

THE ARCHITECTS' JOURNAL



standard contents

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

NEWS and COMMENT

Diary

News

Astragal's Notes and Topics

Letters

Societies and Institutions

TECHNICAL SECTION

Information Sheets

Information Centre

Current Technique

Questions and Answers

Prices

The Industry

PHYSICAL PLANNING

SUPPLEMENT

CURRENT BUILDINGS

HOUSING STATISTICS

Architectural Appointments
Wanted and Vacant

No. 3011]

[Vol. 116

THE ARCHITECTURAL PRESS

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

| | | |
|-----------|--|---|
| 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. | |
| BAE | Board of Architectural Education. 66, Portland Place, W.1. | Grosvenor 4761 |
| BATC | Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1. | Langham 5721 |
| BC | Building Centre. 26, Store Street, Tottenham Court Road, W.C.1. | Reliance 7611, Ext. 1706 |
| BCC | British Colour Council. 13, Portman Square, W.1. | Museum 5400 |
| BCCF | British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13. | Welbeck 4185 |
| BCIRA | British Cast Iron Research Association. Alvechurch, Birmingham. | Perivale 6869 |
| BDA | British Door Association. 10, The Boltons, S.W.10. | Redditch 716 |
| BEDA | British Electrical Development Association. 2, Savoy Hill, W.C.2. | Fremantle 8494 |
| BIA | British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2. | Temple Bar 9434 |
| BIAE | British Institute of Adult Education. 29, Tavistock Square, W.C.1. | Glasgow Central 2891 |
| BID | Building Industries Distributors. 52, High Holborn, W.C.1. | Euston 5385 |
| BINC | Building Industries National Council. 11, Weymouth Street, W.1. | Chancery 7772 |
| BOT | Board of Trade. Millbank, S.W.1. | Langham 2785 |
| BRDB | British Rubber Development Board. Market Buildings, Mark Lane, E.C.3. | Whitehall 5140 |
| BRS | Building Research Station. Bucknalls Lane, Watford. | Mansion House 9383 |
| BSA | Building Societies Association. 14, Park Street, W.1. | Garston 2246 |
| BSI | British Standards Institution. 28, Victoria Street, S.W.1. | Mayfair 0515 |
| BTE | Building Trades Exhibition. 4, Vernon Place, W.C.1. | Abbey 3333 |
| CABAS | City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Civic Centre, Newport, Mon. | Holborn 8146/7 |
| CAS | County Architects' Society. C/o F. R. Steele, F.R.I.B.A., County Hall, Chichester. | Newport 5491 |
| CCA | Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1. | Chichester 3001 |
| CCP | Council for Codes of Practice. Lambeth Bridge House, S.E.1. | Sloane 5255 |
| CDA | Copper Development Association. Kendals Hall, Radlett, Herts. | Reliance 7611 |
| CIAM | Congrès Internationaux d'Architecture Moderne. Dolderstr., 7, Zurich, Switzerland. | Radlett 5616 |
| COID | Council of Industrial Design. Tilbury House, Petty France, S.W.1. | Dolderstr., 7, Zurich, Switzerland. |
| CPRE | Council for the Preservation of Rural England. 4, Hobart Place, S.W. | Abbey 7080 |
| CUC | Coal Utilization Council. 3, Upper Belgrave Street, S.W.1. | Sloane 4280 |
| CVE | Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1. | Sloane 9116 |
| DGW | Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1. | Reading 72255 |
| DIA | Design and Industries Association. 13, Suffolk Street, S.W.1. | Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1. |
| DPT | Department of Overseas Trade. Horseguards Avenue, Whitehall, S.W.1. | Reliance 7611 |
| EJMA | English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1. | Whitehall 0540 |
| EPNS | English Place-Name Society. 7, Selwyn Gardens, Cambridge. | Trafalgar 8855 |
| FAS | Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns, S.W.1. | Regent 4448 |
| FASSC | Federation of Association of Specialists and Sub-Contractors, 5, Arundel Street, Strand. | Sloane 2837 |
| FBI | Federation of British Industries. 21, Tothill Street, S.W.1. | Temple Bar 6633 |
| FC | Forestry Commission. 25, Savile Row, W.1. | Whitehall 6711 |
| FCMI | Federation of Coated Macadam Industries. 37, Chester Square, S.W.1. | |
| FDMA | The Flush Door Manufacturers Association Ltd. Trowell, Nottingham. | Sloane 1002 |
| FLD | Friends of the Lake District. Pennington House, nr. Ulverston, Lancs. | Ilkeston 623 |
| FMB | Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1. | Ulverston 201 |
| FPC | The Federation of Painting Contractors, St. Stephen's House, S.W.1. | Chancery 7583 |
| FRHB | Federation of Registered House Builders. 82, New Cavendish Street, W.1. | Whitehall 3902 |
| FS (Eng.) | Faculty of Surveyors of England. Buckingham Palace Gdns., S.W.1. | Langham 4041 |
| GC | Gas Council. 1, Grosvenor Place, S.W.1. | Sloane 2837 |
| GG | Georgian Group. 27, Grosvenor Place, S.W.1. | Sloane 4554 |
| HC | Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1. | Sloane 2844 |
| IAAS | Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1. | Whitehall 2881 |
| ICA | Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1. | Sloane 5615 |
| ICE | Institution of Civil Engineers. Great George Street, S.W.1. | Grosvenor 6186 |
| IEE | Institution of Electrical Engineers. Savoy Place, W.C.2. | Whitehall 4577 |
| IES | Illuminating Engineering Society. 32, Victoria Street, S.W.1. | Temple Bar 7676 |
| | | Abbey 5215 |

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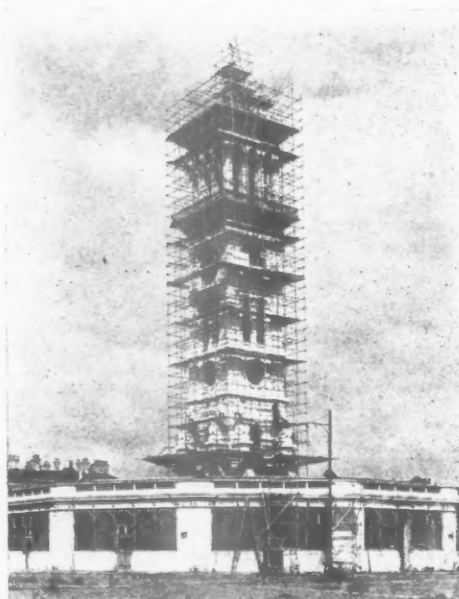
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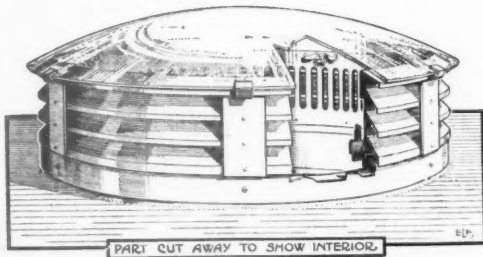
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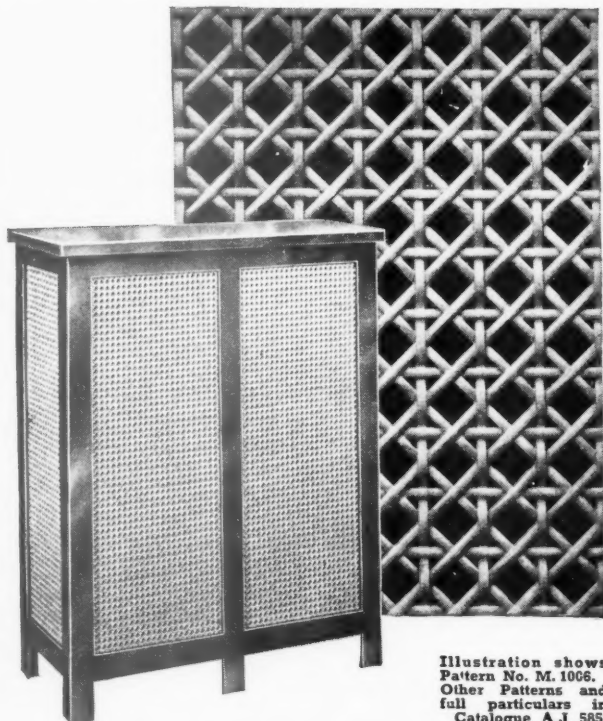
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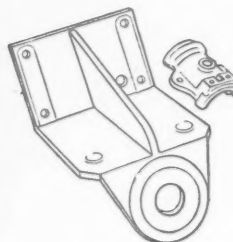
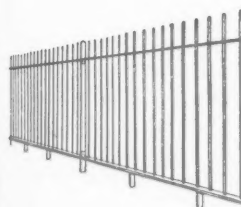
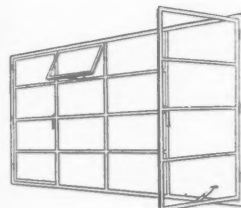
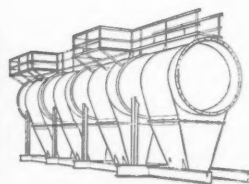
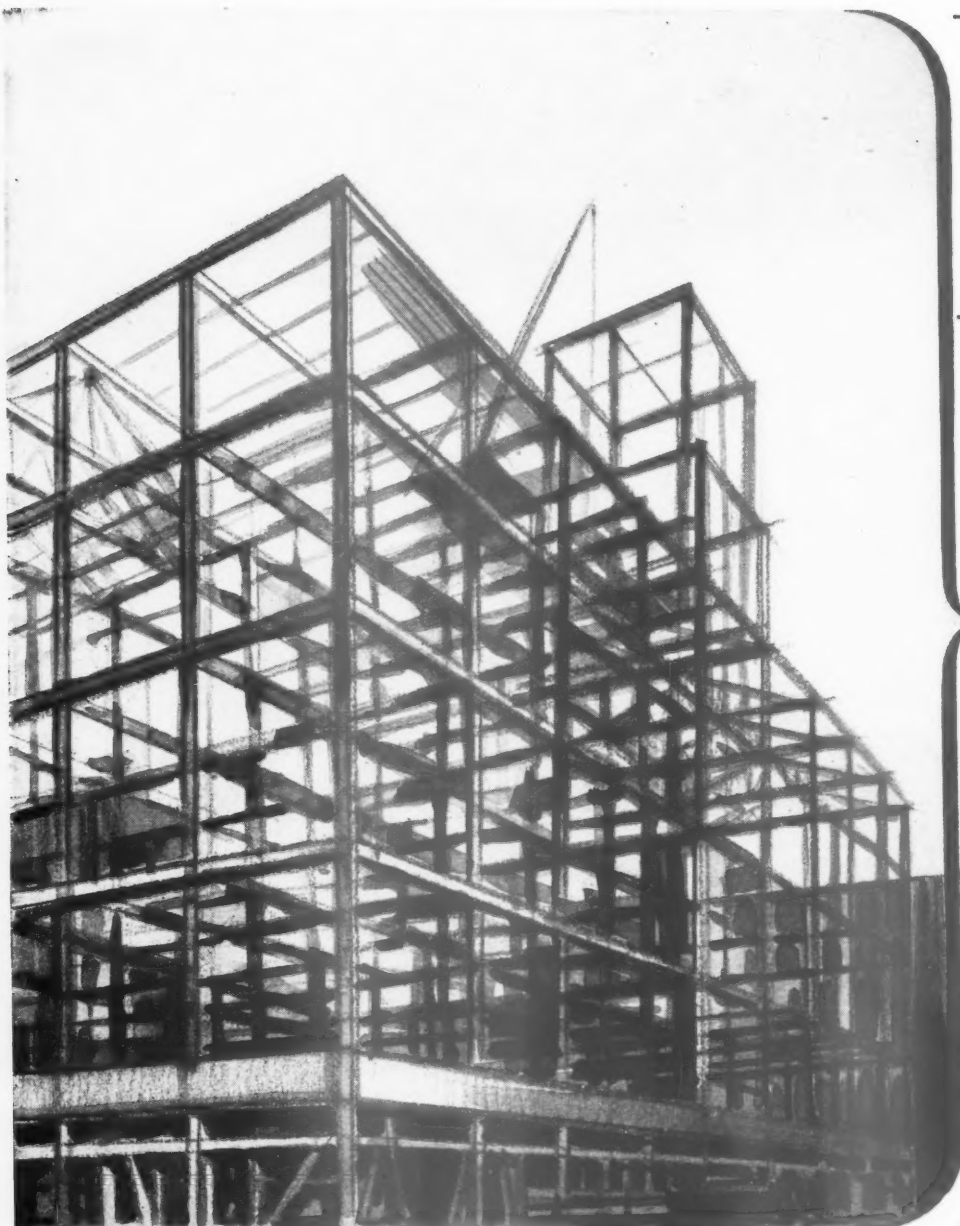
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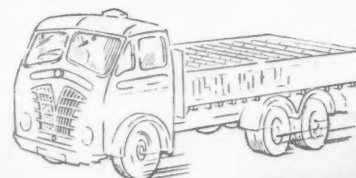
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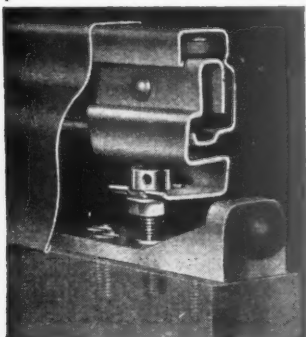
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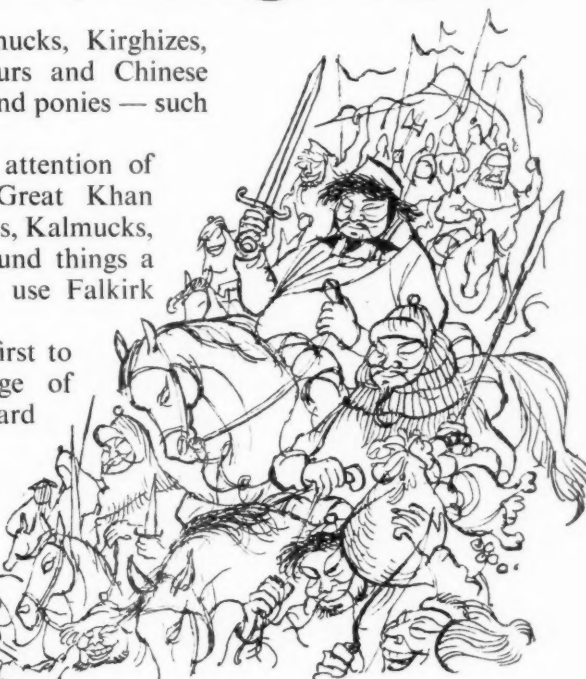
The Hungry Hordes of Ghengis Khan

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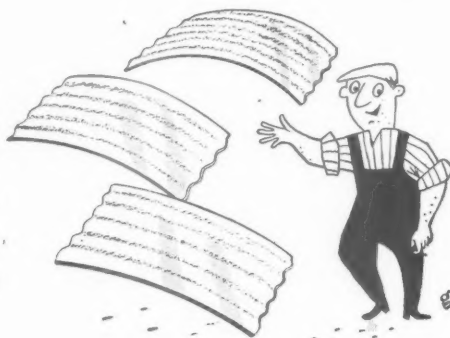
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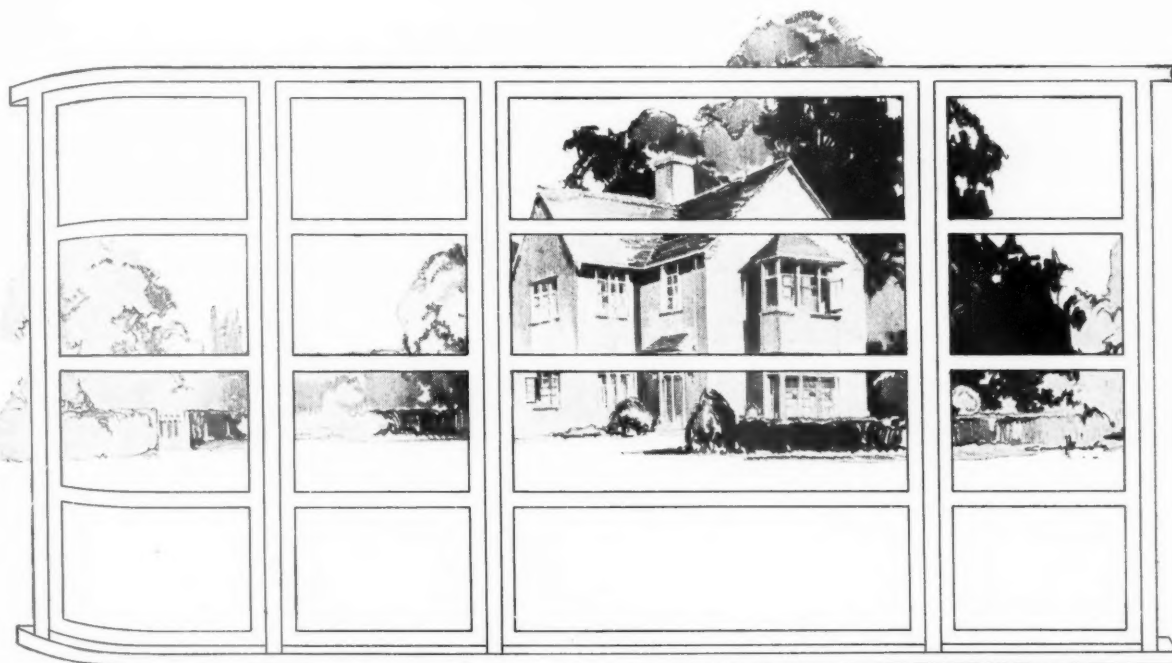


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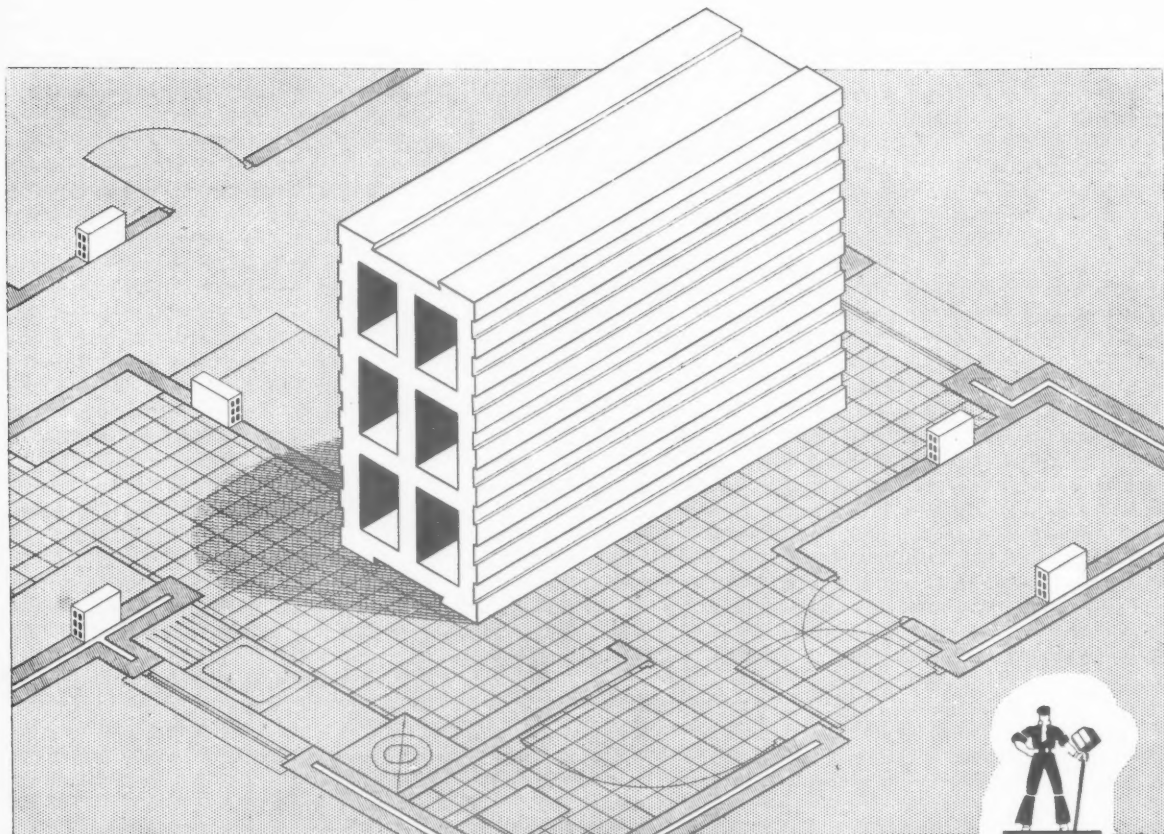


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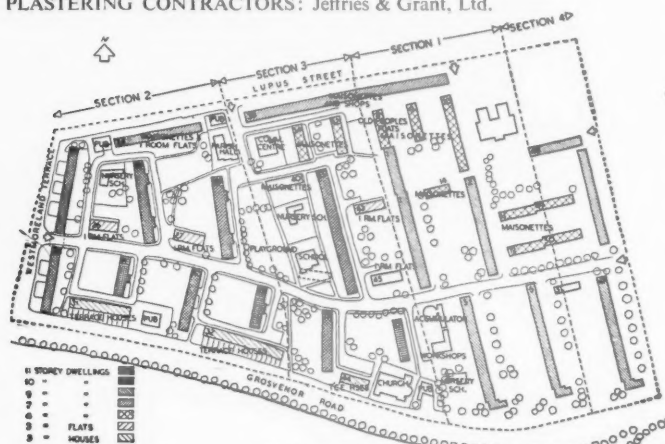
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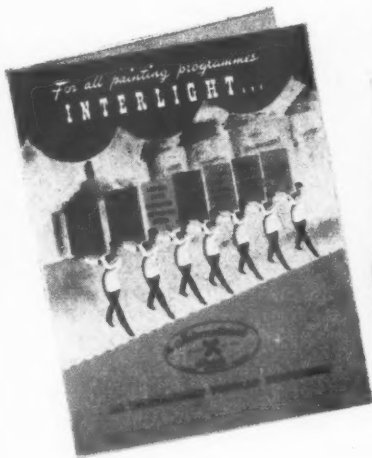
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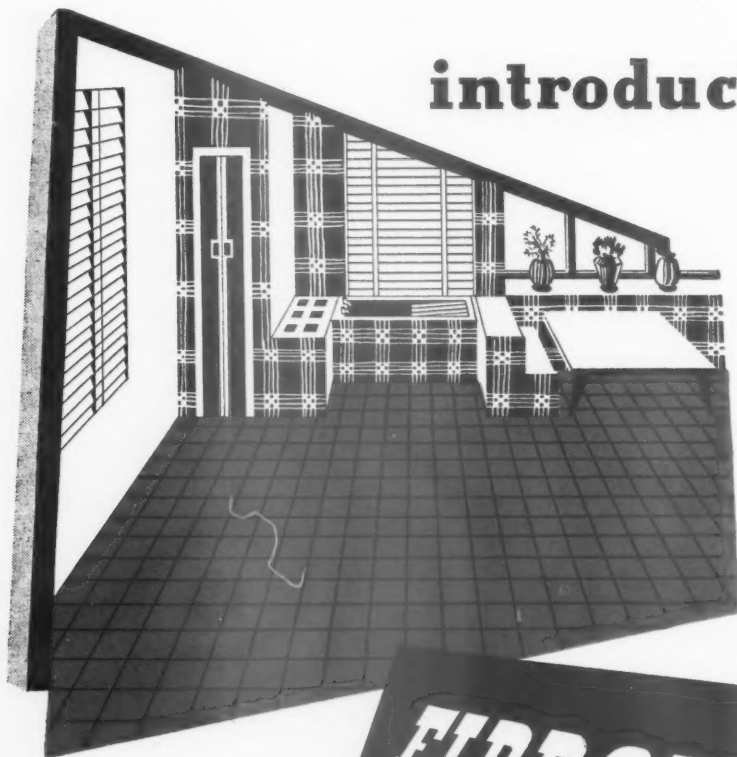
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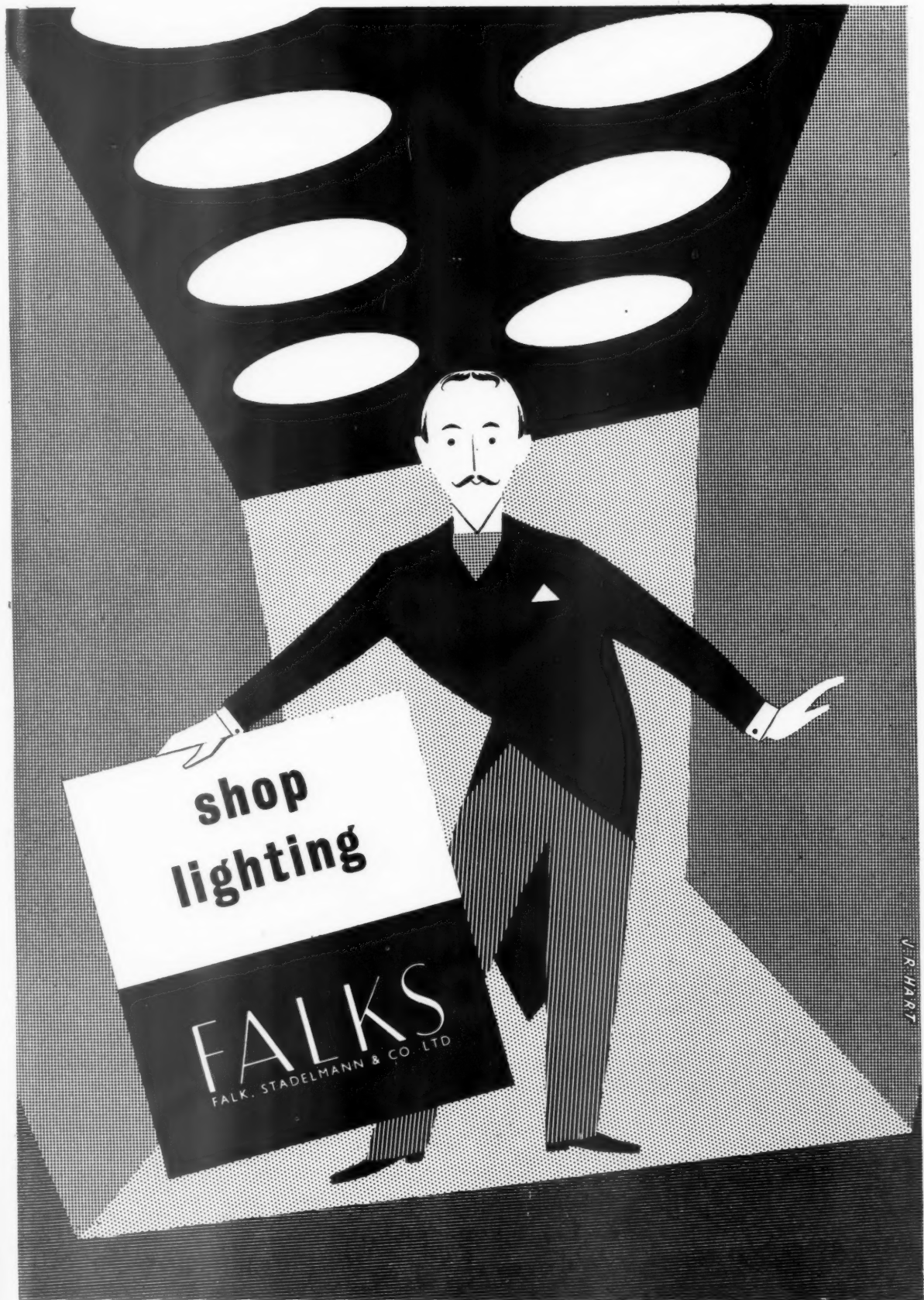
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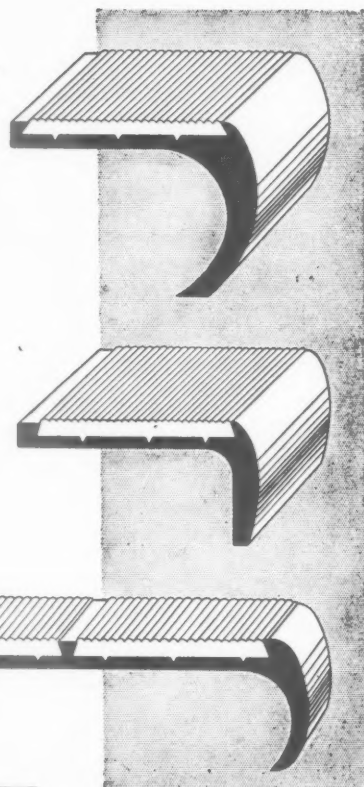
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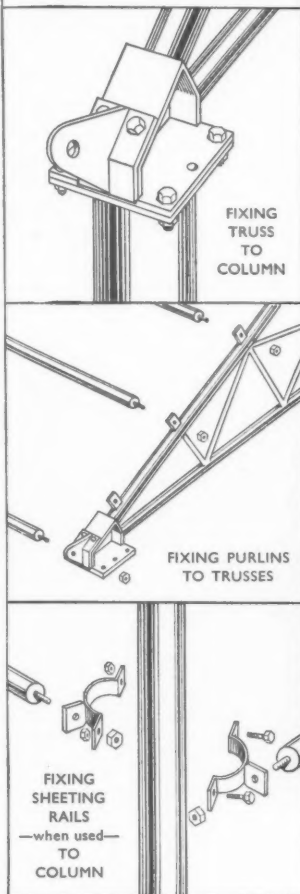
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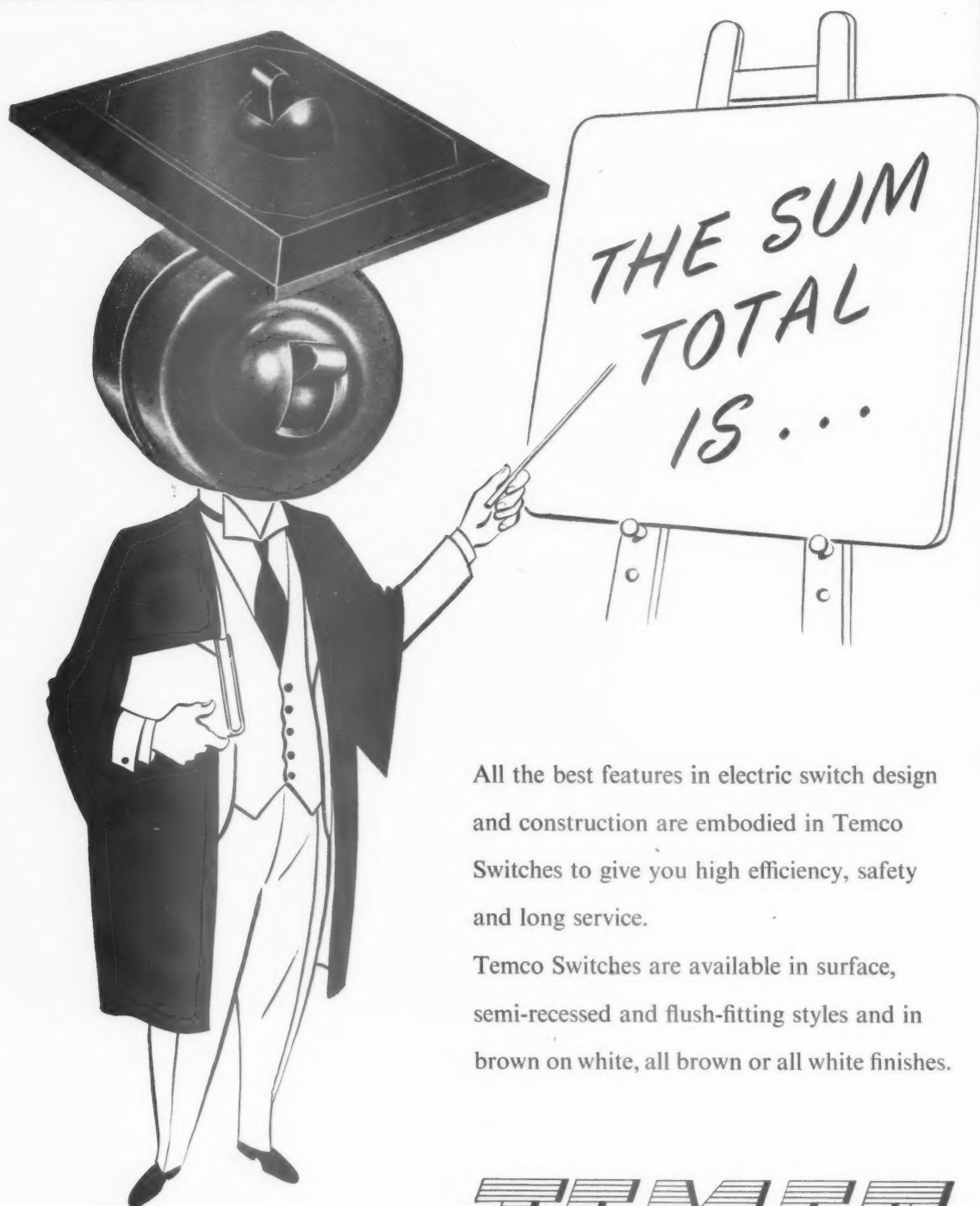
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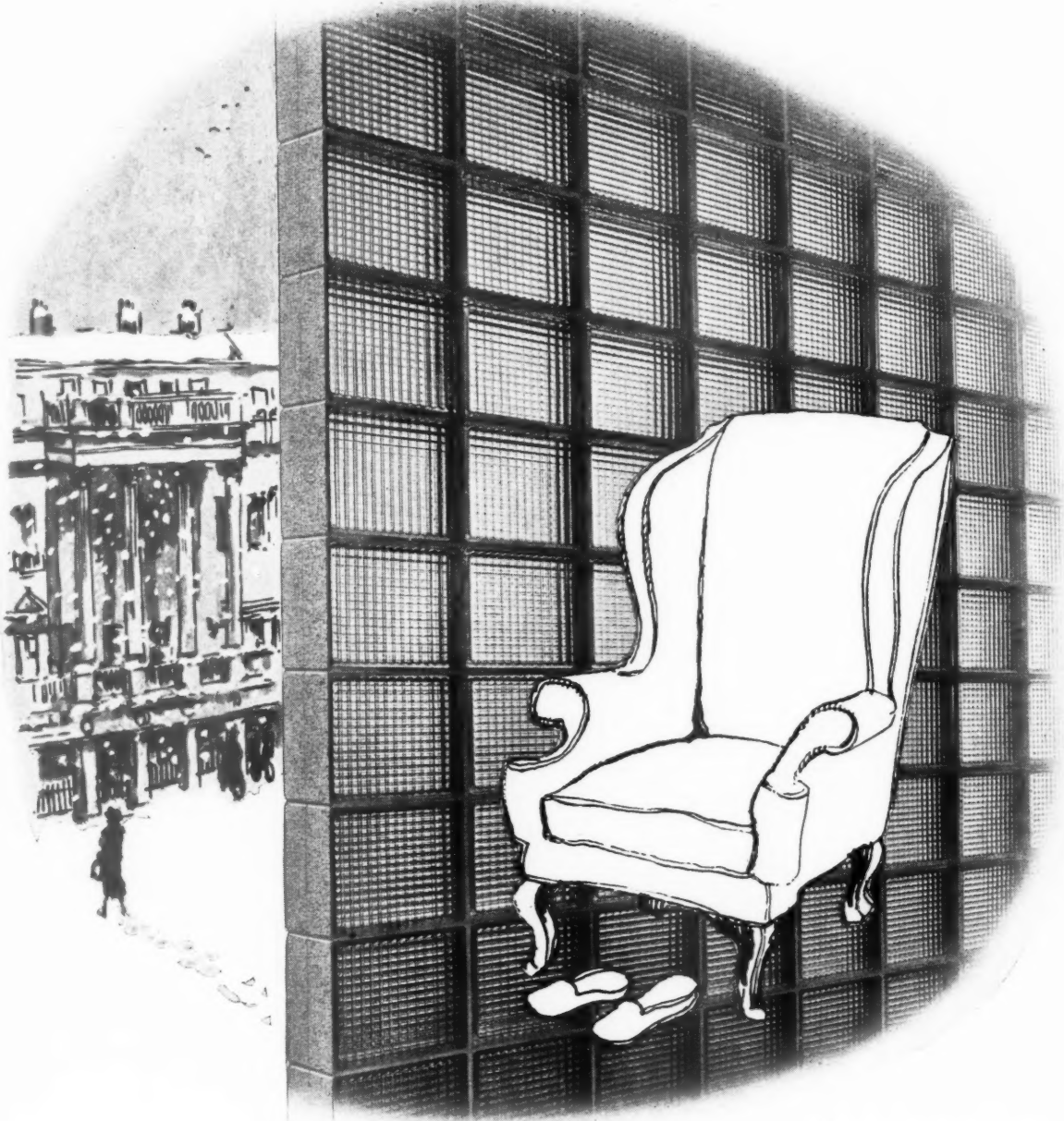
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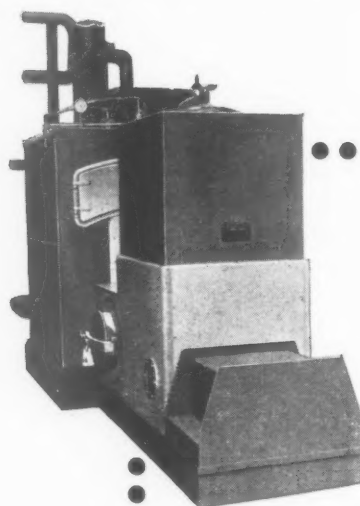
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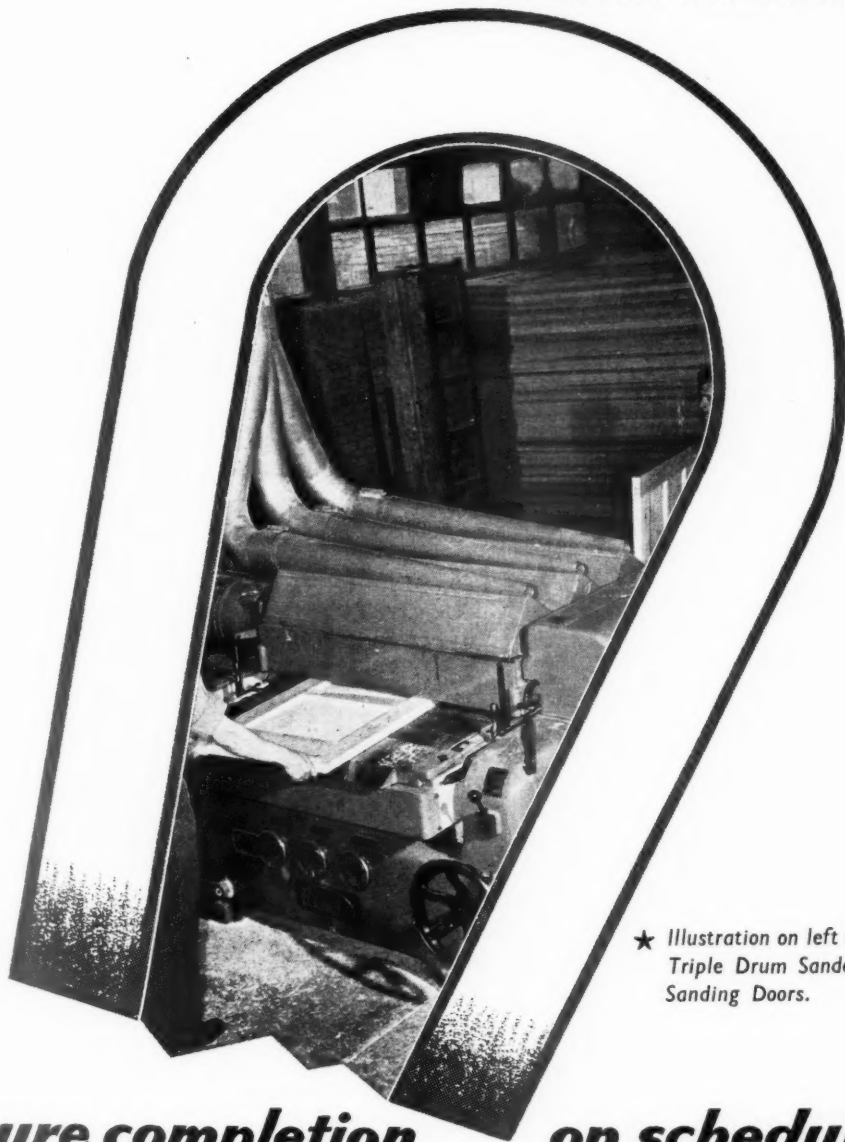
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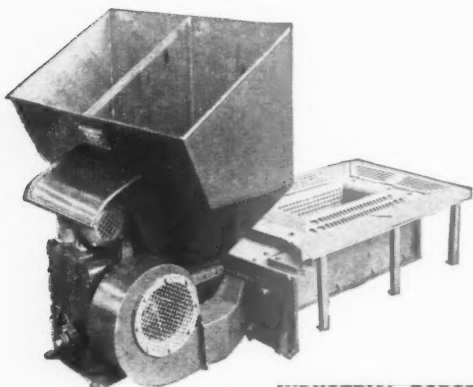
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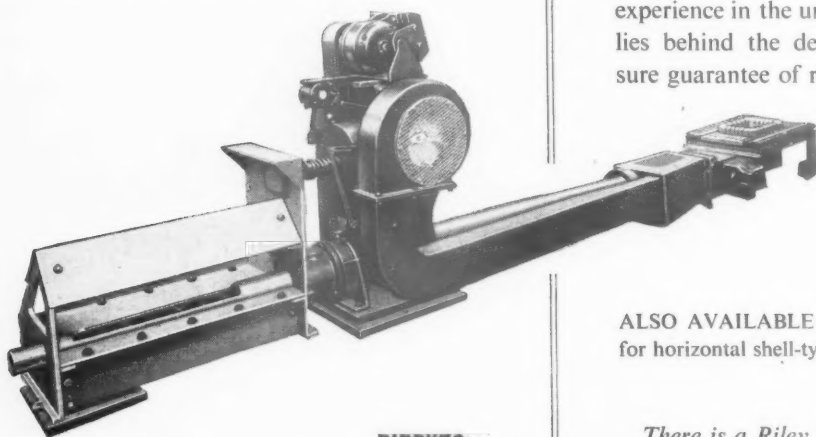
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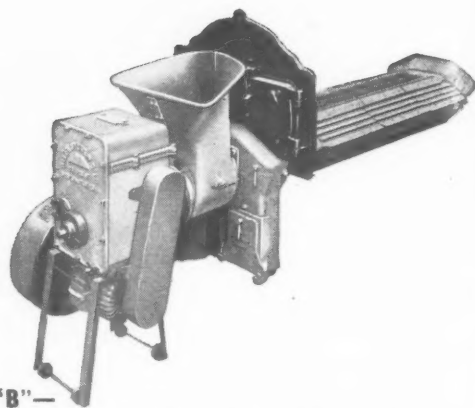
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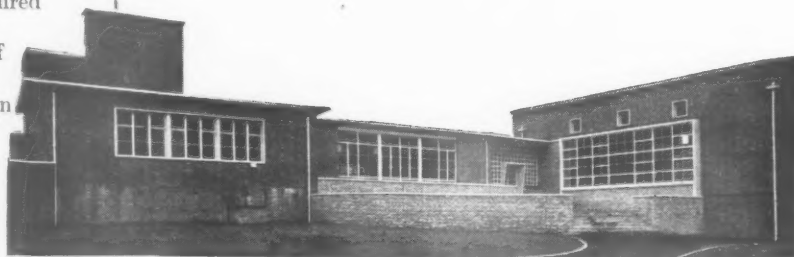
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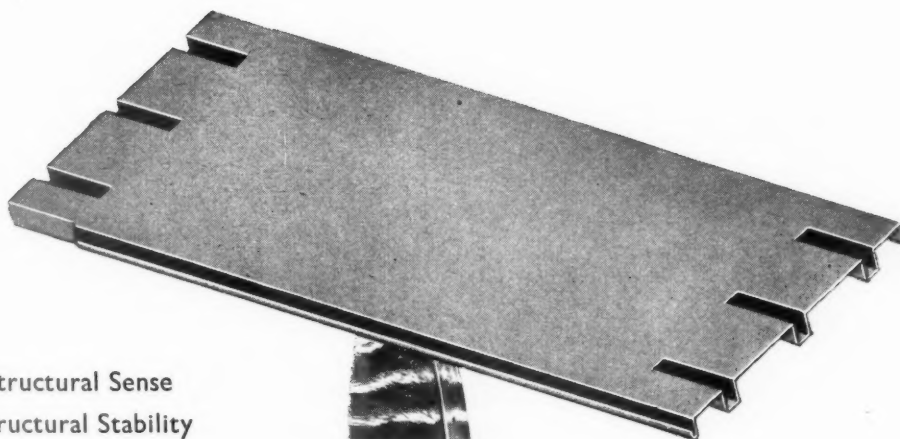


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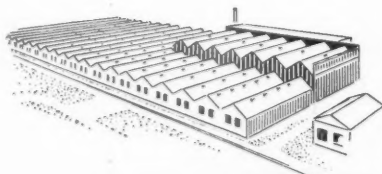
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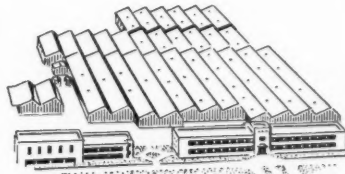


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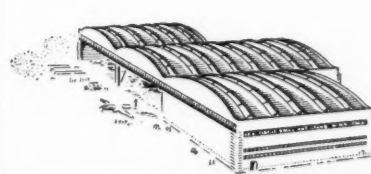
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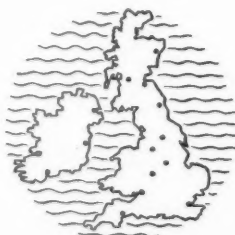
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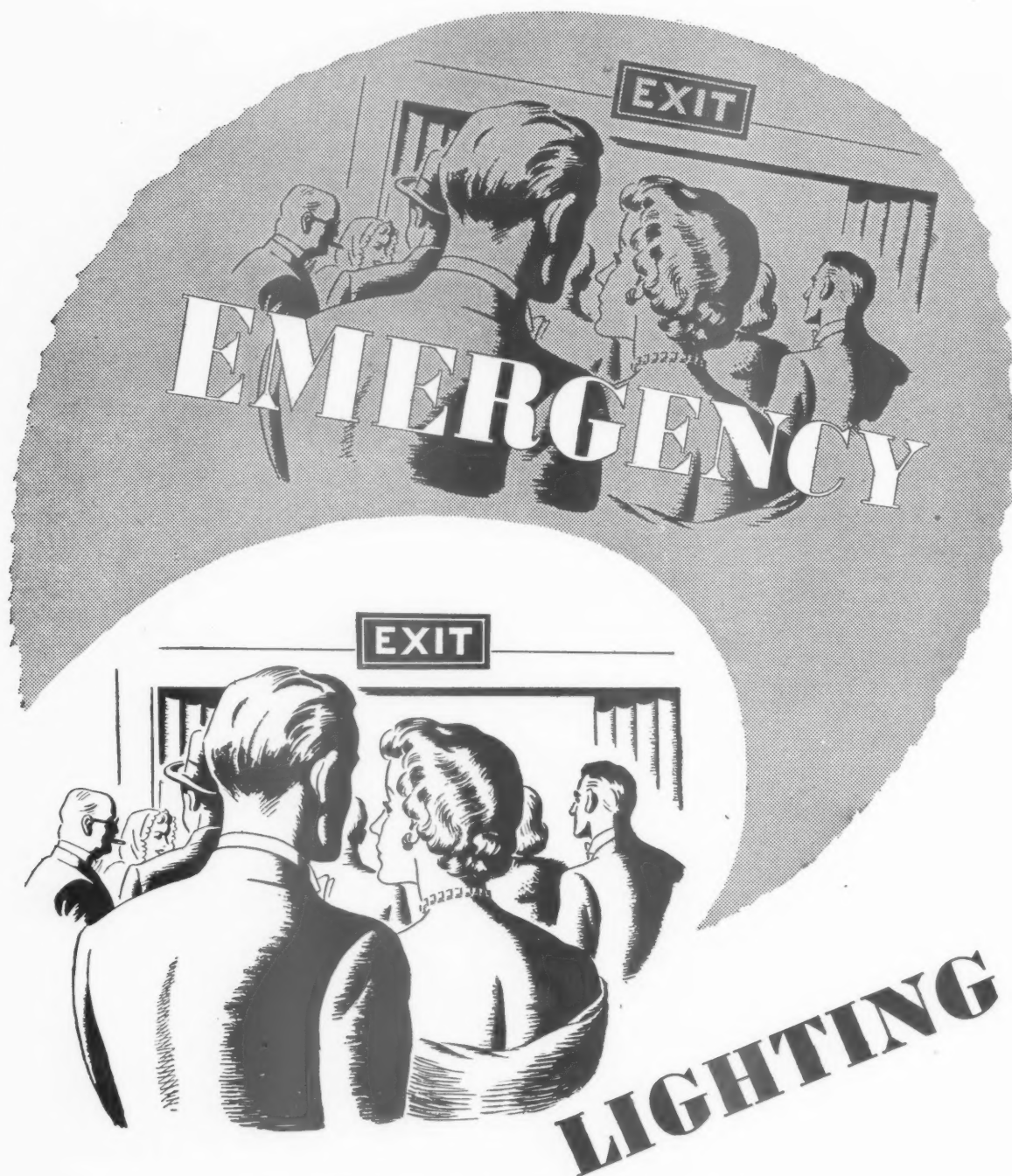
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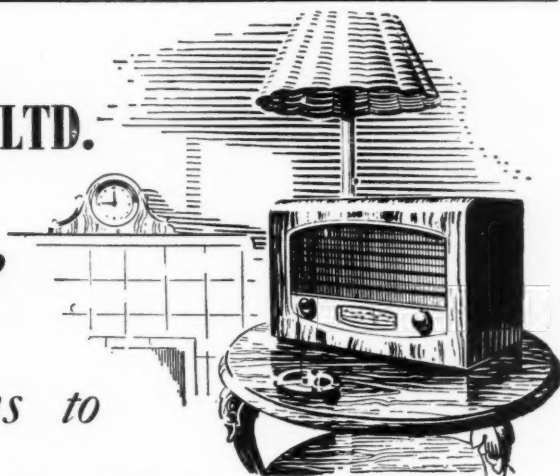


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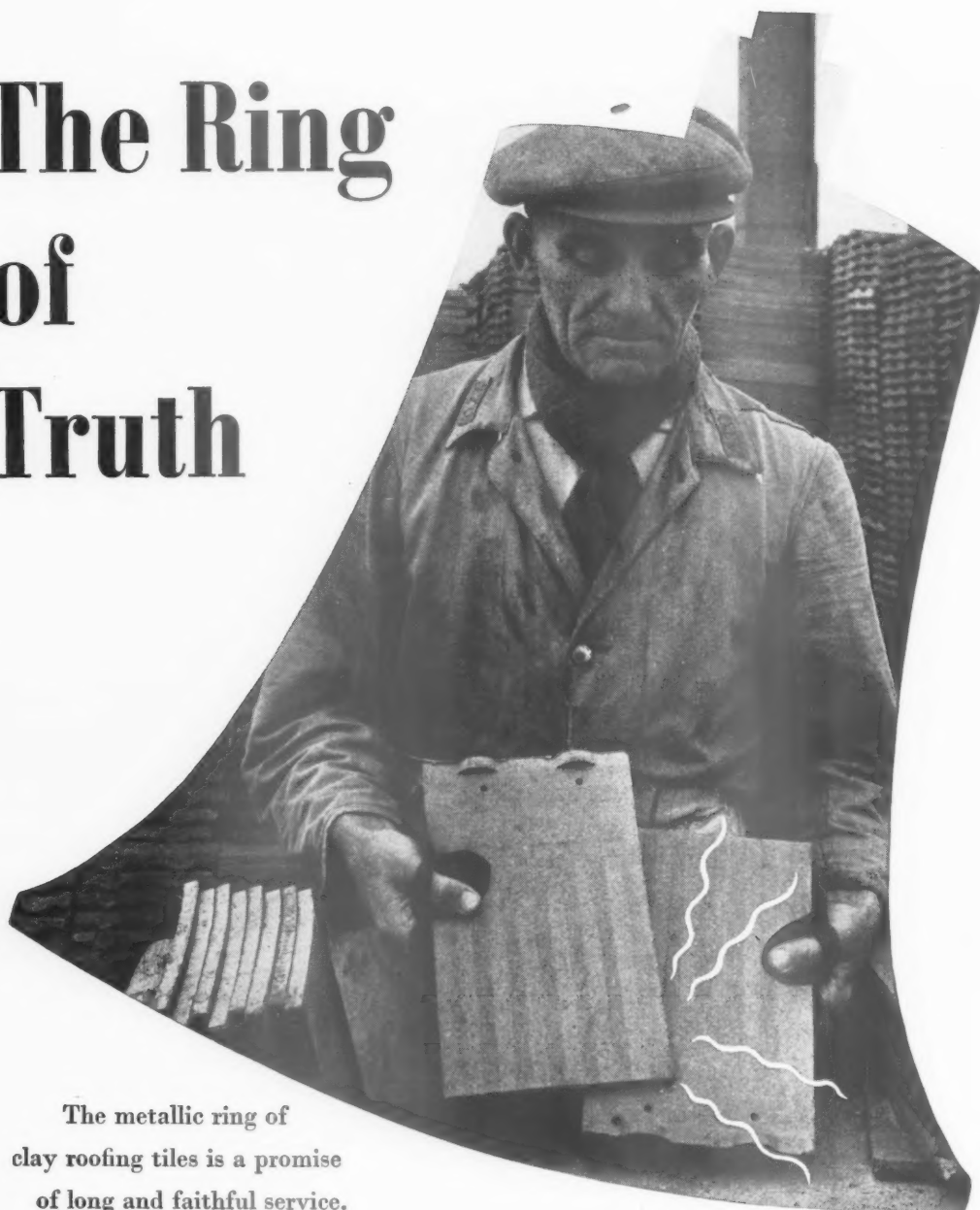
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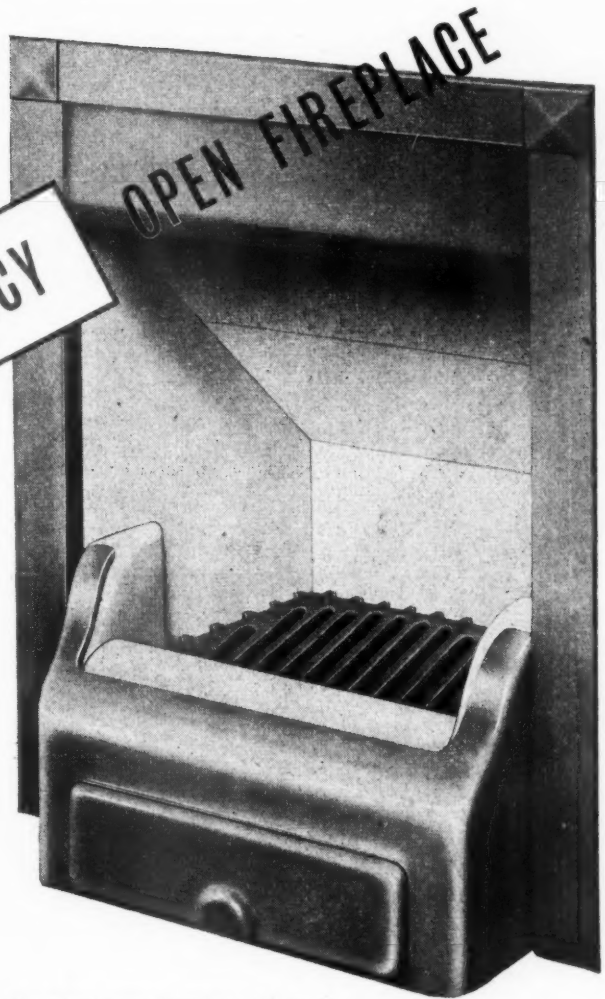


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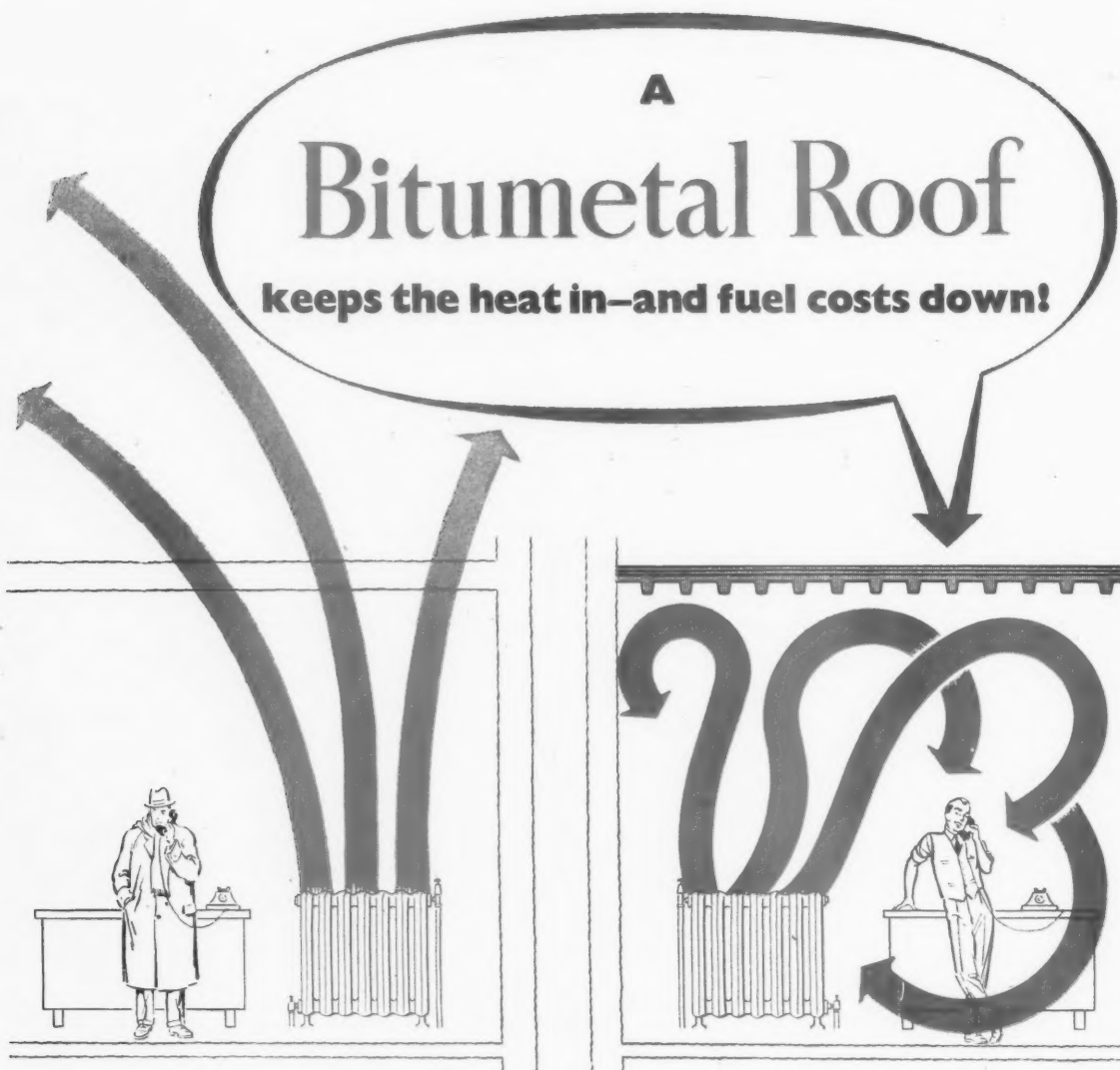
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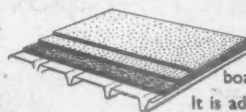


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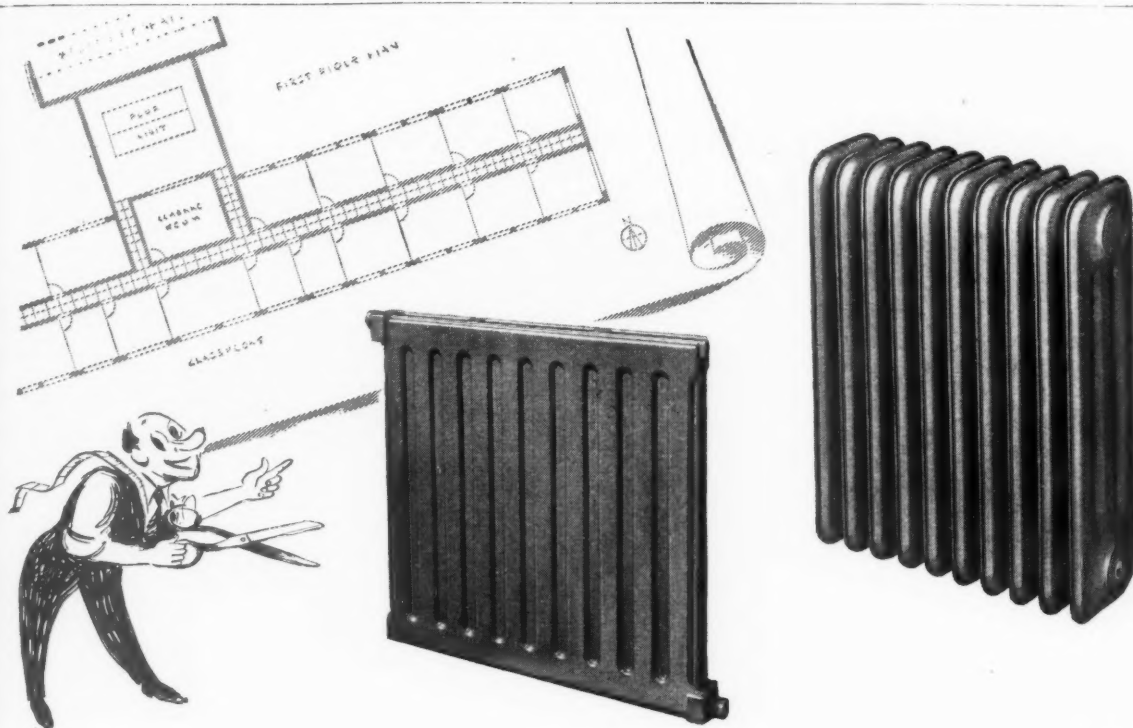
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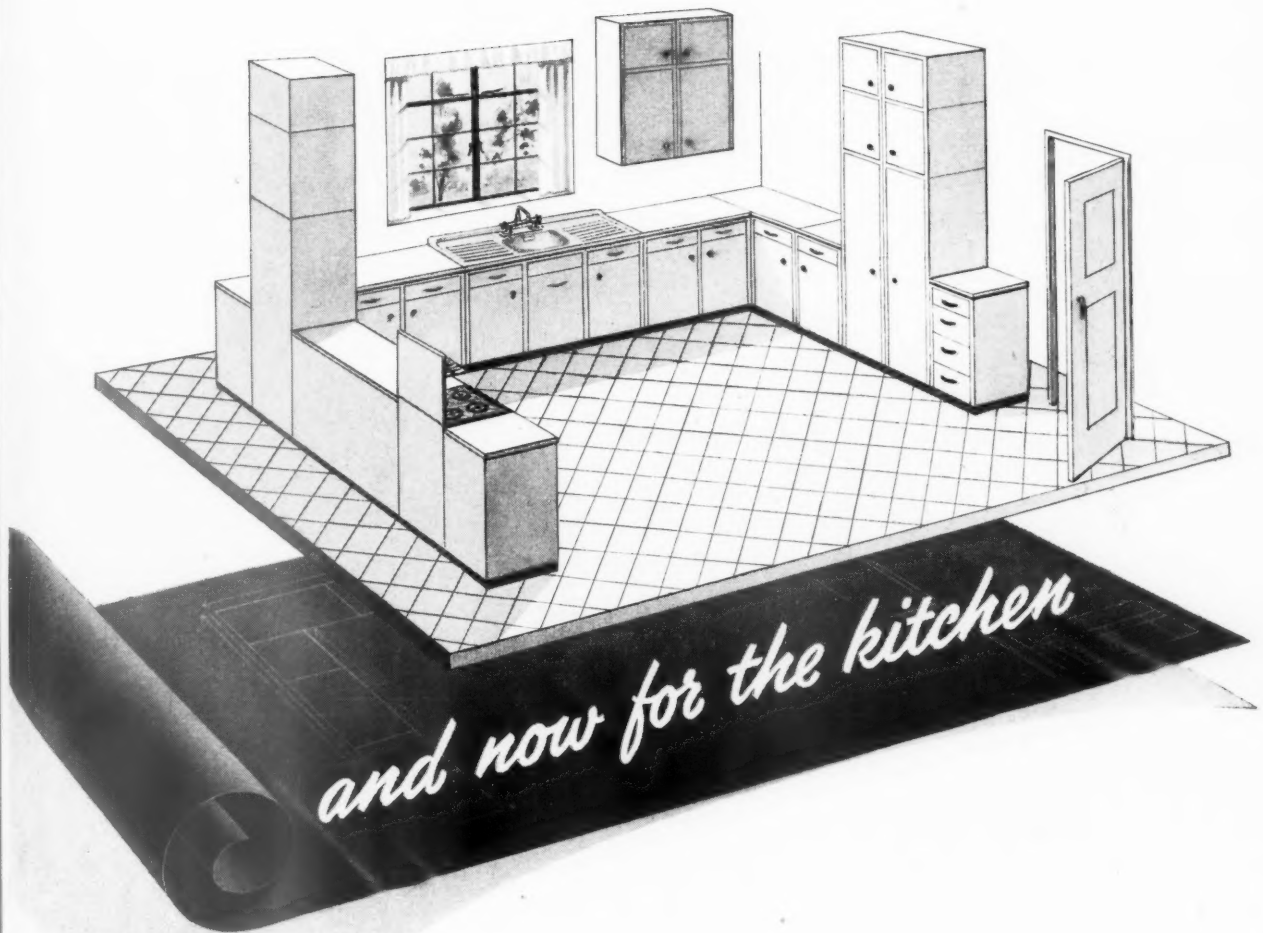
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Architect : Robert H. Matthew, C.B.E., A.R.I.B.A., Architect to L.C.C.

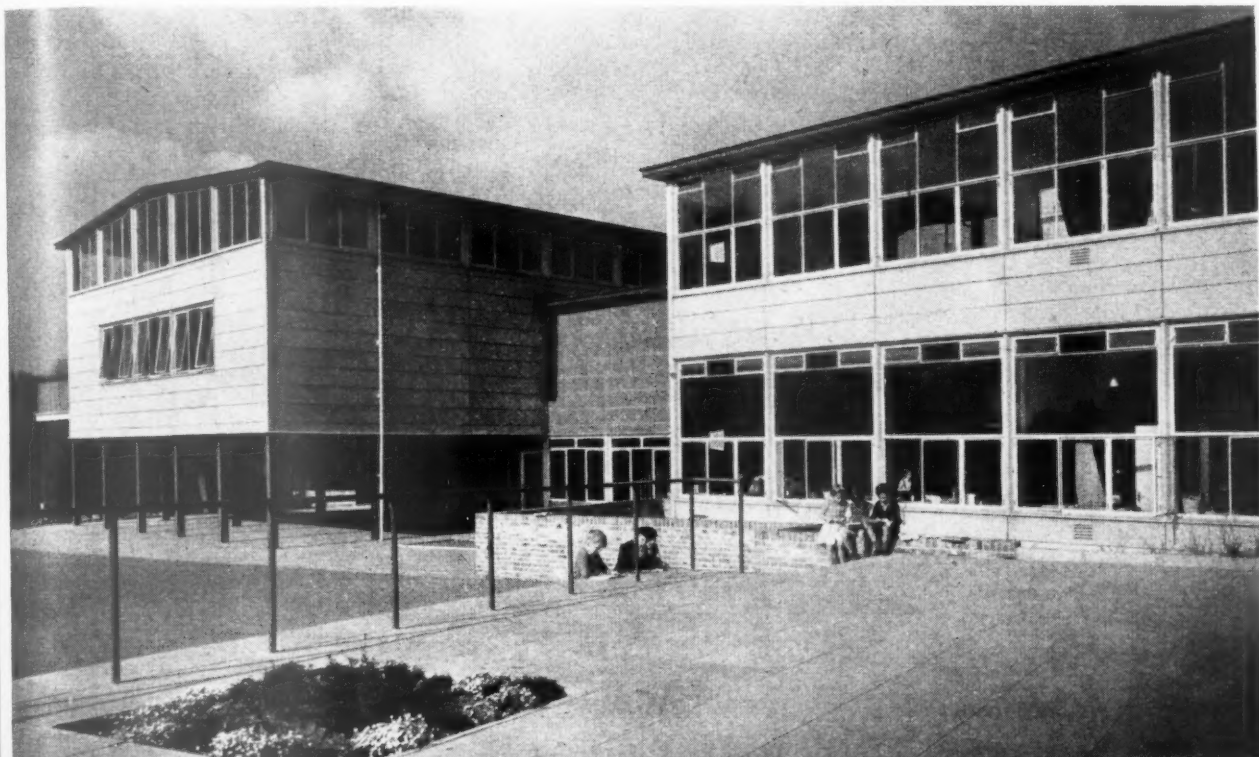
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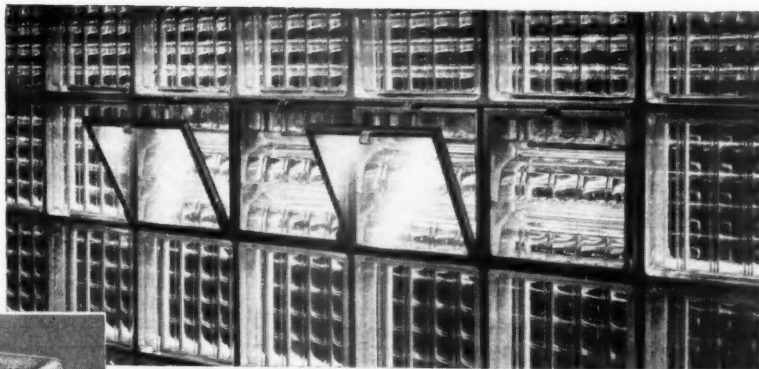
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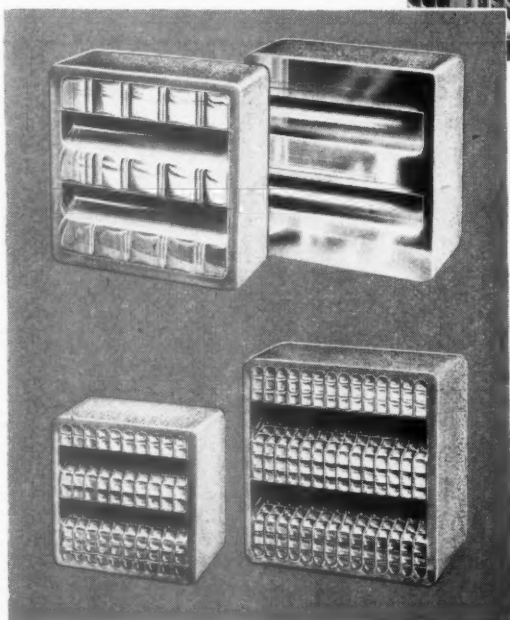
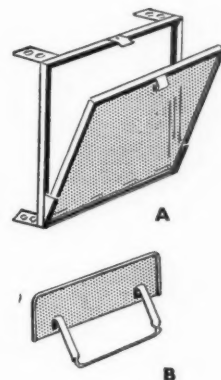
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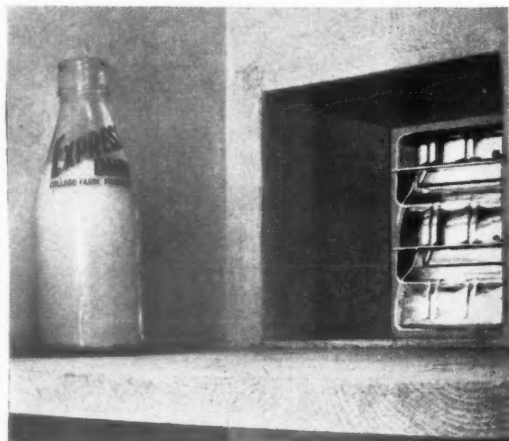
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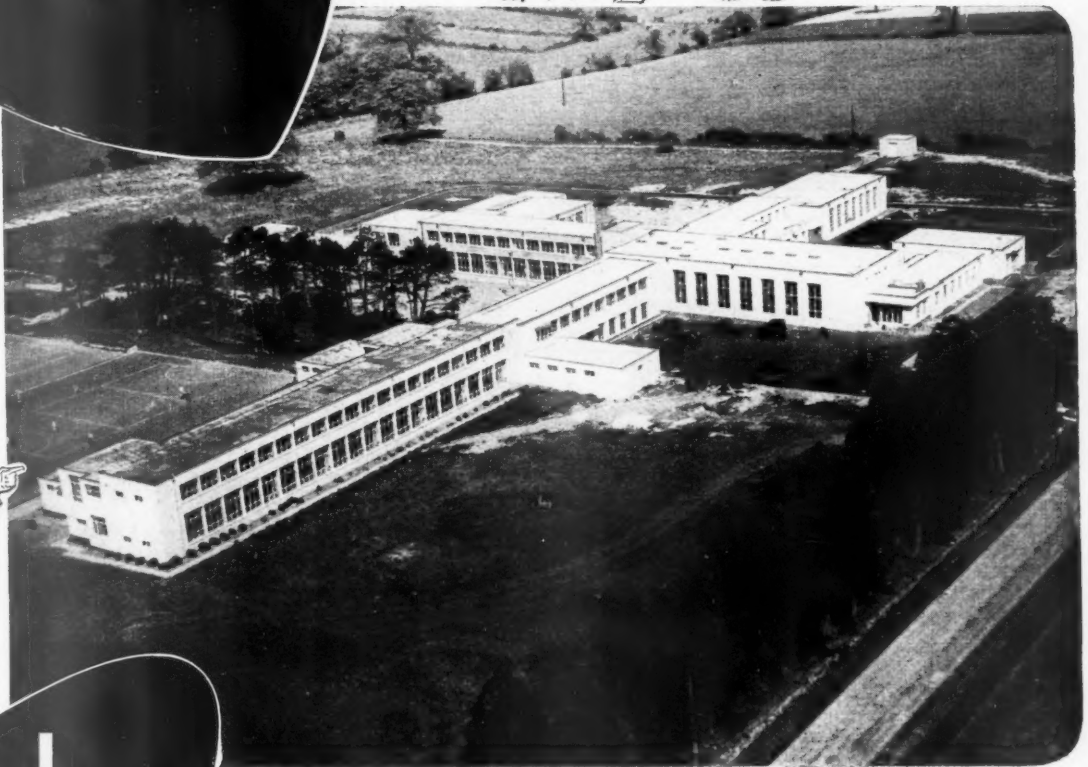
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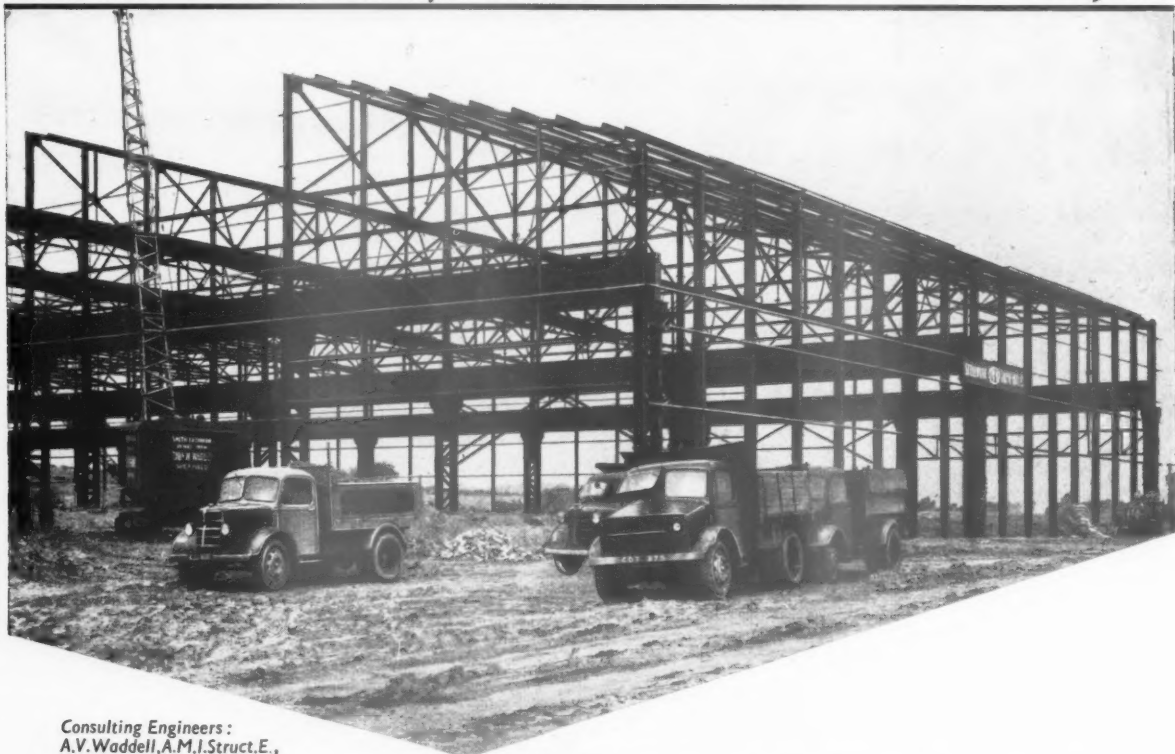
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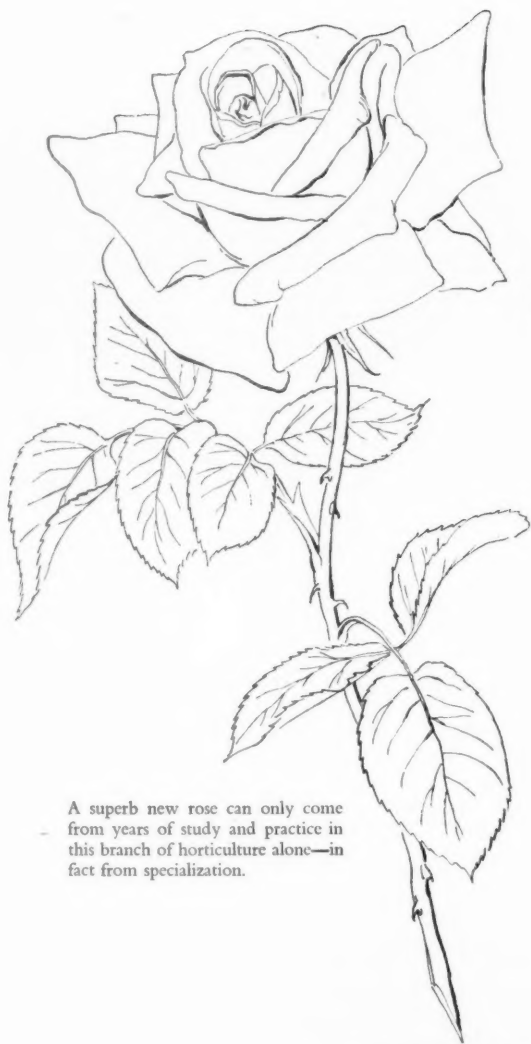
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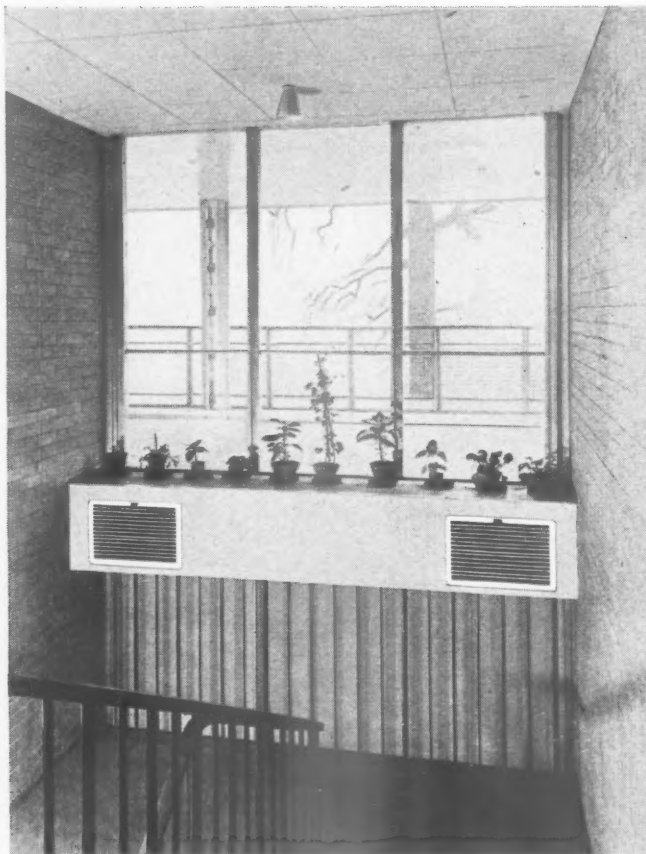
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WEATHERFOIL HEATING



★ The photograph shows WEATHERFOIL heating grilles in a stair unit at The Clarendon School, Oxhey.
Architect : Mr. C. H. Aslin, F.R.I.B.A., County Architect

Built-in Heating for Schools

The adaptability of WEATHERFOIL Heating is well illustrated by this photograph of one of the staircases at Clarendon School, which shows how neatly the heating unit is built into the space beneath the window sill. WEATHERFOIL heating contributes greatly towards fuel economy, and some of the most efficient heating systems in post-war schools are the result of early consultation between the architect and Weatherfoil's heating engineers. A WEATHERFOIL system is designed to react instantly to outside weather conditions and internal heating demands. There is no possibility of overheating such as often occurs when people are gathered together in an assembly hall.

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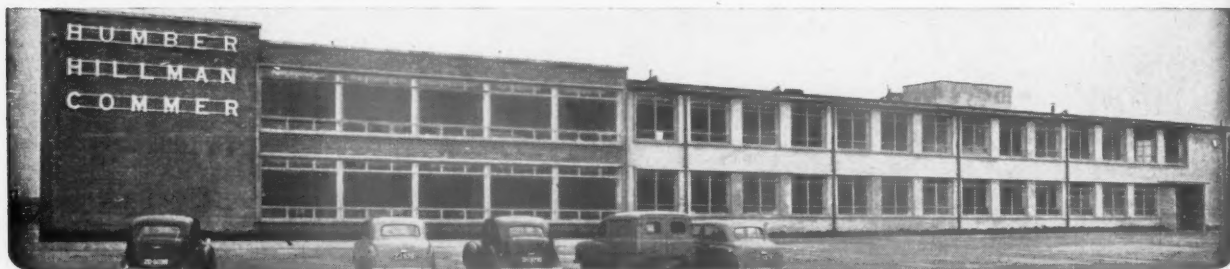
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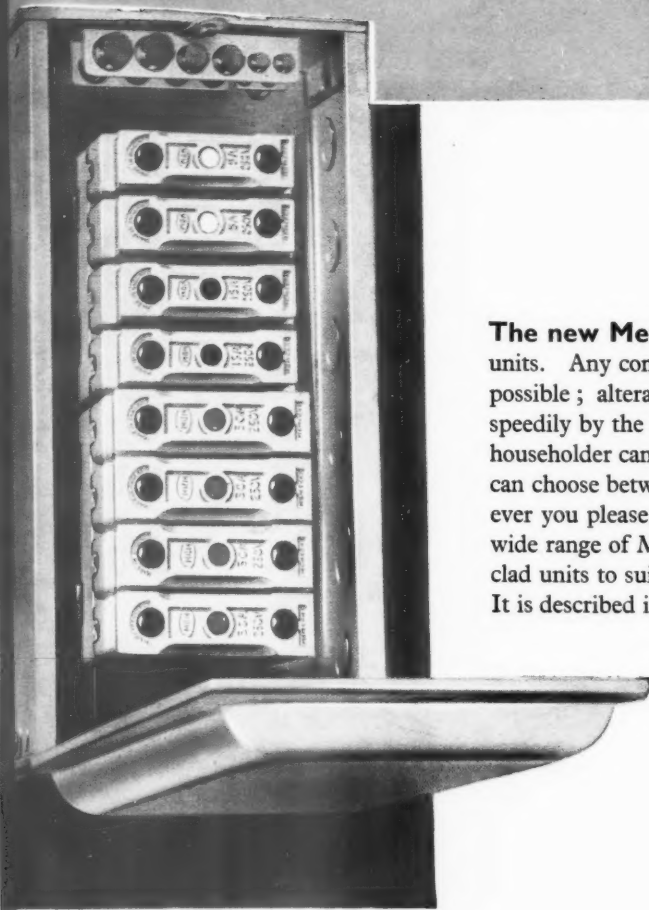
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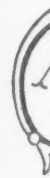
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* To preserve freedom of criticism these editors, as leaders in their respective fields, remain anonymous

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No. 3011 November 13, 1952 VOL 116

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A DOCTOR IN THE HOUSE

It is excellent news that Dr. Martin is being officially recommended for the post of Architect to the LCC by the General Purposes Committee in succession to Robert Matthew. For the past four years Leslie Martin has been at Matthew's side, not only on the drawing board (particularly of course the Royal Festival Hall), but also in the committee room, and there is nobody better qualified to give the final impetus to the architectural reorganization which was started a few years ago in County Hall and has turned it into one of the liveliest departments in the country. It must be a delight to Robert Matthew to know he is leaving his work in such able and sympathetic hands.

The LCC has also recommended Sir Gerald Barry to be consultant for developments at the Crystal Palace, which the Council has taken over "as a place for education, recreation and promotion of industry and art." That has an 1851 ring about it, but clearly it is just Sir Gerald's line. I hope his appointment goes through; no one has been happy about the Crystal Palace since that disastrous competition. Do you remember?

TROUBLE ON SHEFFIELD'S PLATE

On the same day that the announcement of Sir Gerald's appointment was made he had a useful and forthright letter in the *Manchester Guardian*. It is becoming more and more apparent—apart from the buildings themselves and the troubles of the building industry—that the housing problem can never be solved within a framework of orthodox town planning. How depressing are the advertisements of local authorities for men with "experience in the lay-out of estates"! It was, therefore, refreshing to see Sir Gerald's letter on the problem of Sheffield.

*

Sheffield, it seems, is quite unblushingly going to wipe out its own "green belt" and six good farms. It is claimed that the search for housing sites elsewhere has failed; this really won't do. As Sir Gerald points out, some such unorthodox solution as High Paddington may well be the answer. This is not to advocate High Paddington in detail, but it is to advocate an imaginative solution to problems that cannot be solved by unimaginative men. Was there not a French architect who some years ago wrote something about a

"radiant city?" No doubt Sheffield presents many intractable problems; they can be solved by men of vision and imagination. Sheffield must realize that such men are available, but must be paid for and looked for. Meanwhile Sir Gerald Barry has drawn attention to what looks like a bad case of municipal defeatism.

LCC PLAN AND THE BRITISH MUSEUM

The last thing one would do is to underestimate the difficulties of a city such as Sheffield. But the sheer size of London's problem may sometimes blind us to the fact that, when broken down into reasonable areas, London is not the most difficult of our cities. It has little heavy industry and many square miles of decayed and shabby gentility.

*

Compared with Sheffield, therefore, the problem of the Borough of Holborn—though of national importance—may be comparatively easy. It would seem obvious that the vast complex of learning stretching out north and south from the University Senate House must be continued southwards by a great National Library to take the overflow from the congested shelves of the British Museum. To relegate this to South Kensington would be ridiculous. The area between Great Russell Street and Bloomsbury Way is surely one that we can see demolished without a sigh—subject only to a caveat about the preservation of St. George's, Bloomsbury? And even that must go if the frightful alternative is for the British Museum to swallow up the east side of Bedford Square. (There was that threat some years ago.)



MONTGOMERY HOUSE: Manchester Y.M.C.A. War Memorial
Harry S. Fairhurst & Son, F./A.R.I.B.A., Architects

HOPE'S WINDOWS

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At Lloyd's last week relics of interest to archaeologists were exhibited. Also on view was this model. The relics showed what existed on a site in Leadenhall Street in Roman times. The model showed what will soon appear on the site—a puzzle for posterity's archaeologists. The architect is Terence Heysham.

CAMBRIDGE INQUIRY

Let no one think that public inquiries are confined to London. Our University spy—wrinkled woollen socks, blue bony wrists, and a tie like a knotted sandbag—reports that the inquiry into objections to the Cambridge Plan is now steaming slowly through its umpteenth week; the pomp of the Senate House has been exchanged for the more comfortable seats of the Council Chamber at Shire Hall and the principal witnesses for the Planning Authority are possibly wondering whether there was ever a time when they were not being cross-examined about Spines and Spine Reliefs and Christ's Pieces.

*

Although unreported in the national Press (which believes, so rightly, that its readers are surfeited with planning) the inquiry produced some surprises on the very first day, and an air of surprise has hovered over it ever since. On the opening day the University (which fifteen Colleges support in varying degrees) announced that it did not advocate the removal of the commercial centre of the town to a point farther east, which it had appeared to want to do in its official objection. It then went on to attack three or four proposals in the plan with considerable acerbity, and at such length that it did not succeed in mentioning at all that it supported most of the proposals in the plan, which could be said, broadly, to have been designed especially to give the University all it could reasonably ask for.

*

My correspondent formed the impression that the county (the Plan-

ning Authority) had not expected this quite common result of trying to do good to people. A little later the city withdrew its proposal to widen the top end of the Spine (having previously given up the idea of widening its middle). At this point, everyone's views being as clear as London fog, my correspondent left, wondering vaguely what was going to happen if traffic *did* continue to increase.

T. S. ELIOT AND UNESCO

Nothing delights ASTRAGAL more than to see "intelligent laymen" butting in on the world of architectural criticism. Very welcome, if typically obscure in phrasing, therefore, was T. S. Eliot's letter to *The Times* on the subject of the UNESCO building. [How few architects would be equally courageous and admit in a letter to *The Times* that they did not understand what Mr. Eliot was driving at in his latest poem.] Nevertheless, his assumption that the purely technical faults of the UNO building must be repeated in the UNESCO building because of a broad similarity in the shape of the main blocks, is really rather foolish. His aesthetic comments are more to the point, even if one doesn't agree. ASTRAGAL has always thought the "honeycomb" analogy for slab blocks rather superficial; the scenery of the Bois seems to be just the sort of loosely planted landscape that can act as a foil to the rigid but romantic shapes of the UNESCO scheme. Whether the general assembly will agree with T. S. Eliot and the Seine Prefecture or with ASTRAGAL remains, at the time of going to Press, to be seen.

I LIKE HIKE

The news that the National Parks Commission has turned down a scheme for the Thames Riverside Walk between Teddington and Cricklade because of cost is disappointing. To repair and maintain the Walk and make the existing broken towpath continuous would cost over half a million over a ten-year period, most of this being for campshedding. That shows into what a state of dereliction the towpath has been allowed to fall, largely because no one is responsible for its upkeep. It also shows that the Commission may be justified in rejecting the scheme—at least if one accepts present priorities and financial restrictions. A critic might ask why the Home Counties should not have their Long Walk if other parts of the country have theirs—like the Pennine Walk, for instance. The reply is that the cost of such established walks is small—only a few thousands.

*

However, we need not despair; so far as the Commission is concerned the scheme is only in abeyance. Nor is there any reason why the River Walk Committee, which was originated by the Thames Conservancy Board before the National Parks Commission was born, should not inaugurate the scheme through the riparian authorities and other interested bodies. Indeed, a meeting is likely to be called of appropriate authorities who approve the idea. (Incidentally that idea goes back a long time. The Thames River Preservation Committee of 1884 said that the River Walk would be a good thing for England and recorded that a similar idea had been put forward as



[Photograph: Eric de Maré]

Spare That Tree

This forest on Sydenham Hill—the potential Hampstead Heath of South London—is in danger. If the LCC is allowed to go ahead with its plan to build flats at the top of the hill a hundred-year-old growth of woodland will be destroyed. Have we so many public open spaces that we can afford to see this one go? That is the question the recently formed Sydenham Hill and Rural Dulwich Protection Society will be asking at the forthcoming MOHLG inquiry. The society is going further than merely raising

an objection to the construction of flats. It is submitting to the ministry a preservation scheme prepared by a local resident and architect, David Goddard. This scheme is for a large open space formed partly of the four hundred acres of woods and fields of Dulwich and the Hill and partly of other open spaces, including the Crystal Palace Grounds and Brockwell and Dulwich Parks. The society is likely to have the support of the big landowners of these parts—the Dulwich College Estate Governors.

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POINTS FROM THIS ISSUE

The New **People's Houses**: comments and illustrations pages 574, 577 and 578

Robert Matthew's successor: **Dr. J. L. Martin** recommended pages 571 and 576

Recent invention to **speed bricklaying** page 576

The Editors

THE PEOPLE'S HOUSES—WHAT NEXT?

WHEN, in December, 1951, we reviewed the new house plans issued by the MOHLG we said that "something of value has had to be sacrificed to obtain economies in overall area, and it would be idle to pretend that with the issue of these plans the minister has merely waved a magic wand which will leave local authorities with more and cheaper houses, smaller houses and yet no worse houses." We went on to point out that what had been sacrificed was both architectural cleanliness, particularly inside the house, and amenity.

This week we publish—on pages 578 to 580—a new set of MOHLG house plans, together with comments. We still think that architectural cleanliness is being sacrificed. How can a minister who awards medals for good architecture in housing allow the design of such room shapes as occur in type NF/A2 (see page 579)? Isn't it socially wrong of him to permit the publication of such plans as the large family house type NF/D1 (see page 578)? And don't most of us favour the provision of room inside a house to store a pram, or other clean things, away from the fuel store? And what about somewhere to hang up our hat and coat?

However, the plans create a better impression from the point of room shape and architectural form generally than their predecessors, "Houses 1952"—with this very important proviso:—cupboards (that is, built-in wardrobes) should not be provided in bedrooms merely as a means of squaring up room shapes, useful as they may be to that end. One of the two-bedroom flats has a cupboard for each bedroom, but the four-bedroom house has none. Surely it is cheaper and more economical in materials—assuming that people must acquire cupboard space somehow—to provide built-in wardrobes from the start, at least in a majority of bedrooms, rather than to send people to Tottenham Court Road.

This, we think, is a bit of a cheat, rather like that other cheat we mentioned last week—the substitution of two-storey flats for houses, the former not having to comply with any statutory minimum "aggregate living area." When a ministry starts evading its own regulations things begin to get a little out of hand. Many local authorities are still not building down to the Macmillan minima—though not always for the best reasons. Architects, we hope, will take a critical line on these matters, judging economies fairly, but not throwing the baby out with the bath-water.

long ago as 1793). We have had to wait a long time for our Walk and now, it seems, we shall have to wait still longer. The danger is that, while waiting, not only will the towpath decline further but the duties of the Tideless Thames will be spoiled and the walk will not be worth having.

*

The walk is, in itself, not enough, as Eric de Maré points out in a special chapter in his *Time on the Thames*,* where he calls for the creation of a Thames Linear Park in which the continuous towpath would form a part. The whole river landscape needs preserving and enhancing if the Walk is to be agreeable. The National Parks Commission has apparently studied Mr. de Maré's idea, but for the moment it has too much on its plate to go into the proposal in a big way. Present local planning controls could do a lot to preserve the river amenities, but can we trust them, and should not the Thames Linear Park be regarded as an entity and treated as such? On the principle that when you are broke you should boost your morale by at once ordering a new suit, I suggest to Sir Joselyn Bray, the Thames Conservancy Chairman, and others involved, that the River Walk Committee should now order a new National Park even if the Commission won't play. Also that the River Walk Committee should change its name to the Thames Park Committee.

PRESIDENTIAL POSTSCRIPT

Whether or not you like Ike you and the rest of the world have now got him. We architects, anyway, all like Howard Robertson and feel pleased and proud to have him as our private president. There was a fine turn-out last week at the RIBA to hear his sensible and witty talk (see last week's JOURNAL), accompanied by some tantalizingly uncaptioned slides. Hugh Molson, MP, proposing the vote of thanks, put up a pathetically lame excuse for the Lessor scheme and warned us not to use too much iron and steel, and Sir Gerald Kelly, who followed, promised that in future he would use less paint. Mr. Henderson's portrait was unveiled, starting, as he observed, its scheduled run from foyer to cellar, and the evening ended as cheerfully as it had begun—an evening which the president seemed to enjoy as much as we did.

ASTRAGAL

* Architectural Press, 21s.



LCC

Robert Matthew's Successor: Dr. Martin Recommended

The LCC's General Purposes Committee has recommended to the council that Dr. J. L. Martin shall be architect to the council when Robert H. Matthew takes up his appointment as Professor of Architecture at Edinburgh University. ASTRAGAL comments on page 571.

BRICKWORK

New Invention to Speed Bricklaying

A new type of brick has been invented which, it is claimed, can be laid eight times as fast as ordinary bricks. Of normal dimensions (9 in. by 4½ in. by 3 in.) the brick has two dovetailed holes through it. It is laid dry, in stretcher bond, so that the holes in one brick are above those in the bricks below. After three or four courses have been laid, a cement grout is poured into the holes.

The inventor, T. A. Leyshon, a goldsmith

by trade, claims to have laid and grouted 100 of these bricks in 10½ minutes, without over-exerting himself. He suggests that bricklayers could lay between 5,000 and 8,000 per day, although walls made of these bricks could be erected mainly by unskilled labour, with, say, one skilled man to every four unskilled. There are two refinements that complete the invention; firstly, grooves along the outside edges of the bricks, so that, when laid there would be a cavity for pointing or a key for rendering; secondly, a groove right round the brick into which the cement grout would run, to prevent wind or rain penetration.

The size of the holes is such that the amount of mortar required is the same as that used in ordinary brickwork. Larger holes and, therefore, more mortar, would make extra strong walls, and, by inserting reinforcing rods into the vertical cavities, the strength of the wall could be further increased.

It would be necessary for the bricks to be dimensionally accurate, but, says Mr. Leyshon, the extra cost of this is no more than 10s. per thousand, a small amount compared with the cost of the labour saved.

HOUSING

Figures for September

During September 22,323 permanent houses were completed in Great Britain. This was the highest figure for any month since the end of the war. During September last year 17,168 permanent houses were completed.

The number of houses completed under the post-war programme is now 1,344,588. (Permanent: 1,187,442. Temporary: 157,146.)

SCOTLAND

Development Refusals

To meet the demand from local planning authorities and others interested in town and country planning, the Department of Health for Scotland has published a "Bulletin of Selected Appeals Decisions" which have been given by the Secretary of State for Scotland under the Town and Country Planning (Scotland) Acts.

The bulletin, published by HMSO, price 1s., contains summaries of a number of appeals made to the Secretary of State by people whose applications for planning permission to carry out development had been refused by the local planning authority—or granted subject to conditions. It is divided into four sections:—erection of houses; change of use; working of minerals; and miscellaneous.

MOHLG

New Advisory Leaflet

No. 28 in the MOW series of Advisory Leaflets, *Painting Asbestos Cement*, gives advice on the avoidance of troubles arising from the porosity and alkalinity of this material. The price is 3d.

DIARY

Augustus Welby Pugin. Talk by Mrs. Phoebe Stanton. At Library Group Meeting, RIBA, 66, Portland Place, W.1. 6 p.m. NOVEMBER 18

Exhibition of Pugin's Work. At RIBA, 66, Portland Place, W.1. Weekdays, 10 a.m. to 7 p.m., except Saturday, 10 a.m. to 5 p.m. NOVEMBER 18 TO 24

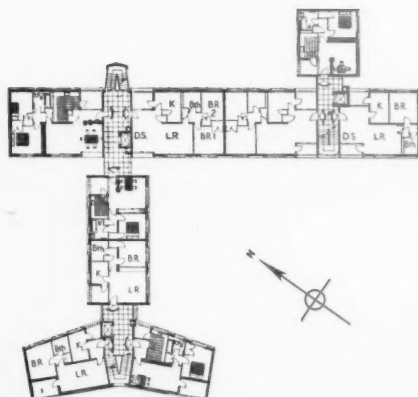
Neighbourhood Layouts in New Towns: Exhibition. At 13, Suffolk Street, S.W.1. (Sponsor: HC.) UNTIL NOVEMBER 28

Victorian and Edwardian Decorative Arts: Exhibition. At V and A Museum, Kensington. 10 a.m. to 6 p.m. Sundays: 2.30 p.m. to 6 p.m. UNTIL JANUARY 18

Discussion. On E. A. A. Rowse's paper, "World Economic Trends in Urban Development," which was read at this year's TPI Summer School. Leader of discussion: Dr. G. P. Wibberley. At Art Workers' Guild Hall, Queens Square, W.C.1. (Sponsor: Students' Planning Group.) 6.30 p.m. NOVEMBER 19

Winter Flower Decoration. Designer, Betty Massingham. At Craftsman's Market, Heal & Son, 196, Tottenham Court Road, W.1. UNTIL DECEMBER 24

PROPOSED BLOCK OF FLATS, AT BEDFORD



Typical floor plan [Scale: 1/4" = 1' 0"]

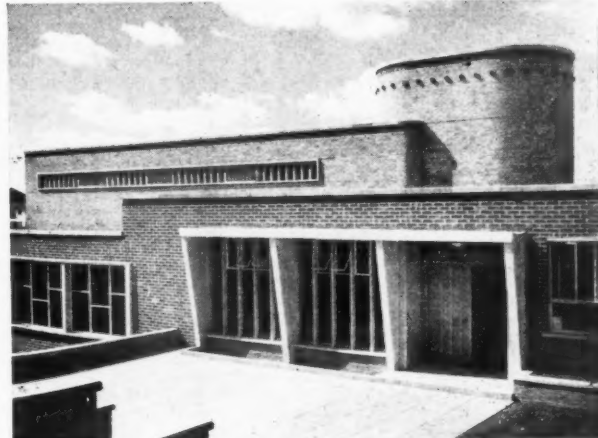


This block of fifty-four flats, designed by Max Lock and Partners, is to be built at Bedford. It will replace eight Victorian houses at present occupied by thirty-two families, and will help to restore a rapidly fading residential area near the town centre and railway station.

BUILDINGS IN THE NEWS :

MOHLG House Plans

These models of new types of MOHLG "People's Houses" were on view at the Public Works and Municipal Services Exhibition, Olympia, last week. Right : houses with reduced frontages. Below : two-storey flats. These plan-types, and variations, are discussed on page 575 and on pages 578 to 580.



Schools at Ealing, Poole and Ramsgate,

Left : Technical College at Ealing under construction, designed for the MCC by C. G. Stillman, county architect. Above : Trinidad County Primary School, Poole, designed by Jackson and Greenen. Below : Ramsgate (Manston Road) County Primary School, designed for Kent CC Education Committee by Howard V. Lobb and Partners, in collaboration with the Kent county architect, S. H. Loweth.

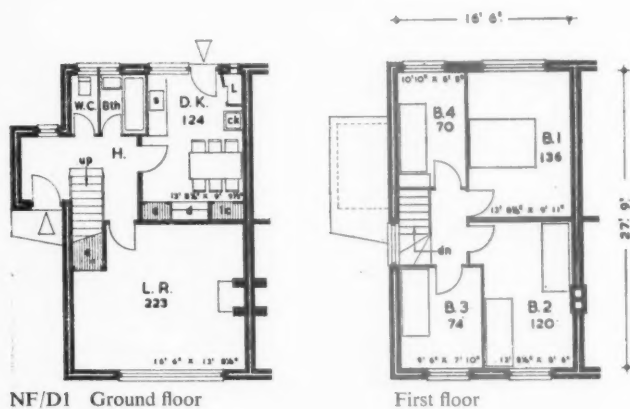


NEW MOHLG HOUSE AND FLAT DESIGNS

NARROW-FRONTED HOUSES AND TWO-STOREY FLATS

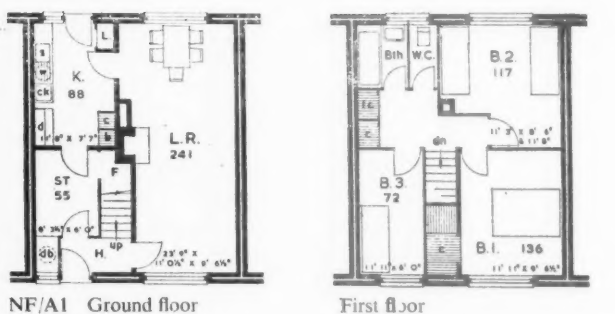
The specimen plans published below—the subject of editorial comment in the JOURNAL last week and today—have been published by the Ministry “solely to stimulate study by the architectural profession.” The JOURNAL welcomes this idea and invites readers to submit comments either of detail or principle. We understand that the published plans are only a few examples of a number of types on which Ministry architects are working at present with a future bulletin, “Houses 1953,” in mind. The published types are (a) narrow fronted houses and (b) two-storey flats. The main intention in the design of each type was to reduce costs by savings, particularly on roads, sewers and site

works, at the same time maintaining the economies already effected in internal planning by the reduced sizes of “Houses 1952.” The Ministry points out that “though road costs vary, a saving of 6 ft. frontage on a house can easily mean a reduction of £25 on the total cost of building, which is equal to about 6d. a week in rent.” Rather than review each plan separately we have arranged them in the following pages in groups according to the type of dwelling they represent. In the following text “G” stands for gross house area including store and fuel, “N” for net house area, and “Ag” for aggregate living area (in sq. ft.) “F” is for overall plot frontage.



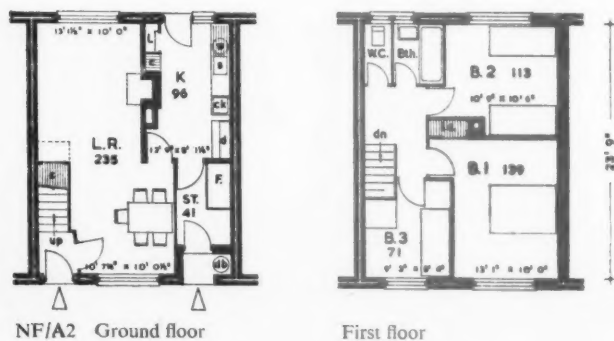
THE FOUR-BEDROOM HOUSE FOR A FAMILY OF SIX

Type NF/D1. G 1007, N 945, Ag 347, F 23 ft. 9 in. Suitable only for the end of a terrace, or as semi-detached. Outside store and fuel. This house falls below the standards of any comparable plan in either Housing Manual in having four bedrooms upstairs and the bathroom and w.c. downstairs. The dining kitchen with table for six squeezed in between cooker and dresser is also inferior to the Manual's four-bedroom house equivalents. Not a single cupboard is provided in any bedroom or anywhere upstairs. A full set of winders starts at the top of the stairs. No pram space. Structure very economical. The Ministry has been slow to face the problems of the large family house. (This is, in fact, the first to be published since the economy drive started.) If this is a kite which is being flown, it should be hauled down rapidly.



THE THREE-BEDROOM HOUSE FOR FAMILIES OF FOUR OR FIVE

Types NF/A1. G 903, N 848, Ag 329, F 19 ft. 11 in.; NF/A2. G 879, N 824, Ag 331, F 19 ft. 5 in.; NF/A4. G 819, N 822, Ag 338, F 19 ft. 5 in. These are all intermediate terrace house types with store, dustbin and fuel, at the front, access to the garden through the house via store and working-kitchen, and with through living-rooms. They are variations on Fig. 11, “Houses 1952,” which had a frontage of 22 ft. 4 in. and it can be seen how savings in frontage are sometimes offset by increased area due to the depth of the house and waste circulation space. In all three the only pram space is in the same store as the fuel, and entrance lobbies and cloaks space are unreasonably cramped. A1 has a bad dining-living room only 9 ft. 6½ in. wide for most of its length. A4 has an independent boiler with “whole-house heating” from a single radiator in the living room (most economically placed), and is probably the best open plan (with stair rising from the living room) yet produced by the Ministry. But how efficient is this single radiator? Will the rooms upstairs not be warmed at the expense of the living-dining room? These are questions on which we would welcome both experience and comment. A2 has an identical upstairs plan to type A4, but shows clearly the unfortunate effect of enclosing the staircase, which, if required, could have been done simply by the addition of a door at the bottom, without the necessity of adding also a badly contorted front porch and second entrance on the same elevation (all in 19 ft. 5 in. frontage). Or would this frank acceptance of the old rural cottage stair have been unacceptable? Again, why have all bedroom cupboards been omitted in types A2 and A4?

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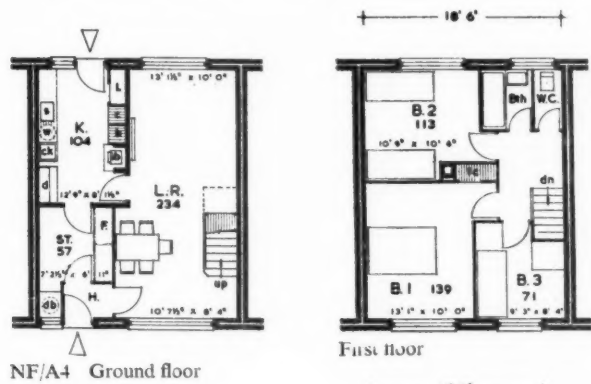
THE TWO-BEDROOM HOUSE (OR FLAT) FOR FAMILIES OF FOUR

The two-bedroom house, although economical in the sense that it is smaller in itself than a three-bedroom house (and additionally so because the permitted "aggregate living area"—kitchen plus living and dining space—is only 280 sq. ft. instead of 320 sq. ft.) never appears to give an economical solution, because the bedroom floor requires less room space than the ground floor and looks wasteful. In most examples either the bedrooms are made considerably over minimum regulation areas or there is waste landing and passage space. In "Houses 1952" an attempt was made to reduce the house area nearer to the "economic" first floor area by making ground floor projections in the form of bay windows or porches. This is in itself uneconomical in the strictest utilitarian sense, and very difficult to handle architecturally. The present solution offered to this problem by the Ministry is to build two-bedroom dwellings either as end houses of terraces or as two-storey terrace flats.

House Type NF/A17. G 772, N 720, Ag 280, F 16 ft. 11 in. If one can enter a house in the middle of the long side, it is obviously much easier to arrange the circulation economically and to plan more cleanly than if one has to enter at the short side. Type A17 is the companion of type A4 and has an open staircase rising from the living room—with, apparently, a back boiler operating a radiator in the second bedroom (surely the enormous first bedroom or the dining kitchen will need it more), and supplying hot water for the very long run (well over 30 ft.) to the bathroom. It would be quite easy, however, to reverse the staircase so as to enter it from the hall, and enclose it, and hand the first floor plan. This gives us in effect another type, A5 (the end-of-terrace companion to A2), which is a variation on this plan. The first bedroom, however, is still 160 sq. ft. The dining kitchen is well under the Manual (and even "Houses 1952") minimum, and is considerably improved if the stair is reversed, putting the cupboard under it into the kitchen instead of the living room and cutting out one of the three doors.

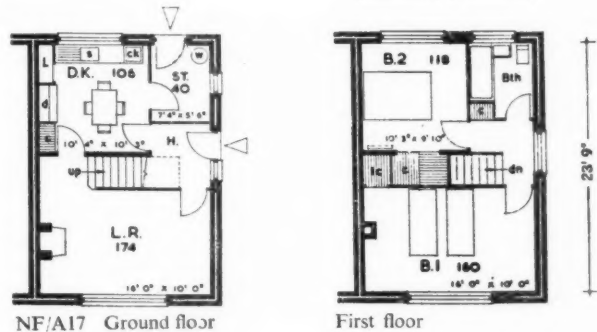
Flat Types DF/1. Gd. Floor: G 704, N 642, Ag 262. First Fl.: G 737, N 675, Ag 262. Frontage: 39 ft. (ave. 19 ft. 6 in. per unit). **SF/2.** Gd. Floor: G 716, N 663, Ag 267. First Fl.: G 727, N 677, Ag 308. Frontage: 35 ft. (ave. 17 ft. 6 in. per unit). **SF/5.** Gd. Fl.: G 702, N 647, Ag 268. First Fl.: G 717, N 667, Ag 283. Frontage: 35 ft. (ave. 17 ft. 6 in. per unit). **IF 2.** Gd. Floor: G 712, N 650, Ag 282. First Fl.: G 721, N 659, Ag 282. Frontage: 27 ft. 9 in. (ave. 13 ft. 10½ in. per unit, but gardens are two deep in this type, doubling depth of plot required).

The first thing to be said about these flats is that, if it is reasonable to legislate for a minimum "aggregate living area" in two-storey houses, it is equally reasonable to say that the same minima should apply to two-storey flats, which are a straight substitution for houses. The aggregate living areas should therefore be increased from the above to 280 sq. ft. This, however, will make some of the first floor flats in some cases very uneconomic. It seems to be too easily assumed that savings in roads and sewers alone make these flats cheaper than comparable houses. Two-bedroom houses can be planned quite well with frontages very close to the above averages per unit flat, and can, of course, also have footpath access. In regard to structure, the flats require quite as much, if not more, feet run of walling, with more external walls; also party partitions on either side the stairs, and more expensive, insulated floors. They economize in drainage and services. They will probably not economize in floor area, compared with an average of two-bedroom house plans, if they are required to meet the same aggregate living areas. The disadvantages of two-storey flats—overhead neighbours, the separation of the upstairs family from their garden, and the overlooking of the downstairs people's garden—have perhaps been too little considered. Type DF/1 appears to be easily the best of these flat plans. The rooms are clean and reasonably well shaped—though, again, in all these plans, the provision of bedroom cupboards appears to be quite arbitrary. The west window of the first floor living room will have rather a good view into the opposite kitchen and might perhaps be better omitted.



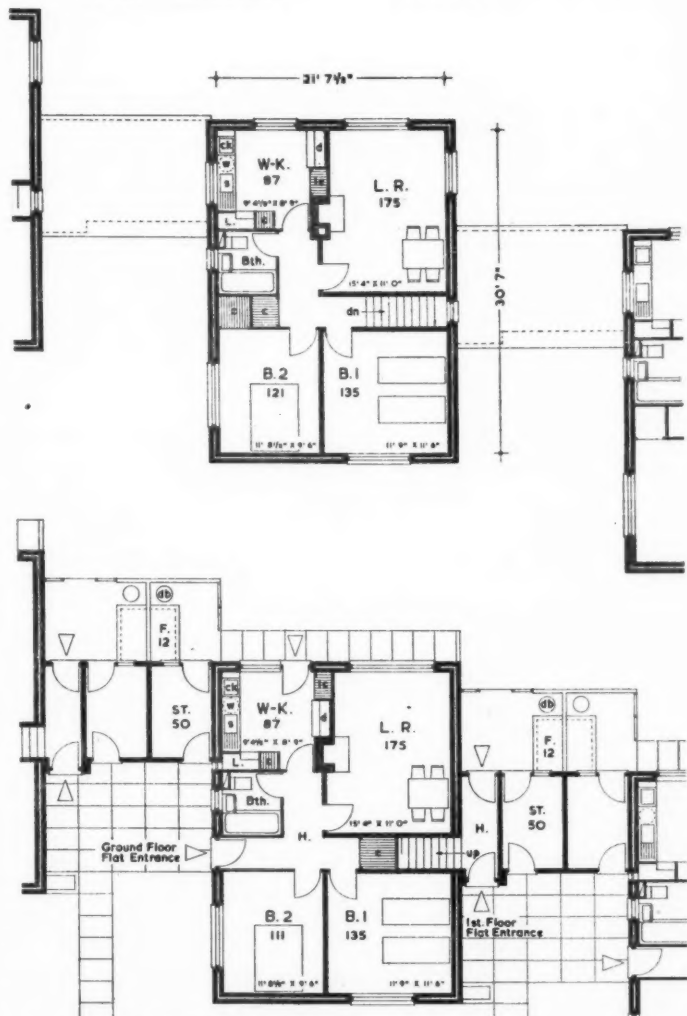
NF/A4 Ground floor

First floor

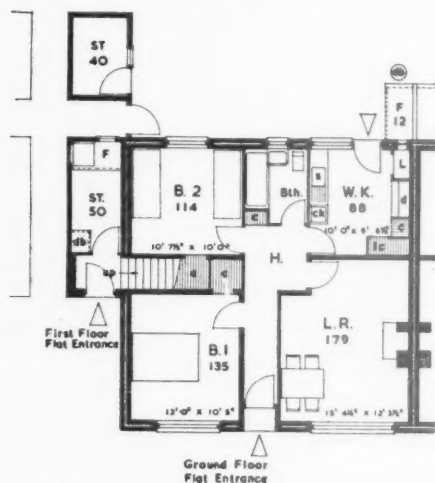


NF/A17 Ground floor

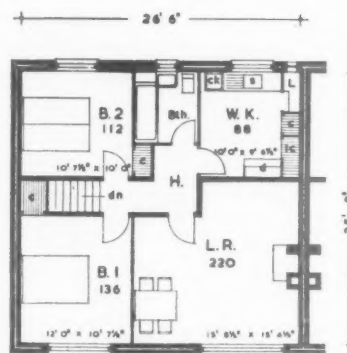
First floor



DF/1 Ground floor and first floor



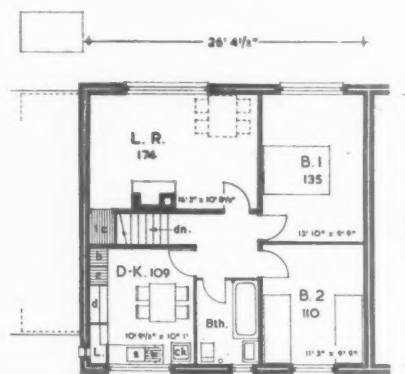
SF/2 Ground floor



First floor



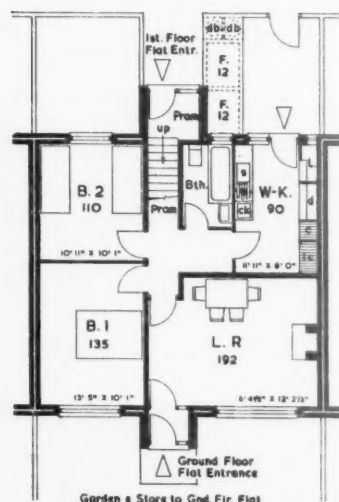
SF/5 Ground floor



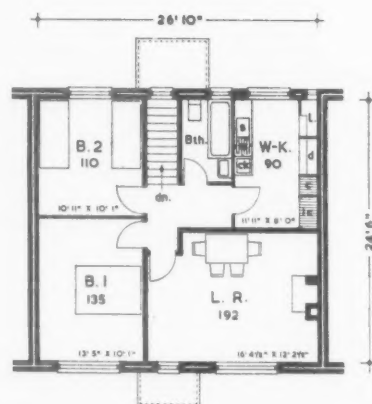
First floor



Foot path



TF/2 Ground floor [Scale: 1/8" = 1' 0"]



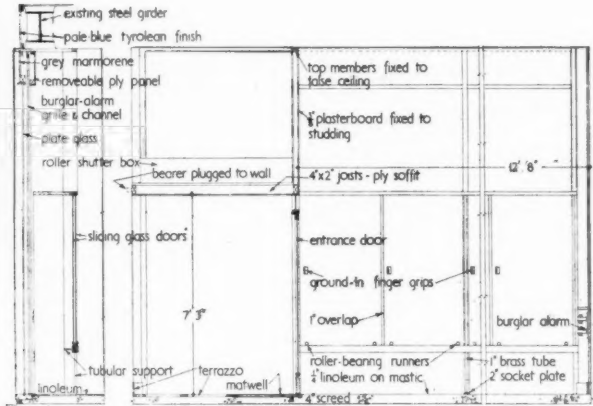
First floor

Types SF/2 and SF/5 have narrow, tunnel-like passages internally, and also externally between the stores. Type TF/2 has an incomprehensible arrangement of gardens with, presumably, two parallel access footpaths, one giving access to the first floor flat and also service access to the ground floor kitchen, the other giving access through the ground floor garden to a main front door and porch tacked on to the living room. This is difficult to take seriously.

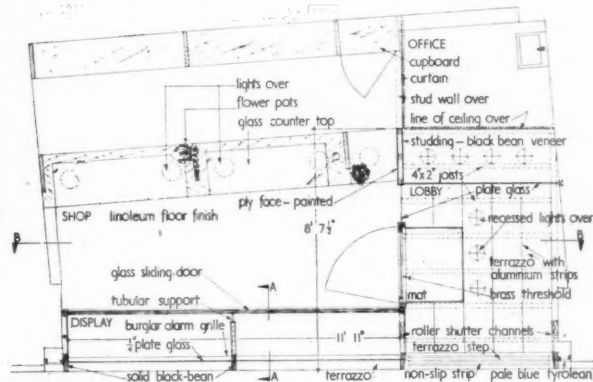
SITE LAY-OUT

From a lay-out point of view, it is interesting to see that the Ministry has had the courage to put forward a scheme for DF/1 types, with footpath access (equally applicable, of course, to houses) in which the access path serves front doors on one side of it and back gardens on the other. In spite of sad experience and municipal opposition we still think there is something in that idea, and it is interesting to note that at the Public Works and Municipal Services Congress (see report on page 595) footpath access was strongly supported, on grounds both of economy and of amenity.

SHOP IN LIVERPOOL STREET, LONDON, E.C.2



Sections A-A and B-B



Plan [Scale: 1/8" = 1' 0"]

The shop at 18, Liverpool Street, illustrated on this page, has been designed for Richard & Partners, Ltd., for the sale of watches and pens. The architects for the shop front (below, right) and structure were Sadie Speight and Leonard Manasseh & Partners, based on a design by David Canter (of Richard & Partners, Ltd.). The interior joinery and display (seen above and below) was designed by David Canter and the work was carried out by the clients. In order to have as much display area as possible, without sacrificing circulation space, the display

is concentrated in an area about 18 in. deep and 6 ft. high. The entire front, which is in black bean, was fabricated and erected as a whole. The contract price for the front and main structure was £1,007. General contractors, Samuel Elliott & Sons (Reading), Ltd. Sub-contractors, page 600.



SHOP

in BROADMEAD, BRISTOL

designed by ELLIS E. SOMAKE

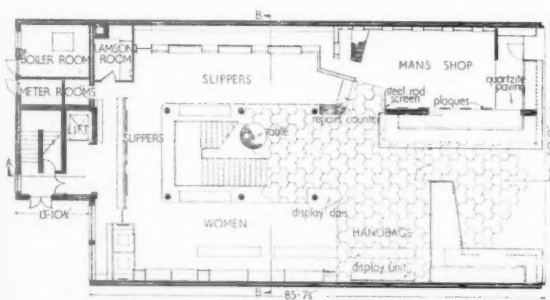
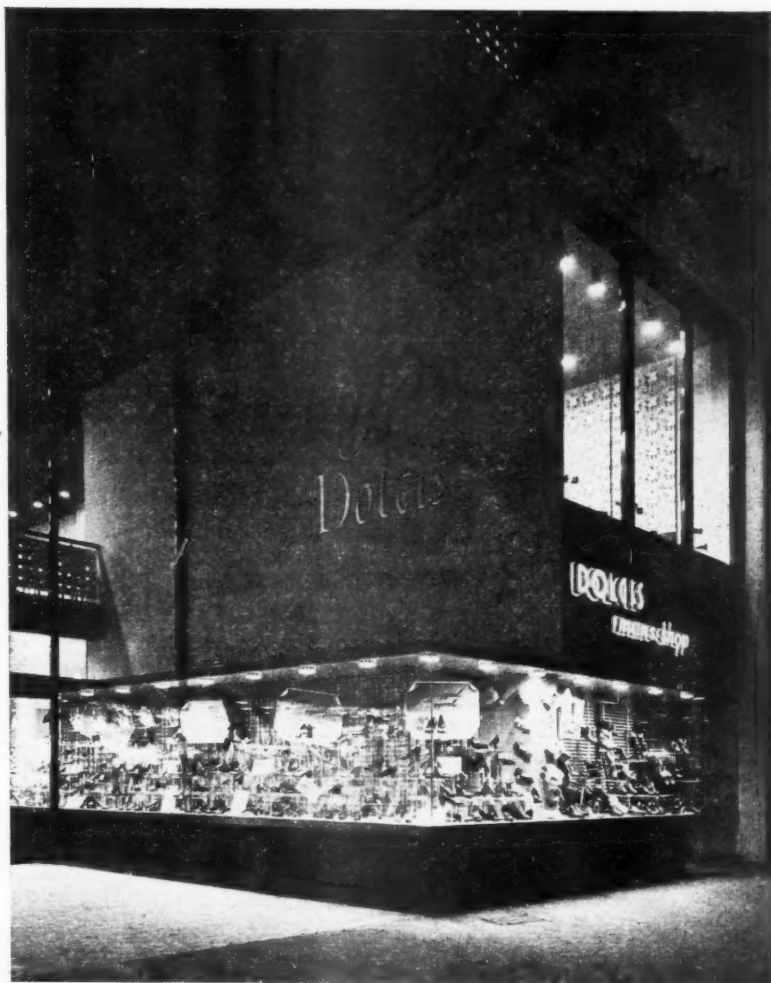
assistant architect, GEOFFREY UFFINDELL

The Dolcis shoe shop in Broadmead replaces the largest of three branches lost during one night of raids on Bristol. This branch has been transferred from the original site in Wine Street in accordance with the town plan. Many other stores now have branches in the new shopping centre (see model of central area, page 400, JOURNAL for October 2).

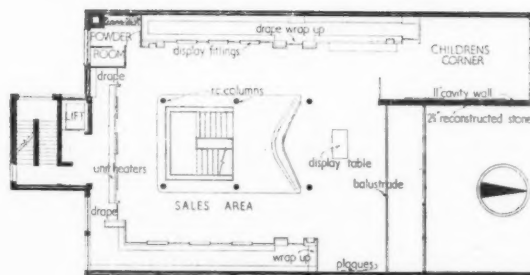
A general view of the ground floor.



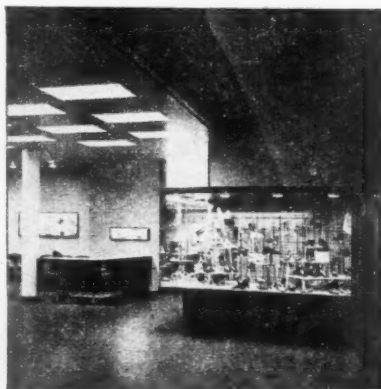
SITE AND PLAN.—The site is rectangular and level. The shop has three floors. Two thirds of the frontage on the ground and first floors forms a lobby flanked by display windows. The rear of the lobby is glazed through two floors. The remaining third of the frontage on the ground floor is used for the sale of men's shoes, with separate entrance, but is linked internally to the main part of the store. The ground floor is used for sale of lingerie, handbags, slippers and "impulse" sales. The first floor is devoted to ladies' and children's shoes. The second floor is used for stock, staff and office accommodation.



Ground floor plan [Scale: $\frac{1}{4}$ " = 1' 0"]



First floor plan

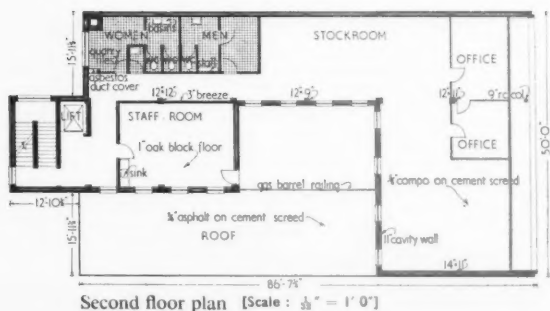


Extreme left, the shop from the north. Left, inside the main entrance looking towards the men's shop. Above, the men's shop with the children's corner over it and the main entrance doors on the extreme left.



SHOP

in BROADMEAD, BRISTOL
designed by ELLIS E. SOMAKE

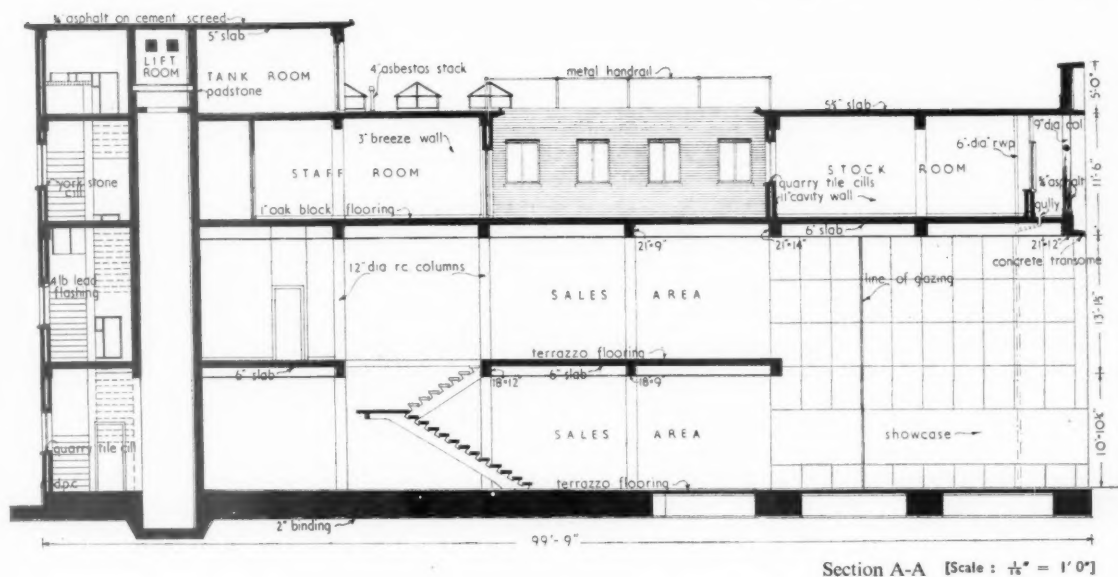


CONSTRUCTION.—Reinforced concrete frame, hollow tile floor slabs, wall panels of 11-in. cavity brickwork externally, 9-in. and 4½-in. internal partitions. Front elevation faced with reconstructed Clipsham stone and polished Portland stone panels.

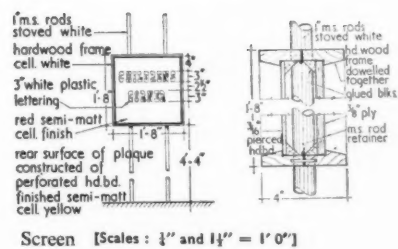
FINISHES.—Exterior: shop front metal work,

Above, two views of the men's shop; view on the right is from the main sales area. Below, the women's shop, from the main entrance.





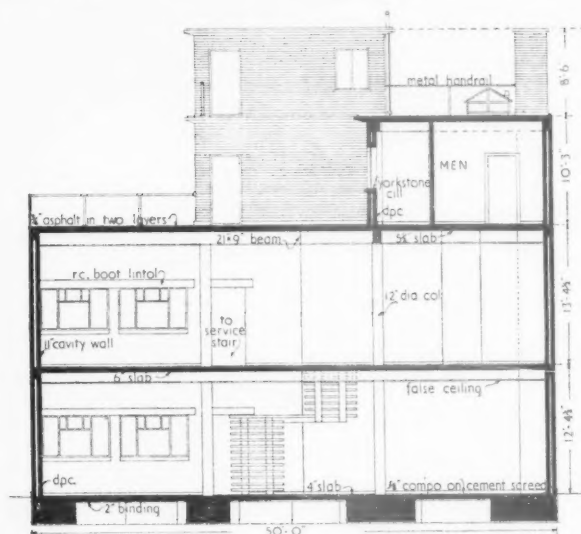
polished bronze ; stall risers and frieze of men's shop, cellulosed aluminium ; fascia sign mounted on polished marble. Floors : sales areas, black or Travertine terrazzo with brass dividing strips, fitted carpet ; men's shop entrance lobby, random quartzite ; stock areas, linoleum tiles. Ceilings : ground floor, Italian blue, pale lemon yellow and white



View from children's corner on the first floor.

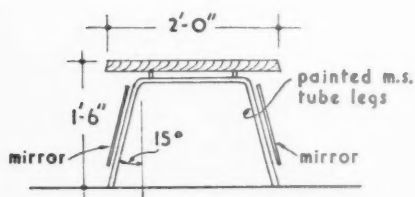
The children's corner.



Section B-B [Scale: $\frac{1}{8}'' = 1' 0''$]

SHOP

in BROADMEAD, BRISTOL
designed by ELLIS E. SOMAKE

Display table [Scales: $\frac{1}{4}''$ and $1\frac{1}{4}'' = 1' 0''$]

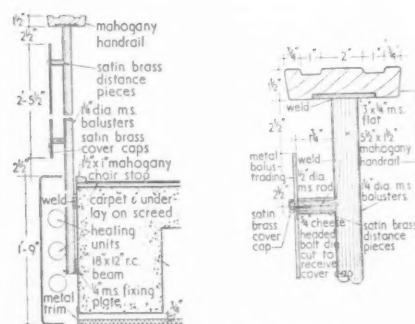
Part of the first floor sales area.



coffers; first floor, deep red carried through from lobby. Walls: at rear, deep red as ceiling; first floor, children's corner, mural by Richard Lambert, circus motif used in fabric panels for that area. Stairs: solid mahogany on RC strings, carpet panels.

SERVICES.—Ventilation and heating: fresh air is drawn in from the rear of the shop, filtered, warmed and distributed through grilles in ceiling coves, extracted by fans concealed in the fascia at the front; additional heat is supplied by skirting heaters.

The general contractors were William Colwin & Son, Ltd. For sub-contractors, see page 600.

First floor baluster [Scales: $\frac{1}{4}''$ and $1\frac{1}{2}'' = 1' 0''$]

LLOYD BOARDS : PAINTING

| Finish | Insulating Board | Hardboard |
|--|---|--|
| Oil-bound water paint (type No. 16) | 1st coat: type No. 16 thinned with petrifying liquid. 2nd coat: type No. 16, thinned with petrifying liquid or water. | 1st coat: type No. 3 oil priming paint. 2nd coat: type No. 16 thinned with petrifying liquid or water. |
| Washable distemper (type No. 19) | 1st coat: size. 2nd coat: type No. 19 thinned with water. 3rd coat: type No. 19 thinned with water. | 1st coat: type No. 3 oil priming paint. 2nd coat: type No. 19 thinned with water. 3rd coat: type No. 19 thinned with water. |
| Non-washable distemper (type No. 22) | 1st coat: size or clearcole. 2nd coat: type No. 22 thinned with water. Alternatively :— 1st coat: type No. 3 oil priming paint. 2nd coat: type No. 22 thinned with water. | 1st coat: type No. 3 oil priming paint. 2nd coat: type No. 22 thinned with water. |
| Flat oil paint (type No. 9) | 1st coat: type No. 9 thinned according to maker's instructions. 2nd coat: type No. 9 thinned according to maker's instructions. | 1st coat: type No. 8 undercoat. 2nd coat: type No. 8 undercoat. 3rd coat: type No. 9. When a superior finish is required procedure should be as follows :— 1st coat: special hardboard primer. 2nd coat: special hardboard filler. 3rd coat: type No. 8 undercoat. 4th coat: type No. 8 undercoat. 5th coat: type No. 9. |
| Gloss paint (type Nos. 10, 11, 12 or 13) | 1st coat: type No. 3 oil priming paint. 2nd coat: type No. 8 undercoat. 3rd coat: type No. 8 undercoat (further undercoats if necessary to obtain a uniform, non-absorbent surface). 4th coat: type Nos. 10, 11, 12 or 13. | 1st coat: type No. 8 undercoat. 2nd coat: type Nos. 10, 11, 12 or 13. When an unblemished enamel finish is required procedure should be as follows :— 1st coat: special hardboard primer. 2nd coat: special hardboard filler. 3rd coat: type No. 8 undercoat. 4th coat: type No. 8 undercoat. 5th coat: type Nos. 10, 11, 12 or 13. |

This Sheet deals with the painting of Lloyd insulating boards and hardboards. The table above gives the recommended specifications for various types of paint.

Extracts from B.S. CP 231 : 1952 *Painting* and sub-code 231.200 *The painting of building boards, sheets and slabs* are given by permission of the Council for Codes of Practice. Copies of the Code can be obtained from the British Standards Institution, 24, Victoria Street, London, S.W.1.

Fixing Boards

Insulating boards : For fixing details see Sheets 15.C1, 15.C2 and 15.C3.

Hardboards : Fixing is similar to that for insulating boards except that the studding should be at 16-in. centres for 4-ft. wide boards and 15-in. centres for 5-ft. wide boards.

Before fixing, the boards should have had their moisture content adjusted to the conditions in which they are to be used. It is generally recommended that, 24-48 hours before use, they be stacked loosely on edge in the place where they are to be fixed so that air may circulate between them.

As an additional safeguard, particularly if the material is to be used in a situation where it may pick up moisture, it is often advisable to paint not only the exposed face but also the back and the edges, since this reduces the tendency to buckling and to lateral movement.

Joints : Various forms of cover strip are shown on Sheet 15.C1. Where no cover strip is used the nails ($1\frac{1}{4}$ in. or $1\frac{1}{2}$ in. panel pins, lost-head oval or round wire nails) should be driven slightly below the surface of the boards and the indentations stopped with a proprietary filler or a mixture of glue-size and whiting, etc., tinted to the required colour.

15.C4 LLOYD BOARDS : PAINTING

Choice of Finish

Insulating boards : Distempers and flat paints, generally, provide a more satisfactory finish than gloss paints and enamels. Where gloss paints and enamels are used several applications of undercoating paint may first be needed in order to provide a level finish of uniform gloss. Where non-washable distempers are used with the intention of redecorating at fairly frequent intervals (e.g. on ceilings) it is an advantage to prime the surface with an oil priming paint instead of size or clearcole.

Hardboards : These may be distempered or painted to give satisfactory flat or gloss finishes. When an unblemished enamel finish is required, however, the boards should be treated with special hardboard primer and filler.

Key to Types of Paint

The type numbers given in the table on the face of this Sheet relate to B.S. Code of Practice CP 231 : 1952 *Painting* and sub-code 231.200 *The painting of building boards, sheets and slabs* of which the following is a summary.

Type No. 3 (primer) : A mixture of pigments and extenders ground in a drying oil.

Type No. 8 (undercoat) : A mixture of pigments and extenders selected to suit the type of finishing coat and ground in a high quality drying oil. It should be adjusted to dry with a non-glossy surface within 16 hours.

Type No. 9 (flat finish—interior use) : A mixture of pigments and extenders selected according to colour required and ground in a high quality drying oil, thinned with volatile solvent. It should be adjusted to dry with a non-glossy surface within 24 hours.

Type No. 10 (oil gloss finish) : A mixture of pigments, according to colour required, with or without a small proportion of extender, ground in linseed oil and thinned with turpentine or white spirit.

Type No. 11 (full gloss finish—hard gloss paint) : A mixture of pigments of fine texture, according to colour required, with or without a small proportion of extender, ground in an oil varnish medium (prepared from natural or synthetic resins), heat-treated drying oils and suitable thinners. It should be adjusted to dry within 16 hours.

Type No. 12 (full gloss finish—alkyd resin type) : As No. 11 but with a synthetic medium consisting essentially of a pure drying oil-modified alkyd resin.

Type No. 13 (full gloss finish—enamel) : As No. 11 but of superior quality particularly in respect of gloss and flowing properties.

Type No. 16 (oil-bound water paint—interior use) : A mixture of pigments and extenders ground in an emulsion of drying oil or oil varnish. Supplied in paste form and mixed with water and/or petrifying liquid for application.

Type No. 19 (oil-free washable distemper) : A mixture of casein with borax, lime or similar material to render it soluble during application, together with alkali-resisting pigments and extenders. Supplied in paste or powder form and mixed with water for application.

Type No. 22 (soft distemper—non-washable) : Powdered chalk or similar material, with pigments if required, mixed with a solution of glue size or other binder.

Hardboard primer : The purpose of such a primer is to stabilise the surface and to retain the oily component of the board.

Calcium resinate solution (5 per cent. in white spirit), suitably pigmented, e.g. with zinc oxide and blanc fixe gives a useful isolating film. The normal lead or cobalt naphthenate drier (ratio 10 : 1) may also be added.

Hardboard filler : The purpose of the filler is to level existing irregularities and prevent further swelling of the fibres by the subsequent paint films applied. A useful material for this purpose is a solution of casein in borax (14-15 per cent. solid), with a little glycerol to act as plasticiser, pigmented with china clay or other suitable pigment.

Permanent Shuttering

Where the boards are used as permanent shuttering for concrete, decoration should be left as long as possible to allow ample time for drying. If there is any doubt as to whether the boards are completely dry it is safer to finish them with distemper rather than oil paint.

Compiled from information supplied by :

Bowaters Building Boards Limited

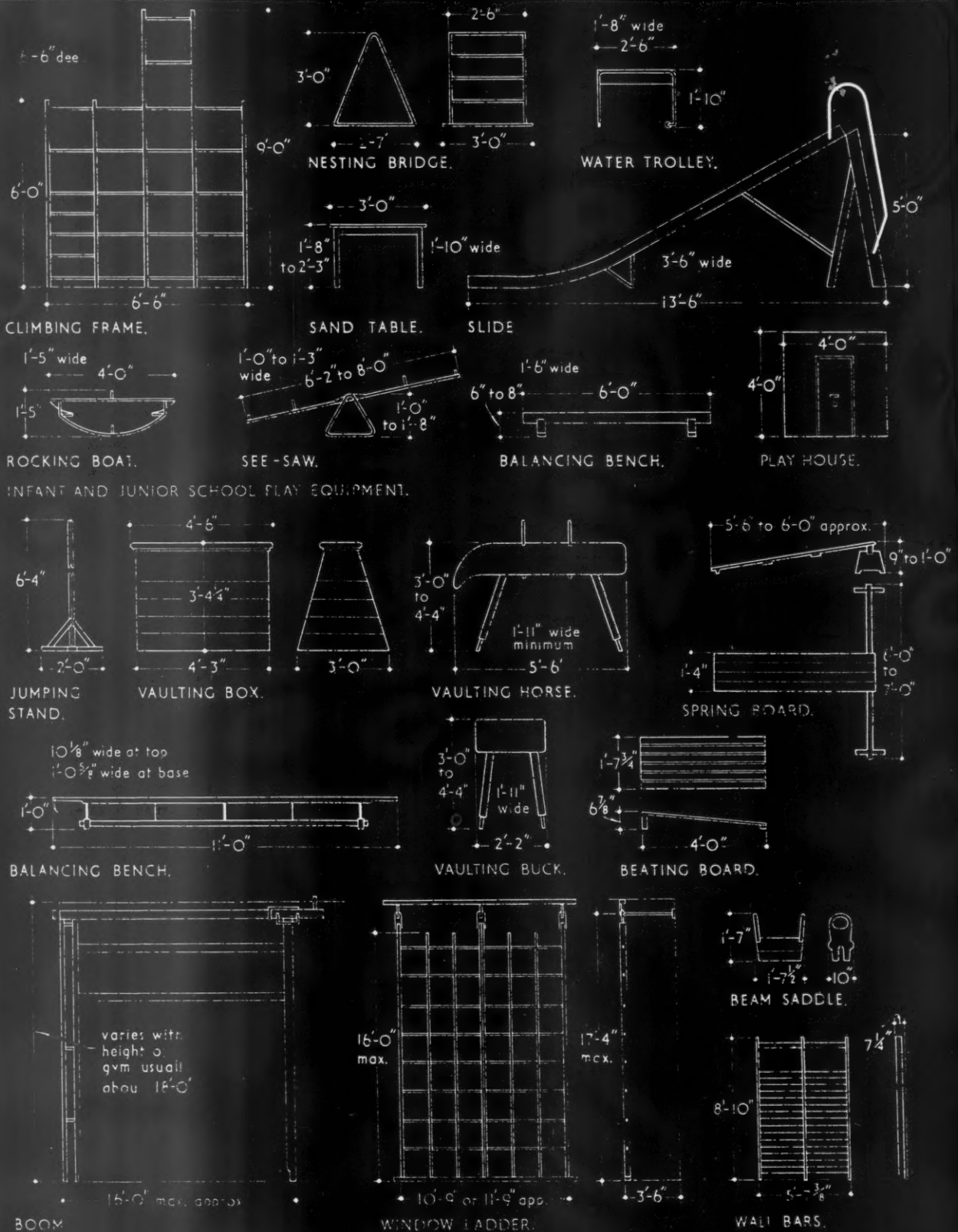
Address : Harewood House, Hanover Square,
London, W.1.

Telephone : Mayfair 9266.

DESIGN DATA | COMMON SIZES

4.A14

The Architects' Journal Library of Information Sheets 390. Editor: Cotterell Butler, A.R.I.B.A.



SECONDARY SCHOOL GYMNASIUM EQUIPMENT

COMMON SIZES 5: GYMNASIUM AND PLAY EQUIPMENT FOR SCHOOLS

Compiled by John M. Price, A.R.I.B.A., A.A.Dip

4.A14 COMMON SIZES 5: GYMNASIUM AND PLAY EQUIPMENT FOR SCHOOLS

This Sheet is one of a group setting out common sizes and deals with play equipment for infant and junior schools and gymnasium equipment for secondary schools. The latter is based on British Standard B.S.1892:1952 by permission of the British Standards Institution, 24, Victoria Street, London, S.W.1.

The dimensions given are the overall sizes of the equipment.

The planning and general allocation of space for play rooms and gymnasias are dealt with under the appropriate planning sections.

Climbing Frame

These are available in various sizes, some as small as 4 ft. 8 in. square on plan.

Nesting Bridge

Normally these are used in pairs as supports for either planks or bars.

Water Trolley

A tubular metal frame supports a deep metal tray. Castors are fitted to the legs at one end and rubber feet at the other.

Sand Table

The top of the table consists of a 3-in. deep metal-lined tray.

Slide

The slide illustrated is the largest suitable for infants' use; smaller sizes are available.

Rocking Boat

This is made of tubular steel with canvas seats.

See-Saw

The drawing shows the range of sizes. Some see-saws are adjustable in height.

Balancing Bench

This is for infants' use. The top of the beam is 2 in. wide.

Play House

This consists of three sides hinged together, one with a door, another a window, and the third a hinged flap forming a counter which folds flat when not in use.

Jumping Stand

Stands are made in sets consisting of a pair of standards and a rope.

Vaulting Box

These are made in separate diminishing sections (to facilitate storage), fitting firmly into each other when assembled. A larger vaulting box is made similar to the one illustrated; it is 5 ft. long, 3 ft. 6 in. wide and 4 ft. 2½ in. high. A third type, having the

same dimensions, is made in three sections instead of five.

Vaulting Horse and Vaulting Buck

Both of these have telescopic legs providing adjustment between the given dimensions. A higher vaulting buck is made, adjustable between 3 ft. 4 in. and 5 ft. 5 in. Straight-necked vaulting horses are also available.

Boom

When not in use, the beams are hoisted to the ceiling and the centre pillar stored against the wall. The diagram shows a single span but double-span booms are also available.

Beam Saddle

These are used in conjunction with the boom, and fit exactly over the beam. They should be stored on shelves or racks when not in use.

Window Ladder

This is hung on runners and when not in use lies flat against the wall.

Wall Bars

These usually consist of two or more sections. The drawing shows the general arrangement, but further sections can be added in units of 2 ft. 9 in. between centres of uprights.

Climbing Ropes

Ropes are usually hung from runners on a steel track at ceiling level, so that they can be moved back against the wall. When in use ropes should not be less than 2 ft. 6 in. apart, and at least 3 ft. from the nearest projection from any wall.

Mats

Mats for gymnasias are of coir fibre or rubber. Those of fibre are made in the following sizes: 4 ft. by 2 ft. 6 in. and 4 ft. square, both 2 in. thick; 5 ft. or 6 ft. by 4 ft., and 6 ft. square, all 2½ in. thick. In rubber the thickness is 1½ in. for the following sizes: 4 ft. by 2 ft. 6 in., 4 ft. square and 6 ft. by 4 ft. Rubber mats are cleaner and do not slide but must not be folded or hung up by the handles.

Landing Mattress

These are made in two sizes, 6 ft. by 4 ft. by 2 in. thick and 6 ft. square by 3 in. thick.

Agility Mattress

These are normally 12 ft. or 15 ft. long by 4 ft. wide and should be at least 2½ in. thick.

Head Pad

These are 5 ft. by 2 ft. by 6 in. thick.

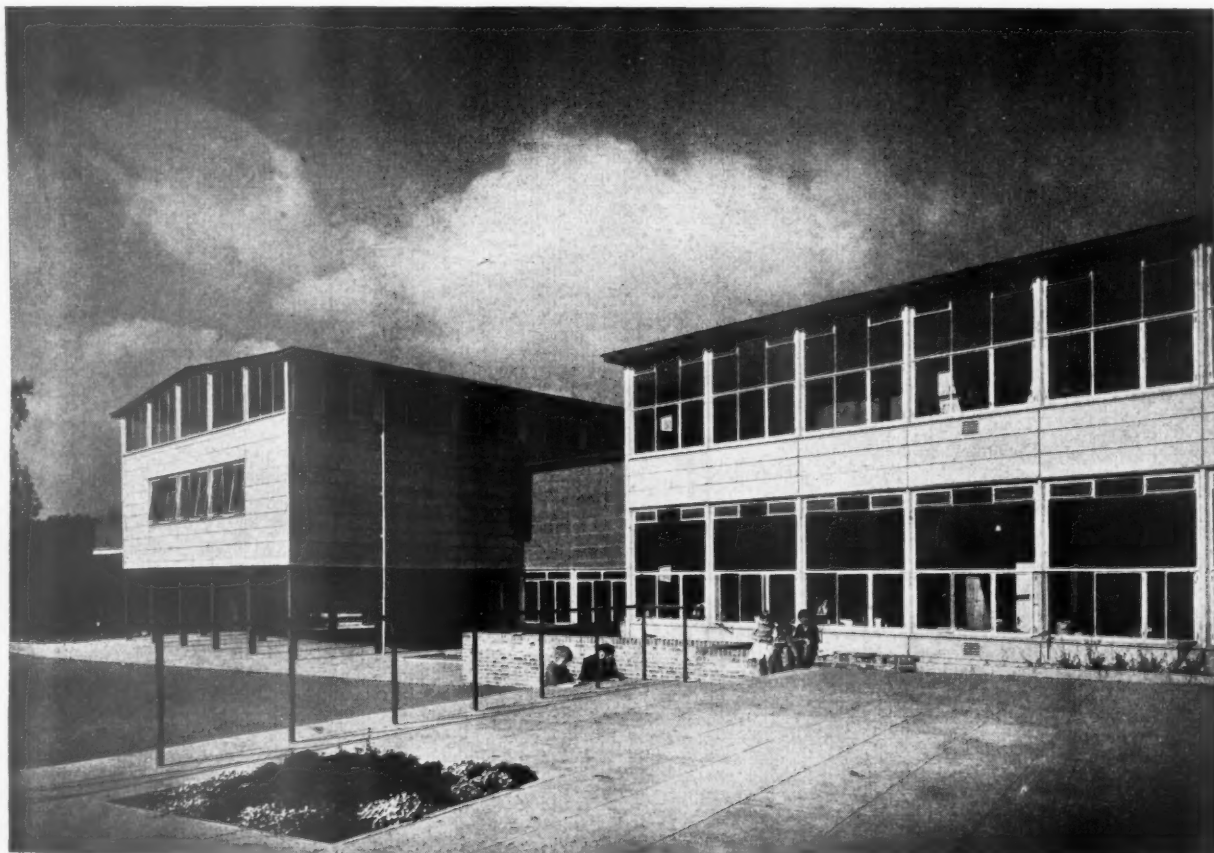
Other Sheets in this Series cover furniture for schools, chairs and tables generally, china, cutlery, kitchenware and miscellaneous items.

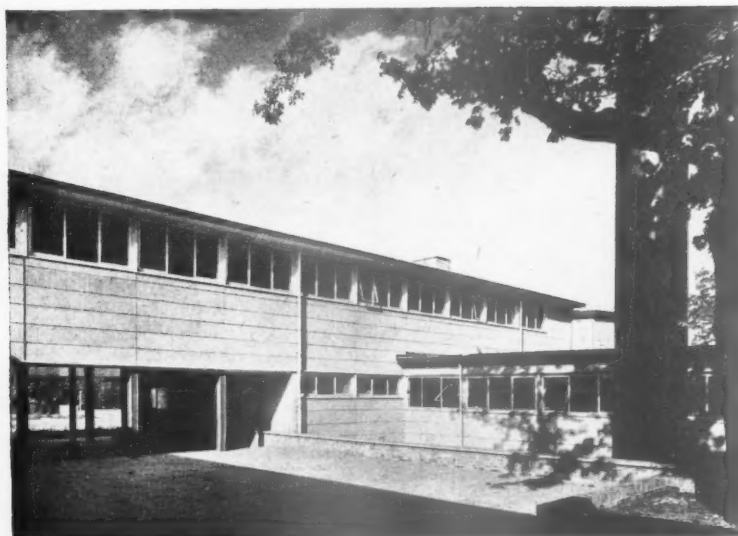
PRIMARY SCHOOL

for the London County Council, in KINGSWOOD DRIVE, LONDON, S.E.21
designed by ROBERT H. MATTHEW, architect to the Council ; J. L. MARTIN, deputy
architect to the Council ; S. HOWARD, schools' architect ; F. G. WEST, deputy schools'
architect ; K. J. CAMPBELL, principal assistant architect ; A. W. STRINGER,
co-ordinating architect ; G. F. HORSFALL, architect-in-charge ; J. G. H. D. CAIRNS,
senior assistant architect ; W. J. APPLETON and D. J. J. WRIGHT, assistant architects

This school forms one of a programme of 17 carried out in a similar form of construction as part of the 1951 and 1952 programmes of the Council. The school is divided into a junior department on the north side of the site and an infants' department to the south, linked by a wing on a north-south axis, containing the dining room and administrative offices. Two murals, originally forming part of the South Bank Exhibition, are included in the school.

Junior classroom block and assembly hall from the south-east.





PRIMARY SCHOOL

in KINGSWOOD DRIVE, LONDON.

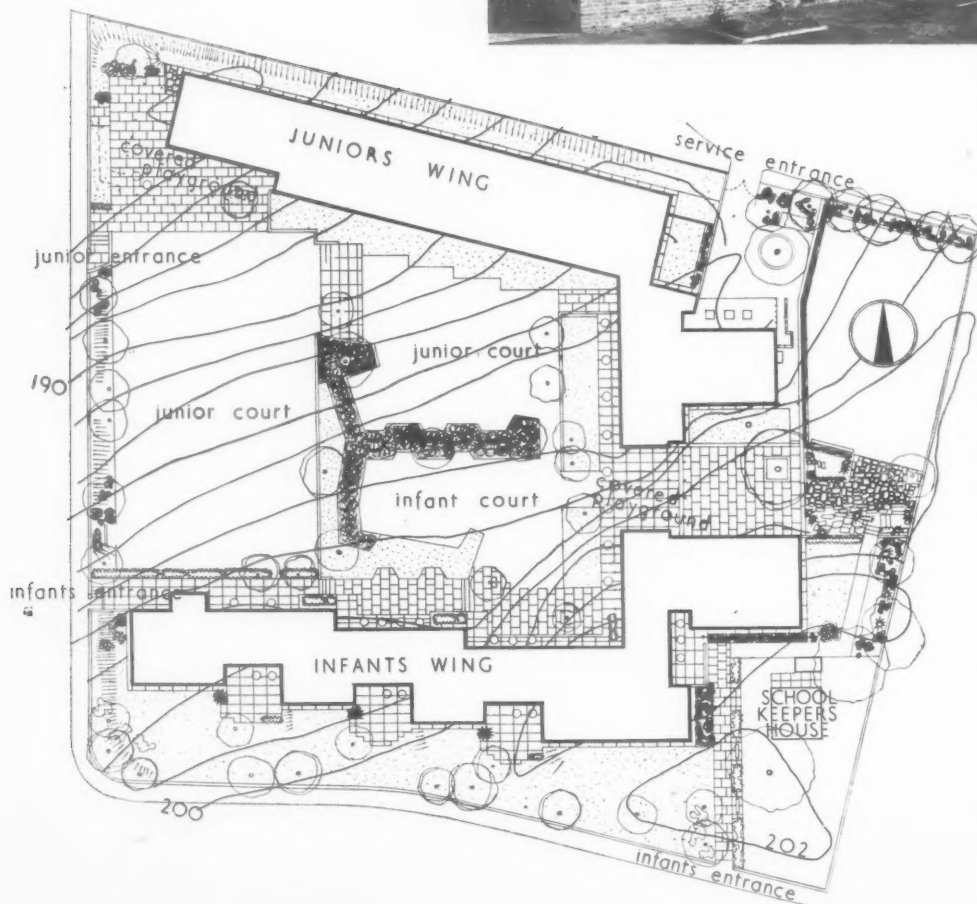
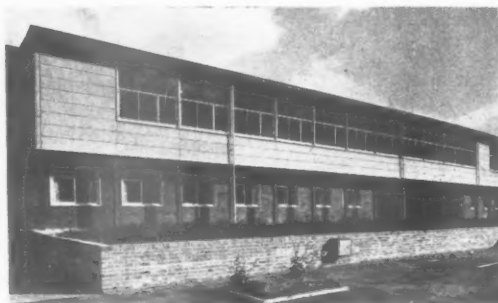
S. E. 21

designed by ROBERT H. MATTHEW,
architect to the LCC

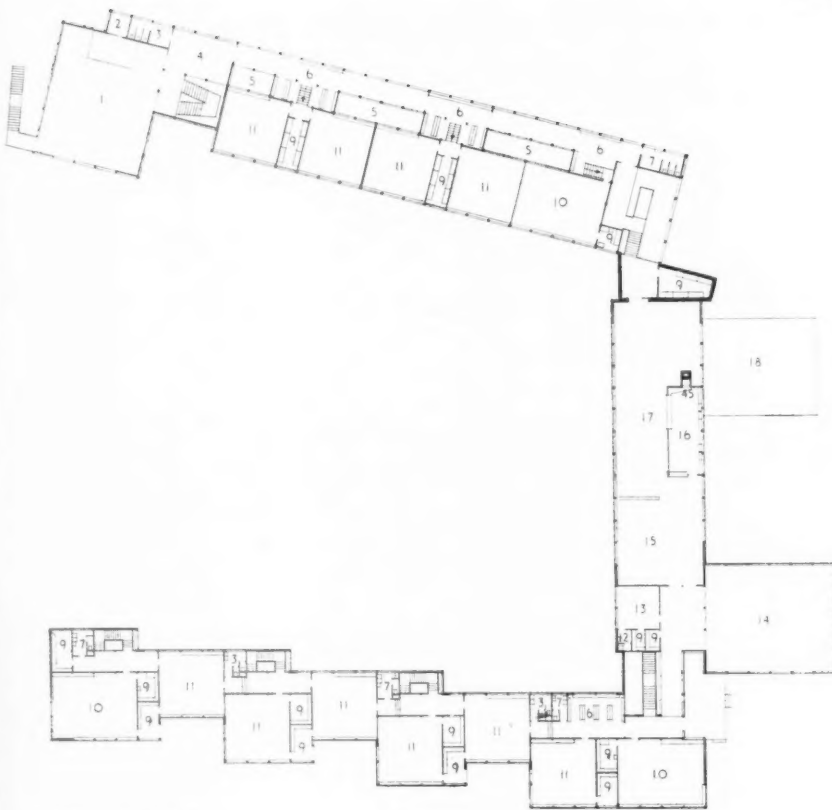
Above, view from the east of the administrative wing which links the junior and infants' departments. On the right are the kitchen and the boiler house chimney. Right, the west facade of the administrative wing from the playground.

SITE.—The 3-acre site forms part of the LCC Kingswood Drive housing estate now under construction and the school is primarily designed to serve this estate. There is a fall from south-east to north-west of 20 ft. across the site. Different textures and patterns of paving have been used and advantage has been taken of natural features, including a group of oak trees on the eastern boundary which are used to screen the school from the housing estate.

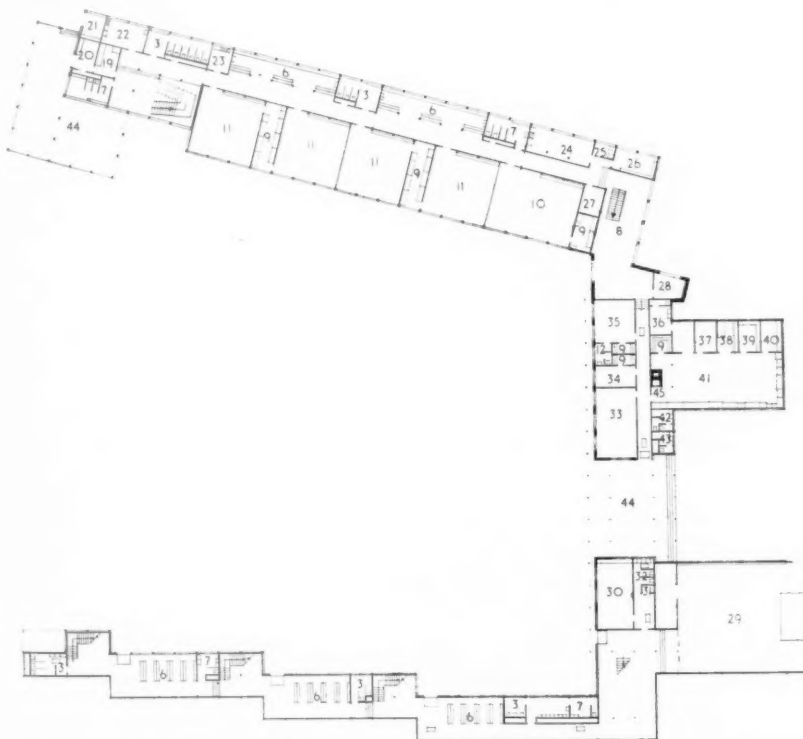
PLAN.—The considerable fall on the site has made it possible to plan the building on varying levels and help to introduce an informal feeling to the layout. The junior wing consists of a two-storey teaching block with all classrooms facing south.



Site plan



Upper level plan



Lower level plan [Scale: 1/4" = 1' 0"]

KEY

- 1 Junior assembly hall
- 2 Chair store
- 3 Girls' lavatory
- 4 Staircase hall
- 5 Lift well
- 6 Cloaks
- 7 Boys' lavatory
- 8 Staircase hall
- 9 Store
- 10 General purpose room
- 11 Classrooms
- 12 Headmistress's lavatory
- 13 Infants' headmistress
- 14 Upper part of assembly hall
- 15 Infants' dining
- 16 Servery
- 17 Juniors' dining
- 18 Kitchen roof
- 19 Schoolkeeper's store
- 20 Workman
- 21 Games store
- 22 Dental room
- 23 Cleaners' room
- 24 Medical room
- 25 Medical inspection lavatory
- 26 Waiting room
- 27 Intake chamber
- 28 Secretary
- 29 Infants' assembly hall
- 30 Infants' staff room
- 31 Tea cupboard
- 32 Infants' staff lavatory
- 33 Junior staff room
- 34 Junior assistant headmaster
- 35 Junior headmistress
- 36 Kitchen staff lavatory
- 37 Supervisor
- 38 Larder
- 39 Dry store
- 40 Vegetable store
- 41 Kitchen
- 42 Female staff lavatory
- 43 Male staff lavatory
- 44 Covered play area
- 45 Service lift

On the upper level the classrooms are grouped in pairs, with a small approach staircase and cloak space, which allows a low ceiling height on the lower level corridor and clerestory lighting to lower level classrooms. Corridors are broken up by glazed screens and certain cloakroom recesses with adjacent lavatories. The junior assembly hall is at the upper floor level and the space under it is used as a covered play area. Medical inspection and dental treatment rooms are situated on the lower



PRIMARY SCHOOL

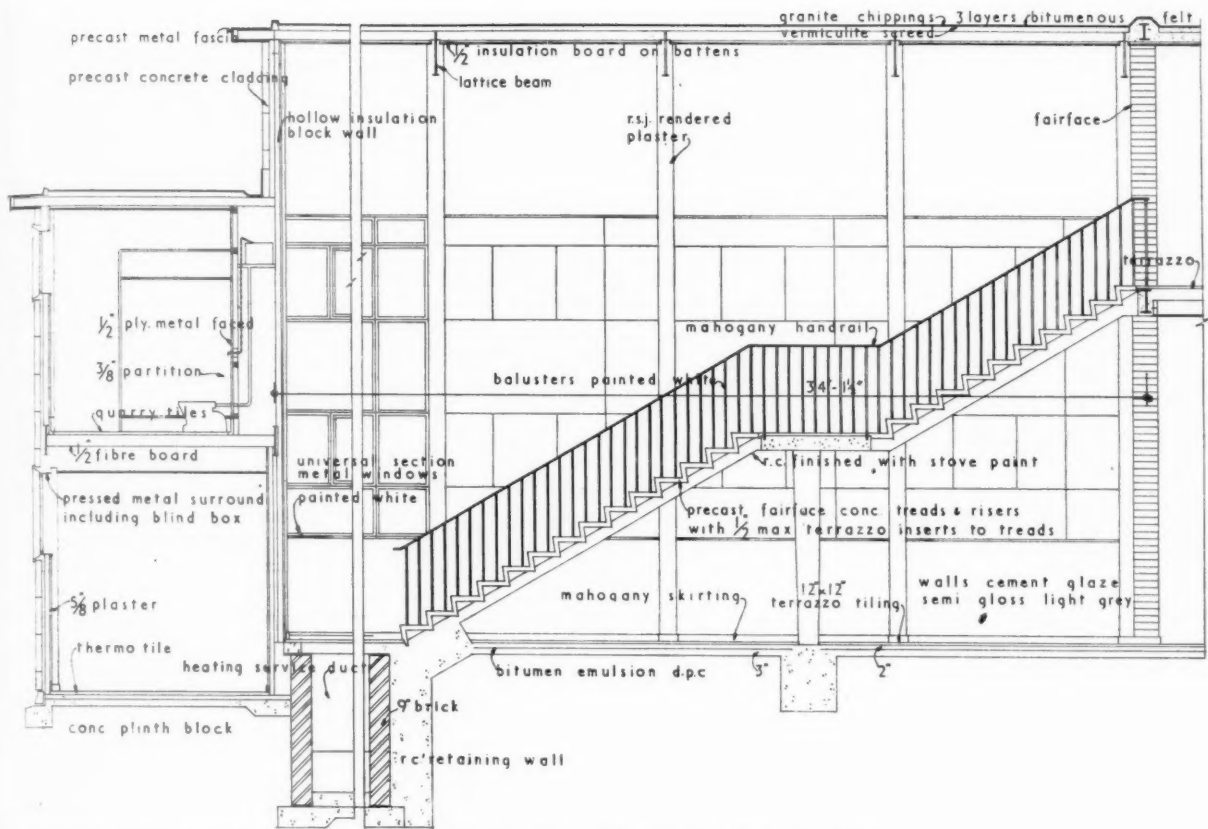
in KINGSWOOD DRIVE, LONDON,
S. E. 21
designed by ROBERT H. MATTHEW,
architect to the LCC

*Above, the staircase at the east
end of the junior teaching wing.*

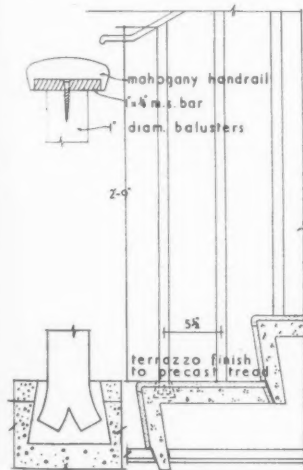
floor of the junior block. The infants' wing has classrooms at lower floor level on the south side, staggered on plan and providing open air teaching spaces approached through a lobby from all classrooms. Circulation to classrooms is by staircases

from the cloaks spaces, which are at lower floor level and overlook the playgrounds. Staff rooms are planned adjacent to their departments and are separated by a covered play space under the dining room.

CONSTRUCTION.—The framework, consisting of steel stanchions and light steel lattice beams, is on an 8-ft. 3-in. grid. Floors and roofs are of

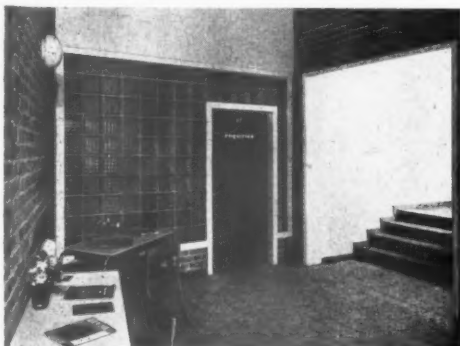


Longitudinal section through north-east junior staircase (see photograph opposite) [Scale: 1" = 1' 0"]



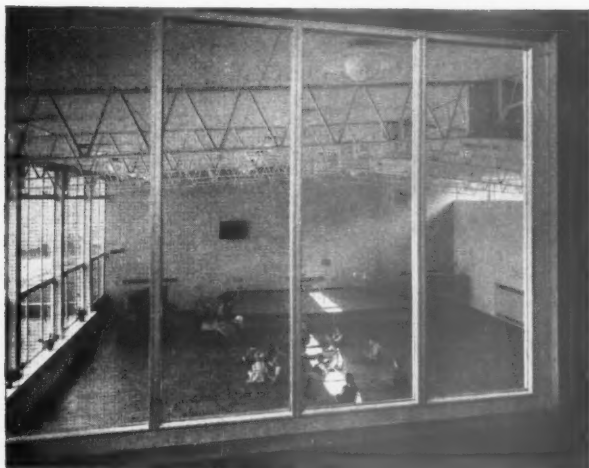
Detail section through stair and baluster [Scale: 3/4" and 3" = 1' 0"]

Right, main infants' entrance and staircase. On the wall is the "Marmalade Cat" mural designed by Kathleen Hale. It was originally in the School's Pavilion on the South Bank. Below, door to secretary's office in the link between junior and administrative wings.



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Above and right, two views of the infants' assembly hall. Below, staircase in the main junior entrance hall, and mural called "Plankton" by Gerald Halton, originally designed for the Dome of Discovery.

precast concrete. Cladding is mainly of white spar faced precast concrete units, varied with red granite and grey granite faced units. Blue brick load-bearing construction is used for the splayed link between junior and administrative wings.

FINISHES.—Floors are finished with composition tiles in classrooms and corridors, concrete paving,

quarry tiles and terrazzo tiles in entrances, precast terrazzo on main stairs, granolithic on other stairs, wood blocks in staff rooms and halls. Ceilings are of fibreboard, either suspended or fixed to the concrete on battens. Walls are plastered. Throughout the building a modified Munsell colour range has been used with bright colours in the circulation spaces, on classroom locker doors, etc.

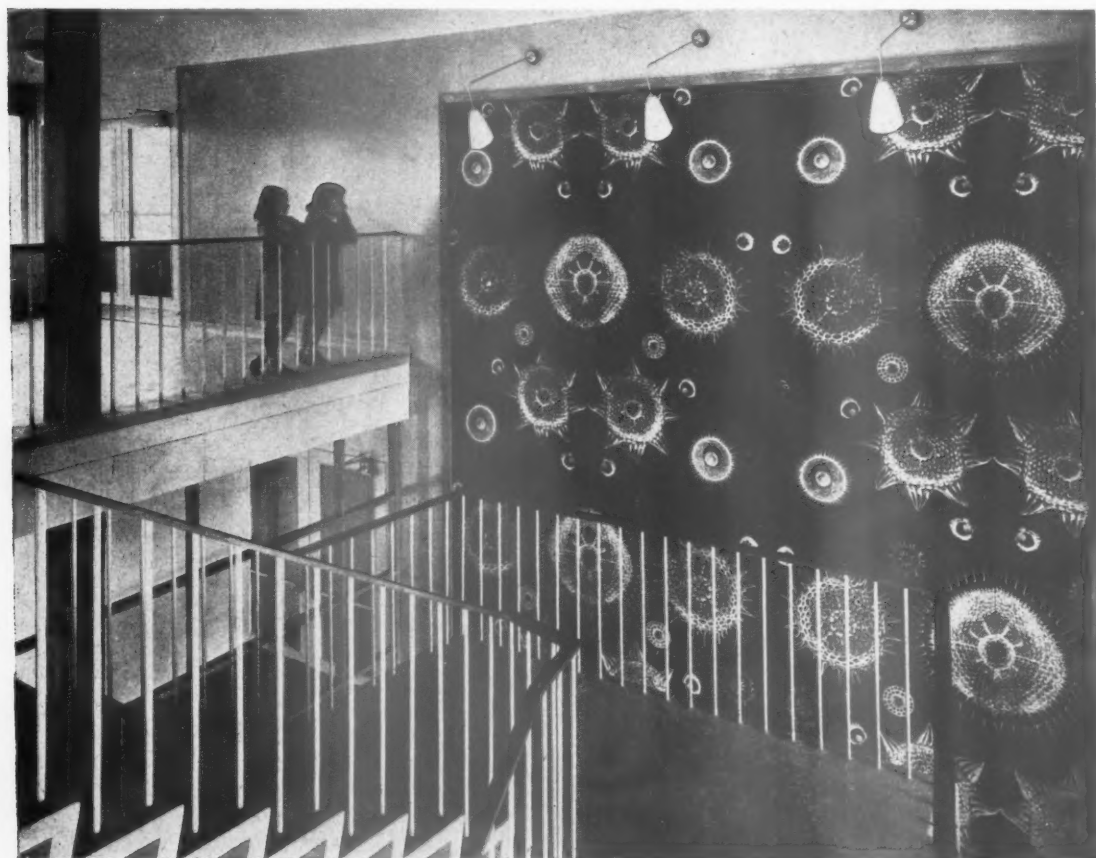
The estimated total cost is £166,000, including all landscape and site work.

The general contractors were Rush & Tompkins, Ltd. For sub-contractors, see page 600.

PRIMARY SCHOOL

in KINGSWOOD DRIVE, LONDON, S.E. 21

designed by ROBERT H. MATTHEW, architect to the LCC



TECHNICAL SECTION

In our feature "Current Technique" almost two years ago we published a description of pre-assembled reinforcement and suggested that its use might well be encouraged, "on account of the increased accuracy, which could possibly effect a saving in steel." We said also that "one can envisage factory production of prefabricated reinforcement for beams and columns. . . ."

It is now, in fact, possible to purchase ready-made reinforcement units for lintels, beams, etc. One firm, however, has gone even farther, and on page 596 we describe a system of construction based on the factory fabrication of *self-supporting* reinforcement for an entire building.

The principal advantage of this system of construction is that, by erecting the reinforcement well in advance of other trades, the confusion and consequent inefficiency which so often occurs when trades overlap is avoided. In addition, of course, site time is saved, as the erection of the prefabricated reinforcement takes far less time than the placing of ordinary reinforcement, and the danger of rods being displaced, which engineers normally have to allow for when calculating the size and spacing of reinforcement, is also eliminated.

This week's
special article

8 ESTIMATING house-building costs

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 Third Report of the Girdwood Committee, analysed below by Professor Bowen, reveals that, between 1949 and 1951, the cost of materials for house building rose by 17 per cent., while wages and bonuses rose by only 10 per cent. Professor Bowen discusses the Committee's comments on the MOHLG house designs put forward in Houses, 1952; the latest MOHLG house designs were commented on in the JOURNAL last week (page 545) and are illustrated on pages 578-580 of this issue.

The Third Report of the Girdwood Committee, which keeps under review the cost of house-building in England and Wales, has now been published; it was signed on May 19, 1952. The report is shorter than the earlier reports, and is written partly in the form of additions and amendments to the Second Report's findings and recommendations. The Committee has packed much information into twenty-five pages of text and tables, and the report deserves study by all concerned with house-building costs. The care with which every estimate is explained

and qualified is commendable, and the technical competence of the Committee is evidently very high, as is to be expected from a body which included Professor C. F. Carter and D. W. Nunn as economist and assessor, respectively.

RECENT TRENDS IN COSTS

The conclusions of the Committee on this subject may be quoted in full from paragraphs 80 and 81: "The steady rise in the tender prices of local authority traditional three-bedroom houses was halted towards the end of

1951 by the increasing use of new house designs incorporating a smaller total floor area." (Par. 80.) "The Ministry of Housing and Local Government have estimated that typical houses of the new designs would cost at least £150 less than houses of comparable accommodation built recently, and we agree that this saving can be achieved." (Par. 81.)

The satisfactory result of this saving would be that a "traditional three-bedroom house" letting at 21s. a week (ex rates) on the new rate of subsidy could be reduced in rent (and, of course, in size and other amenities), with the result that the smaller three-bedroom house could be let at 18s. 4d. a week. This figure is calculated on the assumption that a reduction of £150 is made in the cost of the house, allowing nothing for any changes in building costs that may have taken place since October, 1951.

Thus the Committee's conclusions "trends in costs" might equally well have been labelled "trends in policy." The main reductions in cost to which they are referring result not from any favourable movement in costs but from changes in the type and size of the house to be built.

What have been the actual trends in cost? On this point the Committee provides some valuable information, but it is not easy to summarize. A table can be made showing the trend of some costs up to October, 1951, as follows:—

TABLE I

| Estimated final building cost of three-bedroom houses finished in : | £ | | Index | |
|---|-------|-------|-------|-------|
| | £ | Index | £ | Index |
| Oct., 1947.. | 1,242 | (100) | 1,400 | (100) |
| Oct., 1949.. | 1,321 | (106) | 1,515 | (108) |
| Oct., 1951.. | 1,450 | (117) | 1,690 | (121) |

The figures are not strictly comparable for reasons that will appear later, but this table, as it stands, brings out the astonishing fact that (estimated) finished costs of three-bedroom houses rose by £208, or an apparent 17 per cent., in four years, and the "all-in" cost of houses by no less than £290, or 21 per cent. over the same period.

PROFESSIONAL FEES

One of the reasons for the difference is the increase in quantity surveyors' fees; a new scale of charges came into operation in July, 1949. On this point the Committee has some interesting observations to make; for instance:

"It is noticeable that many authorities, when applying for loan sanction before starting building, include in their applications considerable amounts for quantity surveyors' fees on anticipated variations, which experience has shown them will almost certainly arise. This

practice indicates that the remarks of the Working Party on the Building Industry about the absence of adequate 'pre-planning' of building work was timely. The fact that the quantity surveyor can be relied on to measure variations which are due to insufficient preparation may tend to perpetuate this lack of 'pre-planning.'" (Par. 27.)

However, professional fees are not the only item of costs (other than building costs) to go up; the cost of land and site development also rose between 1947 and 1951, from £122 to £190, according to the estimate. The Committee has not commented on this substantial change—a change which is more surprising in that the Town and Country Planning Act of 1947 was supposed to have obviated the pressure on land values.

REALISTIC COMPARISONS

Table I is based on finished costs for houses of 1,029 sq. ft. in 1947 and 1,050 sq. ft. in 1949 and 1951, but the 1951 house was not of the same design as the 1949 house. A different comparison shows that the building cost alone of a 1949 house if it had been built in 1951 would have been £1,513 and not £1,450 as shown in the table (for the house of 1951 design).

On this basis the comparison would be:

| — | £ | Index |
|---------------------------------|-------|-------|
| 1949 house of 1,050 sq. ft. . . | 1,321 | (100) |
| Same house if built in 1951 | 1,513 | (115) |

In other words, finished house building costs rose by 15 per cent. in the period, as against 10 per cent. if the figures are calculated from Table I. Incidentally, this seems to mean that, inclusive of professional fees and site costs, comparable houses (i.e., 1949 houses) would have cost at least £1,753 in 1951, as against £1,515 in 1949, a rise also of 16 per cent. in two years.

This discussion brings out the essential reason for the economies in design and size of houses that have been introduced. Without such economies the upward trend in house-building costs might have raised rents to levels that would not have been acceptable.

According to the Committee's calculations, the largest single item in the increase in costs between 1949 and 1951 was that due to rises in materials' prices, which increased by £134 per house, i.e., just over 17 per cent. Wages and bonusing cost an extra £38, a rise of only 10 per cent. There was, unfortunately, no estimated increase in labour productivity.

INTEREST RATES AND SUBSIDIES

The Committee points out that, as from November, 1951, the rate of interest on local authority loans was raised from 3 per cent. to 3½ per cent.,

and then again to 4½ per cent. in February, 1952. The effect of this on a house costing a total of £1,690 would be to raise the weekly rent from 23s. 6d. to 30s. 1d., i.e., by 6s. 7d. To meet this (in part) an extra housing subsidy of 5s. 3d. a week has been granted from tax- and rate-payers. Rents of such houses must, therefore, go up by 1s. 4d. a week net, which means a rent of 21s. a subsidised week.

This rent figure is to be brought down again by the device of the "new designs," which are to take £150 off the cost of the house. Final building costs for the "new design" houses were not available for the Committee to comment upon. It is interesting to note how late final costs still are being prepared for analysis. The Committee, in checking its estimates for houses finished in October, 1949, worked on returns for those houses received up to December, 1951, and revealed (Par. 10) that "they cover only a relatively small number of houses built during the period under review."

THE NEW DESIGNS

After some discussion of the reduced standards the Committee remarks rather firmly (Par. 53): "Our concern with these designs is, of course, limited to their effect upon costs." From this point of view, equally "of course," the Committee can hardly fail to welcome reductions in size. But the Committee is hardly consistent on the point, as elsewhere in its reports it attempts to weigh costs of certain amenities against their value to tenants. The thorny question of what are the essential minima of size and standards, if it really lies outside the terms of reference of the Committee, precludes their opinion that "this saving [an average of 150 sq. ft.] can be achieved" from having much value. It *can* be achieved, but the question remains unanswered—at what cost to the tenants?

Supposing it is achieved, houses built to the new plans will, at 900 sq. ft., cost in 1952 some £1,294 as against £1,450 for a 1,050 sq. ft. house of 1951 design, plus an allowance for any rises in materials and labour costs during the course of 1952. (These figures presumably omit professional fees and site costs.) The new designs conform more than the old to the volume of investment that the country can now afford, and, if one result of adopting them were that a greater number of dwellings could be provided, the reduction in standards might do more good than harm. If the costs of houses are stabilized again, as they were from 1947 to 1949 (when the rise was due partly to increasing size), or even reduced, then the possibility of solving the housing problem would be in sight.

IAN BOWEN

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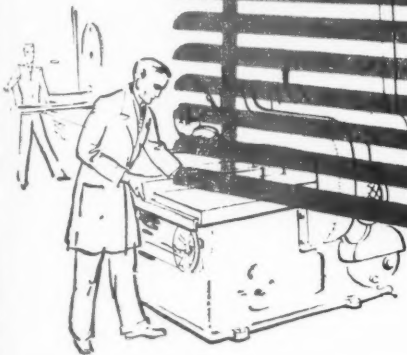
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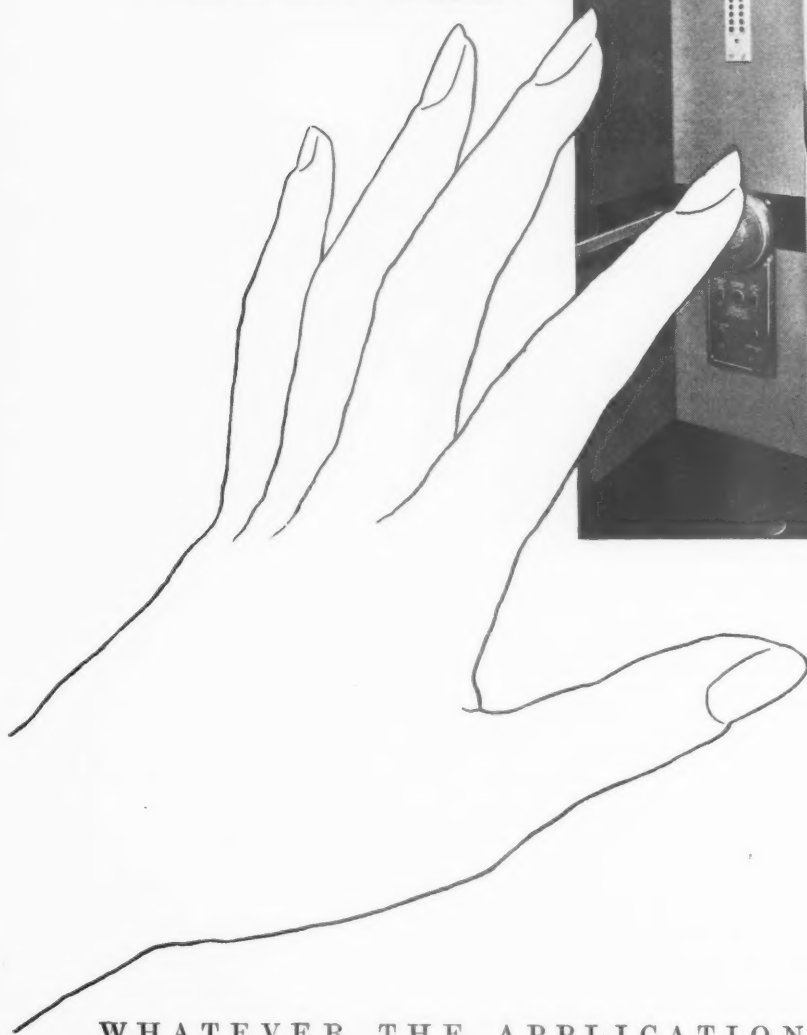
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Of the papers presented at this year's Public Works and Municipal Services Congress, which ended last Saturday, the one of most interest to architects was that on Municipal Housing presented by J. L. Womersley (Borough Architect and Planning Officer, Northampton). Below is a short report of this paper and the discussion which followed it.

MUNICIPAL HOUSING

J. L. Womersley said that insufficient freedom was left to the individual designer to balance the size and shape of rooms. "In small house design," he said, "room shape is the fundamental factor. It is all too easy to produce a bedroom well in excess of the required minimum size which cannot be satisfactorily furnished, just as it is undoubtedly possible to plan a well-shaped bedroom below the minimum size which will serve its purpose admirably. It seems more reasonable to reduce bedroom sizes where, when all is said and done, one normally spends only one's sleeping hours, than to make the serious cuts in the "Dudley" kitchen area proposed in some of the plans in "Houses 1952."

Mr. Womersley made four suggestions for cutting housing costs without reducing amenities:

- i. Simplicity of structure; simple, short heating and plumbing systems; and the grouping together of sanitary fittings.
- ii. Staircases manufactured on a large scale (if agreement could be reached on desirable floor heights and if designers would use simple straight flights whenever possible).
- iii. Standardization and mass production of waste connections, assembly only being carried out on site (if two or three combinations of spacings between bath, lavatory basin and w.c. could be standardized).
- iv. Synchronization (by appropriate committees of BSI) of standard sizes of wood and metal windows in relation to brick dimensions.

He also pointed out that savings could be achieved by restricting loads to the cross-walls, "a particularly interesting feature being that the worse the site, the greater the saving compared with the traditional house."

Excessively low housing densities were criticized both by J. M. Davies (Wrexham Borough Surveyor) and by Mr. Womersley. The latter described housing development being carried out at Wrexham by Professor Gordon Stephenson (Head of the School of Civic Design at Liverpool University), in collaboration with the Wrexham Borough Surveyor. "This scheme," said Mr. Womersley, "is based on the principle used in the plan of Radburn, one of the first of the American 'garden cities,' where there is complete segregation between pedestrian and road traffic. This principle involves the use of the 'super-block' as a residential unit within which there is no through-road traffic. Houses are grouped around common garden space, which contains the footpath system, in which children can play in safety, whilst vehicular access to the houses is given by service roads at the rear.

"Such an arrangement," Mr. Womersley suggested, "approaches the ideal combination of amenity and economy as, in addition to the pleasant open appearance obtained,

the net density is as high as 15 houses per acre, whilst site development costs, including road, paths, sewers and planting, are only £108 per dwelling—about half the average cost of such work in that region."

Mr. Davies pointed out that the Radburn-type of layout was first developed in this country; there being several small-scale examples. "I don't see why back gardens need be any more unsightly than front gardens," he said.

"Higher densities," Mr. Womersley added, "do not necessarily mean less amenity and public open space. Many schemes which look most economical from the street turn out, on analysis, to be very wasteful. Some corridor-street schemes contain carriage-ways of excessive widths and incorporate gardens behind the houses which are too big for the tenants to cultivate."

Many speakers in the discussion following Mr. Womersley's paper criticized the cuts being made in housing standards, and the general feeling seemed to be that the latest MOHLG recommendations—as exhibited on the Ministry's stand at the Public Works Exhibition—had taken economy too far. It was suggested by one speaker that the solution lay outside the building industry—that the Government should allocate more of the national budget to housing and make cuts in other fields. R. C. Ruth (Chairman of the Housing Committee of Bradford) stressed the importance of maintenance costs and Mr. Womersley agreed that "it is no use producing a house which costs less but which will cost more to maintain."

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.

10.97 design: building types SCHOOLS, DESIGN AGAINST FIRE

Building Bulletin No. 7. Fire and the Design of Schools. Ministry of Education. (HM Stationery Office. 1952. 2s. 6d.)

An excellent study of fire risks, dealing with the way in which design and structure can reduce risk of fire or serious consequences of fire in schools. Clear recommendations. An essential reference for all school designers. 56 pp. Illustrated.

The purpose of this bulletin is to give guidance on the ways of designing schools to meet the regulation that they "... shall be such that the safe escape of the occupants in the event of fire shall be reasonably assured." It fulfils this purpose admirably and the recommendations given will, in most cases, undoubtedly be followed, though the authors are careful to point out that it is not intended that they should be enforced as regulations as the subject does not lend itself to this approach.

All concerned with the design of schools must study the bulletin itself, as it does not lend itself to condensation. (See also JOURNAL for Oct. 16, pp. 476-479, for critical analysis of this bulletin.)

19.157 construction: details

REINFORCED CLAY BLOCKS

Reinforced Hollow Clay Blocks for Large Roof Construction. (The Clayworker. October, 1952.)

General descriptive article with illustrations. Describes continental practice in construction of curved roofs of moderate spans in reinforced clay units built up from large special-shaped hollow clay blocks. Units are built up on site and then hoisted into position. Claim made that considerable economy is effected over other methods of construction and that this method of construction is in fairly general use on the continent.

20.213 construction: complete structure BRIDGES

Single Rib Arch Bridge Completed in Germany. (Engineering News Record [USA]. Sept. 18, 1952. p. 52.)

Unusual type of steel bridge, with 200-ft. span, over the Rhine-Herne canal.

This is the first bridge of a new type, consisting of a central tied arch with stiffened decking. This example has only a pedestrian crossing, but other designs have been put forward to carry the heaviest road loading and to utilize trusses and suspension cables as well as arches for the carrying member. The Rhine-Herne canal bridge has a span of 200 ft. The deck is a hollow member, 10 ft. 6 in. wide and 2 ft. 6 in. deep, capable of carrying the torsion set up by unbalanced loading. The top and sides of this member consist of 3/4-in. steel plate and the bottom is latticed. The top is treated with a thin plastic layer before receiving the 1-in. asphalt wearing surface. The total weight of the structure is 61 ton.

25.86 water supply and sanitation FIBRE DRAIN PIPES

From House to Sewer with Orangeburg. (Plumbing and Heating Journal [USA]. Sept., 1952.)

Short illustrated article on history and use of bitumen-impregnated fibre pipes for house drains. First used as early as 1893, these pipes have been more widely used since 1943. This article reports the satisfactory results of a survey on the behaviour of these drain pipes. It would be interesting to know why they have not been used in England.



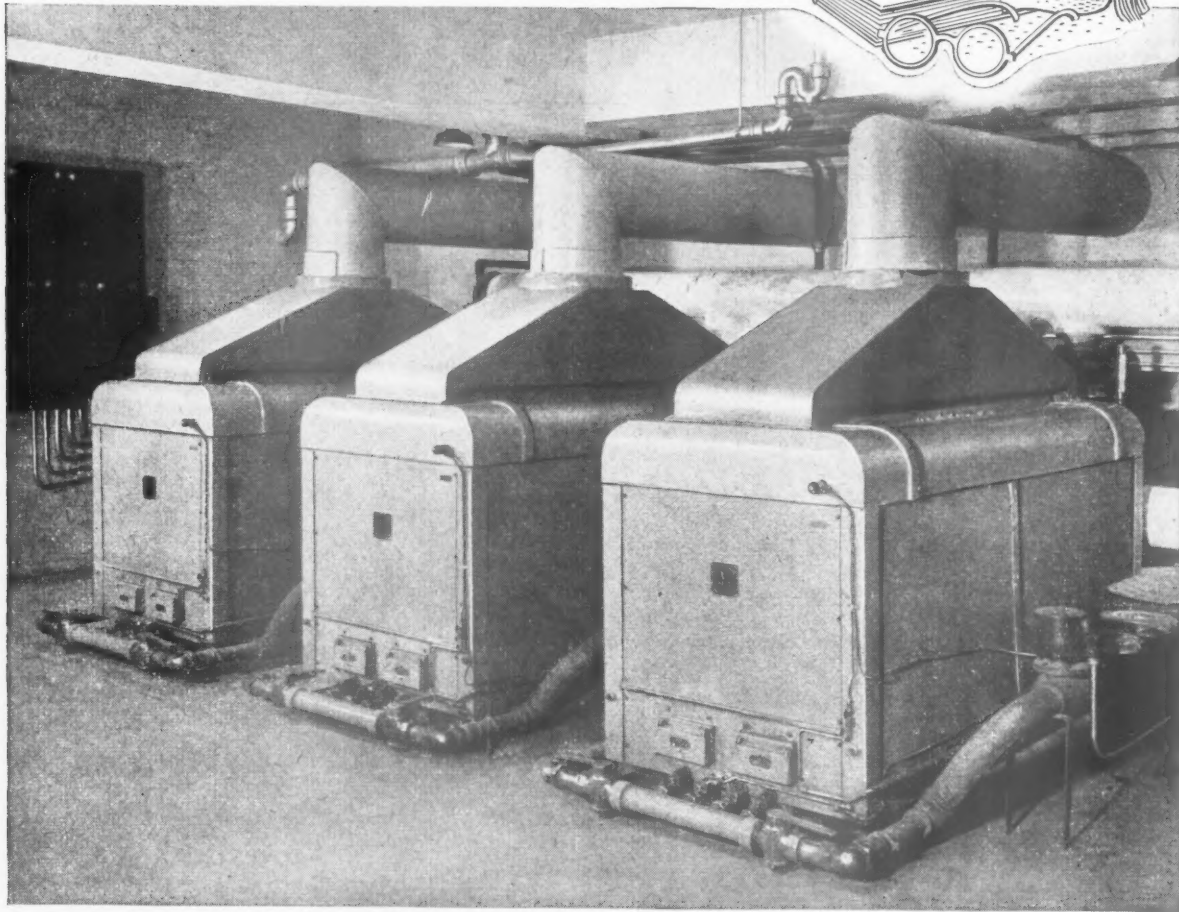
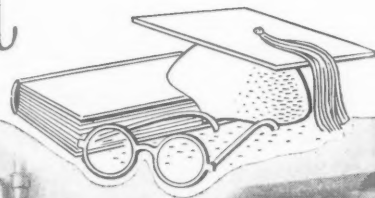
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Heat at the Seat



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Photograph by courtesy of Lancashire County Council, Preston.

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the whole college! There's no doubt about it, these newcomers will always be at the top of their class, even though they do live in the basement.

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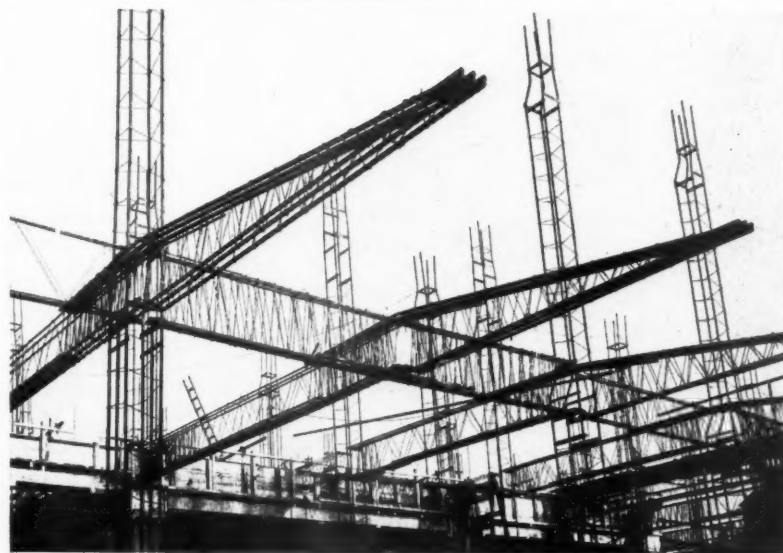
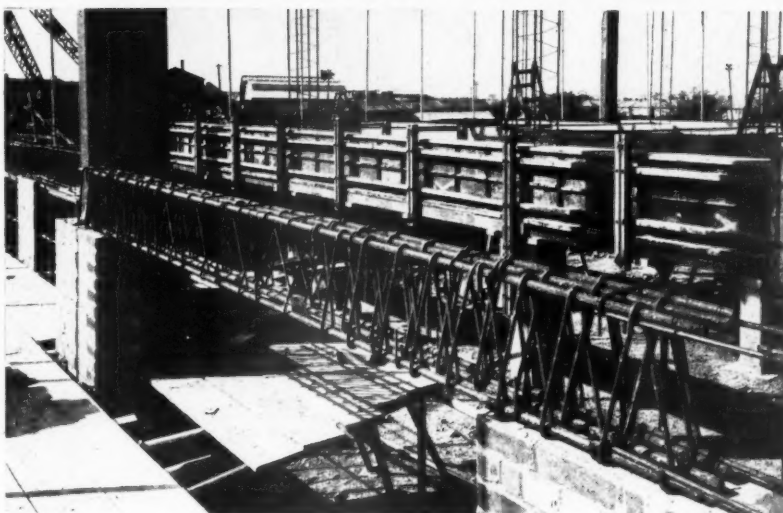
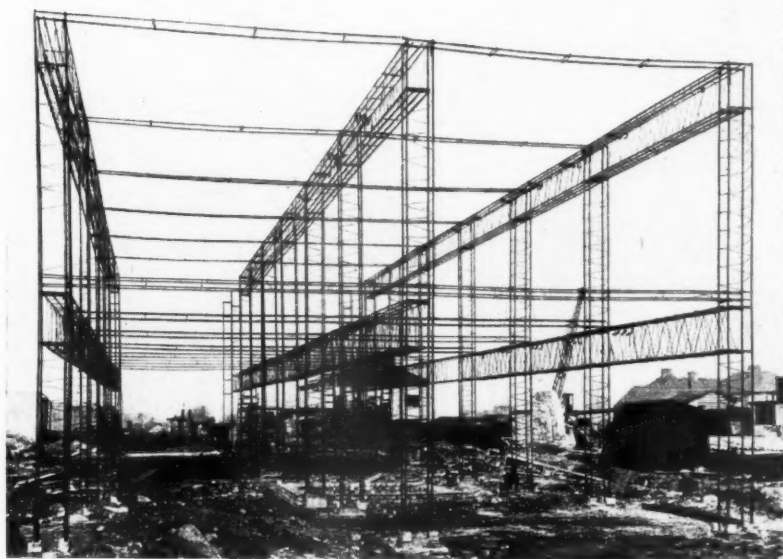
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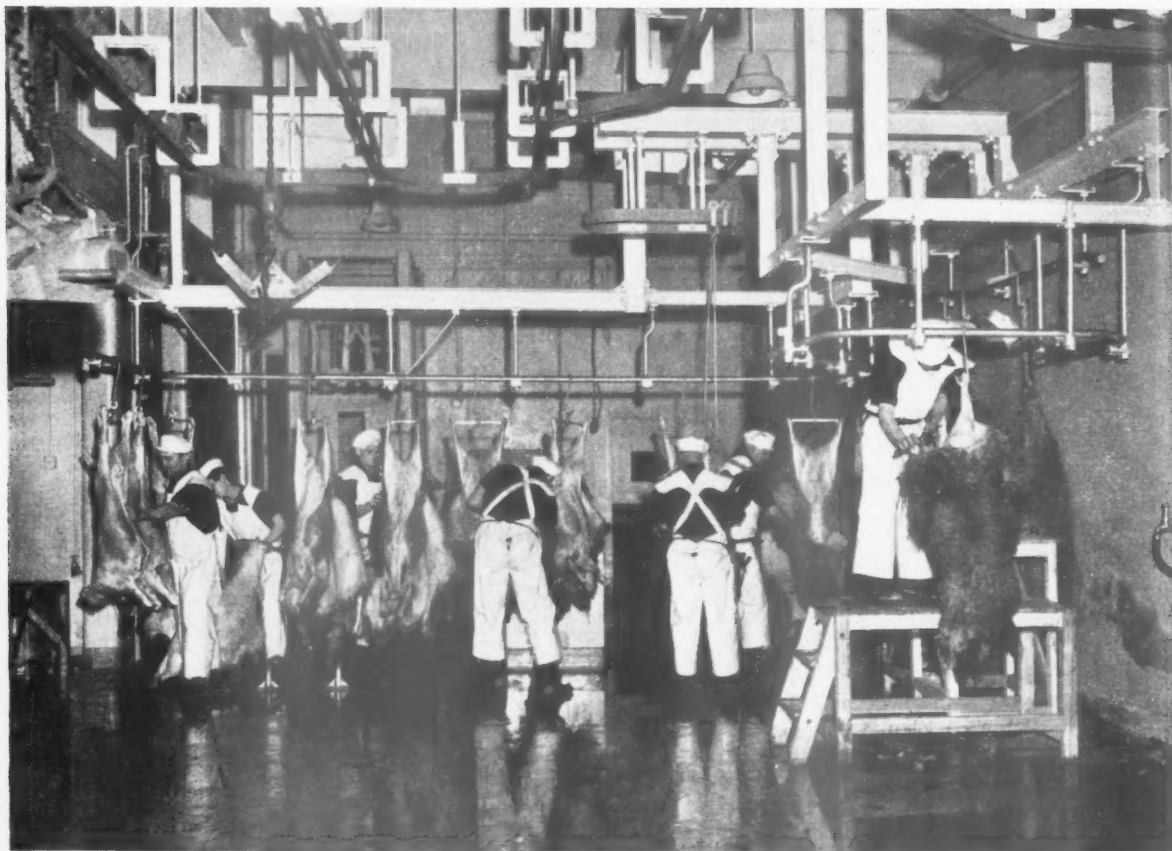
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“FRAMEWELD” — A NEW SYSTEM OF CONSTRUCTION

Reinforced concrete construction gives architects almost unlimited scope, but this is offset somewhat by the tight control which must be exercised over every phase of the site work if good reinforced concrete is to be produced. T. C. Jones & Company, Ltd., has side-tracked one of these phases—the erection of the steel reinforcement—by introducing “Frameweld.” This is a system of prefabricating beam and column reinforcement units in a workshop so that they can be erected on the site as a self-supporting frame. Column reinforcement consists of continuous helical wire, welded to main bars, and at the head of each column flats are welded to provide support for the beams; grooves in the flats being used to locate the beam reinforcement. Special clips are used to secure the beam units to the columns. The beam units consist of continuous diagonal wire rods welded to main bars; the pitch of the rods being adjusted to cater for various shear forces. (No hooks or bent-up bars are used.) This system of construction is particularly appropriate when work can be planned well ahead and where site space is limited. There is no overlapping of trades as the prefabricated reinforcement can be erected immediately after it is delivered to the site. In order to provide continuity in the frames, however, some lapping steel must still be placed at the site. One limiting factor is that there is little scope for last-minute changes; but this might be a good thing. The photographs show, from top to bottom, the framing of the first job erected on this system, before the main body of carpenters or concreters started work; extra shear reinforcement provided by increasing the size and decreasing the pitch of the diagonal wires; part of the reinforcement for an extension to a factory at West Drayton (architect, C. Howard Crane [USA]).





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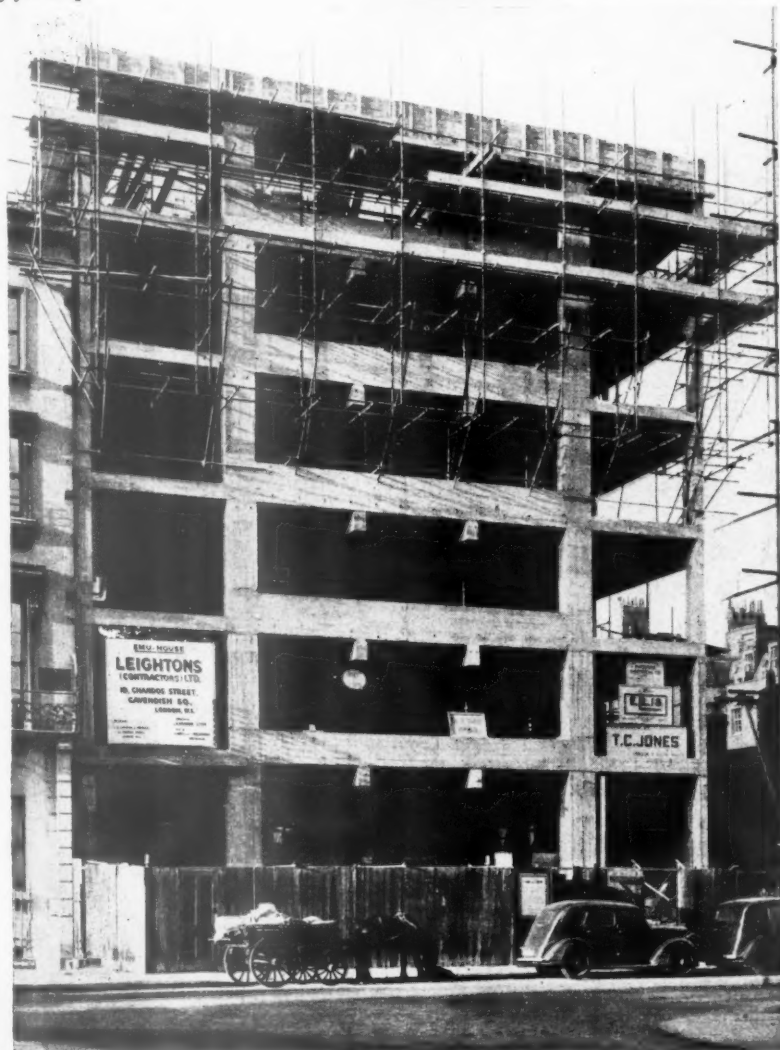
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"FRAMEWELD" USED IN LONDON

A recently-completed building incorporating "Frameweld" reinforcement is shown in the photograph, right. It is a 7-storey office block in Chandos Street, London, W.1, designed by Lionel H. Fewster & Partners, started in 1939, and interrupted by the war, when only the basement and ground floor were completed. The architects chose "Frameweld" largely because the site is 100 per cent. covered and there was nowhere to stack reinforcement or carry out the bending of rods. As seen in the progress photograph below, the planning of the building necessitated large spans and the main beams are 2 ft. 6 in. and 3 ft. deep.



QUESTIONS & ANSWERS

Questions to the Technical Editor are answered confidentially and free of charge.

3067 DAMP PREVENTION

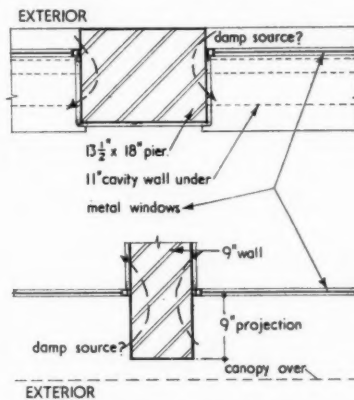
Q We have recently designed a single-storey school sanatorium, which is in course of construction. The contractor has expressed concern over two details which he thinks will not be fully damp-proof.

In the first, for reasons of stability, we have introduced solid piers between metal windows in normal cavity walling. These piers are 18 in. wide and 13½ in. thick. Do you consider that there is any risk of damp penetration? The site is fairly sheltered; the piers are constructed of hand-made facings in 1:1:6 mortar, backed with flettons, and the internal plastering is 1:2:9 cement-lime-sand, skimmed with an anhydrous gypsum plaster to a total thickness of ½ in.

The second detail is at the projection of 9 in. solid walls between some of the wards (see sketch). Construction is similar to the first case.

Do you consider that there is risk of damp penetration in either of these cases? We ourselves think that there may be a slight risk in the second case, but not in the first. If so, can you suggest any remedy? We have in mind the following alternatives:

- (i) Application of waterproof to external brickwork.
- (ii) Application of bituminous material to interior brickwork, under the plaster.
- (iii) Use of a waterproofed undercoat to the plaster, e.g., waterproofed cement and sand 1:3 instead of the rendering specified.



A The contractor's concern is completely justified. Would it not be possible, in the first case, to have a 4½ in. external skin, a 2 in. cavity and a 7 in. x 13½ in. concrete pier behind? Backing the wall with a practically impervious plaster would be of no advantage; it would, in fact, add to the difficulties, as it would be inclined to increase possible rusting of the steel sashes.

The application of a waterproof to the external brickwork, in the second case, would possibly help, but there should be no waterproofing at the back of the plaster, as it would only tend to aggravate "sweating" inside the building and would leave the external part of the wall still carrying damp, to the detriment of any other materials which may be in contact with it.

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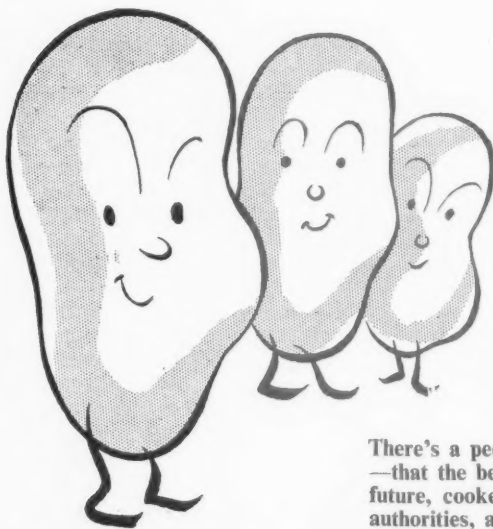
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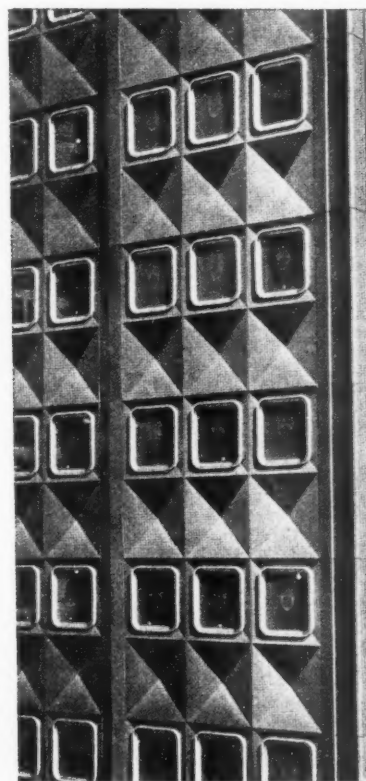
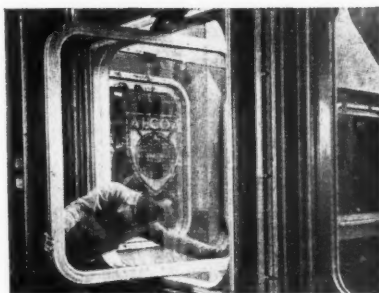
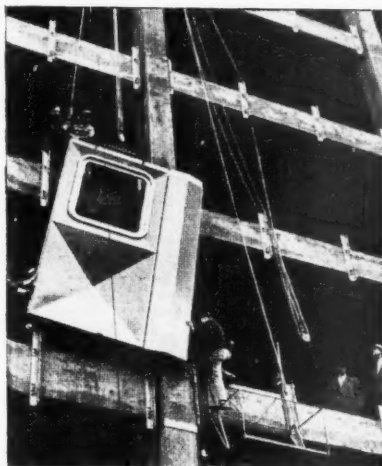
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PITTSBURGH SKYSCRAPER CLAD WITH ALUMINIUM PANELS

Readers of the Architectural Review will not find unfamiliar the pattern made by the aluminium cladding units which sheath this 410-ft. high Pittsburgh skyscraper but the pattern here has more than æsthetic significance. By stamping aluminium panels into this shape, it has been possible to produce 6-ft. square panels out of $\frac{1}{8}$ -in. aluminium that will withstand a wind pressure of 30 lb./sq. ft., with a factor of safety of two. Ordinary flat aluminium panels, without intermediate support, could not be so large. The photograph right shows one of the cladding units being hoisted into position. The window above the aluminium panel (see close-up photograph) is double glazed and centrally pivoted to turn through 360 deg. The complete unit, 6 ft. wide and 12 ft. high, weighs only 162 lb. Insulation is provided by a 4-in. perlite-concrete "back-up" wall, sprayed (in five layers) on to slotted aluminium lathing. Battens are fixed to this wall and the internal finish is 1-in. plaster on metal lathing. There are, therefore, two air spaces; one between the aluminium and the perlite-concrete, and one between this and the internal plaster. The U-value of the wall equals 0.14. Fire resistance is 4 hours. In an article in *Progressive Architecture* (Aug. 1952, pp. 87-91) it was estimated that 10 men should be able to enclose a 30-storey structure with its aluminium skin in one month, and that 12 men should be able to erect the back-up walls at the rate of $2\frac{1}{2}$ storeys per week. The weight of this form of cladding is approximately only 30 lb./sq. ft.—so much less than conventional cladding that 3,000 tons of structural steel were saved in the framework of the skyscraper described above and illustrated, almost completed, right. (Architects, Harrison & Abramovitz; associated architects, Mitchell & Ritchey and Altenhof & Brown.)



Buildings Illustrated

The House of Richard Shop at 18, Liverpool Street, London, E.C.2, for Richard & Partners, Ltd. (page 581). Architects: Shop front and structure, Sadie Speight and Leonard Manasseh & Partners, based on a design by David Canter, of Richard & Partners, Ltd. Interior joinery and display designed by David Canter and carried out by The House of Richard's own department. General contractors: Samuel Elliott & Sons (Reading), Ltd. Sub-contractors: Glass fascia, J. M. Newton & Sons Ltd.; electric wiring, light fixtures and heating, Gratte Bros. Ltd.; folding gates, rolling shutters, Rely-a-Bell Burglar & Fire Alarm Co. Ltd., and E. Gibson & Son; wallpaper, John Line & Sons Ltd.

Shoe Shop for the Dolcis Shoe Co., Broadmead, Bristol. (Pages 582-586.) Architect: Ellis E. Somake, F.R.I.B.A., Staff Architect to the Dolcis Shoe Co. Assistant architect: Geoffrey Uffindell, A.R.I.B.A. Consulting engineers: Malcolm Glover & Partners. Quantity surveyors: Gardiner & Theobald. General contractors: William Cowlin & Son Ltd. Shopfitting contractors: Courtney Pope Ltd. Electrical contractors: Courtney Pope (Electrical) Ltd. Sub-contractors: artificial stone, T. W. Hopton & Sons Ltd.; plumbing, Arthur Scull; metal windows, Williams & Williams Ltd.; ironmongery, Comyn Ching & Co. (London) Ltd.; lift, Keighley Lifts Ltd.; heating and ventilation, Rosser & Russell Ltd.; sanitary fittings, W. N. Froy & Sons; paints, Thomas Parson & Sons Ltd.; false ceilings, Tomei & Sons Ltd.; blinds, Adam Ltd.; asphalt roofing, Ragusa Asphalt Co. Ltd.; quartzite, John Stubbs Ltd.; marble, J. Whitehead & Sons Ltd.; pneumatic cash tumes, Lamson Engineering Co. Ltd.; terrazzo pavings, Marriott & Price Ltd.; chairs and footstools, Geo. Hammer & Co.

Ltd.; fabric panels and display felts, F. G. Minter Ltd.; carpets, P. E. Gane Ltd.; drapes and fabrics, David Whitehead Ltd.; wallpapers, Primavera; plastic lettering, The Lettering Centre.

Langbourne Primary School, Kingswood Drive, London, S.E.21, for the London County Council. (Pages 587-592.) Architects: Robert H. Matthew, C.B.E., A.R.I.B.A., Architect to the Council; Dr. J. L. Martin, M.A., F.R.I.B.A., Deputy Architect to the Council; S. Howard, L.R.I.B.A., Schools' Architect; F. G. West, A.R.I.B.A., Deputy Schools' Architect; K. J. Campbell, A.R.I.B.A., Principal Assistant Architect; A. W. Stringer, L.R.I.B.A., Co-ordinating Architect; G. F. Horsfall, M.B.E., B.A.R.C.H., A.R.I.B.A., Architect-in-charge; J. G. H. D. Cairns, Senior assistant architect; W. J. Appleton, A.R.I.B.A.; and D. J. J. Wright, A.R.I.B.A., assistant architects. Murals designed by Gerald Haltom and Kathleen Hale. General contractors: Rush & Tompkins Ltd. Sub-contractors: plastering, Alan Milne Ltd.; suspended ceilings, Merchant Trading Co. Ltd.; sanitary goods, cloakroom fittings, B. Finch & Co. Ltd.; ironmongery, Comyn Ching Ltd., Hills (West Bromwich) Ltd.; fencing and gates, Bayliss, Jones & Bayliss Ltd.; tanking, William Briggs Ltd.; roofing, Permanite Ltd.; wood block floors, New Floor Installations Ltd.; terrazzo, Marriott & Price Ltd.; composition tiles, Marley Tile Co. Ltd.; Semtex Ltd.; linoleum, Nairns Ltd.; plastic lettering, The Lettering Centre; tank and tower, Braithwaites Ltd.; heating installation, Engineering Service Installations Ltd.; fabrics Gerald Holton; wallpapers, John Line & Sons Ltd.; electrical installation, William Stewart & Co. Ltd.

Office Building in Chandos Street, London, W.1. (Page 597.) Architects: Lionel H. Fewster & Partners. Quantity surveyor: E. R. Felstead, F.R.I.C.S., of Higgins & Partners. General contractor: Leighton

(Contractors) Ltd. Sub-contractors: reinforcement for frame and floors, designed, supplied and fixed by T. C. Jones & Co. Ltd.; lifts, Keighley Lifts Ltd.; central heating, Norris Warming Co. Ltd.; electrical installation, Phoenix Electrical Co. (London) Ltd.; plumbing, Ellis (Kensington) Ltd.; steel shutters, balustrades and ornamental iron work, Light Steelwork (1925) Ltd.; asphalt, Val de Travers Asphalt Paving Co. Ltd.; windows, Middlesbrough Casements Ltd.; office floors, Semtex Ltd.; terrazzo, Fenning & Co. Ltd.; sanitary fittings, B. Finch & Co. Ltd.; sprinkler system, Automatic Sprinkler Co. Ltd.; roof tiles, Marley Tile Co. Ltd.; ironmongery, Comyn Ching Co. Ltd.; artificial stone, Cooper Wettern & Co. Ltd.; pavement lights, Lensecrete Ltd.; facing bricks, W. T. Lamb & Co. Ltd.

Announcements

C. Howard Roberts, DIP. ARCH., A.R.I.B.A., Public Works Department, The Secretariat, Ibadan, Nigeria, would like to receive manufacturers' trade literature and catalogues.

Guest Keen & Nettlefolds (Cwmbran) Limited now has a small architectural section in its offices at Castle Works, Cardiff, which would be pleased to receive trade pamphlets, etc.

John Smith, DIP. T.P., A.R.I.B.A., previously branch architect for the County Borough of Southampton has taken up the position of town architect and planner to the Newry Council, Co. Down, Northern Ireland. He will be pleased to receive trade catalogues, etc.

Messrs. Mence & Moore, A/L.R.I.B.A., have removed their offices to 1, St. Leonard's Terrace, Sloane Square, S.W.3. (Tel.: Sloane 5066.)

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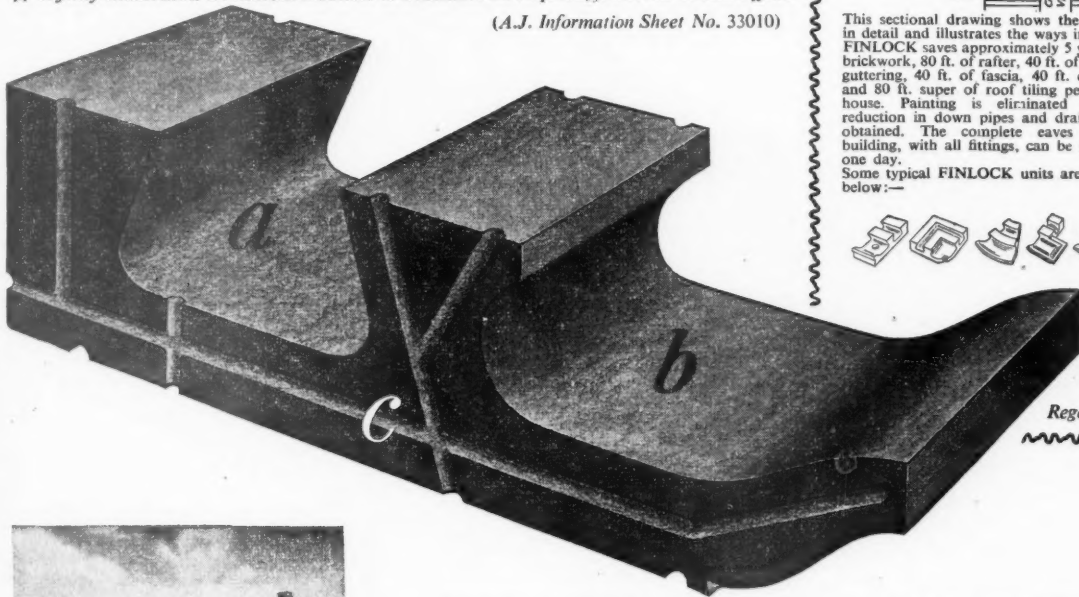
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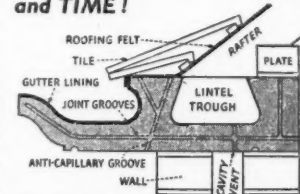


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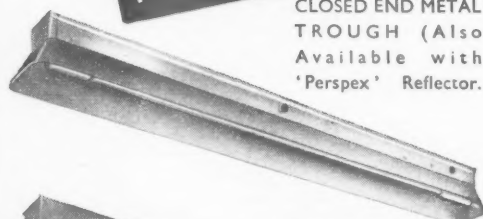
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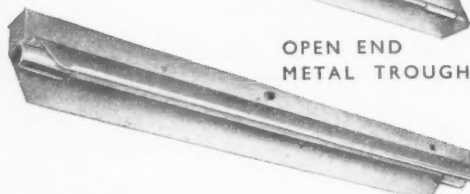
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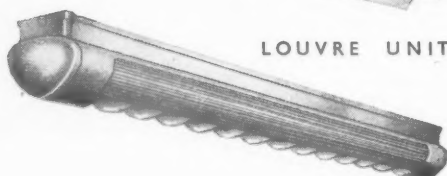
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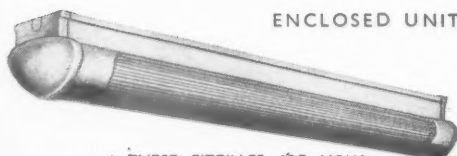
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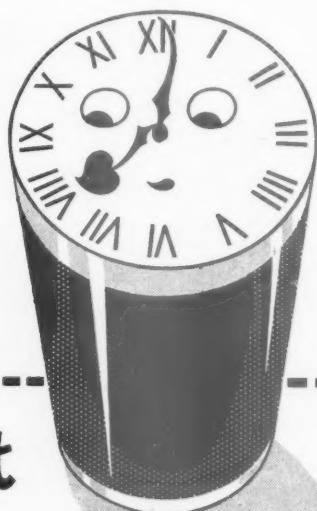


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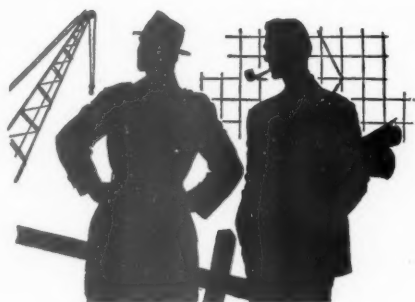
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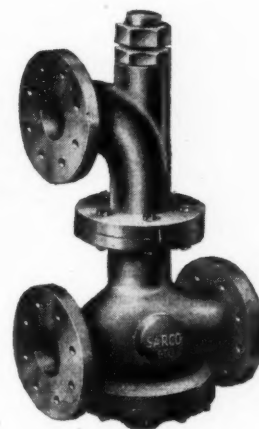


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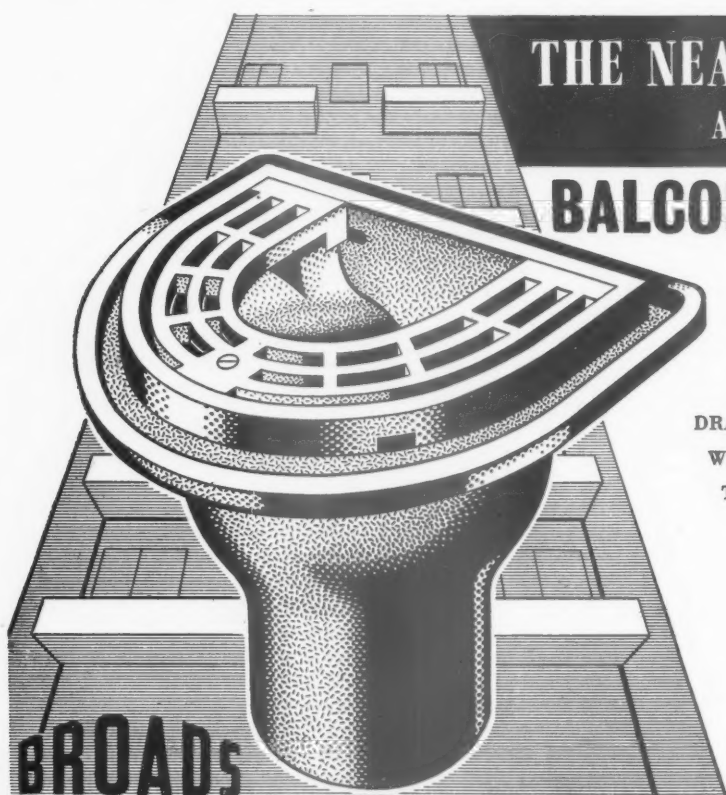
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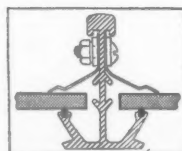


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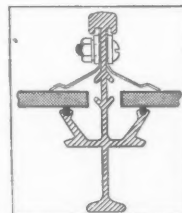
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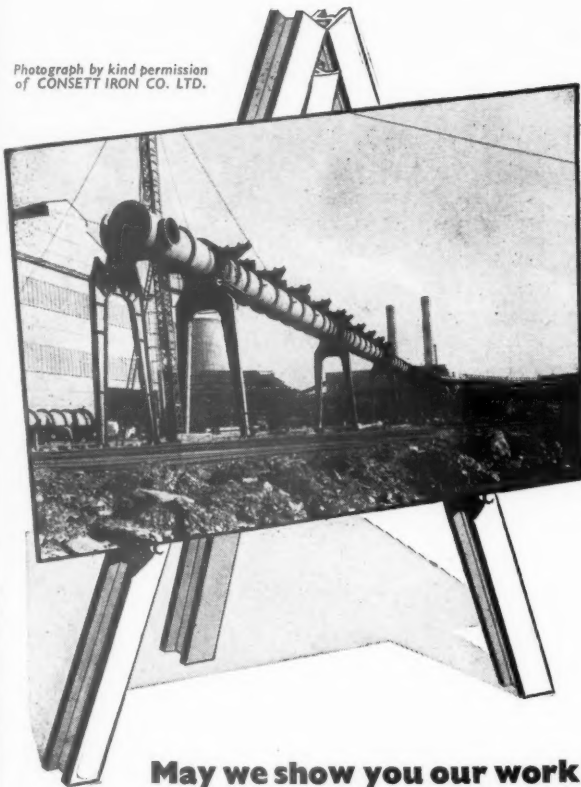
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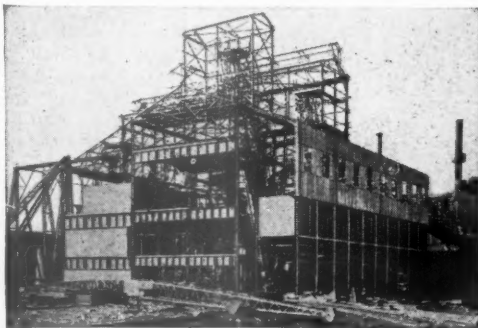


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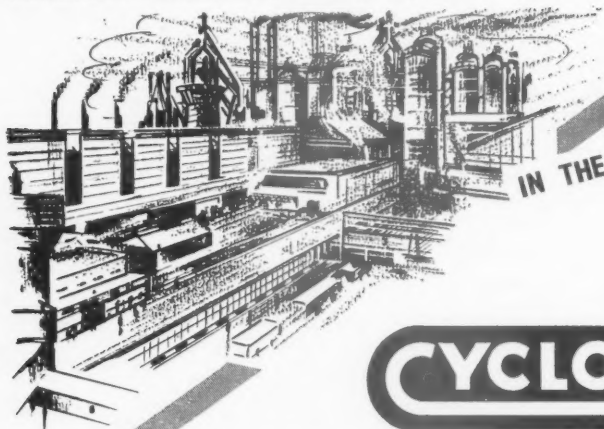
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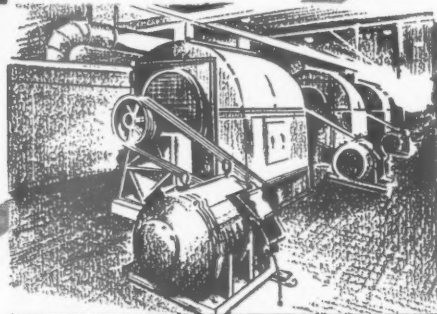
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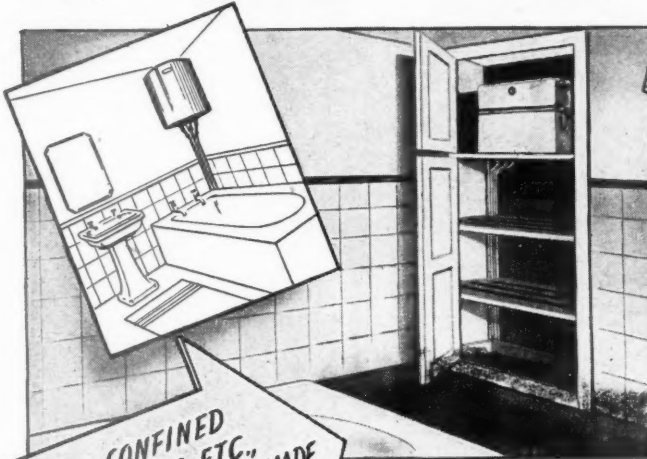
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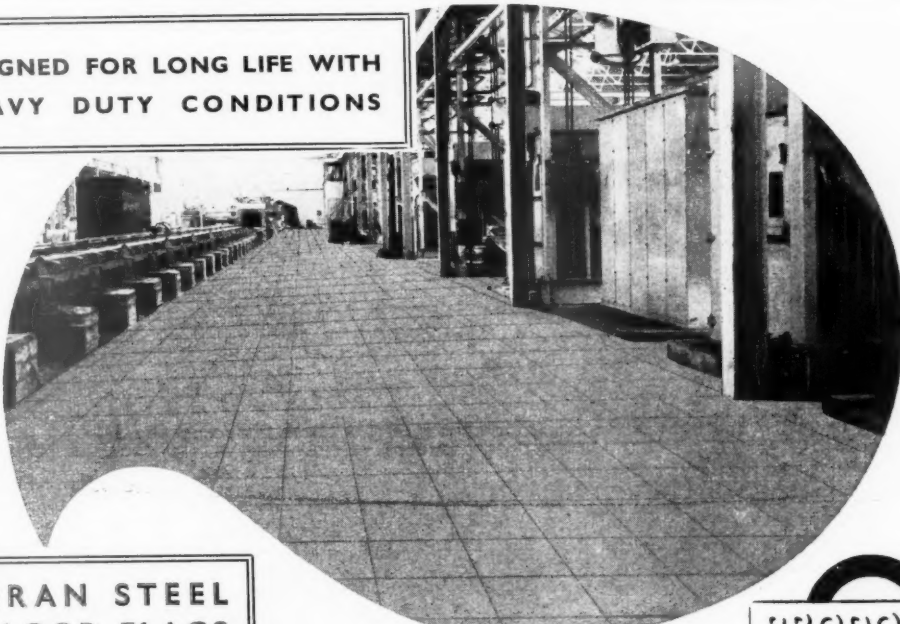
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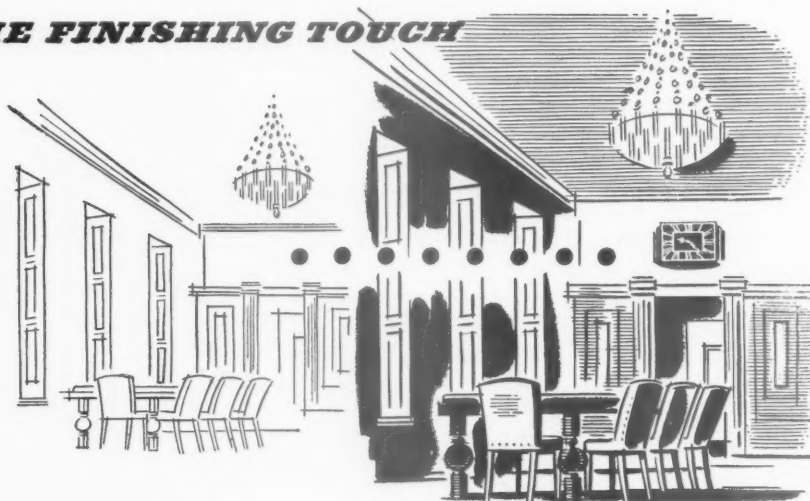
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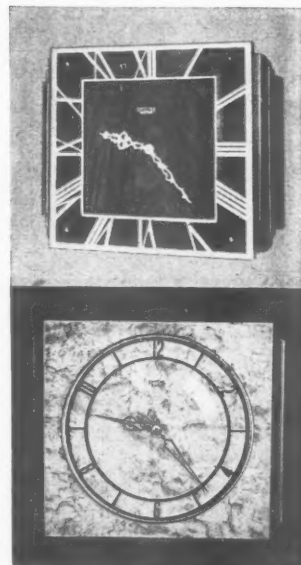
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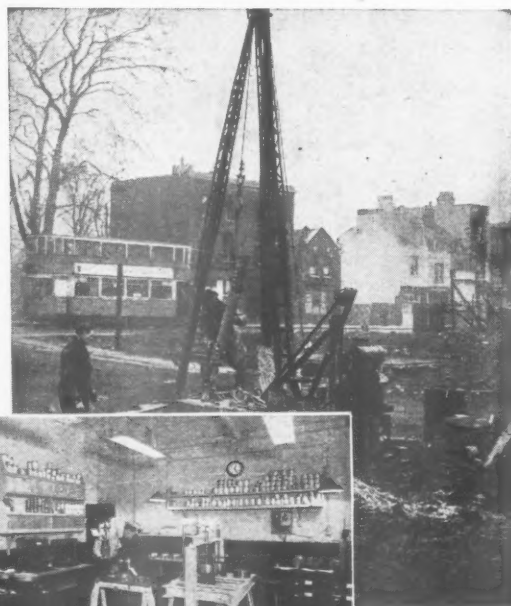
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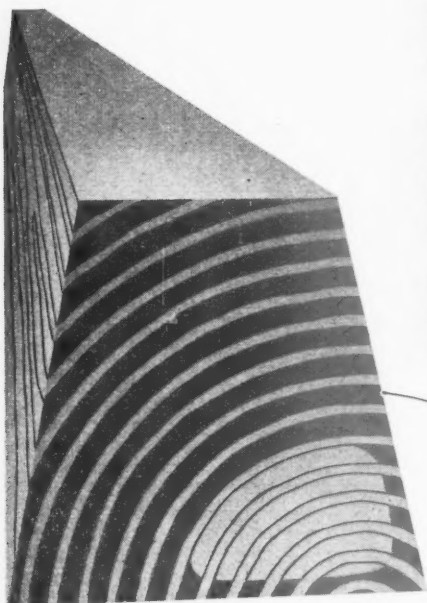
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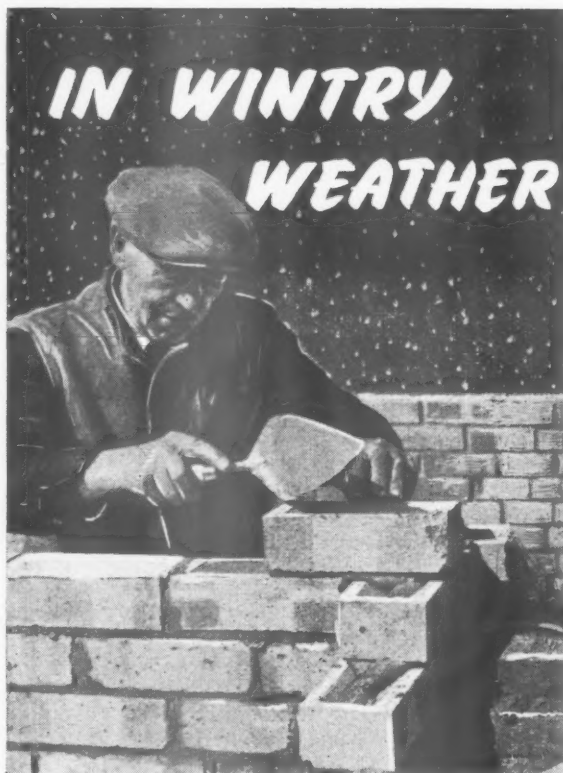
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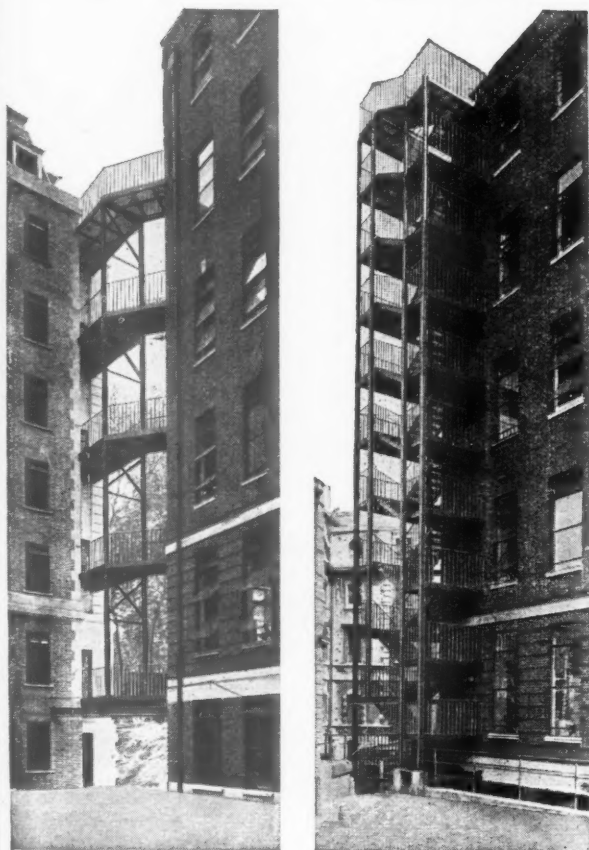
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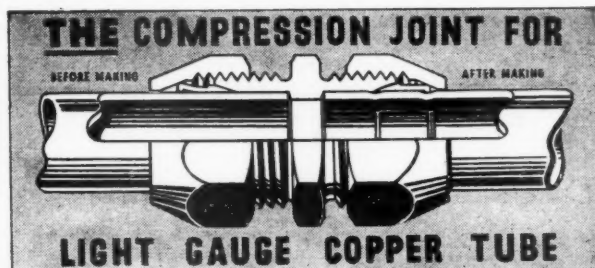
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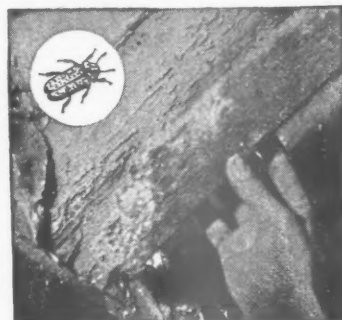
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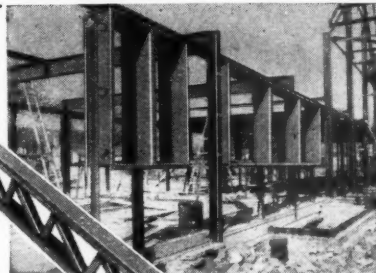
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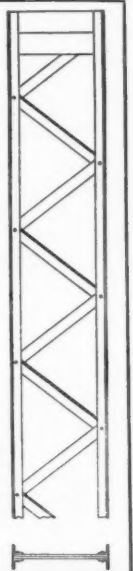
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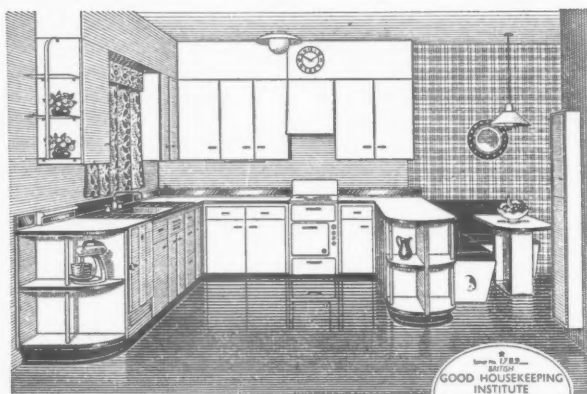
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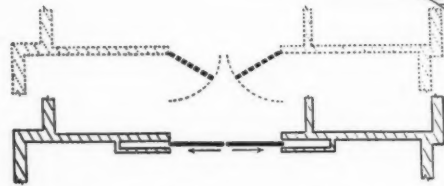
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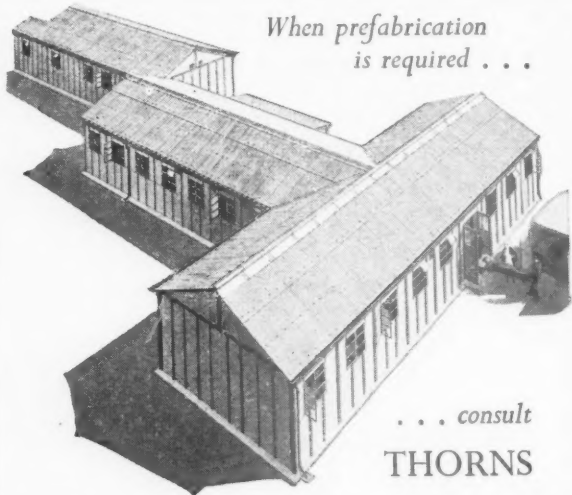


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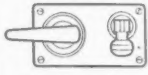
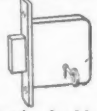

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Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

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

Public and Official Announcements

25s. per inch; 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 exempted from the provisions of the Notification of Vacancies Order, 1952.

BAWMARSH URBAN DISTRICT COUNCIL.

Applications are invited for the position of Housing Architect on the staff of the Surveyor at a salary in accordance with A.P.T. Division of the National Joint Council for Local Authorities, Grade VI (£670-£735). Applicants must be Associates R.I.B.A. with experience in Housing estate development, such experience to include the preparation of Bills of Quantities relating to house construction.

A house will be made available is required.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination.

Applications, stating age, qualifications, details of experience together with copies of two recent testimonials must be delivered to the undersigned not later than Monday, 17th November, 1952.

G. F. CLEGG,
Clerk to the Council.

Council Offices, Parkgate,
Yorks, W.R.
October, 1952

7644

BALDOCK URBAN DISTRICT COUNCIL.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant in the Engineer and Surveyor's Department.

Candidates should have had considerable experience in the design and construction of dwelling houses, the preparation of specifications, bills of quantities, and the measuring up and supervision of Contractors' work.

The salary will be fixed according to qualifications and experience within the range of £595-£645. The National Scheme of Conditions of Service will apply, and the appointment will be determined by one month's notice on either side.

Housing accommodation will be provided for the successful applicant, if required.

Applications, stating full particulars of experience, age, and qualifications, accompanied by copies of three recent testimonials, must reach the undersigned not later than the 14th November, 1952.

F. D. GENTLE,
Clerk of the Council.

Council Offices, Baldock,
28th October, 1952.

7653

WARWICKSHIRE COUNTY COUNCIL.

DEPUTY COUNTY ARCHITECT.

Applications are invited for the post of Deputy County Architect. The salary will be £1,350 per annum, rising, subject to satisfactory service, by annual increments of £50 to a maximum of £1,650. The appointment will be subject to three months' notice on either side.

Candidates must be Members of the Royal Institute of British Architects, and preference will be given to those having had experience under large public authorities.

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

Applications must be made on forms obtainable from the undersigned, and state the names and addresses of not more than three persons who have knowledge of the applicant's experience and work and to whom reference can be made, and should be addressed to the Clerk of the Council, Shire Hall, Warwick, in a sealed envelope marked "Deputy County Architect," and must reach me not later than first post on the 5th December, 1952. Canvassing members or officers, either directly or indirectly, is strictly prohibited, and will be considered a disqualification.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall, Warwick,
29th October, 1952.

7654

LONDON COUNTY COUNCIL.

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As soon as possible, FULL-TIME ASSISTANT, Grade B, to teach building construction and supervise studio work in courses in Architecture and Surveying. Applicants must be Fellows or Associates of R.I.B.A. or R.I.C.S., with good prof. experience. Teaching experience a recommendation.

Salary scale: £586 to £927 min., £873 to £927 max.

Application forms from the School Secretary, returnable by 21st November. (1150)

7680

BOROUGH OF HESTON AND ISLEWORTH. APPOINTMENT OF (a) SENIOR ARCHITECTURAL ASSISTANT, and (b) CHIEF BUILDING INSPECTOR.

Applications are invited for the positions of Senior Architectural Assistant and Chief Building Inspector in the Department of the Borough Engineer and Surveyor. The salary offered is, in each case, in accordance with the scale A.P.T., VII (£710×£25-£785) of the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, with the addition of £30 per annum for London "weighting."

(i) SENIOR ARCHITECTURAL ASSISTANT.

The person appointed must have had good experience in architectural design and building work under construction. Duties will include preparation of sketch designs, working drawings, and the handling of building contracts under construction. Experience in housing and multi-storey flats will be considered to be an advantage.

Other things being equal, preference will be to applicants who have passed the examination for the Associateship R.I.B.A., or hold a university degree or diploma in architecture accepted by that Institution.

(ii) CHIEF BUILDING INSPECTOR.

This officer will be responsible to the Borough Engineer and Surveyor for all matters appertaining to the operation of the Council's Building bye-laws, including the supervision of the technical and clerical staff of the Building Inspection Section. He will also act as the Petroleum Inspector and Inspector for the purposes of section 34 of the Factories Act, 1937.

Candidates must have an extensive knowledge of practical building construction in all branches, and considerable experience in the administration of building bye-laws and associated regulations. They will also be required to give proofs of competency in analysing and checking calculations relating to steel and reinforced concrete structures. The provision of one or more of the following examination qualifications will be considered an advantage: The Institution of Structural Engineers (Assoc. Membership); Post-Higher National Certificate (advanced theory of structures); Institution of Municipal Engineers (Building Inspectors).

The Council is unable to assist either person appointed with housing accommodation.

Applications, on forms to be obtained from the Borough Engineer and Surveyor, 88, Lampton Road, Hounslow, endorsed either "Senior Architectural Assistant" or "Chief Building Inspector" as appropriate, must be received by the undersigned not later than Monday, 24th November, 1952.

HAROLD SWANN.

Town Clerk.

Council House, Hounslow.

7636

DERBYSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited from QUANTITY SURVEYORS for the following appointments:—

A.P.T., Grade VI, £670×£20 (2) and £25 to £735 per annum.

Applicants must have passed the Final Examination of the Royal Institute of Chartered Surveyors (Quantities), and have had five years' experience. It is essential that applicants have a thorough knowledge of the preparation of estimates, taking off quantities for all trades, measuring up, and preparing final accounts.

A.P.T., Grade III, £525×£15 (3) to £570 per annum.

Applicants must have had experience in assisting with the preparation of estimates, taking off quantities for all trades, measuring up, and preparing final accounts.

The appointments are subject to the terms of the National Joint Council's Scheme of Conditions of Service, the provisions of the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass a medical examination.

Applications, on forms to be obtained from this office, must be received by 10 a.m. on 27th November, 1952.

F. H. CROSSLEY.

County Architect.

November, 1952.

7693

LONDON COUNTY COUNCIL.

ARCHITECTS' DEPARTMENT.

Vacancy for PLANNING OFFICER, Grade II (£832 10s.-£1,002). Professional qualifications and planning experience essential. Particulars and application form from Architect, County Hall, S.E.1, quoting AR/EK/P.L.L/4. (1172)

7692

CAMBRIDGESHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for an ARCHITECTURAL ASSISTANT, A.P.T., Grade VI (£670-£735 per annum).

Applicants should be qualified members of the Royal Institute of British Architects, and have had experience in design and construction of all types of public buildings.

Applications, stating age, qualifications and experience, accompanied by one recent testimonial, and the names and addresses of two referees, should be sent to the Clerk of the County Council, Shire Hall, Cambridge, not later than Friday, 21st November, 1952.

The appointment will be subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Act, 1937. The selected candidate will be required to pass a medical examination.

CHARLES PHYTHIAN,

Clerk of the County Council.

Shire Hall, Cambridge.
3rd November, 1952.

7695

COUNTY BOROUGH OF CROYDON. ESTIMATOR AND MAINTENANCE SURVEYOR.

Applications are invited for this appointment from persons experienced in preparing estimates for the maintenance of public buildings. Salary: A.P.T., VI, £670 to £735 p.a., plus London weighting (£30 at age 26 and over).

The Council do not offer housing accommodation.

Applications on forms obtainable from the Borough Engineer, Town Hall, Croydon, must be submitted to him by 24th November, 1952.

Canvassing will disqualify.

E. TABERNER.

Town Clerk.

7679

CITY AND ROYAL BURGH OF EDINBURGH.

CITY ARCHITECT'S DEPARTMENT.

APPOINTMENT OF ASSISTANT ARCHITECT.

Applications are invited from fully qualified Architects for a vacancy in the above Department. Salary: A.P.T., VII (£715×£25-£790). The post is superannuated, and the successful candidate will require to undergo a medical examination.

Forms of application may be obtained from the undersigned, to whom completed forms should be returned as soon as possible.

A. G. FORGIE, A.R.I.B.A.,

Dip.Arch. (Edin.),

City Chambers, Edinburgh, 1. City Architect.

7681

NORTHAMPTON RURAL DISTRICT COUNCIL.

ARCHITECTURAL ASSISTANT

(UNESTABLISHED)

Applications are invited for the post of Architectural Assistant, at a salary within the range of £465 to £540 per annum, according to qualification and experience.

Applicants should be experienced in general building work, be neat draughtsmen, have had a good architectural training, and preferably with Planning experience.

The appointment, which is unestablished, will be for a period of three years at least, and will be subject to one calendar month's notice in writing on either side.

Applications, in candidate's own handwriting, stating age, whether married or single, qualifications and experience, accompanied by copies of two recent testimonials, are to reach the undersigned not later than Saturday, the 22nd November, 1952.

Applicants must disclose whether they are related to any member or senior officer of the Council. Canvassing, either directly or indirectly, will disqualify.

CLIFFORD E. JONES.

Clerk of the Council.

Council Offices, 1, Cheyne Walk, Northampton.
31st October, 1952.

7677

CITY AND COUNTY OF BRISTOL.

CITY ARCHITECT'S DEPARTMENT.

Applications invited for the permanent staff appointment, Grade VI (£670-£735 per annum), SENIOR ASSISTANT ARCHITECT.

Applicants must be Associate Members of the R.I.B.A. or hold equivalent qualifications, and have had considerable experience in design, construction and contract administration, preferably with a large local authority. Appointment superannuable, subject to satisfactory medical examination, and to one month's notice in writing either side.

Applications, stating age, training, qualifications, experience, present appointment and salary, with names of two referees (including present employer), by Monday, 17th November, to

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

City Architect.

The Council House, College Green,

Bristol, 1.

7676

STAFFORDSHIRE COUNTY COUNCIL.

COUNTY PLANNING DEPARTMENT.

Applications are invited for the appointment of a JUNIOR PLANNING ASSISTANT, on A.P.T., Grades I to IV (£465 to £600 per annum), in the Central Area Planning Office at Stafford.

Applicants for the appointment should have had training in an Architect's, Engineer's or Surveyor's or Planning Office, and preference will be given to those who have passed the Intermediate Examination of the Town Planning Institute or its equivalent.

Canvassing, directly or indirectly, will be deemed a disqualification, and relationship to any member or senior officer of the County Council must be disclosed.

Applications should give details of age, education, qualifications, present and previous appointments and experience, and should include copies of two recent testimonials and the names of two persons to whom reference can be made.

Applications should be sent to D. W. Riley, County Planning Officer, 41a, Eastgate Street, Stafford, not later than the 22nd November, 1952.

T. H. EVANS.

Clerk of the County Council.

7687

WEST SUFFOLK COUNTY COUNCIL.

JUNIOR QUANTITY SURVEYING ASSISTANT.

N.J.C. service conditions, salary £465-£540 (A.P.T., I-II). Post pensionable; medical examination. Applicants should be Students of the Royal Institution of Chartered Surveyors; duties will include abstracting and billing in all trades and taking off under supervision.

Application forms, obtainable from the Clerk of the County Council, Shire Hall, Bury St. Edmunds, to be returned by 29th November, 1952.

7686

ISLE OF ELY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the under-mentioned appointments on the staff of the County Architect:—

- (a) ASSISTANT QUANTITY SURVEYOR. A.P.T., Grade III (£525-£570).
(b) ASSISTANT-Heating and Electrical Section. A.P.T., Grade I (£450-£510).
(c) JUNIOR ARCHITECTURAL ASSISTANT. Misc., Grades I, II and III (£300-£440).

Appointments (a) and (b) are permanent; appointment (c) is on the temporary staff. All are subject to the provisions of the National Scheme of Conditions of Service, the Local Government Superannuation Act, and to the passing of a medical examination.

Applications must be made on forms to be obtained from the County Architect, County Hall, March, and must be accompanied by copies of not less than two recent testimonials. The last date for the receipt of applications is Monday, 1st December, 1952.

R. F. G. THURLOW,
Clerk of the County Council.
County Hall, March. 7685

BOROUGH OF NELSON.
ARCHITECTURAL ASSISTANT.
Applications are invited for the appointment of Architectural Assistant, in the office of the Borough Engineer and Surveyor, at a salary in accordance with Administrative Grade IV of the National Scales of Salaries (£555-£600 per annum).

Applicants must be Students of the R.I.B.A., and preferably Associates of the R.I.B.A. They should have experience in housing design, supervision surveys, specifications and general work.

Applications, giving details of experience and qualifications, and endorsed "Architectural Assistant," together with copies of three recent testimonials, must be received by the undersigned not later than Saturday, 22nd November, 1952.

F. W. ROBERTS,
Town Clerk.
Town Hall, Nelson.
31st October, 1952. 7684

HEMEL HEMPSTEAD DEVELOPMENT CORPORATION.
Applications invited for appointment of CLERK OF WORKS for Chief Architect's Department from persons experienced in supervision of housing contracts. Starting salary: £545, in scale £545-£685.

Conditions of service similar to Local Government Charter, with opportunity of entering or continuing in Local Government Superannuation Fund. A house or flat may be available later.

Applications, endorsed "Vacancy No. 12," giving details of age, qualifications and experience, and names of two referees, to reach undersigned by 21st November, 1952.

W. O. HART,
General Manager.
Westbrook Hay, Hemel Hempstead, Herts., 7699

STEVENAGE NEW TOWN.
Stevenage Development Corporation requires in the Department of Architecture and Planning a SENIOR PLANNER, on a salary range of £840-£1,100 per annum.

Applicants should be Members of the Town Planning Institute, and will be expected to take charge of a small Planning Group in the Department. An architectural qualification in addition would also be desirable.

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

Applications, giving full details of experience and names of two referees, to be sent to the Chief Administrative Officer, Aston House, Stevenage, Herts., not later than 26th November, 1952. 7708

NOTTINGHAMSHIRE COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.
APPOINTMENT OF DEVELOPMENT PLAN OFFICER.

Applications are invited for the appointment of Development Plan Officer, at a salary of £815-£935 per annum. Applicants must have experience of the administration of the Town and Country Planning Act, 1947, particularly in relation to the preparation of Development Plans.

Applicants must be Corporate Members of the Town Planning Institute by examination, and must in addition have a recognised qualification in Engineering, Surveying, or preferably in Architecture. Further particulars are obtainable from the County Director of Planning, Shire Hall, Nottingham, to whom applications must be submitted by 6th December, 1952. Canvassing disqualifies.

K. TWEEDEALE MEABY,
Clerk of the County Council.
7706

CITY OF BATH.
CITY PLANNING AND ARCHITECTURAL DEPARTMENT.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT, Grade A.P.T., V. Applicants must be Registered Architects, and preference will be given to those who are Associates of the Royal Institute of British Architects. They should have had good experience in design and construction of Municipal Housing and other works.

The appointment is subject to the provisions of the Local Government Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications and experience, together with the names and addresses of three referees, should be sent to the City Planning Officer and Architect, 7, North Parade Buildings, Bath, not later than 26th November, 1952.

JARED E. DIXON,
Town Clerk.
Guildhall, Bath. 7707

KENT EDUCATION COMMITTEE.
MEDWAY COLLEGE OF ART.
DEPARTMENT OF ARCHITECTURE.

Part-time STUDIO MASTER required for one, two or three days per week, to commence duties immediately. Students preparing for R.I.B.A. Intermediate. Approximate daily remuneration £4 10s., plus travelling expenses. Applications by letter to the Principal, Medway College of Art, Eastgate, Rochester, as soon as possible. 7700

NATIONAL COAL BOARD-NORTH-WESTERN DIVISION.

Applications are invited for the position of QUANTITY SURVEYING ASSISTANT, Grade II, at Divisional Headquarters, 47, Peter Street, Manchester, 2.

Applicants should have had experience in a Quantity Surveyor's office and be capable of working up dimensions, abstracting, writing Bills of Materials, checking accounts, and taking site measurements under supervision.

Preference will be given to applicants who have passed the Intermediate Examination of the Royal Institute of Chartered Surveyors.

Salary, dependent upon qualifications and experience of the successful applicant, will be within the scale £440-£520-£540.

Applications, stating age, education, qualifications, experience, recent appointments and salary, should be submitted within 14 days of the date of this advertisement to the Divisional Establishment Officer, National Coal Board, North-Western Division, 40, Portland Street, Manchester, 1. 7698

Tenders for Contracts
6 lines or under, 12s. 6d., each additional line, 2s.

WELTON RURAL DISTRICT COUNCIL.
HOUSING TENDERS.

The above Council invite CONTRACTORS who are desirous of submitting tenders for the erection of 36 HOUSES at FISKERTON, to send in their names to the Architects, Messrs. Wm. Saunders & Partners, of 24, Castle Gate, Newark-on-Trent (or 14, Mercer Row, Louth, Lincs.), from whom copies of the Specifications and Bills of Materials and Conditions may be obtained on payment of £3 3s., which will be returned on receipt of a bona fide tender.

The Council shall not be bound to accept the lowest or any tender received, and acceptance is subject to the approval of the Ministry of Housing and Local Government.

Sealed and endorsed tenders, on forms supplied, must reach the undersigned not later than noon on Monday, 24th November, 1952.

F. FOSTER,
Clerk to the Council.
Council Offices, 31, Clasketgate, Lincoln. 7691

COUNTY BOROUGH OF EASTBOURNE.
TO BUILDING CONTRACTORS.

The Council propose to invite tenders for the erection of a Laboratory building having a total superficial floor area of approximately 39,000 sq. ft. at Brampton Road, Hampden Park, Eastbourne.

Contractors who wish their names to be considered for inclusion in the panel of tenderers for this work should submit their names to the undersigned by Friday, 21st November, 1952. Their applications should be accompanied by a list of similar works which have been carried out, with the name of the Architect, location, and date of completion.

The work will be comprised in two contracts as follows:—

- (i) Pile foundations, concrete beams, and floor

slab having a superficial area of 35,000 sq. ft. approximately.

(ii) The superstructure, which will be of reinforced concrete design, having over some sections barrel vaulted concrete roofs, and over others flat concrete roofs.

Contractors should state whether they wish their names to be considered for either or both of these contracts. Those selected will be notified and required to forward a deposit of two guineas, which will be returned on receipt of a bona fide tender and the return of documents.

The form of contract will be the R.I.B.A. form specially adapted for use by Local Authorities. Drawings may be seen at the offices of H. Hubbard Ford, Esq., F.R.I.B.A., either at his London office, 20, John Street, W.C.1, or at his Eastbourne office, 24, Cornfield Road, Eastbourne, between the hours of 10 o'clock and 5 o'clock (Saturday 10 o'clock and 12 noon).

Bills of Materials and forms of tender will be issued approximately as follows:—

First Contract: 2nd December, 1952.
Second Contract: 31st December, 1952.

The lowest or any tender will not necessarily be accepted.

F. H. BUSBY,
Town Clerk.
Town Hall, Eastbourne.
4th November, 1952. 7688

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

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

ARCHITECTURAL ASSISTANT, with experience, required for general practice. Reply, stating experience and salary required, to Thomas Worthington & Sons, 178, Oxford Road, Manchester, 13. 7689

ASSISTANT required, with some office experience. Salary: approx. £450 p.a. Write brief particulars, Eric Lyons, F.R.I.B.A., Mill House, Bridge Road, Hampton Court, Surrey. 7682

LONDON Architects require JUNIOR ASSISTANT. Salary in accordance with ability and experience. Apply Box 7689.

ARCHITECTURAL ASSISTANT required by large Industrial Organisation, preferably qualified and with experience in planning, design, and construction of factory buildings. The appointment is permanent and pensionable, and the salary will be £600-£800 p.a. Applicants should be between 30 and 45. Please write, giving details of age, experience, etc., to Box H 9907, A.K. Advg., 212a, Shaftesbury Avenue, W.C.2. 7694

ARCHITECTURAL ASSISTANTS required, with at least 3 years' office experience on working drawings; knowledge of multi-storey flat construction an advantage. Reply, stating experience and salary required, to Edward Armstrong & Frederick MacManus, FF/R.I.B.A., 10, Lower Grosvenor Place, S.W.1. 7702

ARCHITECTURAL ASSISTANT for practice in Bath. Good practical man required. Office training preferred. All-round general experience essential. Academic qualifications not necessary. Salary approximately £350-£425, according to ability. Box 7701.

THE RAILWAY EXECUTIVE (Scottish Region). Applications are invited for SENIOR and LEADING ASSISTANT ARCHITECTS in Civil Engineer's Department in Glasgow. Applicants must be A.R.I.B.A. and with considerable experience. Commencing salary range around £800 to £850 per annum. Apply to Civil Engineer, The Railway Executive, Scottish Region, St. Enoch Station, Glasgow. 7709

Architectural Appointments Wanted

SENIOR ASSISTANT (age 35), 20 years' various experience, all branches of the profession, neat, accurate and essentially quick draughtsman, desires London engagement. Free to commence duties immediately. Salary: 12 gns. per week. Box 599.

ARCHITECTS, Newcastle area. Probationer (24) seeks position near studies. Housing and industrial experience. Box 604.

LADY ARCHITECT, D.A. (Edin.), two years' experience, seeks position with Architect. Contemporary outlook. Box 600.



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FINAL R.I.B.A. Student would like a temporary job up to the end of December in any Architect's or an Engineer's firm. Anywhere in London. Box 598.

ARCHITECTURAL ASSISTANT seeks interesting position, London. Experience several years, work drawings, details, surveys, site supervision. Salary not first consideration. Box 7690.

SCHOOL trained ASSOCIATE, with 4-figure salary, 15 years' experience, holding responsible administrative position, seeks progressive post of interest on large scale work near metropolis. Alternatively, would prefer working and living in country town. Remuneration not first object, provided prospects are sound. Some capital available. Box 7678.

ARCHITECT (33), A.R.I.B.A., M.R.San.I., 17 years' experience in private practice, chiefly domestic, commercial and hospitals, seeks senior position of responsibility. Home Counties and London area preferred. Box 597.

ARCHITECTURAL ASSISTANT (25), Intermediate standard, 6 months' office experience, requires position in London or Surrey. Box 601.

ASSOCIATE, with 15 years' experience, requires position of responsibility in contemporary office, where he will be treated as a human being and where initiative, hard work and conscientiousness are acknowledged. Salary by arrangement. Box 7697.

STUDENT (27), ex-Service, minimum experience, 4 years' school training, awaiting result of Professional Practice Exam., seeks position, preferably North or West London. Temporary work considered. Box 603.

R.I.B.A. (Female) seeks progressive post in contemporary London office. Industrial, domestic and varied responsible experience. Box 602.

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 exempted from the provisions of the Notification of Vacancies Order, 1952.

WELL-KNOWN Midlands Firm require for their London branch an **ENGINEER** to take charge of and control drawing office. Applicants must have knowledge of R.C. frames and steelwork and various forms of floor, roof, and staircase construction; be familiar with drawing office practice (including relevant correspondence) and sitework, and possess experience in the preparation of designs, calculations, and detailing, and have complete knowledge of codes of practice and building regulations. Write fully experience, technical qualifications and salary required, Box No. AC76348, Samson Clark, 57/61, Mortimer Street, London, W.1. 7587

EXPERIENCED SECRETARY / BOOK-KEEPER, male or female, required by Architects. Salary dependent on age and experience. Full particulars to Alleya & Mansel, Staple Inn Buildings, High Holborn, W.C.1, or 'phone Holborn 5311. 7683

Services Offered

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

R.I.B.A., with good all round experience, requires part-time or free lance work to help his growing practice. MUSEUM 9106. 7205

TYPEWRITING, DUPLICATING.—Bills of Quantity, Specifications, etc., expertly typed/duplicated. Express service. Work collected/delivered. **JOSEPHINE HALL & PARTNERS**, 501/2, GRAND BUILDINGS, TRAFALGAR SQUARE, W.C.2. WHL 6411/2, and 57, High Street, Tunbridge Wells. Telephone: 1255. 7005

ARCHITECTURAL DRAUGHTSMAN, experienced in constructional details, seeks work on free-lance or part time basis; sketch plans, working drawings, details, etc. Will travel for interviews. Box 7668.

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STUDENT, preparing thesis, requires copy of "Architectural Review," dated April, 1945, and "Architectural Forum," dated August, 1945. Offers to D. Andrew, 29, Drayton Road, N.17. TOT. 7093.

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R. I.B.A. and T.P.I. EXAMS.—Stuart Stanley (Tutor Sch. of Arch. Lon. Univ.) and G. A. Crockett, M.A./B.A., F.R.I.B.A., M.A.M.T.P.I. (Prof. Sir Patrick Abercrombie in assn.), prepare Students by correspondence tuition. 10, Adelaide Street, Strand, W.C.2. TEM. 1603/4.

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Alphabetical Index to Advertisers

| | PAGE | | PAGE | | PAGE |
|--|----------------|---|----------|---|----------|
| Adamite Co., Ltd., The | lxiv | Greenwood's & Alryac Ventilating Co., Ltd. | iii | Prodorite, Ltd. | lxxxv |
| Adams, Robt. (Victor), Ltd. | lxxxix | Griffin & Paddock, Ltd. | i | Remploy, Ltd. | lxxxviii |
| Bateman's Stonecleaning, Ltd. | ii | Gulf Radiators, Ltd. | xlili | Richards Tiles, Ltd. | xli |
| Bigwood, Josh., & Son, Ltd. | xxx | Gyproc Products, Ltd. | xx | Richardson & Starling, Ltd. | lxxx |
| Blackburn, Thos., & Sons, Ltd. | viii | Harper & Tunstall, Ltd. | lxxx | Riley Stoker Co., Ltd. | lxxxii |
| Boulton & Paul, Ltd. | lxxxvii | Harvey, G. A., & Co. (London), Ltd. | iii | Roller Shutters, Ltd. | lxxxiv |
| Briggs, Wm., & Sons, Ltd. | xi | Hickson's Timber Impregnation Co. (G.B.), Ltd. | lxxxviii | Rolyat Tank Co., Ltd. | lxxxv |
| British Plumber, Ltd. | — | Hill, E. Adam, & Co., Ltd. | lxxxiii | Rownson, Drew & Clydesdale, Ltd. | — |
| Broad & Co., Ltd. | lxxii | Holland & Hannen & Cubitts, Ltd. | liii | Ruberoid Co., Ltd., The | lxxxv |
| Cafferata & Co., Ltd. | lxxxvii | Hope, Henry, & Sons, Ltd. | lx | Rush & Tompkins, Ltd. | xlvi |
| Callow & Keppich, Ltd. | lxxxiv | Imperial Chemical Industries, Ltd. | xvi | Salter, T. E., Ltd. | — |
| Canadian International Trade Fair | — | Industrial Engineering, Ltd. | xii | Sankey, J. H., & Son, Ltd. | — |
| Cape Asbestos Co., Ltd. | xlii | Ingersoll Locks, Ltd. | ii | Sarco Thermostats, Ltd. | lxxi |
| Cargo Fleet Iron Co., Ltd. | xlvi | International Paints, Ltd. | xxi | Semtex, Ltd. | lviii |
| Carron Company | lxxxix, lxxxix | Jones, T. C., & Co., Ltd. | lv | Sign Service | lxxxvii |
| Carter & Co., Ltd. | vi | Kwikform, Ltd. | — | Silexine Paints, Ltd. | — |
| Chance Bros., Ltd. | lxxxix | Leid Industries Development Council ... | lxxxiii | Small & Parkes, Ltd. | xxiv |
| Chandos Engineering Co., Ltd. | lxxxiv | Leaderflush, Ltd. | lxxxiii | Smith's English Clocks, Ltd. | lxxvi |
| Chloride Batteries, Ltd. | xxxvi | Leatherfloor, Ltd. | — | Smith & Pearson, Ltd. | lvi |
| Chubb & Son's Lock & Safe Co., Ltd. | lxxxiv | Le Grand Sutcliffe & Gell, Ltd. | lxxvi | Sommerfeld's, Ltd. | lxxxii |
| Clark, Jas., & Eaton, Ltd. | xlix | Leightons (Contractors), Ltd. | lxix | Spelthorne Metals, Ltd. | — |
| Clarke Ellard Engineering Co., Ltd. | xiv | London Brick Co., Ltd. | xxvii | Story & Co., Ltd. | lxxv |
| Concrete, Ltd. | lxxxvii | Lovell & Hanson, Ltd. | lxxxix | Storry Smithson & Co., Ltd. | lxxviii |
| Coverite (Asphalters), Ltd. | lxxxvii | McCarthy, M., & Sons, Ltd. | lxxxvii | Stott, Jas., & Co. (Engineers), Ltd. | — |
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PAGE
lxxxv
lxxxviii
xli
lxxx
xxxvii
lxxxiv
lxxxv

xxxv
xlvi
lvi

lxxi
lviii
xxxvii
xxiv
xxvi
lxxxvi
lvi
lxxxv

lxxv
lxxviii
lxxv

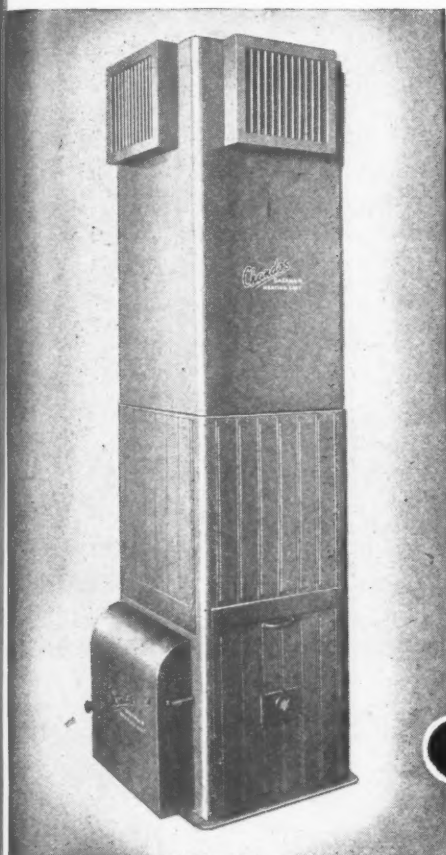
xxxviii
lxxxv
xxii

xi
lxxxix
lxxxiv
xxxvii
xxviii
lxxxviii

lxxi

lxi

lxxvii
xlv
lii
lii
xliv
iv. v
lxxxiii



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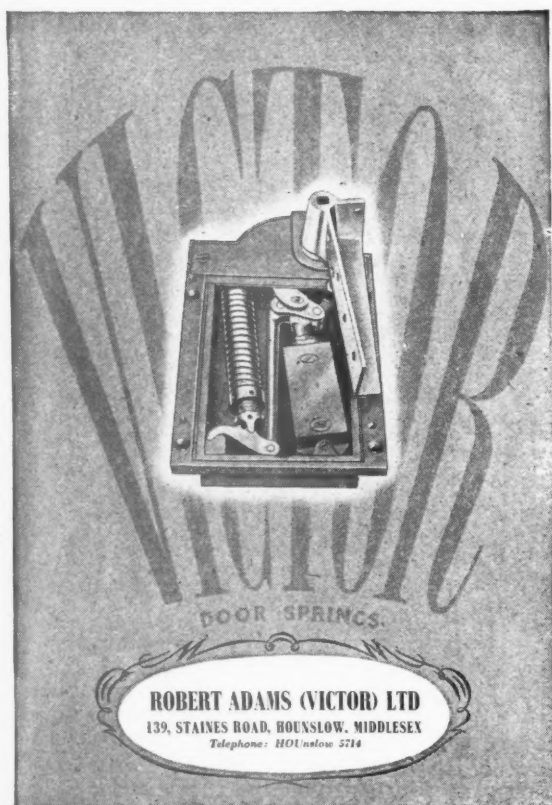
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