

THE ARCHITECTS' JOURNAL



standard contents

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

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

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley," Castle Hill Avenue, Berkhamstead, Herts.	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Langham 5721
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association. 34/36, Bedford Square, W.C.1.	
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Langham 8738
AScW	Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.1.	Grosvenor 4761
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BATC	Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1.	Reliance 7611, Ext. 1706
BC	Building Centre. 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.	Perivale 6869
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Flaxman 7766
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRDB	British Rubber Development Board. Market Buildings, Mark Lane, E.C.3.	Mansion House 9383
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
BTE	Building Trades Exhibition. 4, Vernon Place, W.C.1.	Holborn 8146/7
CABAS	City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Borough Architect, Town Hall, Newport, Mon.	Newport 3111
CAS	County Architects Society. C/o F. R. Steele, F.R.I.B.A., County Hall, Chichester.	Chichester 3001
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CCP	Council for Codes of Practice. Lambeth Bridge House, S.E.1.	Reliance 7611
CDA	Copper Development Association. Kendalls Hall, Radlett, Herts.	Radlett 5616
CIAM	Congrès Internationaux d'Architecture Moderne. Doldertal, 7, Zurich, Switzerland.	
COID	Council of Industrial Design. Tilbury House, Petty France, S.W.1.	Whitehall 6322
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W. Sloane 4280	
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
CVE	Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1.	Reading 72255
DGW	Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
DPT	Department of Overseas Trade. 35, Old Queen Street, S.W.1.	Victoria 9040
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns, S.W.1.	Sloane 2837
FASSC	Federation of Association of Specialists and Sub-Contractors, 5, Arundel Street, Strand.	Temple Bar 6633
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FPC	Federation of Painting Contractors, St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4041
FS (Eng.)	Faculty of Surveyors of England. Buckingham Palace Gdns., S.W.1.	Sloane 2837
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
GG	Georgian Group. 27, Grosvenor Place, S.W.1.	Sloane 2844
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 5615
ICA	Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215

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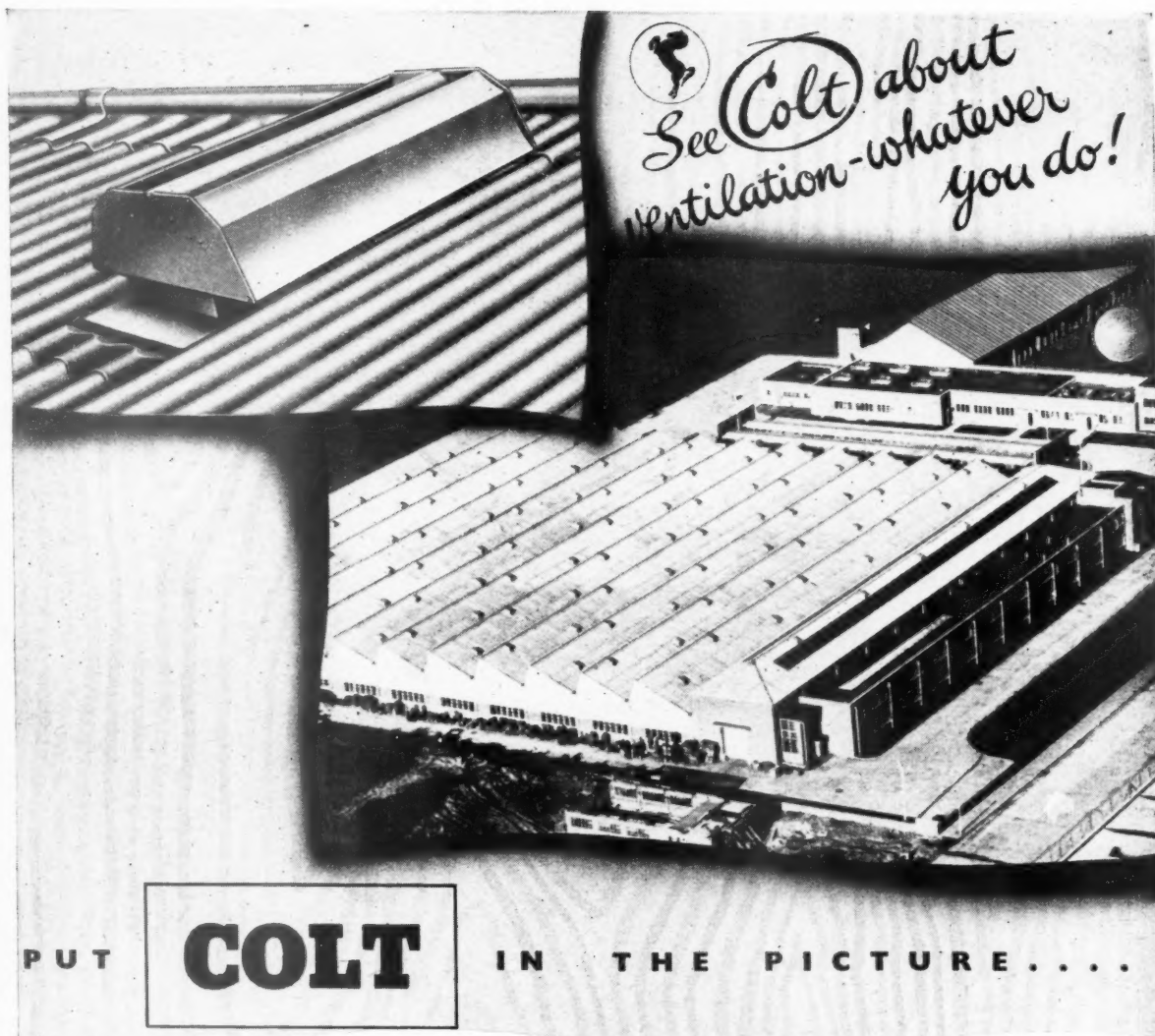
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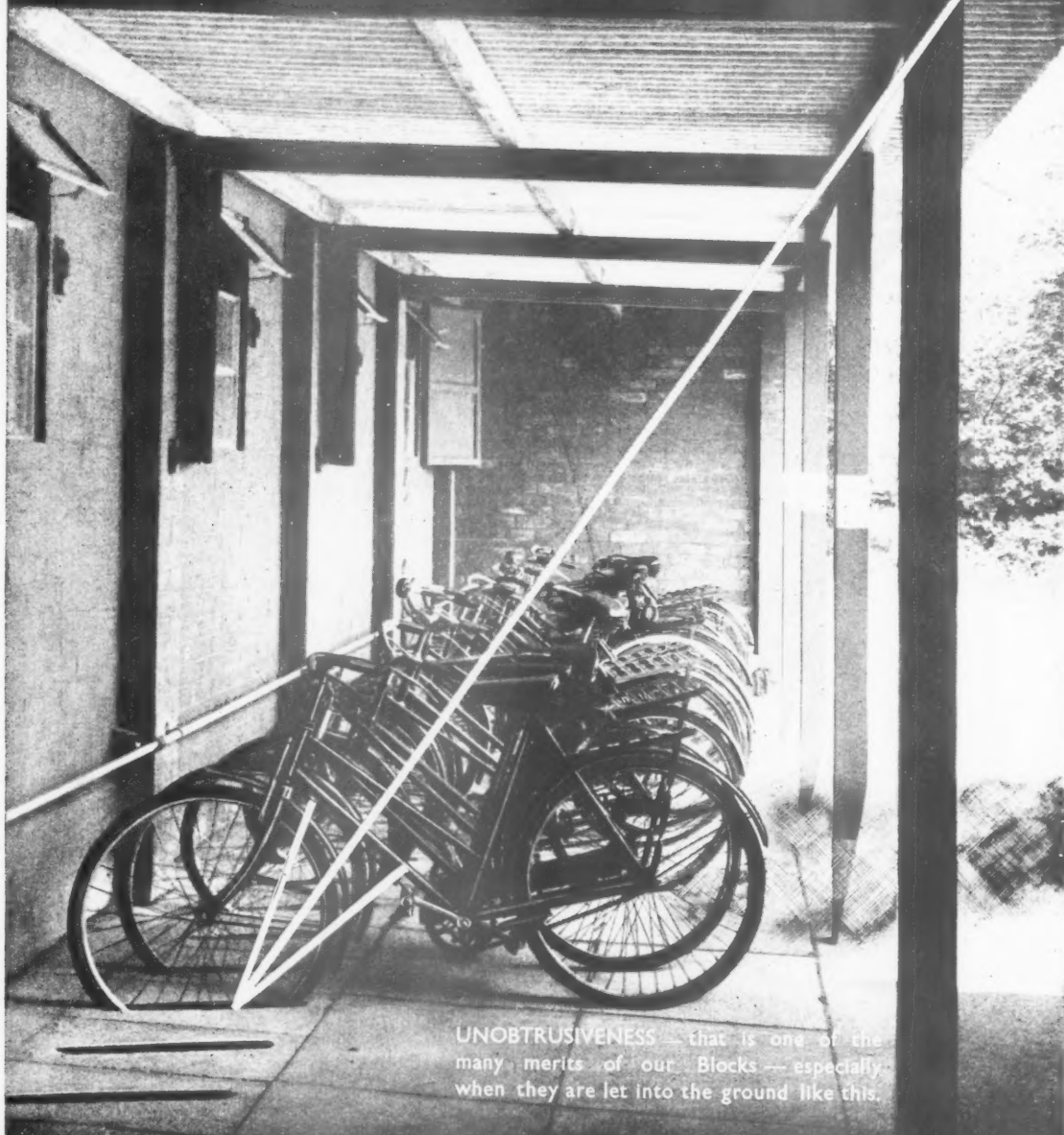
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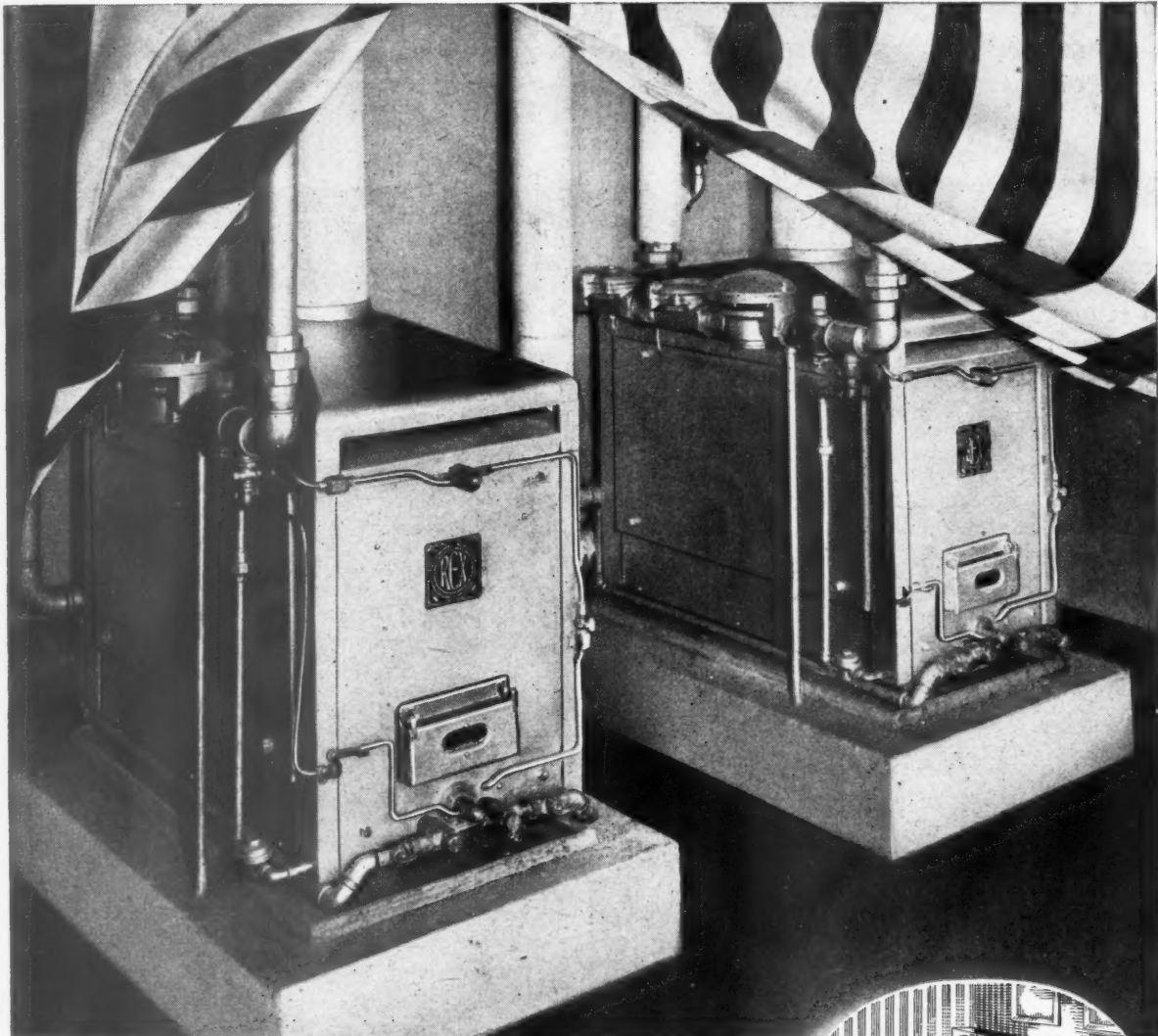
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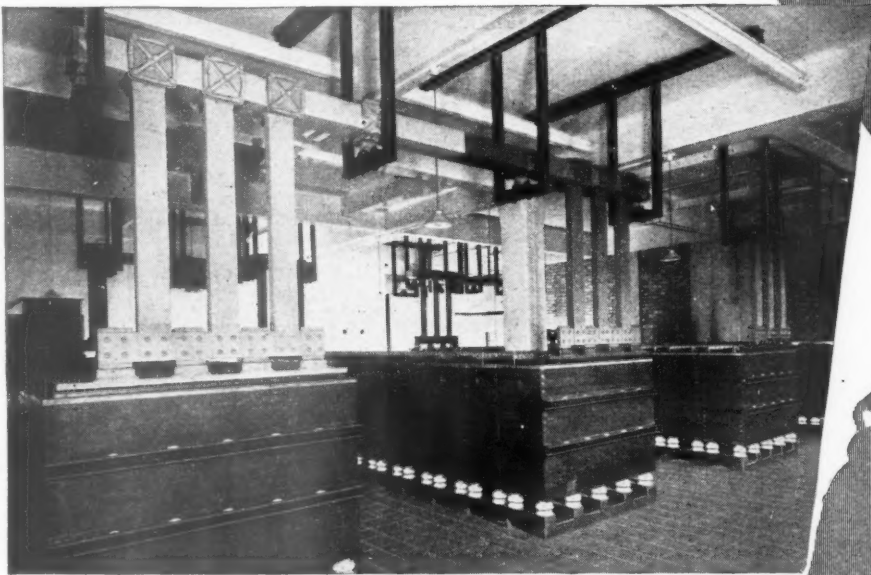
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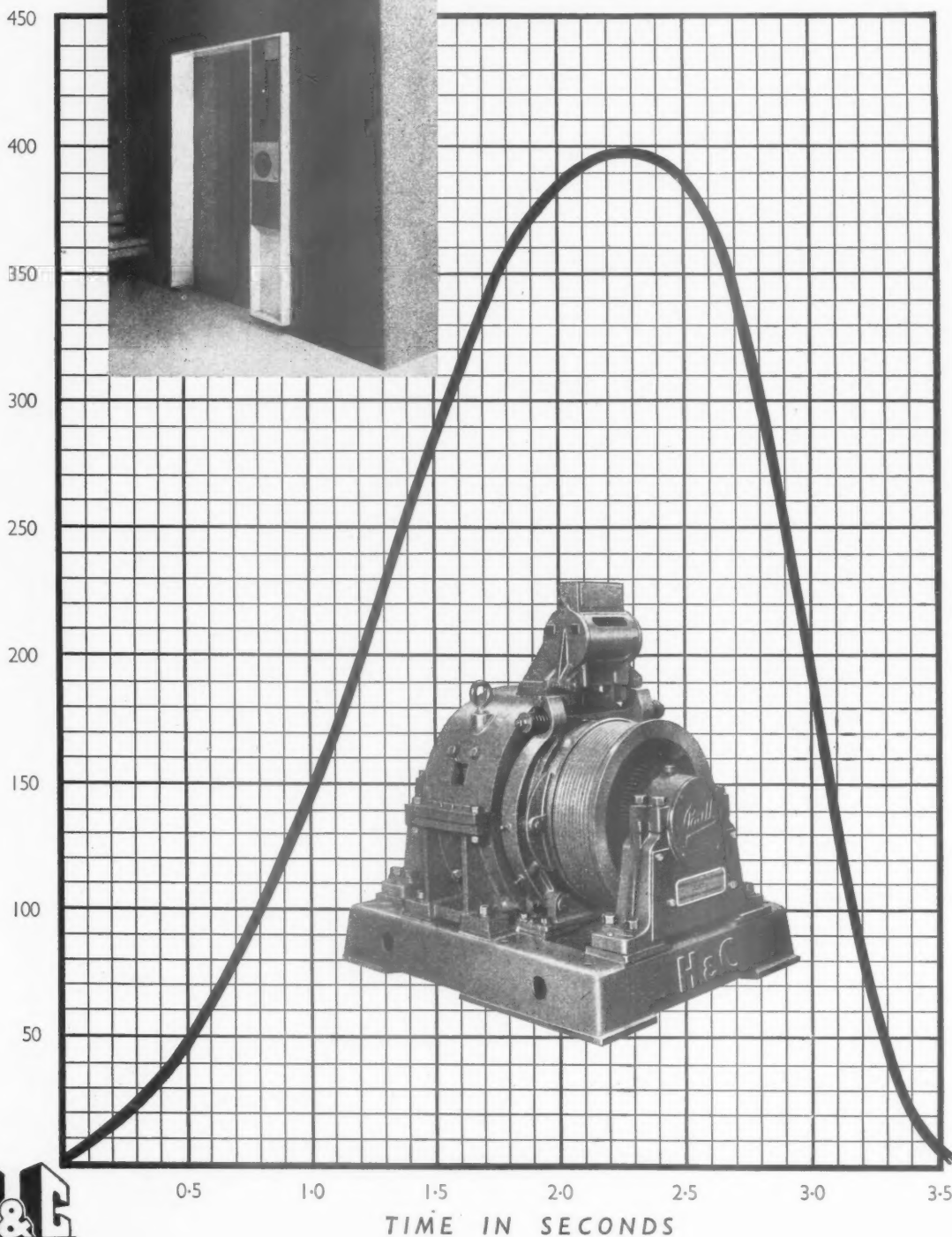
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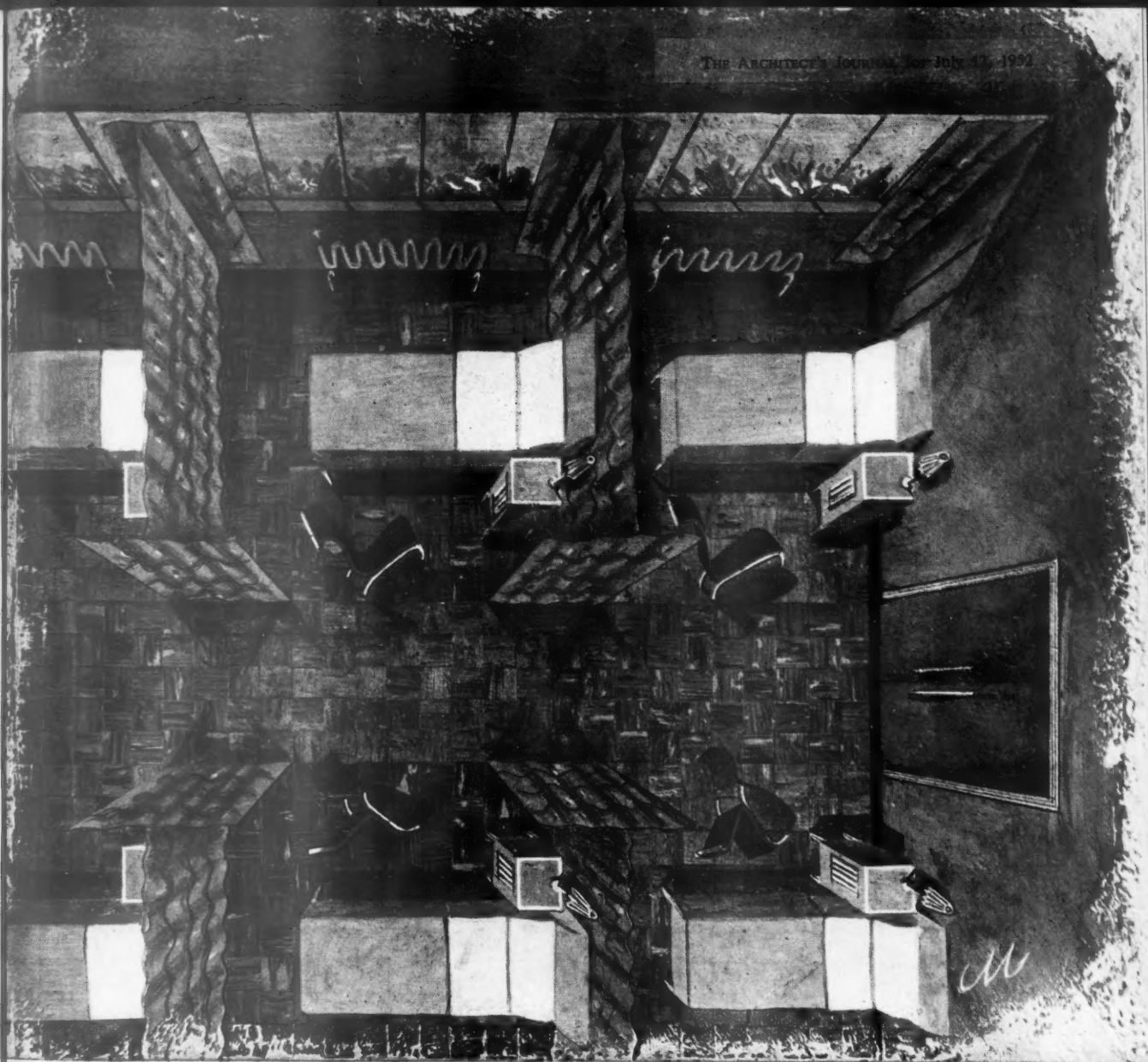
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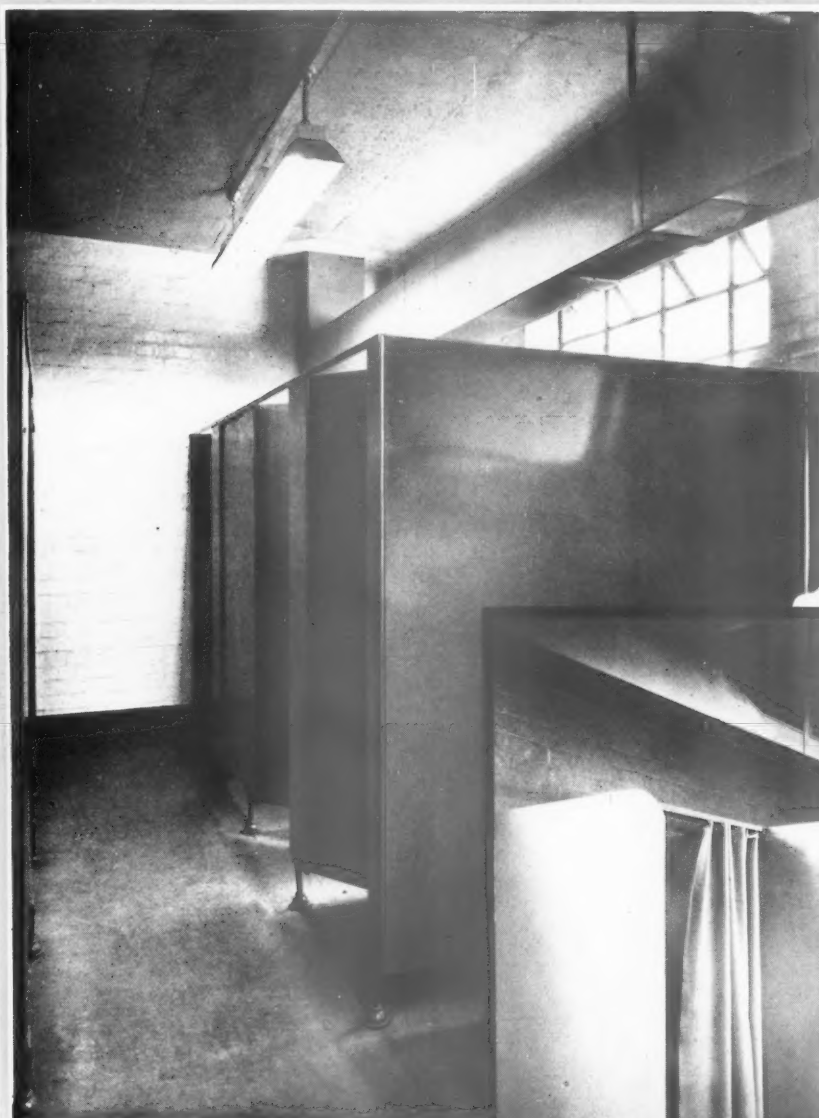
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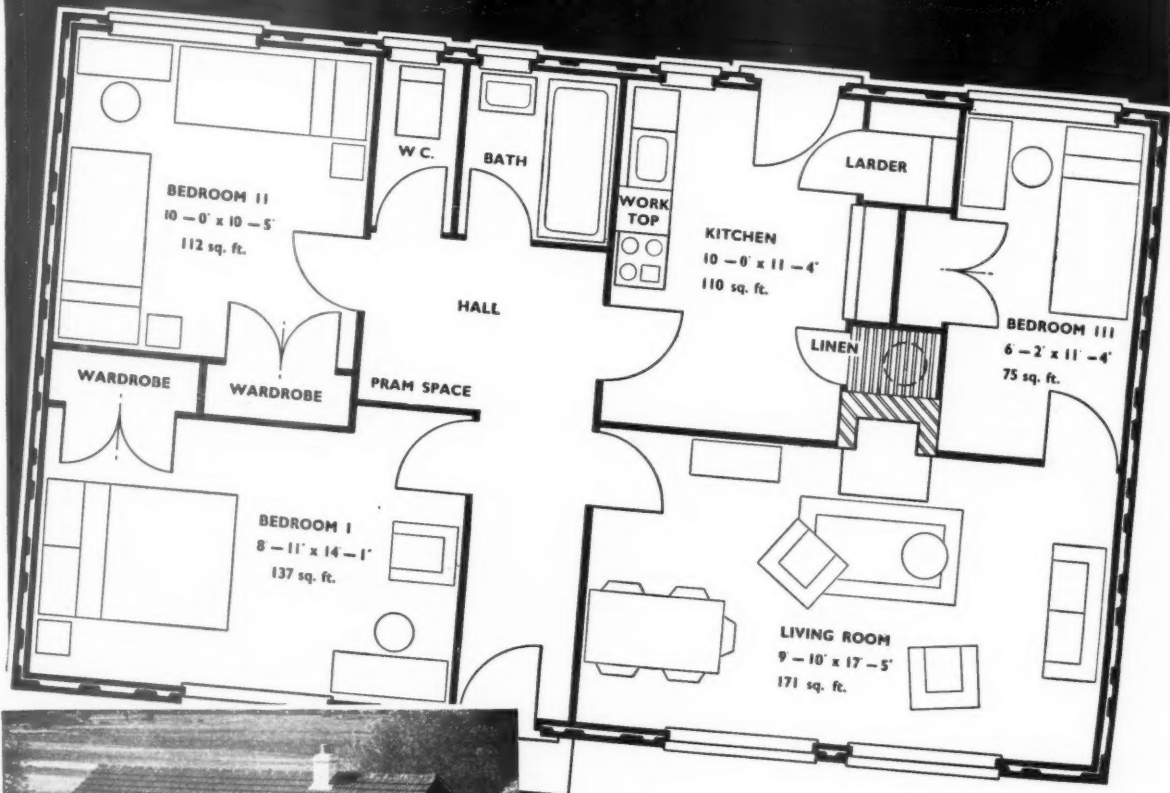
On Right: Flexometal combined bathroom and shower bath cubicle at above.

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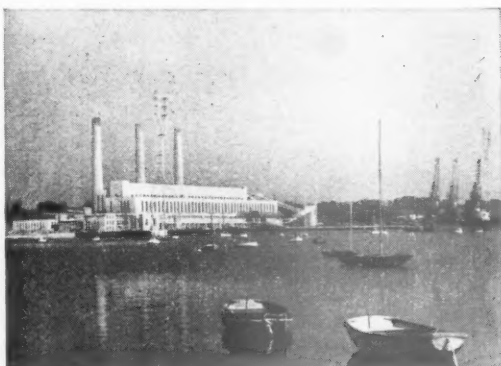
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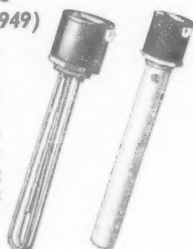
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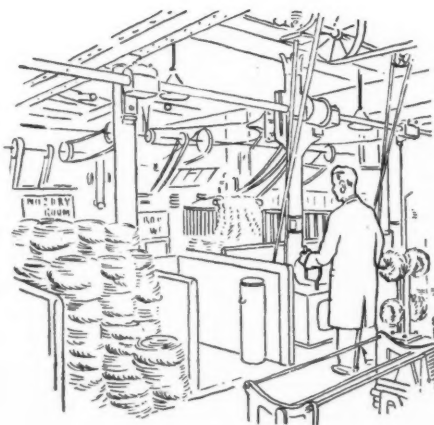
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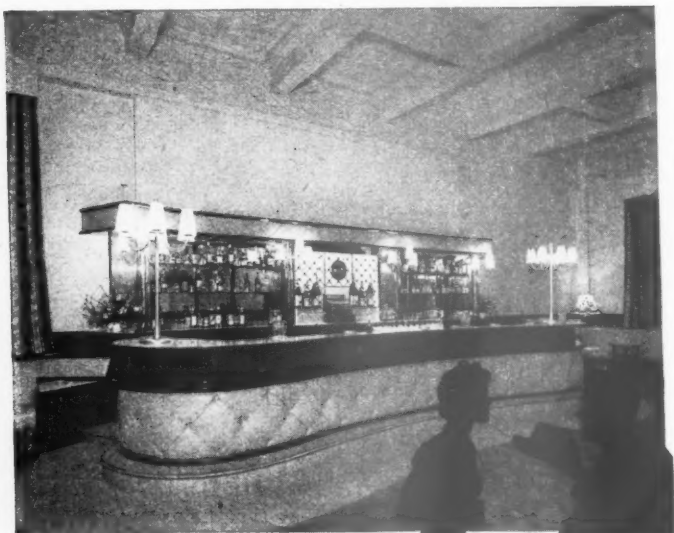
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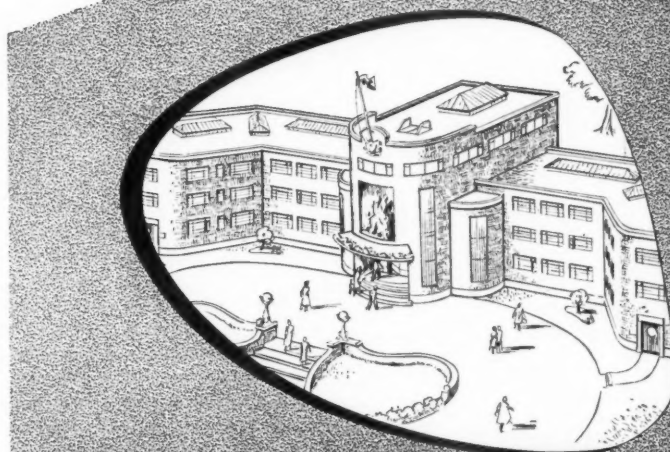
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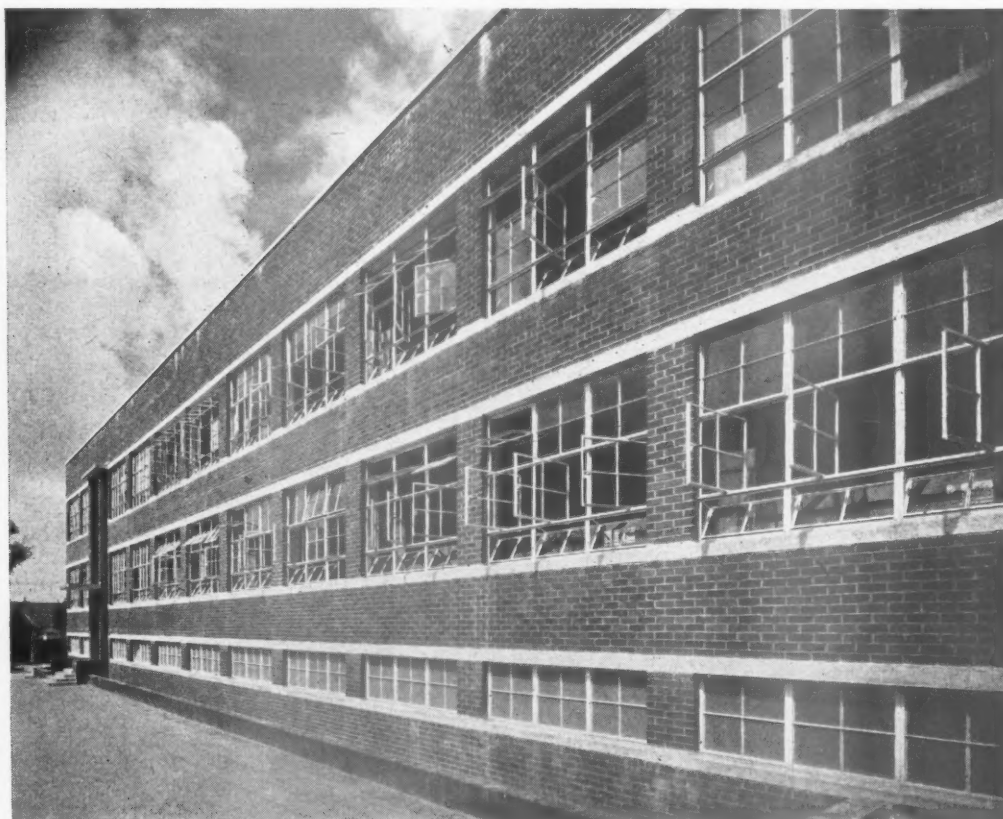


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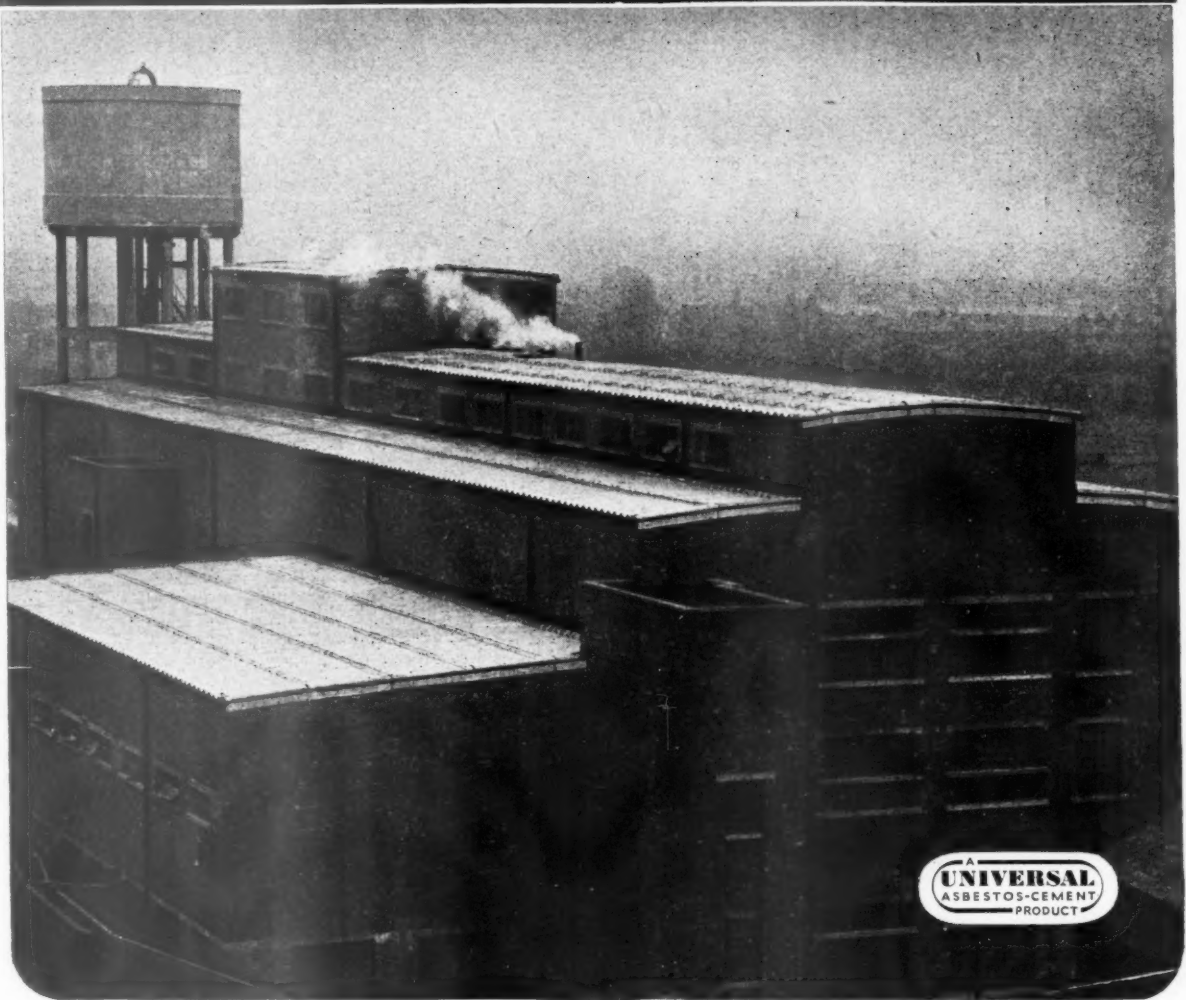
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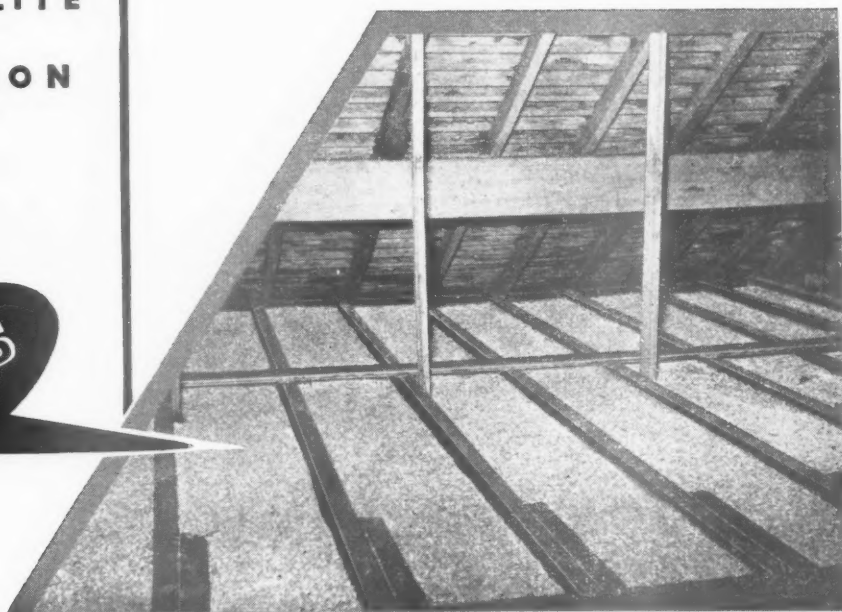
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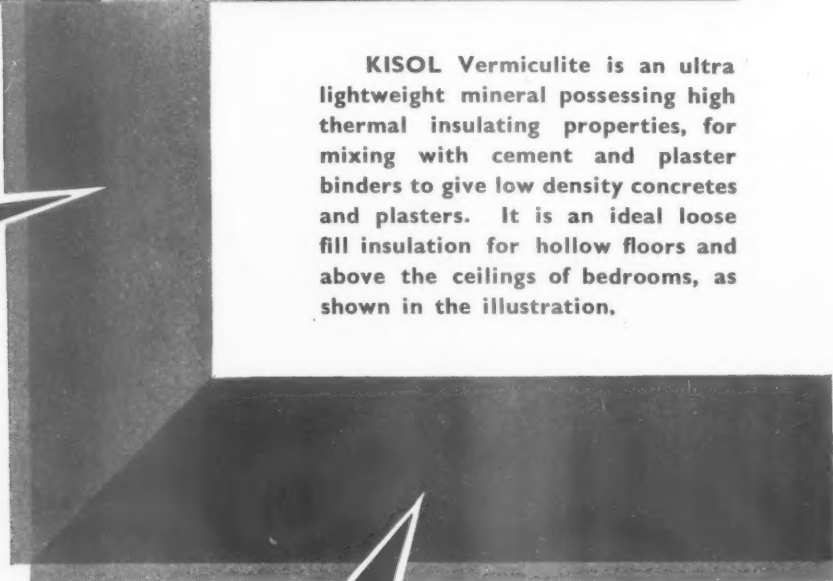
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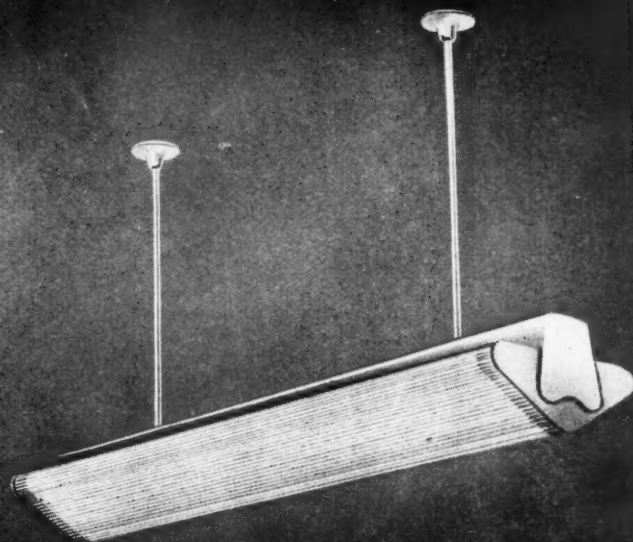
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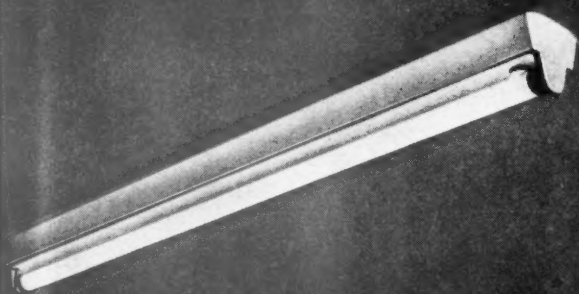
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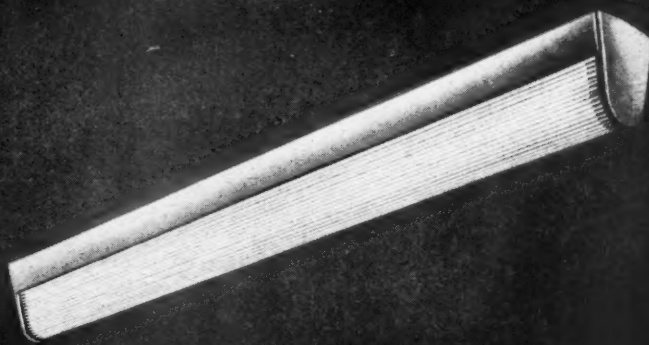
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T417 Ceiling. Type: open batten direct light. Finish: stove enamelled off-white. Control gear: with starter switch or Quickstart unit. Lamp: one 4-ft. tubular fluorescent.



T418 Ceiling. Type: diffused general light. Finish: stove enamelled off-white. Perspex: 1 in. internal reeds. Lamp: one 4-ft. tubular fluorescent. Control gear: with starter switch or Quickstart unit.





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Illustration shows the roofs of the assembly hall and classroom block. Jointing is by means of the conical roll. Above: Back gutter and stepped flashing to large chimney stack. County Architects: Simpson Low, A.R.I.B.A. Roofing Contractors: Builders Iron & Zincwork Ltd.



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Photographs: D. B. Whitfield, Nairobi.

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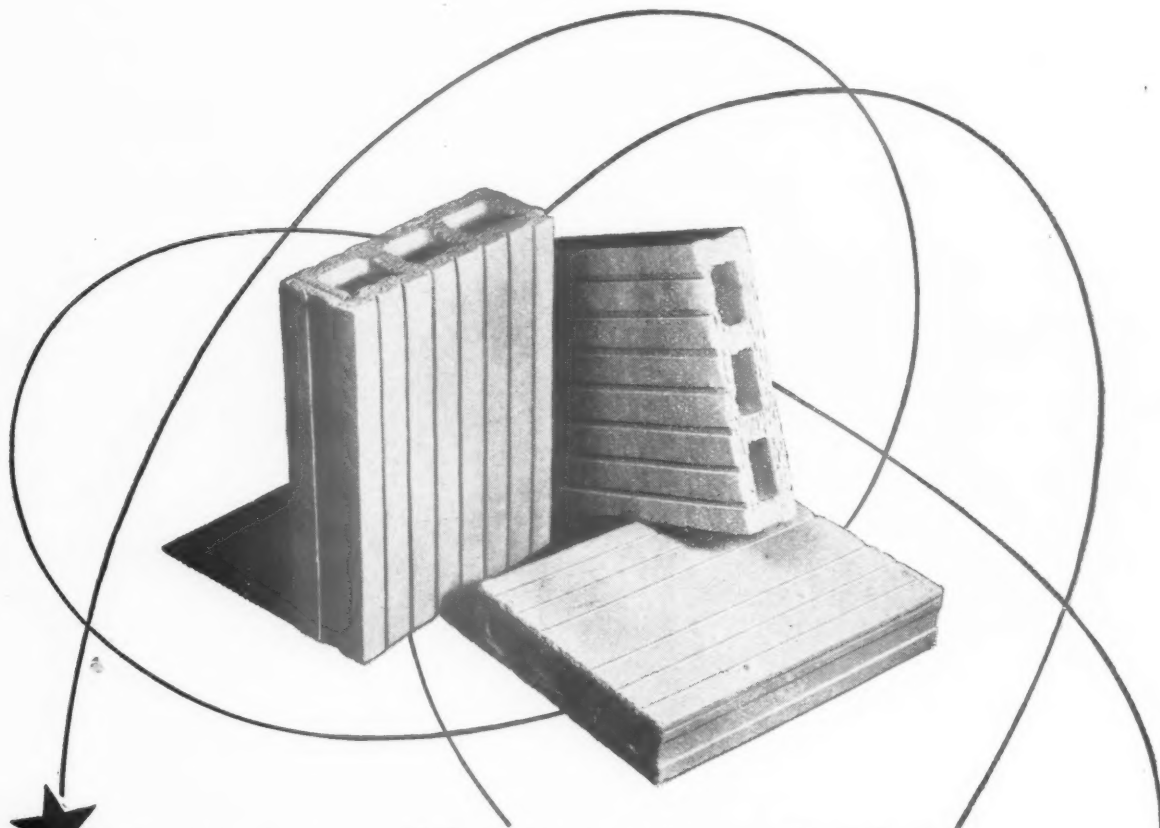


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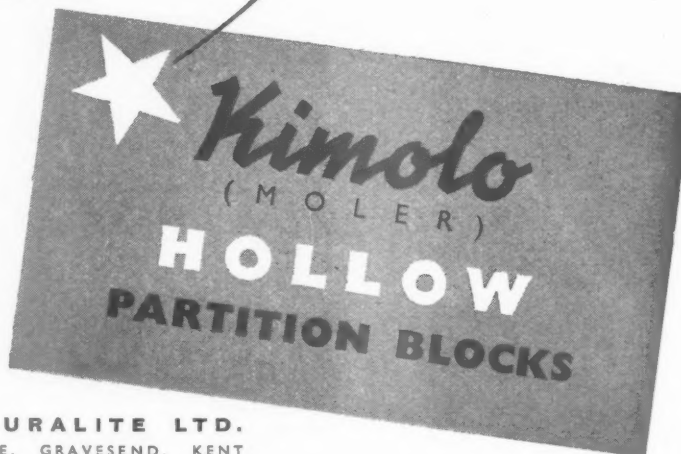


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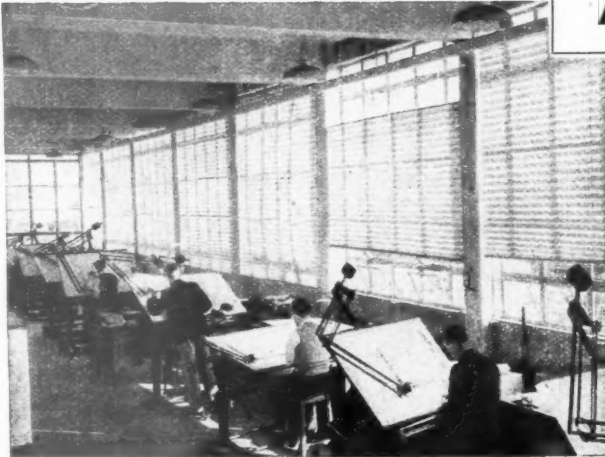
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*Lantern Lights on the Birmingham G.P.O.
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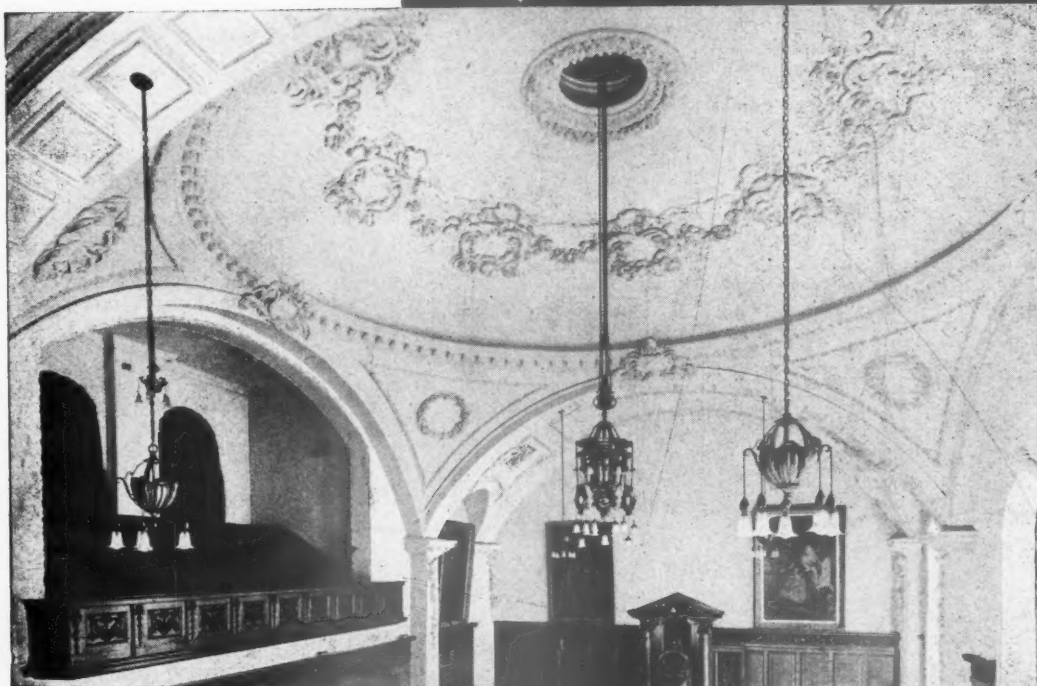
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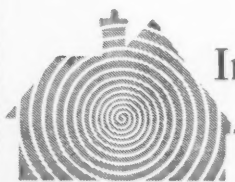


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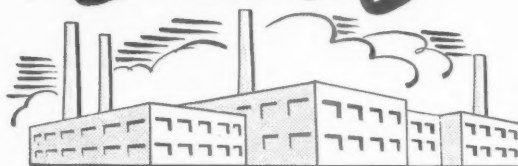
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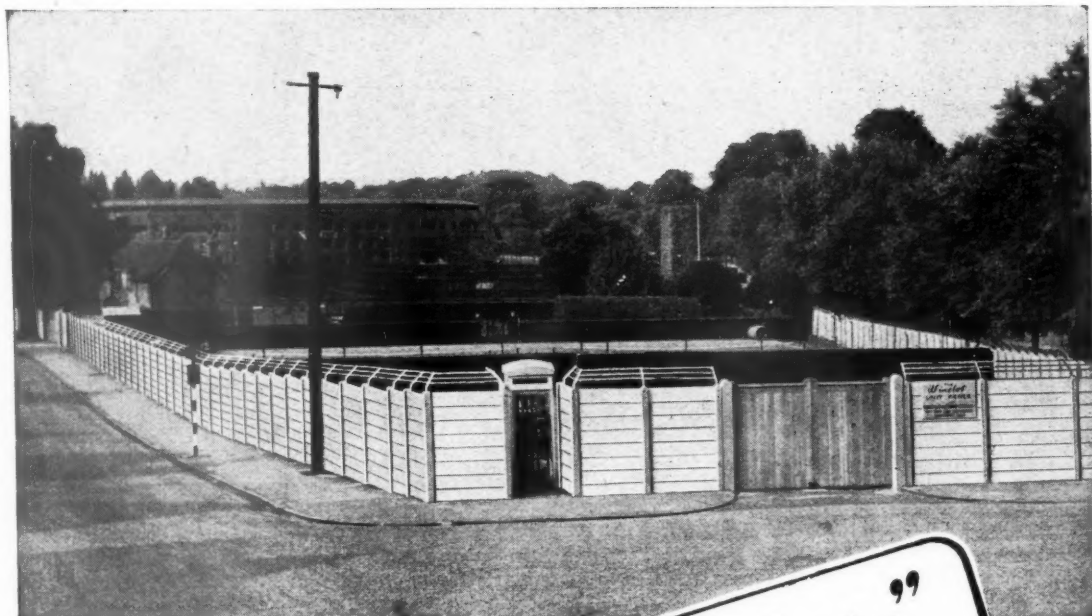


Full descriptive literature
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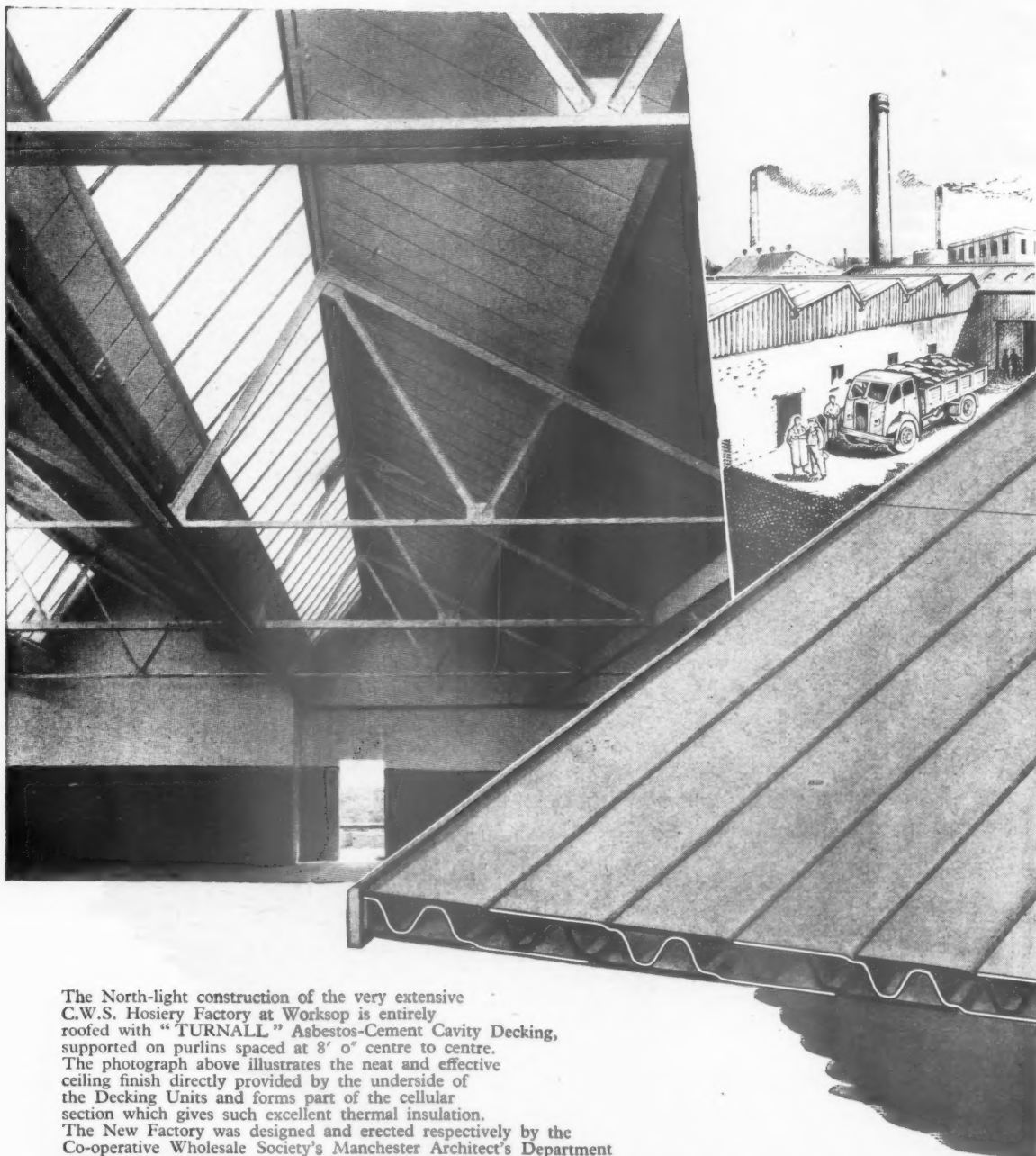
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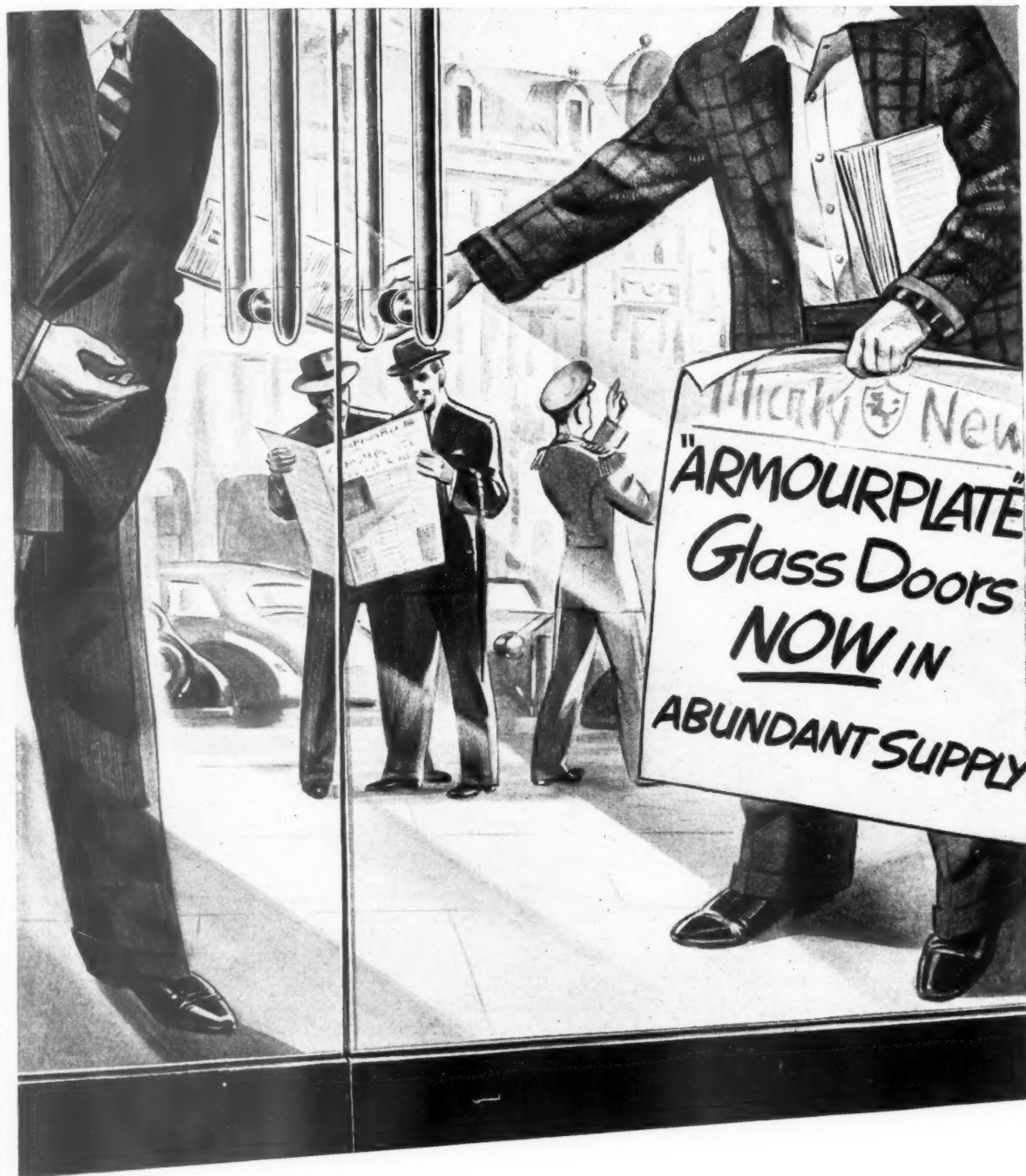
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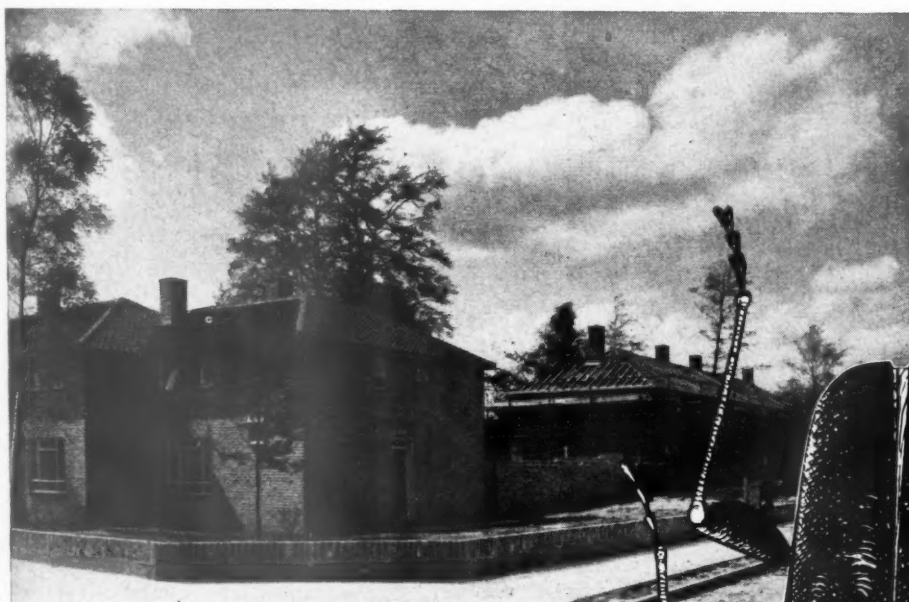
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GC.18

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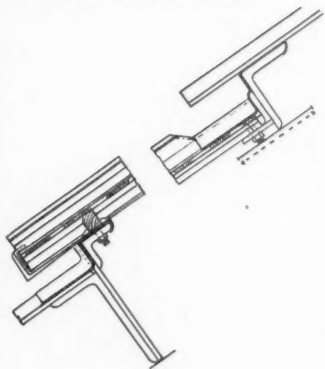


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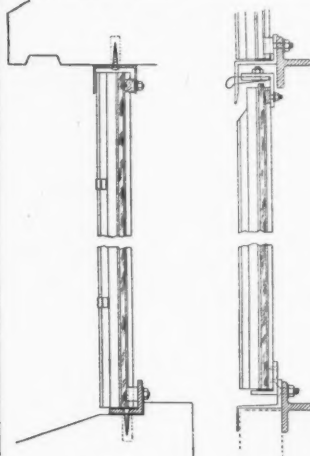


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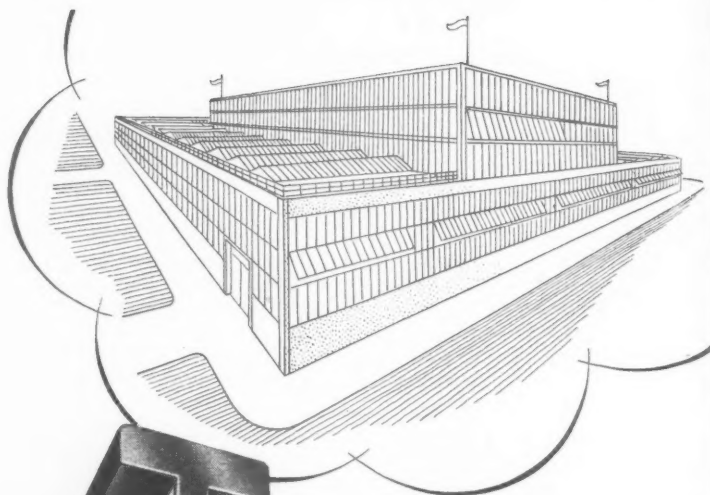
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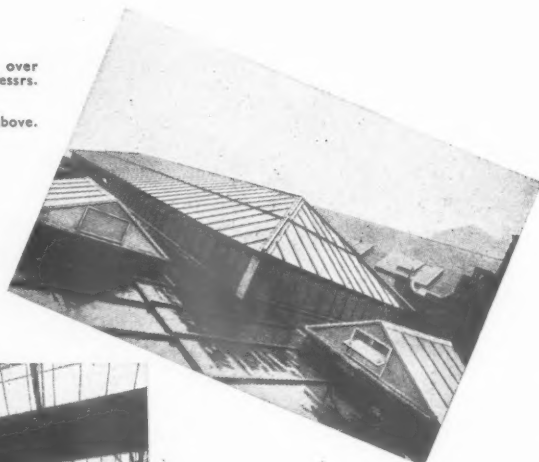
PENNYCOOK PATENT ROOF GLAZING



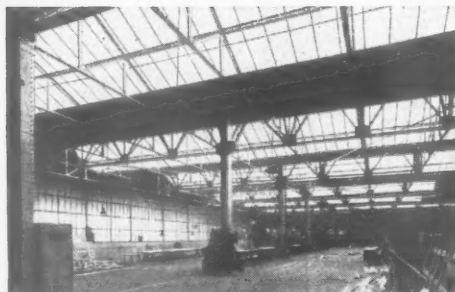
RIGHT: Lantern Lights over Drawing Office of Messrs. Bodec Ltd., Battersea.

LEFT: Interior view of above.

BELOW: Roof Glazing over Joiners Shop of Messrs. Harland Wolff Ltd. North Woolwich.



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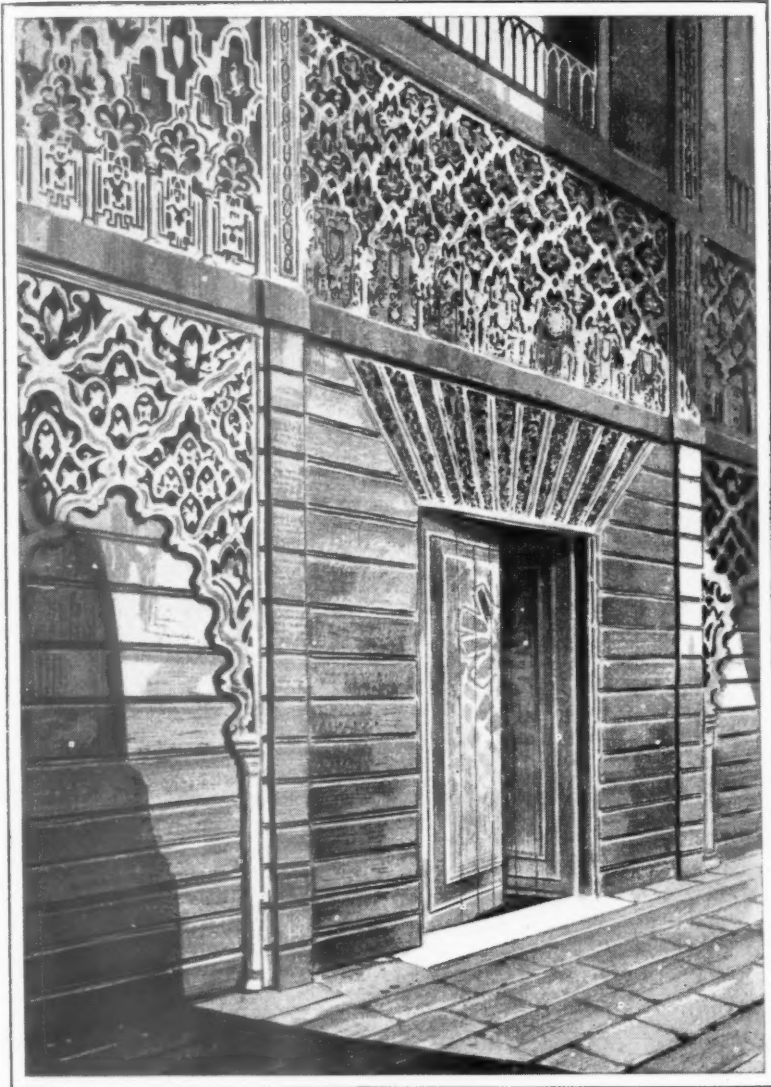
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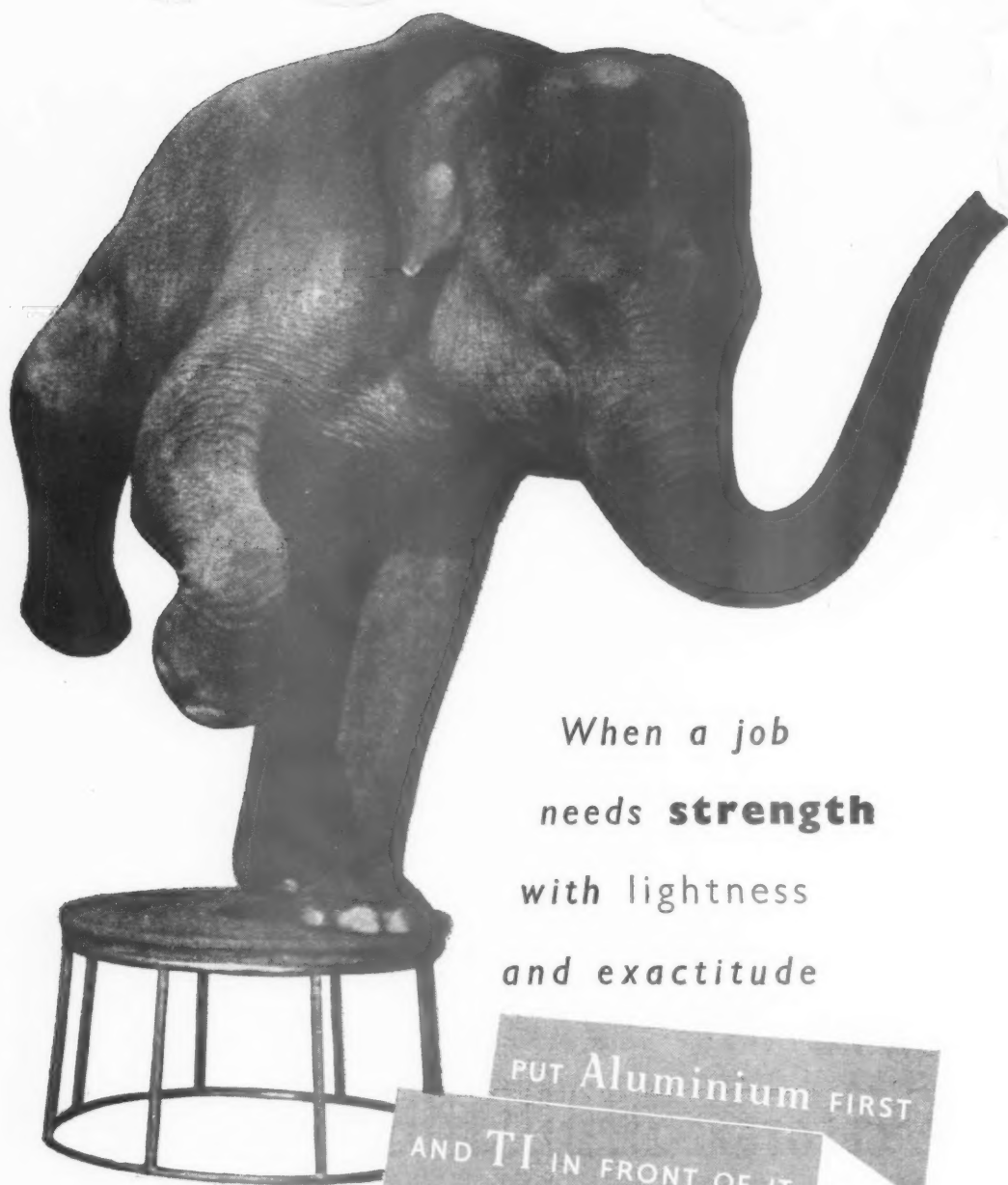
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THE ARCHITECTS' JOURNAL

No. 2994 July 17, 1952 VOL 116

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US AUSTERITY

No doubt the eye-catching headline is a useful way of making readers concentrate on dull woggles of text. But it can lead to disappointments. Look at that one on page sixty-seven this week. "Cunard: Architect to Design Furniture." Fresh news? Read on and you will find that the architect, E. C. Leach, is already the company's decorative architect. Nevertheless, my hopes of seeing a really good ship interior have risen considerably in the last few days. Although he has not yet managed to see the new American liner, *The United States*, he is encouraged by reports of austerity in design and of the absence of inflammable draperies and other decorations.

As even the bandmaster's baton is a light alloy tube—not inflammable wood—there seems a good chance that much of the palm-court ornament that usually clings to luxury transatlantic liners may have been thrown away. Shipping correspondents have had little to say about the new ship's interior. Perhaps that is a good sign. Let us hope the interior is as pleasant as austerity and safety-measures *could* make it.

AMERICAN VISITORS . . .

The United States is, of course, not the only visitor from the United States at this time of the year. ASTRAGAL knows of at least a score of American architects who are visiting us on their way to the continent or have popped across to see what we are up to. He was pleased to find a couple of them on his doorstep the other day. One was Vernon De Mars, of Farm Security fame, who comes from California, where he teaches at Berkeley University and plans San Francisco; the other was Professor Carlhian, from Boston—an expatriated Frenchman now teaching at Harvard and practising in Boston.

. . . AND A NON-VISITOR

How pleasant to show these and other American visitors our parks, clubs and terraces in the blaze of an unEnglish summer. And how thankful one is for an excuse to mop the brow when such visitors look politely through some of our post-war London buildings, or ask on what date we shall be importing the Frank Lloyd Wright exhibition. You have probably heard that we cannot find the space or the money to show this exhibition, which has been to Florence, Munich, Zurich and Paris. But you will lower

your glistening brow in shame when you hear of the rumour that FLW's exhibition will be accommodated in Ireland. Couldn't a big department store have financed the show?

WRIGHT AND WRONG

Incidentally, after allowing two weeks to pass without bridling, ASTRAGAL must defend himself against the correspondent who, in branding him as a testy old man, produced evidence which included "snivelling" at Wright.

Hateful as it is to turn upon an ungrateful child with "after all I've done for you," ASTRAGAL must admit to trying hard to get the exhibition over here (he has plenty of space, if no money). No dear sir, whose name escapes me, this column has not snivelled—though it reserves the right to criticize. There is, of course, a party line to be toed among certain of the Master's followers; but their idolatry has seldom improved their architecture. Isn't it true that people like Neutra, Philip Johnson and Mies Van Der Rohe—who have admired without worshipping blindly—have understood FLW more than anyone?

HARVARD HARD UP

Before leaving America let me give you a thought for the week, fifty-two weeks earlier than you expected it. Who will succeed Professor Walter Gropius in one of the key positions of architectural teaching? He has decided that his resignation from the position of head of the school of architecture at Harvard University shall take effect from the end of this term—not July next year. There is plenty of speculation about his possible successor, but no facts.

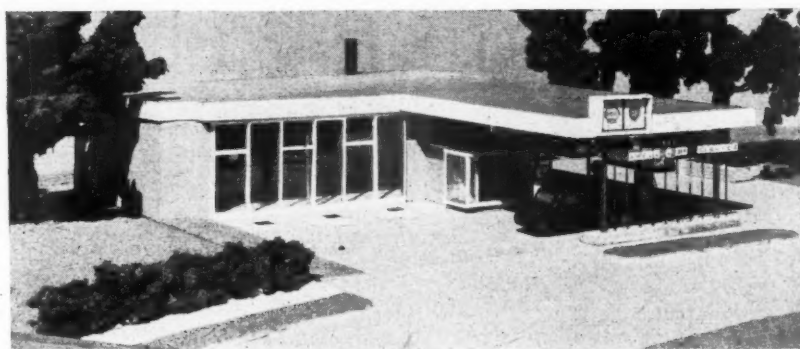
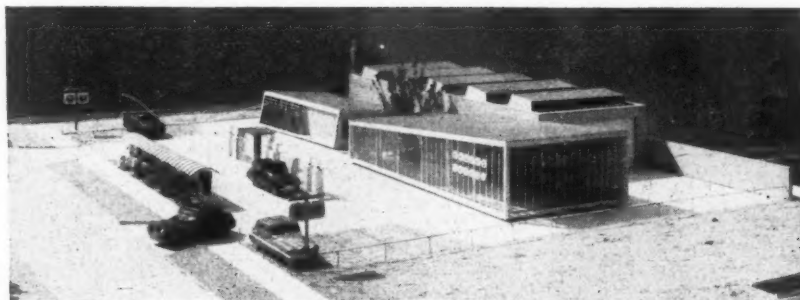


THE MODERN WINDOW

*is fitted with friction hinges
has no stay to clutter the cill
never slams : will not corrode*

HOPE'S

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These photos are of the second prize-winning designs in the Shell-Mex and BP competition. (The first winning designs were illustrated last week). Top: main motorway service station; designers, Alan Reiach, Ralph Cowan and T. R. Spaven, A/A/A. R.I.B.A. Right, centre: suburban station by G. H. Fletcher, A.R.I.B.A. and R. T. Miller, B.Arch. (Dunelm). Right: country station by G. M. Crockett, A.R.I.B.A.—winner of first prize in the main motorway section.

BRUSH UP YOUR FURNITURE

"Where's today's *Times*?" "I left it on the girandoles with the milk."

Have you always wanted to use sparkling dialogue like that in your home. Are you tongue-tied because you don't know the difference between a tester and gumbry? What is the whatnot that's not what it used to be? Although the bardolators among you know who was harassed behind the arras, do you know what an arras is? If you (a) have; (b) are; (c) can't say, and (d) don't know, then John Gloag is the man for you. From this prolific author of novels and books on design has come *A Short Dictionary of Furniture*.*

Of course, such a dictionary, to be any use, has to be an illustrated historical encyclopædia. And once one has got

thus far, materials, craftsmen and designers, processes and certain terms which are shared by furniture and fixtures tend to creep in. Mr. Gloag does not allow them to creep in. He welcomes them, marshals them all in firm squads, and adds, for full measure, a list of reference books.

This is a fascinating book. ASTRAGAL looked up all the words he had long wanted to use with confidence, and is going to be a great success somewhere if he keeps clear-headed. There are 640 illustrations, all of them excellent. They include, as they should, a number from *Punch*.

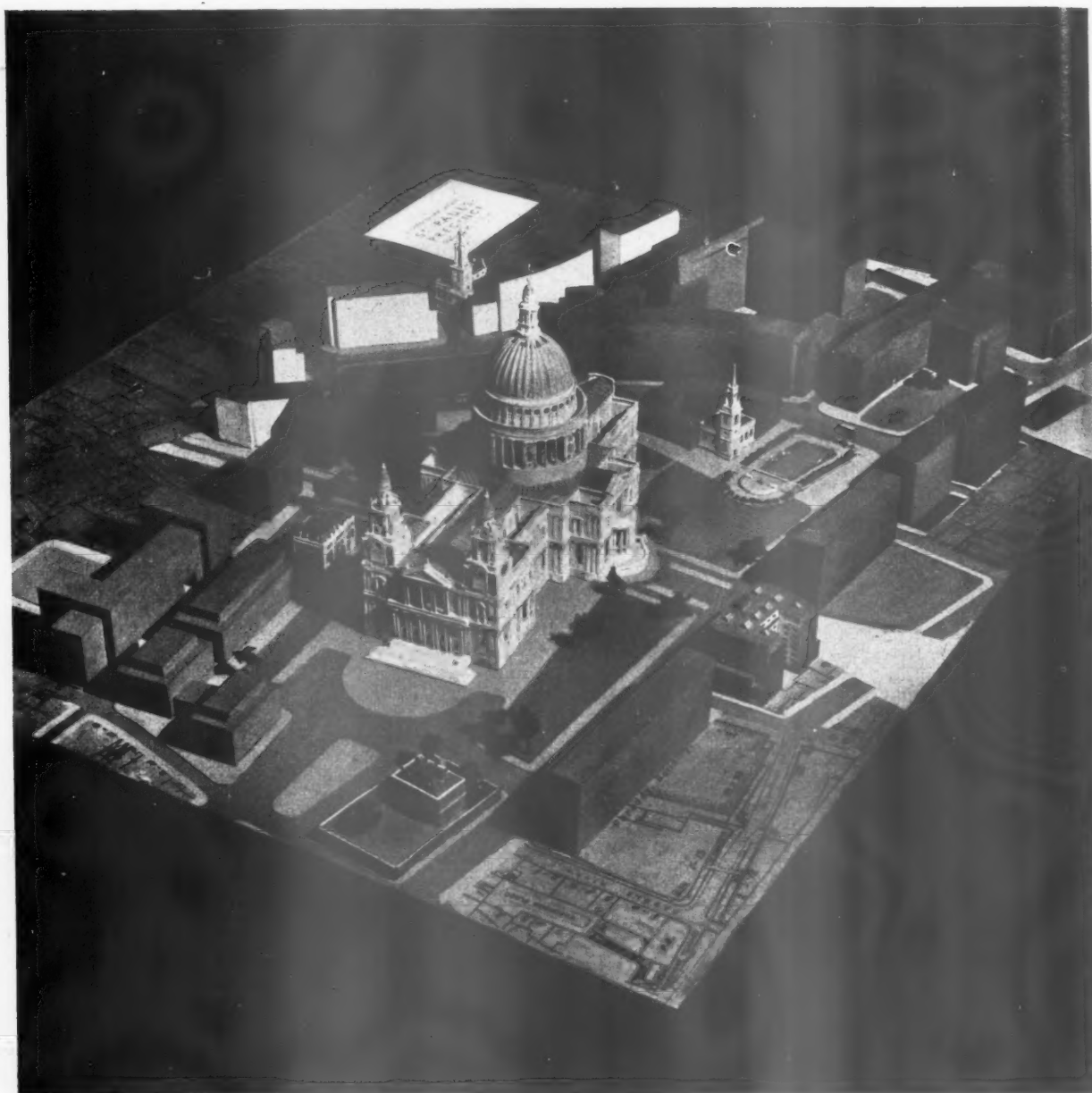
THE AA EXHIBITION

The AA School not only survives changes of regime, it flourishes on them. If it ever achieved stability something would be wrong; in architectural education one is not learning

to cope with a stable world. We are invited in a leaflet to examine the curriculum. One finds that while it is difficult to devise a curriculum at all, it is almost impossible to do so for the Third and Fourth Years. The Theses, presumably, need only a guiding hand.

The First Year Curriculum has, for two or three years now, been acquiring a family likeness to Gropius's Basic Art Course and is both the liveliest and soundest part of the show. The Second Year village schemes, which form the basis for the design of various small buildings, are excellent. I hope the RIBA will not, as rumoured, blunder in and ask for this programme to be changed. A village is *not* more difficult to design than a cottage—only different—and the programme compels the student to design his little buildings—cottage, pub, village hall, etc.—as part of a whole. No, it is somewhere

* George Allen & Unwin, 42s.



Development Around St. Paul's

Another stage has been reached in the preparations to put the Holden-Holford City of London plan into operation. Last week the Court of Common Council agreed to let on building lease, for 99 years, land to the east of St. Paul's Cathedral and south of Watling Street, forming part of Redevelopment Unit No. 1. The City Corporation has also agreed to treat the unit as first priority in supporting any building licence application. The land which the Corporation has agreed to lease is the small island site immediately beyond the Memorial Gardens, designed by Prof. A. E. Richardson, and the little St. Augustine's Church. An inverted "L"-shaped building is planned for the site so that a fine view of St. Paul's may be pre-

served. This view is the famous one from the south-east—the view that can be obtained from anywhere in Cannon Street. There will certainly be the liveliest public interest in the designs for the building which is to be put up on this site—and also for the building on the much larger site to the north, the next site to be developed. It is to be hoped that the outline plans for these new buildings will be published before it is too late for the public and the profession to make their comments on them. (Another aspect of the scheme, which is discussed in a leading article opposite, will be of interest to readers. This is the new approach made by the City Corporation to the problems of administration in war damage restoration.)

in the Third and Fourth Years that the fundamental problems crop up, and are not yet solved.

Aesthetically there is a wave of formalism. This may not be an answer to contemporary problems but—for a student exhibition—there is an astonishing consistency about it. There would seem to be tough technical argument going on, but actually agreement on aesthetic issues!!! For the time being! As usual, the working-drawings are good; as usual, since they lack glamour, they are not spread over the screens; and so, as usual, their existence will be denied.

ASTRAGAL often wonders if the word "architect" will exist in 1970; the AA, whether in assembly drawings for components or in regional planning, recognizes this unknown future. The problem is terrific; by stabilizing on conservative lines Michael Patrick could avoid it, but he has shown that he does not intend to. The current exhibition of students' work is a good one.

DERBYSHIRE DAY

Until recently Chatsworth was a gap in ASTRAGAL'S vocabulary. But the other day, when he was returning from a Highland fling, he decided to diverge from the Edinburgh-London road and fill that gap.

Here, on a fine afternoon in the middle of the week, twenty-six char-a-bancs and some hundreds of cars had spilled visitors from the great industrial north on Paxton's lawns. The cascade and the fountains, stimulated by many half-crowns, were working merrily, and the north and your columnist were fascinated. The winding walks, shaded by so many exotic Paxtonian plants, were as popular as they were lovely. The "Devonshire Art Treasures" were less crowded, but then this "extra" was, frankly, rather small beer. ASTRAGAL was conscious of being a little more esoteric only in his admiration for the Sans Souci-like conservatories, and in mourning over the empty site of the great Crystal Palace prototype. It was all very Albertine, and all in prime condition. But the miracle of Chatsworth is the site—that lordly terraced platform set in the wooded bowl of the Derbyshire Hills. The site is Elizabethan, and it is matchless.

ASTRAGAL

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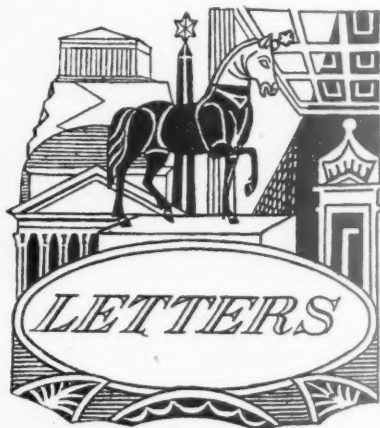
FAIRNESS TO THE SMALL DEVELOPER

AS readers will probably have heard, the next area for redevelopment in the city of London is one to the east of St. Pauls. (For details, see caption to frontispiece opposite.) This scheme is of particular interest because it involves a new approach to one of the problems arising in the financing and administration of war damage restoration. The general procedure for redevelopment after war damage was, of course, laid down in the 1944 Planning Act. When a local authority has acquired the freehold of the "area of extensive war damage" by compulsory purchase, it permits redevelopment by others on the basis of a ninety-nine year lease. The person proposing to develop pays a ground rent based on the value of the cleared site included in his lease.

This procedure allows for variation in detail. Two methods are familiar. The "Lessor" plan, adopted by the MOW in London, is one ; the site is leased, the building is put up by the private developer, and the Ministry, on behalf of the government department, takes a sub-lease of the finished building. The other method is more simple. The intending occupier negotiates for his own lease and carries out the building work himself.

Neither of these methods is fair to the small man who lost his premises through war damage. Although he has as much right to return to his site as his more substantial neighbours, he may not be in a position to finance the building of premises. If the local authority itself does not build offices and shops, and subsequently manage the property, how can it be sure that the small man is fairly treated? Should the small man be at the mercy of the private developer?

This last question has been answered with a firm "No" by the City Corporation. On the St. Paul's scheme it is working in collaboration with the developer. It will have an effective say in the allocation of accommodation, while ensuring that the developer gets a fair rental from the lettings. The details of this scheme will be discussed in a later issue. In the mean time the Corporation of London is to be congratulated on solving this problem.



G. M. Hobbs, A.R.I.B.A.

Ruth Glass

Social Research Unit, Department of Town Planning, University College, London.

M. Gregory, DIP.ARCH. (Sydney)

The Linear House : For . . .

SIR.—I would like to endorse Mr. de Wolfe's thesis of the linear living-space. (AJ: July 3.) I have had experience of it. My wife and I lived in great comfort in a room 10 ft. by 25 ft. approx., from which only the "usual offices" and the entrance hall were excluded. I attribute our domestic bliss partly to my wife's forbearance and partly to the fact that we did not have to begin married life with one of the frozen assets of the standard English house design, namely a bedroom. Divans make up in the daytime into very presentable settees (with a little ingenuity). All snug and cosy with one two-bar electric fire. Why do we go on providing walled-in bedrooms? That is another line Mr. de Wolfe might have tried.

I don't think our one multi-purpose room would have worked with a stair rising from the middle of it. A few minutes scribbling with tracing paper suggests that there are advantages in relegating the stair to the entrance "wing." If it must be inside the house for architecture's sake, couldn't it be circular on plan?—so much easier on the eye, if you catch my meaning.

Nor do I think our one room would have worked if the ceiling had been under 9 ft. 6 in. I think the height of a room is quite important, don't you?

I wonder if it has occurred to anyone else that the "linear house" is rather like a generous double-decker caravan.

G. M. HOBBS.

London.

. . . And Against

SIR.—I beg your pardon, but please keep de Wolfe from our doors. Of course, new ideas on house design are most welcome. They can hardly be of much use, however, unless they are described in plain words. There is always the danger that lay readers of architectural papers, like myself, will suspect that a hideous jargon is the language of muddled thoughts. This suspicion might well be out-dated. It might merely be a symptom of "mental flatulence" or of another disease, caused by "what is quaintly called civilization"—to use one of Mr. de Wolfe's many strikingly unhappy phrases. If that is so, I for one would not wish to be cured.

I would certainly be reluctant to live in a house, the design of which is based on a

sweeping social theory, unfettered by any facts. I would hate to move from the "homescape" to the "Town Square," from the "dual purpose bar" to the "cosy corner." The "Town Square" would be especially annoying. We are told that it is "a multi-purpose space for receiving visitors and callers, dining, circulating and children playing." Presumably while mother tries to decide whether Aunt Prudence is a visitor or a caller, while father has high tea, John smacks Jane and Tommy wets his pants, here amid the domestic circus we would also have to keep on circulating just for the fun of it. The whole house, though it is supposed to satisfy "the eye and its lusts," to rescue us from "long sufferingness," "banality" and many more mean characteristics, is likely to be disappointing. My expectations are not as modest as Mr. de Wolfe's who as "exciting incidents" promises the "visual hazard of the staircase" and a few other odds and ends. Still we can be sure of one delightfully humorous interlude—even if it is unintentional, and therefore does not put the linear house into the same category as the pea-green boat. "As most of us can demonstrate in our bathrooms," says Mr. de Wolfe, "about four feet square of free floor is needed to free the living cadaver from any real constriction of movement."

Is there a dictionary in the linear house?

RUTH GLASS.

London.

A Plea from "Down Under"

SIR.—I write as one from "down under." Thank you for acknowledging the fact that we are at long last heading in the right direction. (AJ: July 3.)

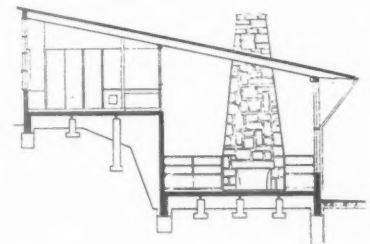
I'm afraid though, that your "example" (two views, no less) of our trends gives the uneasy feeling of being laughed at.

Please would you make amends by publishing one of the more typically Australian houses—i.e. by Hayes & Scott, Baldwinson or the Victorians?

M. GREGORY.

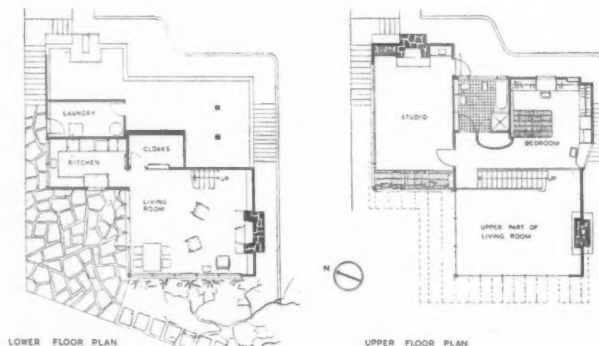
London.

[ASTRAGAL is flattered to find that because a picture appears on his page it is considered a joke. No such joke was intended. To make amends we show here a "typical" Australian house by Baldwinson.—Ed.]



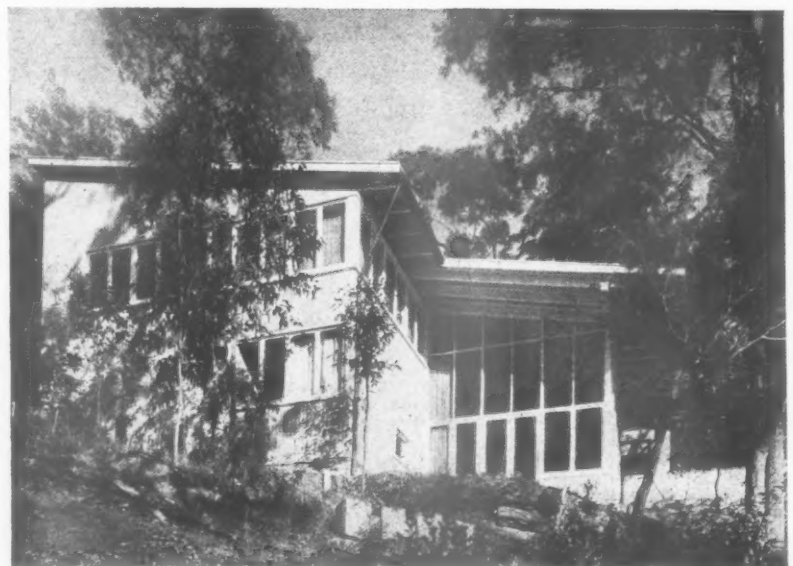
ARCHITECTURE DOWN UNDER

This house, set on a steep hillside at Pittwater, New South Wales, was designed by Arthur Baldwinson. It has a timber frame on reinforced concrete foundation. External walls: vertical weatherboards painted pink to blend with colour of gum tree trunks. Windows and trim, white paint. Roof: large corrugated asbestos-cement.



LOWER FLOOR PLAN

UPPER FLOOR PLAN





RIBA

Hospital Research

The RIBA council is anxious that an independent research organization on hospital building should be set up. On the recommendation of its hospitals committee, it is asking the MOH to receive representatives to discuss the matter. The representatives would be accompanied by members of the Nuffield Provincial Hospitals Trust.

Colour Committee

Six architects are to serve on a committee to discuss the preparation of a "fully co-ordinated" paint colour range. This is a result of a report being presented to the RIBA council from its science committee. This committee had discussed the question with the Paint Industry Colour Ranges Committee and the British Colour Council.

The architects appointed are W. A. Allen, C. J. Epril, S. Kadleigh, J. L. Martin, S. Rowland Pierce and the Hon. Godfrey Samuel.

Further Appointments

Anthony M. Chitty has become the RIBA representative on the council of the British School at Rome. He takes the place of Martin S. Briggs. The other representative on this council is Kenneth M. B. Cross. Kenneth J. Peacock has been appointed RIBA representative on the National Home-Builders' Registration Council for a further term of three years. The other two representatives on this council are C. H. James and A. W. Kenyon.

D. F. Nightingale is the representative on the BSI Committee SAB/8: Chemical Sanitary Appliances.

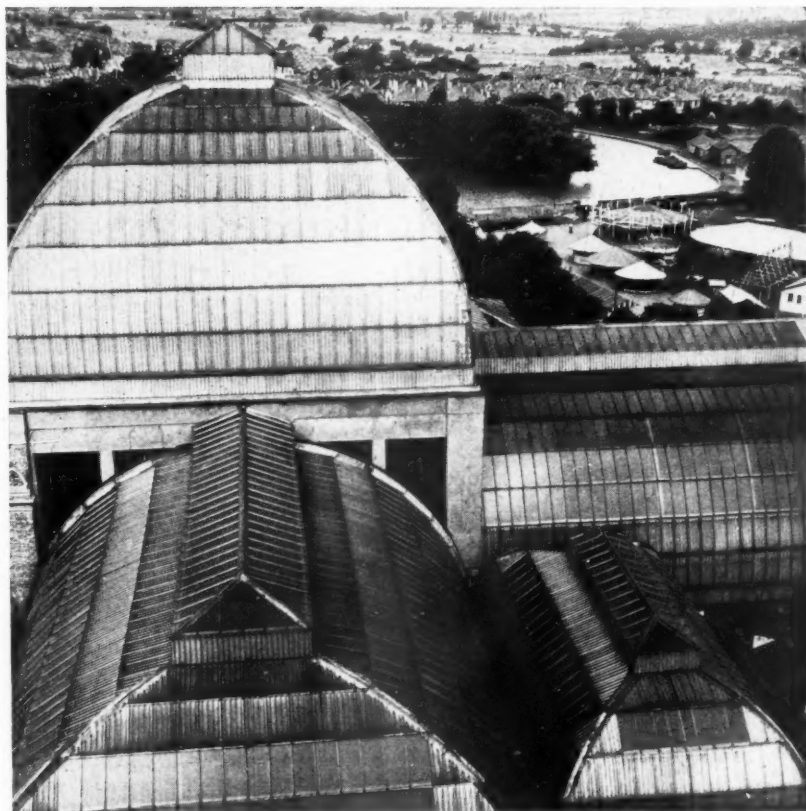
Next Year's Exhibitions

An exhibition of mural painting and one of architectural photography will be held next year at the RIBA's headquarters. The first, in May, will be arranged by the Society of Mural Painters. The second, in September, will be arranged jointly by the RIBA and the Royal Photographic Society. It will mark the centenary of that society.

HOUSING

Figures for May

In May, 19,488 permanent houses were completed in Great Britain. The figure for May last year was 15,869.



The photograph above shows part of the new, part-glazed, aluminium roof over the East Hall of Alexandra Palace. Damaged during the war and subsequently by the weather, the structure of the building has been weakened and the foundations disturbed. The comparative lightness of the new roof will ease the strain on the structure and vastly reduce maintenance costs. (For further details, see "The Industry," page 89.)

Since the war 1,263,993 houses have been completed. Of these 157,146 are temporary.

In Scotland, 2,207 permanent houses were completed in May. The number for post-war houses built is 124,529, including 32,176 temporary dwellings.

He will be assisted by two furnishing superintendents—E. J. Walls, at Southampton, and E. E. Carter, at Liverpool.

STEEL

Productivity Team Report

Last autumn the fifty-third productivity team went from Britain to the United States. Its study of American factory layouts, methods and techniques, working conditions and management in the field of steel construction is the subject of a book just published. This book, which will be discussed later in the JOURNAL's technical section, can be bought for 3s. post free. Applications should be sent to the Anglo-American Council on Productivity, 21, Tothill Street, S.W.1.

CUNARD

Architect to Design Ships' Furniture

An architect has become chief furnishing superintendent of the Cunard Steam-Ship Company. He is F. C. Leach, the company's decorative architect. In taking over the work of S. V. Bilham, who has just retired after thirty-two years' service, he will also continue with his former work.

BC

New Electrical Section Opened Last Week

Opened last Thursday by H. T. Young, chairman of the BEDA's Building Centre committee, the new electrical section at the Centre is very different from the old section at Conduit Street. (It will be remembered that the BC moved last January to new premises in Store Street, Tottenham Court Road.) Instead of being simply a display of equipment and appliances (although there are appliances on show), the new section is primarily a demonstration, imaginatively arranged, of the principles of the installation and utilization of electricity in buildings.

The displays, aimed mainly at architects, surveyors, builders and students, show by means of working models, cut-away sections and other self-explanatory exhibition techniques, various types of wiring and circuits; electric water-heating installations; schemes for electrified kitchens (for houses, schools and cafeterias); and systems of space heating, including an under-floor installation.

There is an interesting device which enables the visitor to compare the effects of different types of light source on various colours, and a large number of colour transparencies depicting lighting schemes applied to the interiors of a wide variety of buildings.



In his letter from Bristol Mr. Wright gives an account of recent news from the building and architectural world in the West of England.

LANCE WRIGHT

Bristol News-letter

IMPROVISATION AT FILTON

In the boardroom of the Bristol Aircraft Company, at Filton, there is a vast scale model of the whole works and airfield. It occupies practically the whole of the rear wall of the boardroom and is tilted at an angle as though to give directors the illusion of being up in one of their own machines—with-out all the bother and distraction. This model, which has the advantage over the original that all the little sheds are coloured differently, according to the date they were put up, shows the energy of the directors in keeping going this vast snowball of human effort. It also bears witness to our great national gift for improvisation. As Filton lies on the outer fringe of Bristol, space has been "no object" and growth has been a glorious process of agglomeration.

The Bristol Aircraft Company had its beginnings in February, 1910, when Sir George White, as chairman of the Tramways & Carriage Company founded a subsidiary firm called the British & Colonial Aeroplane Co. Ltd. But local tradition has it that the real beginnings were earlier than this, when Sir George bought a box-kite machine from a Frenchman and charged the locals sixpence a head to have a look at it.

It would be in line with the Anglo-Saxon taste for small beginnings if the original lean-to which witnessed this showmanship were still preserved. But though we must regret this loss we can make do with the next best—the original Tramway Shed, which still keeps the rain off the heart of this great

industrial process. North, south, east and west of these beginnings were added wave upon wave of northlight truss. Outlying private houses were absorbed easily into the nucleus and were adapted repeatedly to suit works managers, drawing offices or clinics. Filton House, the original Queen Anne Manor, was given a dwarfing addition by Austen Hall and Whinney. Meanwhile the flying school, with its Belfast trusses, started a second nucleus at the far side of the field and was joined by the serried ranks of the engine section. Then the whole complex was smitten by the growth of welfare. Canteens shot out right, left and centre. Then air-raid shelters. And all this time everything else was bursting out of its clothes in every direction, such is the nightmare of growth without form. Last of all, in a third corner of the field, came the Brabazon hangar, which looks on the map as though the model maker had made a colossal error of scale.

Although architects were called in from time to time in the period between the wars to do their conjuring trick on the façades which face the Gloucester Road, the BAC Architects' Department was set up only in the last war. Under the genial leadership of Eric Ross it has done well, and has made many money-saving decisions. But the idea of the architect as the man who is called in—just too late—to cloak an error with seamliness, dies hard.

If the past forty years are anything to go by, it will be a long time before the passer-by on the Gloucester Road has something orderly to look at—particularly as the firm has recently bought up an adjoining laundry. It is also unfortunate that the latest important addition to the site is an £80,000 laboratory which, as it is used for unmentionable things, is concealed in the middle of the site where only the angels can judge its qualities.

POST-WAR HOUSING

Your correspondent takes a particular and mournful interest in all housing schemes in the five south-western counties since, at the time when most of them were first mooted, he was travelling for MOTCP, helping to decide where they should be put. "Helping" is not the word local authorities and their architects would use, because conflict was the rule rather than the exception. Doctrine seemed so clear in those days and the issue so important ("What is the use of winning the war if the agricultural cottages are to go in O.S.432 instead of O.S.427, where there is already a bungalow, a dissenting chapel and two greenhouses?"). To reduce the annoyance the three ministries concerned sent their minions round together, and every parish in England must, at some time or other, have been disturbed by the sight of these ominous conjurations

of surveyors, sanitary inspectors, clerks, councillors, architects and temporary civil servants. They would gather suddenly in virgin fields, gesticulating, pointing, muttering—evidently at cross purposes—and then, as suddenly, disband, leaving behind them those invisible administrative eggs which were to be hatched as council houses.

Resistance to the light in these parts was generally most stubborn in Cornwall where the ruling idea of the village community cut sharply against the ethos of the people. In the Cornish countryside the compact village is the exception, and the lone farmstead and the exiguous hamlet the rule.

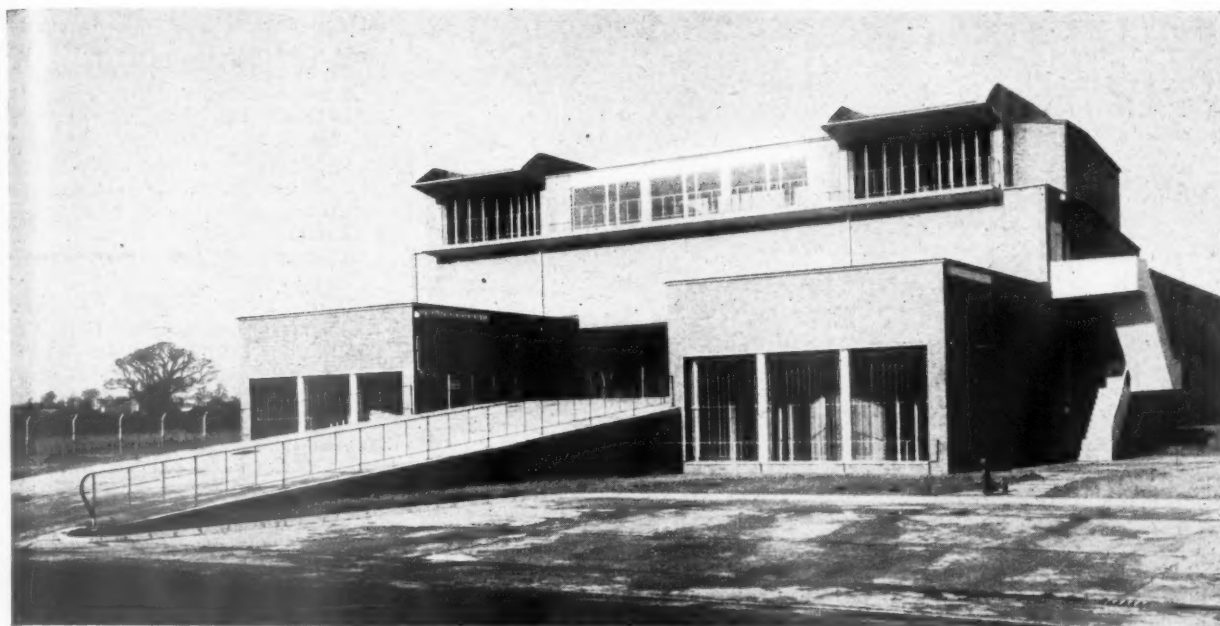
In the majority of the fields then chosen the strings of diapers are now bravely flipping, and it seems that the early unpopular ministrations were worth while. The 1945-47 council house, if not a grand cru, is better designed and better placed than the vinegary and chancey lots which came before. At least this is true of the isolated house and the small group, but whether it is true for the large estates is open to question.

ESTATE AESTHETICS

At Bishops Cleeve, a village lying immediately to the north of Cheltenham, beyond the racecourse on the Evesham Road, lies the wartime factory of Smith's, the electric clock people. You reach it on the left before you get to the village—a long, one-storeyed range of buildings which rest easily on the flat landscape. Opposite them is a big field on a slight rise which, if words could kill, would bear some memorial of a battle fought there. The engagement was between Smith's, represented by their architects—T. P. Bennett and Sons—and the government troops. The cause of the battle? Disagreement as to where the factory housing should go. Smith's wanted to build the houses on



The man who has been trying to clean up Filton: Eric Ross, head of the Bristol Aircraft Company's Architects' Department.



Eric Ross, chief architect of the Bristol Aircraft Company (seen below, opposite) designed this turbine testing building at Gypsy Patch, near the city.

their own land opposite the factory and to create a Smithville with the main road running through the middle. The Ministerial Entente wanted to drive them off this high ground and to force them back into the village of Bishops Cleeve. Here they would have been a few more hundred yards from their work and the firm would have risked a passing odium through compulsory purchase.

The government won, chiefly because of the tenacity of the MOH architect—Mr. Love—who caught the other side by the drains and would not let go. Smith's large staff is now housed in an orthodox fashion in a vast estate which abuts on the village, and is a good example of current housing ideas. It is Housing Manual Plus. Flowering cherries are set in wide grass plats—giving the impression that butter would not melt in the inmates' mouths—and continuous wing walls give only slight embarrassment at the corners. Everywhere are signs of that superior rule-of-thumb which betrays the hand of the assistant architect.

DRAINS AND AESTHETICS

It is impossible not to make some comparison between this mid-century Raymond Unwinry and the standard set by Papworth's Cheltenham. Cheltenham, of course, gains from being fashioned in an architecture which had reached its fullest development and had become instinctive, whereas the type of estate I have mentioned reflects a realistic compromise between two architectural systems. The discipline enforced by services and by the simple rules outlined in the Housing Manual are not enough to make an estate

poetic, and it is surely time that we realized this. Estate layout has so far gone through two phases. During the first, the drains and the roads decided everything; during the second (which we are now experiencing) certain other considerations of amenity and aesthetics allowed to have their say, amid much righteous purring from housing committees.

The trouble is that the aesthetic rules—used so religiously and with such disappointing results even in our New Towns—were made in a very different context and require careful examination. Cheltenham, in town planning as in architectural style, offers an admirable analogy but a risky copybook.

ARCHITECTURAL CRITICISM SUSPENDED

The Bristol Society of Architects, which, since a recent administrative shuffle, has become the Bristol and Somerset Society of Architects, was shaken during the winter by a crisis over its house journal.

This quarterly publication was founded in 1948 by Evelyn Freeth at the end of the war—a time when people imagined they had unlimited energies to spend and unlimited will to spend them on sociable projects. If the JOURNAL did not shrivel and die immediately the cold winds began to blow this was only because Evelyn Freeth and his immediate successor as editor, J. B. Michie, did all the work themselves. But it was then felt that the paper's only possible use would be as an instrument for architectural criticism. Although this idea was right, the manner of putting it into practice was, at best, clumsy. The subject of

the first issue was the reconstruction of the Colston Hall by the City Architect's Department. The City Architect, though troubled for information, was not given an idea of the form the review would take, and the critical parts of this review, though concrete and, perhaps, by absolute standards, just, showed a blissful disregard for the circumstances in which they would be read. The Bristol papers quickly made an uncritical digest of all the more ruthless comments and published them under headings like "Architects Criticise Colston Hall." Thus the Council of the Society was shortly summoned to meet the first crisis of its second century.

In these circumstances those who stood for the idea that architectural criticism should begin at home felt that they were going in to bat on a sticky wicket. The subsequent meeting, which was so voluble in its first session that it had to be adjourned, was perhaps the best attended in the Society's life. Proceedings were somewhat confused because the President did not seem certain whether his position in the chair made him comparable to the Speaker in the House of Commons, or to the Patriarch interpreting the Law to the Twelve Tribes. On the whole he inclined to the latter. The discussion, as you would expect in a body comprising three generations and so many different types of person, was random and seldom explicit.

CONDITIONAL CRITICISM

Though the editorial board emerged exceedingly chastened, it was a valuable assembly. A motion was proposed by Gordon Blake, the veteran principal of the Bristol School of



The unlovely and unloved banana shape in the heart of Bristol. On this page Lance Wright criticises the "Architectural Review's" suggested cure for this heart disease.

Architecture, who was in a good position as he had watched over the education of nearly half those in the room—including the President. His motion upheld the principle of criticism in the JOURNAL though in terms which, by making sure that the architect's consent must be asked for everything said, may render any true criticism impracticable. Even this was passed by only a small majority and there was a large number of abstentions (mostly from Bath members), so great was the feeling of insecurity which the Colston Hall article had bred in practising men.

The next issue could only be in the character of an Eirenikon, and the proposal to treat Vincent Harris's new Council House was put aside in favour of a review of the life's work of H. S. W. Stone, of Taunton, the late President of the Society who had recently died. Even so, differences arose between the editorial board and the heirs to the Stone practice as to whether or not the number should be a serious attempt to place Stone's work in its setting. These differences were amicably resolved, but in order to give an agonized Council a quarter's complete rest from controversy the next number is devoted to "St. Michael's Hill and Kingsdown—a review of two forgotten suburbs"!

"THE CENTRE"

Bristol, though so favoured by nature, suffers from a mortal ill in having a desert where her heart should be. This is a continual ache for those who live there, and any bid to do away with it is watched by local people with breathless expectation. It was a pleasant surprise therefore when the *Architectural Review*, in its March issue, devoted several sheets of art paper to the subject. The only pity is

that the attention given was more superficial than the problem deserved. It was as though a distinguished Harley Street skin specialist were to come down and prescribe for a patient suffering from cancer. This is not to say that what the place looks like is not supremely important, but only to underline what every good functionalist knows—that the outer skin of appearance must mirror an inner reality of fact.

RIVAL CLAIMS OF HARBOUR AND ROAD

The long banana shape known unlovingly as "The Centre" is one of the most recalcitrant open spaces that has ever burnt the fingers of Town Planners. Originally it consisted of two quays looking on to a tidal river. (No. Originally it was a marsh, for it was only in 1241-7 that the River Frome was diverted to its present bed.) All through the eighteenth and nineteenth centuries there was a tussle between the rival claims of harbour and road traffic for the use of this strip. Up to 1893 claims were generally met by differing kinds of swing and bascule bridges thrown over the middle of the banana (the seaward half of the banana being unbridged and wholly given over to ships). But in 1893 the first fixed bridge blocked the inland half against ships of any size. Soon after this the Tramway Company (Bristol had the first electric trams, please!) by a unilateral act christened the inner half of the banana "The Tramway Centre." By the nineteen-thirties the chorus of livid klaxon blowers had forced the city fathers into one of the most drastic orbital traffic schemes that ever breached a precinct. Queen Square was burst open along its diagonal, the whole of the banana was roofed over,

and the present figure of eight was traced upon its upper surface. The Bristol Society of Architects made a noble but characteristically ineffectual protest and was rewarded for its pains with the duty of recommending what was to be done to give an architectural seamliness to the rape. The scheme put forward then provided, with certain grisly modifications, the basis of what exists now.

SOLUTION PROPOSED BY THE "ARCHITECTURAL REVIEW"

The solution proposed in the *Review* was to cut the banana in two, to leave the buses to gyrate round the inner loop and—with a liberal use of trees and floorscaping—to reclaim the greater part of the seaward half for sitting out.

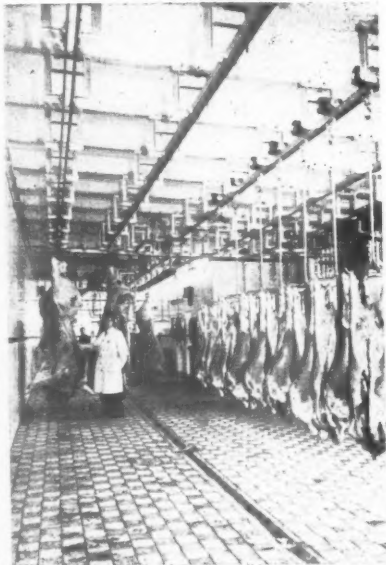
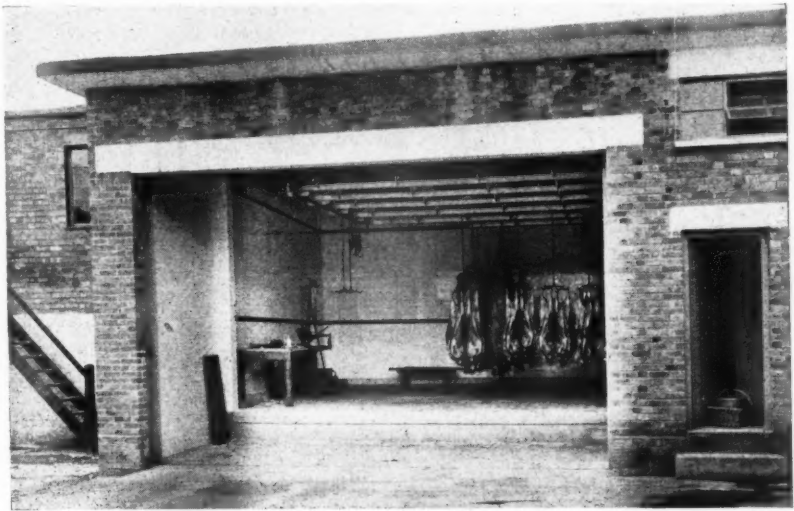
The chief objection to this is that it treats the traffic problem altogether too lightly. It would be just too bad for traffic which had been chugging patiently round the ring road, enjoying as it went the unintended views of Mary Anne backs, to be faced suddenly with an architectural barricade and to be sent back round the other way. Apart from this flaw, the scheme appears to fall down on what may be described as ideological grounds. Cities in the course of centuries get a certain configuration which in turn gives them their character. This—the general lie of their development—is something that is always being modified, and it is possible to imagine a total change of user which would justify its being forgotten altogether. It is something to be watched jealously.

The covering of Bristol's banana, perilous as it was for the Bristol Idea, was probably called for by the shift in emphasis from harbour traffic to road traffic. As an operation, therefore, it was on a par with the removal of the walls of Vienna and their replacement by the Ringstrasse, for the intention in each case was not to alter the basic nature of the city. In cases such as these the lie of development should be kept and nothing should be done without an impelling reason to counter the traditional flow of space. The creation of informal pockets in a city where men can sell balloons is a fruitful sideline for planners. But it is—almost by definition—secondary. And when it takes a first place it is in danger of falling into disrepute.

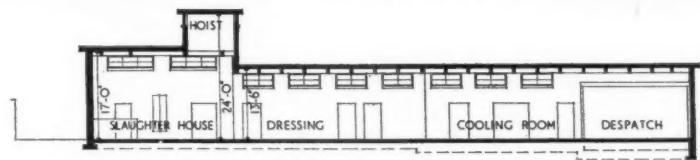


ABATTOIR IN CHAPEL STREET, STRATFORD-ON-AVON

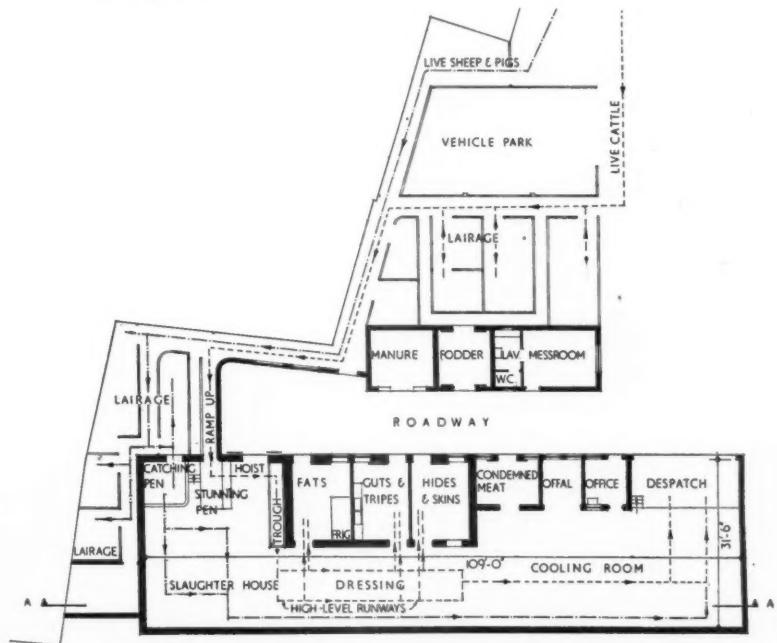
The newly rebuilt abattoir in Chapel Street, Stratford-on-Avon, stands at the rear of a retail butcher's shop and on a site used for this purpose for 400 years. The site is situated near the centre of the town and there was some opposition to its retention as a slaughter house, but this opposition was overruled due to its historical associations and the difficulty of finding another suitable site. During the rebuilding, the original premises, seen in the two bottom photographs, had to be kept in production at all costs. This fact,



and also the changing of the entrance for live cattle from Chapel Street to the less busy Ely Street, had considerable bearing on the plan. The construction is of load bearing brickwork and precast reinforced concrete beam roofs. Runway loads are carried on steelwork. All internal walls of the main building are faced with white glazed tiles from floor to ceiling and floors are of buff coloured ribbed tiles. The photograph top right shows the despatch bay and above is the dressing area. The architect was H. W. Wilson-Wood. The general contractor was D. J. Byer. Sub-contractors, page 90.



Section A-A

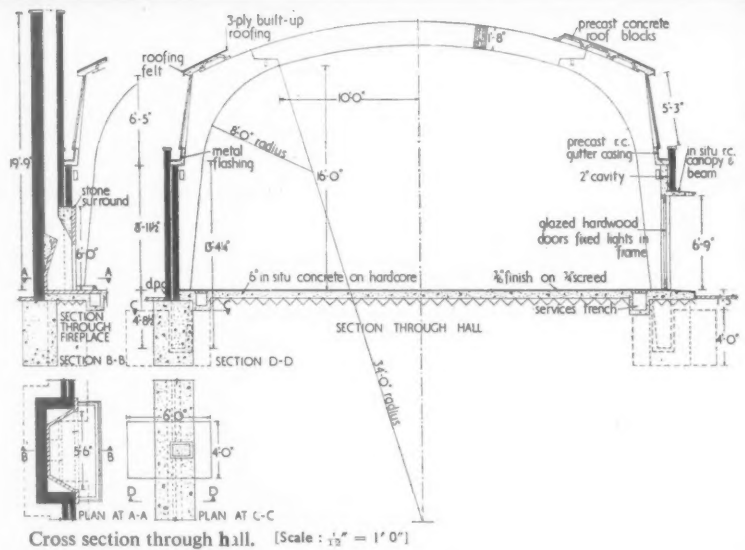


Plan [Scale: 1/32" = 1' 0"]



BOY SCOUTS' HALL AND HOSTEL AT STEPNEY

Roland House, Stepney Green, is a Georgian building scheduled as an Ancient Monument. It was damaged during the war. This damage has been repaired and the building has been extended. A new hall to seat 300 (seen right) has been built to the rear of the terrace houses (top photo, opposite page). It was designed by Clive Pascall. The accommodation required in the old building included a large lounge, capable of subdivision, extension to the ground floor dining room and single bedrooms on the first floor. A second floor, with additional bedroom and lavatory accommodation will be added later. The kitchen has been increased in size and an additional hoist to the dining room fitted. The roof is of timber covered with asphalt laid flat so that it can be removed at some later date to form the second floor. The hall, the interior of which is seen below, is used for troop meetings, lectures, dances, amateur theatricals, gymnastics and to house, when occasion arises, foreign and British contingents en route to camps and jamborees. A small kitchen for serving light meals, showers, dressing rooms and lavatory accommodation is included for use when the hall becomes a dormitory. There is also a small projector box for the showing of films. The precast concrete roof units are supported



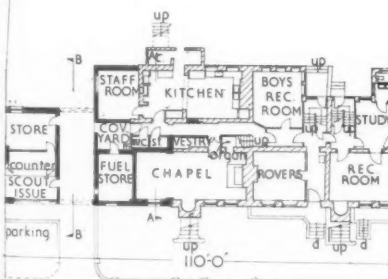
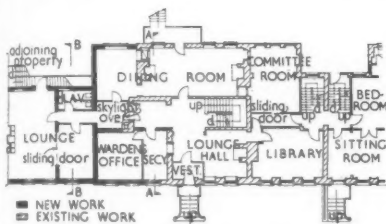
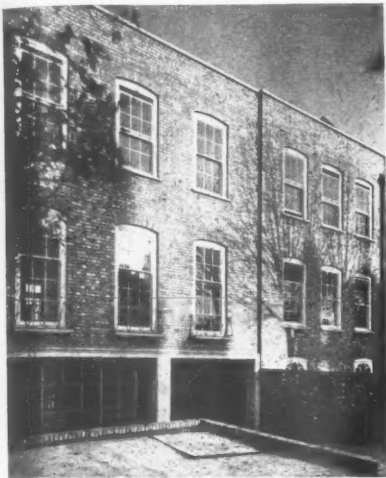
Cross section through hall. [Scale: $\frac{1}{2}$ " = 1' 0"]

on concrete portal frames, which were cast on the site and hoisted into position. The walls are 11-in. cavity brickwork, fair faced on both sides, floors are thermoplastic tiles in the hall, quarry

tiles in lavatories and hardwood boarding on the stage. Doors are of hardwood, undecorated, with armourplate glass in the doors to the garden, to withstand impact when ball games are in progress. The central egg-crate light fittings are also intended to form a protection against damage to the fluorescent tubes. The photograph below opposite, shows the entrance to the hall. The cost was 5s. 5d. per ft. cu. in the hall and 6s. in the hostel. The general contractors were E. H. Burgess, Ltd. Sub-contractors, page 90.



GREEN, LONDON, E.1



In the following article Mr. Watkins discusses the recent debates—in the House of Lords and the House of Commons—on the 1947 Town and Country Planning Act. He points out that while in neither house was there any statement of Government policy on the future of the Act it is encouraging to find that there is, in Parliament, a realization of the faults in it.

ERNEST WATKINS

The Architect and Current Affairs

During the last few weeks, both Houses of Parliament have debated the Town and Country Planning Act, 1947; the Lords in May, the Commons at the beginning of this month. The Lords gave the best part of a day to the subject. The debate in the Commons was on the adjournment, which limited it to half an hour. But it is likely that these two debates make up all the time Parliament will give to the subject this session—certainly before the summer recess. Neither produced any detailed statement of Government policy on the future of the Act, but they did provide some clues of interest to those who are fascinated by the crystal ball.

DEVELOPMENT CHARGE

It is significant that, today, any debate on the 1947 Act turns mainly on its financial provisions, in fact on the development charge. That was the theme of the first speech in the Commons debate, as it was of Mr.

Marples' reply on behalf of the Government. Mr. Marples said that the Government accepted as a fact that the development charge as levied today produced cases of hardship amounting to injustice. He did not want to throw the baby out with the bathwater. The Act as a whole had been accepted and welcomed because everyone realized that living conditions must be safeguarded by lessons of the past being learned. But the Act was bad in parts.

The public complaints against the charge, he said, could be listed under three heads. First, it added to the cost of development. In theory the combined outlay of the developer should not exceed what he would formerly have paid for the land itself, but there was a wide gulf between theory and practice. Secondly, the charge was a tax on development; another gulf between theory and practice. Thirdly, the charge was arbitrary in its method of assessment. People failed to understand the method of assessment and there was no appeal from an assessment once it had been made.

THE SINGLE-PLOT OWNER

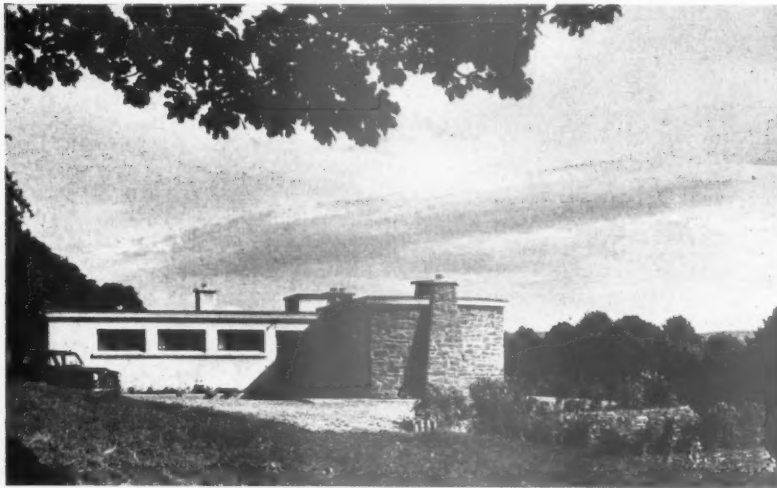
So far so good. The Government, according to Mr. Marples (and his Minister, Mr. Macmillan), sees faults in the Act. It is racking its brains to find a solution, but it has not one ready—at least not ready to announce—just yet, and in defence Mr. Marples referred to the various professional bodies which were trying to find an agreed solution, and failing. In the Commons debate the opening speaker, Mr. Johnson, M.P. for Kempton, Brighton, suggested one remedy for a particular case—that of the single-plot owner who wants to put up a house for his own occupation and who is now faced with a development charge of from £250 to £400. Let the Minister make an order, he said, exempting these houses from the charge, subject to suitable safeguards over size and cost.

Architects, at least, would be pleased to see this class of builder encouraged and not forced to economize over plans and supervision. There was little time in the Commons debate for any other aspect of amendment to be even hinted at. On this, the Lords debate earlier is of greater interest.

TWO CHANGES NEEDED

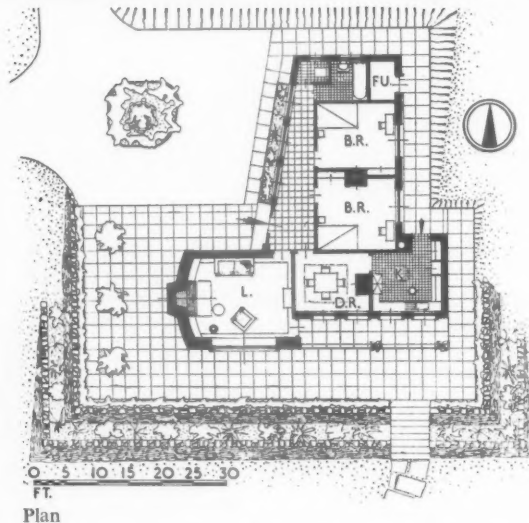
Lord Llewellyn opened that debate. He thought that two main changes in the development charge were needed; liability for the charge should be removed where a site already developed was rebuilt for the same use in the future, and it should cease to be leviable where there was no more than a change in the use of an existing building. This means that the development charge should be levied only

HOUSE AT CREEVAGH, N. IRELAND



The house seen in the photograph above from the west and below from the south-east is at Creevagh, Co. Londonderry, and is designed by W. H. D. McCormick. The site falls steeply to the south with views to south and east over rolling farmland. There is a screen of trees to

the north and west. The house, with an area of 900 sq. ft., complies with the N. Ireland regulations relating to grants for owner-occupied houses. The living room at the south-west corner is 1 ft. 6 in. higher than the rest of the house. Walls are of 11-in. cavity block construction, finished externally with rough cast, except for the 16-in. curved west wall to the living room, which has a 2-in. breeze inner skin.



where there is both a building operation or development and a substantial change in use.

The speaker claimed that a man who was prepared to replace an outworn building by a new one used for the same purpose was a man to be encouraged, not deterred. How otherwise could we expect real improvement in our towns? Equally, to require a development charge on every change of use in an existing building was to impose restrictions which would foster general decay. Improvement was frozen, desirable change killed, and old buildings would become slums. Many existing buildings could be saved only if their owners were encouraged to convert them to some new use.

These are powerful arguments—and from a man who has been a Conservative Minister.

SOLUTION FROM THE PEERS ?

But perhaps the most interesting part of the debate was the speech from Lord Silkin, once the Minister responsible for the original Bill. Lord Silkin was by no means prepared to defend his child as an angel of perfection. If it was a question of giving the owner a right of appeal against an assessment of a charge, why, he should have it. If it was a question of the Government scaling the charge down to no more than 80% of the increase in value due to the planning permission, he would not fight in the last ditch over that. On the basis of the Lords debate, it would not be fantastic to visualize the peers, of all parties, producing an agreed solution of their own.

The debate, outside Parliament, continues. From the spirit of Mr. Marples' speech one might almost say that the Government's attitude is: "Write your suggestions on the back of your income tax demand note and they will receive every attention from the management. Postage will be refunded."

DIARY

Students' Exhibition. At the Polish University College School of Architecture, 7, Cromwell Road, S.W.7. 10 a.m. to 7 p.m.
UNTIL JULY 21

For Bill and Betty—Or Setting Up Home. At the Whitechapel Art Gallery, High Street, E.1. (Sponsors: Oxford House in Bethnal Green and the Whitechapel Art Gallery.) Weekdays (excluding Mondays) 11 a.m. to 6 p.m.; Sundays 2 p.m. to 6 p.m.
UNTIL JULY 24

Building Research and Housing Exhibition. At the Building Centre, Store Street, Tottenham Court Road, W.C.1. (Sponsor: MOW.) 9.30 a.m. to 5 p.m. daily; Saturdays 9.30 a.m. to 1 p.m.
UNTIL JULY 26

Annual Students' Exhibition. At AA, 36, Bedford Square, W.C.1. 10 a.m. to 6 p.m. Until 2 p.m. Saturdays.
UNTIL JULY 31

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The Architects' Journal for July 17, 1952 175

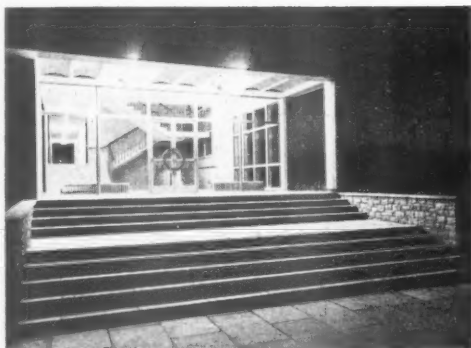
RESEARCH LABORATORIES

at GREENHITHE, KENT

designed by WESTWOOD, SONS AND HARRISON

chief assistant, NOEL BRANDON-JONES

consulting structural engineers, WELLS, COCKING AND MESTON



Main entrance doors and hall.

The research laboratories for Associated Portland Cement Manufacturers Ltd., at Stone, Greenhithe, were opened last week by David Eccles, M.P., Minister of Works. Although each of the twenty-six works within the Blue Circle Group has its own laboratory for control tests, these separate laboratories are required for the creation and development of new types of cement and cement-based products and for the instruction of trainees.

View looking south-west down approach road.

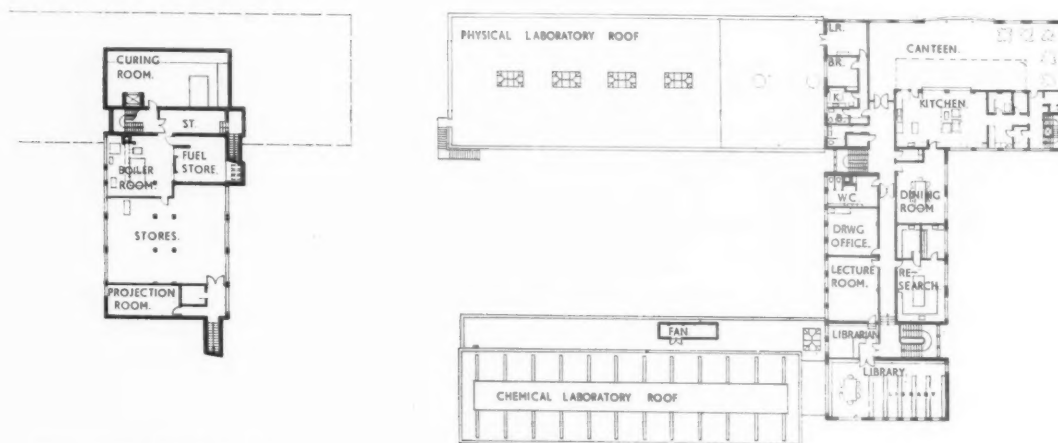




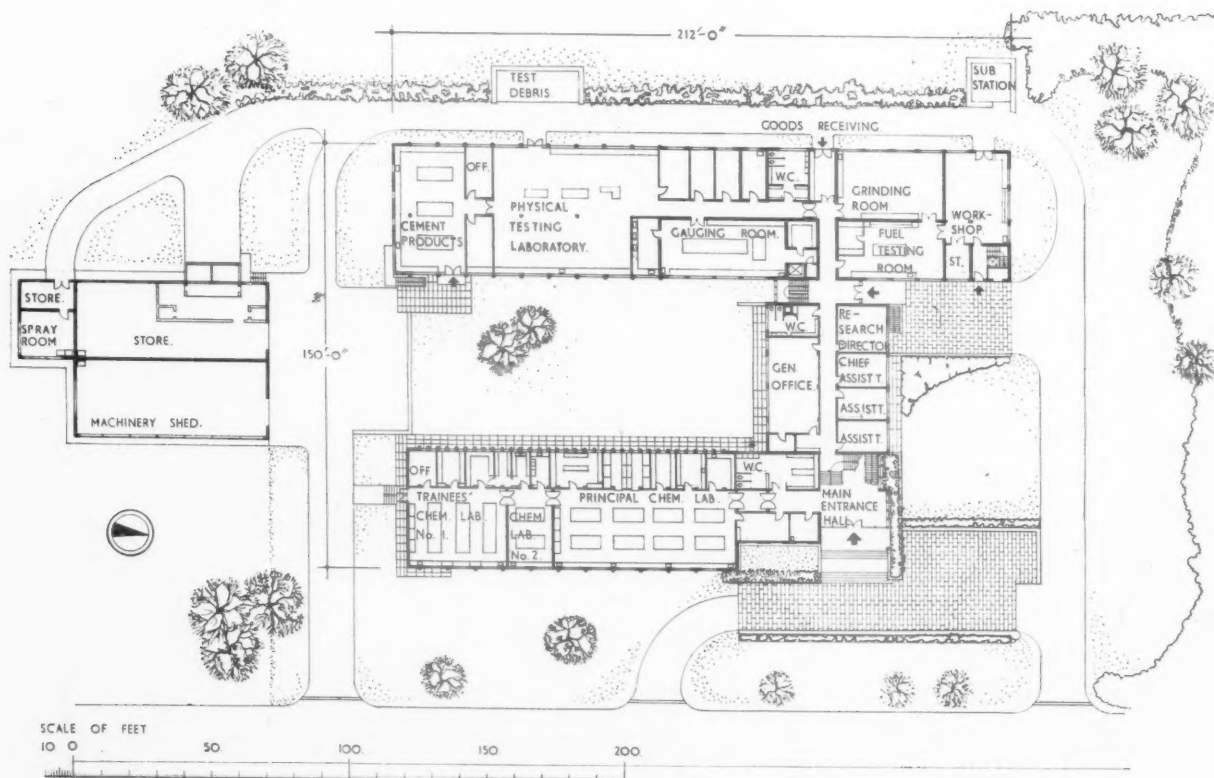
Aerial view looking south-west.

SITE.—The site near Stone Castle is an open one and slopes steeply downwards from the south-west. The difference in level is 12 ft. between the main entrance in the north-east corner and the opposite corner of the building. A concrete service road runs around the building for the easy delivery of goods. The grounds immediately surrounding the building have been laid out with lawns, trees and shrubs and a concrete wall faced with Kentish rag links the building and its surrounding gardens.

PLAN.—The research department consists of a number of divisions, acting in close collaboration:



Basement and first floor plans



Site and ground floor plan

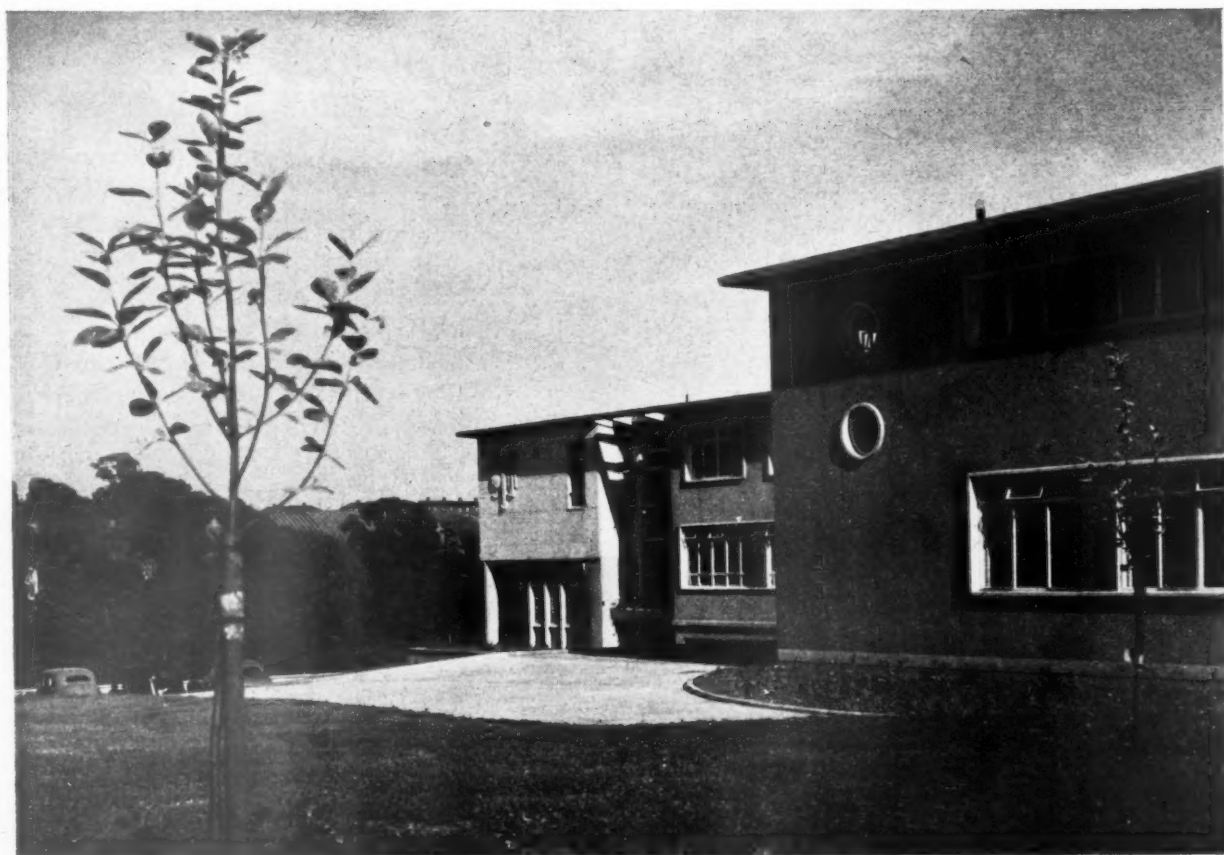
RESEARCH LABORATORIES

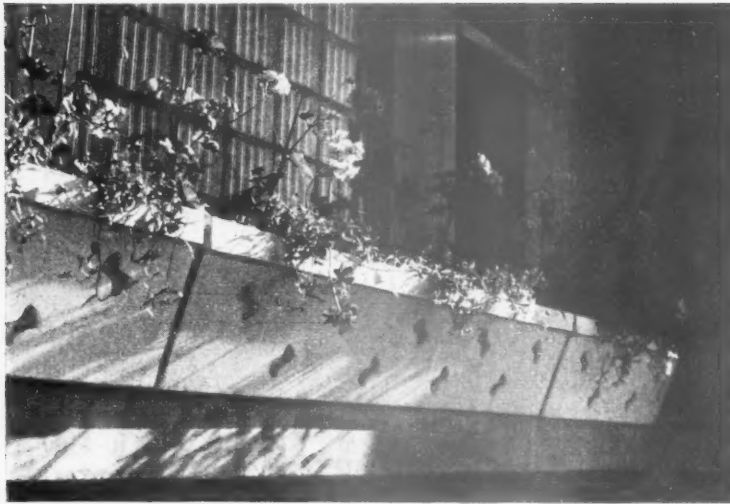
at GREENHITHE, KENT

designed by WESTWOOD, SONS and HARRISON

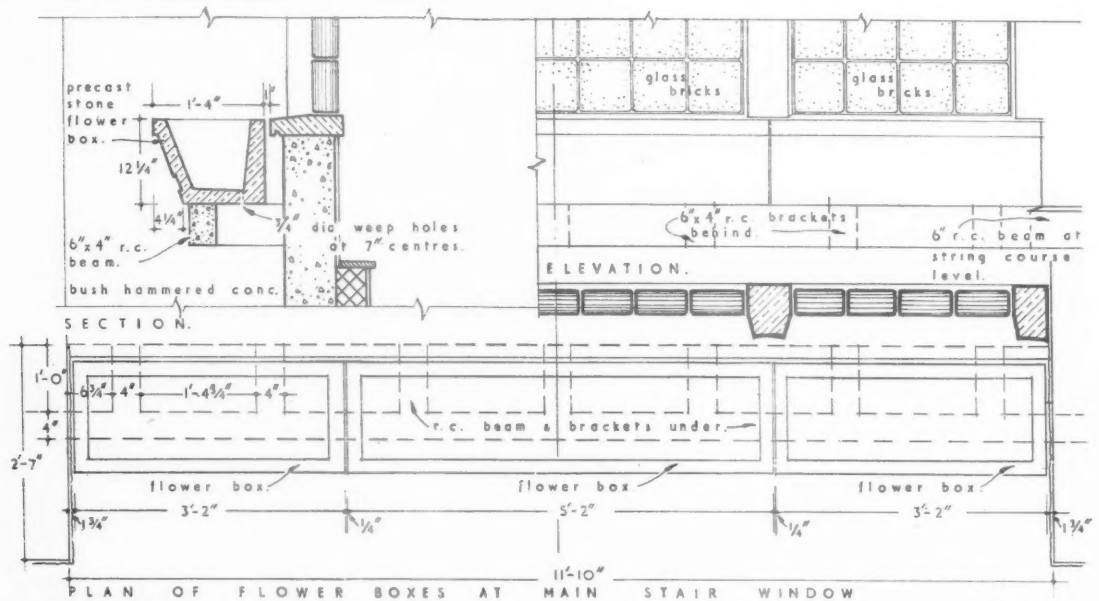
analytical, handling chemical analysis and allied activities in two chemical laboratories, one for regular staff and the other for trainees; physical testing, concerned with the physical properties of cement, aggregates, mortar, concrete, etc., and equipment such as compression and tensile testing machines; coloured cements and paints, consisting of a laboratory for testing special cement products and decorative finishes prepared with them; kilns and mills, for examining the operation and efficiency of rotary and other types of kiln used in the production of cement and lime and suitable fuels; raw materials, the examination of the properties of materials such as chalk, limestone, clay, shale, etc., used in cement manufacture and study of the compound constitution of cement clinker; geological, concerned with the survey of raw material resources at existing and new works and is provided with three complete diamond drilling outfits for borehole tests; workshop, to supply special apparatus required in other divisions; library and lecture theatre. There is a kitchen and canteen where 120 meals can be served at one sitting, and adjoining the canteen is a caretaker's flat. The accommodation required fell naturally into three main groups: firstly, the administrative offices, placed in a block running east and west at right angles to the approach drive;

Below, the north-east corner with the main entrance on the right. Bottom, view looking south-east.





Concrete flower box under main staircase window.



Details of flower box on north elevation [Scale: 1/2" = 1' 0"]

RESEARCH LABORATORIES

at GREENHITHE, KENT

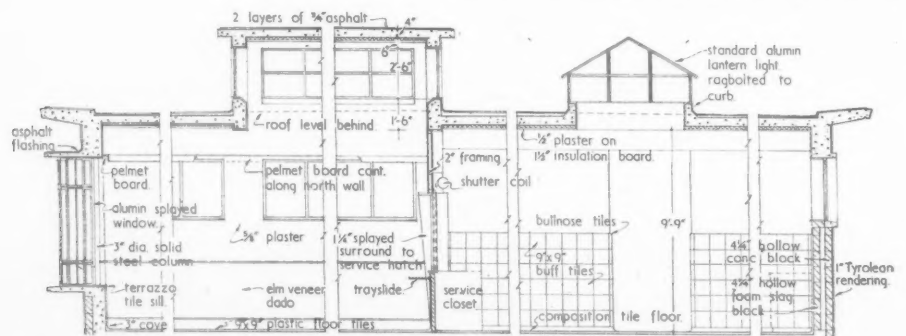
designed by WESTWOOD, SONS and HARRISON

secondly, chemical laboratories forming a single-storey wing running southwards from the east end of the offices, and thirdly, the physical testing laboratories forming a similar wing to the west. To the south—independent of the main buildings—is the machine shed and store.

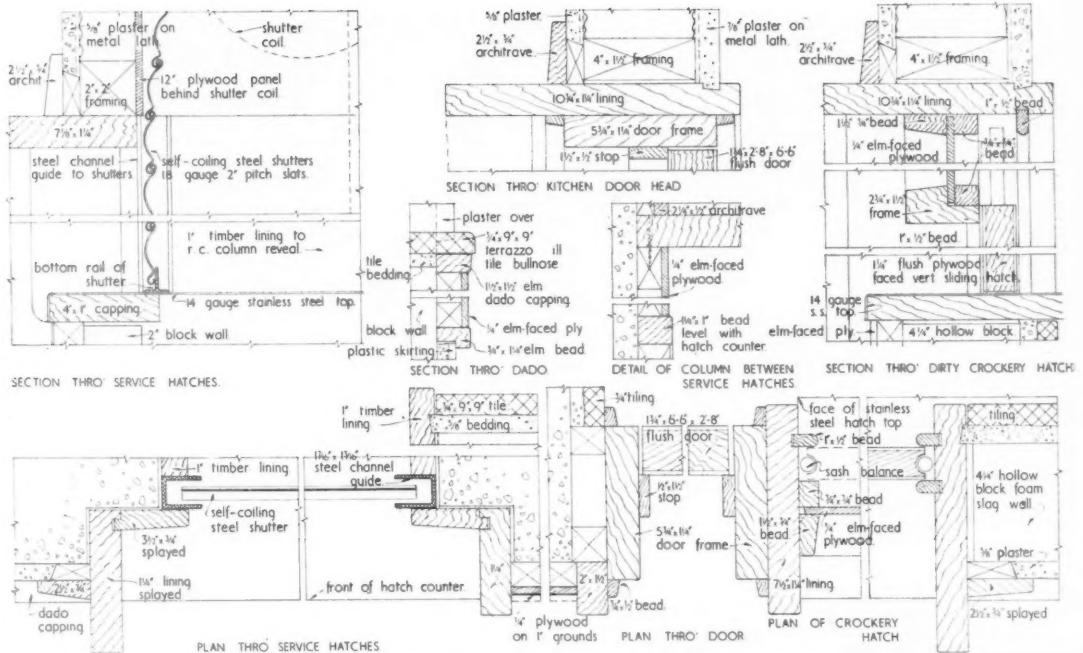
CONSTRUCTION.—External walls generally are of cavity construction, the outer skin being 4½-in. hollow clinker concrete blocks and the inner skin 4½-in. hollow foamed slag concrete blocks. Basement walls are solid, consisting of 7½-in. reinforced concrete with 4½-in. hollow foamed slag concrete blocks forming a permanent shuttering on the inner face, the concrete being bush hammered to expose the aggregate above ground level. Suspended

floors and roofs throughout are RC.

FINISHES.—Walls above ground floor level are finished externally with oyster pink Tyrolean texture except over the main entrance, where cast Portland stone facing slabs are used and a bas relief cast as part of the facing slabs, symbolising chemical



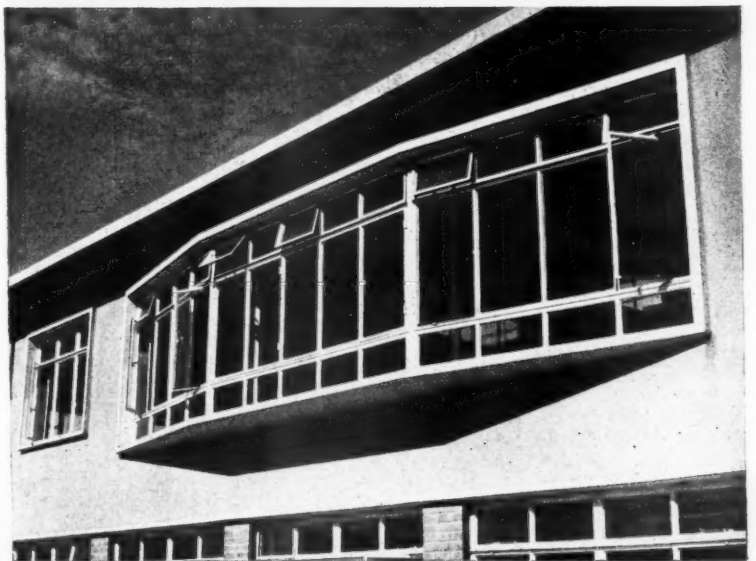
Section through canteen bay window and kitchen [Scale: 1/2" = 1' 0"]



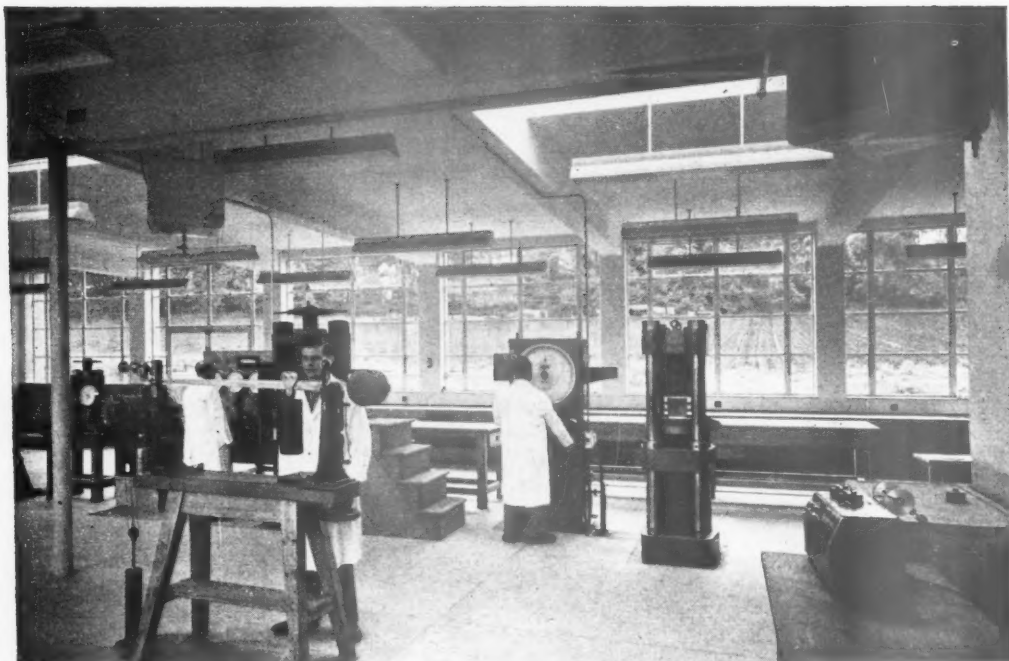
Details of
canteen serving
hatch
[Scale: 2" = 1' 0"]

research forms part of the north wall of the library. This motif is designed by Eric Peskett. Cast Portland stone is also used for window surrounds, sills, jambs and heads. RC floors and roof slabs were cast *in situ* on a permanent shuttering of wood wool-cement slabs providing sound and heat insulation. In the canteen, wood wool slabs are left exposed as an acoustic treatment. Roofs are covered with asphalt. Internal wall surfaces are generally plastered and distempered, but in chemical laboratories the plaster is finished with special acid-resistant paint and there is a dado of glazed tiles with acid-resistant joints. In these laboratories floors are of Missanda hardwood blocks for chemical resistance, elsewhere floors are finished with cork tiles in the library, granolithic paving in main physical testing laboratory, entrance hall, staircases, lavatories and cloakrooms, grease-resistant coloured concrete tiles in canteen kitchen, thermoplastic tiles in offices. Window frames generally are in aluminium alloy and in chemical laboratories plate glass fixed lights are set direct with hardwood beads in reconstructed stone frames. Glass brick panels are also used to give the high degree of lighting required without loss of thermal insulation and to avoid metal components liable to corrosion.

SERVICES.—As far as possible the large number of services required have been concealed, but kept easily accessible in ducts with removable covers. Heating is by hot water radiators except in physical laboratories where overhead unit heaters are used.



1. Above right, serving hatch in canteen.
2. Right, bay window in canteen.



RESEARCH LABORATORIES

at GREENHITHE, KENT

designed by WESTWOOD, SONS and HARRISON

Chemical laboratories are entirely artificially ventilated by special unit heaters at bench level and extract fans in the vertical clerestory and through fume cupboards. The normal four air changes per hour can be raised to 12 when required. Consulting engineers (services) A. F. Myers and Partners. The general contractors were Richard Costain, Ltd. For sub-contractors, see page 90.



Above left, part of the physical testing laboratory. Left, one of the chemical laboratories. Below, reinforced concrete staircase at the rear of the physical testing laboratory.



TECHNICAL SECTION

The subject for the Technical Section this week is concrete—prestressed and precast. Commencing below is a short article describing the tests on the prestressed concrete footbridge at the South Bank which caused, at the time, such controversy in the correspondence column of *The Times*.

Pending the publication of Ove Arup and Partners' report (expected soon) the question should be *sub judice*, but it will be remembered that Sir Owen Williams complained that the bridge, because it was prestressed, wasted cement; while Sir Francis Meynell (Director of CCA) retorted that the bridge saved steel. All that can be said at this stage is that it is high time that it was decided whether it is more important to save steel or cement.

On pages 83-86 there is an illustrated description of a large block of flats at Geneva constructed almost exclusively of precast concrete. This method of construction combines the economy of concrete with the speed of erection of structural steelwork. The amount of steel required is not much greater than for ordinary reinforced concrete and, if the precast elements are made off the site, the concrete quality can be carefully controlled and materials, thereby, saved.

This week's
special feature

18 CONSTRUCTION: THEORY tests on prestressed concrete footbridge

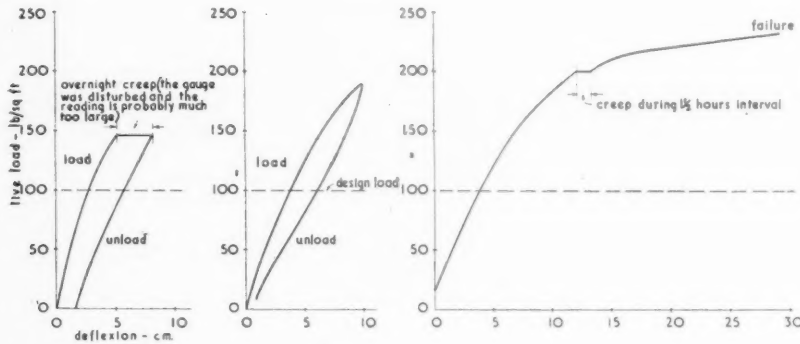
The number preceding the week's special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant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

The decision to remove the three-span prestressed concrete footbridge designed by Maxwell Fry and Jane Drew from the Festival of Britain site on the South Bank provided a unique opportunity to make full-scale tests on a working prestressed structure. In a short article below the JOURNAL's Specialist Editor No. 13 (Structural Engineering) describes the tests and explains how the bridge finally failed.

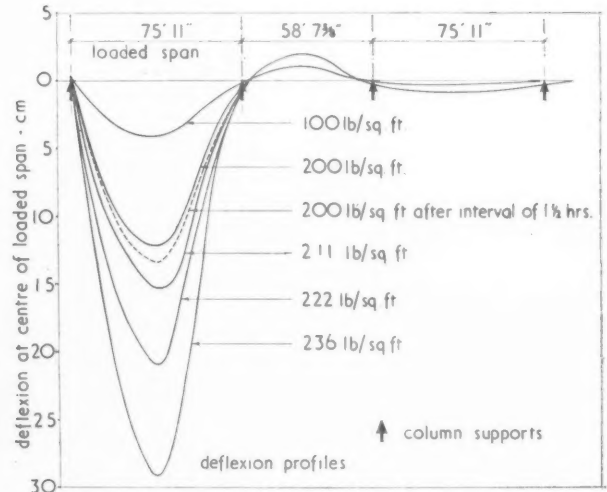
The bridge had a total length of 284 ft., consisting of three straight spans of 76 ft., 59 ft. and 76 ft. respectively, a 54 ft. span at right angles to the others and a cantilever of 19 ft. The deck was 11 ft. 10½ in. wide overall, with a central rib 4 ft. wide and 22 in. deep, from which were cantilevered slabs tapering from a thickness of 12½ in. at the rib to 3 in. at the edge; the whole section thus forming a T-beam. The supporting columns tapered from a section 13 ft. 9 in. by 2 ft. 3 in. at the top to 1 ft. 9 in. by 1 ft. 6 in. at the base. The Freyssinet system of post-stressing was used. The 76 ft.

span at the end was used for the test, which lasted three days. The load was applied gradually and distributed so as to approximate to the conditions of uniform loading.

The bridge was loaded to the design load of 100 lb./sq. ft., then to 125 lb./sq. ft. and finally to 150 lb./sq. ft. At each stage the deflection was measured and the load was left on over the first night. On the second day the load was removed and the recovery noted. Then the bridge was reloaded to 200 lb./sq. ft. and cracks and deflection studied. This load was removed and the recovery



Above, Fig. 1, deflection at centre span; below, Fig. 2, magnified deflection profiles. Left, the bridge being loaded by crane with 3 1/2 ton weights.



noted. On the third day the bridge was loaded to failure, which occurred at a load equivalent to 250 lb./sq. ft. Fig. 1 shows the deflection at the centre of the loaded span at various stages of the test. Fig. 2 shows the magnified deflection profiles along the three spans as registered on gauges at twelve points.

Failure appeared to occur almost simultaneously over the second support and near the middle of the loaded span by compression in the concrete. The end column remained vertical until pulled over by the collapsing span. There did not appear to be any general failure of the steel cables, but it was evident that there was an absence of bond between the steel and the concrete due to the grout having failed to penetrate through from the ends. A report on the tests is being prepared by the consulting engineers, Ove Arup and Partners. This will be reviewed in the JOURNAL as soon as it is published.

QUESTIONS & ANSWERS

3057 CONCRETE WINDOW SURROUNDS

Q How should one construct projecting concrete window surrounds in order that they are likely to be—and remain—waterproof? In particular, what is the best method of preventing water penetration through the jambs?

A The problem of the concrete window surround is not a very difficult one. A good concrete should be, to all intents and purposes, completely waterproof, and a manufacturer who failed to provide sufficiently impervious concrete might be held to be gravely at fault. Most of the difficulties which arise in practice are due not so much to a lack of watertightness but to defective design at the joints, particularly those at the head and the cill.

The detail has to be designed so that the head weathers the vertical member and the joint at cill level needs, itself, to be carefully weathered and should preferably come on to a stooling at the end of the cill. Even when these details have been properly worked out the fact remains that there is a thin concrete member in the window of high thermal conductivity which tends to present a cold impervious surface and will, therefore, allow moisture to condense freely. Any attempt to paint the concrete surface is liable to be a failure and there will also be a tendency for condensed moisture to collect on the inner cill member unless drainage is provided to take it away.

3058 FREE-STANDING BOILERS

Q We should be glad of your opinion as to whether the 9 in. of brickwork required by the building bye-laws at the back of a fireplace applies to free-standing cast-iron domestic hot water boilers.

A The bye-laws require that the back of a fireplace opening in an internal wall shall be not less than 8 1/2 in. thick and, in my opinion, this would still apply where a free-standing, cast-iron, domestic hot water boiler is installed. The pipe from the boiler would

be connected to a "flue" within the meaning of the bye-law and compliance is, therefore, necessary.

3059 PAINTING ALUMINIUM WINDOWS

Q I have been advised by a firm of metal window manufacturers to use aluminium windows in lieu of steel in view of the lengthy period of delivery for steel. I have been offered the aluminium windows at the same price as steel windows but, not having had any previous experience in the use of aluminium, I should be grateful if you could tell me whether there are any special points to watch, particularly with regard to painting the frames.

A If you could possibly find out from the manufacturers what is the best undercoating for the particular alloy that is being used, then your painting should be perfectly satisfactory, but, as aluminium alloys vary considerably, it is as well to get definite details on this point. Also get advice from the manufacturers as to the best undercoating to prevent contact of the aluminium frame with the brickwork and mortar of the structure, in order to prevent corrosion.

A number of developments in the use of precast concrete have taken place in Gt. Britain, for example, the MOW concrete frames for temporary offices (see Information Centre item 19.127 : 23.8.51) and the constructional system designed by Erno Goldfinger for LCC schools at Hammersmith and Putney (see JOURNAL for June 14, 1951) but the precast frame of the seven-storey Swiss building described below represents more advanced development than has yet taken place in this country.

PRECAST CONCRETE CONSTRUCTION FOR FLATS AT GENEVA

Prefabrication techniques were used extensively in the construction of the large block of flats at Geneva, known as Malagnou-Parc and designed by Marc Saugey. This building has been likened to Corbusier's "Unité d'Habitation" at Marseilles on account of the inclusion in the same building as the flats themselves of a large number of ancillary premises, including shops, kindergarten, laundries, etc. But the construction is quite different; the frame being entirely of precast, instead of *in situ*, concrete.

The flats provide accommodation for 450 people in 175 flats, giving a density of 180 persons to the acre. The site (2½ acres) is on the fringe of a high-density district about 1½ miles



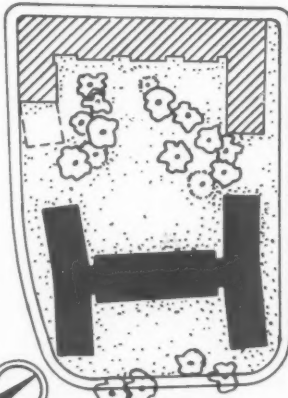
from the centre of Geneva. It is bounded on three sides by streets and falls diagonally towards the rear.

The ground floor of this H-shaped building is devoted primarily to shops, including a newsagent, a butcher, a dairy, a pharmacy, a cake shop, a co-operative grocery and general store and a laundrette. There is also a nursery school, a post office, a petrol filling

Above, Fig. 1, aerial view of completed flats, showing clearly the "H" shape of the block and the two extra storeys of the central portion. Below, Fig. 2, looking north-east at the right-hand wing, with the shops and entrance canopies on the left.

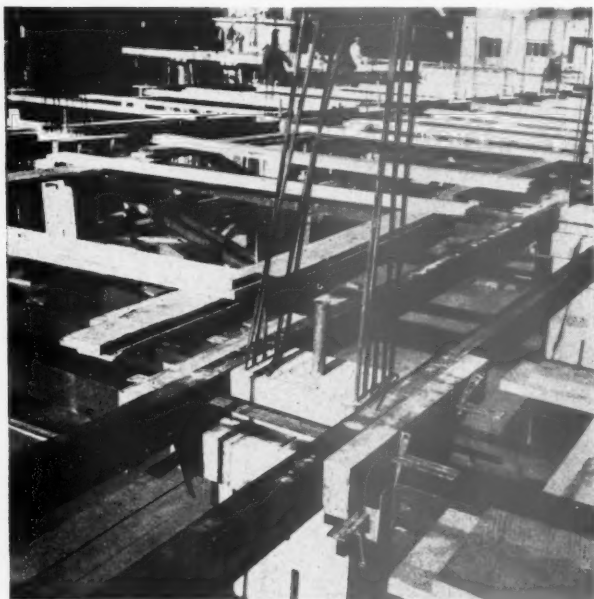


RUE HENRI MUSSARD.



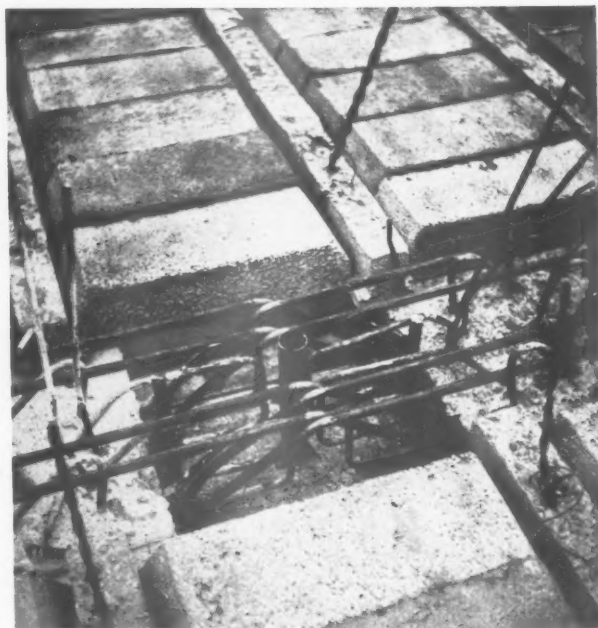
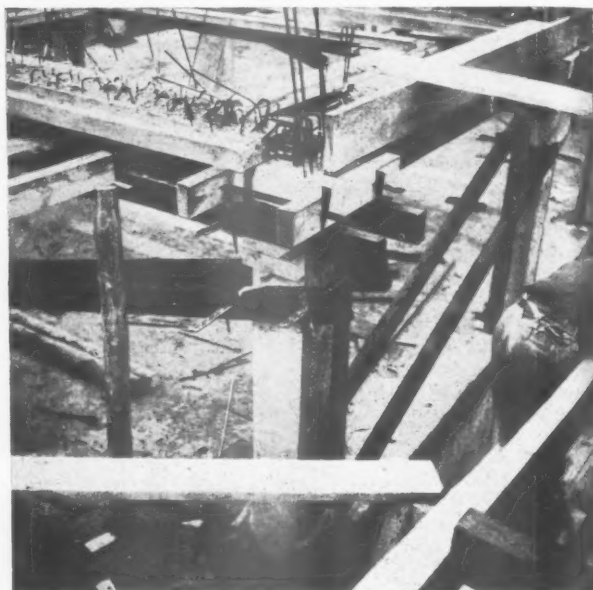
AVENUE TH. WEBER.

Site plan (Scale: 1/2500 = 1" 0")



Top, Fig. 3, placing a precast concrete column into position with the aid of a tower crane. Above, Fig. 4, the grid of temporary formwork. In the foreground can be seen the top of a column; into the metal tube will be inserted the dowel in the foot of the column above. Note the continuity rods projecting from the top of the column.

Below, Fig. 5, precast main beams placed in position. Note the stirrups left projecting so as to bond with the in situ topping. Bottom, Fig. 6, secondary beams and flooring units placed. The continuity rods seen in Fig. 4 have been bent down and the floor is ready for the pouring of the in situ concrete.



station and a group of servants' rooms. The flats vary in size from 1 to 5 rooms plus kitchen and bathroom. There are two banks of four lifts (each bank accompanied by a staircase) from which short corridors give access to 12 flats on each floor, i.e., a total of 24 flats on each of the six main floors. Of the remaining 31 flats, ten are on the ground floor and the rest on the two extra floors of the centre wing of the "H."

In the basement and sub-basement, there are separate stores for each flat, bicycle stores, pram stores, a centrally-heated garage for 60 cars, a large laundry and other smaller laundry facilities.

CONSTRUCTION

From the foundations up to ground floor level, normal *in situ* concrete was used. For the remainder of the building,

all the beams, columns, cladding, floors, roof and some of the partitions were prefabricated. Four mobile tower cranes (seen in Fig. 7) were used to place the prefabricated units into position.

The columns are held in position by steel dowels which fit into tubes set in the concrete slab (see Figs. 4 and 6). Between the base of each column and the slab is a sandwich of sheet lead and

WORKING DETAIL

FURNITURE AND FITTINGS: 21

LIBRARY SHELVES: LABORATORIES AT GRAVESEND

Westwood, Sons and Harrison, architects

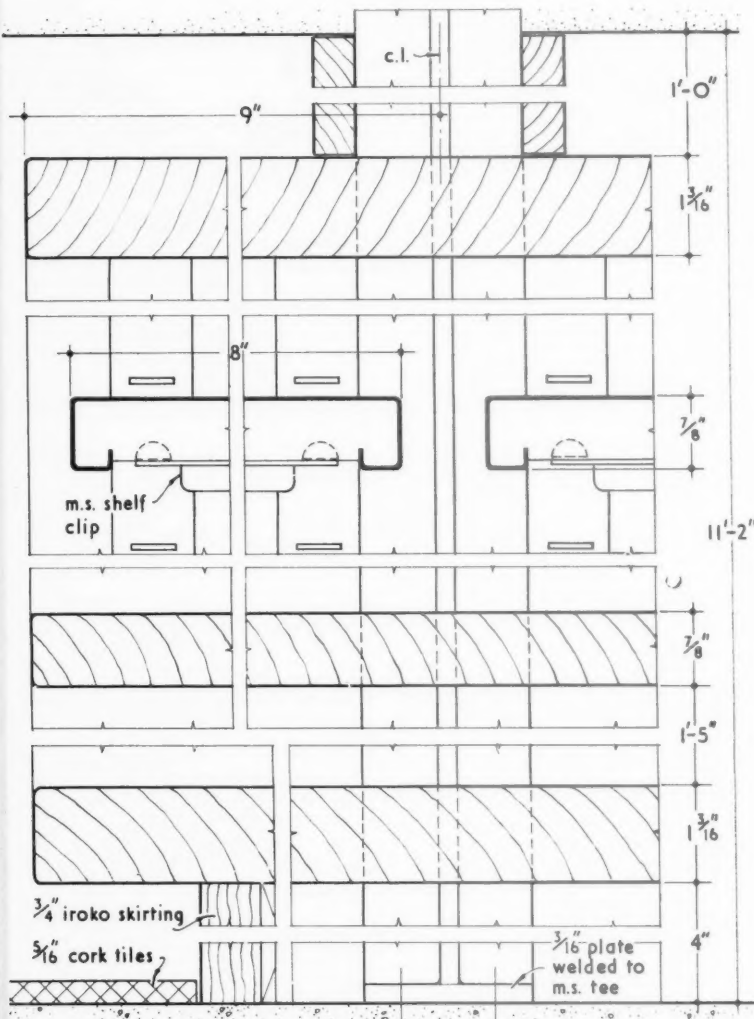


The fitting is constructed from iroko with recessed skirting and adjustable steel shelves: the steel stiffening member which occurs at the ends of alternate fittings is enclosed between bookcase and ceiling in a three-sided casing of iroko.

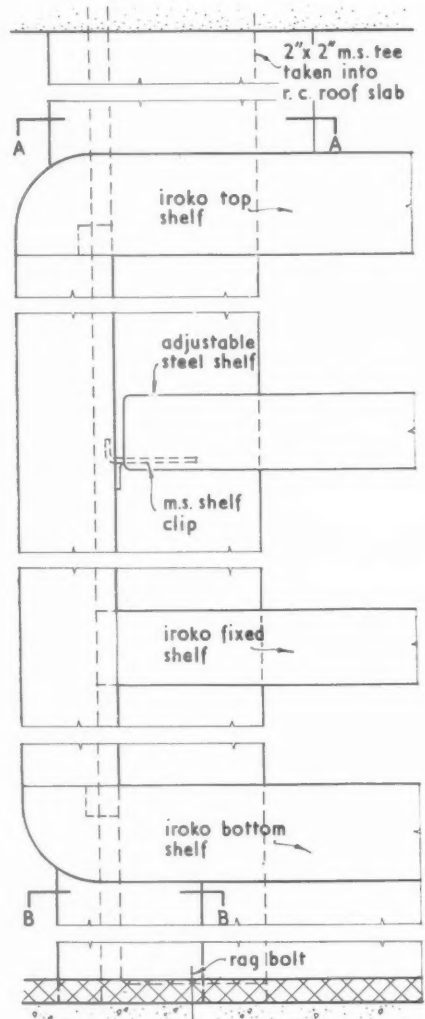
WORKING DETAIL

LIBRARY SHELVES: LABORATORIES AT GRAVESEND
Westwood, Sons and Harrison, architects

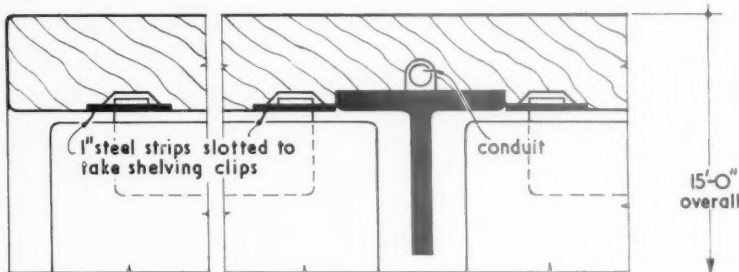
FURNITURE AND FITTINGS: 21



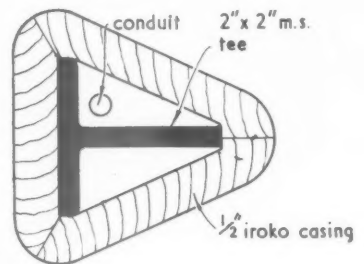
CROSS SECTION THRO' FITTING.



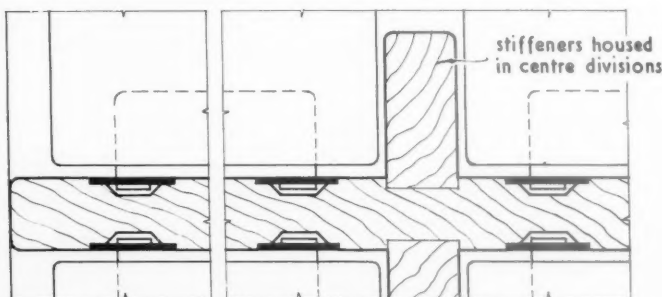
PART FRONT ELEVATION.



PLAN AT END OF FITTING.

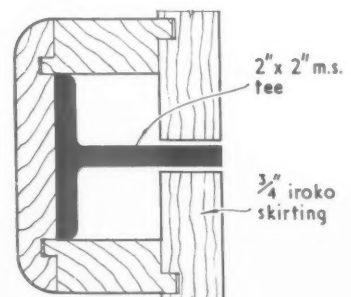


PLAN AT A-A.



PLAN OF INTERMEDIATE DIVISION.

scale: 1/2 full size



PLAN AT B-B.

WORKING DETAIL

WINDOWS: 13

SHOP FRONT: GOWN SHOWROOM IN LONDON W.1

Bronek Katz and R. Vaughan, architects



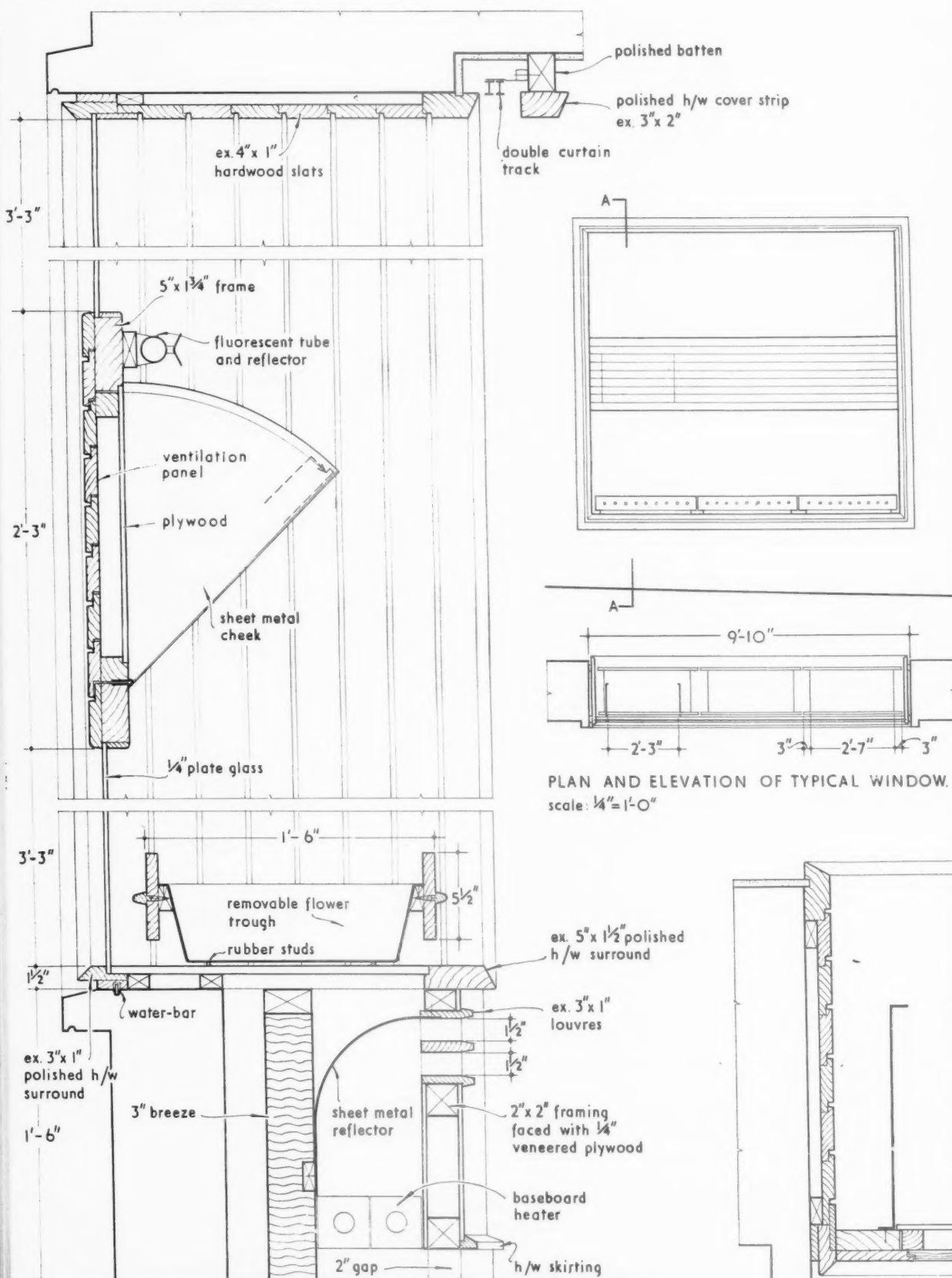
The inside of the window opening is lined with hardwood slats and the glass area is divided horizontally by a panel of similar slats concealing strip lighting.

WORKING DETAIL

WINDOWS : 13

SHOP FRONT: GOWN SHOWROOM IN LONDON W.1

Bronek Katz and R. Vaughan, architects

PLAN AND ELEVATION OF TYPICAL WINDOW.
scale: 1/4" = 1'-0"PLAN OF JAMB.
scale 1 1/2" = 1'-0"

SECTION THRO' SHOPFRONT AT A-A. scale 1 1/2" = 1'-0"

KE
KING

TEST TANKS WATERPROOFED AGAINST 21 FT. HEAD

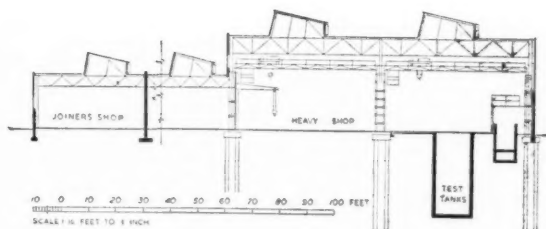


FACTORY FOR SIGMUND PUMPS LTD., AT GATESHEAD-ON-TYNE

THE River Team originally crossed this area and was diverted to form a canal but water still floods the subsoil and surrounds the deepest tank to a depth of 21 ft. 6 in. above its base. Any influx of subsoil water or any leakage from these tanks would defeat their purpose which is to provide an exact basis for measuring the performance of the pumps under test, and freedom from such trouble was assured by the incorporation of 'PUDLO' Brand cement waterproofer in the reinforced concrete structures of the tanks. The difficult problem of providing permanent shuttering to a depth of 30 ft. without internal struts was ingeniously solved by closely encircling the area to be excavated with poured concrete piles.

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Reinforcement Designed and Supplied by :

The Square Grip Reinforcement Co. (London) Ltd.

Consultant for Reinforced Concrete :

O. M. Marcel, I.T.N., M.Am.C.I., M.Soc.C.E. (France)

KERNER-GREENWOOD & COMPANY, LTD.

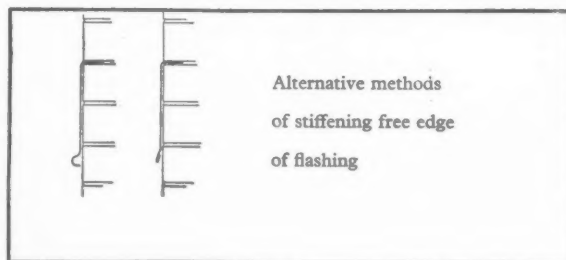
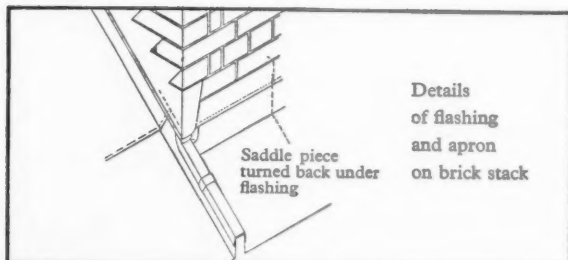
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The word 'PUDLO' is the Registered Trade Brand of Kerner-Greenwood & Co. Ltd., by whom all articles bearing that Brand are manufactured or guaranteed.

DATA SHEET FOR ARCHITECTS No. 7 ZINC CHIMNEY FLASHINGS & APRONS



Zinc is one of the most economical materials available for permanent work and has the additional advantage that it is easily formed. For flashings and aprons No. 14 Z.G. (21 I.S.W.G.) is recommended as a thickness which will ensure a long, trouble-free life. Step flashings of the required length are easily made up from zinc strips at least 7" wide by measuring off the steps against the brickwork.

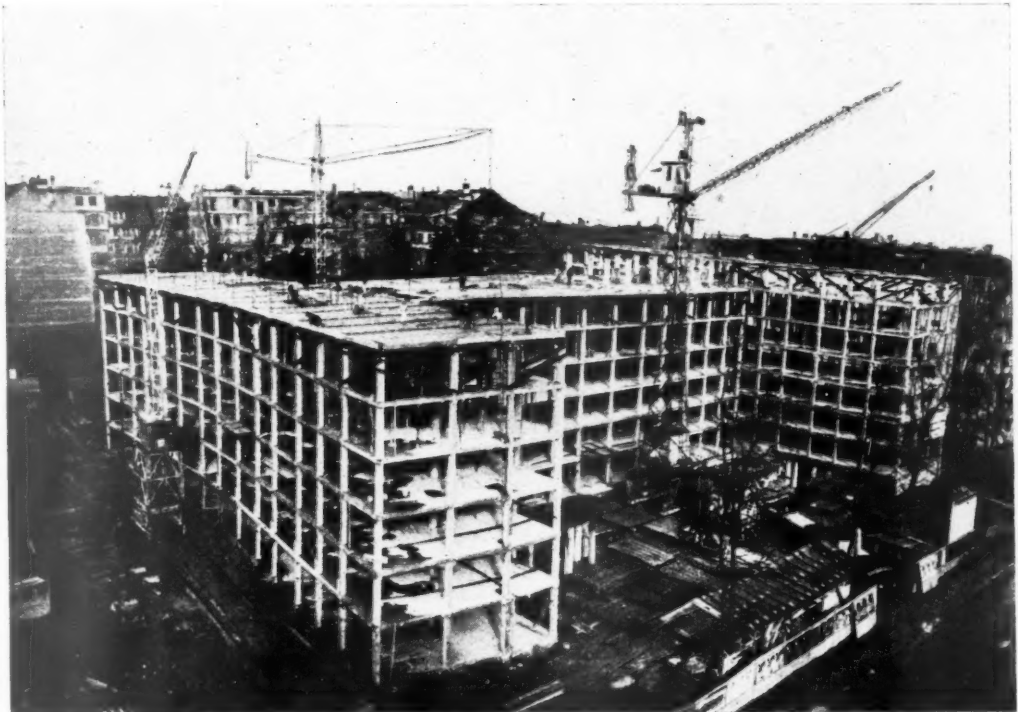
Flashings and aprons are turned into the brickwork and secured by wedges and then pointed. No standard dimensions can be laid down owing to the wide variation in the size of chimneys and the pitch of roofs. Further information on weatherings, gutterings and other uses of zinc in building can be had from the Association, together with a list of publications.

ZINC DEVELOPMENT ASSOCIATION

LINCOLN HOUSE TURL STREET OXFORD TELEPHONE OXFORD 47988



Fig. 7, general view during construction; precast concrete frame almost complete. Note the four mobile tower cranes.

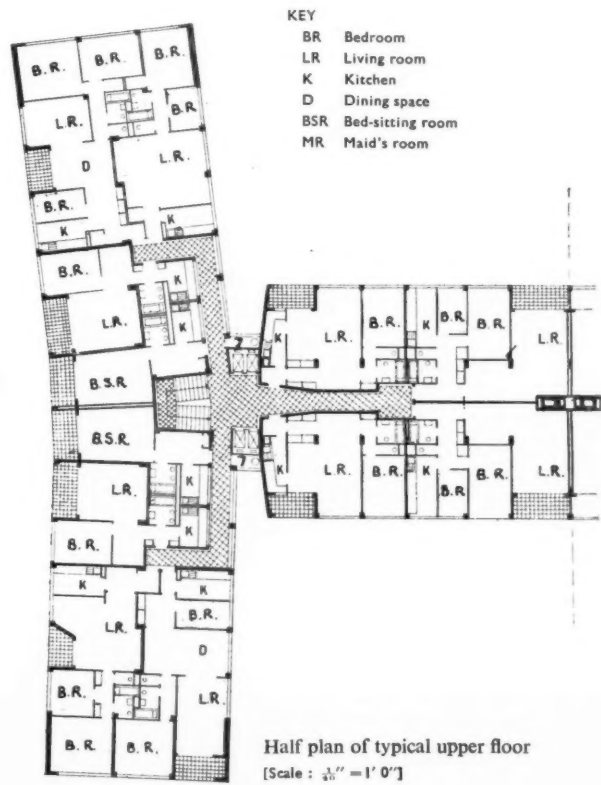
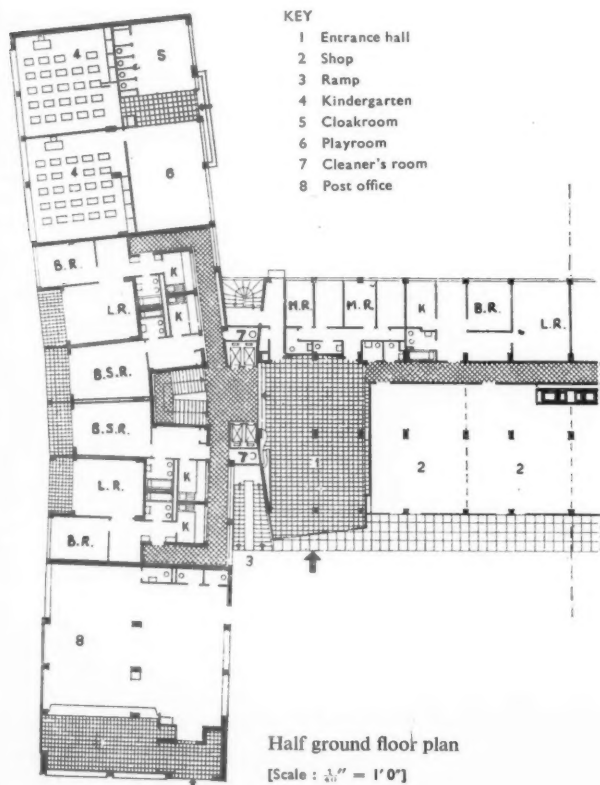


building paper, the lead being intended to take up any slight irregularities. The tops of the columns were held in position temporarily by special demountable formwork (see Fig. 4). The prefabricated main and secondary beams

were then placed in position; hollow blocks set between the secondary beams and 2 in. of *in situ* concrete poured over. Reinforcing rods left projecting from the tops of the columns were bent into the slab, which was carefully vibrated,

thus providing continuity. When the concrete had set, the temporary formwork was taken down.

This sequence of operations was repeated for each floor. It was found that, by this method of construction,





Stony Hall East Housing Site, Stevenage New Town. Bitumen-bonded 'Fibreglass' has been applied in the roof space for thermal insulation. Chief Architect : Clifford Holliday, M.Arch., F.R.I.B.A., A.M.T.P.I. Architect in Charge : O. C. F. Carey, A.R.I.B.A. Assistant Architect : P. Halliwell, A.R.I.B.A.

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Crawley Development Corporation.

Farley Hill Estate, Luton.

Welwyn Rural District Council.

*Field Road Housing Estate,
County Borough of West Ham.*

*Chippingfield Harlow New Town
Development Corporation.*

Architects : Lindsey Drake, A.R.I.B.A., Denys Lasdun, F.R.I.B.A.

General Contractors : Walter Lawrence & Son Ltd.

Hemel Hempstead Development Corporation.

Chief Architect : H. Kellett Ablett, F.R.I.B.A., M.T.P.I.

Engineer & Surveyor : N. W. Cole, M.I.Mun.E., F.R.I.C.S., A.M.T.P.I.

Chief Architect : A. G. Sheppard Fidler, M.A., B.Arch., F.R.I.B.A.,
A.M.T.P.I.

Engineer & Surveyor : F. Oliver, A.M.I.C.E., A.M.I.Struct.E.

Engineer & Surveyor : C. B. Borthwick, M.I.Mun.E., M.R.San.I.

Borough Architect and Planning Officer : Thomas E. North,
F.R.I.B.A., Dist.T.P.

Architect-Planner : Fredk. Gibberd, F.R.I.B.A., M.T.P.I.

Executive Architect : V. Hamnett, B.Sc., A.R.I.B.A., A.R.I.C.S.

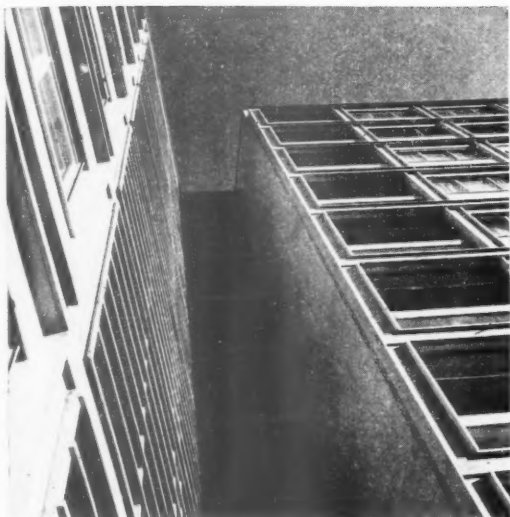
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NEWCASTLE-ON-TYNE OFFICE : 16 Dean Street (Newcastle 20938) • **DUBLIN OFFICE :** 21 Merrion Square North (Dublin 66024)



Above, left, Fig. 8, looking up at the glazed link between the centre block and one wing. Above, Fig. 9, general view of centre block, looking north-west. Left, Fig. 10, staircase and landing, with mural by Eric Hermes.

Kitchens are well equipped with cupboards and refrigerators. The latter are controlled centrally. There are four refuse chutes on each floor. Each flat is fitted with a small built-in safe. In the entrance halls are two large murals by Aubert and on each floor landing is a sgraffito mural by Eric Hermes; one is seen in Fig. 10.

ENQUIRY FORM

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

.....

.....

.....

Please ask manufacturers to send further particulars to :—

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PROFESSION or TRADE

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60 men could assemble and pour one floor, approximately 2,350 sq. yd. in area, in a week (5½ days). The panels beneath the windows were prefabricated, consisting of a 5-in. core of hollow terra cotta blocks, bonded together and faced on the outside with polished artificial stone and on the inside with ½ in. of plaster. The partitions for one floor were prefabricated, but the building proceeded so rapidly that the remainder were constructed *in situ* of hollow terra cotta blocks. The staircases, including the balustrades and handrails, were prefabricated of artificial stone.

FINISHES

Polished artificial stone, in a variety of colours, and Chamson, a natural French stone, have been widely used externally, providing a good contrast to the polished faces of the exposed beams. The contrast provides an interesting pattern and expresses logically the

structural and non-structural elements of the building. The floors of the entrance halls are of Lunel or Travertine. The corridors have asphalt tiles and are lit by fluorescent tubes. Apart from bathrooms, kitchens and w.c.'s, which are tiled, flooring in the flats is of parquet. The roof is covered with bituminous felt. Walls are finished with plaster, but in the corridors an unusual finish has been used. The walls were painted and then a coat of *papier maché* was floated on. This produced a very pleasant texture and was not unduly expensive.

SERVICES AND EQUIPMENT

Central heating is provided by three boilers, hot water by two more. All are oil-fired, but are convertible for solid fuel. An exhaust ventilation system with fans in the roof ventilates kitchens, bathrooms and w.c.s. There are separate ducts from each of these rooms.

This Specialized Age



The Aircraft Designer

This is the era of the jet propelled aircraft, the age when man has finally smashed through the sound barrier and aircraft have attained speeds which a few years ago were beyond conception. Chief Architect of the spectacular post-war advances in this field is the aircraft designer whose specialized training enables him to plan for still greater achievements.

This is the age of specialization. With the advance of modern knowledge, no one man is able to excel in everything and in the field of human endeavour the final product is inevitably the result of co-operation by specialists. So it is with architectural planning. Working under the captaincy of the architect, the team of specialists all play their part and take responsibility for different sections of the project.

Over the years, Lockhart Equipment Ltd., have gained a reputation as specialists in the planning and equipping of Industrial Canteens, Hotels and Restaurants. Experienced technicians are at all times available to provide specialist service to the architects, which includes the preparation of layout plans and the submission of appropriate quotations, whether it be for a completely new installation or the reorganisation of existing facilities. Lockhart Equipment Ltd., offer a fully comprehensive service whereby every item of catering equipment from the largest refrigerator down to the smallest piece of crockery, cutlery, furniture, linen, etc., is planned for and supplied so that the whole unit can be handed over complete and ready for operation.

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INFORMATION CENTRE

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

2.124 planning: general BUILDING ESTATES

The Development of Building Estates. Edwin Robinson and Lewis Keeble. (The Estates Gazette Ltd. 52s. 6d., 1952.)

A practical textbook which architects will find useful to know about; 354 pages; illustrated by diagrams, plans and photographs.

This is a comprehensive guide on the development of housing estates by two authors who are surveyors and who, as might be expected, write particularly competently on the financial and legal aspects, but with a less sure touch on design.

This is a book which covers the whole subject of planning housing estates, including the history of the subject, the selection of sites, road and site layout, town planning aspects, valuation, administration and finance.

Architects should bring the book to the notice of clients who are intending to develop new estates, albeit sometime in the future.

The most valuable sections for the architect already experienced in layout problems are the sections on administration and finance. The photographs are poor.

4.72 planning: urban and rural BEDFORD

Bedford by the River. A Town-planning report by the Max Lock Group. (John Murray, London, 1952. 21s.)

A very well-produced report on the planning of one of the more important of our minor towns. The co-authors of the report were David Grove and Gerald King. 140 pages, including numerous maps, diagrams, tables, illustrations and index.

The group have produced a balanced survey and plan devoid of excessive survey details and of extravagancies in the planning proposals. This is an advisory plan which it should readily be possible to translate into a plan to be formally submitted to the planning Minister. The Group, while they prepared the Report during 1950-51, lived and worked in Bedford.

One of their interesting proposals is that a relief road should be built to free the town centre of north-south through traffic and to link the outer neighbourhoods on the west and south. By far the worst of Bedford's problems is the congestion in the town centre resulting from the continued growth of retail trade on traditional sites which are too small to support any further extension.

As the authors write, it might seem that expensive by-passes would be necessary to solve the problem. This was thought to be the case by the Ministry of Transport and the County Council, as well as by the Bed-

ford Corporation, until the Origin and Destination Census carried out in September, 1950, showed that a much simpler solution would meet the need.

8.30 surveying and specification CURRENT PRICES: BOOK

Laxton's Builders' Price Book. 1952. Edited by P. T. Walters. (Kelly's Directories Ltd. 125th Edition. 1952. 30s.)

The 125th edition of this well-known book, containing about 500 pages of prices and nearly another 300 pages of tables and lists of brands and trade names; of interest to all those concerned with prices for building work.

As in previous editions, "Laxton's" gives rates of wages, and prices for builders' plant, for materials and for building work of all descriptions, including many specialist sub-trades; the prices have been analysed afresh in the light of present conditions and take into consideration the wage increases of February last.

Percentages have been given at the end of each group of prices representing the effect of a penny variation in the basic wage rate. This enables the reader to make his own adjustment for fluctuations in wage rates, without resorting to overall percentages which may well be misleading.

The comprehensive list of brands and trade names, and the alphabetical list of firms connected with them, appear, as usual, and form a very useful section.

The book is well indexed and well set out, and has all the appearance of having been carefully revised. It should be of real value to all who are interested in building prices.

13.91 materials: timber FLOOR BOARDS

The Grading and Sizing of Softwood Flooring. BS 1297:1952. (British Standards Institution. 2s.)

Covers quality of softwoods for plain-edged and tongued and grooved flooring.

This revised BS covers quality grading in terms of checks and shakes, cup, knots, wane and rate of growth. Tolerances on thickness, width and length are defined and also the dimensions of the tongue and groove. Moisture content is left open for agreement between buyer and seller. It refers to six types of timber but could be applied to other kinds. Some specification of this kind is a useful tool to have but, as the foreword says, "In practice the majority of the boards supplied are likely to be well above the minimum requirements specified." To specify to this standard therefore merely means an elimination of the worst grade of material, not an assurance of getting a good grade.

14.50 materials: concrete CONCRETE MIXING

Making Concrete. MOW Advisory Leaflet No. 26. (HMSO. 1952. 3d.)

Intended for the man on the site. Simple but important essentials. Useful table showing quantities of material per bag of cement for various mixes. Allows for proper water content, including water in wet sand.

15.100 materials: applied finishes and treatments DECORATING FIBRE BOARDS

Fibre Building Boards (V). G. A. Clarke. (The Decorator. June, 1952.)

Short article on papering, distempering, painting and staining of insulation and hard-

boards. A number of useful points included such as types of priming, advantage of brush application, etc. Useful for specification writing.

16.88 materials: miscellaneous GLASS

The Discoloration of Window Glass. BRS Digest No. 43. (HMSO. June, 1952. 3d.)

Brief note explains that discoloration which sometimes occurs is due to glass getting wet during transport or storage. Thin film of moisture between adjacent sheets of glass reaches soda from glass and alkaline solution attacks the surface. No remedy once glass is thus affected but cannot occur except when stacked sheets get damp before fixing in position.

16.89 materials: miscellaneous BRICKS AND TILES

The Frost Resistance of Fired Clay—A Perennial Problem. B. Butterworth. (The British Clayworker. June, 1952.)

First part of paper to be read at International Ceramic Conference, 1952. Chiefly an examination of the use of freezing tests and reasons for their failure to give adequate information on behaviour in practice. Specialist but interesting.

19.154 construction: details SHORT BORED PILES

The Short Bored Pile Foundation. BRS Digest No. 42. (HMSO. May, 1952. 3d.)

In two parts, the first dealing with the method of boring while the second covers application and design.

Short bored piles have been described and exhibited a number of times in the last few years. There is now a fair amount of experience of their use. This Digest gives a clear explanation of all the designer needs to know and none of it should be beyond the easy grasp of any architect.

A brief introduction points out that advantages not to be overlooked with this form of foundation are much greater cleanliness of site and much less soil to remove. Speed may be greater and will be if mechanical boring is used. Work can proceed in weather which would make trenching difficult or impossible. The system is intended for clay sites. Tree roots or a very stony clay make difficulties.

Part I describes clearly the process of pile boring by hand and by machine, with useful practical tips which have clearly been learnt from experience.

Tables show times taken for boring different depths and different diameters and also show the effect of stones and the way a large diameter bore cuts down trouble with stones. Details of the concrete and method of casting are given.

Part II deals with application and design. Some care must be taken to find out what site conditions really are. Piles are probably unsuitable in clays containing sulphates because the use of high alumina cement raises problems. A table of load bearing capacities is given and the method of calculating footing beams shows a big saving over beams calculated by normal WL/12 methods.

The use of this type of foundation will mean a little more trouble at the design stage, at least until the design technique becomes familiar, but it seems to have much to commend it for use on clay sites.



We design the structure, fabricate
the steel in our workshops at Norwich and
our own men erect it on the
site. In short, we see the job through from
start to finish. An example
is the Cromer Street Flats for the
St. Pancras Borough Council, in which
1300 tons of steel were used.

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THE INDUSTRY

Brian Grant's report from the Industry this week includes details of the new aluminium roof which has been constructed at Alexandra Palace, a photo-electric protective device for oil burners and a useful booklet on wood preservation.

DOMESTIC HOT WATER

The photograph on the right shows a "Thermain No. 15" hot-water storage heater, as installed by the Bury St. Edmunds Borough Council in a recently completed block of flats. It was thought desirable that each flat should have its own self-contained plumbing system, in order that it should be possible to continue using it even if the water supply were cut off in an emergency, or if repairs have to be carried out in adjoining flats. At the top of each unit is a small, cold-water supply tank, incorporating a ball valve, so that at all times it is possible to use the stored and heated water for baths, etc. (R. & A. Main Ltd., 48, Grosvenor Gardens, London, S.W.1.)

CONTROL OF OIL BURNERS

A leaflet issued recently by the Rheostatic Company describes the new "Satchwell" photo-electric protective device which is sensitive to the flame of automatic and semi-automatic oil burners. In the normal automatic oil burner there are various safety devices intended to prevent the pump from continuing to deliver oil if, by any chance, the automatic flame lighting should fail. The device consists of two units, the photo-cell head, which is designed for mounting on the boiler front plate so that it can be focused on the flame, and the amplifier and relay unit which is fitted in a separate housing on the wall. When the cell is illuminated by the flame, a very small current is passed to the amplifier which controls the main

circuit of the oil burner. If there is no flame or if the flame should fail during use the oil supply is cut off. Moreover, the oil burner will be stopped if either the photo-electric cell or the amplifying system fails, or if any of the electrical connections are broken.

The idea is not entirely new, but the details have been thoroughly worked out and almost every possible type of failure seems to have been allowed for. (The Rheostatic Company Ltd., Slough, Bucks.)

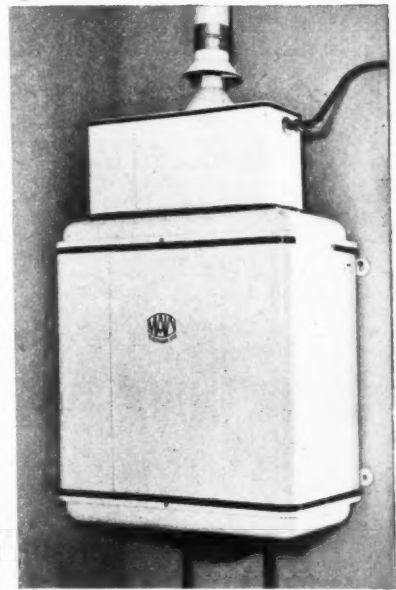
TIMBER PRESERVATION

A booklet recently published by Messrs. Hickson & Welch deals with "Tanalith" wood preservative. "Tanalith" is a general-purpose preservative, but the firm also manufactures a variety of other preservatives, including "Triolith," principally used for preserving timber in mines; "Wolmanol A," for brush or dip treatment against fungicidal and insect attack; "Pyrolith," for vacuum-pressure treatment to increase flame spread resistance as well as to stop attack by fungi and insects; and "Tanexol," a highly-concentrated insecticide for fighting furniture beetle or woodworm, powder post beetle, death watch beetle and the house longhorn. This last product is intended only for use on timber already in position. The booklet contains full details of methods of application, and a useful list of timber preservative plants where the various treatments can be carried out, both in this country and abroad. (Hickson & Welch Ltd., Castleford, Yorks.)

STEEL PRODUCTION

The teams which visit the USA under the auspices of the Anglo-American Productivity Council come back with reports which reiterate the same old story of greater demand, harder work and higher output per man hour. To a certain extent this is inevitable and, although the report of the visit of steel producers* tells the same story, it is well worth reading. There are several facts which should be appreciated before any comparisons are made between the steel industries of the two countries. Firstly, there is a steady and rapidly-increasing demand in the USA from the domestic consumer, who is accustomed to kitchen furniture and mechanical equipment of all kinds made of steel. Secondly, the American steel industry is concentrated in units of a size we are

* Steel Construction. (Anglo-American Council on Productivity. 3s.)



Main's "Thermain No. 15," self-contained, gas-operated, storage water heater.

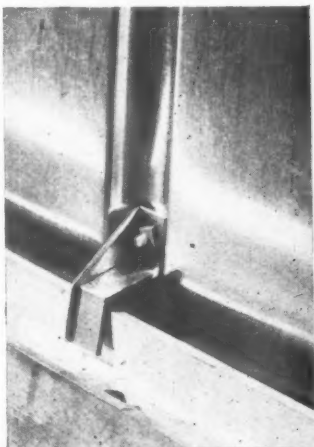
only beginning to approach here. Thirdly, there is, in the USA an abundance of natural gas, oil and easily-mined deposits of good-quality coking coal, which the industry needs in large quantities. Price comparisons mean very little, but it is interesting to note that the price of British steel is still lower than American.

ALUMINIUM ROOFING

Below left, are two close-up photographs of the fixing of the aluminium roofing recently erected over the East Hall of Alexandra Palace. The building suffered considerable damage during the war and most of the wrought iron glazing bars and purlins became very rusty. It was, in fact, found possible to re-use only about one-fifth of the wrought-iron purlins, and for the re-roofing it was decided to make use of the "Aygee" system of curtain walling. This is based on a standard glazing bar made of aluminium, which can be modified to accommodate various infillings, such as glass, flat or corrugated aluminium, other metal sheeting, or standard insulation board. It is thus possible to place any necessary glazing exactly where it is needed. The sheeting used at the Alexandra Palace (see photograph on page 67) is Mansard pattern, corrugated aluminium, with super-purity aluminium used for the flashings; all supplied by the British Aluminium Co. Ltd. (Aygee Ltd., 100, Westminster Bridge Road, London, S.E.1.)

DELIVERING SOLID FUEL

A City firm has just introduced a special-purpose lorry for the delivery of coal and coke. This new lorry has a scraper conveyor, which can handle fuel up to 4 in. in diameter, driven from the engine and running fore and aft along the bottom of the lorry hopper. A further conveyor is mounted at the back and suspended from a small jib so that it can swing through 180 degrees horizontally and be raised to clear and discharge at a height of 7 ft. 6 in. The length of this second conveyor is 13 ft. 6 in., and the swinging motion allows the fuel to be stacked at a uniform height instead of in space-wasting heaps. Delivery can be made by the lorry driver and the conveyor will deal with a 6-ton load in just over ten minutes. (Charrold Ltd., Tower House, 40, Trinity Square, London, E.C.3.)



Two close-up views of the fixings of the new aluminium roof at Alexandra Palace (left, from the inside; right, from the outside). Note the die-cast aluminium shoe, specially designed to secure the aluminium glazing bars to the purlins without holes being drilled in the latter. For general view of new roof, see page 67.

Buildings Illustrated

Abattoir in Chapel Street, Stratford-upon-Avon. (Page 71.) Architect: H. W. Wilson-Wood, F.R.I.B.A. General contractor: D. J. Dyer. Sub-contractors: Asphalt, Ragusa Asphalte Paving Co. Ltd.; concrete blocks, D. J. Dyer; reinforced concrete, Constone Ltd.; bricks, Proctor & Lavender and The London Brick Co. Ltd.; artificial stone, Constone Ltd.; structural steel, Boulton & Paul Ltd.; special roofing, Celotex Ltd. and Ragusa Asphalte Paving Co. Ltd.; woodblock flooring, Messrs. Hewitson; patent flooring, Prodorite Ltd.; electric wiring, N. Dixon; casements and window furniture, Crittall Manufacturing Co. Ltd.; rolling shutters, Potter Rax Ltd.; tiling, Messrs. Robertsons; equipment hoists and runways, Lockerbie & Wilkinson Ltd.

Boy Scout Hall and Hostel, Roland House, Stepney Green, London, E.1. for the Boy Scouts' Association. (Pages 72-73.) Architect: Clive Pascall, A.R.I.B.A. General contractor: E. E. Burgess Ltd. General foreman: W. F. Jones. Sub-contractors: asphalt, Permanite Ltd.; bricks, London Brick Co. Ltd.; artificial stone, Liverpool Artificial Stone Co., Ferro-Concrete (Shepperton) Ltd.; structural steel, Matthew T. Shaw & Co. Ltd.; roofing felt, Permanite Ltd.; partitions, Flexo Plywood Industries Ltd.; glass, Aygee Ltd.; patent glazing, W. H. Heywood & Co. Ltd.; woodblock flooring, Bennetts Wood Flooring (Tungit) Co. Ltd.; patent flooring, Armstrong Cork Co. Ltd.; central heating, J. Wontner-Smith Gray & Co. Ltd.; gasfittings, North Thames Gas Board; gas-fired boilers, Ideal Boilers & Radiators Ltd.; electric wiring, A. Dean & Co. Ltd.; electric light fixtures, Merchant Adventurers Ltd.; plumbing, Z. D.

Berry & Co. Ltd.; sanitary fittings, Stitsons Sanitary Fittings Ltd., Shanks & Co. Ltd.; door furniture, Yannedis & Co. Ltd.; casements, Guildford Glass & Metal Co. Ltd.; iron staircases, E. H. Burgess Ltd.; sunblinds, Hills (West Bromwich) Ltd.; plaster, E. H. Burgess Ltd., Millars of Walthamstow Ltd.; metalwork, J. H. Swanserr & Son; joinery, Jayanbee Joinery Ltd.; lifts, J. & E. Hall Ltd.

Laboratories, Stone, Greenhithe, Kent, for the Blue Circle Group, Associated Portland Cement Manufacturers Ltd. (Pages 75-80.) Architects: Westwood, Sons & Harrison, F./R.I.B.A. Chief assistant: Noel Brandon-Jones, A.R.I.B.A. Chartered structural engineers: E. P. Wells, Cocking & Meston. Consulting engineers for services: A. F. Myers & Partners. Quantity surveyor: Cyril Sweett, F.R.I.C.S. General contractor: Richard Costain Ltd. Sub-contractors: Asphalt roofing, Excel Asphalte Co. Ltd.; asbestos cement sheeting, Universal Asbestos Co., Boddy Roofing Co. Ltd.; balustrades and railings, Adrian Stokes Ltd.; canteen cooking equipment, Falkirk Iron Co. Ltd.; cast stonework, Stuart's Granolithic Co.; cement glaze, Robbs Cement Enamel Finishes Ltd.; concrete blocks, Atlas Stone Co. Ltd.; concrete bricks, Dunbrick Ltd.; convactor heaters, British Trane Co. Ltd.; doors (internal), Shapland & Petter Ltd.; electrical installation, Rashleigh Phipps & Co. Ltd.; false ceilings, Tentest Fibre Board Co. Ltd.; fibrous plaster, G. Jackson & Sons Ltd.; flooring (cork), Korkoid Decorative Floors; flooring (missanda blocks and plastic tiles), Hollis Bros. Ltd.; flooring (terrazzo), Fennig & Co. Ltd.; glass domelights, T. & W. Ide Ltd.; glass bricks, Pilkington Brothers Ltd.; heating and ventilation, Norris Warming Co. Ltd.; ironmongery, Yannedis & Co. Ltd.; joinery, P. H. Barker & Son Ltd.; laboratory fittings, Baird & Tatlock Ltd.; library shelving, Luxfer Ltd.; lifts, Bennie Lifts Ltd.; light fittings, General Electric Co. Ltd.; planting and Kentish rag walling,

Gilliam & Co. Ltd.; sanitary fittings, Shanks & Co. Ltd.; steel lockers, W. B. Bawn & Co. Ltd.; steelwork, Moreland Hayne & Co. Ltd.; tiling (concrete), Standard Pavements Ltd.; tiling (glazed), Cope & Co. Ltd.; windows (aluminium), Williams & Williams Ltd.; windows (wood), Jayanbee Joinery Ltd.; wood-wool slabs, Gyproc Products Ltd.

Corrections

The name of the Manchester Slate Co. Ltd. was omitted from the list of sub-contractors on the Tractor Repair Depot at Chester, illustrated on May 22. This firm supplied and fixed roofing and vertical sheeting on the offices and workshop; they also supplied and fixed the wood-wool slabs and the lining board to the workshops.

The advertisement for Messrs. Aygee Ltd. on July 3 referred incorrectly to the firm's exhibits at the "Road Centre." This should have read "Building Centre."

On June 12 we stated that the wall tiling at the premises for F. W. Woolworth & Co. Ltd., Plymouth was carried out by The Standard Pavements Co. Ltd. This is incorrect; the work was carried out by Messrs. Bryon & Co. Ltd., of London and Birmingham.

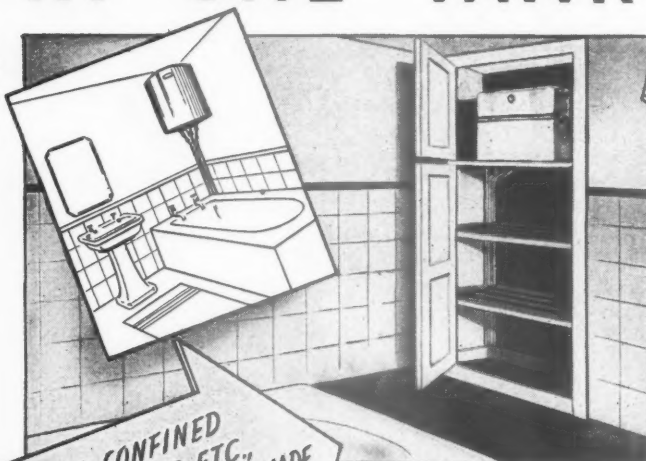
Announcements

Mr. Hugh Bankart, F.R.I.B.A., has moved to 8A, Miles Buildings, George Street, Bath, Somerset, where he will continue in practice independently. He will be pleased to receive trade catalogues, etc.

Edward A. Pearce & Partners, consulting engineers, have now moved from Harrow to 28, Baker Street, W.1. (Tel.: Welbeck 3564.)

W. Wylton Todd, chartered architect, 11, Duke Street, Manchester Square, W.1, would like manufacturers' literature.

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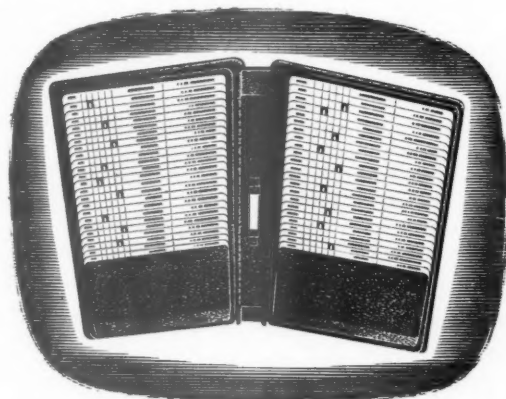
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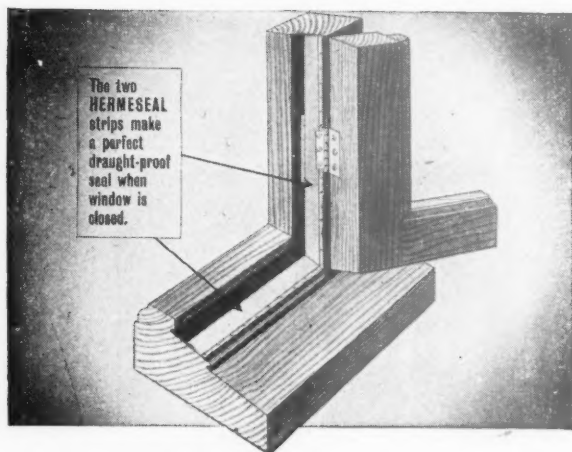


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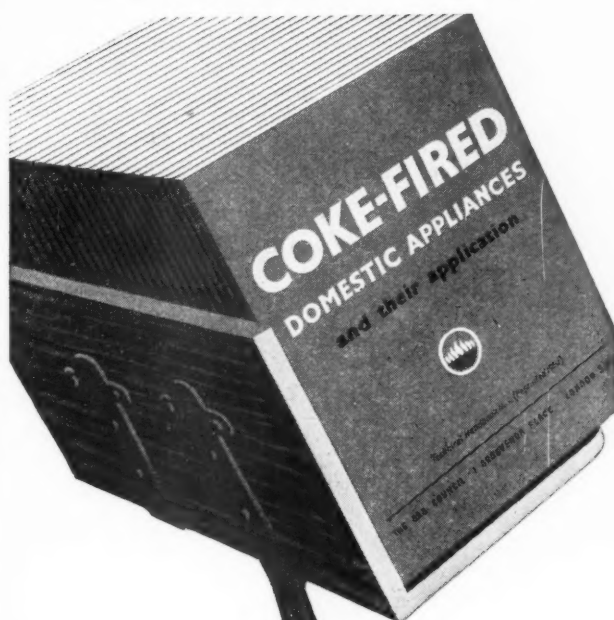


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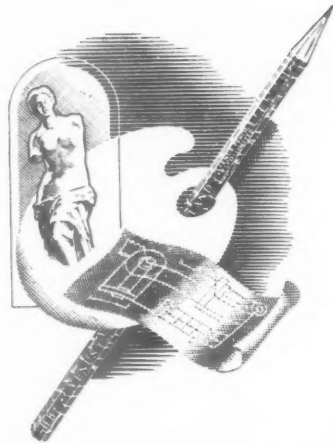
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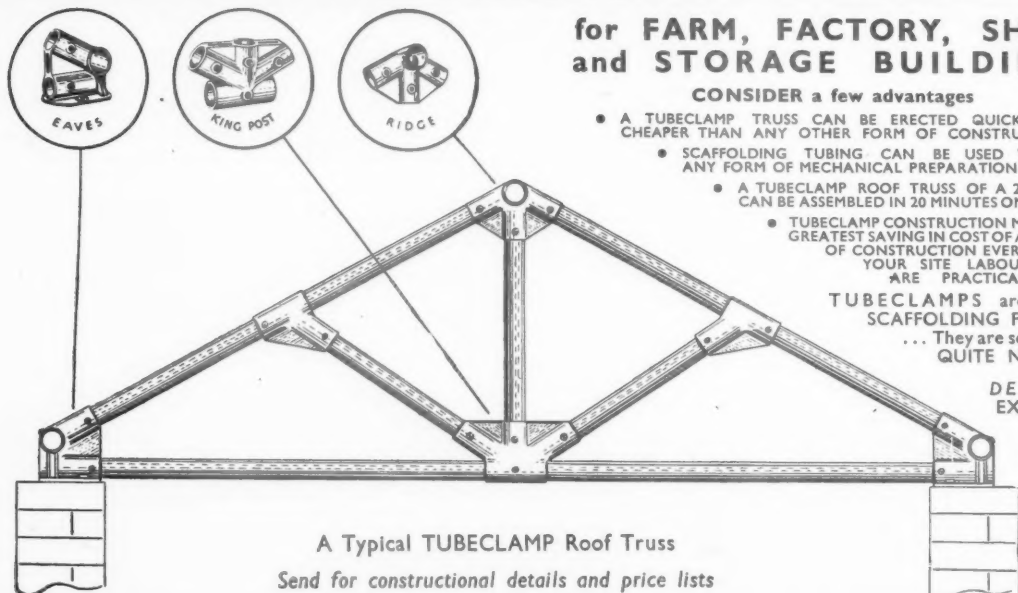
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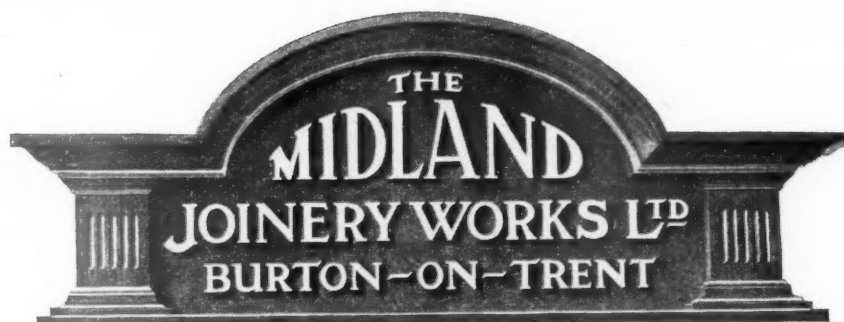
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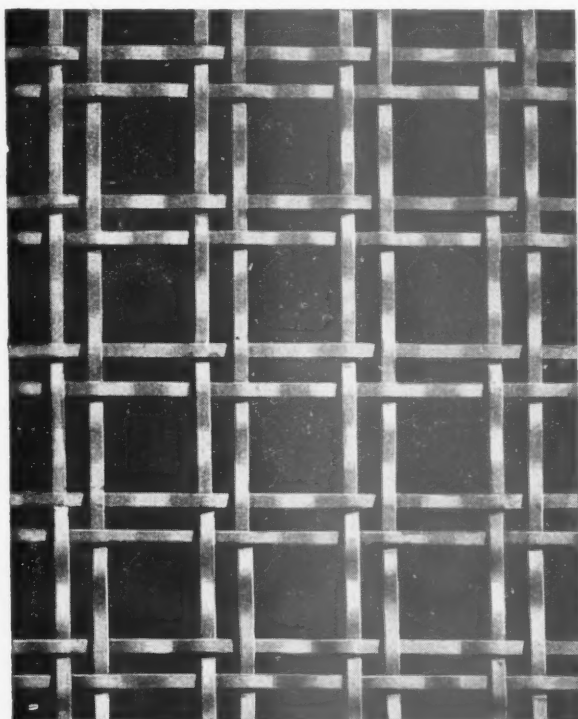
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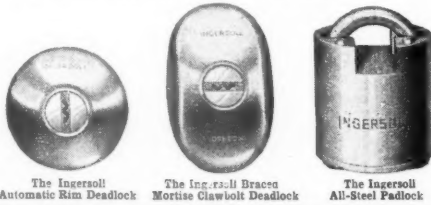
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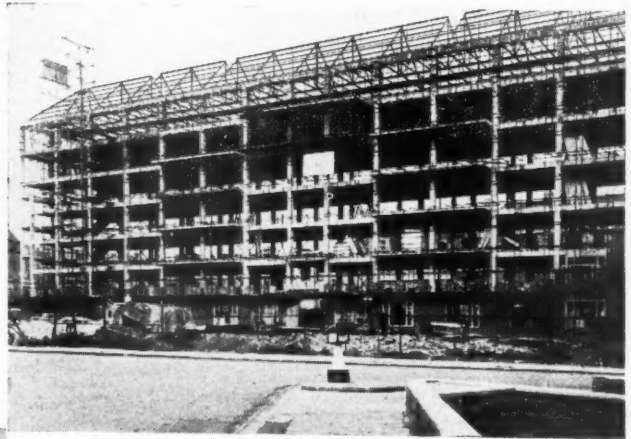
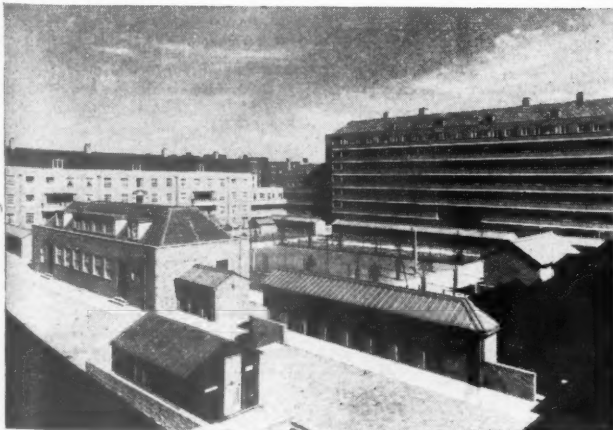
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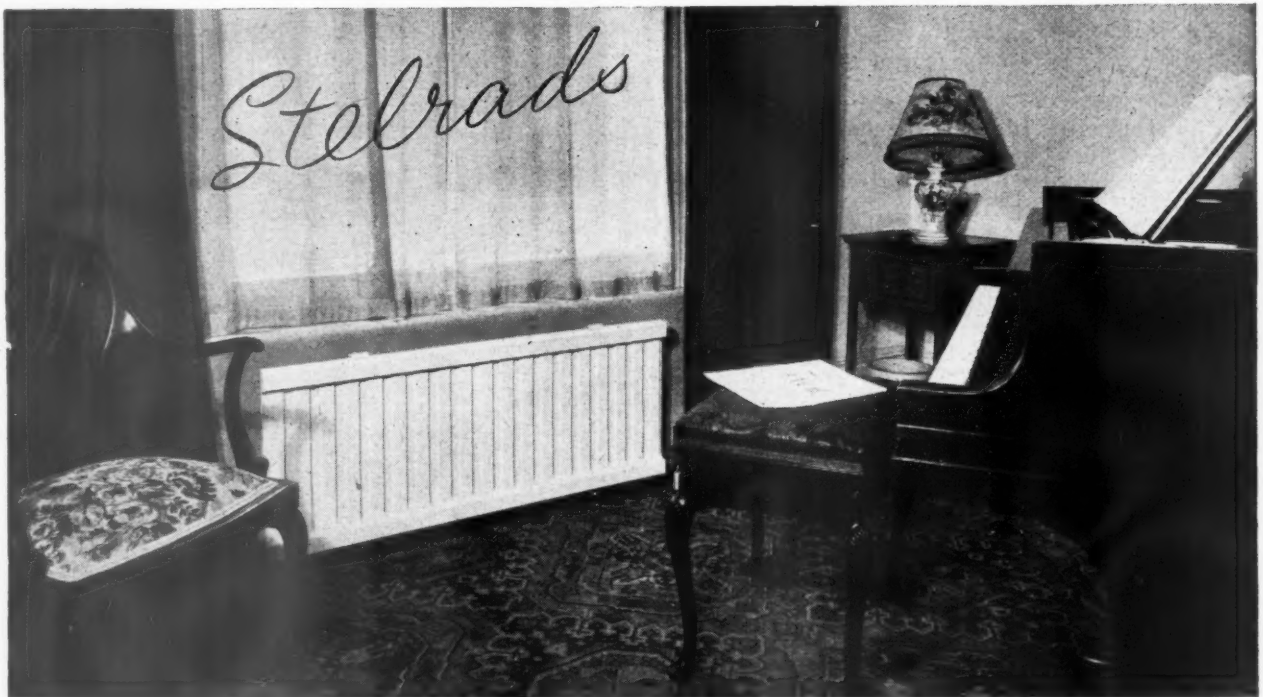
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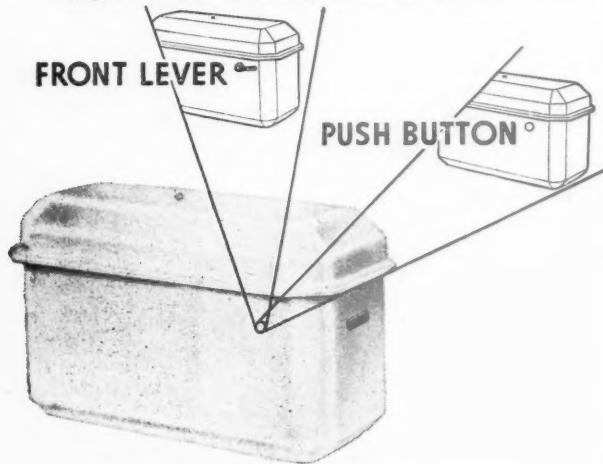
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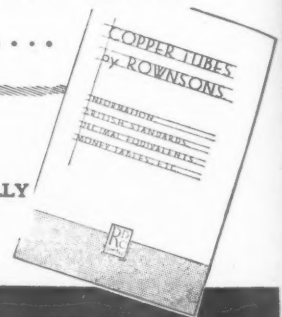
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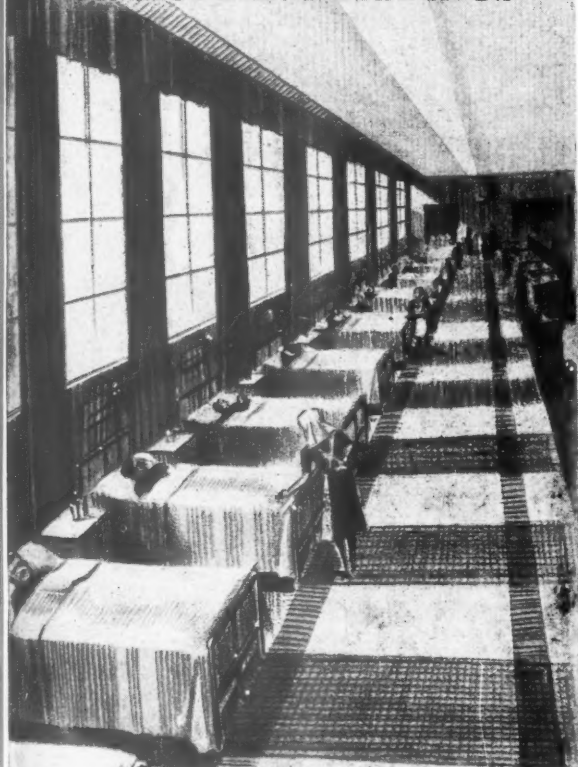
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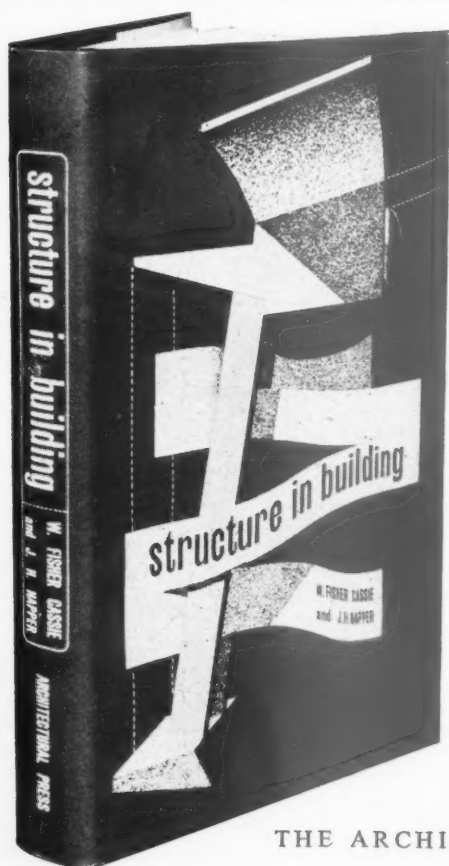
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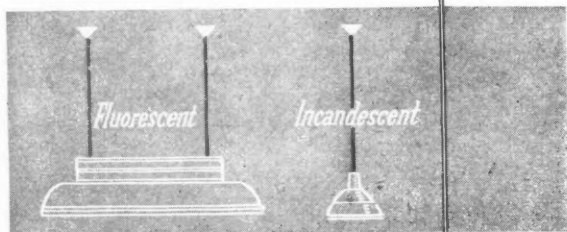
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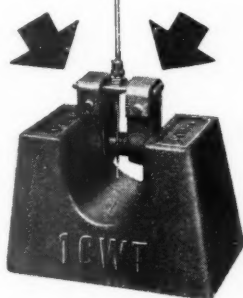
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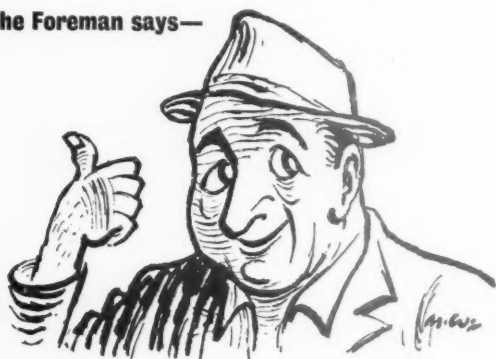
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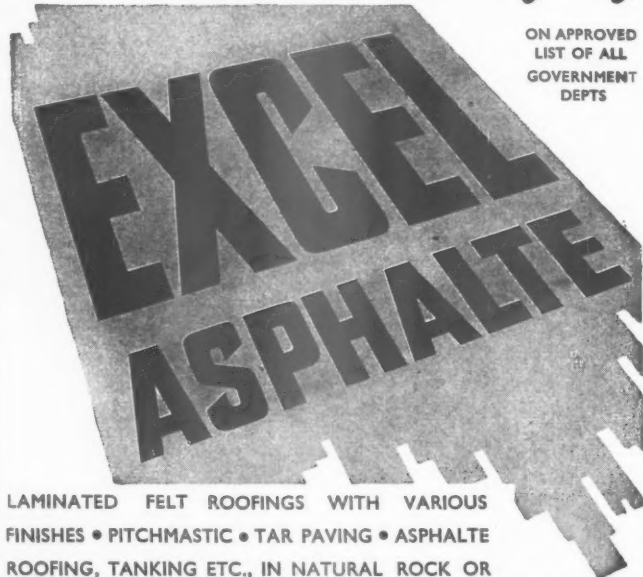
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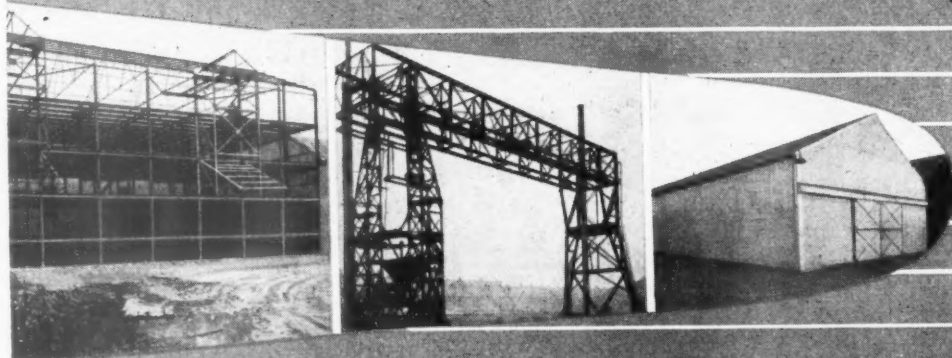
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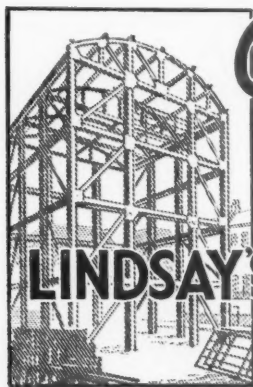
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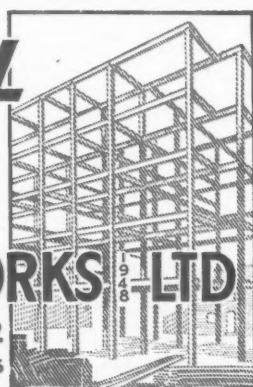


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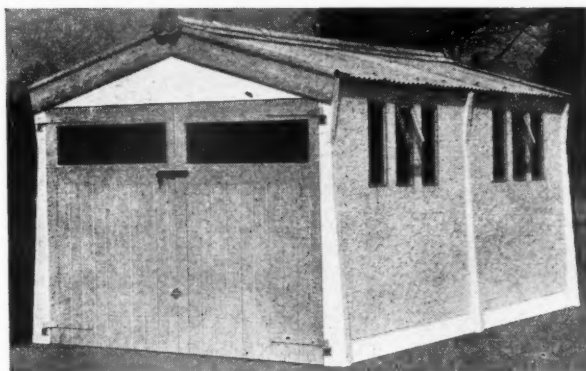
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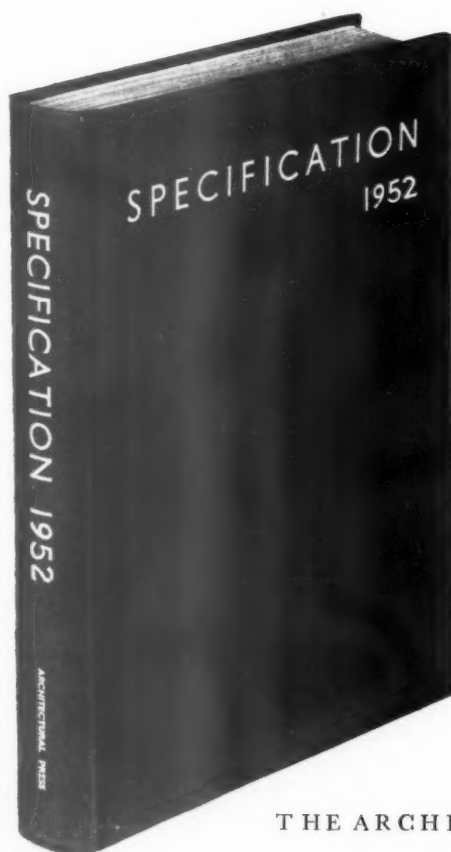
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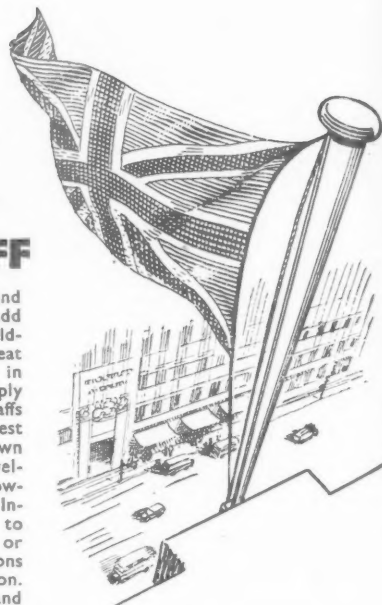
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Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1. and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

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

Public and Official Announcements

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

CITY OF BIRMINGHAM EDUCATION COMMITTEE

APPOINTMENT OF DEPUTY ARCHITECT.

Applications are invited from suitably qualified Architects for the position of Deputy Architect to the Education Committee (Architect to the Committee: Mr. J. K. Sheridan-Shedden, A.R.I.B.A.).

The salary will be at the rate of £1,250 per annum, rising by annual increments of £50 to £1,450.

Applicants will be required to produce evidence of their capacity in design and construction. Further particulars and forms of application, which should be returned not later than 29th July, 1952, should be obtained (s.a.e.) from the undersigned.

E. L. RUSSELL,

Chief Education Officer.

Education Office, General Purposes Branch, Council House, Margaret Street, Birmingham, 3. 7078

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

Applications are invited for the following posts on the permanent establishment, in connection with the reconstruction programme of the County Borough:—

TWO ASSISTANT ARCHITECTS. A.P.T. Grade VI. £645 × £20 × £25—£710, plus London allowance.

Applicants should be A.R.I.B.A. or Registered Architects, and have had experience in large Housing works and be able to supervise Contracts. Application forms (returnable by 28th July, 1952) to be obtained from the Borough Architect and Planning Officer, Thomas E. North, O.B.E., F.R.I.B.A., 70, West Ham Lane, E.15.

G. E. SMITH,

Town Clerk.

West Ham Town Hall, Stratford, E.15. 7095

GOVERNMENT OF THE UNION OF BURMA

Applications are invited for the posts of (i) ARCHITECT, and (ii) QUANTITY SURVEYOR for the Architectural Branch, Buildings and Roads Department. Minimum qualifications—Associate-ship of the Royal Institute of British Architects for post (i) and with the Royal Institute of Chartered Surveyors qualification for post (ii) or their equivalents. Pay £225 and £187 10s. 0d., fixed per mensem respectively. Contract for 3 years. Free passage. Provident Fund. Gratuity. Full terms and conditions with forms of applications obtainable on request from the Embassy of the Union of Burma, 19a, Charles Street, W.1. Applications received up to 30th August, 1952. 7109

THE UNIVERSITY OF SHEFFIELD

Applications are invited for the post of LECTURER or ASSISTANT LECTURER in ARCHITECTURE to begin duties as early as possible.

Salary Scales: Lecturer, £550—£1,100. Assistant Lecturer, £450—£500, with Superannuation provision under the F.S.S.U. and a family allowance. The commencing salary on either scale will depend on the qualifications and experience of the successful candidate.

Further particulars may be obtained from the undersigned with whom applications (three copies) including the names and addresses of two referees should be lodged by 9th August, 1952.

A. W. CHAPMAN,

Registrar.

7110

METROPOLITAN BOROUGH OF SHRODITCH

ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of Architectural Assistant. Salary A.P.T. V (£600—£650).

Subject to medical examination. Council's Superannuation Scheme and N.J.C. Conditions. Preference will be given to candidates with a recognised architectural qualification.

Applications, stating age, training and experience, and giving two referees, to arrive by 1st August, 1952.

C. A. JAMES,

Town Clerk.

Town Hall, Old Street, E.C.1. 7105

COUNTY BOROUGH OF CROYDON.

SENIOR ASSISTANT ARCHITECT.

Applications are invited for this appointment in the School Architect's section from qualified persons with considerable experience in the preparation of working drawings and sketch plans. Salary: A.P.T. VI. £675—£740 per annum inclusive.

Applications, on forms obtainable from the Chief Education Officer, Katharine Street, Croydon, must be submitted to him by 19th July, 1952.

No living accommodation will be offered.

Canvassing will disqualify.

E. TABERNER,

Town Clerk.

7084

BUCKS COUNTY COUNCIL

Applications are invited for the appointment of an ASSISTANT HEATING ENGINEER, Grade V, £570—£620 p.a., on the staff of the County Architect.

Applicants should be graduate or associate members of the Institute of Heating and Ventilating Engineers or equivalent. They must be experienced in the design of schemes for heating and hot water supply installations, capable draughtsmen and able to prepare specifications, etc. A sound knowledge of electrical installations will be an advantage.

This appointment is superannuable and subject to medical examination.

A weekly allowance of 25s. and return fare home once every two months may be paid for six months to newly appointed married officers of the Council unable to find accommodation.

Further particulars and form of application may be obtained from the County Architect, County Offices, Aylesbury, to whom applications must be delivered by 25th August, 1952. 7111

LONDON COUNTY COUNCIL

ARCHITECT'S DEPARTMENT

ARCHITECTS, A.R.I.B.A., required for constructional divisions (Schools, Housing General). Starting salaries up to £837 10s. Application forms from Architect, (quote EK/HSG/2), County Hall, S.E.1. (769) 7101

CAMBRIDGESHIRE COUNTY COUNCIL

Applications are invited for the following appointments:—

(a) ARCHITECTURAL ASSISTANT.

Grade A.P.T. V (£570—£620).

(b) BUILDING INSPECTOR.

Grade A.P.T. IV (£530—£575).

Forms of application can be obtained from the County Architect, Shire Hall, Cambridge, not later than Thursday, 24th July, 1952.

CHARLES PHYTHIAN,

Clerk of the County Council.

Shire Hall, Cambridge. 7103

LINDSEY COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

There is a vacancy on the permanent staff for HEATING ASSISTANT, A.P.T. III. £500—£15—£545. Duties will include taking off of heat losses, designing heating schemes, preparing specifications and obtaining tenders, and preparing estimates.

Allowance of 25s. per week and return fare home bi-monthly will be paid for up to six months to married men unable to find housing accommodation.

N.J.C. Conditions of Service. Canvassing will disqualify. Candidates must disclose in writing whether to their knowledge they are related to any member or senior officer of the Council.

Applications, stating age, qualifications and experience, with copies of two testimonials or the names of two persons to whom reference can be made, not later than Friday, 25th July, 1952, to:—

A. RONALD CLARK, A.R.I.B.A., A.M.T.P.I., County Architect.

County Offices, Lincoln. 7106

CROWN AGENTS FOR THE COLONIES.

ARCHITECTURAL ASSISTANT required by the Government of Uganda for the Public Works Department for one tour of 30 to 36 months' continuous residential service in the first instance, with prospect of permanent employment. Salary, including temporary allowance, £862 a year, rising to £987 a year. Outfit allowance £30. Free passages and liberal leave on full salary. Provident Fund. Local Government Superannuation rights can be preserved. Candidates not over 35 years of age must be rapid and accurate Architectural Draughtsmen, and have had experience in the preparation of working drawings and be capable of carrying out calculations for reinforced concrete structures. Apply at once by letter, stating age, full names in block letters, and full particulars of qualifications and experience, and mentioning this paper to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting on letter M.29370.D. The Crown Agents cannot undertake to acknowledge all applications, and will communicate only with applicants selected for further consideration. 7119

GLAMORGAN COUNTY COUNCIL

Applications are invited for the following appointments on the Permanent Establishment of the County Architect's Department:—

ASSISTANT ARCHITECTS. A.P.T., Grade VI (£645—£710).

Candidates for these posts, who must be Registered Architects, should make immediate application to the County Architect, County Hall, Cardiff.

D. J. PARRY,

Clerk of the County Council.

Glamorgan County Hall, Cardiff. 7120

NATIONAL COAL BOARD

NORTH-WESTERN DIVISION

Applications are invited for the position of QUANTITY SURVEYOR Grade I—Salary £900 by £35—£1,200. Applicants must be fully experienced, corporate members of the R.I.C.S. and capable of carrying jobs from sketch plan estimate through all stages to final account on contracts up to six figure value.

Applications stating age, education, qualifications, experience, present appointment and salary, together with copies of two testimonials, should be submitted within fourteen days of the date of this advertisement to the Divisional Establishment Officer, National Coal Board, North-Western Division, 40, Portland Street, Manchester, 1. 7127

THE UNIVERSITY OF LIVERPOOL

Applications are invited for the post of LECTURER AND STUDIO INSTRUCTOR in the School of Architecture at a salary scale of £550/50/900/50/1,100.

Applications, accompanied if possible by drawings or photographs of work, two testimonials and the names of two referees, should be received not later than 1 September, 1952, by the undersigned, from whom further particulars of the conditions of appointment may be obtained.

STANLEY DUMBELL,

Registrar.

7128

July, 1952.

BOROUGH OF ILFORD. APPOINTMENT OF ARCHITECTURAL ASSISTANT

A.P.T. Grade VII

Applicants should be Associate Members of the R.I.B.A. and have a thorough knowledge of Architectural works with practical experience in the design and development of buildings of all types, preference being given to candidates with specific experience in connection with post-war Housing schemes, including Flats.

Salary will be in A.P.T. Grade VII of the National Scales, viz., £685—£760, plus London Weighting.

The Council is not in a position to offer housing accommodation.

The appointment is superannuable and subject to one month's notice on either side, to the National Conditions of Service and to the passing of a medical examination. The appointment will be whole-time (private practice being prohibited).

Form of application may be obtained from the Town Clerk, Town Hall, Ilford, and should be returned by the 1st August, 1952. 7130

COUNTY BOROUGH OF BOLTON

Applications are invited for the permanent appointment of an Architectural Assistant in the Borough Engineer and Surveyors' Department at a salary in accordance with Grade A.P.T. II of the National Scales (£470 to £515). Commencing salary will be fixed according to the candidates' experience and qualifications.

Applicants should have attended a full time course of Architecture, and have passed the Intermediate Examination of the R.I.B.A. or its equivalent.

The appointment is subject to the provisions of the Local Government Superannuation Acts.

Applications, on forms to be obtained from the undersigned, together with copies of not more than two testimonials, should be forwarded to me not later than 29th July, 1952, in envelopes endorsed: "Architectural Assistant."

PHILIP S. RENNISON,

Town Clerk.

Town Hall, Bolton. 7131

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Architectural Appointments Vacant

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

TWO JUNIOR ARCHITECTURAL ASSISTANTS required. W.1 area. Box 7124.

SURVEYORS required for Service in West Africa. Only those experienced in Contour Survey and Route Surveys considered. Must be prepared to work whole time under field conditions. Good pay. Tours of 18 to 24 months with liberal leave on full pay. Applications giving fullest details invited from young, active, unmarried men. Box 7074.

ARCHITECTURAL ASSISTANTS required in Westminster office of Consulting Engineers for detailing designs of Power Stations, Administrative Office Blocks, etc. Apply, stating age, experience, qualifications and commencing salary required. Box 7076.

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Architectural Appointments Wanted

ASSISTANT (34), student R.I.B.A., seeks position in London. 2 years' technical, 18 months' recognised school training, 6 months' post-war office. Small knowledge of acoustics, surveying. Studying for Final. Salary £375. Box 486.

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EFFICIENT Shorthand-Typist requires post as **SECRETARY** in Architect's office, S.W.1 district. No Saturdays. Four years' building trade experience. Box 7117.

DESIGNER/DRAUGHTSMAN (32), 16 years' experience shopfitting, specialist joinery, furniture, bars, interiors, etc., at present employed as Architectural Assistant, seeks position at home or overseas, preferably with possibilities of accommodation. Box 7122.

ASSOCIATE R.I.B.A. (27), school trained, with experience in surveying, levelling and handling of contracts to final account stage, seeks post in progressive office in Southampton—Portsmouth area. Box 497.

ARCHITECTURAL DRAUGHTSMAN desires full or part time employment in London office. Box 499.

ARCHITECTURAL ASSISTANT. accurate and reliable d/man on wrk. drgs. seeks position in London. Box 500.

ARCHITECTURAL ASSISTANT, Final Standard, school trained, with some office experience and much enthusiasm, seeks a position in office with contemporary outlook. Location unimportant. Box 494.

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STUDENT, R.I.B.A. (27), just completed Dipl. course and R.I.B.A. finals, desires position with firm of interior designers, or to assist in historical research and documentation. London or Edinburgh preferred. Box 495.

SENIOR ARCHITECTURAL ASSISTANT. Student R.I.B.A., with 18 months' office experience in multi-storey housing, hospital work, etc., seeks responsible position in London area. Salary by arrangement. Box 496.

QUALIFIED ARCHITECT, 29, public school, university, 7½ years' varied office experience (including hospitals) seeks appointment in South or West Country with early prospect of junior partnership. Box 7123.

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EXPERIENCED SENIOR DESIGNER, 38, Architectural Degree, experience in leading exhibitions, including Festival of Britain, and furniture design, seeks progressive position. Able to prepare designs, take charge of office and supervise complete schemes. References and photographs. Box 501.

ARCHITECTURAL ASSISTANT, 30, M.A., school trained, Final Standard, two years' varied office experience, own car, requires responsible post in progressive London office. Box 498.

Other Appointments Vacant

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

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

SECRETARY required by Architect in private practice. Hours 9 to 5, no Saturdays. Please write, giving details of experience and salary required, to Lesslie K. Watson, 6, Gray's Inn square, London, W.C.1. 7118

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Only those firms capable of executing orders in a reasonable time should communicate with London Agent, H. Baker, 6, The Crescent, Watford Road, North Wembley. 7107

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I.A.A.S. FORTHCOMING EXAMINATIONS
The Incorporated Association of Architects and Surveyors will hold examinations at Intermediate and Final grades in the following sections during the week beginning 24th November, 1952:—
ARCHITECTURE.
QUANTITY SURVEYORS.
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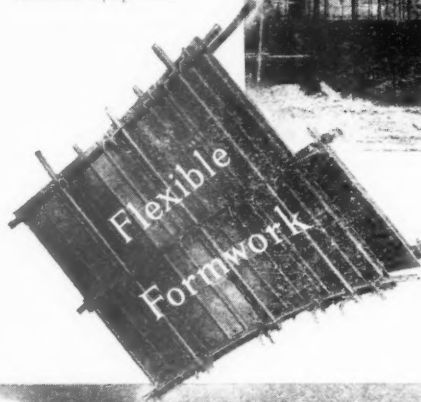
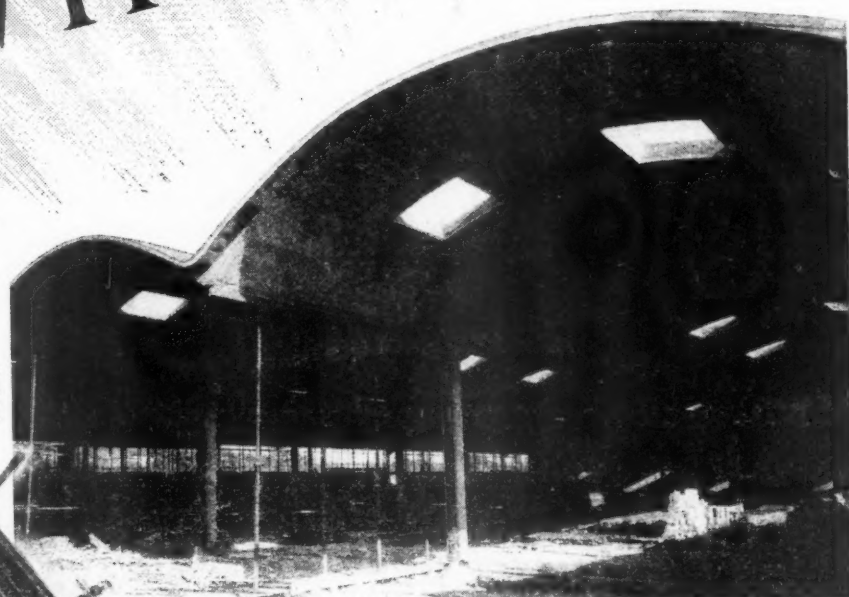
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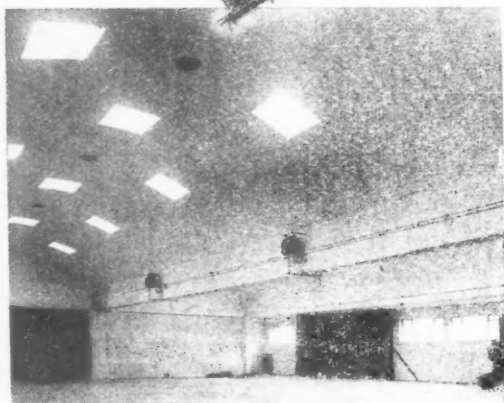


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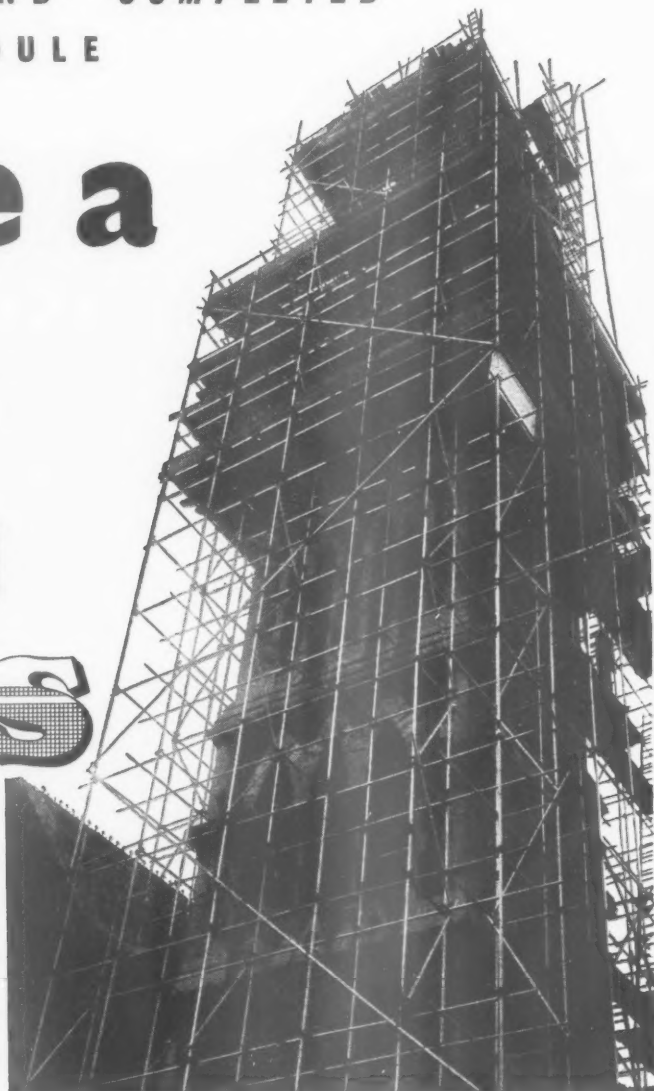
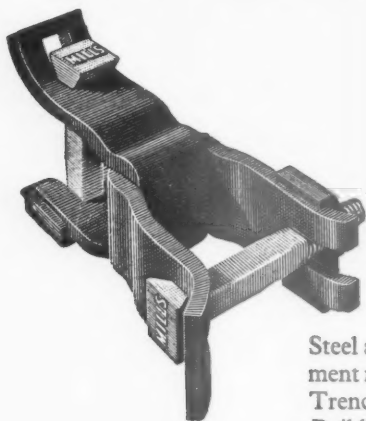
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