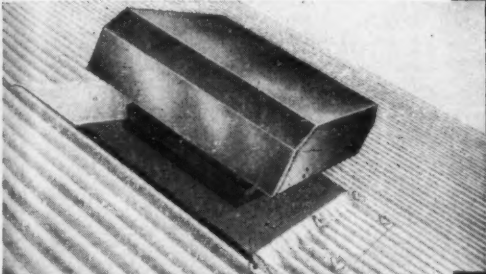
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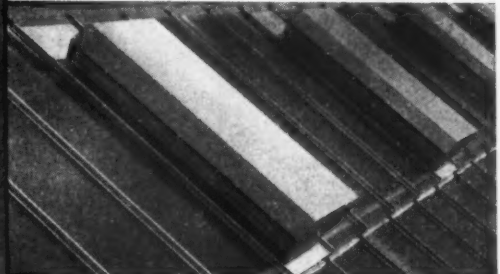
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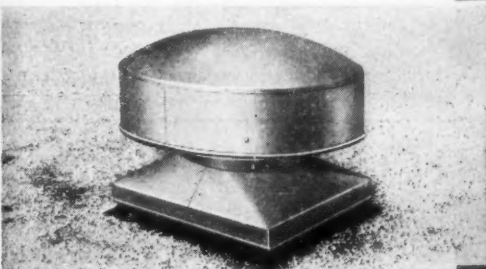
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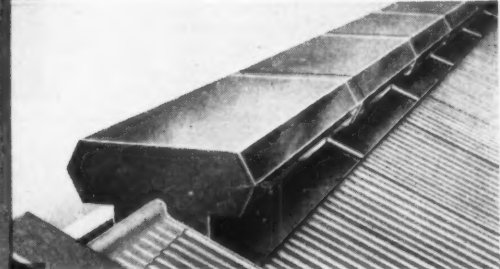
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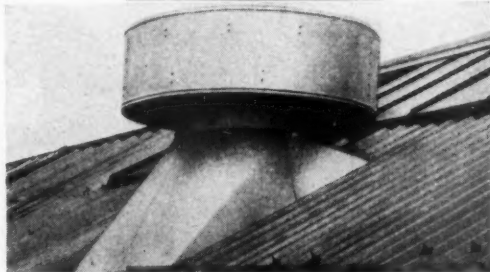


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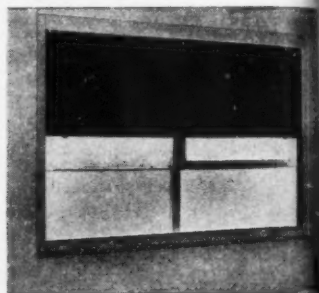
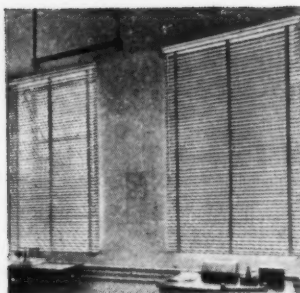
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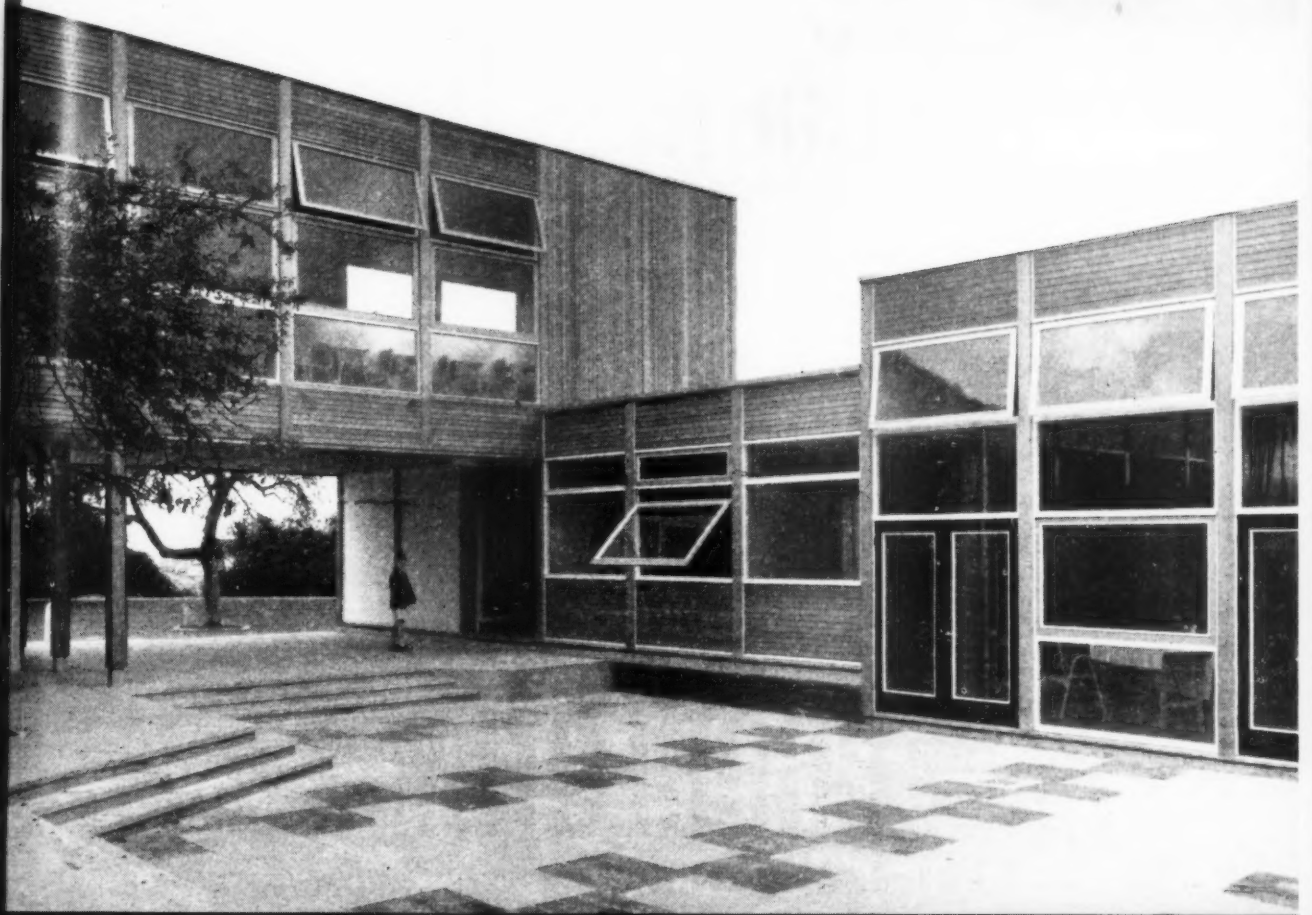
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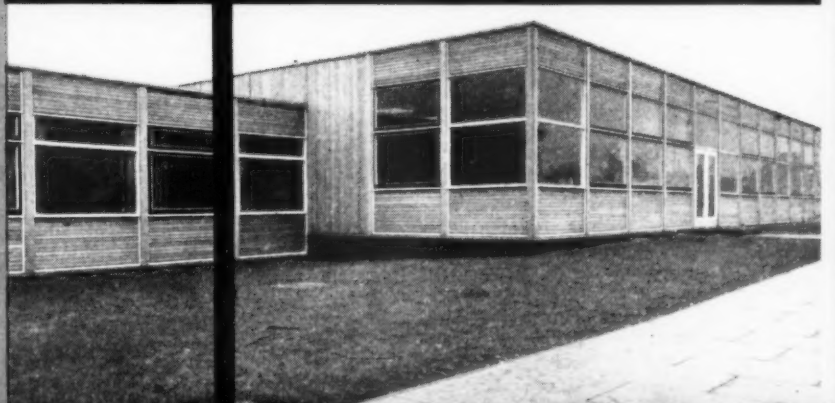
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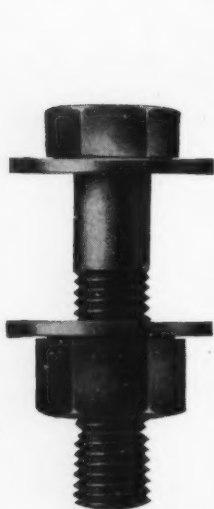
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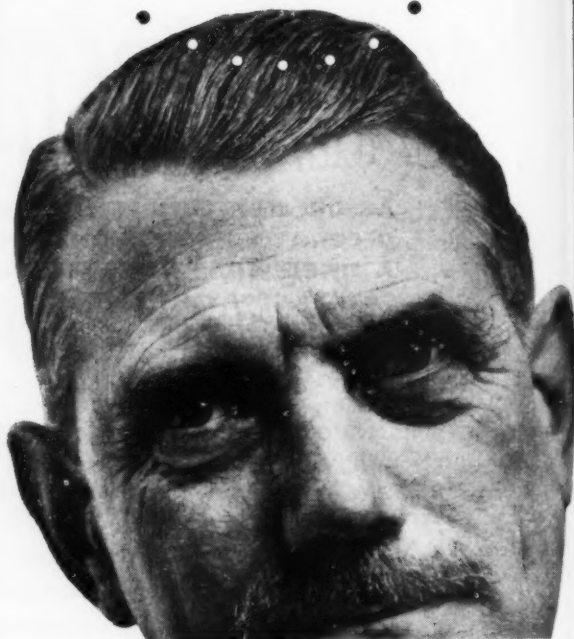
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The Architects' Journal

No. 3382. Vol. 131. April 21, 1960

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NOT QUITE ARCHITECTURE

The Inter-commuter

Inter took a long time. Those burdened trips to London came to be a mark of the seasons' change every bit as much as Easter and August Bank Holiday are. A bi-annual test of physical stamina [Imperial board, T-square, Double Elephant portfolio, brief case (set square and the rest, Reynolds and Kent, Morgan, Mackay, Mitchell) and a small heavy suitcase]. Each of my carefully timed arrivals at Euston discovered a new rush hour, and once it was The Strike. Even at the best of times my drawing hand was stiff and sore from the string round my portfolio, and at the worst I dropped my T-square on to the line at Goodge Street. Try buying an Imperial T-square in the vicinity of Portland Place before 9.30 a.m. The actual examination periods were events only dimly seen behind the smoke of physical exertion, until I was actually sitting there, supporting a three and a half legged desk with my knees and keeping my elbows well in.

*

The papers never presented any difficulty. It was just that they always triggered off a self-destructive streak in me. For instance, I would be glugged with expensive finishes,

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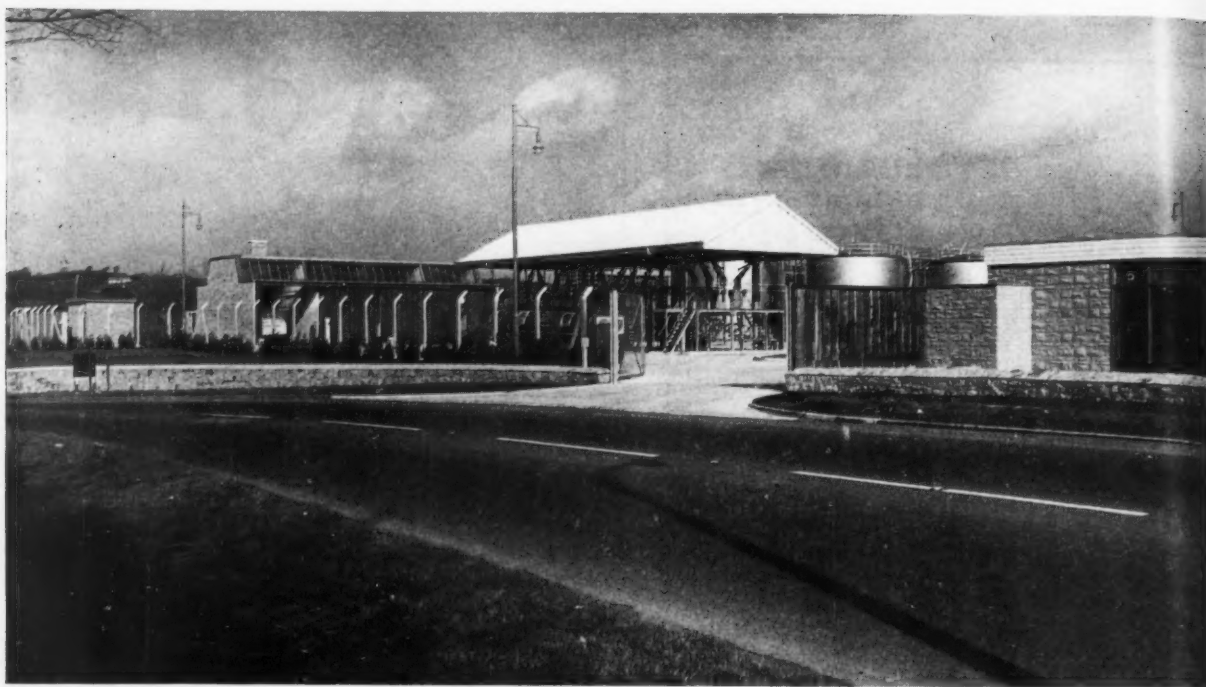
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Shellshock

All over the country Shell is building new petroleum depots. In the picture above you can see two of its designers at work. "Planning a Depot" is the title given to the picture, which is taken from the Shell-Mex and BP *Book of the Year*. It illustrates an article on the new depot at Falmouth, and gives the names of the designers: engineer-in-charge John Moffat, principal draughtsman A. E. (Tony) Cole, resident engineer H. G. Tambling. The result of their work is seen alongside. Shell, as everybody knows, is concerned about beauty and "amenity." It produces county guides, and makes interesting films. Its vice-chairman, Christopher Brunner, welcomes the interest taken by the RIBA in urban motor ways, and understands that designing cities is a job for architects as well as engineers. But oil depots, it seems, are a job for the unaided hand of the engineer. At Falmouth the engineers have tried hard. Their installation, says the brochure, "fits gracefully into the Cornish landscape. The land surrounding the installation has been laid out in gardens with young conifer trees, flowering shrubs, lawns and tubs of flowers." But, alas, it has been done without any

imagination. The brick garage unit (top left) is neat and unassuming, and the silver painted piping and storage tanks add to the design rather than detract from it. But the attempt to prettify the roadside is spoiled by the most unhappy massing of the office block (above) and the general composition, or lack of it, into which the pitched asbestos cement roof intrudes prominently. The concrete boundary fencing posts are crude, the choice of lamp standards poor, the detailing of the timber office windows very heavy, small ancillary buildings and signs are sited haphazardly, and the weak appearance of the reconstructed granite of the office walls is shown up by the real Cornish granite of the insignificant boundary walls beside them. Do the directors of Shell know that their installations are of such low standard? If they want their buildings to "fit gracefully into the landscape" why entrust the job to people who are not trained to do the job? Why not employ local architects (there are some good ones in Cornwall) or, if they want standardization, employ architects to prepare standard designs? Exciting architectural opportunities are being thrown away.

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as a man crawling off the desert sand might crave ice-cold Pilsner. "... kitchen floor finish 2 in. Pentelic marble." "... eaves soffit 1/2 in. Brazilian Rosewood." Not even veneered ply you notice. The real thing, every time.

And the lunch breaks. Walking down to Joe's or Forte's with the genius from Brixham School who never lifted his head after the papers were dealt. He has a quiet confidence that worries the daylight out of you, and makes Architectural comments as you walk along.

"Good old London Stocks."

"Oh... Yes... good old London Stocks." He bounds up to a nice piece of metal on a shop window and scratches it with his thumb nail.

"Ah," he says, "I thought it wasn't."

"Isn't it?"

"No," he says.

Or the November lunch breaks, when you get down to All Souls Langham Place before you realise that it is raining filthily and you have no coat. You wonder what is the matter with you.

And the Design Oral. You shuffle the dog-eared drawings looking for your number; you always pass it by the first time thinking "Poor devil," but it is your number and you remember the sweaty thumbprint across the South Elevation, so you are stuck with it. When you get in the shortest queue, waiting to be done, the old lag in front of you leans over with his hand across his mouth and says:

"This one's a devil, look at him—hateful old swine." Realizing that the examiner finds the procedure as distasteful as you do doesn't help at all. It gives the whole thing a touch of gentle sadness, especially that final moment when his eyes meet yours in a brief *rapport* of mutual regret.

But now, with May coming again, I find that part of my mind is homesick for London in Inter Week. Lying awake alone in a strange bed, hearing strange clocks chime: those early mornings in Portland Place, with the faraway park hovering green beyond the Crescent; blue sky and white stucco.

The taxis, the tube trains, the bowler hats, rolled umbrellas, your footsteps echoing from sunlit cliffs of Regency windows. Then at evening the parks and the pubs, with that singing tiredness in your ears. It must be that extra milligram of Adrenalin in the blood that makes these things exciting—and they are exciting to a stranger alone in London. But I don't want to analyse it. I just want to remember how it all glowed on those tense hopeless days.

STEPHEN HOLLAND

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

The Editors

GOVERNMENT POLICY IN BUILDING

WHAT is the responsibility of Government towards productivity in the building industry? The British answer to this question is twofold. First, to test materials and techniques and to suggest new ones. This responsibility is discharged through BRS. Second, to assist in the education of all concerned in building: in the technical colleges, through the publications put out by BRS and MOW. A new booklet published by the Economic Commission for Europe of UN implies that this is not enough. This booklet, entitled "Government Policies and the Cost of Construction,"* is a review of prices and experiences in the field of building during the last 10 years, and covers most European countries both sides of the Iron Curtain. This report attributes the relative backwardness of the building industry in all countries to a chronic lack of capital investment. The trouble is that the demand for new buildings over the years is so fitful that it is never worth anyone's while to put into the industry the large sums which at any period are needed to bring the industry up to date.

The two courses open at the present are either to attempt to rationalize traditional technique, which requires relatively little new investment, or to experiment more strenuously with new and revolutionary techniques, of which prefabrication in its many forms is the most common. This second course needs much new investment. The Report records scrupulously all the disappointments experienced in the UK and in many countries with prefabrication. But behind all is the conviction that the rationalizing of traditional techniques (of the sort advocated by BRS) is not going to provide the long-term building needs of our civilization; and that large-scale experiments in prefabrication, of the sort now being tried by the USSR, have a long-term value which transcends their immediate fruitfulness.

It is clear that Government has some responsibility for ensuring that the building industry keeps up to date. This can be done either by directly re-equipping the industry or by using Government building programmes in such a way as to make it worth the industry's while to re-equip for itself. Though we have the example of MOE to show the remarkable influence which a public building programme can exert in

* H.M.S.O. 12s. 6d.

this sense, we have the impression that, on the whole, this aspect has been ignored by those who control Government building programmes. The short-term desire to get the cheapest possible (and, therefore, usually, traditional) building now, has too often prejudiced our chances of getting cheaper non-traditional buildings in five or ten years' time.



ALL BETTER THAN SOME

Henry Brooke is a promising Minister; but when will he stop promising and get on with the job, particularly the job of improving housing in this country? I've just been reading an interview with him in the current *Ideal Home* magazine. There under six ever-so-typical pictures of him—looking shrewd, benevolent, quizzical or twinkly—are a series of statements which show he knows what's what, even if he can't think how. "You don't necessarily produce as good a result simply by taking a copy of a house that was thoroughly acceptable forty or sixty years ago and slightly modernising it" . . . "It would be very helpful, also . . . to get away from the horrid monotony that so often curses the building of small houses. One might encourage building in depth instead of in linear strips lining the roads" . . . "I think it is almost certainly true that some building societies have up till recently been scared of the non-traditional house."

Good blunt speaking (especially that "almost certainly true"), so it's a pity the Minister lets the side down by giving a little pep talk on what the architect ought to remember when designing for modern living. Isn't Mr. Brooke aware that we are all waiting for him to give the architect a chance to design for modern living? Doesn't he know that the horrid monotony and the linear strips he talks about are invariably the work of the hack builder?

*

I particularly enjoyed the Minister's true-politician comment on the small houses designed in the *Ideal Home*/RIBA competition. "All of us," he said, "will like some of these more than others."

GRIN WHILE YOU BEAR IT

Incidentally, you'll find a sick joke about the problems of the man wanting to build a modern house in the centre pages of *Punch* this week. Eight witty drawings by Kenneth Browne tell the story of a man who buys a site to build on and is constantly foiled by building society conservatism, planning committee decisions, preservation society panic: in fact, the lot. The more this sort of thing gets a hearing the better. Before long surely all the jokes, television interviews and articles about the hounding of good architects by cloth-headed laymen will have some effect.

SMELL ON THE LANDING

"Meet the Architect in Your Life," says the RIBA in a forthcoming exhibition I'm not yet allowed to tell you about. Rumour has it that this invitation is being put out to scotch the Lever Brothers' insinuation that the man at the drawing board doesn't bother about personal daintiness. This terrible allegation appears in a strip cartoon which shows the architect being spurned at his hearth by his wife and patronised on the site by a "hotel magnate" whom he addresses as "sir." This may, of course, be relevant to *your* office problem. But if Lifebuoy (with puralin, whatever that

is) doesn't do the trick your problem may be even simpler. Maybe you're just a bad architect.

KNUTS

When Holford described his visit to Brasilia recently at the RIBA he mentioned the fashion models he saw being photographed against a background of the new buildings. In April's *Harper's Bazaar* the result of this experience and frantic endeavour to scoop fashion rivals can be studied in superbly austere photographs. Before Niemeyer's gracefully curved concrete the angular, uncomfortably upholstered models, stand in splay-footed elegance, wearing the reasonably-priced clothes which architects' honest wives can only afford when their figures are as fat as their bank balances.

HOT AND COLD

An innocent acquaintance, gaily looking forward to living in an all-electric house, asked his architect if he couldn't have a Blankety heat-pump, which would give him hot water and a cold larder. The architect, also innocent, agreed until he checked with a highly intelligent electrical consultant. Swiftly the client was informed of the facts: through the nature of the beast, the heat pump would overcool the larder in cold weather, in its endeavours to heat the water, and in summer time would fail to cool the larder, because the water would be so quickly heated, unless a heat loss to the water supply was contrived, thus cancelling out the cost of the electricity saved.

*

Much cheaper in capital cost, and more efficient, would be a couple of under-sink heaters and a separate refrigerator unit for the larder, said the consultant. Surely heat pumps have been running long enough for the glamour of an ingenious idea to have died down and for the truth on the matter to emerge. Has anyone any facts?

ADVANCED STUDIES

That most admirable memorial to the late Dr. William Singleton, the York Institution of Advanced Architectural Studies, continues to organize courses on important topical matters. The three latest, ASTRAGAL learns, are on Urban Renewal: the Centre; Tree Preservation; and the Architecture of New

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G. A. Jellicoe's plan for the development of Barry Island, Glamorgan, and the coastline to the west of it. The area at the moment is a half built-up back-end of a big coal port and for once could legitimately be described as ripe for development. The old harbour is to become an enclosed yacht basin; the island itself will have hotels, shops, and fairground—and a three-part road apparently designed to cater for (in the words of the handout) "the visitor who throughout the day at the seaside might never

get out of his car." This seems topsy-turvy: the point of a good seaside resort should be that it is seductive enough to draw out our new generation of hermit crabs without their knowing it. From this point of view there seems to be not enough building around, an odd criticism of a seaside project: the headland is too urban to remain natural landscape and the remainder is not close-built enough or enclosed enough to make a true focus for holiday makers.

Roads. The lecturers are of high calibre and full information, as usual, can be obtained from Secretary West Taylor, Micklegate, York.

are by Vigers & Co. I'm sorry the name of the agency has slipped my mind.

DAMPENED SPIRIT

We're always complaining because there isn't enough time given on television to architecture. But I was rather sorry any time at all had been given to it on the BBC Brains Trust recently. It was a pity to hear John Betjeman making unfortunate remarks about modern architecture which will be accepted by hundreds of people as the views of an expert. "How," the questioner asked, "is the spirit of the age represented in contemporary architecture?" Mr. B. said we were good

at exhibitions because they were temporary; we were good at schools because they were not for us, but for the children—who ought to have something better; but that our housing was "high-minded planning by high-minded people without much heart—for people who would rather live in houses with gardens."

*

Such snap generalizations can do a lot of harm, and I rather agreed with another questioner who suggested that it was better to read a bad book than to watch almost any television programme.

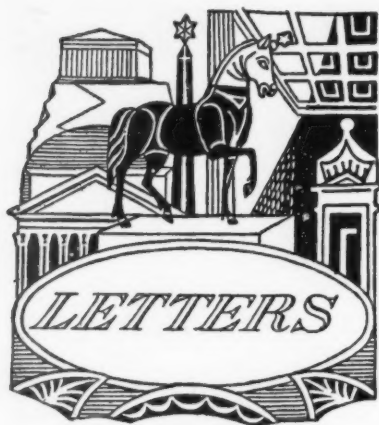
ASTRAGAL

EVERYTHING BUT THE FACTS

A three-page handout tells me about a dream office built by an advertising agency. With it comes a map showing where the office is, a list of ways of getting there and a proud boast that "at least one leading London advertising agency believes in keeping everybody well informed." For some reason the architect's name is withheld (it can't have been an accident in such an efficient organisation). It is C. H. Elsom and Partners, and the interiors

A model of the three-class primary school, designed by the Notts CC Architects' Department (under W. D. Lacey) in CLASP construction which will form the first official British exhibit at the Milan Triennale. It will show Milan's estimated half a million visitors how more high quality, teaching accommodation per place at 50 per cent. less cost (allowing for the changed value of money) is provided today than 10 years ago. After the Triennale closes the school will be given to the Italians and re-erected on a new housing estate in Milan. In addition to the school there will be a small exhibition in the Palazzo dell'Arte illustrating post-war school building in Great Britain. The designer is James Gardner. Fred Millet has designed a ceiling decoration for the Assembly Hall.





G. J. Foxley, A.R.I.B.A.

David Beaver

D. G. Howard

Managing Director, M. Howard (Mitcham) Ltd.

Mayfield Revisited

SIR: I should like to congratulate you on the article which appeared in your JOURNAL for April 7, 1960, under the heading "Buildings Re-visited" concerning this large Comprehensive School.

I consider that the value of such articles to be enormous for, whilst we are, of course, able to learn lessons on work for which we have, ourselves, been responsible, it is of immense value to hear of the lessons learned on projects undertaken by our colleagues in the profession.

This process can only lead to a greater awareness, on the part of the profession as a whole, to "defects" of planning, use of materials and qualities of specification; and must surely lead to progressive improvement in all aspects of providing buildings which meet both the user's requirements and provide him with the best value for the money that the client is prepared to spend on any project.

I hope that it will be possible for a greater number of similar such articles to appear in your JOURNAL.

G. J. FOXLEY

Matlock

SIR: Thank you so very, very much for the article on Mayfield school after five years' use, in this week's AJ.

At last somebody has woken up to the fact that Architecture is about time and durability and such like.

This article is worth its weight in gold and I hope that you will publish many, many more on the same lines, for, on these, particularly modern architecture stands or falls.

Thank you again for your good sense.

DAVID BEAVER

Edinburgh University

RIBA-Ideal Home House Costs

SIR: The house designed by Messrs. Grenfell Baines & Hargreaves in association with J. Keith Ingham, and built by us at Bromley was in fact a 4-bedroom house with two bathrooms, not two bedrooms as incorrectly reported in the *Evening Standard*, but afterwards corrected therein.

The price of the house is made up as follows:

Land: With 60 ft. minimum frontage to make up roads £2,000 freehold. (If anybody can offer good land within 10 miles of London at this price we should like to hear about it.)

Building: £4,250. The total floor area is 1,570 sq. ft. made up as follows:

Main building: 975 sq. ft. (original plan).
Garage and fuel store: 163 sq. ft. (original plan).

Upper floor (containing two bedrooms and one bathroom): 442 sq. ft. (additional to original plan).

If you take the average price of £3,600 it will be seen that the additional accommodation on the upper floor amounting to 442 sq. ft. has been provided at an extra cost of £650.

Now a word about architect's fees. So far as my own firm is concerned, we are working on the new RIBA Scale of fees for work in connection with private housing development, and the extended service at that. The fee for each original house type design is 4 per cent of the selling price of one such house, plus .8 per cent of the selling price in respect of layout and of royalty for each use of a house type design. It is thus apparent that the architect receives £250 for the original design, plus £50 for each house subsequently built on the same site.

In conclusion, it might also be added that as builders, we have gone to a great deal of trouble to present these houses in the manner required by the architects, including those specially appointed by the "Ideal Home" to design the interior decorations, lighting schemes, etc. This has been done by our firm in an attempt to let the architect have his head and see how the public react to some of their progressive ideas. Now, we are being accused of making fat profits in the process, but many builders still cling to the view, wrongly we think, that their profits decrease when they employ architects.

D. G. HOWARD

The Editors reply:

We are glad to have the assurance given by George Grenfell Baines, the architect (see last week's AJ) that the price of this house is reasonable, backed by the builder's breakdown on costs. This confirms our point that the price of land has risen to an extortionate level. It also suggests the inaccuracy of the Q.S.'s original estimates. In the RIBA/Ideal Home book of Small House Plans, the estimated cost of developing the first floor to provide two bedrooms and a bathroom was £160, less than one quarter of the builder's cost.

We appreciate Mr. Howard's gesture in paying Messrs. Grenfell Baines & Hargreaves the RIBA scale of fees, but it fur-

ther confuses the matter. We would point out that this might be construed as negating the RIBA's gesture of offering these designs for a specially low royalty.



TCPA

Holford on Public Spaces

"Redevelop your central areas in big bites and do it quickly in one go"—this was the message with which Sir William Holford concluded his talk on "Public Spaces" to the TCPA Planning Forum last week. Sir William took his youthful audience through a series of aspects relating to public spaces which, though not all new, he put across in such masterly fashion that they were fresh and stimulating. Glamour and convenience were the two main things to aim at: glamour in the form, colour, lights, decoration and a sense of vitality, convenience in the form of pedestrian precincts with easy parking facilities. The juxtaposition of trade and privilege (the market square near Wells cathedral or the Cambridge colleges) was often very successful, the covered way remained an important element. Some excellent slides (breath-taking glimpses of Piazza San Marco) illustrated these and many other points: the Via Corso shopping street in Rome with its narrow pavements (there are many accidents to shoppers stepping off the pavement), flowers as a mass spectacle on the Spanish Steps (why couldn't we have something similar here?) and a good example of public relations—a Coventry poster, showing the redeveloped centre, displayed on the site.

In the discussion Walter Bor drew attention to the bleak and unattractive backs of the inward looking New Town Centres—"it's like barging through the back door to get into the front parlour." He would like to see the car parks covered and more housing built in the immediate vicinity of the new centres, as in Vällingby. The best solution was to tuck the cars out of sight underneath and to re-create and re-use the space above as in St. Paul's Precinct and Barbican. Paul Kriesis got a firm "No" from Sir William when he asked whether we should not fol-

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low the American example and build the new shopping centres outside our towns. To a question how comprehensive development could be achieved in face of private developers building bits and pieces and often twisting the original conception, Prof. Holford replied that he would like local planning authorities to have more powers to ensure good comprehensive redevelopment and to insist on high quality design.

CRAWLEY

Chairman T. P. Bennett interviewed by Peter Rawstorne

Sir Thomas Bennett made his last speech as chairman of the Crawley Development Corporation on April 9. He has now retired, after 13 years, from the Corporation having piloted it from its first fumbings on paper to its handing over as a thriving community of 51,700 people.

Speaking to me after the meeting, at which he had presented the Annual Report, Sir Thomas (head of the London firm of architects T. P. Bennett & Son) outlined what he thought other development corporations should do in creating more New Towns.

Apart from urging the Government to create a New Town every 5 years "within 30 miles of London and with national funds" he said: "They must be sure in selecting the site that they can adequately deal with the problems of basic services. In Crawley, for instance, we had much difficulty in laying on good water supplies and there is the further consideration of sewage disposal and easy communications.

"Apart from making every possible effort to encourage industry you must ensure that there is a sufficient variety of factories. A community that depends on one large factory is facing disaster. At Crawley we have seven types of engineering and all have been brought here by careful programming so as

not to disrupt too much their production patterns.

"We insisted on industries with a high intake of skilled workers and, particularly in the early days, we made sure that too high a proportion of women were not to be employed so as to unbalance the community. "At the same time the housing must be synchronized with the building of factories and should follow the laying down of drains, sewers and roads. From 1947 to 1949 we concentrated on the general plan and the installation of essential services to make the town work from the start as people came in and this policy has proved to be a sound one." Commenting that his wartime experience as Director General of Works has made the administration of the CDC much easier he said that, nevertheless, building a New Town is straightforward planning.

"It is an operation of building," he said, "and not, as people used to say in 1945, a social experiment."

Having reached their population target Crawley, he said, was facing the biggest problem of all which was how to cope with resident increase.

"Through natural birth rate as the main factor," he said, "it is quite likely that the population of Crawley will rise to 74,000 people by 1980. (In 1947 it was 9,500.) To accommodate them within the 6,000 acres of the designated area means increasing the living density per acre from the present 12.3 to as high as 100 to 150.

"This will mean a much higher proportion of flats of greater height than we are building at present."

Commenting on traffic problems of the future he said: "I am not at all sure that we in Britain know the answer to the urban needs of pedestrians and traffic. The climate is an important factor and we must be sure that the car can come in close enough to the shopping or business centres so people don't have to walk too far.

"I am certainly not in favour of too many through roads but some roads must come in close to the centre. Some thought has

been given recently to the possibility of closing Queen's Square (the main piazza) to traffic and making it a pedestrian centre. "So far the traders have expressed divided opinions on this but it might well prove to be highly advantageous. Whether this can be done within the next 12 months remains to be seen but it is certainly worthy of further consideration.

"Ultimately there will be space for 2,600 cars in the town centre and, if it becomes necessary, multi-storey car parks will be built."

Sir Thomas said that the total cost of building Crawley had been £48,750,000. Buildings cost £26 million, land £4 million and £18 million had been spent by the County Council, the UDC and commercial and private undertakings. Total income is £1,758,000 a year.

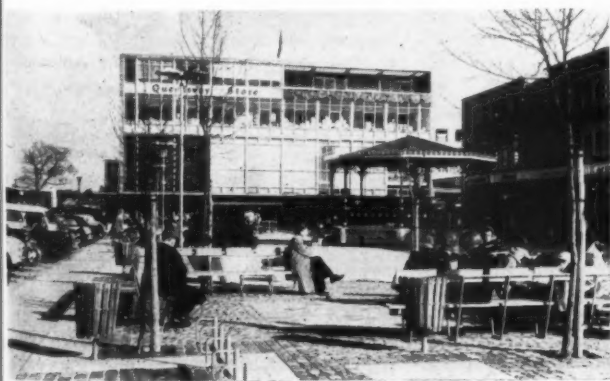
Including 1,575 flats in the area, 10,254 dwellings had been built ranging from one to five bedrooms. Seventy per cent. are three-bedroom and there are 250 dwelling types. Private enterprise had built a further 1,490 houses on freehold land on the fringes of the neighbourhoods. Selling prices ranged from £2,000 to £4,000.

Rents for the corporation houses ranged from 28s. 6d. to 39s. 6d. "But," he said, "as Crawley is now a town and not a New Town anymore, it is unrealistic to continue subsidizing rents to the full extent. The government will simply have to find a way that ensures that a man in the Midlands does not subsidize high-standard living for people in a town hundreds of miles away." He said also that 36 of the 72 new factories had been built by private money and that the total employment register is 21,800 people. Only 2,200 work outside the town and those mainly in London.

When I asked him if he would do the same thing again, if he had to, the reply was an emphatic affirmative. "New Towns," he said, "must be laid out on a tight concentric plan. A green belt in the centre is mistaken thinking. Keep the green belt on the outside."

Sir Thomas Bennett, speaking for the last time as chairman of the Crawley Development Corporation, said that the possibility of closing, within twelve months, the main piazza in the shopping centre to vehicles was being considered. Part of the street is shown below left, with a store in the background designed by Gaby Schreiber

Associates. Below right is a model of 3- and 4-storey flats to be built in Deerswood, in the Ifield area west of the town centre. The density will be 22 people to the acre. Designed by the Corporation's architects' department under H. S. Howgrave-Graham.



DIARY

The World of Bischof. Exhibition of photographs by Werner Bischof. At the Building Centre, 26, Store Street, W.C.1.

APRIL 21-MAY 11

The Royal Fine Art Commission—Pro and Con. Talk by J. M. Richards at the AA, 34/36, Bedford Square, W.C.1. 8 p.m.

APRIL 27

Is Daylighting Really Necessary? Lighting Conference for architects organized by the British Lighting Council at the RIBA, 66, Portland Place, W.1. 11 a.m.

APRIL 27

EXHIBITION

Arts Council and RIBA Collaborate

To coincide with the Congress of the International Union of Architects in London in July, 1961, the RIBA and the Arts Council are arranging a selective exhibition of work by British architects to be shown at the Arts Council Gallery, St. James's Square. Only the best work will be shown—size will be no criterion—and the exhibits will be selected by Lionel Brett, Hugh Casson, John Killick, John Piper and J. M. Richards. Architects may submit up to three examples of their work, completed

or projected, since 1951. Submissions must be accompanied by entry forms which should be obtained from the RIBA. Applications for forms (envelopes marked "Architecture Today Exhibition") must be made by June 30; and material submitted must reach the RIBA during October.

NIGERIA

New Town Proposed

Plans have been made for a new town to be built in Ilorin Province, near the proposed Niger dam in Northern Nigeria. It will house engineers and workers engaged in the dam construction, and people displaced by the new reservoir.

AMERICAN SCHOOLS

David Medd reviews a new presentation of U.S. Educational Buildings

It is almost impossible to imagine a better book of its kind on American schools. It is written in "clear, fascinating and frequently amusing prose" and is accompanied by hundreds of photographs taken with unusual perception and which "could be a book in themselves." Usually one has to gather all one's strength to embark on a book on American schools, but do not be intimidated by this one, for it is light in character yet in no way superficial.

The book is written primarily for School Board members, parents and laymen involved in school building decisions. The lay community in over 40,000 school districts throughout the United States shape their own educational policies, and have to find most of the money for capital expenditure from their own pockets. The number and quality of school buildings therefore depend on the willingness and ability of a local community to pay for them.

It is not surprising to find enormous variety in size, wealth, and attitude to education among school districts across the country and books like "Schoolhouse" contain a wealth of educational, architectural and technical experience, which, in the absence of central guidance, is essential to bring ideas and enthusiasm to those whose background very often does not fit them for the responsibilities of shaping the educational and school building policies of their community.

With 40,000,000 persons in school, and this number increasing by 4 per cent every year, and with 42 per cent of school districts containing less than 50 pupils, one-third of the high schools with less than 100 pupils, one-quarter of the schools one-teacher schools, and school districts as widespread as 17,127 square miles for 3,000 pupils, the problem of the dissemination of experience is not confined to the wealthy, well-educated and well-organised suburban communities in which generally the most enlightened school policies are to be found.

Walter McQuade, the editor of *Schoolhouse* edited by Walter McQuade. Simon & Schuster, New York. \$10.00.

has picked the brains of structural engineers, contractors, acoustical engineers, mechanical and electrical engineers, architects, superintendents, administrators, psychologists, and professors of education, and yet has produced a book which is easy to read. Early chapters discuss the responsibilities of the community, the philosophy of American education, and the qualities and character of schools which teachers and children appreciate and enjoy. Much of this may be familiar, but platitudes and pedestrian language are mercifully avoided. Moreover, the subject is very relevant to problems in this country for in spite of the different background in education, our ideals are similar and experiences complementary. Intellectuals may be superior about American education, but the Crowther and Albe-Marle reports alone remind us of how much we have to learn from the framework for education that has been set up in the United States. But Americans are aware of their own shortcomings, and the greatest difficulty would seem to be one of finding teachers in sufficient number and of sufficient quality to cope with the insatiable demand of ever increasing numbers clamouring for more and more education.

The chapter on "How to choose an Architect" is interesting, for virtually all schools are built by private architects desperately competing with one another for work, and the best architects competing even more desperately for the comparatively few clients who are sufficiently enlightened to employ them. The situation is vividly conveyed by the following advice given to School Boards in this chapter: "Try to decide immediately whether you intend to employ the best architect or the best salesman"; "refrain from trying to select your architect by shopping for the lowest fee and the maximum in fringe benefits"; "lean back quickly if you find yourself veering toward the man who says he can get your school built cheaper than anybody else"; "do not expect your architect to design your school programme as well as your school building"; "don't ask for rough sketches."

The next two chapters "Convincing the community" and "Shopping in the bond market," give vivid pictures by means of examples of the trials of a superintendent who has to find out where and how to borrow money for a school, and then to persuade the community to pay it back out of their own pockets, so that when they go to the polls the School Board will get the majority vote approving the necessary taxes. We are now halfway through the book, and at chapter 9 we move from educational to technical affairs but a bridging chapter on climate gives yet another fascinating picture of the U.S.A. Almost every climate in the world is experienced within its boundaries, and from San Francisco alone an easy drive will bring you to the moors of Scotland, the rain forests of New Zealand or the apricot groves of Israel. Geography therefore imposes real problems for designers. But it is one of the paradoxes of the United States that in spite of variety of every conceivable kind it is the sameness rather than the variety of man-made environments and habits that strikes the visitor. With air-conditioning finding its way into schools, and the increasing preference for the regularity of electric light over the vagaries of daylight, F. Scott Fitzgerald's "... there is much less weather than when I was a boy ..." is becoming more and more true. Chapters on structure, acoustics, lighting and wiring, heating and plumbing, and furniture are models of how to write on technical subjects for lay readers. It should be pointed out that architects and technical persons in this country should not assume that there is nothing here for them. They will get a clear picture of American standards and aims, with a sprinkling of foot lambers and decibels to chew over. One of the disconcerting aspects of an American school architect's life must be the expertise with which superintendents and Board members equip themselves. In fact, one's impression is that financial and technical problems are preoccupying. Superintendents will explain the lighting and heating installation in great detail, pass judgment on the relative merits of furniture manufacturers' products, be fully equipped with the properties of structure, but will find it quite difficult to tell you how often certain rooms are used, or the relative merits of different teaching methods and room layouts.

We are now three-quarters of the way through the book, and chapter 15 is headed "Design" and it is at this point we move from technical matters to complete buildings. We have been helped on our way by dozens of photographs of unusual interest and imagination, toddlers to teenagers enjoying—yes, enjoying, for as we are always told "education is fun" in the U.S.A.—every conceivable aspect of school life from paddling to courting.

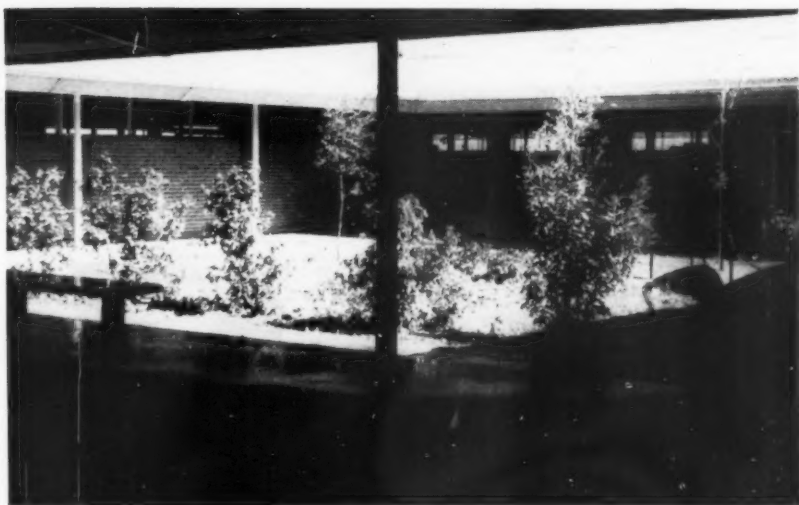
The last quarter of the book after some amusing cartoons, opens with nine superb low oblique air views in colour showing in the clearest possible manner the planning and surroundings of schools which include an elementary school loosely dispersed on a wooded hillside in Connecticut; John Lyon Reid's factory floor school in San Mateo, California, whose myriads of toplights monotonously mirror the subdivision pressing on to the school from all sides; a big suburban high school in Long Island in a photograph which painfully shows how the Island is being transformed from a potato field into a housing estate; Caudill's Carl Underwood School in Andrews, Texas, which is perhaps the finest the writer has ever seen but in a landscape of biting sand; and Perkin's famous Crow Island School in a photograph showing the icy cold of Illinois in winter.

From these birdseye views we plunge into the interior, and in twenty pages of annotated photographs we go round schools, but, not content with this, we follow with twenty-five pages of interior details, by which time our picture of American schools is rich and clear. We have not been misled by the conventional or mannered techniques of the architectural photographer, but the camera has been used to convey detail and character of structure and equipment. These are not the photographs contrived for A.I.A. awards. Addresses and credits are given under each photograph—no maddening maze exercise is necessary to link them together—and therefore the reader has perhaps the best reference to interesting American schools available at the present time.

Do not assume that all schools in the U.S.A. are as good as those in this book, some are better and most are worse. Do not assume either that praise for this book means praise for everything in it. Many new schools which look interesting are not, in fact—for fancy sections and skilful architectural treatment, superb equipment and finish can never conceal classrooms that are merely rows of boxes and poverty-stricken education. Several of the big names in architecture fail because they do not understand the problems they are asked to solve—problems this book puts so well.

We have now reached the end of the book, and have done so probably because there are no plans, no schedules, no areas and no check lists. There is plenty of detail but none of it is tedious. This is a book from which to capture the spirit rather than the letter of American school buildings, and because American schools are shaped by, rather than shape, American society, and because it is a faithful book, one gets from it a picture not only of American schools but of American life.

DAVID MEDD



Carl Underwood School in Andrews, Texas

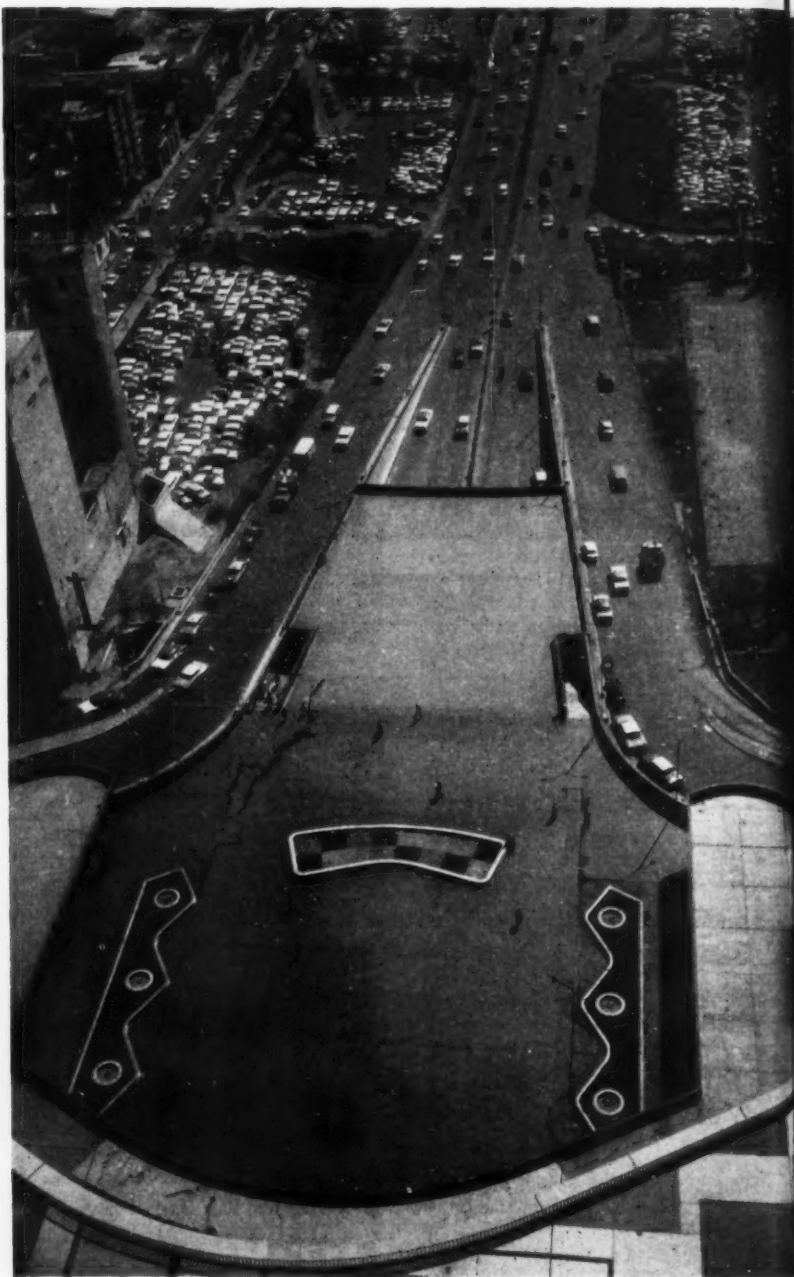
Top: patio. Wide overhangs, planting and a playing fountain make a pleasant outlook in a relentlessly bright and sand-blown district. This design is a welcome alternative to the windowless school.

Centre: dining room. The space is divided from the kitchen and is itself sub-divided into areas of varying size by low, brightly coloured screens.

Bottom: library. This photograph shows the library in use at lunchtime, when the boy at the desk in the background is in charge. The library, like the classrooms, is grouped round the patio. Communication is through the rooms as there is no separate corridor.

CARACAS

The review of building in Brazil, by C. C. Handisyde, which appeared in our issue of April 14 is now followed by his description of work in Caracas and Mexico City and its surroundings.



S&Z



Caracas lies in a long valley between hills which rise several thousand feet above the town. The old centre, built on a slope but with a rigid pattern of narrow streets, forms an impossible traffic problem and, as a result, there is a very big shift of the centre of activity outward along the valley, and, going with this, a very large road building programme. Indeed, much of the interest in Caracas is in its road improvement schemes. The pride of the place at the moment is the fairly recently completed road up from the coast to the city, climbing something like 5,000 feet and providing a dual carriage-way with relatively few bends. The work included the construction of two tunnels and three bridges crossing gorges at a height of about 200 feet. It makes all the fuss about our M.1. a little unnecessary.

Into the centre of the old town comes a main traffic road which drives beneath the great Central Boliva building while, at the same time, cross traffic also goes beneath the building and at a different level. (1) is a view of this main road from the top of the Boliva building. The whole thing, with a natural cross fall to be accommodated, is an extremely com-

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CARACAS & MEXICO CITY (continued)

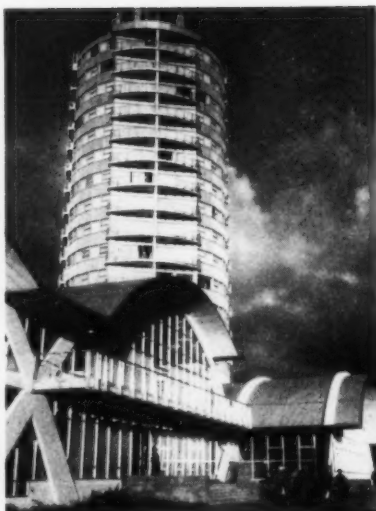
plex piece of road engineering. It by no means solves all the problems and a new by-pass road is now planned to miss the centre of the old town altogether.

Approaching Caracas up the new road from the coast, there is an astonishing view of a large number of very brightly coloured twelve storey blocks of flats. Very crudely and economically built, they are an interesting attempt to deal with the enormous problem of low cost dwellings. It was said that the original interiors of these were built to last only five years, while the occupants were taught to live in such places. The idea was that they would then be remodelled inside. This does not appear to be happening. There is lift access to 4th, 8th and 12th floors only. In some blocks elsewhere, of a later and rather better standard of finish, there was an entirely open deck at fourth and top floors, apparently intended for recreation, parties, etc., but seemingly very little used. The general appearance suffered badly from a lack of any real landscaping. It was interesting to note a thick forest of T.V. aerials on top of the lowest income group flats! This disease appears to be world-wide

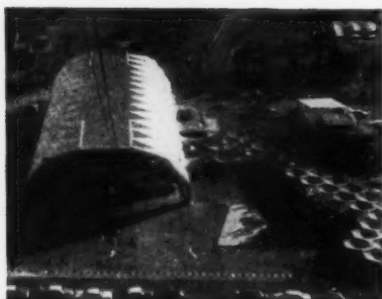
There are numerous new office buildings



and high cost flats. The **Polaris building**, out in the newer part of the city, seems to be much admired. At least it is an example of a high building with advertisements on top. The most luxuriously finished job is probably the USA Embassy, which, for its beautifully finished materials, is certainly worth seeing.



Among the star turns is the **Humboldt Hotel**, approachable only by cable railway, it stands on the top of a mountain about 3,500 feet above the town. Fourteen storeys high, it is built in circular form to give the rooms views all round. Apparently this hotel received Government backing as part of a general plan to improve tourist facilities. For a time it was unsuccessful, but now appears to be doing rather better. The hotel is clearly visible as a landmark from the valley, while the views from it are splendid. It was a very bold project and deserves success.



The starting point for the **cable railway** is interesting for the building housing the machinery and the passenger take-off point. Clearly designed as a concrete shell, it was surprising to find inside

a complete steel frame—apparently somebody's slide rule did not work or the construction was faulty, because the steel frame was added after the job had been completed. It seems that a later edition of the same thing has been built not far away without the aid of the steel framing. This type of experiment and failure does not seem to worry anyone unduly. Alongside the main building is an approach covered way constructed of a large number of small inverted umbrella-shaped concrete structures. These looked quite amusing. Water leaked through, but in this case that may have been unimportant as the shelter was probably more to give shade than to keep off rain.

Without spreading along the valley space for development is limited. As a result, speculators are doing the most astonishing things in buying up mountain sides and levelling them. Most of what can be seen in the distance, in this picture



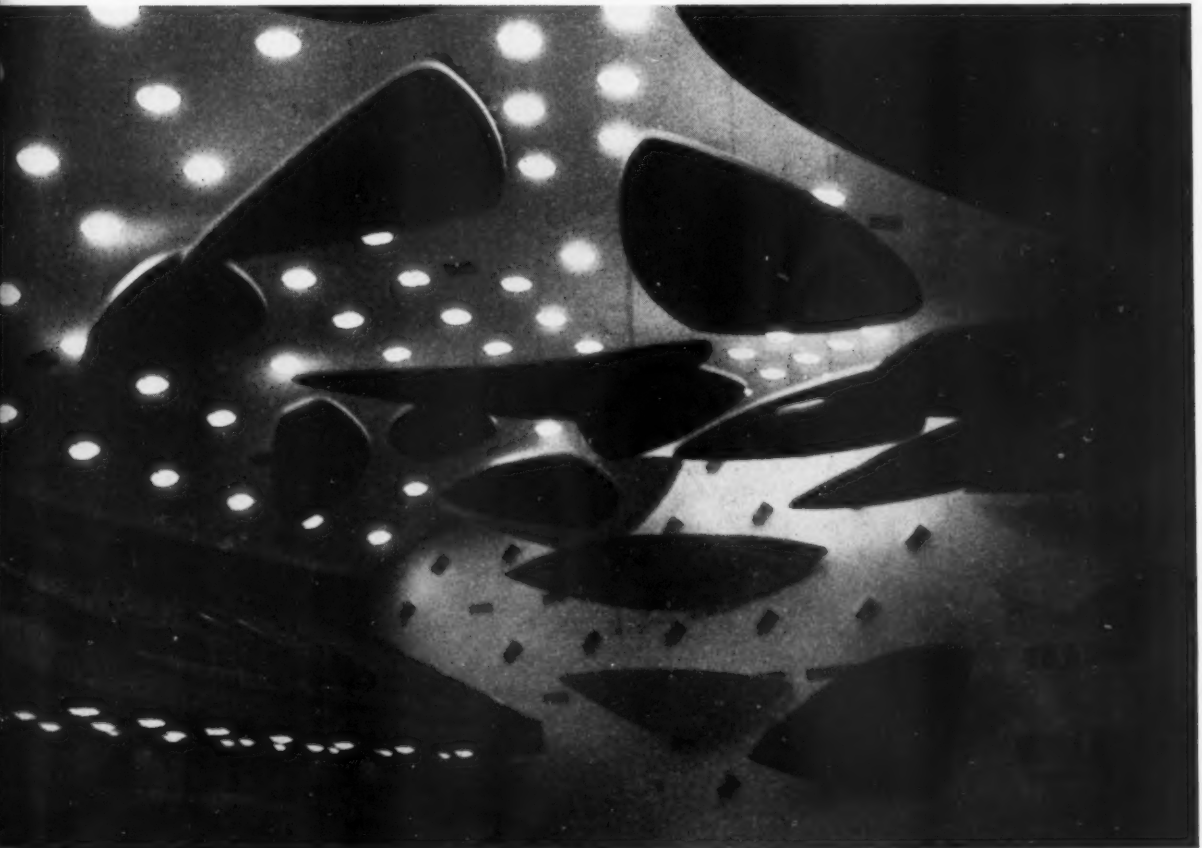
is being treated in that way.

Of large earth-moving schemes, however, the **Helicoide shopping centre development (3)** is the most ambitious and interesting. Here, speculators have bought up a quite sizeable, very steep, hill not too far from the centre of the town. The land was regarded as too steep for development and was therefore cheap, at about 30 Bolivias per square metre, against 700 for normal land in the same area. By a vast earth-moving programme this is now being converted into a spiral of shops facing outward from the hill and approached from a continuous ramp road. The picture opposite shows the scheme in model form, though it is difficult to appreciate the ingenuity of the road system. Levels 1, 3, 5 and 7 are for a road going up and intertwined with this are "down" roads at Levels 2, 4, 6. It is arranged so that cars never cross pedestrian routes. Altogether, there will be 30 shops with the owners as co-operative owners of the whole scheme which is



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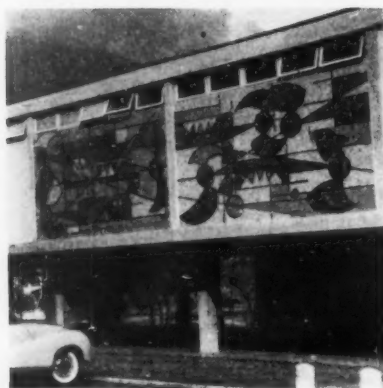
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CARACAS & MEXICO CITY (continued)

cludes also lifts and escalators for pedestrian travel between levels, a small hotel for visitors, a communal secretarial service and, in addition to local parking for shoppers, a central car park for shopkeepers and others stopping for lengthy periods. There will also be restaurants and exhibition spaces. Outside opinion about the scheme was rather divided, some people saying that shoppers would not bother to drive so far up and down the spiral roads.

The University City at Caracas is fully built and clearly a very going concern.



Artists have had a grand time with **sculpture and murals**, some of the latter being painted and some in glazed tile. Individual buildings are interesting, especially the interior of the large auditorium with its gaily coloured flying "shapes," (page 611, (4)) though it is difficult to see that they would have been needed if the auditorium had, basically, been acoustically good. In its overall plan the University campus makes an interesting field for comparison with Mexico City. Caracas has been kept

deliberately tight in its planning but seems, as a result, to be rather confused and lacking in serenity, while at Mexico there is further to walk from one faculty to another but a real sense of planning and some fine lay-out. Both have external murals which are vivid in colour and, to our ideas perhaps, rather primitive in their style, though this seems somehow to be more acceptable in Mexico than in Caracas.

Among the modern office buildings in Caracas was one which had adjoining it a multi-storey garage with pigeon-hole automatic parking. In the office building



was a nice example of an **architect's office**. Situated high up at a set-back in the building, it had an attractive roof terrace with planting, pool and sculpture. Inside, all was perfect, beautiful furniture, and filing cabinets, beautiful mechanical aids and beautiful reception room carefully furnished with beautiful secretaries sitting on orange-covered chairs and having lipstick to match! This was not a large office and it appeared to be doing far more work than one would expect from the size of staff. Enquiry showed that all detail working drawings were delegated to another concern. This was not so unusual as it might appear because, so far as one could discover, qualified architects seldom did very much in the way of

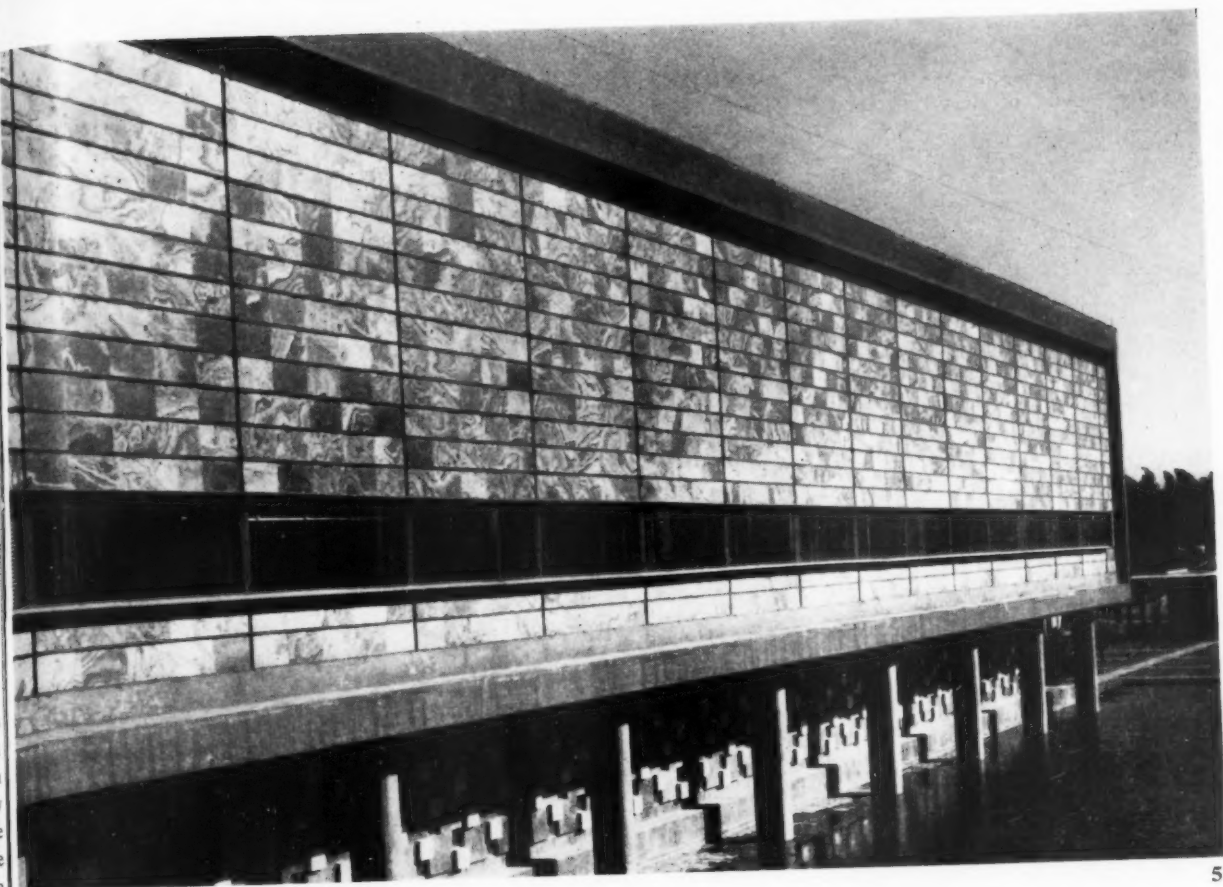
working details. Is this in fact the two-tier profession already in action? Enquiring about the use of engineers, it seems that independent consultants were sometimes used but also quite frequently the contractors provided the engineering service. In any case, contractors doing jobs of any appreciable size had to have qualified engineers on their staff.

CARACAS CONCLUSIONS

An overall impression of Caracas was that workmanship was rather better than in Brazil, a fair amount of skilled Italian labour is employed. There are only a few hundred qualified architects in the whole of Venezuela and one with two or three years' experience could expect to earn nearly £3,000 a year and still have some time for developing a practice of his own. On the other hand, a reasonable two-bedroom flat costs about £700 p.a. and a very modest lunch at least a pound. Future travellers should note that in a decent hotel a steak costs 30 shillings and an omelette 16 shillings. Perhaps the cost of the American Embassy building, said to have been £15 per square foot, was not so outrageous after all.

PANAMA

A night stop in Panama gave no time for more than a quick glance at the town. There are some quite interesting university buildings and a mass of extremely ordinary housing for the American Forces. A large and very luxurious hotel proved difficult to sleep in, owing to the noise nuisance from air conditioning



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6



CARACAS & MEXICO CITY (continued)

This was a really serious drawback and made rooms near the main shaft almost uninhabitable.

and the general design might have been found anywhere from London to USA.

MEXICO CITY

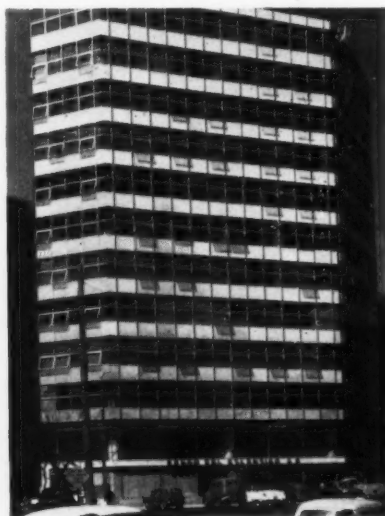
Mexico City is an enormous place, almost 5,000,000 people. Fine wide roads in the centre and sensible regulations against U turns make traffic flow reasonable, except at the worst of the rush hour



period. Very large areas of the **suburbs** look like the less attractive parts of the East End and where these districts do have new buildings, one hopes that architects were not involved. In the central area there were plenty of new shops and



offices: height set-backs seemed to operate, sun breakers were very little used

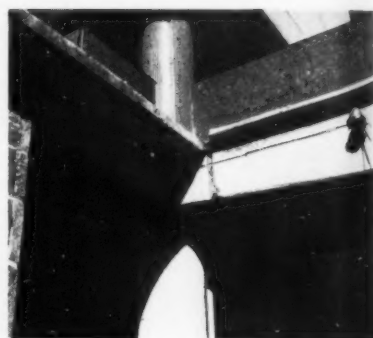


This **corner block** was interesting for its overall colour effect. Green tinted, heat-excluding glass was used for the windows and the panels were in a very small scale ribbed aluminium. Mullions also were in aluminium.

The two things of outstanding interest in or near Mexico City were the Candela churches and the University. The University was planned much more openly than Caracas but, at the same time, achieved a more unified and orderly overall design in spite of a large number of architects having done the individual buildings. Except for a few things, such as the stadium and a magnificent set of swimming pools, all buildings were on the inside of a ring access road. Each was well set back and had good access and parking area off the road. Within this ring of buildings was the main open space of the campus which was very carefully and attractively landscaped, with a maximum advantage being taken of changes in level. Apart from the famous mosaic-

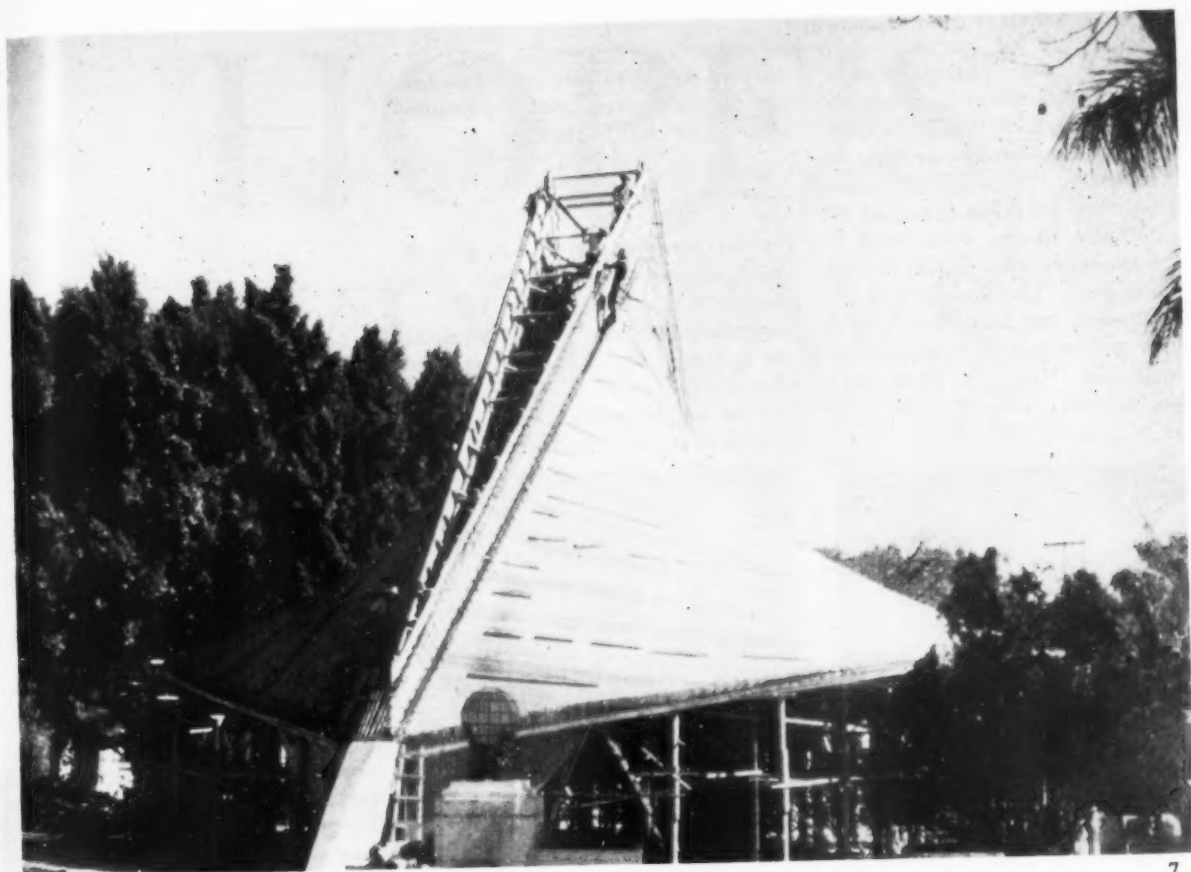


covered library stackroom, the individual buildings were competent rather than spectacular. The **main administration building** has a huge brightly coloured mural on the right end wall. (The library can be seen just showing behind the left end of this main block.) Note the grass and paving lay-out which seemed excellently in scale. On the previous page (5) is a closer view of the low wing of this administration building. This housed a very large registration hall and was interesting for its natural lighting—the long walls being “glazed” with thin slabs of translucent creamy gold marble, except for a small horizontal strip of clear glass. Outside, this material appeared solid but inside it gave a diffused golden light and the variations in colour of the material produced a very rich effect. (The higher part of windows in the reading room of the library were treated in the same way.) Quality of workmanship



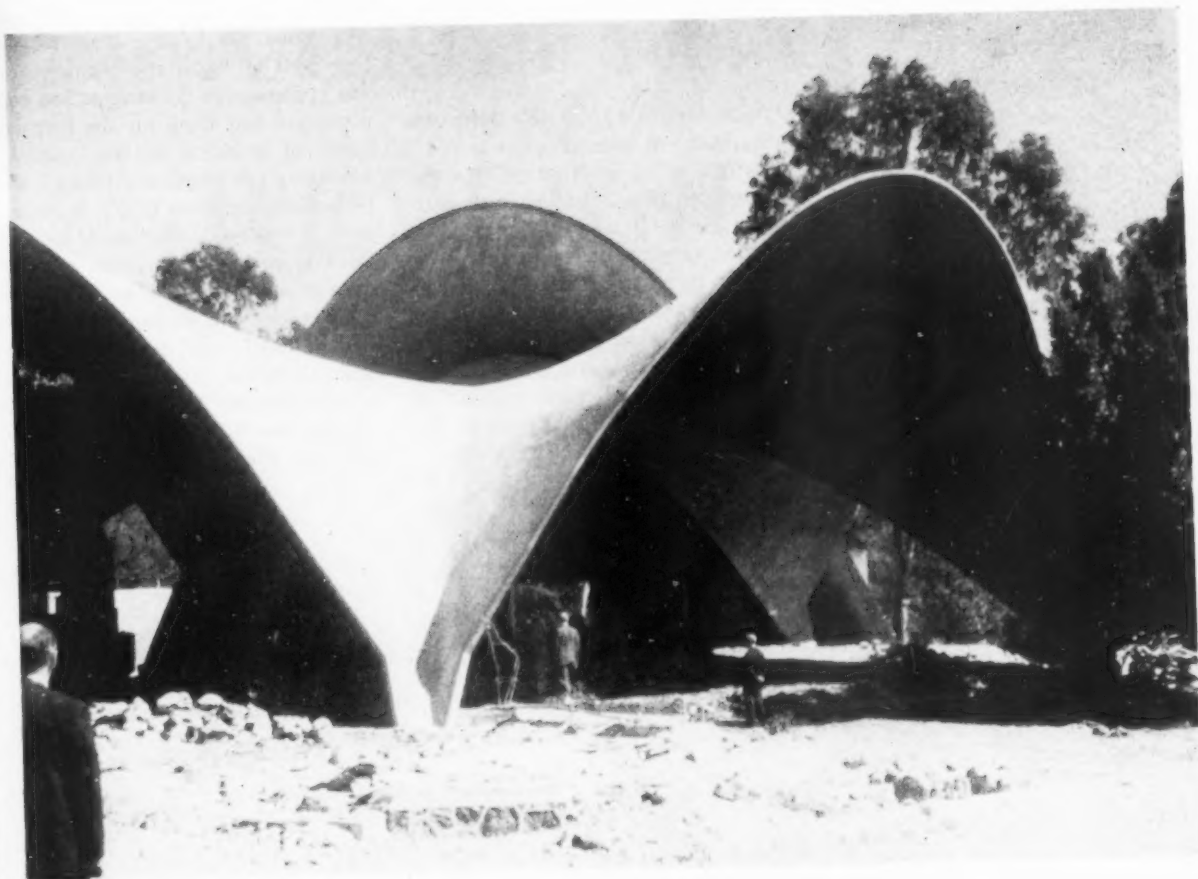
varied. The picture above shows a **poor detail**, but elsewhere there was some excellent concrete work to be seen. The much photographed Cosmic Rays building by Candela, which has been described as “like a covered wagon, a gem of architecture as much as of concrete construction,” I thought looked out of scale and out of place and shoddy into the bargain, and was extremely disappointing. It gave an impression of being little better than a temporary Nissen hut that one hoped would be removed as soon as circumstances permitted.

Candela buildings elsewhere were a puzzle. Technically, they are most ingenious and, at first sight, most exciting, but it did seem very odd to find almost the same constructional solution to every problem and it was very difficult to believe that it was always the best one. Candela sometimes operates solely as consulting engineer, sometimes as architect and engineer, sometimes as engineer



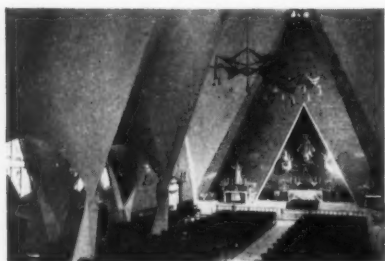
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8



CARACAS & MEXICO CITY (continued)

and contractor and sometimes as architect, engineer and contractor. In one odd case, a large new factory, a Cuban architect had been employed, Candela was the engineer and contractor and had apparently amended the design in part of the job. Adjacent to the main industrial part, a two-storey office section was going up in steel. This seemed peculiar as he never uses a steel frame, but it turned out that for this part of the project the architect was Mies! The whole thing seemed to me a case of "too many cooks."



For churches, the **thin shell constructions** produce shapes which seem appropriate, especially when the whole design is kept as simple as possible. Where it gets more complicated the result is less satisfactory. In the church shown above and on page 613, (6) the twisted necks to the

columns seemed to spoil the simple lines and the exterior lost much of the charm which other churches had.

On the previous page (7) is a small church at Cuernavaca being built in the grounds of a successful hotel. This was particularly interesting as an example of the shuttering required and it is quite surprising how simple this is once the setting out has been correctly done. In the grounds of the same hotel, a new



restaurant and theatre (also previous page) (8) were being built in shell construction. The large shell houses the theatre and the smaller one the restaurant. Whether the shape was acoustically good for a theatre did not appear to have been studied.

Outside Mexico City a new town was being built. At present, there is not a great deal to see in it except an extraordinary amount of preparatory road-work, but at least it has provided a dramatic entry on the main road from Mexico City (page 609, (2)). Five triangular concrete pylons rose to heights of well over 100 ft. in an interesting composition. Each pylon was in a different colour and the effect was very dramatic. It would be fun to see something of this kind at Harlow or Hemel Hempstead.

CONCLUSIONS ON THE TOUR

Looking back now on the whole trip, including Brazil, Venezuela and Mexico, one has a feeling of admiration for the boldness of some of the schemes in each country, even though in many cases the details, especially in construction, were so poor. It was irritating and rather disappointing to find that almost all the things one most wanted to photograph because they were exciting were the things that could be most criticized for their practical failings. In some ways, Caracas was perhaps the most interesting place for here no one individual was scooping the pool, whereas in Mexico one felt that the Candela shells were getting rather too large a share of publicity and in Brazil the Niemeyer cult was oppressive in the extreme and quite possibly a bad thing for the long-term future of architects in that country. Interesting and instructive though it may be for architects from Britain to see such work at first hand, what would be really valuable would be to organize a trip for some of our leading clients. They might come back with a more enterprising view of architectural design and anyway could hardly fail to return with a feeling of thankfulness for the comparative completeness of the service they get from architects over here.

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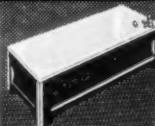
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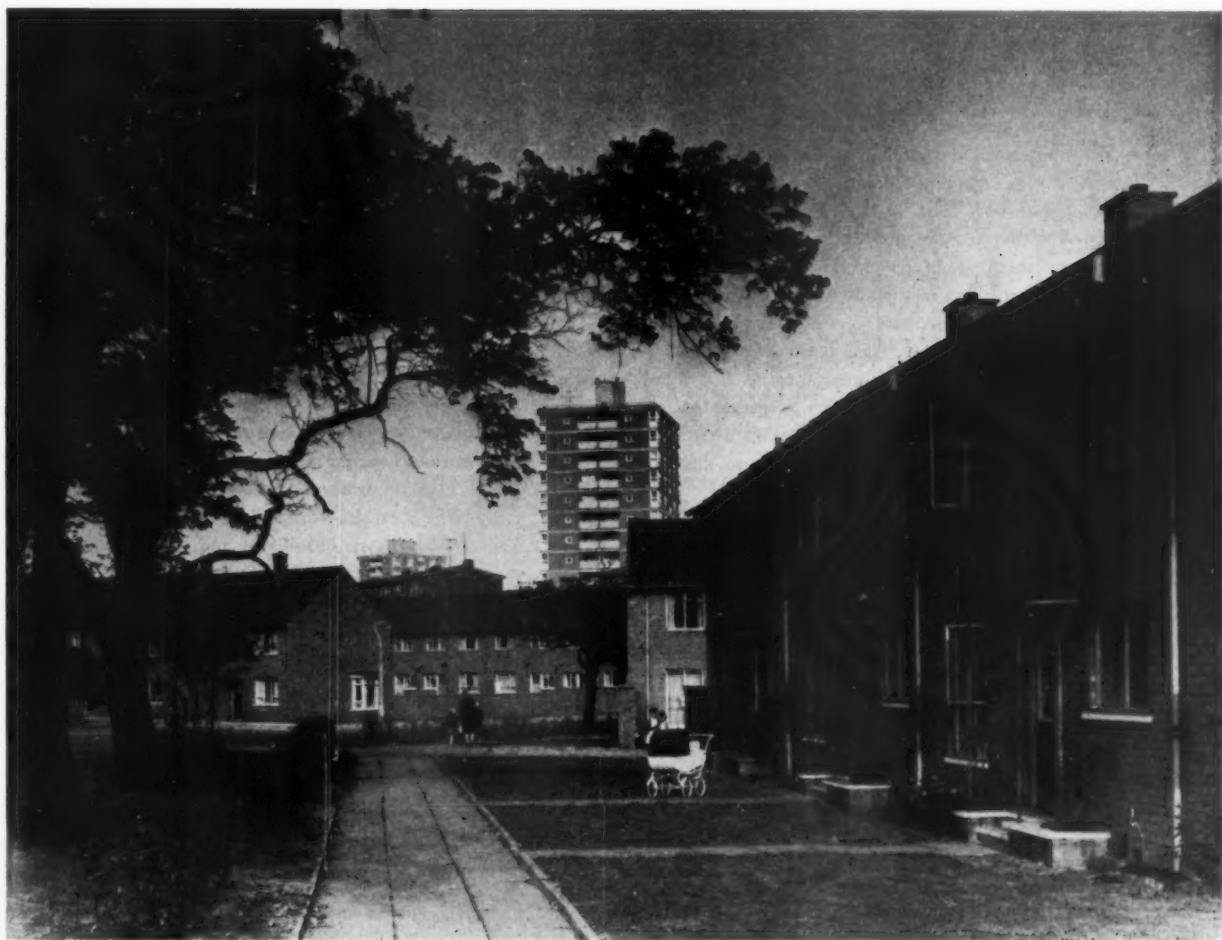
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PROGRESS REPORT ON SHEFFIELD

The City's main redevelopment schemes, designed by City Architect J. L. Womersley, now going forward rapidly, are here outlined. A cost analysis of the main central housing scheme, Park Hill, will be published in the AJ later this year.

The Radburn layout at Greenhill-Bradway, with, rising behind, one of the tower blocks which have been used on the Netherthorpe estate in the city centre.



PROGRESS REPORT ON SHEFFIELD (continued)

Although Coventry has, quite rightly, stolen the limelight in Britain's post-war urban redevelopment schemes it is well to remember that other cities too dream of better things, and among these lesser satellites Sheffield's star shines ever brighter. Whether the new centre will ever rival the cohesion and urbanity of Coventry is difficult to tell at this early stage: from the few completed commercial buildings and the official layout plan there is room for doubt.

The actual centre apart, the slum clearance, redevelopment and new development schemes are now in full spate and, owing to the hilly nature of the city's terrain, they will all play a very dominant part in the eventual townscape of both the heart of the town and its periphery.

There are two areas of central redevelopment called Netherthorpe and Park Hill and two new areas on the edge of Sheffield known as Greenhill-Bradway and the Gleadless Valley Development. Netherthorpe is under three-quarters of a mile from the city centre and is a fairly conventional and thoroughly valid planning solution to a steeply sloping site which is unequally divided by a deep valley. On one side is a row of 13-storey point blocks which overlooks the valley (given over to public open space) and on the other side there will be 3, 4 and 5 storey blocks of flats and maisonettes. The area will have its own shopping centres, public houses, health centres, school, etc., and its 121 acres will be developed at 100 persons an acre, excluding major open spaces.

Of the final scheme, only the tower blocks and a few low buildings are nearing completion. The tall blocks look well from a distance and sit comfortably on their terraces which have been built up on the valley side to allow all round fire ladder access to the top storeys. These terraces must have been a costly item but there seems to be little evidence that the opportunity will be taken to link them visually with their neighbours, though the site works are not yet complete. A closer inspection brings a keener disappointment however for there is much to be desired in the workmanship, finish and architectural detailing of these high blocks. Indeed since this criticism applies in varying degrees to all the work in Sheffield it may be as well to discuss the obstacles and reasons in more detail.

Take workmanship. Here a sensitive architect working in a local Authority fights an uphill battle. It is with the greatest difficulty that contractors can be persuaded from the view that public housing is "the dregs." This attitude colours their whole approach to the job so that the simplest detail is coarsely handled. In fact one is led to wonder whether it is worth trying a few complex details to force greater care on the workman and even obliging the contractor to put better men on the housing work. That contractors have these categories of labour is quite apparent when you see the same firm working on, say, a school in the same housing estate.

The difficulty here, of course, rests in finance. Intricate detailing and good finishes lead to expensive schemes in excess of Ministry figures. In Sheffield it appears that the finishes, adequate internally except for dismal grando staircases are also bedevilled by local politics. The architects are instructed to use bricks of the most characterless colour and texture in both urban and new development schemes. At Netherthorpe it is not too critical since the elevations of the tower blocks are tightly knit in an exposed reinforced concrete frame. The same is also partly true of Park Hill, though the architects must take some responsibility for the unfortunate

juxtaposition of panels of yellow and brown brick. In the Gleadless Valley and Greenhill estates, however, the lifeless character of the bricks does much to rob the layouts of any real vitality.

The lack of refinement in the architectural detail makes one think wistfully of Scandinavia—and Roehampton. One has the feeling in all these four schemes that someone with real imagination conceived the overall layout and worked on the basic planning of many of the block types. Indeed ingenious planning solutions abound in Sheffield; one of the few Radburn superblocs in England, the 6-storey blocks entered at 2nd floor level to obviate lifts; the intricate layout of flats in the Park Hill scheme, the staggered blocks and careful planning to make the most of the north facing slopes in the Gleadless Valley. These are the equal of planning thought anywhere in the world, but when allowances have been made for bad workmanship, financial restrictions and reactionary committees one may still ask why the result is so dull compared with the best examples. Here and there a breath of life invigorates a section of housing or a corner of a shopping centre and while one is repelled by the thought of recommending deliberate cribbing tours of Göteborg, Blackeberg and Vallingby it is surely most important that new residential buildings in England maintain at least the high standard of the latest estates by Gibberd at Harlow and Culpin at Stevenage.

The second redevelopment area at Park Hill is well on the way to completion and 944 dwellings in blocks from 4 to 13 storeys high will soon be completed in the first stage. The site once again is precipitous and will present a dramatic facade to the town centre which it overlooks across the railway station. The flats are interesting for their combined access system of lifts and wide continuous balconies, and for the central heating and Garchey refuse disposal system. The blocks are arranged in continuous cranked lines which form great inward-looking courts on the up-hill side and look out over the city to the West. It is a bold layout, though at the moment its level skyline makes the profile uninteresting and unrelieved against the skyline. Phase II however rises higher still beyond the first instalment and it remains to be seen whether the dramatic relief given by its giant tower blocks will be as evident in fact as it is on the drawing board.

About five miles from the city is the Gleadless Valley Development which more than any other scheme in Sheffield holds out real hope for the future. A 300 acre tract of land is being developed to house 17,000 people in three neighbourhoods of unequal size—dictated by the steep contours of the site. The layouts are imaginative and they use the contours well—at times quite brilliantly. Some of the courts and retaining walls are lifted from the rut of poor materials by the use of second-hand stone available in huge quantities from the demolition of slum property. Apart from the uneven quality of the architecture the landscaping is weak and often non-existent. One sighs again for a continental awareness of the immediate humanising effect of a tree and, better still, for the Russian technique of planting hundreds of thousands of fifteen-year-old trees (with less than 1 per cent failure) in their new estates immediately the structural frame of the buildings is complete.

Much too could be done to overcome the deadness of the brickwork with an imaginative colour scheme, but off-white (B.S. 9.093) is the general specification for all softwood, up

Netherthorpe

A detail
tower block
The tiled
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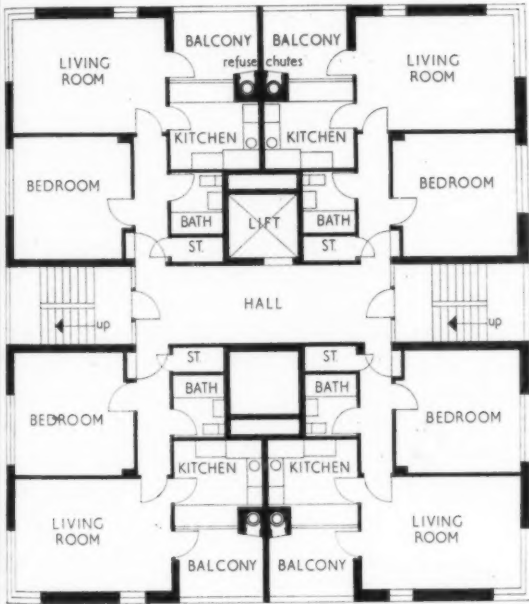
Tower

Park

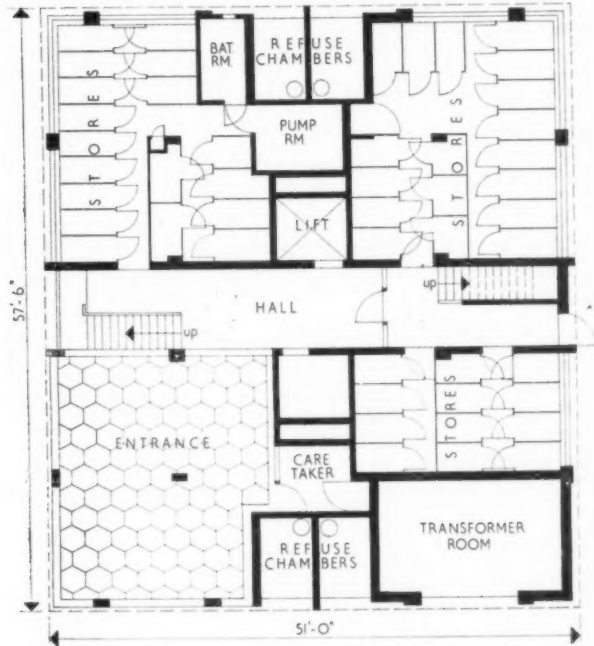
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Netherthorpe estate

A detail at the entrance of one of the 13-storey tower blocks being built on the Netherthorpe estate. The tiled wall screens the main duct and 8-person lift. The slatted roll shutters give access to the refuse collecting points at the bottom of the shafts. The small window is excellently placed both externally and internally; from an armchair one can look out comfortably over the city. Note the execrable standard of paving.



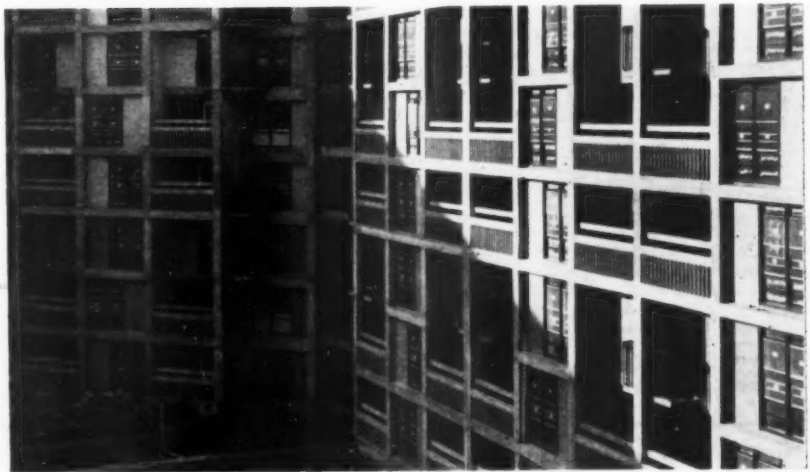
Tower block, Netherthorpe estate, upper floor plan



Tower block, Netherthorpe estate, ground floor plan [Scale: $\frac{1}{16}'' = 1' 0''$]

Park Hill flats

Detail of the Park Hill flats from the east. The pedestrian aspect of the elevations is relieved by some interesting details such as the unclimbable balustrades. It remains to be seen how so much exposed concrete will withstand Sheffield's grime.



PROGRESS REPORT ON SHEFFIELD (continued)

hill and down dale, with a few primary colours applied to front doors for contrast. Committee directives may well be at the back of this culpable timidity, but maybe they would miss one little close somewhere if the architect chanced his arm!

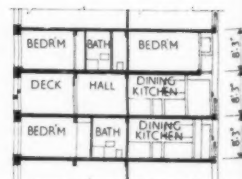
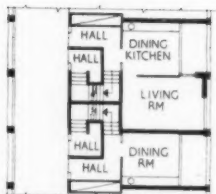
The full extent of the progress made in developing a vigorous architecture in Sheffield's public schemes is not fully realized until one has visited the Greenhill-Bradway estate. This is in the adequate but dreary tradition of so many British post-war housing developments. On his appointment six years ago as City Architect, Mr. J. M. Womersley was presented with an architectural legacy of apathy, reaction and sterility. At Greenhill he was in time only to recast certain parts of the plan with the result that here is one of the very few Radburn layouts (why is this not done more extensively?) and some 2-storey "corner" flats which give much more continuity to the terraced layouts.

Thus, although criticism has been and will be levelled at the quality of the work now going up it must be leavened with an acknowledgment of the tremendous advance that has been made in so short a time. It is perhaps unfair to expect that in six years a new climate of opinion in official circles will be formed, that a design and building team will be welded into a supremely competent unit, and that new buildings of maturity will blossom forth in a desert just newly tilled. There is a long way to go yet; future progress will be keenly watched, but already there is no doubt that a whole generation will have something worth while to see for its money. This at least is more than can be said for cities like Liverpool or Manchester.

Park Hill flats



The Park Hill Central Area Development from the west. The buildings illustrated show Stage 1 only of a much larger scheme which will comprise tower blocks on the hillside and blocks on the flat. From the composition of the photograph it is evident that the buildings are part of a much larger scheme which will comprise tower blocks on the hillside and blocks on the flat.



Park Hill flats, plans above deck level, at deck level, below deck level, typical section [Scale: $\frac{1}{8}$ " = 1' 0"]

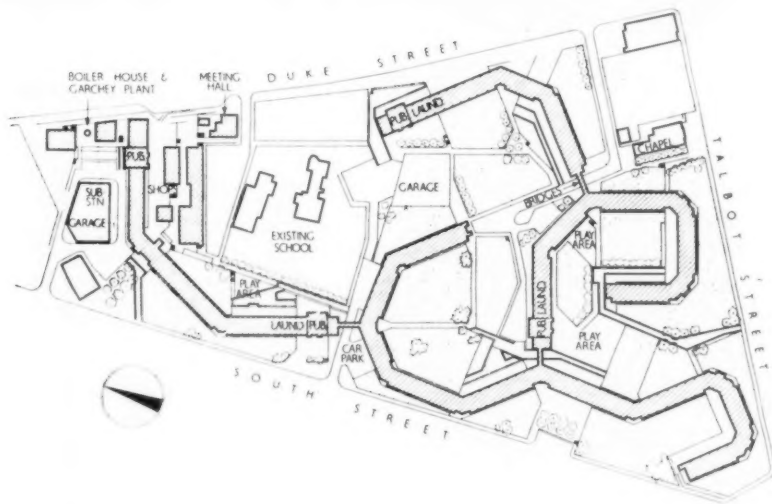


from the
e 1 only
rise tower

blocks on the rising ground to the east of the present
blocks. From the elevated viewpoint shown, the total
composition should be very dramatic but from the

city streets in the valley bottom in the middle distance
it is difficult to foresee anything other than a flat
skyline broken only by the awkward obtuse angles

produced by the cranked blocks. The chimney of the
central refuse disposal and central heating plant for
the entire scheme can be seen at the left of the picture.



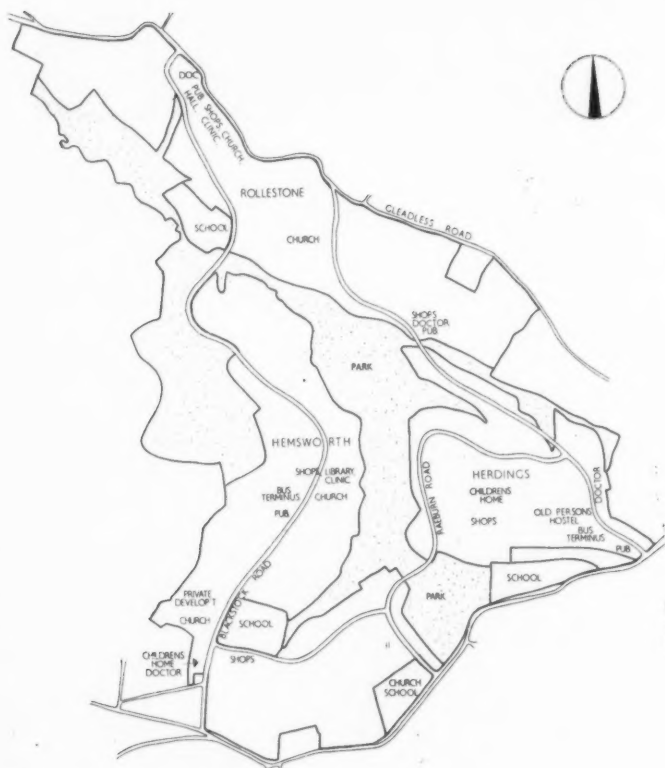
Site plan of Park Hill Development

PROGRESS REPORT ON SHEFFIELD (continued)



Gleadless Valley Development

Looking west over the Herdings estate in the Gleadless Valley Development. The north facing slope presented a design problem which has led to some interesting block formations. From a distance the lack of refinement in architectural detailing is not noticeable, but closer inspection reveals that quality details must go up on the architectural department's list of priorities if further progress is to be made.



Site plan of Gleadless Valley Development



Ground floor plan of staggered terrace house



View of the Hemsworth estate. New planting is desperately needed to reinforce the few decaying specimens that have withstood the building operations. Note also the paltry lamp standards and the dingy chestnut paling.



First floor plan of staggered terrace house. Scale: $\frac{1}{8}'' = 1' 0''$

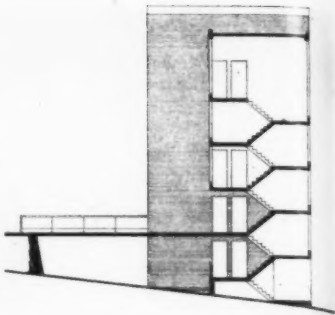


Block plan of Gleadless Valley Development

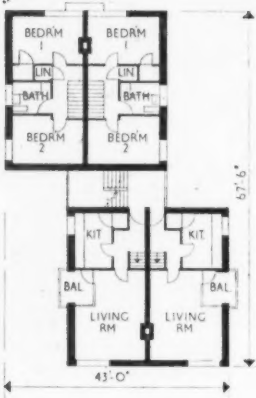
PROGRESS REPORT ON SHEFFIELD (continued)



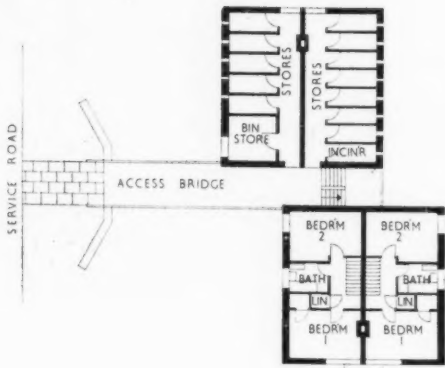
The six-storey flats in the Hemsworth section of the Gleadless Valley Development. Entrance is gained at second floor level, obviating the need for lifts while at the same time qualifying in height for the extra money for this facility. The money has been used generally to build complex house types elsewhere rather than lavished on the buildings illustrated. Louvred glass ventilators to stores have been found useless in this class of housing. Many of them are smashed; none are cleaned.



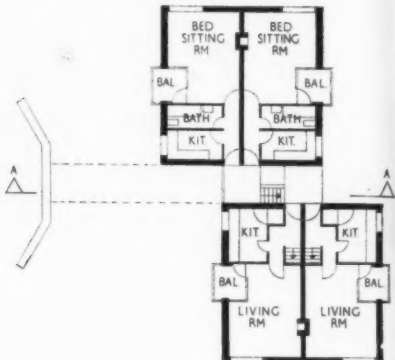
Section AA



Upper floor



Floor at bridge level



Floor below bridge level. [Scale: 1/8" = 1' 0"]

Greenhill-Bradway estate



- KEY
- 1 PUBLIC HOUSE
 - 2 SHOPS
 - 3 SHOPS - MAISONNETTES OVER
 - 4 NURSERY SCHOOL - NOT BUILT
 - 5 CHILDREN'S PLAY AREA
 - 6 4 STOREY MAISONNETTES
 - 7 GARAGES
 - 8 SUB-STATION

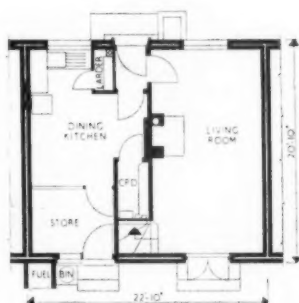
Site plan of Greenhill-Bradway estate



Looking into the Radburn layout at the Greenhill-Bradway estate. This is excellently planned and is very popular with the tenants and it holds out hope for the further development of such an excellent concept. Some unimaginative planting and path layouts detract from the scheme. The lamp standards are dull—and the telegraph poles regrettable.



Typical Greenhill-Bradway house,
first floor plan



Typical Greenhill-Bradway house,
ground floor plan. [Scale: $\frac{1}{8}'' = 1' 0''$]



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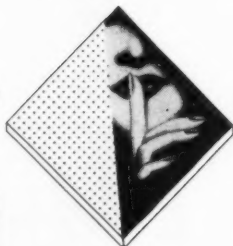
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Awards for Working Details



As is their habit about this time each year the Editors propose to offer cash awards to students to enable them to collect material for AJ Working Details on the Continent or elsewhere abroad this summer.

It is a fairly straightforward matter to present working details of buildings in this country as it is usually quite simple to go and look at the building, then talk to the architect about his detail. Obviously it is not so easy to do this with foreign buildings, distance and language presenting obstacles to quick, easy communication. The Editors themselves can seldom give the time for this, and the purpose of the AJ awards is to delegate students to act on their behalf.

The Awards: A total of £400 in awards is offered with a maximum of £40 for any one award. Awards will be paid to those students selected by the Editors from written applications. Students will be judged, not so much on their deserving qualities as on the likelihood of their bringing back usable material.

Applications for awards must reach the Editors by the first post on May 16. You must state where you propose to go, what contacts you have there, what buildings you would like to detail, what architects you would like to visit and how you propose overcoming the language problem. Only with this information will it be possible for us to judge what chances you have of bringing back to us material suitable for publication. At the same time include in your application a brief description of yourself (*e.g.*, where you are studying and what stage you are at) and an indication of whether you seek an award to travel to your destination and back or to enable you to stay there longer or whether your proposed visit is dependent on an award which will cover all expenses. Applications should be accompanied by a letter from the Principal of your School of Architecture or one of the Principals of your firm.

Collecting Material: Students receiving awards will have to supply architect's and if necessary manufacturer's working drawings. Also they will have to provide a rough pencil sketch of their own with descriptive notes in English and will have to fill in a questionnaire form supplied by us. They will have to obtain a photograph from the architect or commission one from a professional photographer at the JOURNAL's expense. We will pay a further six guineas for any detail published in the AJ.

For Architects: Whilst we do not make cash awards to architects for the purpose of collecting foreign details we will pay a fee of eight guineas for any detail published, plus expenses incurred in getting photographs whether published or not. Architects are asked to write and tell us their plans before going abroad. The Editors reserve the right to refuse any material submitted.

COLOUR SERVICE COLOUR SERVICE

technical service in action No. 2

Mould growth and paint

One of the most difficult problems that besets the makers of paint is the growth of micro-organisms either on or in a paint film. Micro-organisms are often found growing upon or in paint films within or without breweries, bakeries, dairies, greenhouses and in certain factories, such as tobacco stores. They make themselves evident by unsightly blotches upon the paint, often coloured red, green, brown or black.

A botanist describes mould as fungi. Fungi show no differentiation into stem, leaf and root, like a garden plant. They are also free from chlorophyll and consequently differ entirely in mode of life and habit from a garden plant. Having no chlorophyll, and therefore no power of decomposing carbon dioxide, they are entirely dependent for nourishment, and especially for carbon, on organic compounds. It is for this reason that they are found growing freely in bakeries and breweries. Some are parasitic upon living organisms, either animal or plant, whilst others are saprophytic, obtaining their food either from dead organic substances, such as the decaying vegetable and animal matter of the soil, or from organic solutions such as the juice of fruits. The fungi comprise a large number and variety of organisms, the great majority being multicellular, but one of the unicellular fungi is the yeast plant — of great importance since it is the cause of fermentation. One of the multicellular family, penicillium has become well known because it is the parent of the antibiotic penicillin.

The fungi that cause disfigurement of paint films are invariably mixtures, but one dominant type determines the appearance and colour. Although often the colour or appearance of the fungal patch is associated with the systematic botanical name of the fungus, this can be misleading since often the genus, specie and variety must be known before adequate action can be taken to eliminate the growth.

If you have a specific mould growth problem, either inside or outside, write to:

Goodlass, Wall & Co. Ltd., Corn Exchange, Liverpool 2, or 179/185 Gt. Portland Street, London, W.1.

SERVICE

technical section

THE INDUSTRY

The Industry this week is devoted to a report on the Electrical Engineers' Exhibition which was held at Earls Court from April 5-9. As in past years, this report has been prepared by the Journal's Specialist Editor (18) Electrics.

On the whole, the exhibition was more encouraging than last year. Almost everything, except some salesmen's manners, seemed to have improved, while one gained the impression that manufacturers have at last realised that for many electrical components performance is now taken for granted, and competition is in price and styling.

Lighting fittings

Scandinavian and Italian influence is getting stronger than ever, and following a lead from Frederick Thomas several firms, Courtney Pope, Atlas, G.E.C. and Falks' (at least) have brought out fittings consisting of a plain opal inner glass, with a decorative outer glass or pierced metal screen resting on a lip. Most of them are rather disappointing, except one or two from Falks and the G.E.C. fittings, one of which is illustrated in Fig. 1.

The best of the new suspended ceilings is the "Circlgrid" by Harris and Sheldon, consisting of p.v.c. tiles 2-ft. square with a pattern of circular holes pierced in them, Fig. 3. The tiles may be obtained in clear or obscured p.v.c., or with clear on one side and obscured on the other, so that by turning some of them the other way up, a simple pattern can be formed. This may not sound very much on paper, but its appearance is much better than any of the other lighting ceilings I have seen during the last few years. The method of suspension is extremely ingenious, and the price is fairly reasonable, as these ceilings go.

Accessories

Several firms now have on the market reliable and

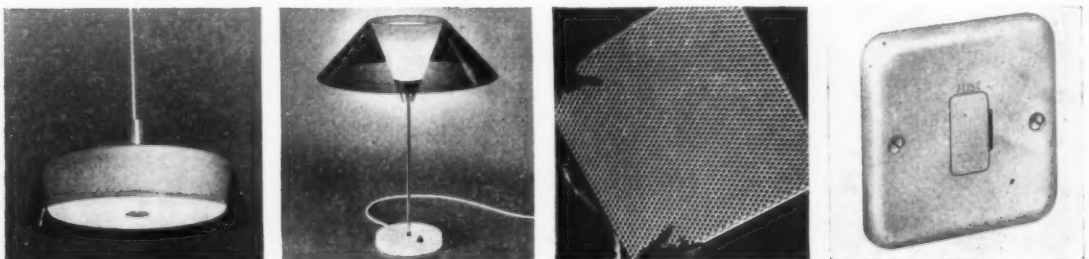
well-designed ranges of switches and socket outlets, all of which are priced about the same. Each seems to be trying very hard to reduce its prices by the few coppers necessary to capture large orders for speculative or local authority estates against opposition from the others, while competition in directions where price is not the sole criterion is based upon appearance and supplementary facilities and components. The M.K. exhibit I found the most comprehensive: the appearance of their products is usually inoffensive, although some components could well be cleaned up, and they are filling in the gaps in their range rapidly. They are, so far as I know, the only manufacturer who offers a really comprehensive range of spur boxes, while they have recently introduced ceiling switches with built-in pilot lights, very useful for controlling heaters in bathrooms, and a special twin box which enables two different components, such as a switch and a socket, to be mounted side by side as part of the same assembly. Another component which they alone make is a simple flex connector plate to match their ceiling switches and sockets.

This year they have introduced a range of plastic boxes which should make it much easier to set a socket outlet neatly into a wooden skirting. They also had on display a number of special boxes suitable for use with m.i.c.c. cables, although I understand these are not yet in production.

Last year it seemed that Falks were trying hard to widen their range but this year the only new components were a nice looking ceiling switch that can be obtained with a pilot light and a ceiling rose. The rose has one or two technical advantages, but is not a good match to the switch, and to me at least, is not very well styled anyway. Tooling costs or no tooling costs, Falks' really must try hard to complete their range of accessories.

Most large buildings require one or two odd components such as 30-amp switches with pilot lights, connector plates or other accessories which are rarely used, but which must match the remainder of the outlets. If a firm is not in a position to supply components of this kind, the contract for all the accessories may go elsewhere purely for the sake of obtaining matched components.

Left to right: Fig. 1a. and b, G.E.C. pendant and desk lamp fittings; Fig. 2. Harris and Sheldon Circlgrid p.v.c. tiles; Fig. 3. Crabtree spur box.



PLANNING FOR RUBBER FLOORS.

A series of technical bulletins from the Runnymede file

WORN WOOD FLOOR HEAVY TRAFFIC

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technical section

In view of the tremendous costs now involved in tooling up for a complete range of accessories, it may well be that the smaller firms will go to the wall. The only solution would appear to be amalgamations, or working arrangements between firms that cannot carry the capital outlay alone.

This year Crabtree have introduced spur boxes for the first time, and very neat they are, Fig. 4. Until recently the appearance of Crabtree's components has left something to be desired, but these spur boxes, and the consumer's units referred to later on are a big improvement, and I hope they represent a change of policy.

G.E.C. have produced some little island boxes for mounting socket outlets in the middle of a floor, shown in Fig. 5. With the increasing use of electric office machinery, this has become quite a problem: flush sockets collect the dirt, while there is rarely enough room to set the outlet down beneath a trap. Upstand boxes have been on the market for a long time, but they were not really suitable for office use, and were guaranteed to ladder stockings. Greenwood Airvac also offer a very similar type of box for use with their new "Flushyt" underfloor trunking system, which seems to be a good deal simpler and cheaper than most of the floor trunking systems that have been available hitherto.

F. C. Blackwell ("Blaco") have widened their range of deep boxes for use with cast floors: they have an excellent record for producing new and modified conduit components to get round the difficulties raised by modern forms of building construction. It might be quite a good idea to refer to them whenever an electrical contractor complains that a particular form of ceiling or partition will not accept a conduit box. Another of their components which should be more widely used is the 13-amp. socket outlet box with adjustment for levelling.

Switchgear

The appearance of switch and control gear has improved enormously during the last two years. Nearly every firm offers a "De Luxe" range of some sort, if only at a de luxe price, and nearly all of them look quite well. This year there has been a rash of switchfuses with handles at the front. The "Star" range by Simplex was brought out last year in prototype form, and has got well into its stride this year, while G.E.C. have introduced their

curiously named "Hidutac" series (Fig. 6), and M.E.M. their "Excel" ranges (Fig. 7). These are all very reasonably priced and there will be no excuse in the future for switchgear which looks as if it had been (and in at least one case actually was) designed by the works manager.

The new consumer's unit by Crabtree incorporating miniature circuit breakers is shown in Fig. 8, and is a very creditable effort. They have also brought out other units of more conventional form in which it is clear that great care has been taken over the appearance.

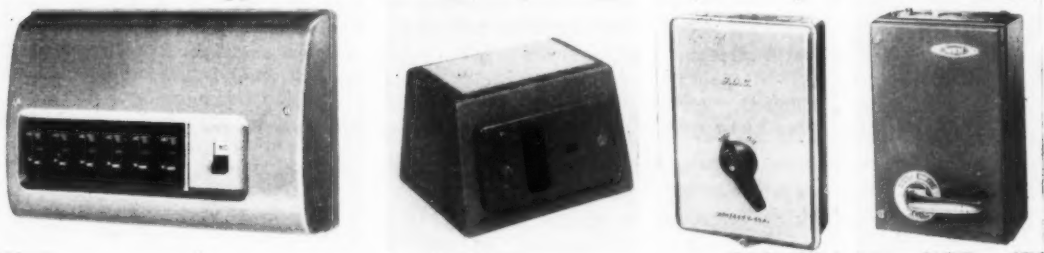
Heating

Process Controls (Procon) have produced a new thermostat which is quite nice looking and will be available in surface, semi-recessed and plug-in versions, with and without switches. This should be very useful for floor heating as inexpensive instruments suitable for houses and flats are still rather rare.

Thermodare have brought out a modification of their standard rewirable floor heating system which they call "Embedded-Rewirable." It costs very little, if any more than an ordinary embedded system, but it can be rewired if necessary. Some means of access is needed at one side of the panel, although this need not be a proper duct cover but something very much cheaper and simpler. The system can only be applied to relatively small panels, as would be needed in private houses, or small blocks of offices, but these are just the cases where an inexpensive rewirable system would be especially useful.

Heatrae had on show their "Express" water heater for use in factory and office washrooms where the demand is for relatively small quantities of hot water at frequent intervals. Essentially it consists of a 1½ gallon free outlet heater, fitted with a 3 Kw element and a spray nozzle. It will give a continuous flow of hot water at 105-110°, and some tests conducted recently by the South Western Electricity Board showed that it gives a better performance under the conditions for which it was designed than either large thermal storage heaters, or "instantaneous" electric water heaters. It seems to be an excellent solution to what has always been a very difficult water heating problem.

Left to right: Fig. 4. G.E.C. island socket; Fig. 5. G.E.C. Hidutac switchbox; Fig. 6. M.E.M. Excel switchfuse; Fig. 7. Crabtree consumer's unit.



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7.78 practice

DRAWING TECHNIQUES

Architectural Rendering by Albert O. Halse, published by F. W. Dodge Corporation. \$15.75.

This is a book which abounds in detailed information, written by a man of terrifying competence. Seven techniques are discussed: pencil, pen and ink, smudge charcoal, Chinese ink, water colour, tempera and air brush; and all are fully illustrated. An obvious objection to this enthusiastic and authoritative work is that the overwhelming majority of the renderings chosen for illustration are exceedingly unpleasant, and the English reader will keep asking himself if the kind of skills proposed are really worth having. In architectural rendering, competence, when not allied to sensibility, produces results which are more objectionable than incompetence. It is quite remarkable (*vide* page 163 where there is a rendering of Ronchamps) how grossly an able delineator can belie the appearance of a building if he does not understand the effect the architect was out to produce. This observation does not apply to the architect who wants to prefigure his own buildings and this book will certainly tell him how to produce any standard effect.

Du3

13.144 materials: timber

DRY ROT

Dry Rot in Wood. Sixth Edition. By W. P. K. Findlay and J. G. Savory. (Published by HMSO. 4s. 0d.)

The sixth edition of this useful booklet would not qualify for a notice here were it not that it carries one important new piece of technical information. Namely that, for removing dry rot from brickwork and masonry, sodium pentachlorophenate and sodium orthophenylphenate are much more effective than sodium fluoride and magnesium silico fluoride.

25 WATER SUPPLY & SANITATION

the case for revision of our water regulations

English architects have long realized that this country's water regulations are very different and, generally, much more stringent than those which apply elsewhere. These regulations of ours imply, to the building owner and architect, an increase in cost and a sacrifice of visual neatness, to the user of water a loss in efficiency and to the British manufacturer a grave commercial disadvantage *vis-a-vis* the European Common Market. In this article, an engineer in the service of one of our leading manufacturers of taps and valves considers our regulations and the effect they have on our hot and cold water installations and on the design of taps.

Those who draft and enforce our regulations have two main concerns: that water should not be contaminated and that it should not be wasted. It is clearly right that these should be their concern. The questions which arise are whether these interests are, in fact, effectively safeguarded by the regulations as they stand and whether their requirements do not, in some respects, go far beyond what is needed.

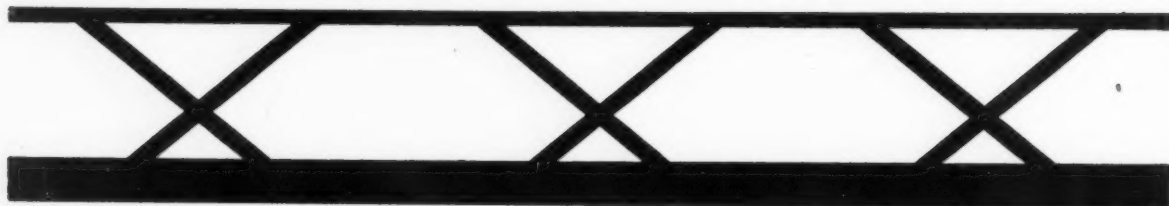
Water supply

One of the chief means used by water authorities to achieve both their ends is the cold water cistern. This is a particularly English thing which is not used on the Continent of Europe. In all probability tanks were first introduced mainly with the idea of preserving a ready source of supply in each household in the event of water failure. Certainly the extra water storage which this supplies is very considerable: it is calculated, for instance, that several hundred millions of gallons of water are stored in the roofs of London alone. This local storage must have been of real importance in the earliest days of piped water, but they must be less today. It is interesting to note that the cistern, first insisted upon in the Metropolis Water Act of 1852, was removed in the Act 1871, but only to be brought back again in the embracing Public Health Act of 1875. The real case for keeping the tank is the protection it is said to give against contamination, by providing a buffer between the user and the main supply. On this point it is perhaps worth noticing that, until about four years ago, there was a marked difference in practice between the north of England and the south: the



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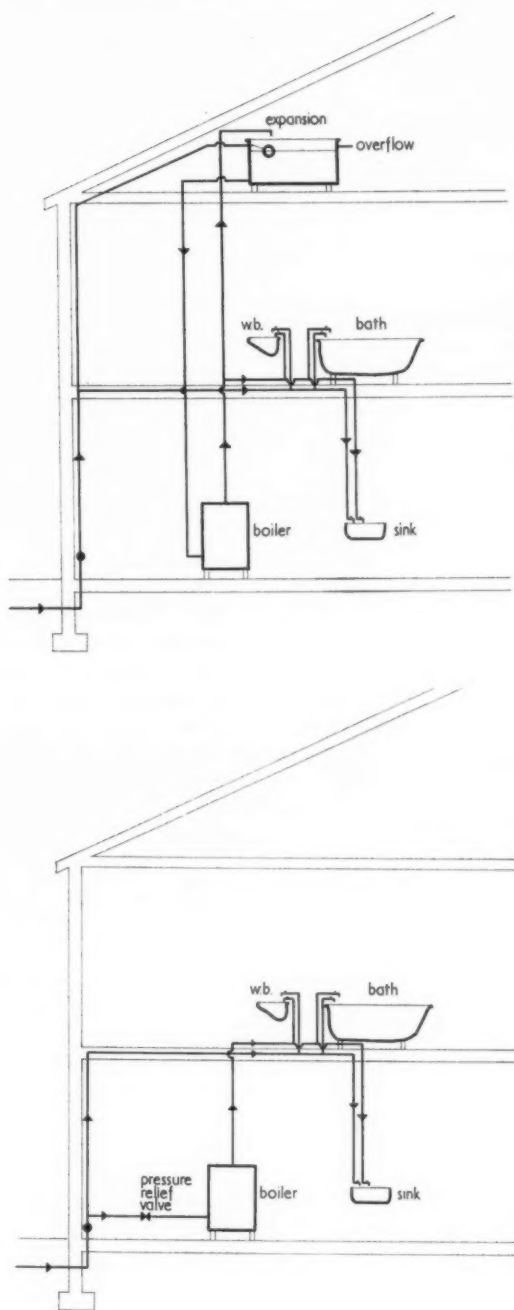


Fig. 1. Comparison between, top, a typical British and, bottom, a typical Continental or American domestic plumbing installation.

north would allow all manner of connections to the mains which the south would not; but since the general adoption of the Model Byelaws the practice of the south has become general.

This practice, of course, is that all connections for the hot water supply must be taken from the tank and not from the mains. Is this an effective safeguard? The first consequence of interposing a tank between the hot

water supply and the mains is that, whereas the latter will be at a pressure of 45 pounds or more, the hot water is at a pressure which will certainly be much less, perhaps only about five pounds. The authorities are very insistent (as we shall see when we come to the design of taps) that hot and cold water should not mix in the pipes. But it is not so easy for them to prevent this as might appear. There is nothing, for instance, to prevent a householder from buying a gadget (designed for rinsing the hair after washing it) which will connect across the hot and cold taps. If the spray rose of this gadget were to become blocked, the fact of there being a differential pressure would cause the mains water to flow into the hot supply. In fact, though the contamination of the mains through infection in the individual dwelling remains a theoretic possibility, there is no evidence that it is significant in those countries not using the break tank.

As can be judged from Fig. 1 the effect of the insertion of the cold water cistern on the design and performance of the installation is very considerable. Not only is there the cost of the tank itself and the lengths of pipe needed to feed it, but, because of the comparatively low water pressure which it permits, pipe sizes and tap sizes must be larger to provide a given flow. Thus you must either wait longer for your water or have a bigger pipe. This can be seen in the following tables:

Number of gallons per minute passed by 100-ft. run of $\frac{1}{2}$ -in. pipe:

at 15-ft. head	2
at 50-ft. head (22 p.s.i.)	4
at 100-ft. head (45 p.s.i.)	6

Or, to put the matter the other way round, if you have 100 ft. of pipe and you want a flow of twenty gallons per minute

with 6 ft. of head you need	$1\frac{1}{2}$ -in. pipe
with 15 ft. of head you need	$1\frac{1}{4}$ -in. pipe
with 50 ft. of head (22 p.s.i.) you need	1-in. pipe
with 140 ft. of head (60 p.s.i.) you need	$\frac{3}{4}$ -in. pipe

In this context it is interesting to notice that, on the Continent, the $\frac{3}{8}$ in. tap is rapidly taking the place of the $\frac{1}{2}$ in.

Taps

The second method used by water authorities to control the use of water is to insist on certain standards in the design of taps. This is in itself reasonable: the trouble arises from the choice of standard, which, for all practical purposes, is that laid down in BS 1010. The commonest version in the Standard is the half inch bib tap, illustrated in Fig. 2. This design (which is very old) has a remarkably inhibiting effect on designers. Two points must be noted here. The first concerns the thread. This is laid down in detail and is such that the minimum effort to open the tap fully is 2.2 turns. This slow opening is a precaution against water hammer; but water hammer is caused more often by faulty design of the pipes, and though rapid tap opening can cause water hammer there is no reason why, if the tap is properly designed in other respects, it should do so. The only case in this country where rapid opening is in practice allowed is in the quarter turn taps, with elbow action levers, used by surgeons in hospitals. It is said that these would have been banned long since were it not for the consideration that the ultimate sanction which a

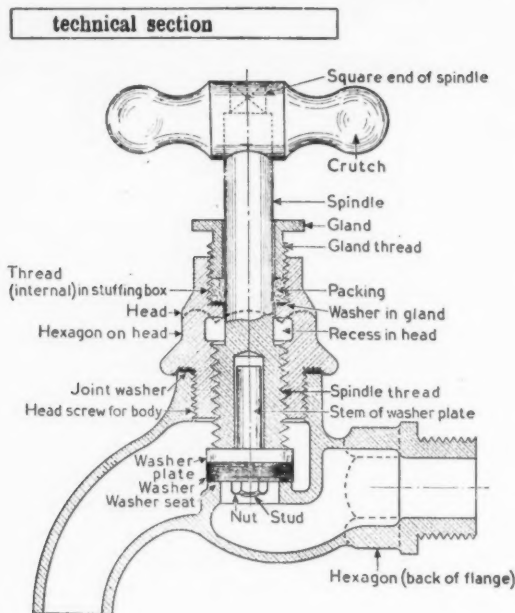


Fig. 2. Full size section through a $\frac{1}{2}$ -in. bib tap to BS 1010: 1953.

water authority can apply is to cut off the consumer's water, which is more than they dare do to a hospital. The second point to notice about BS 1010 is that it insists upon massive proportions and at every point specifies a minimum dimension and less often the maximum. Thus in the $\frac{1}{2}$ in. tap the minimum width of seat must be greater than $\frac{1}{16}$ in. But it is now widely accepted that the proper way to seal off is to design a very narrow seat on which a washer will sit securely with light pressure. Nor are objections to this standard limited to the dimensions of the separate parts. One very successful technique for sealing off developed abroad employs a simple rubber "O" fitting on the spindle to replace the whole gland combination, but this, of course, does not begin to qualify, for BS 1010 is interpreted, not as a *performance* standard—which would at least be defensible even though, in certain respects, needlessly high—but as a *design* standard. It is emphatically not open to British manufacturers to put forward an alternative method for doing the same job, giving the same or better performance. To be more exact, it is perhaps in theory open for them to do this, but in practice not. As architects will know, ultimate authority in all matters to do with water rests with each separate water supplier. There is a central body, the British Waterworks Association, to which all of these belong and this body undertakes tests of manufacturers' products and issues certificates of approval. Unfortunately these certificates are not by any means a guarantee of acceptance by the local water authorities and, in fact, some of these have an almost traditional disregard for the findings of their own Association.

Recently there has been a certain conflict in the minds

of water authorities between the claims of water saving which have been growing more and more insistent every year, and those of other requirements. The need for much greater water saving has permitted some degree of acceptance for the self-closing tap. This differs fundamentally from the BS 1010 tap in the means of opening and closing. Instead of screwing the spindle up and down, pressure on a thumb lever (or pad in a foot operated tap) causes the spindle to slide. When thumb or foot pressure is released, a spring returns the spindle and closes the valve. Various means of damping the action are in use, so that the return to the closed position is not instantaneous and one maker can give up to 20 seconds delay. A simple version of this tap can be seen in railway carriages (which, of course, evade the regulations). The fear is that this type of action could cause water hammer, but its virtues in saving water are so great that this is usually overlooked. Another recent development arises from the desire in some British manufacturers to match the combination tap which is a common feature on the Continent. This allows the hot and cold to flow together within the body of the tap so that they are already mixed when they flow out from a single faucet. This, of course, is quite contrary to the logic which insists on the cold (i.e. from the mains) being kept apart from the hot (from the tank). There is now general agreement among water authorities, however, that hot and cold may mix in the air beyond the spout of the tap and this has led a few manufacturers to devise a combination tap with a single faucet in which hot and cold are divided either by a plate down the middle of the faucet or by running one supply up a smaller internal pipe and the other in the annulus. It will be appreciated, however, that to have two jets in one is not the same thing as a single jet of ready mixed water, and stratification is usually noticeable to the user.

In this article we have mentioned only a few respects in which our regulations are over-restricting. There are many others. The question arises whether the regulations which govern water supply in other parts of the world are negligent and whether disaster has resulted from them. The answer is that the regulations covering the greater part of Europe and North America are also, in their own ways, exacting: for we have not, by any means, a monopoly of serious-mindedness on this subject; also that there is no record of evil effects from the kind of permissions that we have been discussing in this article. Since the early nineteenth century this country has been the home of unduly restrictive regulations. Urged by growing world competition and by the need for economy and helped by our greater knowledge of the subjects at issue, we have been steadily removing these in most departments of life. An example which immediately springs to mind is the regulations affecting soil and waste stacks and underground drainage: how completely the picture has changed here from what it was only a very few years ago. A similar rationalization is called for in water supply. It would be a great pity if our ramshackle administrative arrangements were to make this impossible.

working detail

SWING DOORS: HOSPITAL IN SWINDON

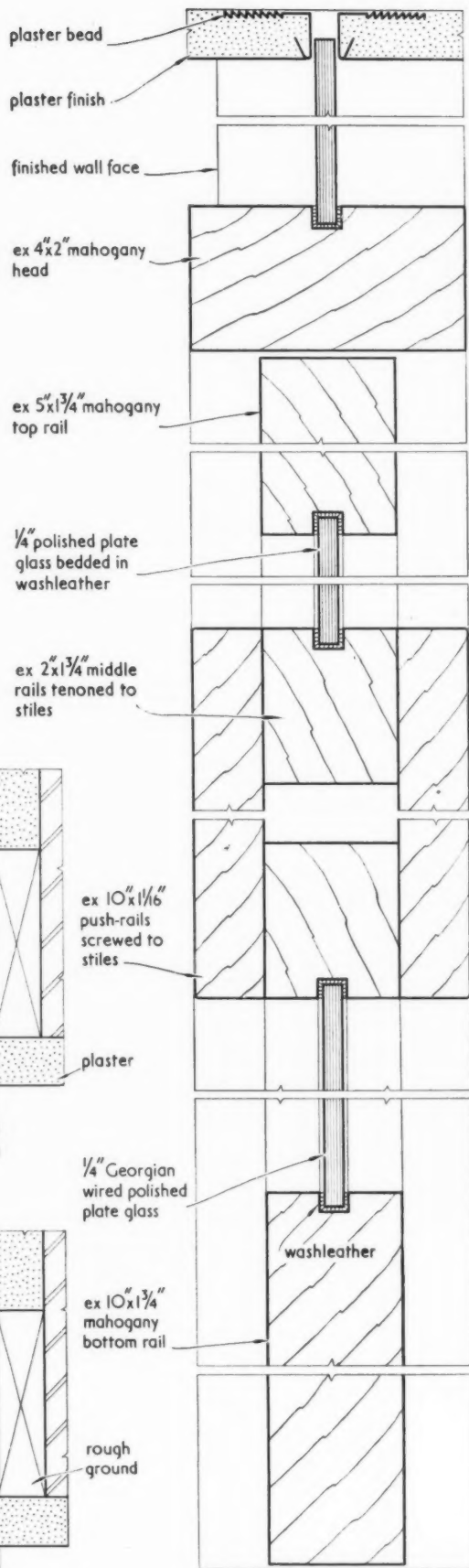
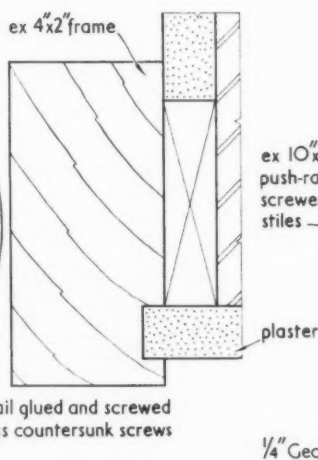
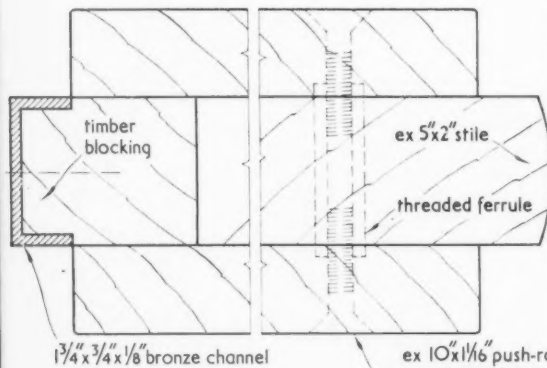
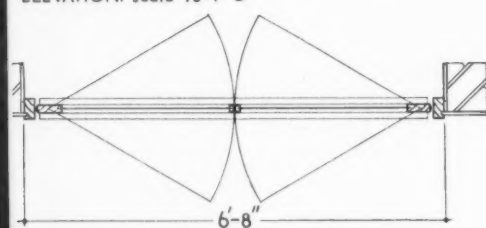
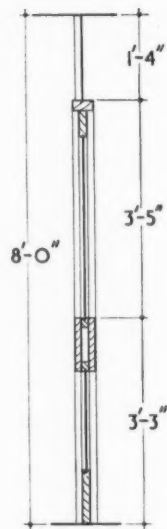
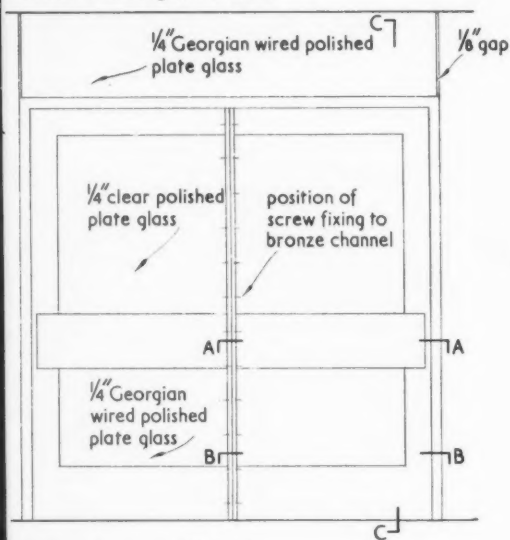
Powell and Moya, architects

These doors show an alteration in the visual balance customary in swing doors of this type. The meeting stile is formed of a bronze channel encasing a wood bead and is reduced to a minimum dimension. This channel can be unscrewed if panes have to be replaced. By contrast the centre rail is made deeper than usual and push bars have been glued to it front and back.

working detail

SWING DOORS: HOSPITAL IN SWINDON

Powell and Moya, architects



working detail

ROOFS AND CEILINGS: 62

MONITOR ROOF LIGHT: ART GALLERY IN COPENHAGEN

Jørgen Bo and Vilhelm Wohlert, architects (material supplied by George Kew)

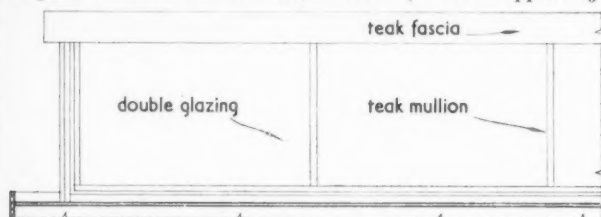
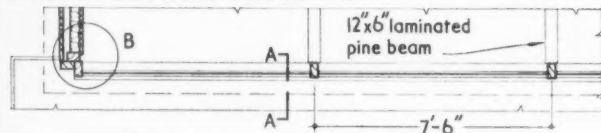
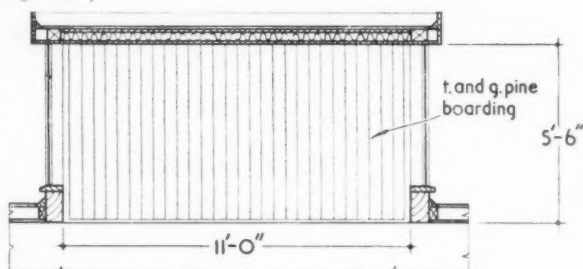
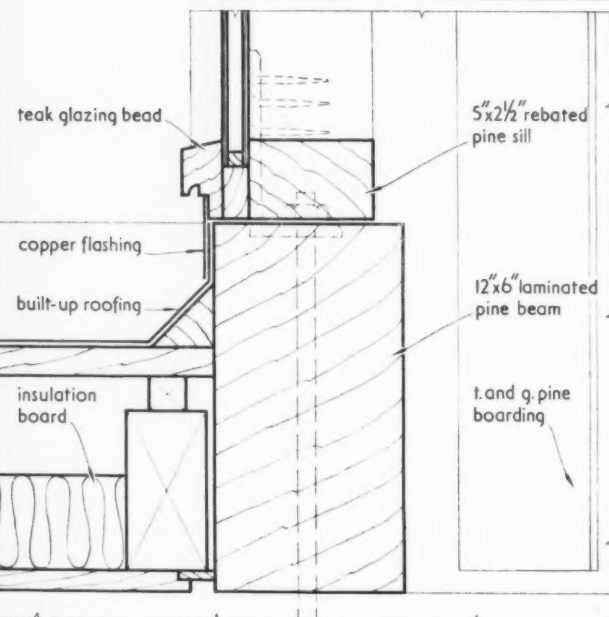
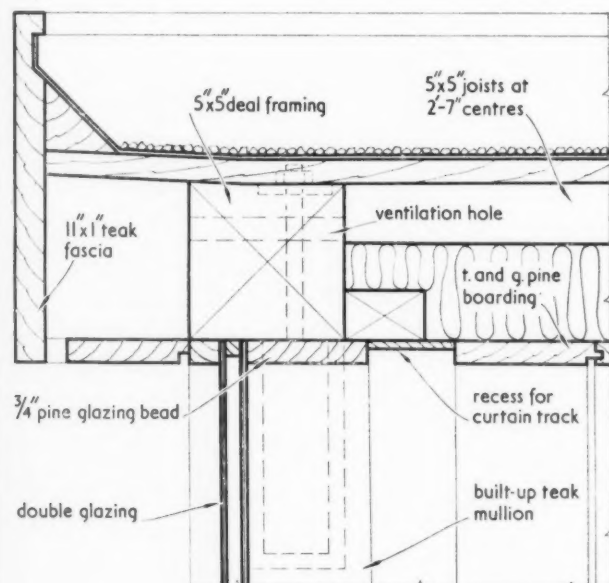
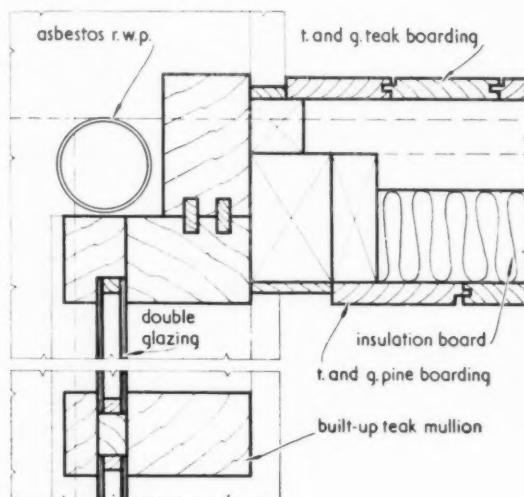
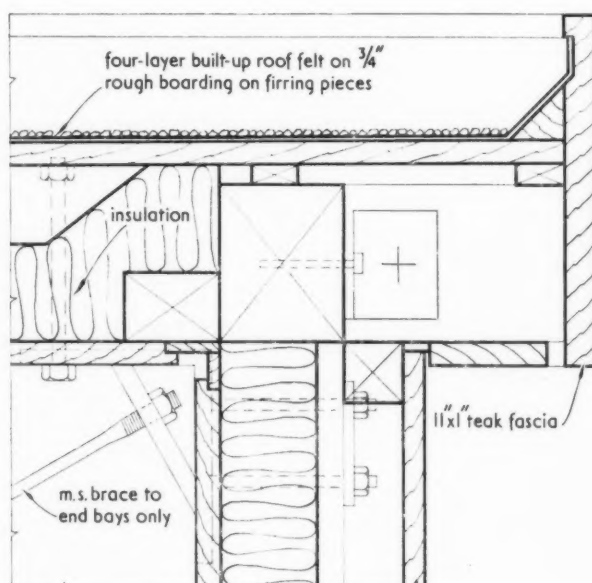


This is a splendid example of careful timber detailing. Note such refinements as the coincidence of joints in the boarding with the centre lines of mullions, the avoidance of visible glazing beads, recessed cover joints at corners (on the drawing) and the Continental preference for building up of mullions and window frames from a number of small sections.

working detail

MONITOR ROOF LIGHT: ART GALLERY IN COPENHAGEN

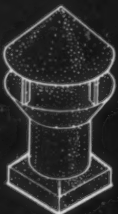
Jørgen Bo and Vilhelm Wohlert, architects (material supplied by George Kew)

EXTERNAL ELEVATION. scale $\frac{3}{16}''=1'-0''$ PLAN. scale $\frac{3}{16}''=1'-0''$ SECTION. scale $\frac{3}{16}''=1'-0''$ SECTION A-A. scale $\frac{3}{16}$ full size

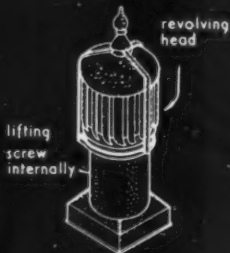
DETAIL AT B.

note: figured dimensions in feet and inches are approximate

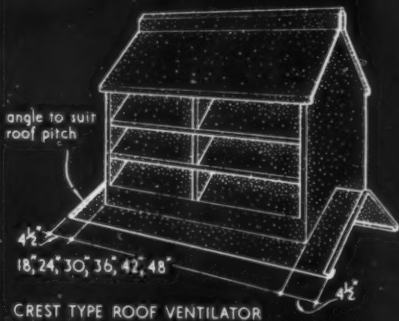
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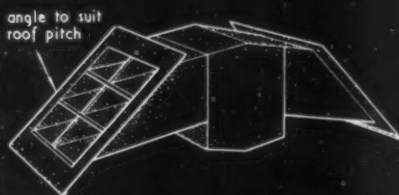
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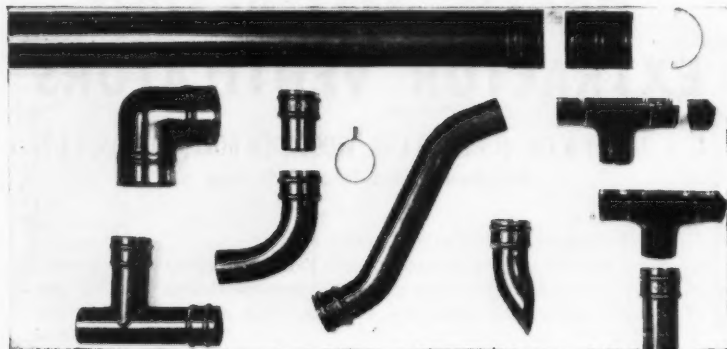
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of
MARLEY vinyl RAINWATER GOODS

Resistant to acids and mechanical damage, non-ageing Marley Vinyl Rainwater Goods are not affected by the atmosphere of coastal or heavy industrial areas. They will not abrade, or corrode, to cause clutter and stoppage. There are not, nor ever will be any sharp edges or uneven joints to catch at leaves or grit. There are no faults to start blockage. Everything that

collects in the smooth vinyl gutters flows freely into and through the down pipe.

Light in weight vinyl gutters and down pipes are easily handled and speedily installed. Now ready in grey or black, with more colours to come, they need absolutely no painting or maintenance at any time.

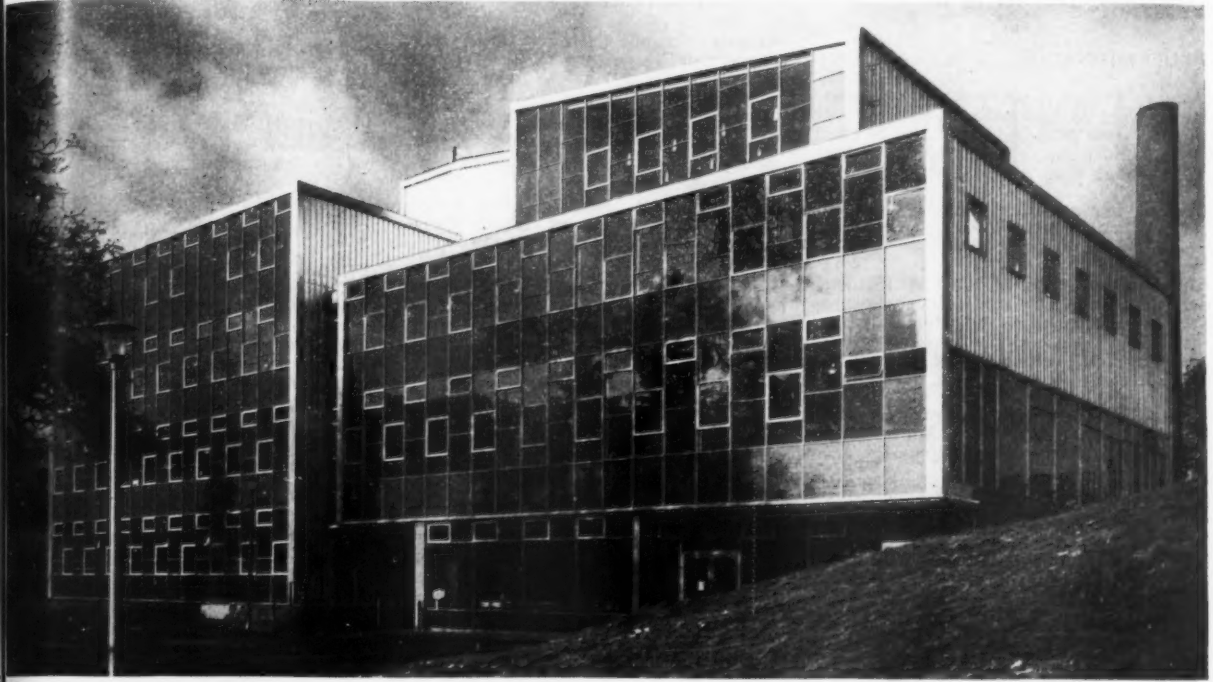


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A few of their special advantages and refinements are: All wall and floor space is left clear... the doors cannot wedge or jam... they seal tight to exclude insects... they have no grooves or rails to collect grit... they cannot be damaged by a car in transit... ventilators, special glazing and remote control can be incorporated.

"Overhead Doors"
cost a little more than the ordinary sliding variety—but what can you expect!

Announcements

PROFESSIONAL

Alec F. French & Partners, F./A./L.R.I.B.A., are moving to new offices and their address as from 20th April, 1960, will be Pearl Assurance House, Queen Square, Bristol 1 (telephone Bristol 93011).

Richard Clarke, A.R.I.B.A., has now moved to 16, Brook Lane, Ormskirk, Lancs. (telephone Ormskirk 3256).

The firms of Redfern, Briggs & Partners, architects, and Diamond, Hodgkinson & Partners, architects, have combined under the style of Diamond, Redfern & Partners. The partnership will be carried on from the same addresses as before.

Rose & Higginson, chartered architects, have moved to Bank Chambers, 2, Bridge Street, Leatherhead, Surrey. (Telephone Leatherhead 4171).

George Lowe & Partner, chartered architects, have moved to 79, George Street, Croydon. (Telephone Croydon 3608/9).

TRADE

Edward Bush has retired from the position of Sales Director of Concrete Ltd.

British Insulated Callender's Cables Ltd. announce that C. G. Hickling, A.M.I.E.E., is now manager of their Middlesbrough Branch.

W. J. Walpole is now managing director of Lumenated Ceilings Ltd.

Anthony Sissons is to become general manager of Sissons Paints (East) Ltd. in Malaya.

A. G. Norman, chairman of Formica International Ltd., has retired, his successor is G. G. Riddick.

Yale & Towne have appointed George Beebee Comptroller of their British Divisions.

H. L. Nathan, Southern Branch representative of Marryat & Scott Ltd. has retired and J. A. Conyers has been appointed to manage the area.

Monsanto Chemicals Ltd. announce an agreement with A/S Flamingo Foam, of Copenhagen, for the purchase of its British subsidiary, Flamingo Foam Ltd., 34, Victoria Street, S.W.1.

Hattersley (Ormskirk) Ltd. have appointed Markland Scowcroft Ltd. stockists of their Hattersley gun metal and cast iron valves.

William Rampton took over his new appointment as Company Secretary of Ronuk Ltd. on April 19.

Stramit Boards Ltd. have appointed Ralph J. Allen as area Technical Manager for South West England and South Wales.

George Boyd & Co. Ltd. are now sole distributors in Scotland for Dryad Architectural Ironmongery.

Alan Watson, A.S.M.A., is now Sales Manager (responsible for the Southern Region) of Redland Tiles Ltd.

British Insulated Callender's Cables Ltd. have formed a new company, Telcon Metals Ltd.

John H. Hawkey, General Sales Manager Sir W. A. Rose & Co. Ltd., is now a director of the company.

Atlas Lighting Ltd. are marketing all fittings manufactured by George Forrest & Son Ltd.

OBITUARIES

The death occurred on March 28 of Philip F. Wright, Joint Assistant Managing Director of the B.B. Chemical Co. Ltd.

The death occurred on March 24 of Rowland G. Elliott, pilot of Colt Ventilation Ltd.

CORRECTION

Two office blocks, Pembroke House, A 3.3.60, and Honeywell Brown Ltd., A 10.3.60, were published under the wrong classification number: Office blocks should be classified (92) 725.23.

The Information Centre item which was published on March 31 as 18.210 Construction: Details, External Rendering External Rendered Finishes BRS Digest No. 13 H.M.S.O. 3d., should have been numbered 18.211. We apologize for the error.

Inside view of shutters at Dairy.

"3 Bay shutters at Dairy Garage"

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**Extension now —
re-extension later**

Kenwood's new extension is to be continued to the left when more land becomes available.

The Wallspan cladding on the far end will be taken down and re-used as the new end wall.

Office extension for
Kenwood Manufacturing Co. Ltd.,
Woking, Surrey.

Architects: Malcolm Peck,
Roberts & Associates.

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.

Kenwood couldn't afford to wait. They commissioned their architects to design an extension that would be integral, yet could be built in two halves — one straight away, the other later.

The architects saw a clear case for Wallspan curtain walling.

It offered them so many advantages — speedy erection, maximum glass area, splendid weathering. But above all it gave them the flexibility they needed to re-extend when the rest of the plot became available.



Work will go ahead as soon as the lease of the old cottages next door has expired.

Showing all that can at present be seen of the Wallspan wall which is to be moved.

Williams & Williams purpose made aluminium windows are set above glazed asbestos spandrel panels. The whole exterior will be washed down to a new condition, making the Wallspan additions indistinguishable from the existing building.



All the Wallspan on the end wall will be taken down, the building will be extended over the site of the two cottages, and the same Wallspan will be re-erected as the new end wall. The final result will be a unified piece of architecture — free of the patched-up look that would have been inevitable with traditional materials.

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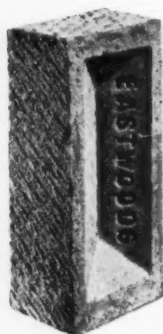
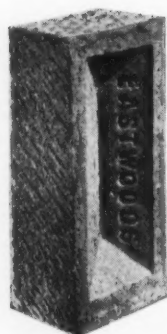
EASTWOODS

Announce

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Available as single units or combined to form multi-unit wall or central ranges. Spacious 30" oven with thermostat and relay control. Hotplate has six separately controlled anti-spillage burners and 'slide-over' pan supports in heat and acid resisting vitreous enamel. Shelf with visible-level grill, and backplate are optional extras.



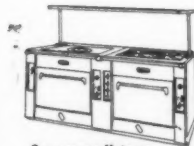
Strathearn Unit Pattern Gas Range 4501

Easy-to-maintain units for single or multiple wall or central ranges. Choice of: open top hob plate with four separately controlled ring burners; solid top hob plate or fry top with two cast iron burners giving even heat distribution. 24" oven has automatic heat control and drop-down door.

Strathearn Unit Pattern Gas Range in multiple combinations



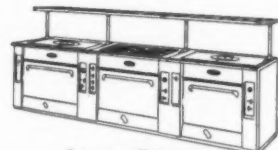
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2 oven wall type with one solid and one open top



4 oven island suite with three solid tops and one open top

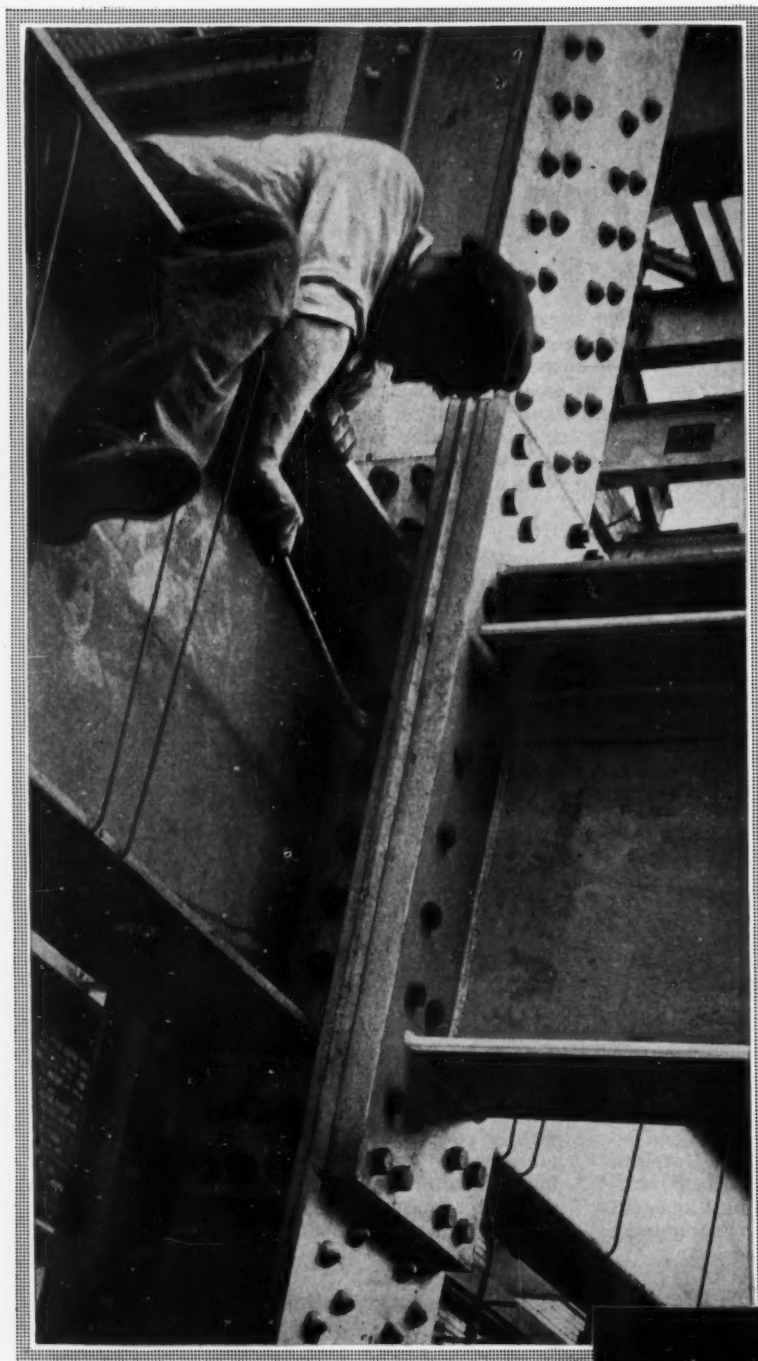


3 oven wall type with two solid tops and one open top

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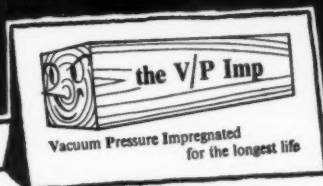
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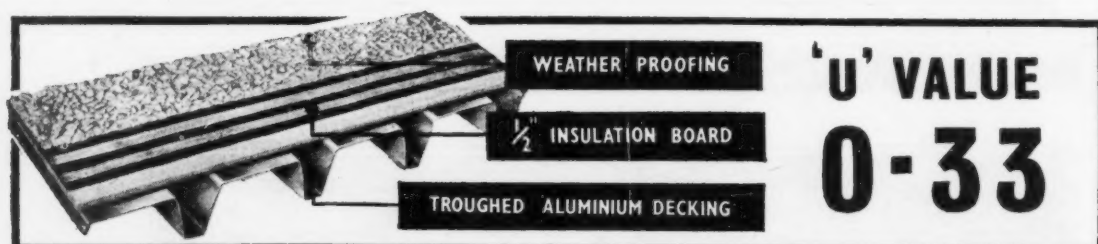


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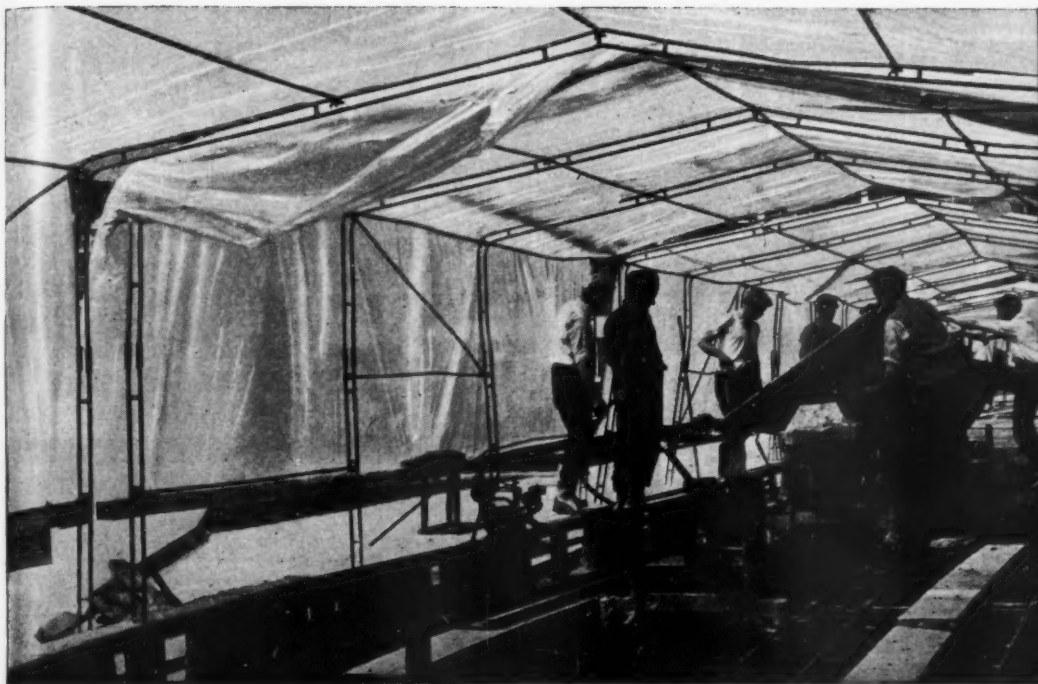
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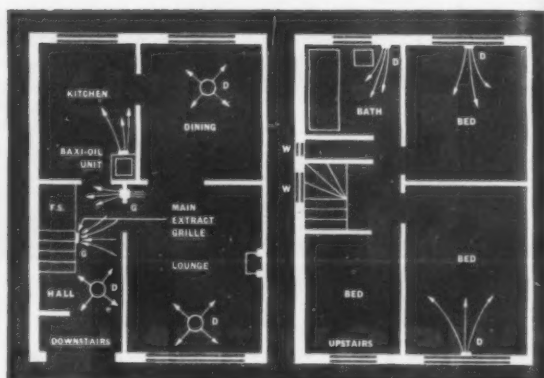
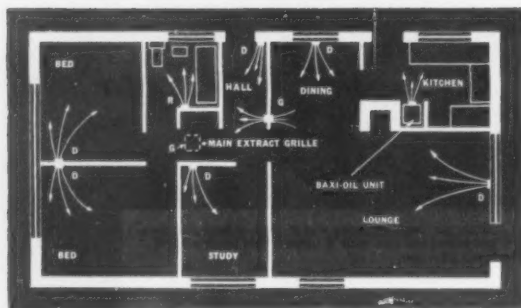
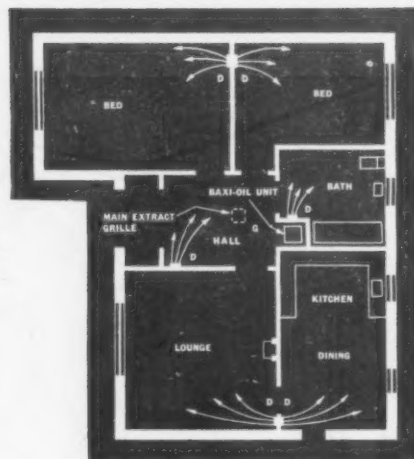
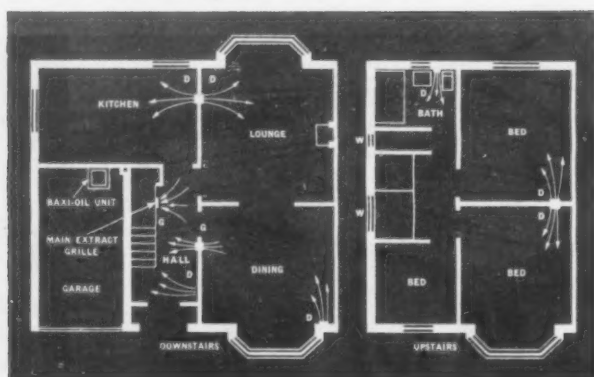
BRITISH VISQUEEN LIMITED

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Method of fixing the sheeting to the framework. The 'Visqueen' was wrapped round rough-sawn timber battens and nailed at intervals. These were then fastened to wood blocks already secured to the metal work.



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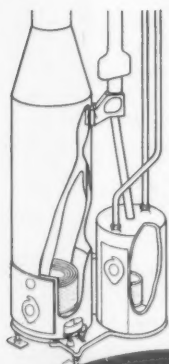
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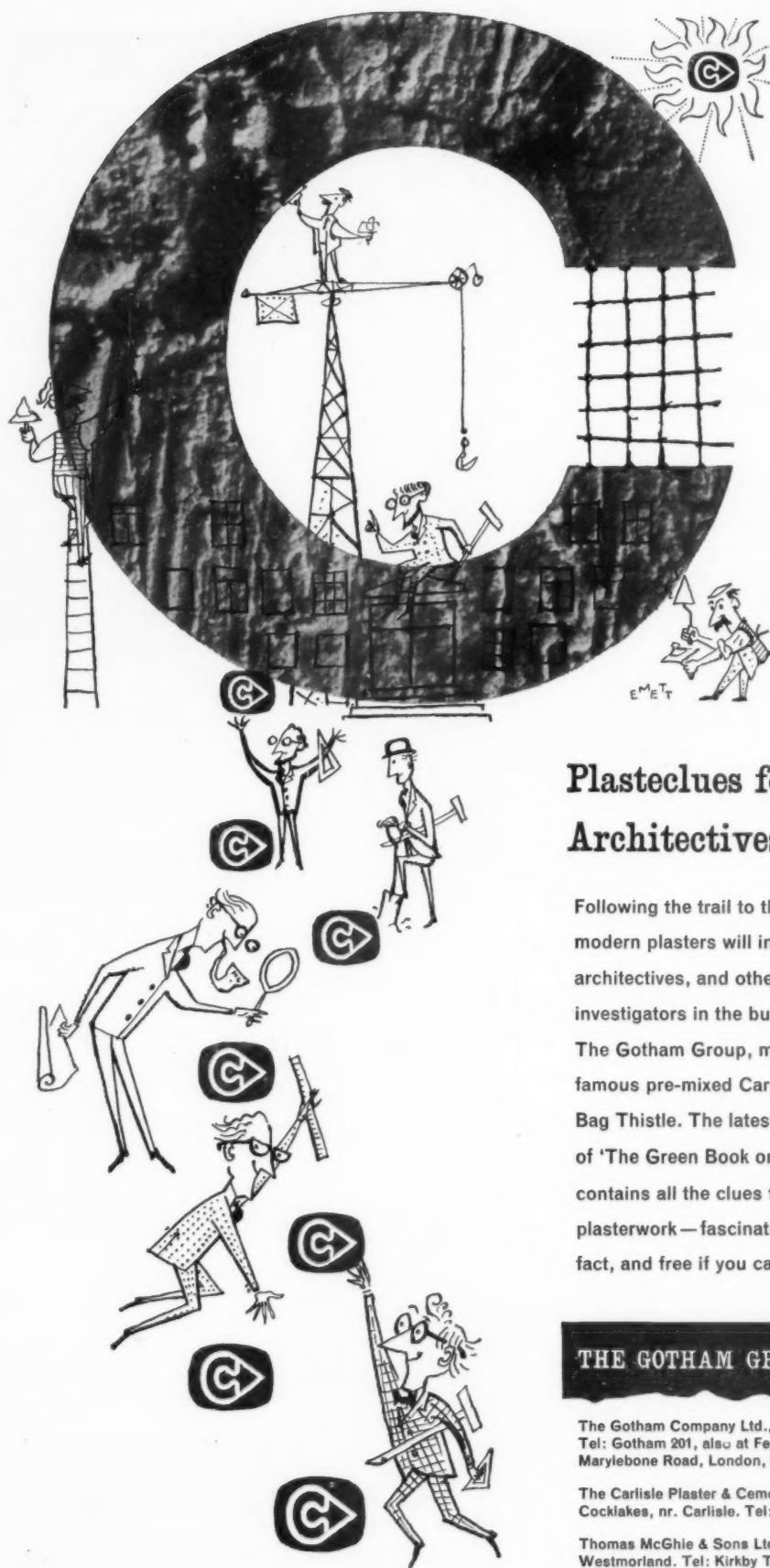
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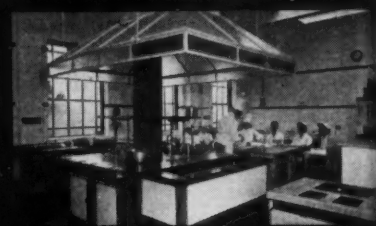
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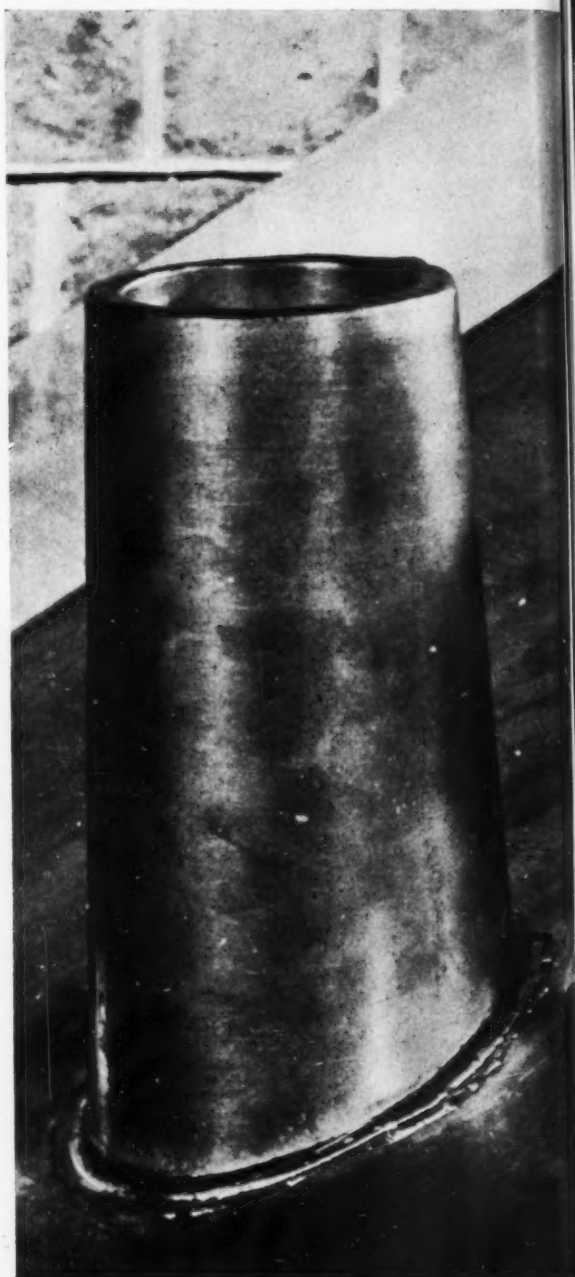
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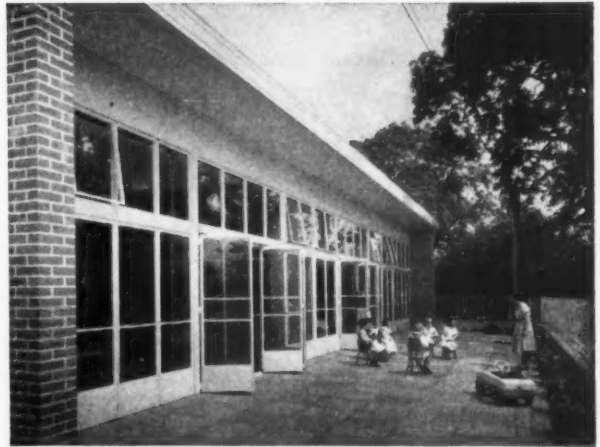
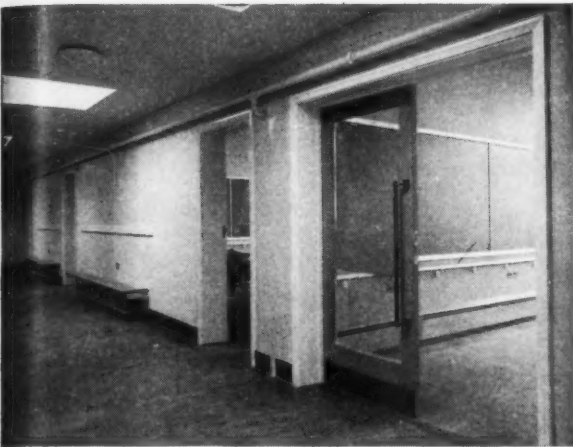
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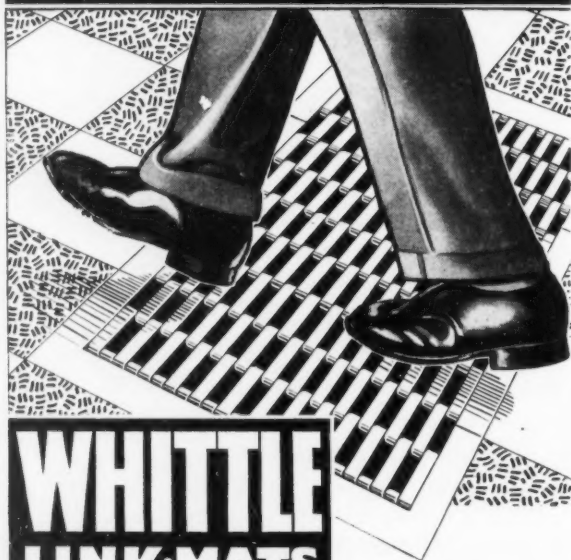
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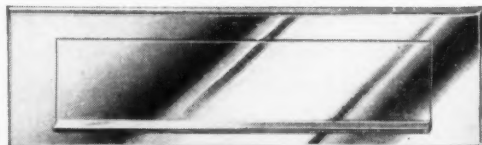
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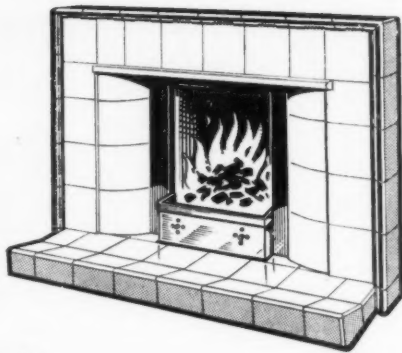
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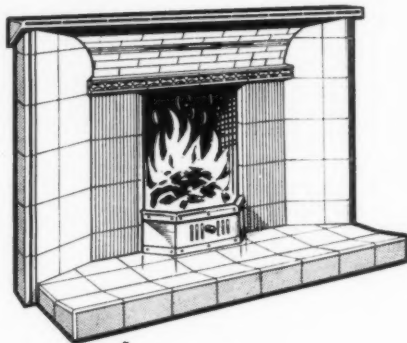
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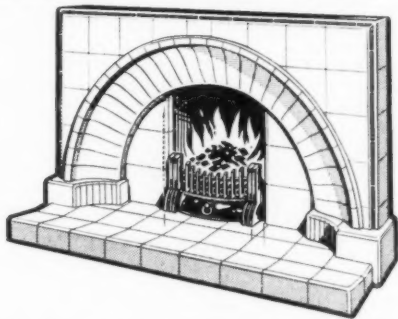
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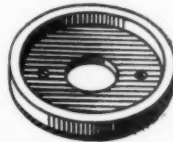
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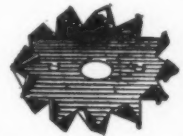
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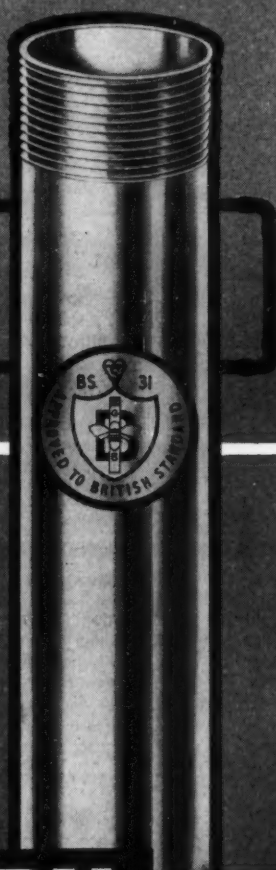
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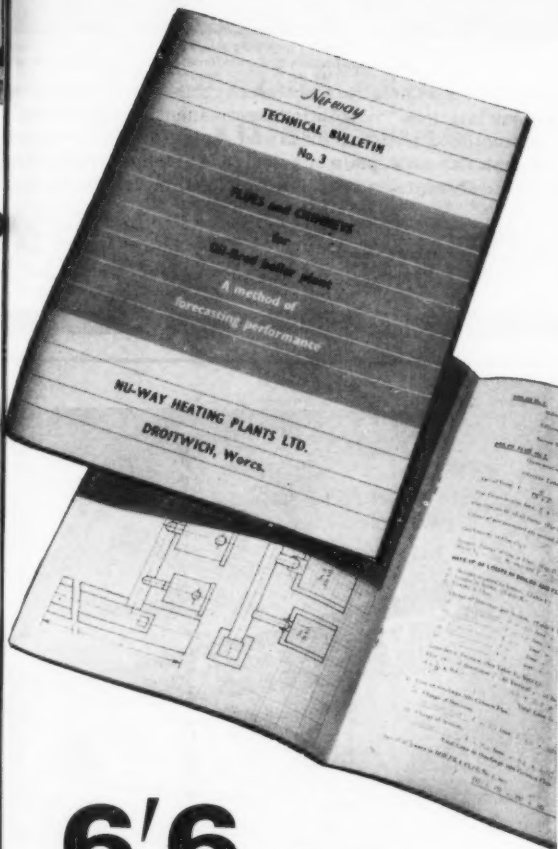
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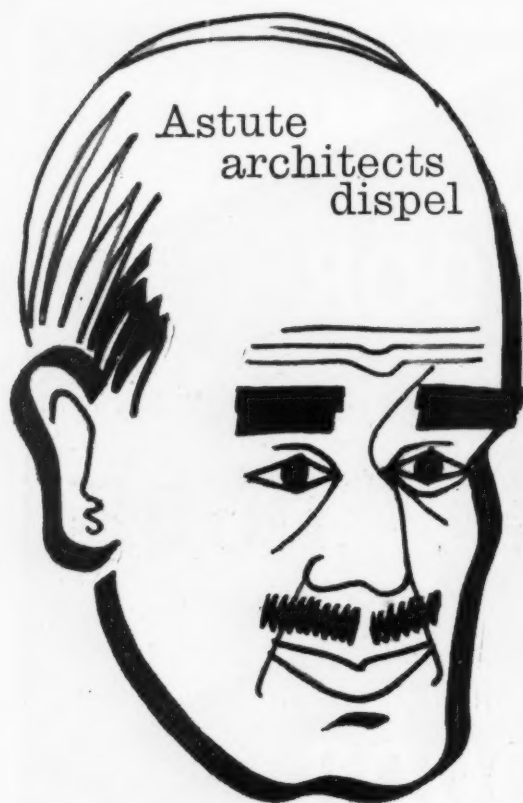
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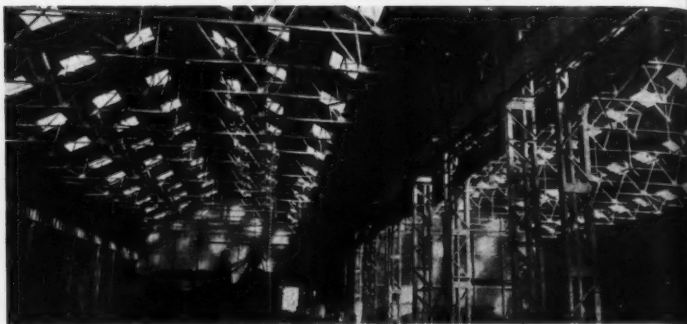
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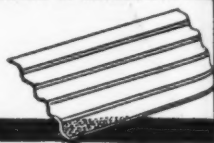
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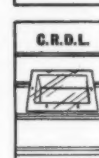
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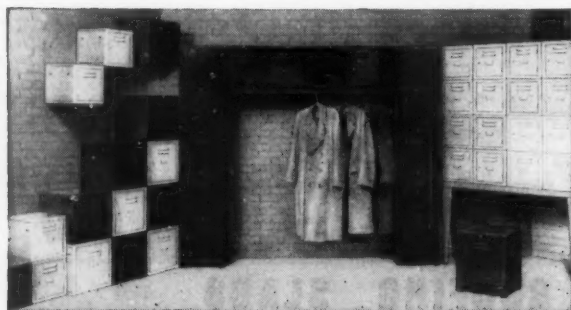
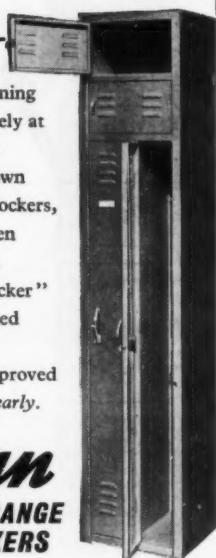
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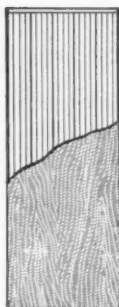
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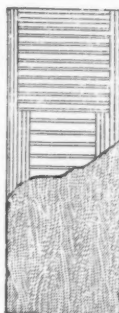
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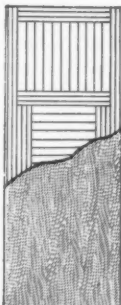
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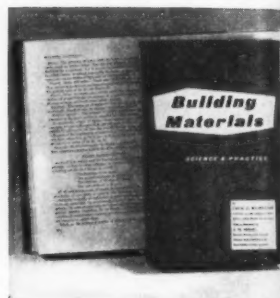
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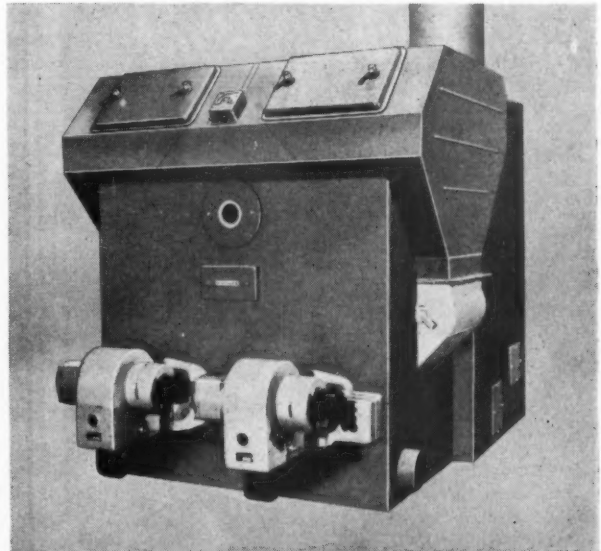
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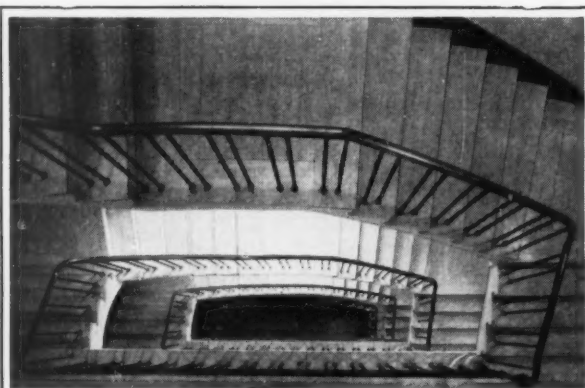


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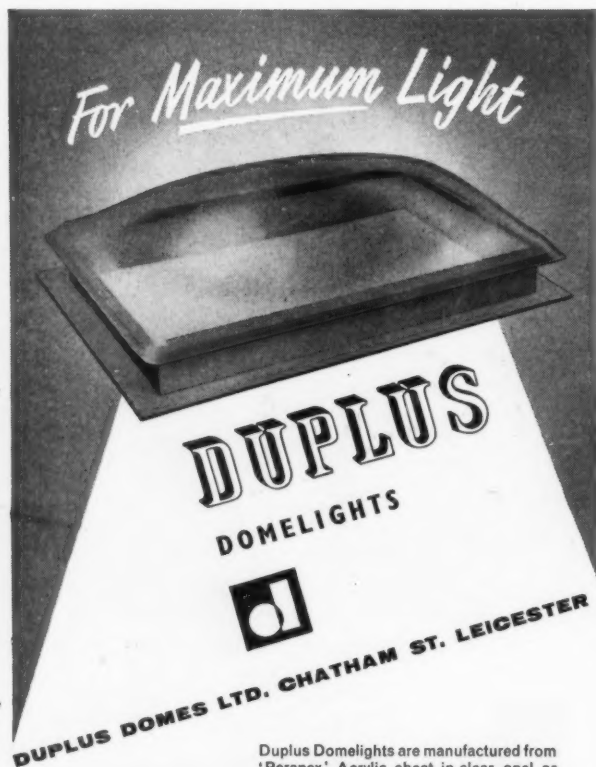
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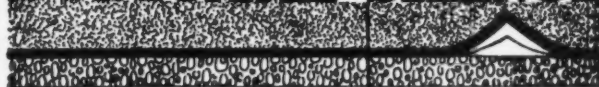
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CLASSIFIED ADVERTISEMENTS

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

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

AIR-MAIL SERVICE available on request. In response to requests from a number of Overseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appointments Vacant, we have been pleased to arrange that cuttings of all such classified advertisements appearing in the A.J., shall be despatched by air-mail on Wednesday of each week (one day prior to A.J. publication date). The cost of this special service to Overseas subscribers will be 6s. for four weeks (1s. 3d. for each additional week) and prepayment should be sent by subscribers wishing to take advantage of this service. The charge we are making represents only the actual cost of the postage involved.

Public and Official Announcements

36s. per inch; each additional line, 3s.

CITY OF SHEFFIELD
CITY ARCHITECT'S DEPARTMENT

Enthusiastic and imaginative architects possessing the drive and determination necessary to help rebuild this industrial hill city are invited to apply for the following posts on the permanent staff of the City Architect, Mr. J. L. Womersley.

- (a) GROUP LEADER ARCHITECT (EDUCATION AND GENERAL)—Grade A.P.T. V (£1,220—£1,375).
- (b) SENIOR ASSISTANT ARCHITECT (HOUSING)—Grade A.P.T. IV (£1,065—£1,220).
- (c) ASSISTANT ARCHITECTS (in both Housing and Education and General)—Grade S.C. (£785—£1,070).
- (d) ARCHITECTURAL ASSISTANTS—Grade A.P.T. II (£765—£880).

The Housing Section is engaged on large scale schemes of redevelopment and new development and there are excellent prospects of further work on challenging schemes of urban renewal.

The Education and General Section is responsible for an expanding and interesting programme of large and important civic buildings, including colleges, schools, libraries, art galleries, old people's and children's homes, bus garages, fire and police stations, health centres and clinics and Town Hall extensions.

Commencing salaries within the above grades according to qualifications and experience.

Candidates for post (a) must be fully qualified and capable of taking charge of a group responsible for the design and supervision to completion of major works on new schools. For post (b) the person appointed will be required to prepare layouts of housing areas and to design, prepare working drawings and supervise to completion all types of dwellings including multi-storey flats.

Applications for posts (c) will be welcomed from students completing their training this year and from young qualified architects seeking appointments offering considerable scope. Applicants for posts (d) should be of Intermediate R.I.B.A. standard.

Applications stating post applied for, age, education and training, qualifications, present and past appointments (with dates and salaries), experience and the names of two persons to whom reference may be made, should reach me not later than 2nd May, 1960.

JOHN HEYS,
Town Clerk.

Town Hall, Sheffield, 1. 9682

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. Peske, 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.

Public Offices, Enfield, Middx. 8454

BUILDING SURVEYORS
Architect's Department, L.O.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/494/4c), County Hall, S.E.1. 9276

**CORPORATION OF GLASGOW
ARCHITECTURAL AND PLANNING
DEPARTMENT
ASSISTANT ARCHITECTS
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. 9016

BOROUGH OF EPSOM AND EWE
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

- (a) SENIOR PLANNING ASSISTANT.
 - (b) SENIOR ARCHITECTURAL 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 essential 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, A.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. 9455

WEST SUFFOLK COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointment:—

SENIOR ASSISTANT ARCHITECT, at a salary in accordance with Grade V (A.P.T.) of the National Scales of Salaries—£1,220 x 155 x £50—£1,375. Commencing salary will be according to experience.

Further particulars should be obtained from the County Architect, County Hall, Chichester, to whom all detailed applications must be submitted not later than 5th May, 1960.

T. C. HAYWARD,
Clerk of the County Council.

County Hall, Chichester. 9548

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

will shortly appoint a DEPUTY SECRETARY to the Board of Architectural Education.

The duties of the Board are to advise the Council of the Royal Institute on all matters relating to architectural education.

A University degree is essential. Previous experience in administration is desirable.

Salary: £2,000 x £100—£3,000; starting point according to qualifications and experience.

Further information and application form from the Secretary, R.I.B.A., 66, Portland Place, London, W.1.

Closing date for applications: 20th May, 1960. 9625

CITY OF PETERBOROUGH
CITY ENGINEER'S DEPARTMENT
ARCHITECT'S SECTION

Applications are invited for the undermentioned appointments:—

- (1) TWO SENIOR ASSISTANT ARCHITECTS: Grade A.P.T. IV, £1,065—£1,220 per annum.
- (2) TWO ARCHITECTURAL ASSISTANTS: Grade A.P.T. II, £765—£880 per annum.

Applicants for (1) should be Associates of the R.I.B.A. or its equivalent at one of the recognised schools of architecture, and for (2) to have passed the Intermediate examination R.I.B.A. The assistants appointed will work as a team and will be engaged for the completion of a redevelopment scheme adjacent to the Cathedral, estimated to cost £300,000, comprising houses, flats, maisonnettes, in multi-storey blocks, of framed and load bearing construction. Experience in housing and flat design and cost control will be an advantage. Possibilities exist for permanent engagement for suitable assistants.

The scheme at present is in the sketch stage and assistants are required for preparing complete working and detail drawings, etc., where good draughtsmanship and knowledge of construction are essential.

Housing accommodation will be provided if required.

Application forms, together with conditions of appointment are obtainable from Mr. L. H. Robjohn, M.B.E., A.M.I.C.E., City Engineer & Surveyor, Town Hall, Peterborough, and should be returned by 12th May, 1960.

C. PETER CLARKE,
Town Clerk.

Town Hall, Peterborough. 9591

BOROUGH OF EALING

Erection of 16 Flats—Lyncroft Gardens, W.13. Forms of Tender and Specification, etc. can be obtained from the Borough Surveyor on payment of £5.

Tenders to be delivered to the Town Clerk, Town Hall, Ealing, W.5, not later than 12 noon, 20th May, 1960.

E. J. COPE-BROWN,
Town Clerk.

Town Hall, Ealing, W.5, not later than 12 noon, 20th May, 1960. 9601

BUCKINGHAMSHIRE COUNTY COUNCIL
APPOINTMENT OF DEPUTY COUNTY ARCHITECT

Applications are invited from Fellows in Associates of the Royal Institute of British Architects for the appointment of Deputy County Architect at a salary of £2,225 per annum, rising by three annual increments of £250 to £2,495 per annum.

The appointment is superannuable and subject to medical examination.

Further particulars and forms of application may be obtained from the undersigned, to whom applications must be delivered by Tuesday, 10th May, 1960.

R. E. MILLARD,
Clerk of the County Council.

County Hall, Aylesbury. 9630
April, 1960.

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT
ARCHITECT/PLANNERS required.

Include three-dimensional planning in Comprehensive Development Areas and all other important areas of new development throughout London, including those associated with road improvements. Up to £1,135 (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/527/4c), County Hall, S.E.1. 9077

BOROUGH OF KING'S LYNN
HOUSING ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of ASSISTANT QUANTITY SURVEYOR. Grade A.P.T. I (£610—£765 per annum).

Candidates, who should have passed or be studying for the appropriate Intermediate examination, will be required to assist in the preparation of Bills of Quantities, Valuations and measurement of works in progress and settlement of Final Accounts.

Consideration will be given to the provision of housing accommodation. The appointment is superannuable and subject to the National Scheme of Conditions of Service, and to Medical Examination.

Applications, giving age and full particulars of experience and previous appointments, and naming two referees, should be addressed to G. Holmes, A.R.I.B.A., Housing Architect, Clifton House, Queen Street, King's Lynn, not later than Thursday, 28th April, 1960.

Canvassing disqualifies.

E. W. GOCHER,
Town Clerk.

Town Hall, King's Lynn, Norfolk. 9619

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Interesting work in pleasant conditions with promotion on MERIT. Superannuation Fund. Reduced rates of travel and other concessions.

Commencing salaries up to £1,000 according to ability; a limited number of posts in ranges between £1,150 and £1,695; five-day week.

Applications in the first instance, giving qualifications and experience, to:—

Chief Civil Engineer
British Railways
Western Region
Paddington Station
London, W.2. 9630

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W. G. PLANT, DIP. ARCH (LIVERPOOL), F.R.I.B.A., REGIONAL ARCHITECT.

EXPANSION OF ARCHITECTS' DEPARTMENT

The Board is engaged in an expanding programme of hospital development, and the undermentioned appointments offer exceptional opportunities of gaining experience in designing and supervising the construction of hospital buildings. Most of the building work is designed and supervised by the Board's own staff which is now being substantially enlarged, and those appointed will be expected to accept a considerable degree of responsibility. Own car may be used for visiting hospitals, etc., for which adequate mileage allowance paid. Posts pensionable and excellent prospects for promotion. Previous hospital experience is NOT essential. SALARY SCALES UNDER REVIEW.

SENIOR ASSISTANT ARCHITECTS
Salary £1,100—£1,295. (New entrants commencing at minimum.) Applicants must be registered Architects having passed the requisite examinations and must be good designers, capable of preparing working drawings and specifications for, and undertaking site supervision of, all types of building projects.

ASSISTANT ARCHITECTS
Salary according to age and experience up to a maximum of £1,105. Applicants must be registered Architects having passed the requisite examinations, and must be good designers, capable of preparing working drawings and specifications for, and undertaking site supervision of, all types of building projects, under limited supervision.

Applications, giving date of birth, present salary, qualifications and experience with referees, together with the names of two referees, to Secretary North East Metropolitan Regional Hospital Board, 40, Eastbourne Terrace, London W.2, within 14 days.

CAMBS COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
 Applications are invited for the post of ASSISTANT QUANTITY SURVEYOR, Grade I, P.T. Division, £610-£765.
 Applicants should have had experience in estimating bills and site measurements and preference will be given to an applicant who is qualified for the R.I.C.S. examinations.
 Applications stating age, present and previous appointments, details of training and experience, together with the names and addresses of two referees, should be submitted to the undersigned not later than April 26th, 1960.
CHARLES PHYTHIAN,
Clerk of the County Council.
 Shire Hall, Cambridge.
 10th April, 1960.

BOROUGH OF BRENTFORD & CHISWICK
ASSISTANT ARCHITECT
 (SPECIAL GRADE) £815-£1,100 p.a.
 Applications are invited for this vacancy. Preference will be given to candidates who have passed the examination for A.R.I.B.A. Commencing salary will be according to qualifications and experience.
 The Council may be prepared to assist in the provision of housing accommodation.
 Applications to Borough Engineer & Surveyor, Town Hall, Chiswick, W.4, not later than 30th April, 1960.
W. F. J. CHURCH,
Town Clerk.
 9628

AYCLIFFE DEVELOPMENT CORPORATION
APPOINTMENT OF ARCHITECTURAL ASSISTANT
 Applications are invited for the above appointment at a salary within Grade A.P.T. III of the Whitley Council for New Towns Staff scale of salaries, according to qualifications and experience. The salary ranges from £800 p.a. to £1,065 p.a.
 Appointment subject to N.J.C. conditions, superannuation, medical examination and to one month's notice, in writing, on either side.
 Housing accommodation, if required.
 Applications, stating age, qualifications and experience, together with the names of two referees, to arrive not later than Saturday, the 30th April, 1960.
A. V. WILLIAMS,
General Manager.
 Churchill House, Newlon Aycliffe, Nr. Darlington.
 9633

COUNTY COUNCIL OF THE STEWARTRY OF KIRKCUDBRIGHT
 Applications are invited from (a) Associates R.I.B.A. for posts of ASSISTANT ARCHITECTS salary up to £1,075 per annum according to experience) and from (b) others, preferably having passed the Intermediate R.I.B.A. for posts of ARCHITECTURAL ASSISTANTS salary £605 to £735 per annum with placing according to qualifications and experience) for responsible work on Schools and Houses, in a pleasant maritime county in the South of Scotland. Car allowances payable; car purchase scheme available; five-day week.
 Applications, giving age, qualifications and details of previous experience and the names and addresses of two referees to be lodged with the County Clerk, County Offices, Kirkcudbright, not later than 30th April, 1960.
 9647

BRITISH RAILWAYS
 Applications are invited for the following posts in the office of the Architect, Eastern Region, British Railways, at King's Cross Station.
LEADING ASSISTANT ARCHITECTS—Starting salary £1,095. Applicants should be qualified architects with some years' practical experience.
ASSISTANT ARCHITECTS—Salary ranges £835-£1,034. Starting salary will be determined in accordance with qualifications and experience.
 The office is engaged on a wide range of interesting buildings and gives responsibility for design, administration and site supervision to those with ability. Five-day week, rail travel concessions. Modern working conditions. Apply in writing to the Architect, Chief Civil Engineer's Office, British Railways, Eastern Region, King's Cross Station London, N.1, giving age, experience and qualifications.
 9639

COUNTY BOROUGH OF SOUTHEAST-ON-SEA
BOROUGH ARCHITECT'S DEPARTMENT
 Applications are invited for the following posts:—
ASSISTANT ARCHITECT—Special Classes Scale (£785 x £40 (6) x £45-£1,070).
TECHNICAL ASSISTANT (ARCHITECTURAL)—Grade A.P.T. II (£765 x £25 (1) x £30 (3)-£880).
ASSISTANT QUANTITY SURVEYOR—Special Classes Scale (£785 x £40 (6) x £45-£1,070).
 A flat is available for a suitable candidate.
 Candidates must be suitably qualified and experienced.
 The appointments will be subject to the provisions of the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service so far as adopted by the Council. Medical examination.
 Applications, stating age, qualifications and experience, with the names of two referees, should be submitted to the Borough Architect, 30, Alexandra Street, Southend-on-Sea, forthwith. Canvassing will disqualify. Any candidate who is related to member or officer of the Council is required to disclose the fact.
ARCHIBALD GLEN,
Town Clerk.
 9654

WEST SUFFOLK COUNTY COUNCIL
 Applications are invited from suitably qualified persons for the post of ARCHITECTURAL ASSISTANT within A.P.T. Grade I (£610-£765).
 N.J.C. Service Conditions; post pensionable, medical examination.
 One day per week will be allowed for study at a recognised school of architecture.
 Application forms obtainable from the County Architect, 13, Westgate Street, Bury St. Edmunds, to be returned as soon as possible.
 9539

BOROUGH OF EALING
TWO ARCHITECTURAL ASSISTANTS, within scale A.P.T. IV according to experience (£1,095 to £1,250 inclusive). Must hold recognised architectural qualifications.
 Full particulars and application forms from Borough Engineer, Town Hall, Ealing, W.5.
 Closing date 18th April, 1960.
E. J. COPE-BROWN,
Town Clerk.
 9623

CORPORATION OF GLASGOW
ARCHITECTURAL AND PLANNING DEPARTMENT
 A new planning team is being set up to study the planning problems of the City Centre involving the preparation of schemes for seven Major Comprehensive Development Areas and the Inner Ring Road—a four-mile-long Urban Motorway.
 Applications are invited from enthusiastic QUALIFIED PLANNERS interested in the architectural, engineering or statistical aspects of the problems involved.
 The work will provide scope for initiative in preparing details for schemes on which constructional work is intended to start as soon as possible.
 Salary scale of £795 to £1,240 with placing according to experience.
 Apply to City Architect and Planning Officer, 20, Tongate, Glasgow, C.1, giving details and names of referees.
 9516

CITY OF LEICESTER
CITY ARCHITECT'S DEPARTMENT
 ARCHITECTS interested in modular co-ordination and prefabricated systems of building are invited to apply for the post of ASSISTANT ARCHITECT, Grade A.P.T. IV (£1,065-£1,220).
 The post will be concerned with research and development of C.L.A.S.P. building and will involve work in co-operation with other local authorities.
 Previous local government experience not essential. Housing accommodation at an economic rent will be provided if necessary. National Conditions of Service apply.
 Applications with the names of two referees should be sent to the undersigned not later than Monday, 25th April, 1960.
J. H. LLOYD OWEN,
City Architect.
 10, Loseby Lane, Leicester.
 9511

BOROUGH OF BASINGSTOKE
 A SENIOR ASSISTANT is required in the Architect's Department for housing and general work in this rapidly expanding town.
 Applications are invited from Associates, R.I.B.A., who have had considerable housing experience; salary range £785-£1,070 according to experience. House or flat available. N.J.C. conditions. Post pensionable. Medical examination.
 Details giving age, training, experience, etc., and names and addresses of three referees to be sent to the Borough Architect, Eric Almond, Dipl.Arch., A.R.I.B.A., Municipal Buildings, Basingstoke, Hants, by the 2nd May, 1960.
L. WOMERSLEY,
Town Clerk.
 9522

COVENTRY CORPORATION
require
ASSISTANT HEATING AND VENTILATING ENGINEER—Grade A.P.T. V (£1,220-£1,375), commencing according to qualifications/experience, to be responsible for design and contract supervision of heating, ventilating, air conditioning and other building services, in a varied and interesting building programme (including College of Technology Central Library, Law Courts, Residential College and Bus Station). Associate membership Inst. H. & V.E. desirable. Housing accommodation may be available. Interest free removal expenses loan up to £50. Application forms from City Engineer, Council House, Coventry, returnable by 30th April, 1960.

ADMINISTRATIVE COUNTY OF LEICESTER
(a) SENIOR ASSISTANT ARCHITECT, £1,075-£1,220.
(b) ASSISTANT ARCHITECT, £785-£1,070.
 Candidates for (a) must be chartered members of the R.I.B.A., have had considerable experience and be capable of taking charge of contracts from inception to completion; for (b) must have passed Parts I and II of the R.I.B.A. Final and be capable of executing working drawings.
 Lodging allowance and removal expenses may be paid to a married man.
 Apply to County Architect, 123, London Road, Leicester.
 9655

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.
 9693

WARWICKSHIRE COUNTY COUNCIL
COUNTY PLANNING DEPARTMENT
SENIOR PLANNING ASSISTANT—Grades A.P.T. IV/V (£1,065-£1,375 per annum).
 The post is in the Development Plan Section at Warwick and the appointment is superannuable and subject to the National Scheme of Conditions of Service. Consideration will be given to the granting of financial assistance towards removal expenses.
 Applicants should be Chartered Planners with all-round planning experience and especially of development plan work.
 The successful applicant will be required to provide and maintain a motor-car. Travelling and subsistence allowances will be in accordance with the National Scale.
 Applications, together with the names of two referees, should be sent to J. J. Brooks, County Planning Officer, Northgate, Warwick, not later than Saturday, 7th May, 1960.
 Canvassing will be a disqualification.
L. EDGAR STEPHENS,
Clerk of the Council.
 Shire Hall, Warwick.
 9695

CITY OF CHICHESTER
SENIOR ASSISTANT
 Applications are invited from Chartered Architects or Chartered Surveyors for this appointment at a salary within the Grade for Special Classes of Officers (£785-£1,070). The person appointed will be responsible to the City Surveyor for the design of new Council houses and other work connected with housing and housing estate layout. He must have a complete knowledge of building construction, experience in design, and be fully competent to arrange and supervise building contracts. The Corporation retains the services of a firm of Chartered Quantity Surveyors and employs a Clerk of Works.
 The appointment will be in accordance with the National Conditions of Service and terminable by one month's notice on either side.
 Temporary housing accommodation will be provided, if required.
 Applications on forms obtainable from the City Surveyor, Greyfriars, North Street, Chichester, must be returned to me by 9th May, 1960.
ERIC BANKS,
Town Clerk.
 9696

BOROUGH OF MALDEN AND COOMBE
APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT
 Applications are invited for the above appointment from persons who have passed the R.I.B.A. Intermediate Examination, or its equivalent. The salary will be in accordance with Grade A.P.T. II (£765-£880 per annum, plus London "weighting").
 Applications on forms to be obtained from John Apse, A.M.I.C.E., Borough Engineer and Surveyor, Municipal Offices, New Malden, Surrey, should be returned by not later than 9th May, 1960.
HAROLD E. BARRETT,
Town Clerk.
 Municipal Offices, New Malden, Surrey.
 9670

HER MAJESTY'S OVERSEAS CIVIL SERVICE
PLANNING OFFICER, PUBLIC WORKS DEPARTMENT, HONG KONG
 To prepare plans and conditions for development schemes of all types. General Town Planning duties and consideration of private and public building proposals.
 Pensionable appointment. Age limit 45. Salary scale £1,500-£2,865 with point of entry between £1,650 and £2,325 according to experience. Rented quarters. Free passages. Candidates must be A.M.T.P.I. and have a minimum of one year's post qualification experience preferably with A.M.I.C.E. or A.M.I.Mun.E. or secondly A.R.I.B.A. or A.R.I.C.S.
 Write Director of Recruitment, Colonial Office, London, S.W.1, giving full names, age, qualifications and experience, quoting BCD 112/51/831/E2.
 9666

COUNTY BOROUGH OF WALLASEY
APPOINTMENT OF ASSISTANT ARCHITECTS AND ARCHITECTURAL ASSISTANTS
 Applications are invited for the following appointments in the Borough Architect's Department:—
 (a) ASSISTANT ARCHITECTS, Grade A.P.T. V (£1,220-£1,375).
 (b) ASSISTANT ARCHITECTS, Grades A.P.T. IV/V (£1,065-£1,375).
 (c) ASSISTANT ARCHITECTS, Special Grade (£735-£1,070).
 (d) ARCHITECTURAL ASSISTANTS, Grades A.P.T. I/II (£610-£880).
 (e) ASSISTANT ARCHITECT, Temporary, at a salary to be determined within the range of £1,300-£1,580. This appointment will be for a period of two years and for specified works.
 For appointments (a), (b), (c) and (e), applicants must be Fellows or Associates of the R.I.B.A. and for appointment (d), applicants must have passed the Intermediate R.I.B.A. examination. Commencing salaries will be according to capabilities and experience and in connection with (a), (b) and (c) favourable consideration will be given to the provision of housing accommodation if required. Forms of application may be obtained from the Borough Architect, Town Hall, Wallasey, to whom they should be returned by the 26th April, 1960.
A. G. HARRISON,
Town Clerk.
 9697

THE UNIVERSITY OF SOUTHAMPTON
Applications are invited from suitably qualified persons for the post of ASSISTANT ARCHITECT. Salary Scale £900 x £50 to £1,100. Family Allowances, F.S.S.U. Duties will cover wide variety of interesting activities connected with the University's building programme, planning of services, and general architectural work of the type carried out by a staff architect in a large organisation. Experience and ability in contemporary design, detailing, supervision of building work and administration essential. Further particulars from the Secretary and Registrar, to whom applications (six copies) containing names of three referees should be sent not later than 9th May, 1960. 9692

CITY OF BRADFORD
SENIOR ARCHITECTURAL ASSISTANT
Applications are invited for the superannuable appointment of a Senior Architectural Assistant, Post 217, in the City Engineer & Surveyor's Department at a salary on Grade A.P.T. V (£1,220-£1,375).

The successful candidate would be engaged in the design of multi-storey flats, maisonettes, houses and shopping centres for large housing estates and in connection with the redevelopment of slum clearance areas near the centre of the City. He would also be concerned with architectural work for the replanning of the City centre. Candidates should have sound design ability and experience in the preparation of working and detail drawings, and should be either A.R.I.B.A. or A.M.T.P.I.

No housing accommodation can be provided. Application forms obtainable from the City Engineer & Surveyor, Town Hall, Bradford, 1, with three testimonials, must be received by the undersigned by 2nd May, 1960.

HENRY PATTEN
Town Clerk.

Town Hall, Bradford, 1. 9668

EAST LOTHIAN COUNTY COUNCIL
ASSISTANT ARCHITECTS

Applications are invited from Qualified Architects for two posts of Assistant Architect in the Property and Works Department. Salary scale £795 to £1,075 per annum with appropriate placing. Superannuation. Persons appointed may reside in Edinburgh if desired or alternatively a house will be made available if required. Applications, stating age and experience, with names and addresses of two referees, to the undersigned by 26th April, 1960.

THOS. GIBB,
County Clerk.

County Buildings, Haddington. 9690

HERTFORDSHIRE COUNTY PLANNING DEPARTMENT

SENIOR PLANNING ASSISTANT required as Group Leader of the Central Areas Group of the Development Plan Section. To be responsible for all town-centre plans and urban renewal schemes. Must be A.M.T.P.I. preferably with design experience.

Salary "Special" linked A.P.T. IV (£785 rising to £1,220 p.a.). Commencing salary according to qualifications and experience. Five-day week. "Essential" motor-car allowance.

Applications from: The County Planning Officer, County Hall, Hertford. To be returned by 25th April, 1960. 9671

HAMPSHIRE COUNTY COUNCIL

SENIOR PLANNING ASSISTANT, Special Grade (£785-£1,070), required for pensionable post in Headquarters, Planning Department, Winchester, for work in connection with the preparation of Town Maps and the review of the County Development Plan. Candidates should be corporate members of the Town Planning Institute and have had good all-round planning experience. Commencing salary according to experience. Separation allowance and assistance with removal and other expenses in approved cases. Applications, stating age, education, qualifications and experience, together with a copy of one testimonial and the names of two referees, should reach the Clerk of the County Council, The Castle, Winchester, by 30th April. 9672

QUANTITY SURVEYING ASSISTANTS, Grade III, required by AIE MINISTRY in the PROVINCES. Duties include abstracting and billing, site measurement and preparation of estimates. Candidates must hold O.N.C. (Building or Builders' Quantities) or equivalent and have good experience under Quantity Surveyor or Building Contractor. Knowledge W.D. Schedule an 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.

Salary ranges from £680 (at age 26) to £850. 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 Street, London, E.C.4. No original testimonials should be sent. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only applicants selected for interview will be advised. 8336

ARCHITECTS AND MAINTENANCE SURVEYORS. Pensionable posts for men and women at least 25 and under 35 on 1.1.60 (extension to regular Forces service, Overseas Civil Service, established civil service and temporary Government service as Architect or Maintenance Surveyor). Candidates must be registered Architects or, alternatively, for Maintenance Surveyor posts have achieved Corporate membership of R.I.B.A. (Building section), or have passed examinations necessary for attaining Corporate membership. Starting salary (men, London) from £830 to £1,125 according to age. Scale maximum (London) £1,300. Promotion prospects. Write Civil Service Commission, 17, North Audley Street, London, W.1, for application form, quoting S/60-61. 9670

LONDON COUNTY COUNCIL

ARCHITECT'S DEPARTMENT
ARCHITECT, Grade III, required in Historic Buildings Section. Up to £1,135 (under review with probable maximum £1,250). Work related to Sections 29 and 30 of Town and Country Planning Act, 1947, and includes collection of relevant historical information, advising on proposals of private owners relating to listed buildings and preparing Building Preservation Orders. Special knowledge of history of architecture in England, preferably with experience in town and country planning, essential.

Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/AJ/973/4), County Hall, London, S.E.1, returnable by 4th May. 9674

BOROUGH OF BEBINGTON
SENIOR ARCHITECTURAL ASSISTANT
GRADE IV A.P.T.

Applications are invited for the above post, commencing salary of which will be fixed according to qualifications and experience.

Candidates must hold appropriate architectural qualifications and be capable of undertaking development schemes of housing and public buildings.

A five-day week is in operation. Application forms are available from the Borough Engineer and Surveyor, Town Hall, Bebington, Cheshire, and when completed should be returned to the Town Clerk so as to be received by him at the same address not later than first post on Monday, 2nd May, 1960. The candidate appointed, if married, and considered by the Council to be in need of housing at the time of appointment will be found accommodation within a reasonable period of time. Canvassing will be a disqualification.

G. CHAPPELL,
Town Clerk.

Town Hall, Bebington. 9699

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These appointments in our rapidly expanding nationwide organisation, where competent design and time/cost control are of prime importance, call for keen and experienced men who are proficient draughtsmen.

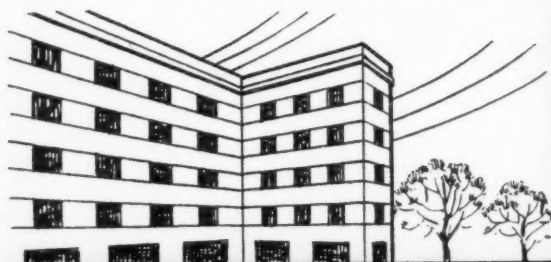
The positions occur in our offices at Leamington Spa and Tunbridge Wells, and they carry good salaries (commensurate with ability and experience) and include participation in a generous bonus scheme.

Please apply, in writing only, stating full particulars of training, experience, age and salary required, to:—

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ATCOST (FACTORIES) LTD., YORK HOUSE,
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Telephone: Southampton 73108

**LONDON COUNTY COUNCIL
ARCHITECTS' DEPARTMENT**
ARCHITECTS AND BUILDING SURVEYORS
required for improvements, alterations and extensions. Jobs up to £20,000. Selected candidates will be responsible for surveys, schemes, working drawings, specifications and supervising contracts. Up to £1,135 according to qualifications and experience. (Salary scales at present under review with probable maximum of £1,250.) Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/AJ/910/4), County Hall, S.E.1. 9627

**BOROUGH OF KEIGHLEY
BOROUGH ARCHITECTS' DEPARTMENT**
Applications are invited for the following temporary position, for a period of two years:—
ASSISTANT ARCHITECT, Grade A.P.T. IV, salary Scale £1,065–£1,220. Applicants must be associate members of the R.I.B.A., and possess good experience in architectural design and building work under construction.
Applications to be made upon the prescribed form to be obtained from the undersigned, to whom same must be returned, accompanied by copies only of two recent testimonials, not later than first post, Thursday 8th May, 1960.
E. G. FELGATE, A.R.I.B.A.,
Borough Architect,
Borough Architect's Department,
College Street, Keighley. 9676

**CITY AND COUNTY OF BRISTOL
ARCHITECTS' COMMITTEE**
Applications invited for the following permanent staff posts from applicants who have the qualification shown or equivalent qualification:
SENIOR ASSISTANT ARCHITECTS—Grade A.P.T. IV (£1,065–£1,220 p.a.)—Final R.I.B.A. 9676

SENIOR ASSISTANT ARCHITECTS—Special Scale (£785–£1,070 p.a.)—Parts 1 & 2 Final R.I.B.A.
ARCHITECTURAL ASSISTANTS—Grade A.P.T. II (£765–£980 p.a.)—Intermediate R.I.B.A.
SENIOR QUANTITY SURVEYORS—Special Scale (£785–£1,070 p.a.)—Final R.I.C.S.
LAND SURVEYOR—Grade A.P.T. I (£610–£765 p.a.)—Intermediate R.I.C.S. (Land Surveying or Building Surveying Section).
The Department has an interesting and varied programme of work including the design and construction of Colleges of Art and Further Education, Secondary Schools, Markets, Baths, Libraries and redevelopment projects including blocks of dwellings up to 15 storeys. Facilities will be given for design and contract experience and good opportunities exist for men with drive and initiative to assist in works of major architectural importance.

Five-day week. Assistance with removal expenses. Housing accommodation available, if necessary, at an economic rent.
Details and application forms, returnable by Wednesday, May 4th, from City Architect, Council House, Bristol. 1 9679

**UNIVERSITY COLLEGE OF NORTH WALES,
BANGOR**

BUILDINGS OFFICER
Applications for the above appointment are invited from persons with suitable professional qualifications and experience. The present salary scale, which is now under consideration for upward revision, is £1,250 × £250–£1,350 × £75–£1,650 p.a. with child allowances and membership of a pension scheme. The initial salary will depend on qualifications and experience, and the appointment will date from October 1, 1960, a date to be mutually agreed.
Experience in the planning and construction of large scale educational buildings is highly desirable. Further particulars may be obtained from the Registrar, to whom an application should be returned not later than May 16, 1960. 9678

NORFOLK EDUCATION COMMITTEE
Applications are invited for the post of **ASSISTANT ARCHITECT**. Salary in accordance with A.P.T. Grade IV (£1,065 × £55 × £50 (2) p.a. £1,220).

Candidates should be qualified Architects and have experience in the planning and erection of large buildings.
Forms of application from the undersigned to be returned within 14 days of the date of this advertisement.

F. LINCOLN RALPHS,
Chief Education Officer,
County Education Office,
Stracey Road,
Norwich.
Norfolk, Nor. 49A. 9701

CITY AND COUNTY OF NEWCASTLE UPON TYNE

**NEW TOWN HALL
APPOINTMENT OF CLERK OF WORKS**
Applications are invited for the appointment of Clerk of Works in connection with the New Town Hall, the construction of which is anticipated to commence at the beginning of May, 1960.

The salary for this appointment will be £1,375 per annum, the maximum of A.P.T. Division Grade V.
Intending applicants should apply in the first instance for Forms of Application and further particulars to the City Architect, George Kenyon, Dip. Arch., A.R.I.B.A., Dip. T.P., A.M.T.P.I., 23, Cloth Market, Newcastle upon Tyne, 1.
JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.
22th April, 1960. 9700

COUNTY BOROUGH OF GATESHEAD
Applications are invited from qualified and experienced persons for the following appointments:—

(a) **SENIOR PLANNING ASSISTANTS**, A.P.T. IV-V (£1,065 to £1,375), who must be qualified by examination in Town Planning, and preference will be given where a recognised qualification in Civil Engineering or Architecture is also held.

Applicants must have had experience covering Central Area Redevelopment and Central Development Area procedure and current planning legislation.

(b) **PLANNING ASSISTANTS**, Special Scale—A.P.T. IV (£785 to £1,220). Applicants must have had not less than three years' experience on Development Plan Surveys, Redevelopment Programmes and at least have passed the Intermediate Examination of the Town Planning Institute.

(c) **REFERENCING CLERK**—(Male/Female) General Division (according to age) (£206–£595). Applicants should preferably have worked in the office of a Planning Authority and have experience of planning applications and keeping of planning registers, maps, etc.

All above posts pensionable, subject to medical examination and one month's notice on either side.

Favourable consideration may be given to the provision of housing accommodation in posts (a) on a rental basis.

Applications on forms to be obtained from the Borough Surveyor, Swinburne Street, Gateshead, 8, must be returned to him not later than Monday, 2nd May, 1960.

C. D. JACKSON,
Town Clerk.

Town Hall,
Gateshead, 8.
April, 1960. 9669

**BOROUGH OF BRIDGWATER
BOROUGH ARCHITECTS' DEPARTMENT**
Applications are invited for the following posts:—

(a) **TWO ASSISTANT ARCHITECTS** (A.P.T. IV), £1,065–£1,220

(b) **TWO ARCHITECTURAL ASSISTANTS** (A.P.T. II), £765–£980.

For work of an interesting and varied nature, offering scope for design and experience on a three-five-year programme of central redevelopment comprising the erection of three, four, six and eight-storey flats and maisonettes, etc.

Applicants for posts (a) must be A.R.I.B.A. with a number of years' practical experience since qualifying, and for (b) Intermediate R.I.B.A. with a number of years' practical experience.

Appointments subject to Medical Examination, National Conditions of Service and one month's notice on either side. Consideration will be given to the provision of housing accommodation.

Applications, giving full details of age, experience and qualifications, past and present appointments and the names of two referees, to the Borough Architect, Town Hall, Bridgewater, by 10 a.m. on Saturday, 30th April, 1960.

H. A. CLIDERO,
Town Clerk.

Town Hall,
Bridgewater.
12th April, 1960. 9699

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 3698/9. 8645

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, Ooptic Street, W.C.1. 8815

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.R.I.B.A., Grosvenor Buildings, 65, Albert Road, Middlesbrough. 8290

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 3111 for appointment or write giving details of experience to Box 9930.

ASSISTANT ARCHITECT required by Harker & Hall, L/R.I.B.A., for responsible position in their London office, 13, Welbeck Street, W.1. (WEL. 0061.) 9061

W. H. WATKINS, GRAY & PARTNERS require ASSISTANTS of Intermediate and Final standard. Pension scheme and luncheon vouchers. Salary range £700 to £930. Apply 57, Catherine Place, London, S.W.1. 8750

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

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.

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 8086.

EWIS 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, 5th Floor, or telephone CITY 8811, quoting SLB in both instances. 7780

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. 8499

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. 8690

ARCHITECTURAL ASSISTANT required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20, Bedford Square, London, W.C.1. 7280

TWO ASSISTANTS required: one at Intermediate standard and one qualified with some years office experience, for small busy office. Salary according to experience. Bing LANGHAM 1732 or write to F. G. Frizzell, A.R.I.B.A., 90, Portland Place, W.1. 8625

VACANCIES exist for ASSISTANTS of Pre-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

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 £200–£1,000 p.a. Non-contributory Pension Scheme. Five-day week. Apply in writing to 32, Clarendon Road, Watford. 8099

SENIOR ASSISTANT urgently required for pleasant office in Gray's Inn. Interesting and varied practice. Salary up to £1,100. Telephone Chancery 8387. 8336

SEELY & PAGET have immediate vacancy in their City office. Standard near Final R.I.B.A. with office experience. Holiday arrangements respected. Salary range £240 × £52 (4)–£1,000 plus luncheon vouchers. Write 41, Cloth Fair, R.C.1, or telephone MET 8511. 9156

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.

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.F.R.I.B.A., A.M.T.P.I., 90, Fenchurch Street, London, E.C.3. 9096

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.) 5429

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.

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 9556 for appointment or write Box 9404.

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. 9146

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. 9504

ARCHITECTURAL ASSISTANTS required by Hasker & 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 0051 or Knowle (Birmingham) 3502. 9062

BUSY City Firm engaged in industrial and commercial work requires ASSISTANT of Final standard with several years' office experience. Five-day week. Luncheon vouchers. Salary by arrangement. Box 9227.

BRYAN & NORMAN WESTWOOD & PARTNERS urgently require JUNIOR and SENIOR ASSISTANTS. Salary will be according to experience. Please write or telephone for an interview. 21, Suffolk Street, S.W.1. TRAFalgar 4411. 9278

SHEPPERDSON & DIXON, of 2, Museum Street, Ipswich, urgently require additional experienced ARCHITECTURAL ASSISTANTS at their Ipswich and Colchester Offices. 9293

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

£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.

J. SEYMOUR HARRIS & PARTNERS, 34, 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

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.

JOB LEADER (Architect) wanted for design and construction of important overseas university buildings. Two-year contract. Commission on new work. Particulars to Hening & Chitty, 30, Percy Street, London, W.1. 9613

HENING & CHITTY require ASSISTANT ARCHITECTS (£250—£1,000) for new and interesting work. Particulars to 30, Percy Street, London, W.1. 9514

SENIOR ASSISTANT capable full charge interesting £250,000 project West End. Other large schemes in office. Salary according to capabilities. Norman Green, F.R.I.B.A., 12, Adeline Place, Bedford Square, London, W.C.1. 9515

ARCHITECTURAL ASSISTANTS required by large Midlands Brewery Company. Please reply, giving details of qualifications, age, experience, and salary required, to Box 9518.

DENNIS S. LICHTIG requires experienced ASSISTANTS of Intermediate and Final standard for interesting work in his Loughton office. The appointment offers good prospects for keen men. Three minutes' walk from Central Line tube station, buses close by. Five-day week. Salary by arrangement. Apply to 24, Sparelease Hill, Loughton, Essex, or phone LOughton 5864. 9574

WORK in pleasant office with informal atmosphere. Direct contact with jobs from start to finish in office and on site. ASSISTANTS required for variety of projects including school, hospital and industrial work. Salary up to £950 according to ability. Dennis Poulton, Philip Freeman and John Rice, FFAR.I.B.A., 6A, Wyndham Place, W.1. 9599

EXPANDING practice with varied work in different parts of the country, require keen and capable Intermediate standard ASSISTANTS. Good salary and prospects for the right men. Holiday commitments honoured. Dalling and Partners, 14, Bloomsbury Square, W.C.1. CHANCery 4725. 9469

W. S. HATTELL & PARTNERS

Architects COVENTRY

invite applications for the following vacancies: (a) SENIOR ASSISTANTS. (Salary £1,000 minimum.)

Must be fully qualified architects with some years' office experience, capable of taking a large measure of responsibility for a wide range of contracts.

(b) ASSISTANTS. (Salary £750—£1,000.) Should be of Intermediate-Final standard, capable of preparing full working drawings, specifications, etc., under supervision, and of taking responsibility for smaller contracts.

(c) JUNIOR ARCHITECTURAL ASSISTANTS. (Salary up to £750.)

Up to Intermediate R.I.B.A. standard. Opportunities to gain experience on a wide range of contracts.

Progressive salary depending on ability. Pension Scheme. Five-day week. Travelling expenses paid to interviewed applicants. House available.

Replies to 1, Queens Road, Coventry. 9602

J. SEYMOUR HARRIS & PARTNERS, 34, 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

SENIOR ASSISTANT required in a busy practice for work on new construction of Departmental Stores. Experience of this work not essential but ability to deal with contracts without supervision essential. Salary according to experience. George Baines & Sykes, A.R.I.B.A., 121, Victoria Street, Westminster, S.W.1. 9560

ASSISTANT ARCHITECT required for large public Advertising Company. The appointment will be based at the head office in Coventry. Candidates must have the requisite experience of design and repair work and have a thorough knowledge in taking off and preparing Bills of Quantities. Generous salary and an attractive pension scheme offered to the selected candidate. Preferred age 30 to 35. Please send brief details in confidence to: A. A. Lees, A.R.I.B.A., A.R.I.A.S., Company Architect, Mills & Rockleys Ltd., Queen's Road, Coventry. 9620

ARCHITECTURAL ASSISTANTS (TWO) required for busy office. Interesting industrial and commercial work. Salary £900. Apply giving particulars to: Mr. G. Yarwood, F.R.I.B.A., The Barnsley British Co-operative Society Ltd., Twibell Street, Barnsley. 9583

RICHARD SHEPPARD, ROBSON & PARTNERS require ARCHITECTURAL ASSISTANTS, Intermediate or Final standard. 5 Southampton Place, W.C.1. CHANCery 4261. 9610

ARCHITECTURAL ASSISTANT required. A 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

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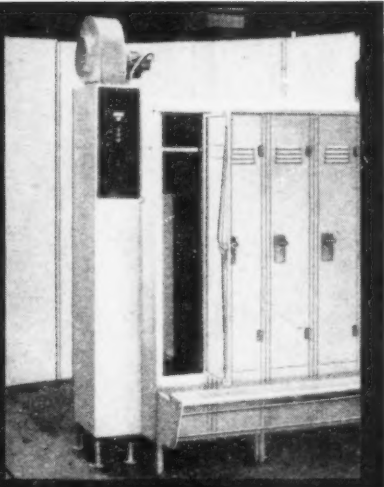
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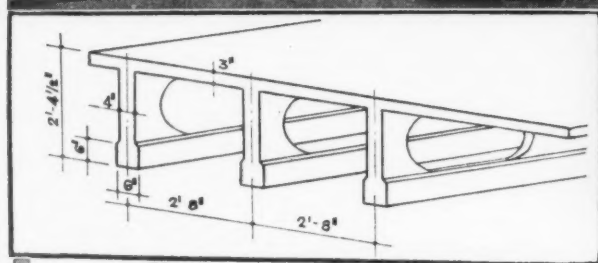
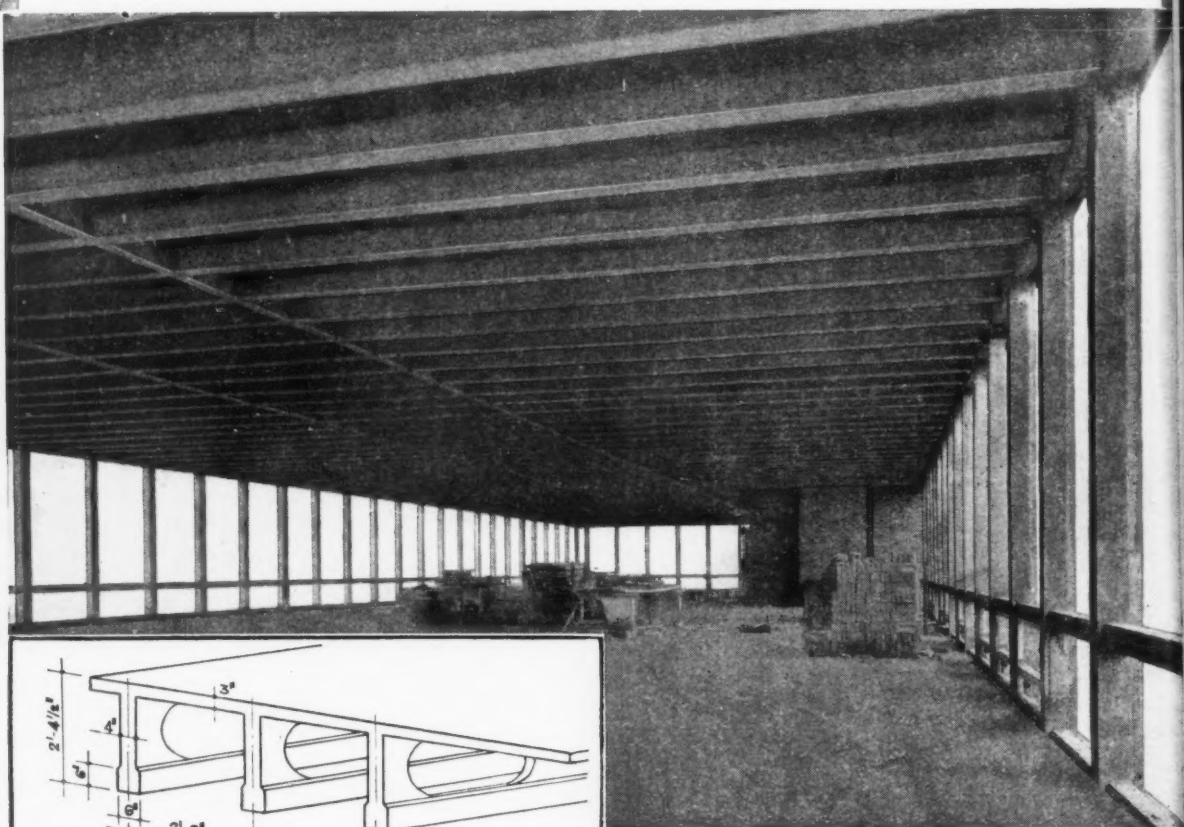
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