

THE ARCHITECTS' JOURNAL



standard contents

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

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No. 3070]

[Vol. 118

THE ARCHITECTURAL PRESS

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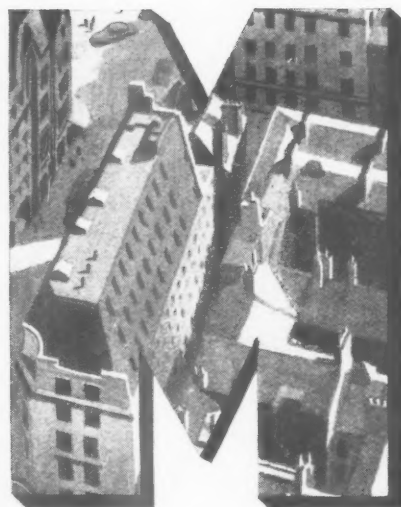
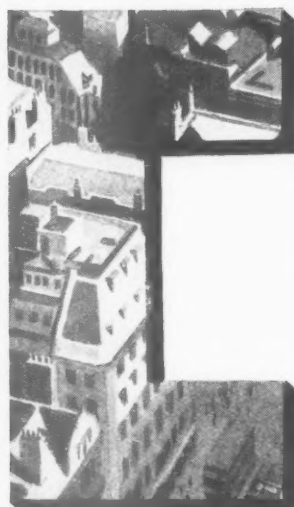
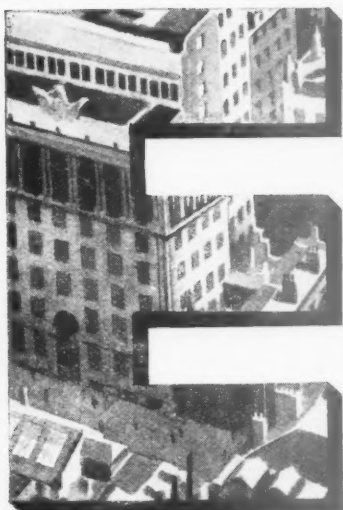
Registered as a Newspaper.

★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ij 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
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BATC	Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1. Reliance 7611, Ext. 1706	
BC	Building Centre. 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5.	Ealing 9621
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Fremantle 8494
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	
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. Whitehall Gardens, Horseguards Avenue, Whitehall, S.W.1.	Langham 2785
BRDB	British Rubber Development Board. Market Buildings, Mark Lane, E.C.3.	Trafalgar 8855
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. British Standards House, 2, Park St., W.1.	Mayfair 0515
BTE	Building Trades Exhibition. 4, Vernon Place, W.C.1.	Mayfair 9000
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. Doldertal, 7, Zurich, Switzerland.	Radlett 5616
COID	Council of Industrial Design. Tilbury House, Petty France, S.W.1.	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. 67, Oxford Street, W.1.	Regent 4448
FASS	Federation of Association of Specialists and Sub-Contractors, Artillery House, Artillery Row, S.W.1.	Gerrard 0021
FBBDO	Fibre Building Board Development Organisation, Ltd., Melbourne House, Aldwych, W.C.2.	Abbey 7232
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Temple Bar 4561
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.	W.C.1.
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Chancery 7583
FS (Eng.)	Faculty of Surveyors of England. 67, Oxford Street, W.1.	Whitehall 3902
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Langham 4041
GG	Georgian Group. 27, Grosvenor Place, S.W.1.	Gerrard 0021
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Sloane 4554
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 2844
ICA	Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1.	Whitehall 2881
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Sloane 5615
IEE	Institution of Electrical Engineers. Savoy Place, W.C.2.	Grosvenor 6186
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Whitehall 4577

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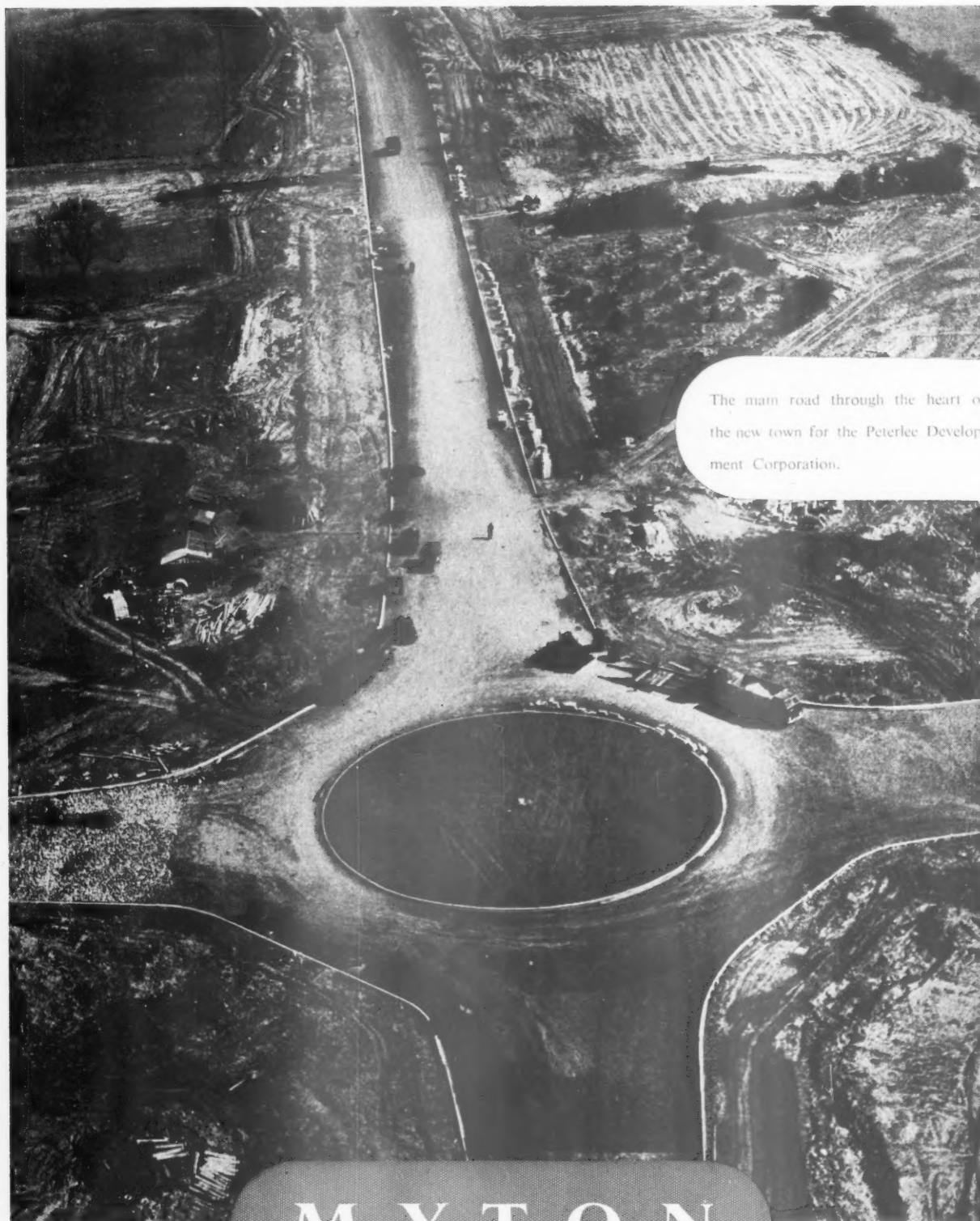
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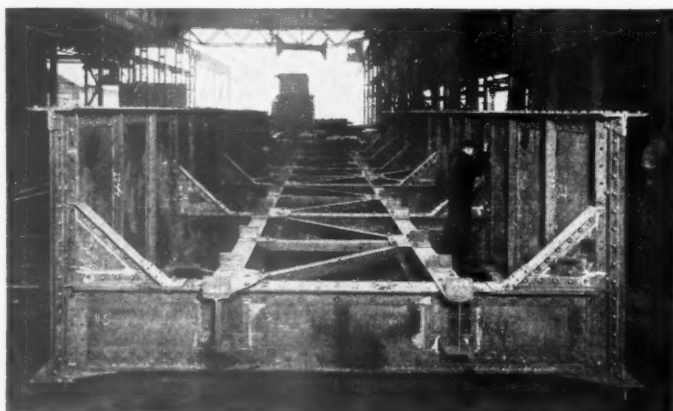
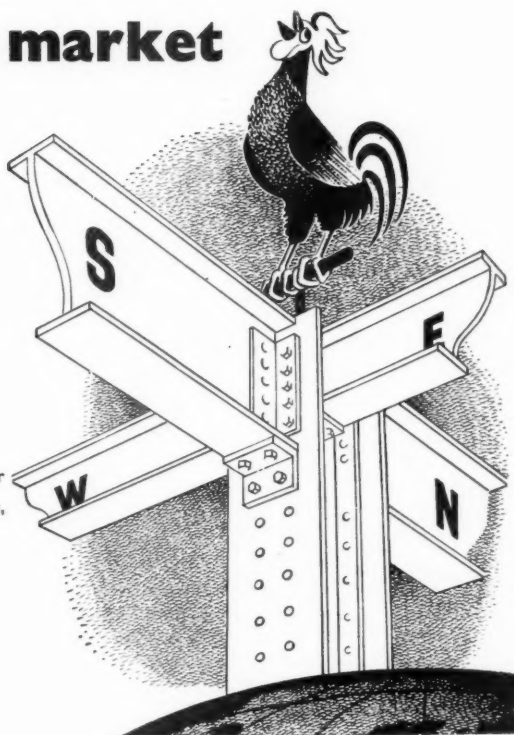
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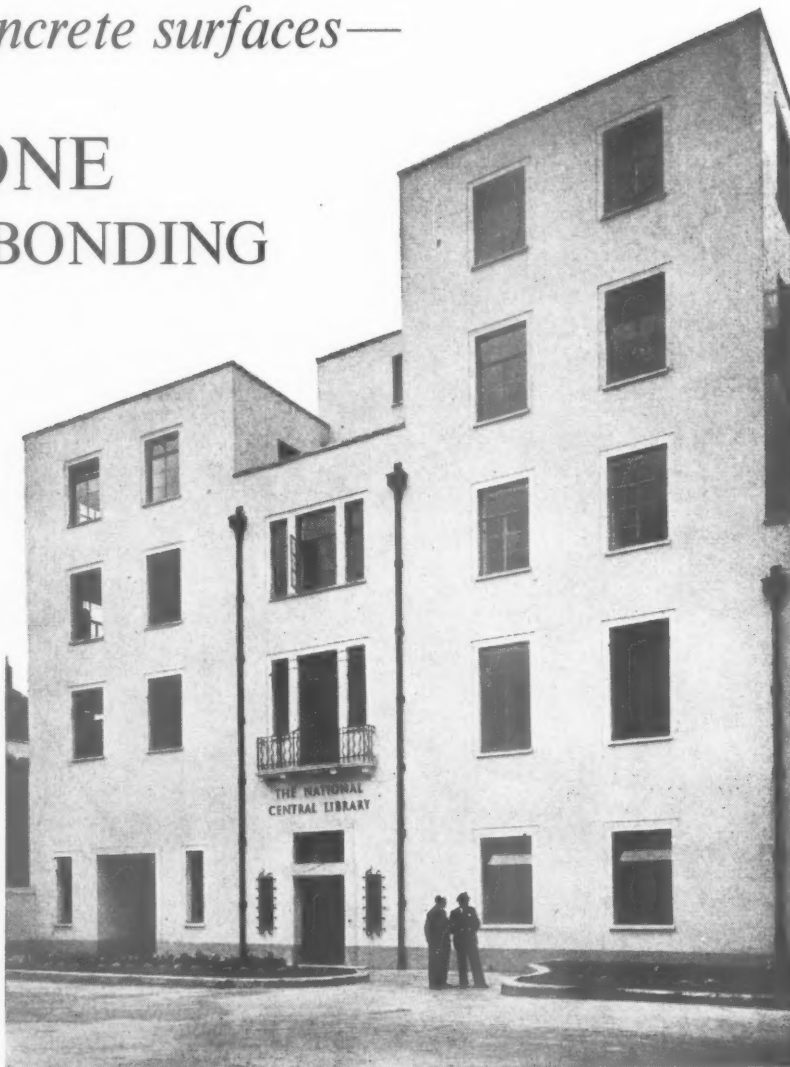


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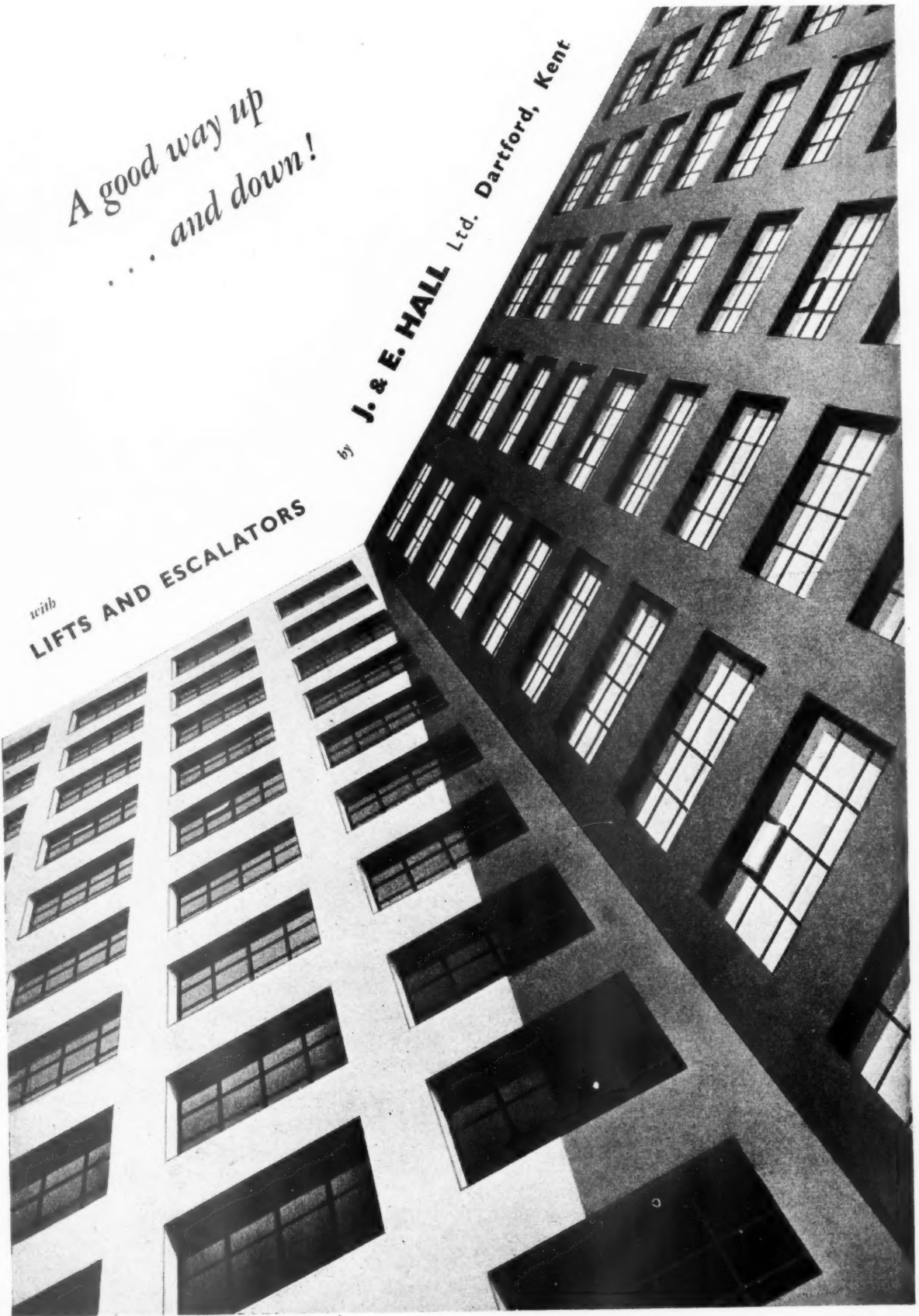
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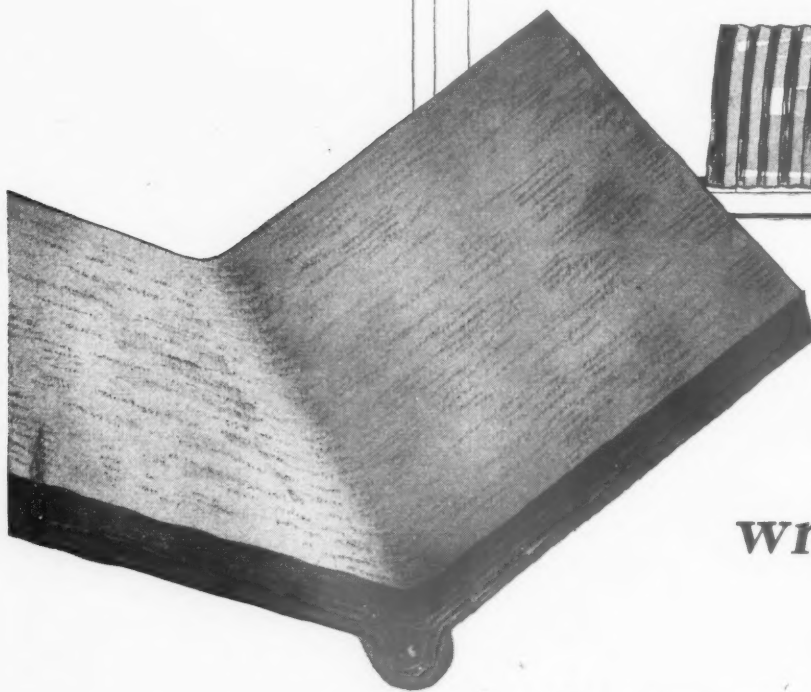
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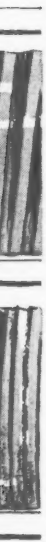
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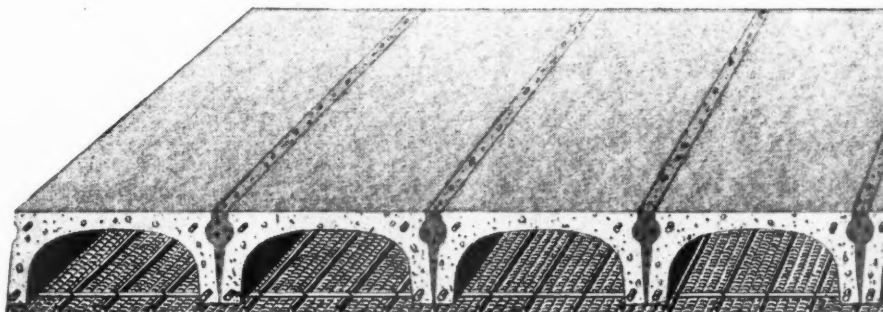
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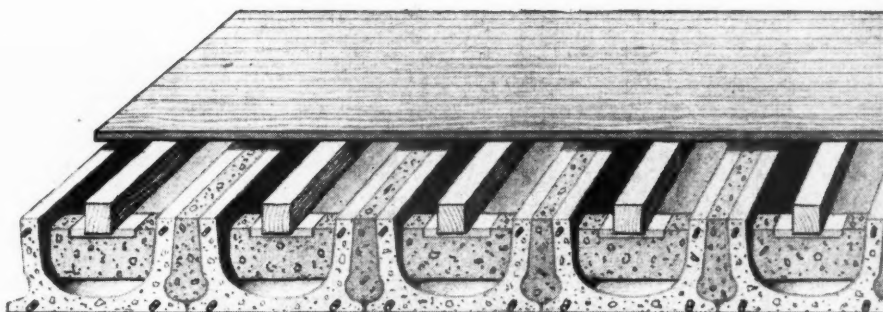
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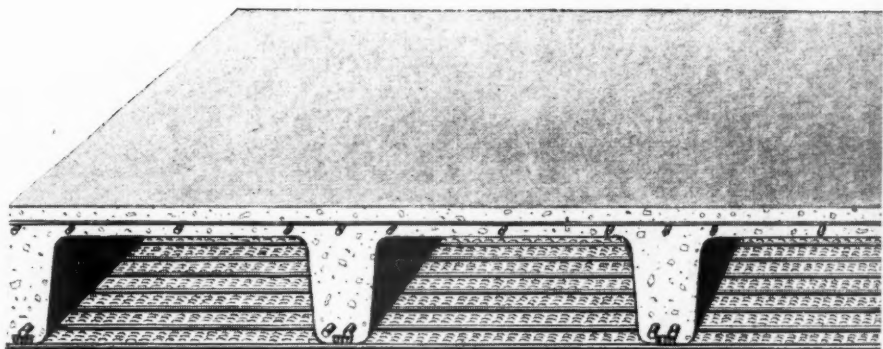
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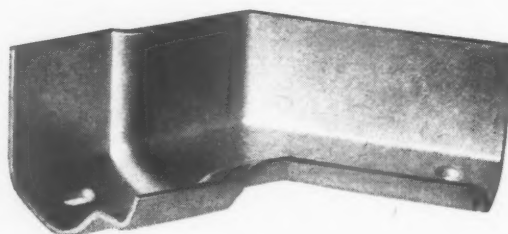
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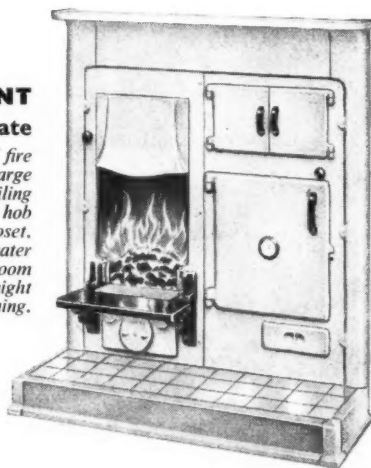


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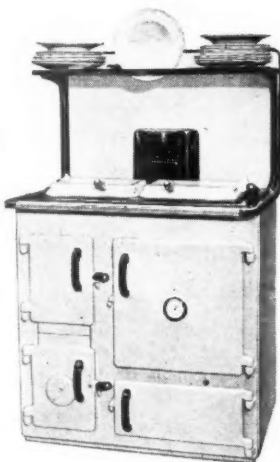
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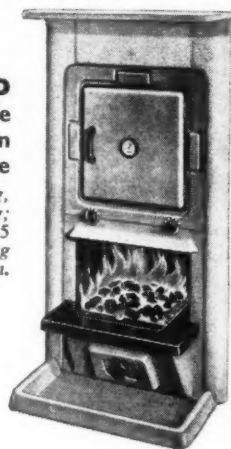
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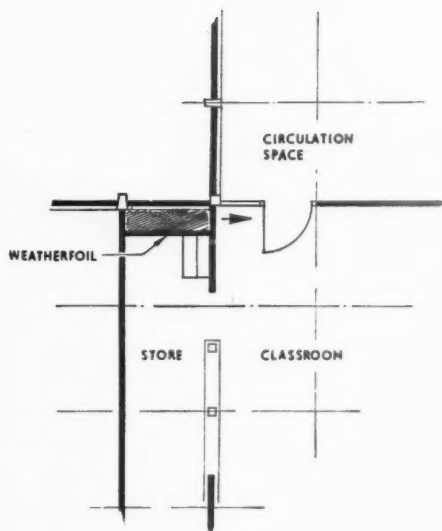
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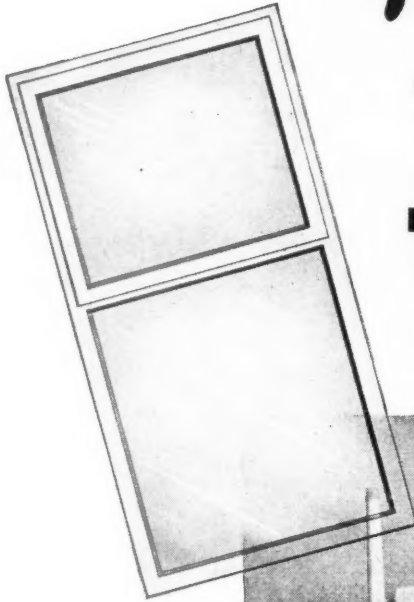
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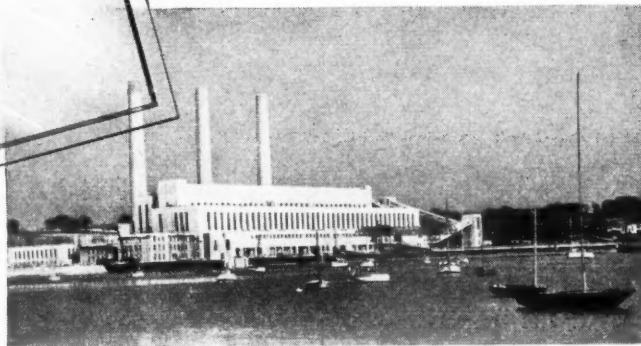
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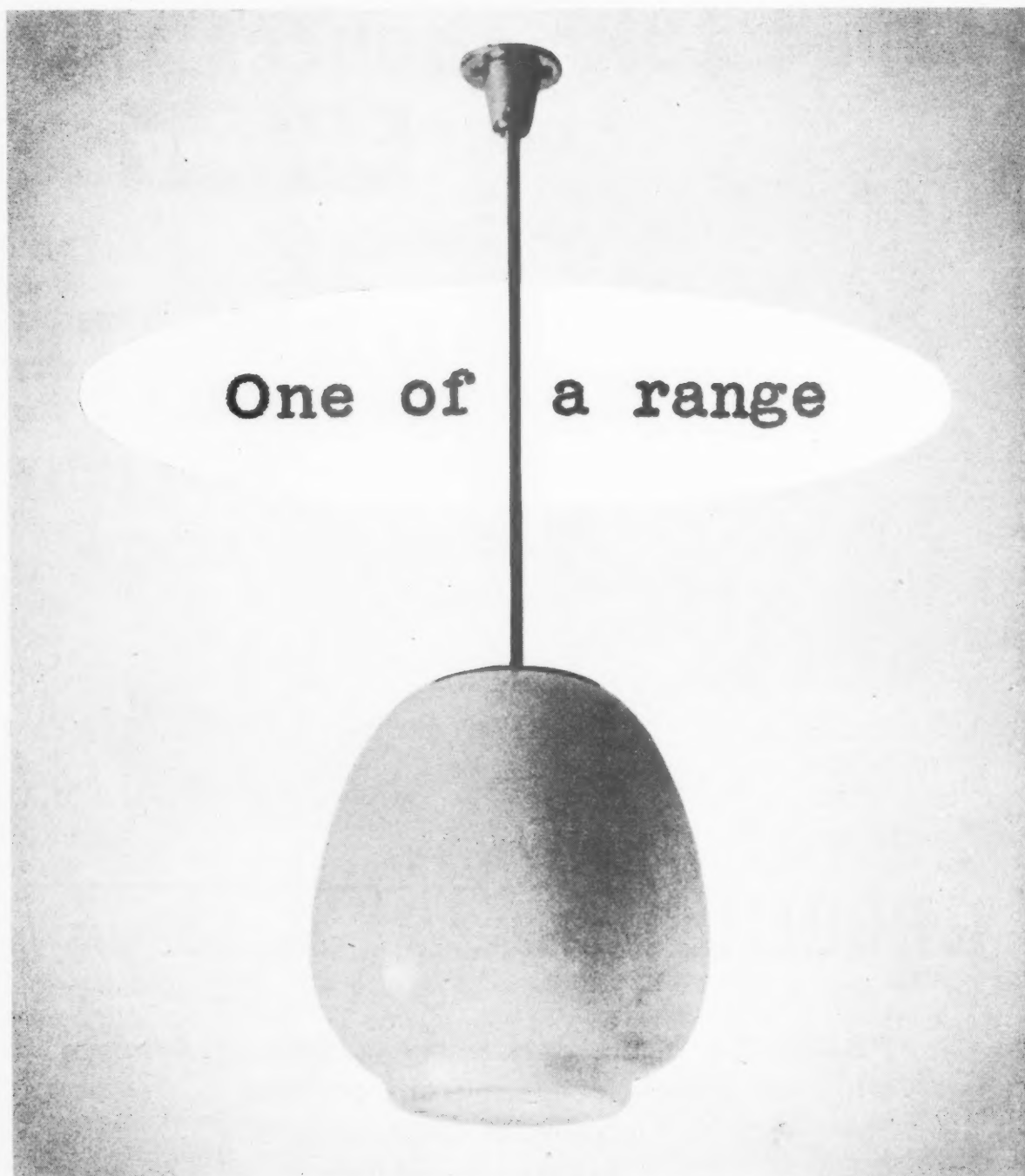


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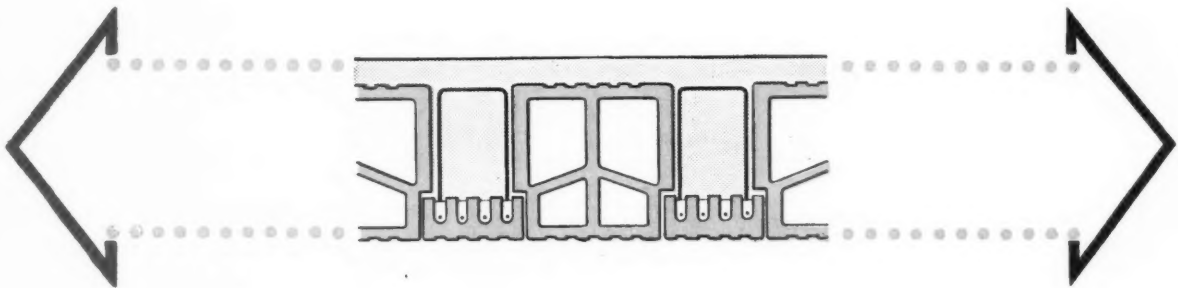
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POINTS ABOUT *Stahlton*

1 SPANS UP TO 35 FEET

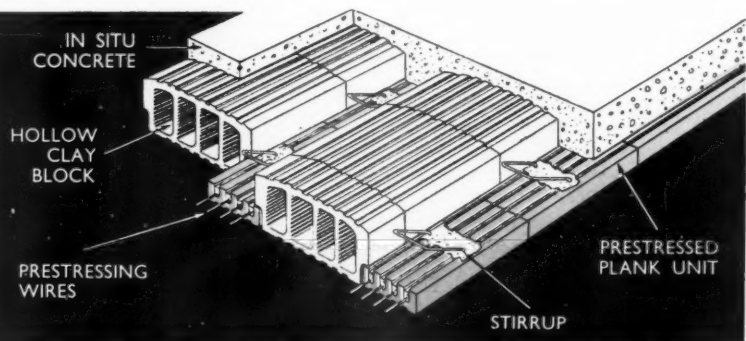
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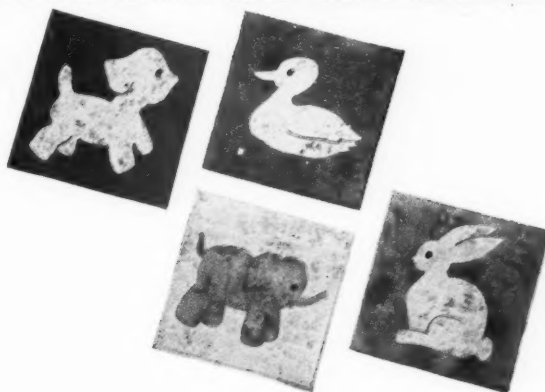
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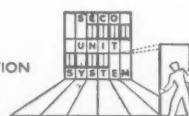
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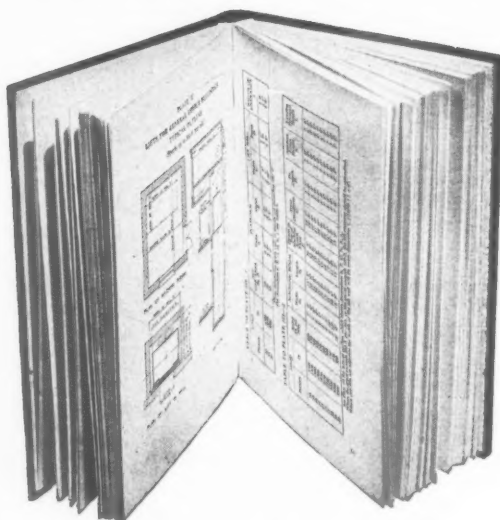
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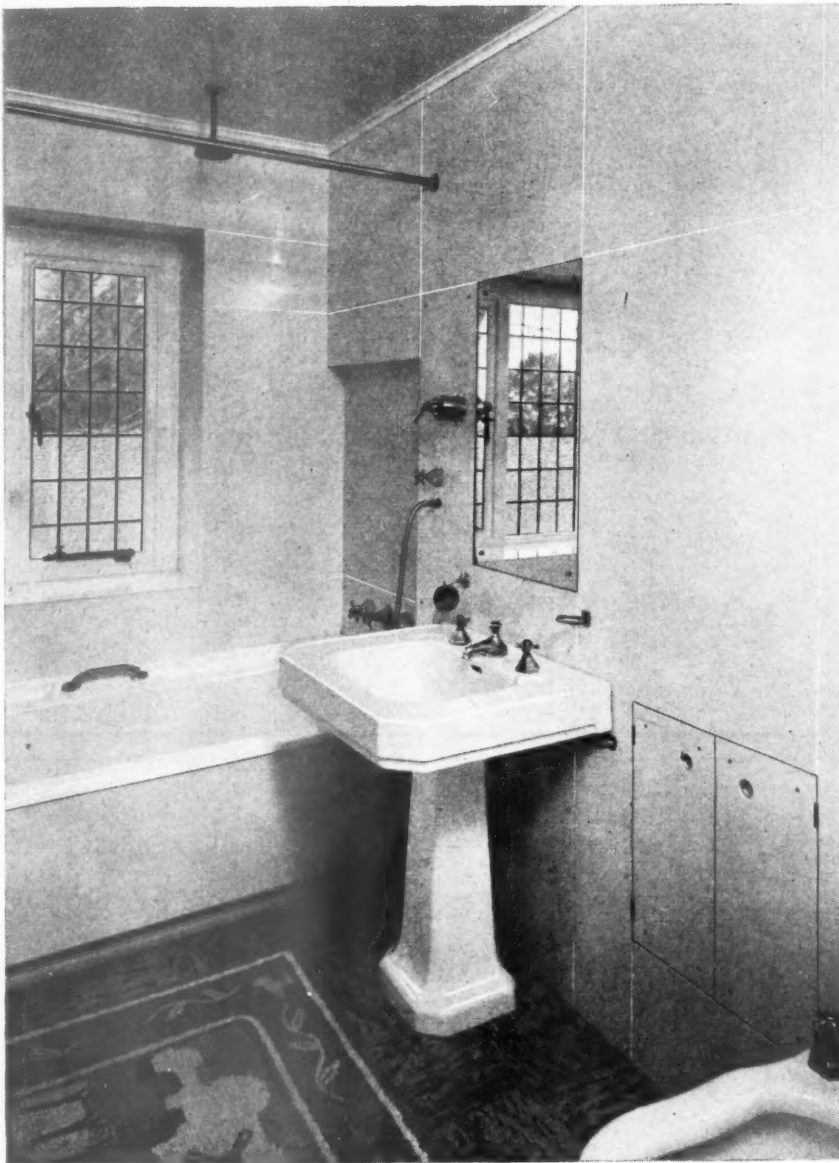


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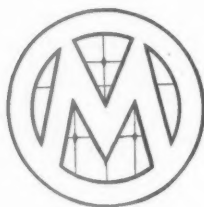


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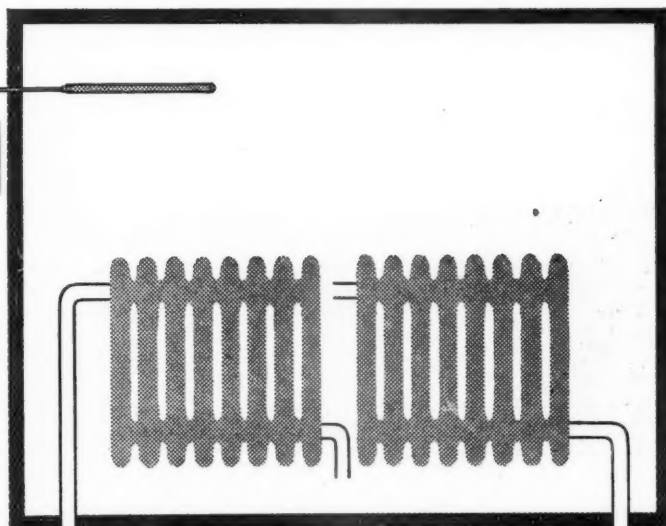
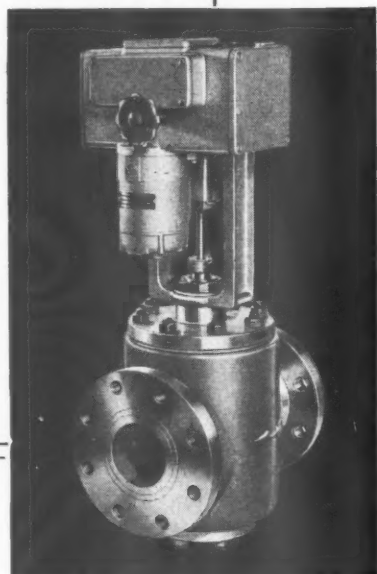
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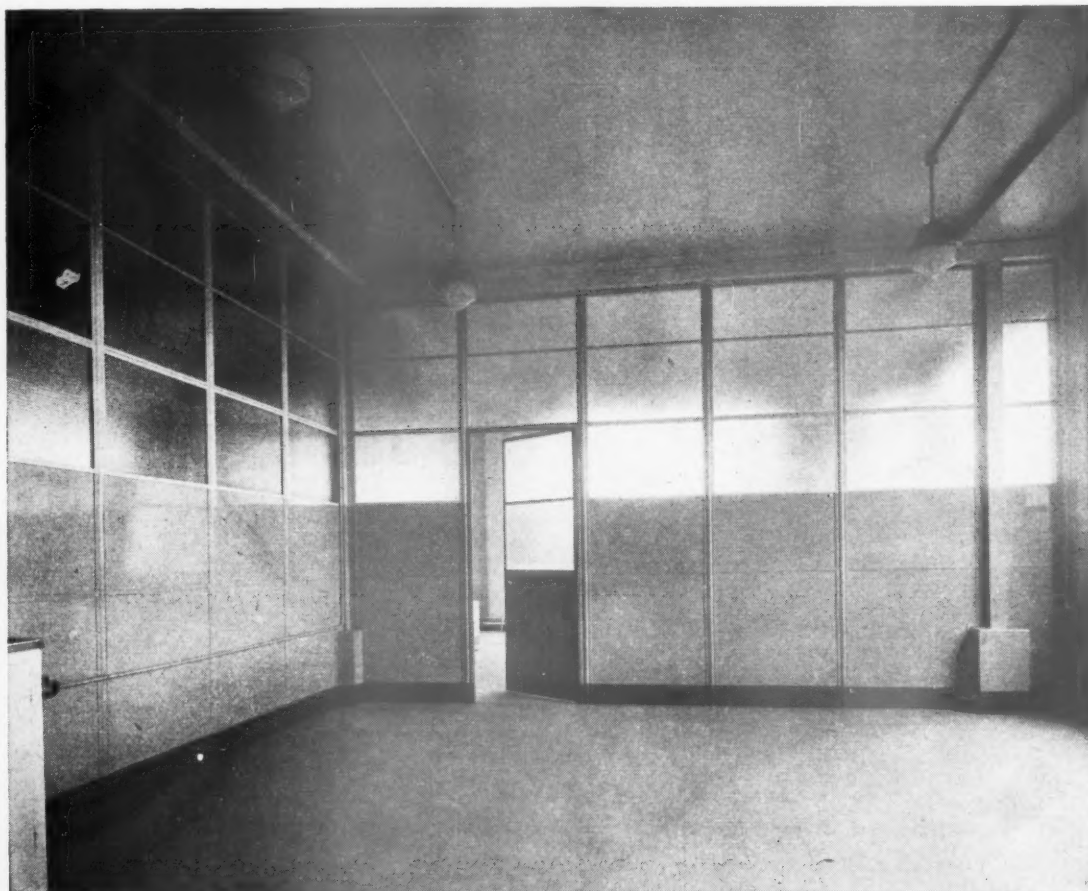
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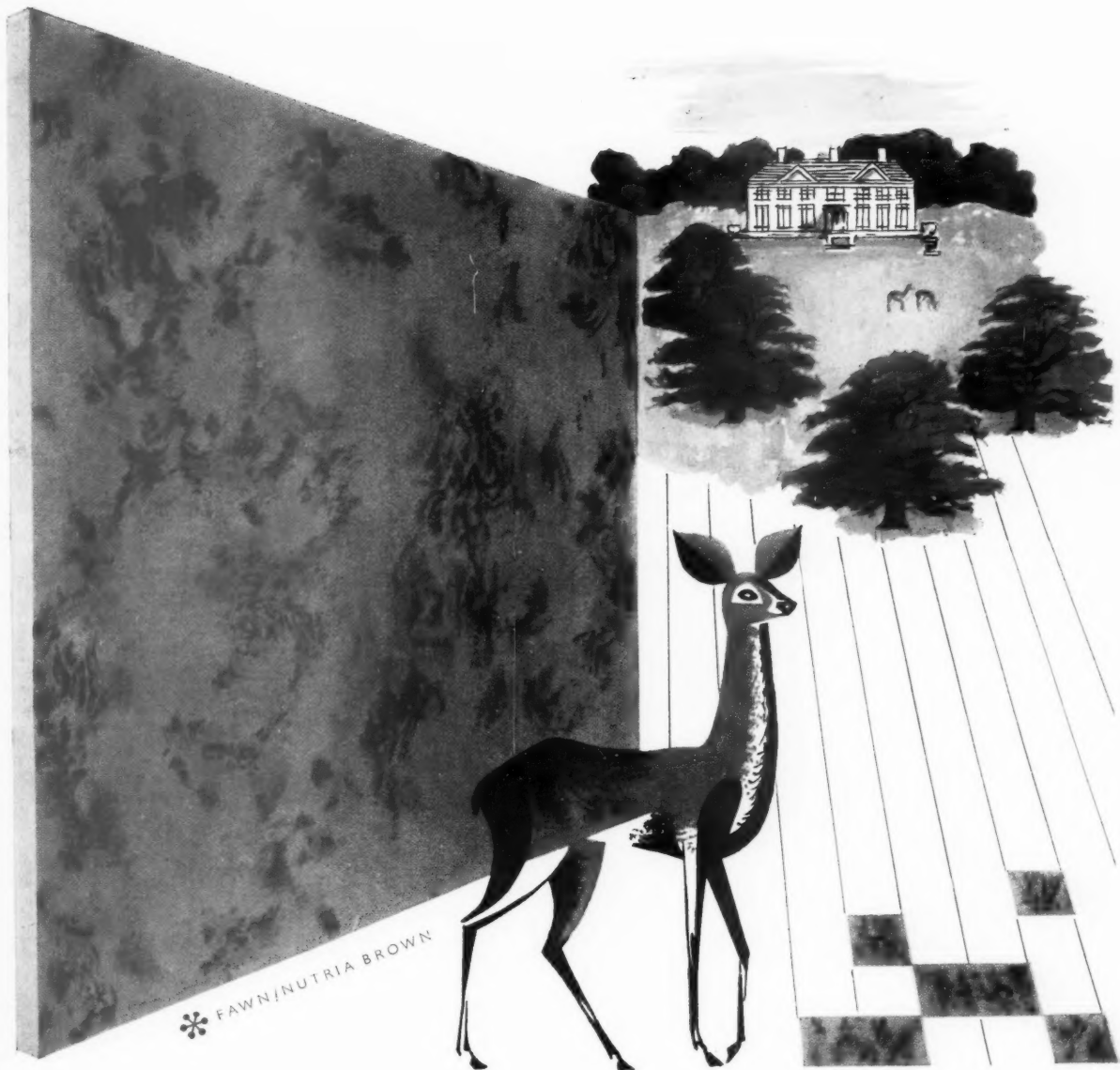
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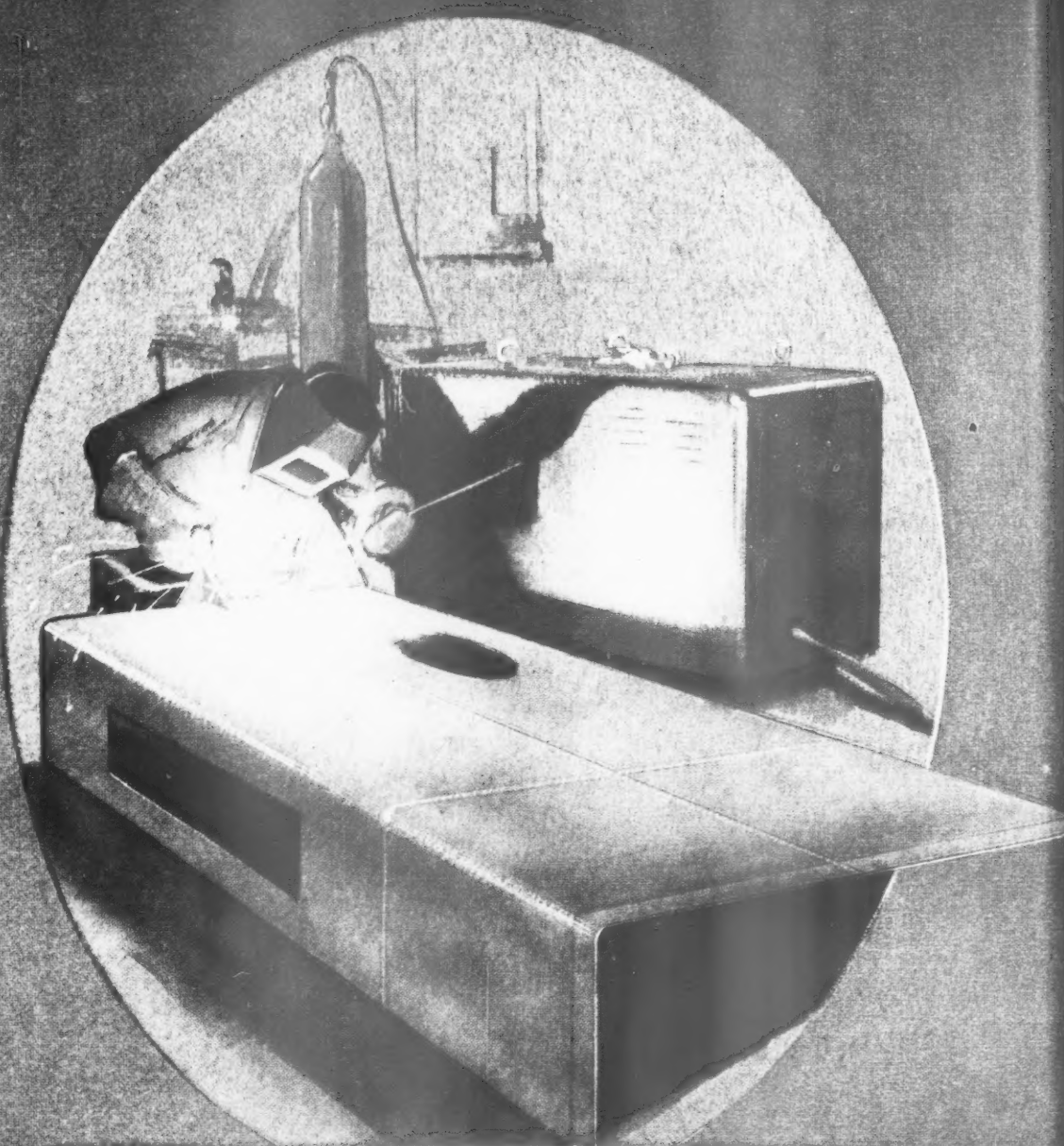
Long ago when Britain was an island of many kingdoms, and the great forests were full of wild fallow deer, the colour of their young was known as "fawn". Today the forests have shrunk to parks or green belts and the deer in England are domesticated, but the ancient colour name is still with us, its shade now precisely defined by the British Colour Council. This same Council has also standardised the tones of nutria, which is the colour of the finer, shorter hairs of the rabbit, the musk-rat, the hare and the South American coypu. Now these two delicate colourings of both foreign and domestic animals have been chosen to provide a tone pattern for the Vinyl tile illustrated. Architects will find that the dual range of Semtex Vinyl and Semastic Decorative Tiles (whose colours were selected in collaboration with the British Colour Council) offers them the widest possible scope for colourful decorative schemes to satisfy both aesthetic and practical considerations.

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

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DESIGN FOR ECONOMY

The Productivity Council's report on *Design for Production** keeps very strictly to its terms of reference and its title, and does not, as one might reasonably hope, say anything useful about the relationship between the industrial designer, the production engineer and the sales force. Since one hears that American industrialists regard designers as normal members of the production team, it would have been interesting to know where they come in and what difference they are thought to make both to the appearance and sales of the product. The report is quite interesting, but seems a bit slipshod here and there: e.g. why

print the very sensible questions which US manufacturers were asked if you don't publish an analysis of the answers? Architects will be most interested in Appendix V, the simplified draughting methods recommended for the GEC's Philadelphia plant. Not all of them are new, but there are a number of useful hints.

CONCRETE WINGS

ASTRAGAL was thumbing through one of the JOURNAL's less shiny, but no less serious-minded contemporaries, when his eye lighted on the headline "Plane Wings in Pre-stressed Concrete." At first he was inclined to dismiss this as a Christmas caper, or possibly one of those attacks of materiomania, like Iron-mad Wilkinson's cast-iron coffin. But on reading the article and examining the illustrations he found it was a serious business—inspired by that indefatigable experimenter Louis Breguet, who insisted on inventing the helicopter two or three times before the Americans got round to it, and even made some successful flights.

Inevitably the name of Freyssinet is involved in this project—the casting of wire-stressed hollow r.c. wing units for a guided missile. The resulting structure is more resistant to heat loadings than a metal wing, is accurate to within .01 of an inch (which very few welded or riveted wings are) and is vastly cheaper than a whole wing machined from the solid metal billet, which is the normal way of obtaining high accuracy with metal construction. The only snag is the one you might expect—the surface is too rough to be used as it comes from the mould and has to be ground down and finished—

but excess weight is not an adverse factor.

And the moral of all this is:—No aero-engineer has complained about this invasion of his field by building technicians. *Verb. sap.*—and let's have some reciprocity please. Plumbing would be a good place for the aircraft boys to begin.

BRAUN STUDY

ASTRAGAL has never been one to look gift horses in the mouth, but he did cast a brief appraising glance between the greening teeth of the picture recently presented to the House of Commons by Marshall Field. As you may remember, it was painted by the Frenchman Leopold Braun. It depicts a scene during a debate in the House in July, 1914. It measures 6 ft. × 8 ft. and it has been valued at nearly £9,000.

ASTRAGAL can accept the first three facts, but is surprised that the picture has any more than domestic value. The portraits are recognisable as far back as 50 odd feet (i.e. the usual Frank Salisbury standard). It was, of course, most generous of Mr. Field to present it—whatever its value. Nevertheless, while ASTRAGAL is no picture valuer he has seen a number of these "Historical Scenes" panoramas hanging about in the dimmer recesses of club billiard rooms looking a little bit sorry for themselves. They may—as John Russell once put it—just be "waiting confidently for the pendulum of taste to swing in their direction" or they may be awaiting a good offer for their frames. Time will tell. Meanwhile, ASTRAGAL cannot forbear to tell

*British Productivity Council. 3s. 6d.

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the story—maybe you remember it?—of the mass portrait with its outlined and numbered key drawing beneath. One faceless and numbered head (65) was saying to another (66): "Nobody would have taken you for 66."

CAREER GIRL, MALGRE ELLE

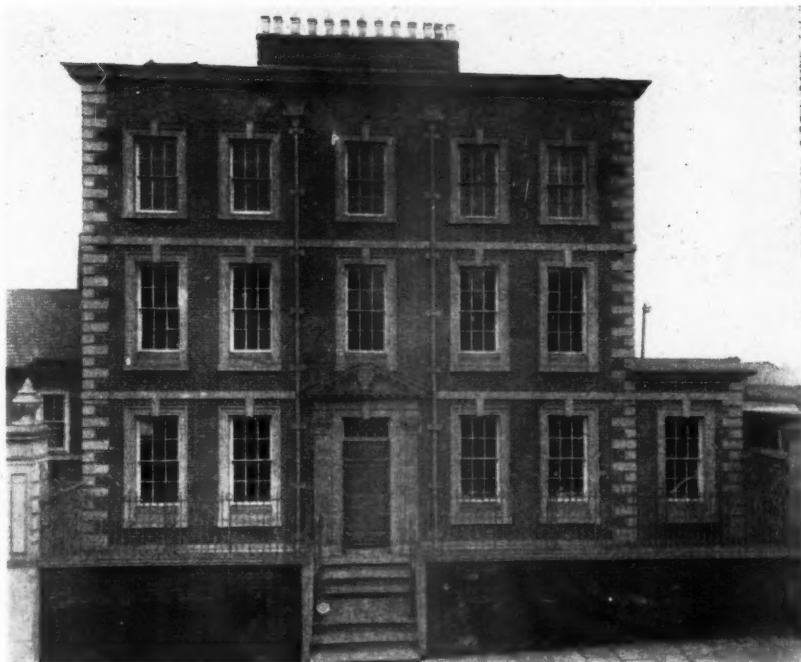
Rescuing a husband's bankrupt lumber yard from its ravaging creditors hardly sounds an amusing job, but Mrs. Barrie extracts a good deal of humour from it in her book, *The Lumberyard and Mrs. Barrie**, and incidentally provides some useful hints and tips for stalling on payments. Successful enough in business no doubt, but unfortunately not all applicable to one's own private debts. The joke goes on a little too long, but "lumber yards" in America appear to sell virtually everything in the way of housebuilding equipment, from baths to door furniture, so there is some interest in it for architects. Read it yourself first and then pass it on to a builder's merchant. He will recognise plenty of old friends.

HUTTED AIRPORTS

Since the war ASTRAGAL has been lucky enough to visit most of the air terminal buildings of Europe and the near-middle-East, and like most other air-passengers has nearly always found these buildings in various stages of being altered and extended. Often this means no more to passengers than the minor inconvenience of cement dust in the coffee, and to the architect concerned a routine job.

*

Sometimes when an imposing symmetrical design is the problem—as at Collinstown, Dublin—the problem of graceful addition and subtraction is a very tricky one. ASTRAGAL welcomed, therefore, Sir Hugh Casson's recent article in *The Observer*, in which he made a plea for the retention of "huttied camp" airports. This, the argument ran, was more economic, as it was obviously cheaper, than escalators and marble floors, more efficient (because it was more flexible and who knows which way air-traffic will move in the next twenty years, and what sort of buildings it will require?), more aesthetically valid, because it was in character with the transport system it served, and psychologically more wel-



In our issue for December 3 ASTRAGAL asked if any architects were living or working in buildings of historic interest. Peter Elphick, of W. Dobson Chapman and Partners, sent him this picture of his firm's offices, Jordangate House, in Macclesfield. It was built in 1728 by a Mr. John Glover, and in 1745 Prince Charles, the Young Pretender, established his headquarters here until his army was driven back by the Duke of Cumberland.

come to the passenger, who was not compelled to leave the grandeur and stability of a banking hall for a frail aluminium shell.

*

Airports—in other words—should be more like Hertfordshire schools than City insurance offices, and even the glories of dear old Tempelhof—wearing wonderfully well—and dear old le Bourget, to say nothing of the new London Airport will persuade ASTRAGAL otherwise.

KEEPING UP WITH JONES

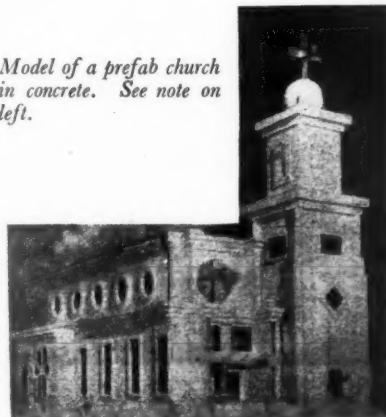
If you are one of those who feel it is high time that someone took a strong line on aesthetics, symbolism, and all that, you will probably be sorry that you missed some words of overpowering wisdom that recently came from a firm in Bristol which has dreamed up a prefab church in concrete. They announced that they had been struck by a "paucity of design for modern church construction; most have a secular appearance or a development of fantastic additions" (their syntax, not ours). This paucity they propose to combat with a design which is functional, beautiful and sacred, and equally useful to any denomination.

So far, jolly good; and further "It would be a building of great strength... suitable for either town or country"—wind-loads, you know, and the risk of the roof being raised by vociferous rural Non-conformists—and the tower has a number of prefabricated symbols already built in, depicting, among other things, the overthrow of paganism, and the final sacrifice as outlined in Ezekiel's Vision.

*

Then comes the pay-off. "The body of the church, in design, is in the ancient Minoan Mycenaean" which, of course, is appropriate to all Christian denomina-

Model of a prefab church in concrete. See note on left.



*By Jane Barrie. (Hammond, Hammond, 10s. 6d.)



Coventry Cathedral: More Revisions

This photograph shows the latest of a number of revisions that Basil Spence has been making to his Coventry Cathedral design. The Graham Sutherland tapestry has been moved 50 ft. back from its earlier position immediately over the altar to the (liturgical) east wall of the Lady Chapel, where it will still be seen from the nave, as in this picture,

through a light metal altar screen and where it will be lighted from the side. The other new development shown is the piercing of the shell-concrete vault by a pattern of small openings, designed to improve the acoustics and bring out the delicate lightness of the structure. Artificial lighting will shine through these openings.

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tions, while the outside of the building has been kept plain "in accordance with modern practice, and a ruling of Inigo Jones who said in effect 'outwardly a building should be plain, but inwardly should fill us with zeal and fire'."

So there you have it, one of the acutest stylistic problems of the day solved in accordance with modern practice, and by reference to the precedents of History, not to mention Pre-history. The effect you may see from the photograph, on page 801.

AS OTHERS SEE US

Because he was on a jaunt to the Continent at the end of October, and therefore failed to hear Sir Hugh Casson's presidential address to the AA, and because everyone he has spoken to since has said "It was the funniest thing ever! You were in it but I'm jolly glad I wasn't," ASTRAGAL has been waiting with fluctuating impatience for his copy of the *AA Journal* with the transcript in it.

Now that it has come at last, ASTRAGAL is at a loss to know what his friends were talking about. These five or six imaginary portraits of types of architectural degradation, the Busted Revolutionary, the earnest intellectual, the Provincial Empiricist, the chichi Kensingtonian, the Academician and the Civil Servant—these are the spitting images of the people who buy me drinks in their efforts to get their schemes published or hushed up.

The grotesque, outrageous portrait of an architectural journalist, though it is a gross slander on the profession as a whole is, thank goodness, *nothing* like ASTRAGAL, who never allows his friendship for individual architects to prejudice his judgment of their works, and never condemns his good ideas to oblivion because he knows that his writings will be read and consulted for many years to come, unlike some journalists he could think of—and come to think of it, Sir Hugh's portrait was rather like some of them . . . hm . . . I wonder . . . where's the phone book . . . I'll give him "absurd but lovable."

ASTRAGAL

POINTS FROM THIS ISSUE

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The Editors

EDUCATION AND THE FOREMAN

THE NFBTE recently published their second report of the standing committee for the training of General Foremen. No less than fifty-nine technical colleges now offer courses in General Foremanship studies. Candidates for the certificate course are required to hold a City and Guilds Full Technological Certificate in a building craft and an Ordinary National Certificate in building—unless they are aged over 30, when the completion of a preparatory course of general foremanship studies may be accepted in place of the Ordinary National Certificate.

The outline syllabus so far prepared is in four sections: site administration and control, site organization and method, personnel administration, and, finally, surveying practice. Initial experimental courses which certain colleges have been invited to organize will consist of 200 hours instruction on two nights a week for two years.

Architects everywhere will welcome the NFBTE's enterprise in striving for a certificate course. It is another conclusive sign that the building industry is at last getting itself trained, as well as organized at the vital level, for real efficiency of building management. A close study of the details of the course does, however, reveal another issue. Much of the course could be of real value to senior architectural students. This is perhaps obvious. There is, after all, very little in the whole field of building which it does not pay the architect to study. But we question whether there is anyone at the top of the building industry tree who is keeping an overall eye on the different methods now used for training building foremen, clerks of works, surveyors, engineers and architects. It may possibly be that these different courses could, at certain early stages, be linked together; an arrangement which would be economical in teaching time and in equipment and would encourage good relationships between various types of student. Has anyone thought, yet, of a Faculty of Building? Everyone talks glibly today of the necessity for good architect-builder relationships. Might we not introduce the pair when they are a little younger and more receptive?

FOCUS ON

Maurice J.
 PILCHER, Anthony J.
 542 PILKINGTON, Collis Atkin, Housing.
 9176 PILKINGTON, Henry Lionel Gordon, 52.
 483 PILKINGTON, Thomas, Britannic Buildings,
 19 PILL, Arthur Edgar, 13 and 15 High Street, Ba.
 3 PILLEY, Amon Vivien, 7 Hill Road, St. John's V.
 9 PILLING, Harry, 2 Ashford Grove, Lumber Lane,
 8 PILLING, Randolph Smith (Guns), 69 Barnley Road,
 8 PIM, Arthur Sidney Bernard, 14 Bentley Farm Close, E.
 1 PIMM, Francis William Cecil, Hillsborough, Livingston
 PINCKHEARD, John Albert, Booth & Ledebor, 141
 1 PCKNEY, Roger Arthur Philip, 7 Gray's Inn Sq.
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YOU

The JOURNAL's Guest Editor
 Professor Bowen continues to give
 results of his enquiry into the state
 of the architectural profession.
 (The names shown in the headpiece
 above were taken at random from
 the Architect's Register, and are
 not related to this article.)

Guest Editor :

Professor IAN BOWEN

The Architect's Status

THERE are many questions of professional conduct and etiquette which are best discussed among architects themselves. In this article some reflections on the status of architects will be made exclusively from the point of view of an economist who is also a student of building economics. The quality of British architecture today is not under discussion, but the economic and social organization of the profession.

Quality is, of course, involved in this issue, so perhaps with all due deference as one wholly unqualified to discuss the point, I may remark that, to the outsider, some of the modern schools of British architecture seem to have produced practitioners of a merit unsurpassed by other countries, and that the general level of quality resulting from the reforms introduced into the profession over the last twenty years has steadily risen.

This view is widely accepted and it therefore becomes a matter of some public astonishment that architects do not command, in this country, a freer hand in the design of the new buildings and conversions of old buildings, which together form such a large part of our constructional programme.

The gross value of constructional work done by all agencies in this country in 1952 was £1,600 million, of which, omitting civil engineering and repair and maintenance work from the total, some £800-900 million would consist of new work and conversions of property. No reliable figure is at present available of the total gross earnings of architectural offices, and until some calculations can be made, it would be wise not to put down some speculative guess, but at the very outside, and on the most favourable view, not more than 40-50 per cent. of this work can have been taking place under the direction of private or public architects, and the proportion was, in all probability, very much less (it may have been as low as a third or a quarter). Some of the "repairs and maintenance" jobs were, moreover, substantial.

The point which now needs to be considered is, whether this is not the fault as much of the building industry as of the architectural profession itself.

COSTS AND TECHNIQUES

It is clear from our sample that the architectural profession would like its members to be more fully trained in their early years in control of costs and in knowledge of technical building problems. Both these ideals are unattainable so long as the building industry itself is backward in both respects. For both historical and economic reasons the method of controlling costs within the building industry combines the disadvantages of elaboration and primitive thinking. It has fallen into the hands of the specialists known as quantity surveyors, a profession which would not exist if the building industry was organized on sound industrial lines.

The traditional methods of quantity surveying, although they are slowly improving, were unsound just because cost control in building was unsound; yet this very unsoundness made necessary the creation of a profession of quantity surveyors.

For example, following the old procedures a quantity surveyor will itemize all the parts and details of the building and estimate a price for each of the items. Both the builder and the client are really interested only in the final figure, and, so long as any errors of estimate of the quantity surveyor cancel themselves out, no great harm is done. The fact remains that at the end of the job, in all likelihood no one will have taken records to check whether each item has cost more or less than was originally estimated. Final costs are rarely documented in such a way that the basis of the estimate can be revised accurately and up to date for future buildings.

This sketchy account refers to practices which are now out of date, and have been substantially modified by the

most progressive firms operating today, but they remain to a large extent the procedures still followed, and in themselves are bound to give rise to uncertainties as to the final cost of any building, but worse still, they cut at the root of scientifically worked-out economical design.

VARIATIONS AND CHANGES OF PLAN

The other aspect of building cost control which has so often been criticized by committees and working parties is the inability of the British industry to work to a fixed cost. There is nearly always a variations clause in contracts, and the uncertainty and flexibility due to this leads both to delays in building and changes in final prices charged. Worse still, so long as the system persists, labour productivity is not likely to increase substantially.

All these points were fully made by the Anglo-American Committee on Productivity. The architect cannot carry out the suggestions made by that report, namely to plan ahead to the last detail, unless he is working in an economic environment conducive for that result to be obtained. The case today is almost exactly opposite. There is no incentive for the building owner to demand early planning. He demands, instead, the right to an extraordinary vagueness in stating his specification. Nearly always he values highly the right to make alterations at the last minute, or even after the job has got under way. The builder, too, has little economic incentive to work to a rigidly predetermined plan. In many cases a large part of his margin of profit comes from exercise of the variations clause, or as a result of alterations made after the job has begun. The building industry is not a heavily capitalized one, and the builders therefore do not have the incentive of the civil engineering contractor, who has heavy plant to get on to, and out of, the job promptly to a narrow schedule. On the contrary, there is some incentive to spin out jobs as a means of retaining a pocket of skilled labour and certainly it rarely works out that time is money to the builder. There are often reasons why architects themselves should not press for speed.

Men's actions are determined strongly by economic motives, though not exclusively. It does not seem likely that the architect can re-occupy his rightful position, if it is so deemed to be, of building efficiency expert, until arrangements are made to change the economic scheme under which so much work is carried out today.

It might be more than an ideal exercise to consider what would be required to make it possible for architects to be employed in the control of all building work over, say, £25 in value. If any

attempt were made to enforce such a system there would have to be more architects. Much more important is the fact that they would have to be fulfilling satisfactory economic, as well as æsthetic, purposes. The economic justification for that control would be the saving in final and working costs of buildings, both cost of construction and costs of maintenance and running. What would be involved, too, would be the complete overhaul of the costing systems now practised in the building industry.

The hypothesis considered is not so absurd as it may at first seem. Even the smallest alteration of a house, or the building of a garage, raises problems of design, and, of course, of decoration and finish, in which nine times out of ten the client would have benefited from some expert professional advice. If all, or a very substantial part, of building were planned by architects down to such a low level (or to some other low figure—even £50 or £100), the total gross earnings

accruing to the profession would be several times their present value; the total cost of building should, however, be reduced.

Evidently the architect in these circumstances would play the part (looked at from one point of view) of a businessman. Experience in costs cannot be divorced from knowledge of the practices of the market (the terms and conditions of materials' purchases, for example). But this would not be an innovation. Already architects frequently have to busy themselves with such matters. (In our sample there was even one architect who financed his own constructional projects, with "most satisfactory results"—this architect suggested that all plans ought to be prepared by architects at scale fees, to be enforced before execution of the work.) Many building owners, as clients, look to their architects for explanations of varieties in costs, and in effect make them responsible for progress.

Successful teams of architects are, no

doubt, satisfactorily solving the problem of the varying functions which the architect's office is expected to carry out. But if the scale of architects' work were to be widely extended, then far more teamwork, or specialization within offices, would seem to be needed. The growth in both the number and size of offices would not necessarily stifle individual initiative and originality, but could provide a healthy environment for their fuller expression.

To the outsider, at least, the architect's office is, among other things, a business, and it must be efficient as a business if the client is to be satisfied. So long as the building industry is largely inefficient, however, there are serious limits to what architects can do.

Extension of the sphere of the architect, desirable though it seems to be, depends upon a prior reform of the building industry, as well as the enforcement of high standards of architectural performance, and the improvement of the width and depth of educational requirements.

BUS GARAGE FOR LONDON TRANSPORT AT LOUGHTON, ESSEX

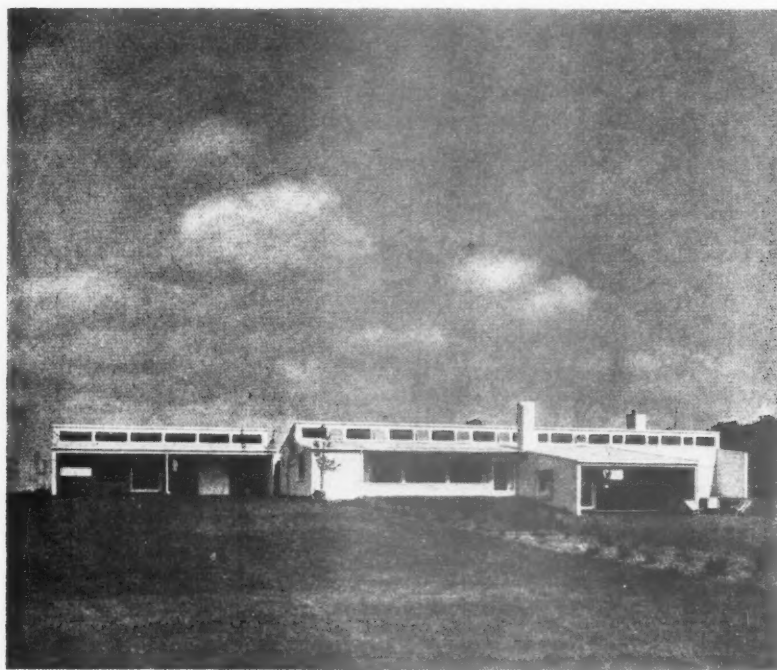


This LT bus garage was illustrated as a project in the JOURNAL for March 15, 1951. It was designed by F. R. S. Yorke, E. Rosenberg and C. S. Mardall (in association with Thomas Bilbow, Architect to L.T.E.). Associate-in-charge, J. S. Penoyre ;

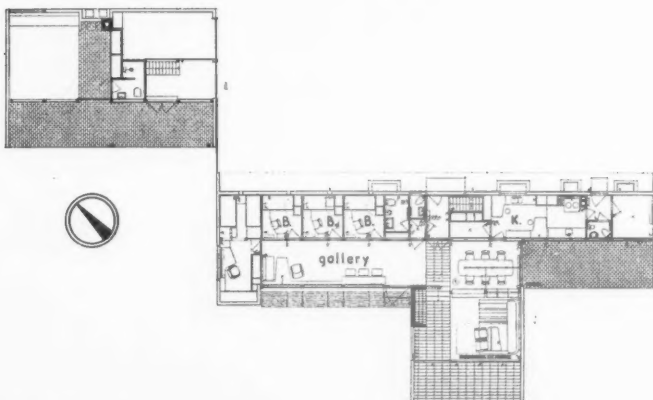
assistant architect-in-charge, J. S. P. Vulliamy. The structural engineers were Clarke, Nicholls and Marcel. The photograph above shows the docking area from the east ; below is a view, from the west, of the two-storey administration and canteen block.



HOUSE ON THE NAKSKOV FJORD, DENMARK



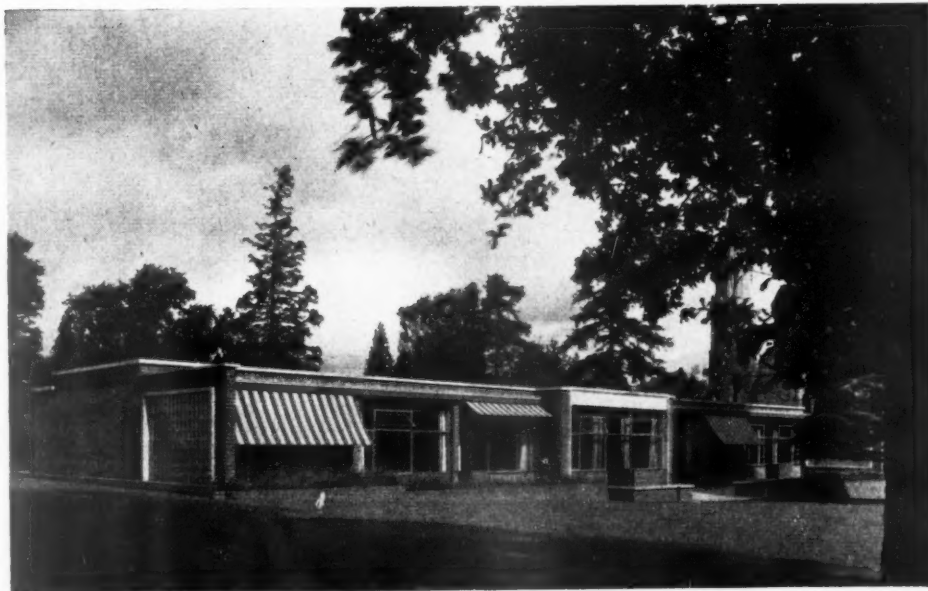
This house at Rasnæs, on the Nakskov fjord in Denmark, was designed by Finn Juhl. The living room and gallery outside the bedrooms face south; the ground slopes in the same direction. The bedrooms face north and are lit by clerestory windows and windows in the gallery wall. The main entrance and kitchen are also on the north side. The walls are of lightweight concrete. The roof is of asbestos concrete tiles. The floor area is 1,038 sq. ft. Above, the house from the south; below left, the gallery; below right, the living room. (Reproduced from Arkitekten, Denmark)



BUILDINGS IN THE NEWS: SANATORIUM, SCHOOL AND HOSPITAL

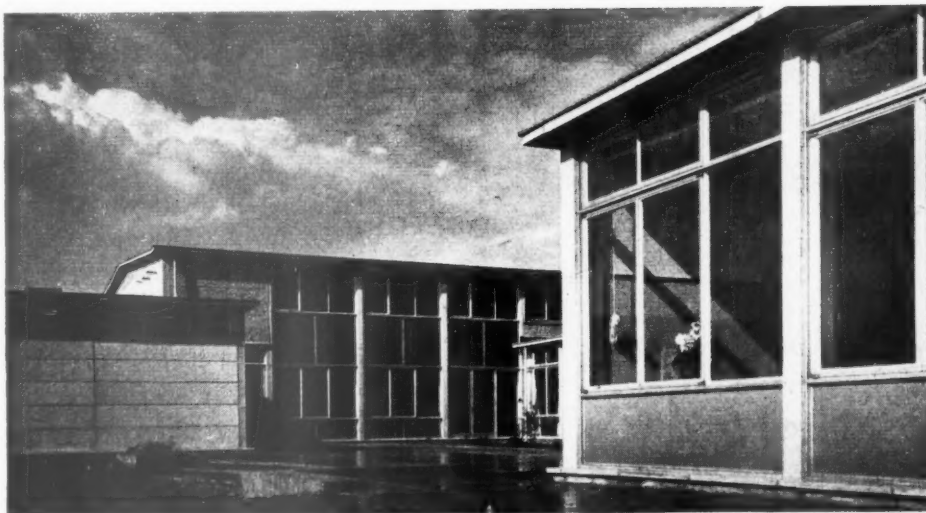
Sanatorium at Witley, Surrey

The photograph right shows the sanatorium for boys and girls at the King Edward's School, Witley, designed by Gerald F. Jones and Sykes for Bridewell Hospital, a charitable foundation, dating from the 16th century, who own the school. There are two 4-bed and four 2-bed wards, a convalescent room, surgery, waiting room, sluice and duty rooms, kitchen and resident matron's flat. Walls are of cavity construction, with breeze inner leaf, carrying a prestressed concrete roof. The architects were given advice on daylighting and glare control in the wards by the BRS.



School in Waltham Cross

The Hurst Drive Primary School, which was designed for the Hertfordshire County Council by Hening and Chitty, (assistant-in-charge, H. J. Lane Davies) in collaboration with C. H. Aslin, County Architect, is built on a flat site on the borders of Hertfordshire and Middlesex. The school is designed to accommodate 280 juniors and infants, mostly from recently built housing developments. The photograph, left, shows the east side of the assembly hall, which is faced with vertical mahogany weather boarding between glazing, seen across a courtyard.



Hospital in Balham

The west elevation of St. James' Hospital out-patients' department in St. James' Drive, Balham, S.W.17, designed by A. H. Devereux and E. L. W. Davies for the South West Metropolitan Regional Hospital Board. There are $\frac{1}{2}$ m. out-patient attendances a year at the hospital. The original contract price was £177,598. The floor area is approximately 32,000 sq. ft. For an illustration of the bridge connecting the department to the existing hospital see Working Detail on December 17, 1953. This out-patients' department will be illustrated fully in a later issue of the JOURNAL.



NEWS

SHOPS AND MAISONNETTES IN

MOHLG

Changes in Housing Medal Competition

There are to be changes in the character of the MOHLG Housing Medals Competition. It is to be extended to cover *post-war housing schemes completed at any time up to December 31, 1953* (provided they have not been submitted in previous competitions). (Previously, medals have been awarded for housing completed in the past year.) In addition, a diploma will be awarded to the builder responsible for the building work in each winning scheme.

Harold Macmillan, the Minister of Housing and Local Government, says that particular attention will be paid, in the judging of the next competition, to schemes presenting attractive solutions to the special problems of design linked with the use of "People's Houses" or new tradition houses.

The closing date for entries is February 27. In 1955 it is proposed to hold separate competitions simultaneously for (a) schemes of conversion or improvement carried out by local authorities and other public and private owners, and (b) schemes of new housebuilding by private enterprise. Schemes eligible for these new competitions will be those completed by the end of next year. It is hoped that the greater encouragement given to improvement work by the Government's Housing Bill and to private enterprise building by the freer issue of licences will produce some interesting schemes.

No decision has been taken for future competitions, but it is likely that a competition for new local authority housing schemes will be held in 1956 and may, thereafter, alternate with competitions featuring other selected aspects of housing.

CONCRETE

A New Substitute

The British Electricity Authority believe they have the answers to problems of building and constructing new aircraft runways designed to accommodate the ever increasing number of jet-propelled planes.

They are producing a highly-active pozzolan derived from the waste products of pulverized coal-burning power stations which, when mixed with lime and water, is said to be a good substitute for concrete.

RIBA

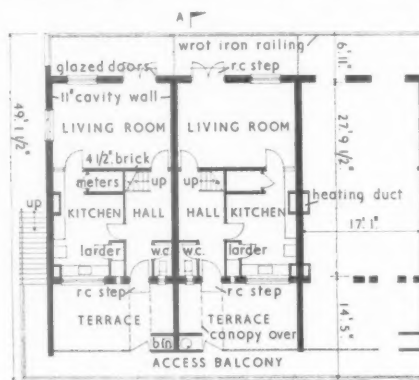
Royal Gold Medal Awarded

It is announced from the Royal Institute of British Architects that the Royal Gold Medal for Architecture for 1954 is to be awarded to an Australian architect, A. G. Stephenson. This is the first time the medal has gone to an Australian. It will be presented to Mr. Stephenson personally by the Queen when she visits Melbourne during the course of her present tour.

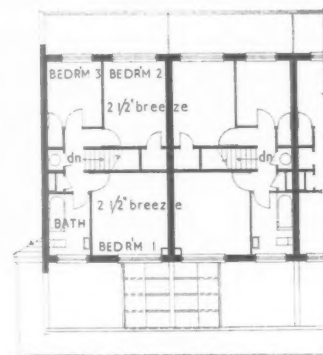
Mr. Stephenson, who was born in 1890 and was trained in Melbourne, Sydney and London, is a partner in the firm of Stephenson & Turner, who specialize in the design of hospitals. They were the architects of



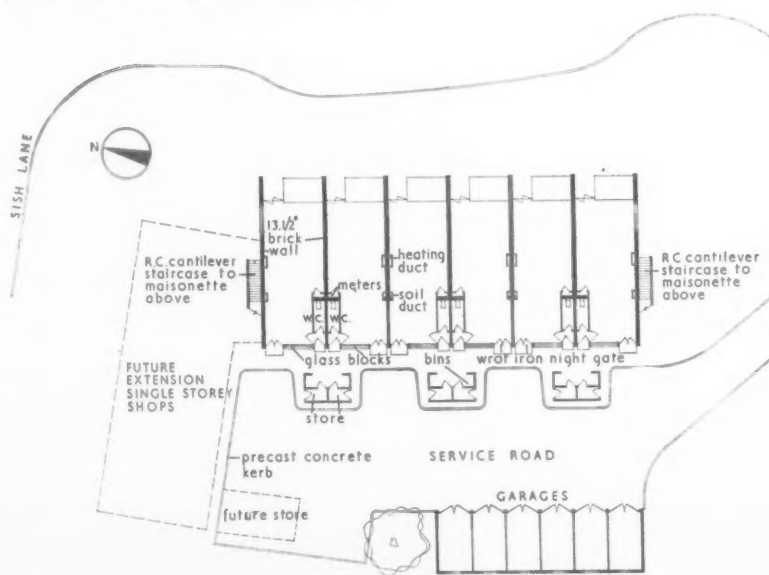
This block of six shops, with maisonettes over, is typical of several sub-shopping centres being erected in Stevenage New Town for the Development Corporation. They were designed by Professor Clifford Holliday, former Chief Architect to the Corporation, L. G. Vincent, Deputy Chief Architect, D. S. Craig, Group Leader, and D. F. Eatwell, assistant architect. The heating consultants were Oscar Faber and Partners. The photograph above shows the rear of the shops, with access balcony to the maisonettes,



First floor maisonette plan [Scale: $\frac{1}{32}$ " = 1' 0"]



Second floor maisonette plan



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

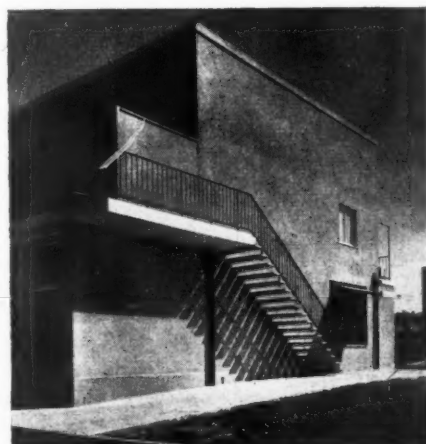
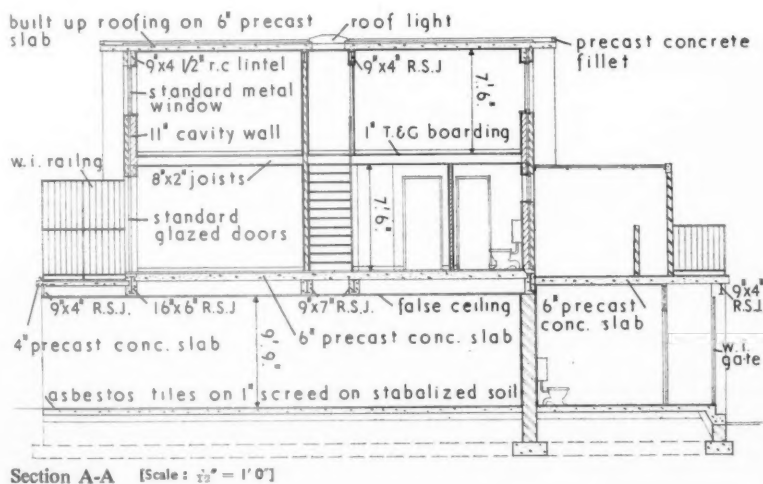
POPPLE WAY, STONY HALL, STEVENAGE NEW TOWN, HERTS



and in the foreground detached stores seen from the west. On this page, above, another view of the rear of the shops, showing panels of glass bricks between access doors. Right, the front facade of the block, seen from the south-west. Below, right, outside staircase at the south end of the block, leading to the maisonettes. The site is at the junction of new neighbourhood roads and access to the rear of the shops and to garages is from a service road. There are double doors for goods and a separate door, leading off a lobby, for the shop tenant. At each end of the block there is an outside staircase with cantilevered concrete treads, leading to maisonettes. Each maisonette has a private balcony, accessible from the living room on the west, and one on the east, visible from kitchen for supervision of children. The centrally placed staircases are lit by dome lights in the roof. Construction is of 13½-in. load-bearing cross walls to shops and 11-in. cavity brick walls above ground floor.



There is a 6-in. r.c. slab between shops and maisonettes and for the roof and first floor, joists and boarding. Shops have false ceilings for sound insulation and for thermal insulation there is plaster board on 2-in. by 1-in. battens to the roof slab. Facing bricks are Uxbridge flints and metal windows are in wood sub-frames. End walls are rendered, with a Tyrolean finish. The contract price was £29,729 and the estimated final cost is £26,372. The general contractors were Crook Bros. For sub-contractors see page 828.



the King George V memorial maternity hospital at Sydney, the general hospital at Concord West, Sydney, the largest in the Southern hemisphere, the Royal Melbourne hospital and many others; also of a hotel at Darwin, the first modern hotel to be built in the Northern Territory.

MOHLG

Soil Stabilization Methods

Methods of making roads on housing estates more cheaply and more quickly than by traditional means were demonstrated to Ernest Marples, Parliamentary Secretary to the MOHLG, when he visited Dartford recently.

Local authorities whose soil is suitable are being urged by the Ministry to adopt these methods which, since 1945, have saved Dartford Borough Council at least £24,000, or over £12 a house.

Mr. Marples inspected roads at the Temple Hill Housing Estate which have been built on stabilized soil, and saw in action a new British machine which performs the soil stabilizing process in one operation.

This, in simple terms, consists of mixing a stabilizer, usually cement, with the soil over which the road will run to provide a firm base for the tarmac surface. Laboratory tests are needed to show whether the soil is suitable. Those most likely to be are gravels, sandy soils, loams and sandy clays. But if the soil on the site is not easily stabilized a more suitable type can be brought in from elsewhere.

At Dartford the soil on the housing estates is readily stabilized. The top soil, containing organic material, is first stripped off and the remaining soil shaped to the line of the road. It is then broken up into small particles and mechanically mixed with cement. Water is sprayed on to make the mixture moist enough to remain stable when the surface is rolled, the last stage in the preparation of the base before the tarmac is laid.

The MOHLG say that the advantages of soil stabilization are as follows:—(1) Only about half the amount of cement normally used in concrete roads is needed. (2) No hardcore is required, and as the soil itself is used, it is no longer necessary for large quantities to be carted away. (3) A road can be built in a quarter to a fifth of the normal construction time. (4) Road making for housing schemes can be done when weather conditions are easiest and the danger of starting house building before the roads are ready is avoided.

Plant in common use in the building industry or in agriculture can be employed with or without slight adaptation. Special machinery is, however, now being made in this country.

Mr. Marples saw a new British single, pass-soil, stabilizing machine in action. It consists of a light crawler tractor towing a processing unit comprising a cement distributor followed by a mixer which pulverizes the soil and mixes cement with it. Water is then automatically added to the mixture of soil and cement. Towed behind the processing machine is another rotating mixer and a machine for compacting the soil cement with a series of dropping weights. As it travels over the cleared sub-soil it leaves a fully prepared road base behind.

MODULAR SOCIETY

Talk by Sergei Kadleigh

A correspondent writes:—"Architects in and out of the Modular Society will have to do some hard thinking if they take note of the Paper given to the Society last week. Sergei

Kadleigh provided a general introduction to the subject of 'Proportion and Symmetry in relation to Modular Co-ordination,' and, in his own words, introduced 'a vast territory ripe for exploration.'

"Leaving aside the technique of building, he enlarged upon the science of space and the philosophy underlying it. The Society were asked to consider what Science has to say about the organization of living and non-living matter, and what Philosophy had to say about the nature of Matter and its hierarchical Form, about Platonic Bodies and Harmonic Spirals.

"The application of applied science, including statistics, to building was one thing (we were told), but the application of pure science and philosophy was another. The first told us 'how' to build, the second 'what' to create. The second field was worthy of study.

"In the words of the chairman, who summed up, the paper was 'very deep, very thoughtful, and to be chewed over for some time to come.' In the words of an architect overheard after the meeting, 'But what is the Golden Section?'"

RIBA

Raymond Erith to Criticize Students' Work

Raymond Erith has undertaken to give the criticism of the drawings submitted in competition for the RIBA Prizes and Studentships, 1954-1955. His criticism will be given at a general meeting of the Institute, to be held in February, 1955.

COMPETITION

Crematorium for Kirkcaldy

The Royal Burgh of Kirkcaldy invites architects to submit, in competition, designs for a crematorium to be erected at Dunnikier Park, Kirkcaldy.

The assessor will be Ronald Bradbury. The premiums will be, first £300; second, £200 third, £100. The last day for submitting designs is Saturday, May 8, 1954, and the last day for questions is Saturday, February 20. Conditions may be obtained from the Town Clerk, Town House, Kirkcaldy. (Deposit £2 2s.)

DIARY

Contemporary Lighting Fittings. Exhibition at the BC, 26 Store Street, W.C.1. Weekdays, 9.30 a.m.—5 p.m.; Saturdays, until 1 p.m.

UNTIL JANUARY 7

Different Kinds of Nursery Schools. Exhibition at 1, Park Crescent, W.1. (Sponsor: The Nursery School Association of Great Britain and Northern Ireland.) Weekdays, 10.30 a.m. to 4.30 p.m.

UNTIL JANUARY 16

Honour Your Forebears. John Betjeman at the RIBA, 66, Portland Place, W.1. 6 p.m. Also Announcement of Award of Prizes and Studentships.

JANUARY 5

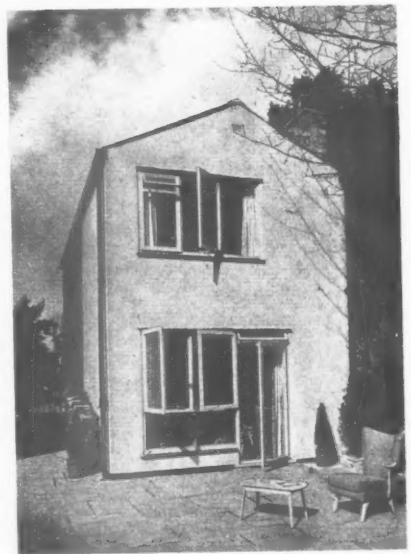
Cathedral Acoustics. Discussion at Trinity College of Music, Mandeville Place, W.1. (Sponsor: The Acoustics Group of the Physical Society.) 5.15 p.m.

JANUARY 5

University of Sheffield Architectural Competition. Premiated designs. At RIBA, 66, Portland Place, W.1. Weekdays, 10 a.m.—7 p.m.; Saturday, 10 a.m.—5 p.m.

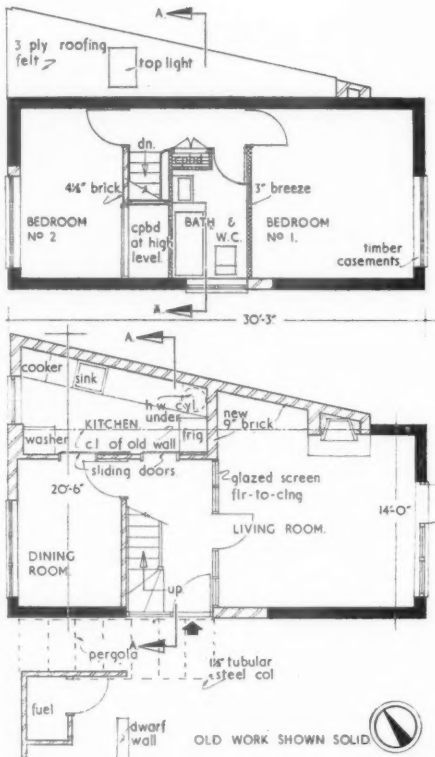
JANUARY 8—20

CONVERTED COACH

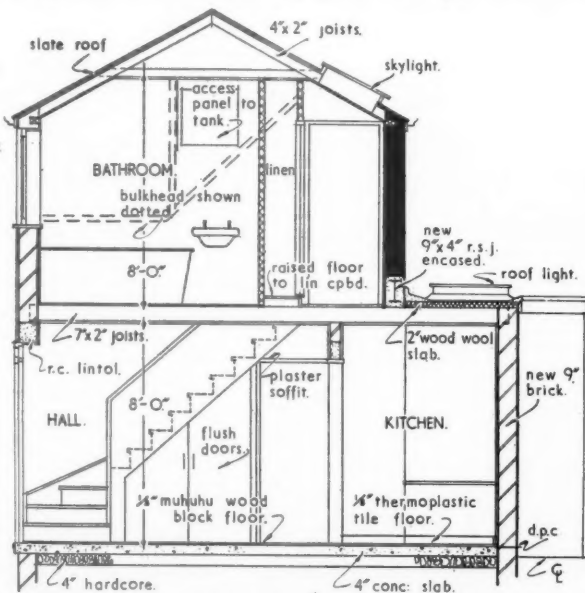


A derelict coach house at 37, Nightingale Lane, which had been war damaged, has been converted into a dwelling house. The architect for the conversion was Elie Mayorcas. Above are two views from the south, before and after the rebuilding. Originally, the interior measured only 12 ft. 6 in. by 28 ft. 6 in., and a height of 15 ft. 9 in. to the underside of roof joists at eaves. Permission was granted by the LCC, however, to extend the house at ground floor only up to the diagonal site boundary on the north-east side. The photograph top, opposite, shows the north-east edge of the site from the adjoining property, and bottom right is the kitchen, in this new extension. In the centre photograph is part of the living room, showing, on the left, the glazed

HOUSE IN NIGHTINGALE LANE, CLAPHAM, LONDON, S.W. 12

Ground and first floor plans [Scale: $\frac{1}{8}" = 1' 0"$]

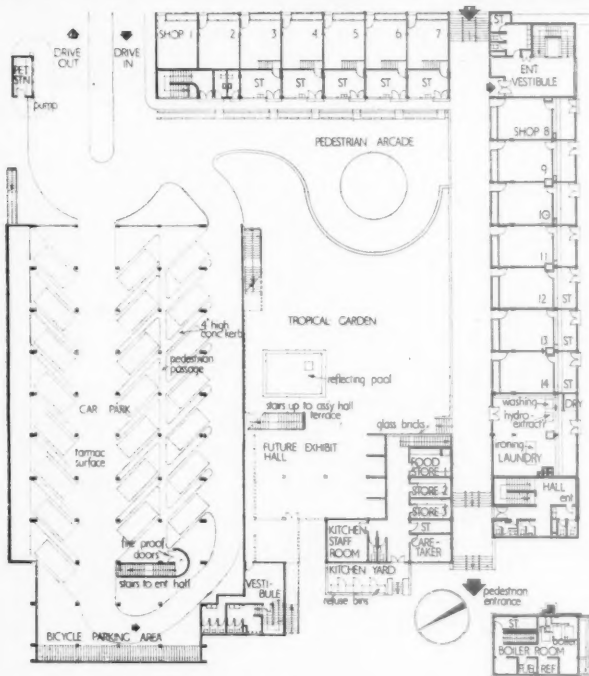
partition which provides light to the hall. The main house, to which No. 37 was originally the coach house, is only 12 ft. distant and consequently natural lighting is virtually confined to the north-west and south-east aspects. Furthermore, no windows were permitted on the north-east facade. Walls are of 9-in. London stock bricks, which are now finished externally with a tyrolean rendering.

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

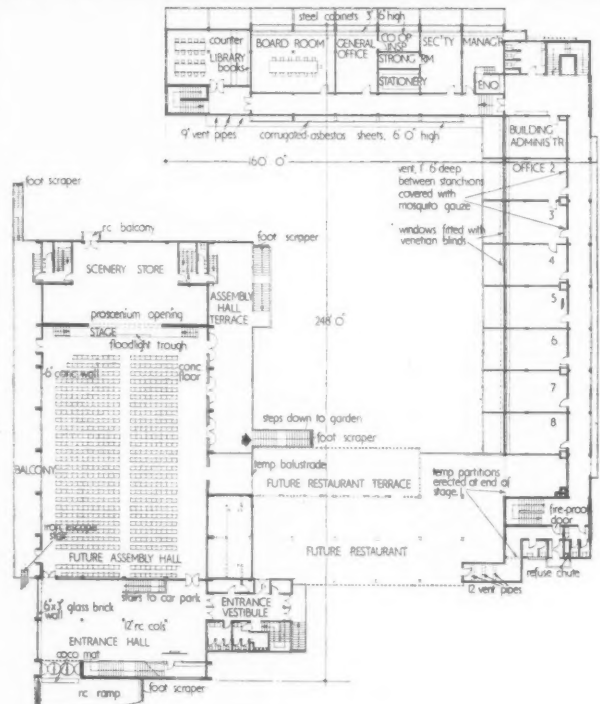
The original rough brick paving to the ground floor has been covered with a 4-in. concrete slab over a layer of waterproof cement and is finished with hardwood blocks. General contractors, Broadlands (London), Ltd. Sub-contractors, page 828.



NATIVE CO-OPERATIVE HEADQUARTERS AT MOSHI, TANGANYIKA



Ground floor and basement plans

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

The headquarters for the Kilimanjaro Native Co-operative Union at Moshi are designed by Dr. E. May and Partners. The function of the building is to form a cultural centre for Northern Tanganyika and when completed it will contain the administrative offices of the Union, shops, an assembly hall for 700 people, restaurant, hostel and car park. This scheme is experimental and is designed to be completely inter-racial. The building has a reinforced concrete frame and panel walls of pumice blocks. Top left, from the west; top right, the inner courtyard from the north; extreme left and left, two views on the roof terrace, where there is a small restaurant.



Miss Westwater contributes another of her news-letters on events in Scotland which are of interest to architects.

LINDA WESTWATER

Scottish News-Letter

THE Scot is well known for his love of litigation, and it may be this national trait which has led to the astonishing array of wigs and gowns which delights the eye at formal inquiries into Development Plans in Scotland. John A. McGregor, Planning Officer, Paisley, addressing the Scottish Branch of the Town Planning Institute, described the Scottish inquiry as "a lawyers' paradise," and deplored the fact that all objectors might not have an equal chance of being adequately represented and heard. Later in the discussion A. T. McIndoe, planning consultant, Edinburgh, estimated one day's costs to an objector in the region of £200. Whether this is valid criticism or not, the fact remains that so far only one Authority, viz. Paisley, has had its plans passed, though it is now two years since some of them have been lodged. During the inquiry into Glasgow's Plan, John Cameron, QC, Dean of the Faculty of Advocates, representing an objecting contiguous Authority, described the plan, which had been said to be fluid, as "having a closer resemblance to a jelly which had not begun to set." The issue, which is Glasgow's housing needs *versus* neighbouring amenities is not yet settled.

EDINBURGH PLAN

The formal inquiry into Edinburgh's plan is not yet started as the plan has only just been lodged. Already, however, a public inquiry has been held, owing to the storm of protest which arose over the city's intention to build houses at Meadowfield, on the eastern slopes of Arthur's Seat. The town council has engaged Senior Counsel and Professor G. Gordon Stephenson of Liverpool. Main objectors were the inhabitants of Duddingston, a village community unwilling to be engulfed by Edinburgh's new housing schemes, and the Dunsappie Society. The latter is a group of citizens interested in the preservation of Arthur's Seat who have banded together to protect, and called their society after the lonely loch high on the hill. It is worth while to note in passing that Sir Patrick Abercrombie, in his Civic Survey for Edinburgh, waxed quite poetic on the subject of Arthur's Seat, this wild volcanic hill in the heart of the city, and recom-

mended that there be no further encroachment of housing on the eastern slopes. The scheme is to proceed in a modified form.

Caledonia being indeed stern and wild and situated far from London, it is as well that its local councillors have hard heads. Some of the problems confronting local authorities are large enough to become national rather than local issues. Some months ago *The Scotsman* astonished its readers by photographs of what appeared to be at first sight widespread and serious bomb damage. On closer inspection the damage proved to be most unpleasing decay in the heart of the Royal Burgh of Stirling. Many historic buildings, including Prince Charlie's Coffee House, which fell to pieces during the last war, were shown to be irretrievably lost, and whole areas were fenced off for danger of collapsing walls. For years the town council has struggled with insufficient funds to tackle the problem of maintaining this Royal Half-Mile which is historically at least of equal interest to Edinburgh's Royal Mile. During the war, tinkers squatted and Irish labourers dosed down for the night where once Darnley lived, and where James the Sixth (and First), as well as his son Prince Henry, had their nurseries.

Two wars intervened since improvements were first mooted. In 1937 the late Sir Frank Mears drew up a scheme of reconstruction which is now being carried out by his firm. Only one or two buildings are capable of being restored. For the rest, new blocks of dwelling houses are replacing the ruins. These are being built in stone as far as possible, which means stone fronts, and there is good reason to hope that the old atmosphere will be recaptured, at least in part. Here, too, the National Trust played a large part in furthering action.

STONE BUILDING

The findings of the Department of Scientific Research in their recent inquiry into stone building in Scotland were published early this year. Remedies to increase production and lower costs were suggested, but the expected conclusion was reached, namely, that stone could never be used competitively with the cost of other building materials. There was a slight rumpus some time ago when the new MOW offices in George Street, Glasgow, were found to have been built in English stone! The official reply was that a suitable type of stone was not available in Scotland. The stone from the Dumfriesshire quarries is of a dull red colour, unbeloved by architects; there are limited quantities of honey coloured and greyish stone from more northern quarries, but there is apparently no light cream coloured stone readily available. The famous Craigleith Quarry which produced most of

the stone for the New Town of Edinburgh, is now extinct. A new approach to the problem is being made by the Scottish Council (Development and Industry) and their findings may be published this year. This committee is mainly concerned with freestone, but there are several types of whinstone being used locally in Scotland, and also granite. Kincorth, Aberdeen, for whose lay-out Robert Gardner Medwin won the competition many years ago, is being built entirely in granite, and it has to be admitted that, viewed from the outskirts of Aberdeen on a rainy day, it presents a rather dismal aspect.

PLANNER'S PARADISE

Rain, however, did not dull the sparkle of Aberdeen itself, although it did its best on the day of my visit. The city might well be described as a planner's paradise; it is manageable in size and its town council for years past has pursued the enlightened policy of buying up ground on the outskirts, and the University has preserved and kept up the old town most sympathetically. It has, of course, its black spots, and the sea front and its approaches from the town give J. E. Barlow, the director of planning, some problems of street surgery and of reconciling industrial spread with seaside fun. But these must be well compensated for by the many magnificent sites for housing and other purposes which surround the town. Some of the most attractive housing proved to be Swedish timber houses charmingly grouped among well-developed trees, and single-storey dwelling houses for old people planned round three sides of an open green. Children as well as old folk are well looked after by the Corporation, which has provided a number of small homes throughout the city, and, recently, a reception centre, the first of its kind in Scotland, at Craigielea. Here the children are analysed in order that the most suitable type of accommodation can be found for each individual.

A site for a bus station has been selected at Lower Denburn and new government offices are being built in Gallowgate, near Marischal College, that well-known granite building which appears to be made of cast aluminium. This area is being replanned, and includes, not far from the College, Provost's Skene's house, another fine 16th century house which exceeded the bounds of allowable decay. It is being restored by the MOW, who uncovered a remarkable painted ceiling during operations. Improvements are suggested for the banks of the Dee, which, though not built-up to any great extent, are somewhat neglected. Mr. Barlow wants to make the river accessible to the public for the length of its course through the city, so that a link is formed between the Harbour Area and the landward Green Belt. He also has

a scheme for tidying-up the northern aspect of Union Street Gardens, in the centre, which are spoilt by unsightly development fringing the railway at this point. His tidying-up policy is very comprehensive; a survey has been made of all derelict buildings, and also of all advertisements. One or two of the latter have already been challenged, and it is hoped that all which adversely affect the amenity of Aberdeen will eventually be weeded out. Constructive reports have been prepared for allotments, burial grounds, and children's playgrounds, and a report on playing fields throughout the city is in preparation. The Corporation has already prepared what is hoped to be the first of many Tree Preservation Orders.

The final submission of the Development Plan will be made this year, one cause for delay has been the Corporation's decision to include an area of comprehensive development, comprising about 8½ acres in the centre of the town to be redeveloped mainly for housing purposes. It is evident that Aberdeen's tradition for far-sighted planning continues, and in Mr. Barlow the city appears to have found the planning director it deserves, for it is obvious that, while retaining a wide view of the larger problems, his eye can focus very acutely on the smaller details so often ignored.

FORTH ROAD BRIDGE

The major topic of building interest in Scotland at the moment is undoubtedly the Forth Road Bridge. Vitally necessary, now more than ever, because of increased development of the Lothians and Fife, this bridge has been under consideration for more than one hundred years. Preliminary expenditure was authorized in 1948 to enable the scheme to be brought to the contract-letting stage. But when early this year the Forth Road Bridge Joint Board requested £2,000,000 to enable the preliminary work to be started the answer was No. When M. Lennox Boyd came down and repeated his answer in person the Scottish Covenant Association retaliated by a hand-out of leaflets to motorists waiting at the Ferry—"You can't have a bridge until you have a Scottish Government." The total cost is now estimated at £13,500,000, which would be spread over eight years. In 1948 it was estimated at £12,000,000, and Sir Bruce White, of Mulberry fame, then put forward an alternative scheme to convert the existing railway bridge to carry vehicular traffic above the railway track for £200,000; a scheme which is being talked of again now. Annual expenditure due to lack of a road bridge has been estimated at £765,000.

It seems unlikely that any progress will be made so long as the Government continues to regard the necessary expenditure as a part of the annual ex-



The 16th century Provost Ross's House in Shiprow, Aberdeen. The National Trust for Scotland and the Saltire Society have opened a fund for the restoration and preservation of the house, the oldest in Aberdeen.

penditure on roads, because roads in Scotland are on a sorry plight. Highland roads, particularly, are notoriously bad. An investigation of roads in north-west Scotland was carried out recently by the Press. It was found that it was impossible to travel at more than 20 m.p.h. on the greater part of roads classified as A by the MOT, and in the west of Sutherland excessively bad surfaces reduced the speed to 10 m.p.h. Parts that permitted a speed of 40 m.p.h. were found to be mainly due to the pre-war Crofter Counties Scheme, which provided a tar-bound surface, which is still good. Since this scheme sanctioned by Hore-Belisha petered out, the work, for lack of funds, has all been make-do-and-mend. The area with its magnificently spectacular scenery is sparsely populated, nevertheless the Dingwall-Garve-Ullapool road, single track like most of the Highland roads, has to carry one hundred and twenty fish lorries a day. Naturally transport costs are high, and during the last two decades the population has been steadily falling.

HOUSING PROSPECTS

In housing the prospect is much brighter, the total of permanent houses for the first six months of this year being 19,507, which is greater than the average yearly total in the period 1919-1939. Concern has been expressed in some quarters that schools and

churches are lagging too far behind. The greatest numbers of houses have been built in the four main cities, but the new towns are forging well ahead, and a new village is being built at Cannich, Invernessshire, for the GlenAffric Hydro-Electric Station. As a background to new life in the Highlands, this village, although its houses are stone-built, is disappointingly suburban in character. A. G. Jury, Glasgow's City Architect and Planning Officer, has just proposed a new and real "Miracle in the Gorbals." He hopes to replace the warrens which inspired the decor for the well-known Sadlers' Wells ballet of slum life with multi-storey flats.

CHEMISTRY DEPARTMENT

Recently completed buildings include a five-storey Department of Chemistry in Aberdeen, built in multi-coloured granite with a slated roof; a very straightforward office block in reinforced concrete for the Coal Board at Alloa by Egon Riss, and the graceful Health Centre at Sighthill, Edinburgh, by R. Gardner-Medwin. The last two buildings were recently fully illustrated in this journal, which may go some way to offset the remarks of the past president of the RIAS, when, at the Convention at Inverness, he deplored the lack of publicity given to the work of architects in Scotland.



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WORKING DETAIL

BALCONIES: 8

SPOTLIGHT BALCONY: COMMUNITY HALL, HEMEL HEMPSTEAD NEW TOWN

H. K. Ablett, chief architect; M. Hardstaff, senior assistant architect-in-charge: Hemel Hempstead Development Corporation



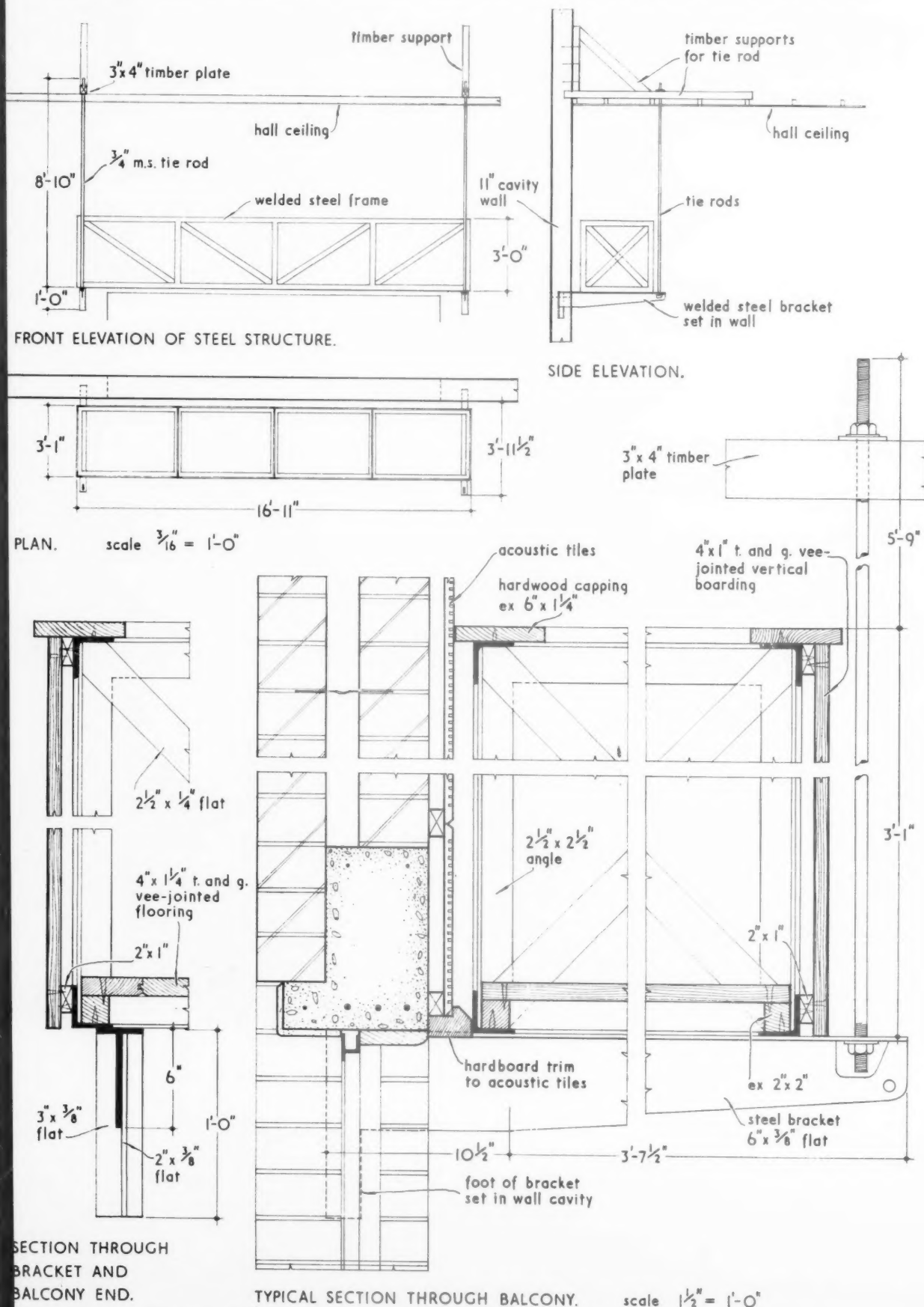
As the balcony is only for occasional use and not by the public, no permanent means of access was considered necessary. The steel frame was welded in one piece. The steel brackets get additional support from an extruded "foot" which bears against the outer leaf of the cavity wall and from the $\frac{3}{4}$ -in. steel tie rods which are bolted to a timber framing situated above the ceiling joists.

WORKING DETAIL

BALCONIES: 8

SPOTLIGHT BALCONY: COMMUNITY HALL, HEMEL HEMPSTEAD NEW TOWN

H. K. Ablett, chief architect; M. Hardstaff, senior assistant architect-in-charge: Hemel Hempstead Development Corporation



WORKING DETAIL

DOORS: 17

EMERGENCY EXIT: COMMUNITY HALL, HEMEL HEMPSTEAD NEW TOWN

H. K. Ablett, chief architect; M. Hardstaff, senior assistant architect-in-charge: Hemel Hempstead Development Corporation



The exit sign is illuminated by a lamp which is fixed at the back of the panel. This lamp is wholly invisible externally and shines through the thickness of the perspex sheet. Since perspex has the quality of bending light rays, these are turned downwards within the thickness of the material and illuminate the lettering cut in the surface. The letters are picked out in green in place of the more usual red since an exit door should denote "safety" rather than "danger."

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PRIMARY SCHOOL

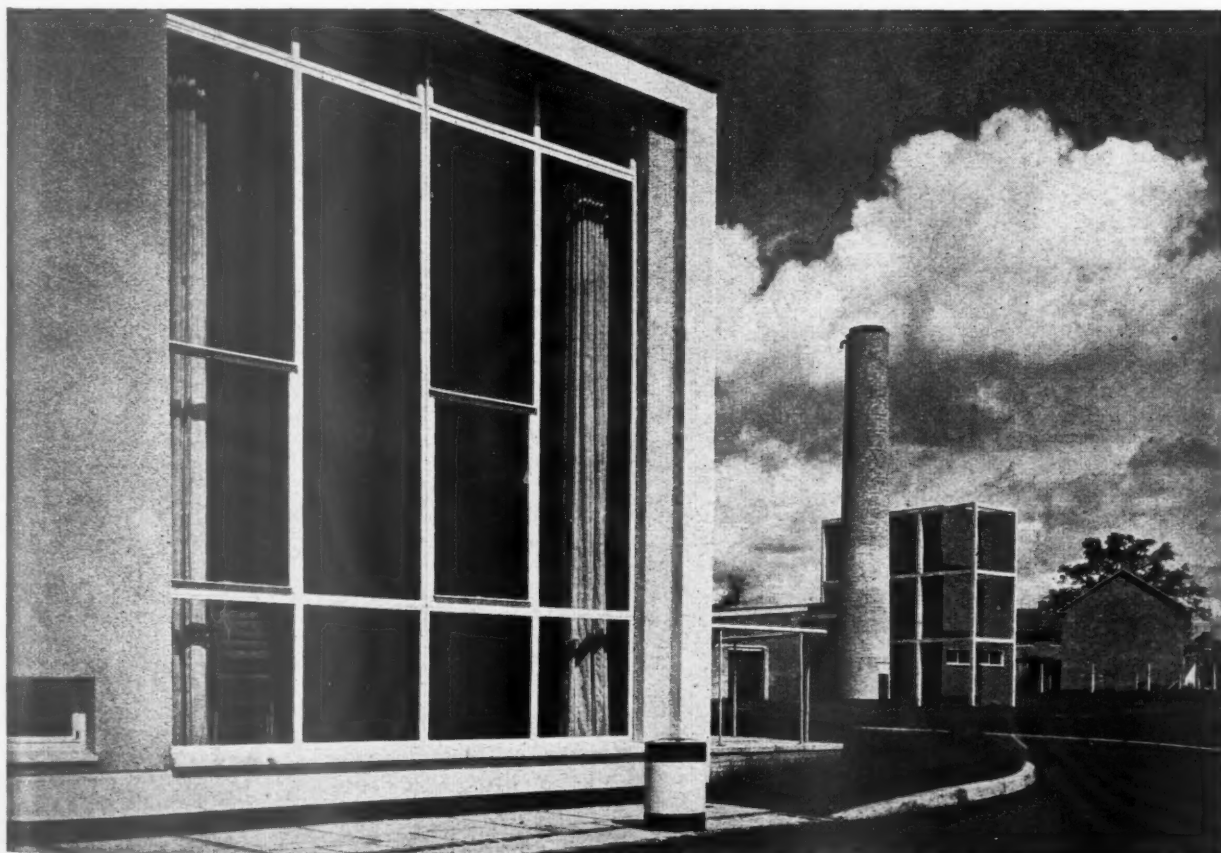
in WIMPSON LANE, MILLBROOK, SOUTHAMPTON

designed by E. D. LYONS and L. ISRAEL

consulting engineers, reinforced concrete, HAJNAL KONYI and MYERS
services, J. STINTON JONES and PARTNERS, quantity surveyors, VEALE and SANDERS

The Wimpson Junior School on the Millbrook Estate, Southampton, is a three-form entry school to accommodate 480 pupils. The school occupies the southern end of a seven-acre plot in the centre of the estate, which lies on the western boundary of the city. A part of the site lying to the north of the new junior school is reserved for a future infants' and nursery school. The kitchen and boiler house have been built large enough to serve this future school, when constructed.

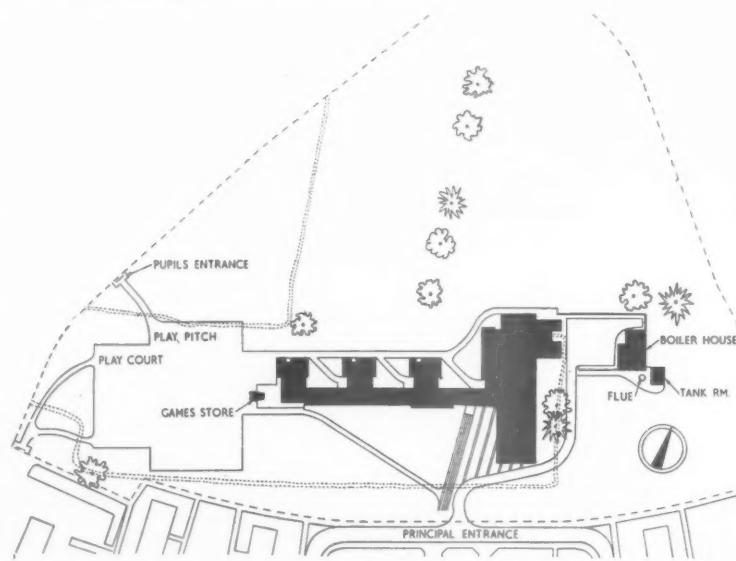
The south-east corner of the assembly hall, and boiler flue.



SITE.—The site is low lying and forms a collecting basin for water drained off the higher level neighbourhoods to the north. The sub-soil was badly water-logged with a standing water level only 12 in. below the surface. Further complications were caused by two springs which had to be diverted. The whole of the site has been drained by an extensive land draining scheme connected to the public storm water sewers. The few existing oak trees have been preserved and with the land drainage, are returning to sound health. The building is set back 100 ft. from the public road and in siting the main entrance to the grounds the major axis of the surrounding housing layout was taken into account.

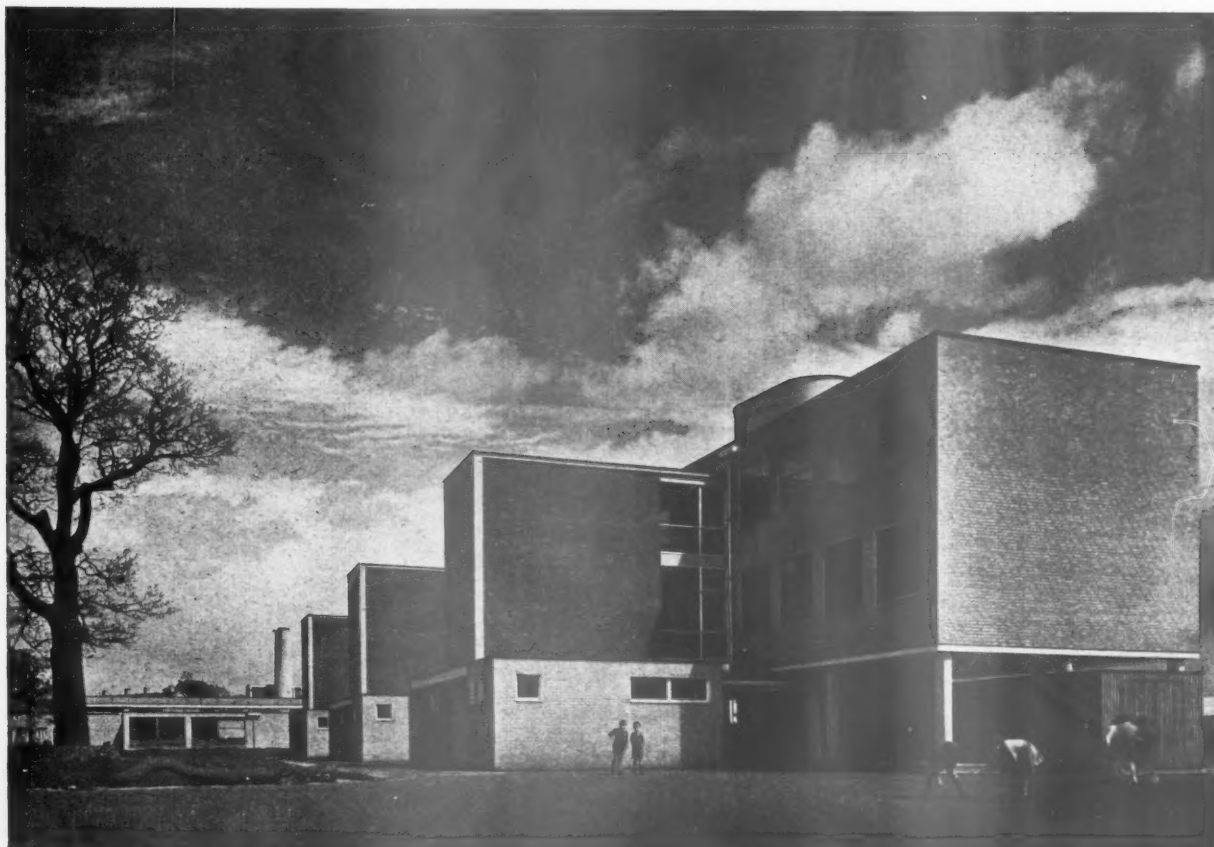
PLAN.—Owing to the site difficulties it was essential to reduce ground coverage and plan vertically where practicable. The teaching block is on three floors; and the ground floor is used mainly for cloakrooms and lavatories and staircase access to pairs of classrooms on the first and second floors. There are also lavatories near second floor stairheads. Each classroom is provided with open storage space and there

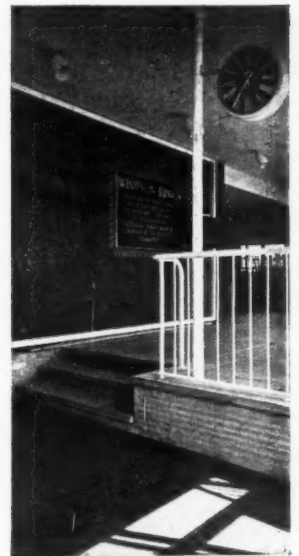
is a games store situated in a covered play space at the west end of the classroom block. The three tank rooms on the roof are situated to serve the groups of lavatory accommodation on ground and second floors. In the single-storey administration wing the assembly hall and dining hall are divided by sliding-folding doors, as are the staff common-room and M.I. room, to allow flexibility of use. The boiler house and main tank tower are kept



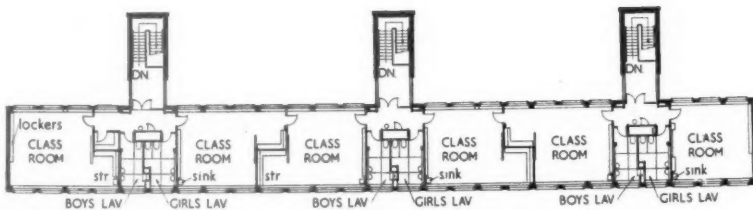
Below, the classroom block from the west. The three projecting wings on the north side contain staircases and lavatories on ground floor level.

Site plan

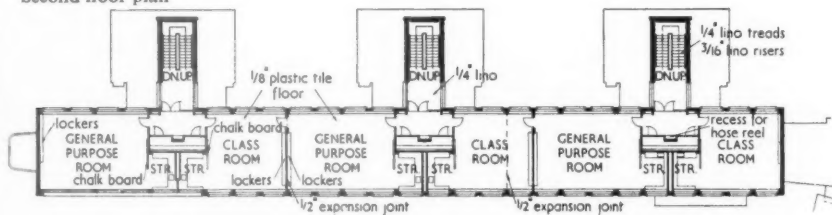




Above, left, the main entrance, showing part of the assembly hall on the right and a corner of the classroom block on the left. Above, part of the entrance hall seen from the waiting space.



Second floor plan

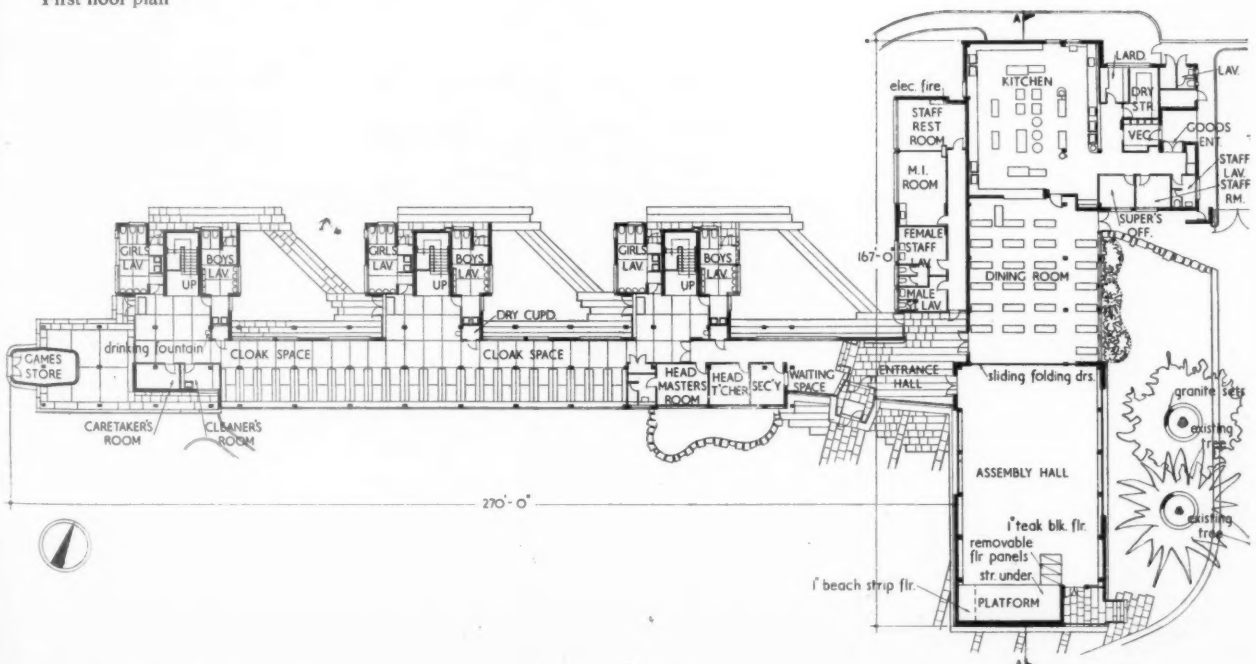


First floor plan

PRIMARY SCHOOL

in WIMPSON LANE, MILLBROOK,
SOUTHAMPTON

designed by E. D. LYONS and L. ISRAEL



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



PRIMARY SCHOOL

in WIMPSON LANE, MILLBROOK
SOUTHAMPTON

designed by E. D. LYONS and L. ISRAEL



Above, the staff room and M.I. room from the north-west. Above right, dining room showing kitchen servery. Right, classroom block from the east. Below, the cloak space on the ground floor of the classroom block.



separate from the school and are intended to link up with the future infants' school. The entrance hall forms a link between the classroom and administrative blocks.

CONSTRUCTION.—There is a reinforced concrete frame on r.c. foundations supporting precast lightweight foam-slag covered r.c. beams and 11-in.

cavity brick external walls. The whole of the site slab is r.c. in a double layer with a waterproof membrane added. The few underground ducts are designed as r.c. continuous U-beams to combat the upthrust of water pressure in the sub-soil.

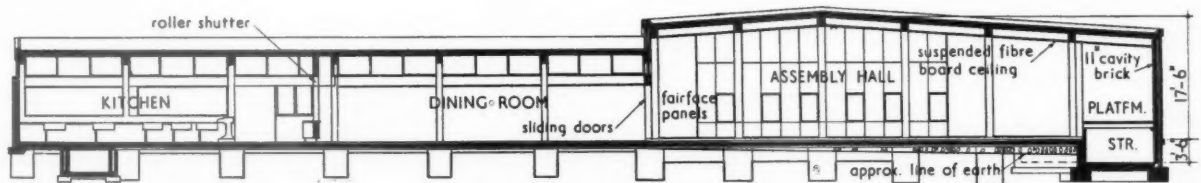
FINISHES.—All roofs are covered with built-up bituminous felt covered with green stone chippings. With the exception of some clerestory windows and windows to the cloak space and assembly hall, all windows are of hardwood and double glazed. All underground ducts are tanked with three layers

of asphalt and loaded to a weight at least equal to their displacement in water. All joinery is in hardwood, left oiled and varnished. Floors are covered with asphaltic tiles in classrooms, dining and staff rooms, teak blocks in the assembly hall and stone flags in the entrance hall. A considerable area of internal wall space has been left fair faced.

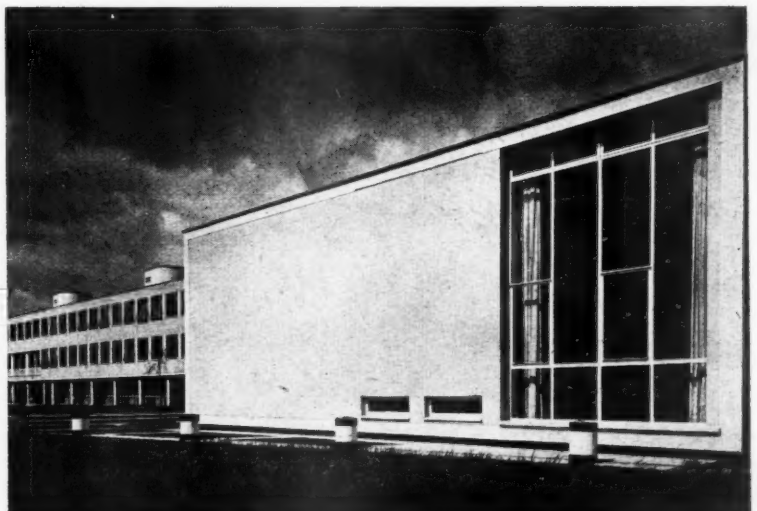
Externally, facing bricks are pointed with turquoise blue, grey and yellow pointing. The internal colour schemes are of white, light and dark grey and small areas of bright colours.

The general contractors were R. H. Lynn & Co., Ltd. For sub-contractors, see next week's A.J.

Below left, steps leading to the assembly hall platform. Bottom, left, part of the east wall of the assembly hall with the dining hall beyond. Below, the assembly hall looking towards the classroom block. Bottom right, the south wall of the assembly hall with the classroom wing on the left.



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



BUS GARAGE

for LONDON TRANSPORT EXECUTIVE

in LANSDOWNE WAY, STOCKWELL, LONDON, S.W.8

designed by ADIE, BUTTON and PARTNERS, in association with THOMAS BILBOW, architect to LTE, consulting engineer, reinforced concrete, A. E. BEER, electrical, J. H. COOMBS and PARTNERS, heating and ventilation, H. CARTER, new works engineer, LTE

The large bus garage in Stockwell, which is part of the scheme to replace London trams by buses, has been in part use since April, 1952, but has only recently been brought into full use. The clients required a covered parking space for 200 buses, together with necessary facilities for inspection, fuelling, maintenance, repair work, operating offices, staff rooms, canteen, etc. The site, which had been largely cleared by enemy action, is bounded by two fairly wide roads, Lansdowne Way and Binfield Road, and is a short distance from an important intersection of main roads.

The main parking area looking north-east.





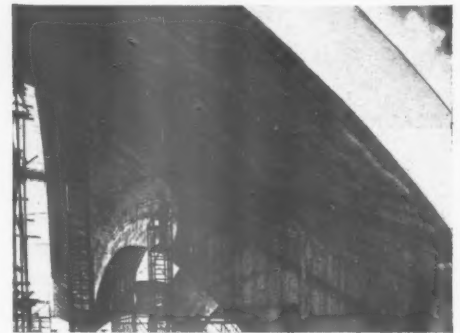
PLAN.—The main influence on the design was the need for unrestricted floor space to accommodate the requisite number of vehicles. On this irregularly-shaped site the parking area had to be situated at the largest end—the north end. The offices and staff rooms are contained in a separate block on the Bin-



CONSTRUCTION.—The main building is 392 ft. long. It is constructed of two-hinged reinforced-concrete portal frames spanning 194 ft. and connected by arched vaults spanning 42 ft. to give nine bays and an uninterrupted floor space of 73,350 sq. ft. The frames are carried on piled foundations, on which they bring a load of approximately 400 tons. The prescribed headroom throughout the garage was 16 ft. and this determined the location of the H beams (see section overleaf) at which level the main frames begin to spring. The r.c. vaults which span 42 ft. between the main frames are struck to a radius of 27 ft. and contain roof lights each 140 ft. by 14 ft. Passing across the roof lights at 10 ft. centres are 6-in. wide r.c. ribs designed to take care of unusual loads, e.g. snow, and to prevent torsion on the main ribs. The only longitudinal tie between the frames is the H beam (seen in the section



Left, the parking area, looking towards the north wall. Above, the Lansdowne Way facade from the north-west. Below, progress on one of the 42-ft. wide arched vaults which link the main portal frames.



BUS GARAGE

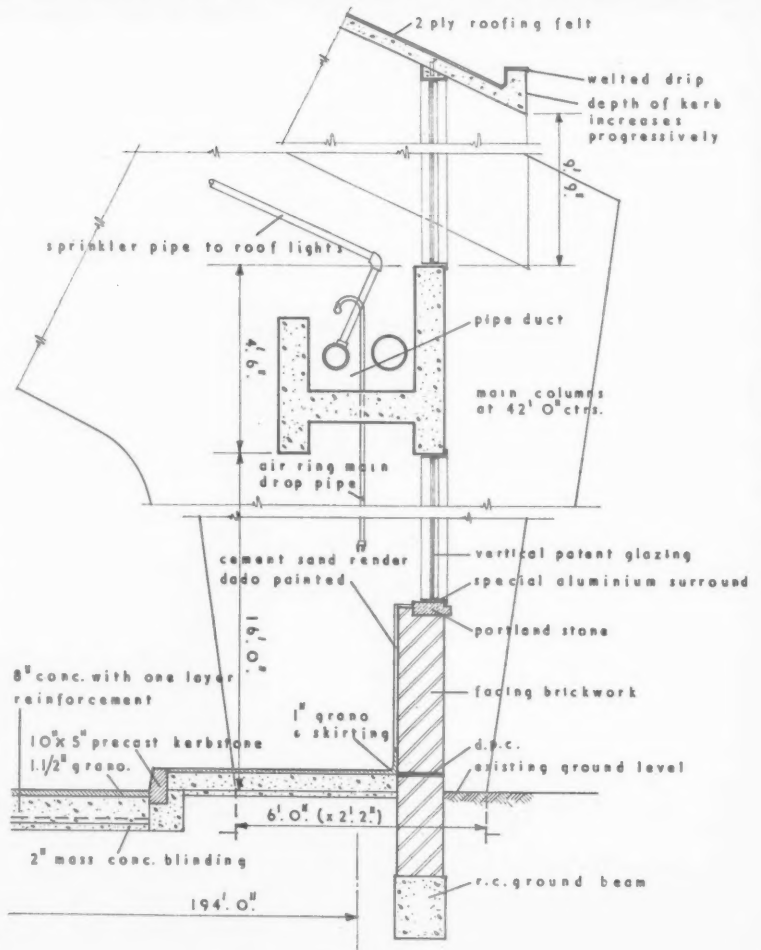
in STOCKWELL, LONDON, S.W.8
designed by ADIE, BUTTON and PARTNERS

on this page) at haunch level which is carried round the four sides of the garage and conceals 9-in. cast-iron rain disposal pipes, 6-in. sprinkler main, compressed air and water ring mains and electrical conduits. The comparatively small section of the main frames made it essential to weld the main reinforcement (instead of the customary laps) and some 1,200 V-butt welds were made in the arch ribs and ties connecting the pile caps. Concrete was delivered by pump and vibrated with immersion vibrators; the mix formed in frames and vaults was 1 : 1½ : 3 nominal and elsewhere 1 : 2 : 4 nominal.

FINISHES.—In the garage and docking area floors are of granolithic on r.c. slabs. Around the parking area there is a 5 ft. 6 in. high rendered dado painted with a water resisting paint.

SERVICES.—Lighting over the whole parking area is provided by continuous runs of unshaded 8-ft., 75-W. fluorescent lamps following the arch of the main ribs, in runs of 22 lamps.

The general contractors were Wilson Lovatt & Sons Ltd. For sub-contractors, see next week's AJ.



Part section through centre of typical 42-ft. bay on north wall of parking area [Scale : ½" = 1' 0"]



wall.
orth-
ched



b
y

ound



PUDLO GUARDS AGAINST RISING DAMPNESS AFTER THE WORST FLOODS FOR YEARS

In January last, the defence wall holding back the tidal waters of the River Great Ouse was breached by the high tides.

As a result of this disaster the site of the Fropax Canning Factory at West Lynn was flooded to a depth of approximately six feet and the water remained over the site for many weeks before it was pumped back over the sea wall.

The architect decided to guard against any rising dampness in the new floor of the factory by incorporating 'PUDLO' Brand Waterproofer in the 1 inch topping of waterproofed cement applied to the ordinary under-concrete. The topping was composed of:—

1 1/4 parts 1/4" granite chips,	1 part Portland Cement.
3/4 parts coarse, washed sand.	5 lbs. 'PUDLO' Brand Powder to each 100 lbs. cement.

Architect: C. J. Downing Esq., Engineers Dept. Fropax (Ware), London, E.C.1

Builders: Warren Bros, Clenchwarton, King's Lynn.

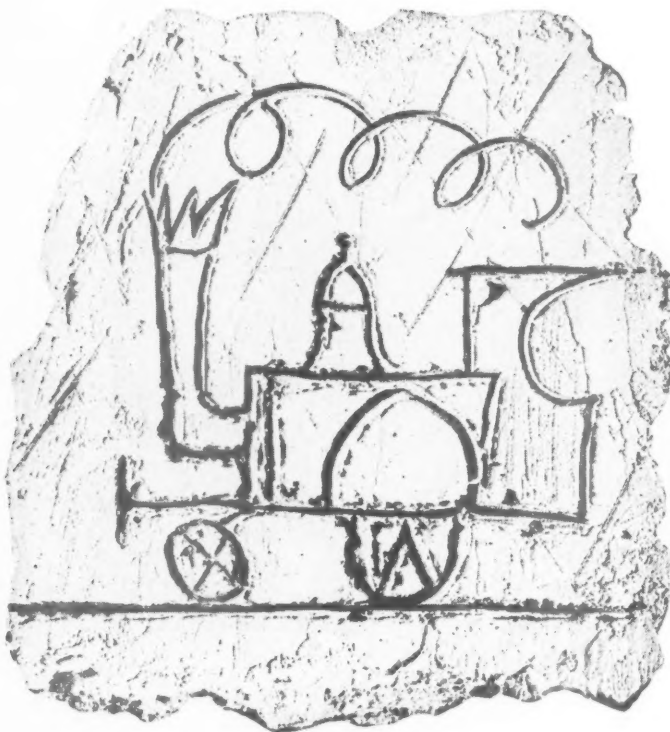
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BRAND

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Insensate speed!

"Do you know that medical authorities once laid down that travel at twenty miles an hour would unhinge the mind?"

"Why should you as an architect bring the history of locomotion into a publication like this?"

"I'm leading up to progress, with particular reference to the advantages of Carlite pre-mixed vermiculite plaster, over old-style sand based plasters."

"I believe they're very considerable from the contractor's as well as the architect's point of view. Proceed."

"The big thing is that, being pre-mixed, Carlite can be rigidly controlled at the factory. The quality never varies."

"So you architects know you have no trouble about your specifications being met."

"And you contractors have no trouble meeting them—which is more than you can say when you're putting up a mixture of sand, water and plenty of human element."

"How is Carlite in use?"

"First rate. Very tough and resilient, highly resistant to cracking. The thermal insulation is extra good and Carlite weighs less than half as much as old-style plaster."

"That would be a load off my mind in more ways than one. Carlite looks like one part of your specification that it will be a pleasure to meet."

Carlite



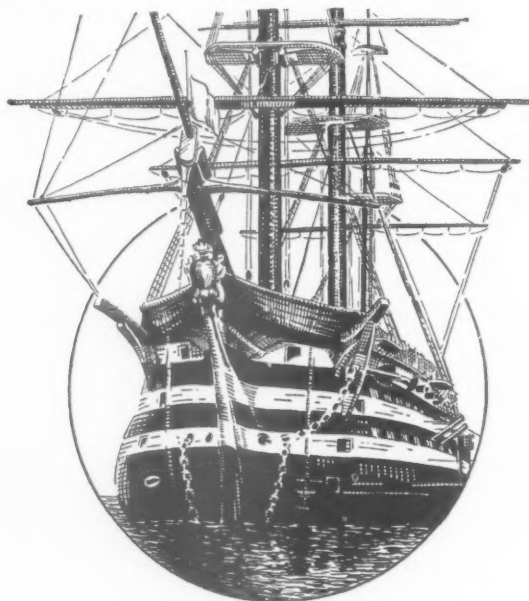
For full details of Carlite write to: The Carlisle Plaster & Cement Co., Cocklakes, Carlisle.
The Gotham Company Ltd., Wheeler Gate, Nottingham.

TECHNICAL SECTION

Architects should advise their clients to arrange with the local electricity boards to bring electricity on to the building site before, or at least as soon as, the contractor takes possession of the site. Yet another thing for the architect to remember, but an action which may result in the quicker completion of the building. The MOHLG in a circular to housing authorities (No. 62/53) called attention to the references made in various recent reports on the building industry to the advantages of having electricity laid on to sites before building operations began. The Building Working Party, when reporting in 1950, said that electricity being available would, or should, result in the wider use of power-driven tools. The more recent Committee on the Quicker Completion of House Interiors made the following comment : "Progress will be greatly assisted if economic arrangements can be made with the Electricity Boards for power to be laid on to the site at an early stage. This will make possible a wider use of power tools, as well as the installation of temporary lighting so that working hours need not be curtailed during the winter."

Power can be provided in either a temporary or permanent form. Electricity boards can lay temporary lines for which the contractor pays little more than the cost of laying ; the materials and equipment being largely recoverable on the completion of the building. But, obviously, this is not so satisfactory as providing a permanent supply system, if it can be ensured that the precise siting of the installation is permanent too.

Why is such a circular necessary ? Are not contractors eager and anxious to use power tools at every opportunity ? Quite frankly, they are not. They have a considerable dislike of potentially lethal power cables lying around watery sites, particularly with semi-skilled labourers around who are liable to attempt to handle them. However, it remains the architect's duty to ensure that the early opportunity to use power tools is given to the contractor, even if, for some years, at least, the opportunity is liable to be fraught with danger. The danger may at least encourage tidiness and system on the site, and the power itself, without tools, but used as a source of light, should allow longer hours to be worked in winter.



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FILING INSTRUCTIONS

Every Information Sheet is perforated so that it may be readily removed from the JOURNAL and has a classification symbol printed in the top corner, for example, 32.C20. The key to the classification system is contained in Sheet 1.A1, reference to which should make filing a simple matter.

The first number of the symbol, 32, refers to one of the 46 main subjects into which the Library has been divided (in this case, Water Heating): the letter that follows refers to the section, C (in this case, units: gas), under subject 32: the final number indicates the position in which the Sheet is to be placed in the appropriate section.

Every December a check list of the contents of the Library is issued showing the correct sequence of all Sheets published to date. Throughout the year, any revisions to or cancellations of Sheets are noted in the JOURNAL and the Editor will always be pleased to assist if any difficulty is encountered in keeping the Library in order.

CORRECT SEQUENCE OF COMPLETE LIBRARY AT DECEMBER 24, 1953

1.A1	1.A2	1.A3	1.B1	1.B2	1.B3	15.C1 (R'53)	15.C2 (R'53)	15.C3	15.C4 (R'53)	15.C11	15.R1 (R'50)	28.E20 (R'53)	29.A1 (R'53)	29.C1 (R'50)	29.C2 (R'52)	29.C3	29.C10 (R'52)
1.B4	1.B5	1.B5a	1.B6	1.B7	1.B8	15.S2	15.S6	15.T6	15.T7	15.Z1 (CR'51)	15.Z2	29.C20	29.G1	29.H1 (CR'53)	29.H2	29.J1	29.J3
1.B9	1.B10	1.B11	1.B12	1.B13	1.B14	16.B1	16.C1	16.J1	17.B1	17.B2	17.D1	29.J4 (R'51)	29.J5 (R'51)	29.J6	29.J10	29.J11	30.A1
1.B15	1.B16	1.B18 (R'51)	1.B19	1.B20	1.B21	17.D2	18.E1	18.F1 (R'51)	18.F2	18.G1 (R'53)	19.F1	30.B1	30.B2	30.B3	30.B4	30.B5	30.C1 (R'49)
1.B22	1.B23	1.B24	1.B25	1.B26	1.B27	19.F2	19.F3	19.F11	19.G1 (CR'51) (R'53)	19.G2 (R'53)	19.G3 (R'53)	30.C2	30.D1	30.D10	30.D11	30.D12 (R'52)	30.D21
1.B28	1.B29	1.B30	1.B31	1.B32 (R'51)	1.B33	19.G4 (R'53)	19.J2	19.Z1	19.Z10 (R'52)	20.B1 (R'53)	20.C1	30.E1	31.B1 (R'52)	31.B2 (R'52)	31.C2	31.C3	32.B1 (R'53)
1.B34	1.B35	1.B36	1.B37	1.B38	1.B39	20.C2	20.C10	20.C11	20.C12	20.Z1	20.Z2 (R'52)	32.C3 (R'52)	32.C10	32.C11	32.C20 (CR'53)	32.C21 (R'53)	32.C22 (R'53)
1.B40	1.B41	1.B48	1.B49	1.B55	1.B56	20.Z5	20.Z6	21.G1 (R'51)	22.D12	22.D13 (R'50)	22.D16 (R'53)	32.C23 (R'53)	32.C24 (R'53)	32.C25 (R'53)	32.C26 (R'53)	32.C27 (R'53)	32.C28 (R'53)
1.B57	1.B60 (R'53)	2.A1 (R'49)	2.A2	2.A3	2.A4	22.E1 (R'51)	22.E2 (R'51)	22.F1 (R'51)	23.B1 (R'52)	23.B2	23.C1 (R'53)	32.C29 (R'53)	32.C30 (R'53)	32.C31 (R'53)	32.C32 (R'53)	33.B1	33.B2
2.A5	2.B1	2.B2	2.B3	2.B4 (R'50)	2.B5	23.C2 (R'53)	23.C3 (R'53)	23.E1	23.H1	23.H2	23.H3	33.B3	33.C1 (R'49)	33.C2 (R'49)	33.C3 (R'49)	33.C4	33.C5
2.H1	2.H2	4.A1	4.A10	4.A11	4.A12	23.H4	23.H5	23.H6	23.Z1	24.C1 (R'53)	24.C2 (R'53)	33.C6	33.C7	33.C8	33.C9	33.C10	33.C11
4.A13	4.A14	4.A20	4.E1 (CR'53)	4.E2	4.L1	24.C3 (R'53)	24.D1 (R'53)	24.D2 (R'53)	24.D3 (R'53)	24.D4 (R'53)	24.D8 (R'53)	33.C12	33.K1	33.P1	33.Q1	33.Q2 (R'50)	33.Q3 (R'53)
4.L2	4.L10	4.L11	4.N1	4.N2	5.B1	24.E1 (R'50)	24.J1	24.J2 (R'53)	24.M1	24.M2	24.M3 (R'53)	33.Q4	33.U1	33.U4	33.U5	33.U10 (R'53)	35.B1 (R'51)
6.A1 (R'53)	6.A10	6.A11	6.A20	6.A21	6.Z1 (R'53)	24.N1	24.N2	24.N3 (R'53)	24.S1	24.S2	24.Z1	35.B2	36.A1	36.B1 (R'53)	36.D1 (CR'50)	36.D2	37.C1 (R'50)
7.C1 (R'51)	7.C2 (R'51)	8.E1 (CR'53)	8.F1	9.C1	10.B1 (CR'52)	25.A1	25.A2	25.A3	25.A4	25.A5	25.A6	37.D1 (R'50)	37.D2 (R'50)	37.D3	37.H1	37.H1	37.H2
10.B2 (CR'52) (R'53)	10.B3 (R'52)	10.B4	10.E1	10.F1	10.G1	26.A1	26.C1 (R'50)	26.D1	26.D2	26.D6	26.E1 (R'50)	37.H3	37.H4	37.H10	38.B1	38.C1	38.C2
10.G2	10.G3	10.G4	10.G5	10.G6	10.G10	26.E2 (R'53)	26.F1 (R'50)	26.F2 (R'50)	26.F3 (R'50)	26.F4 (R'50)	26.J3 (R'51)	38.D1	40.B1 (R'49)	40.B2	42.B2 (CR'51)	42.C1	42.C2
10.G11	10.G12	10.G13	10.G14	10.G15	10.G20	26.J4	26.J5 (R'48)	26.J6	26.J20	26.M1	26.M2	42.C3	42.C4	42.C5	42.D1	42.E1	42.K1 (R'53)
10.G21	10.G22	10.J1	10.J2	10.J3 (R'53)	10.J4	26.M3	27.B9 (R'51)	27.B10 (R'52)	27.B11	27.C1 (R'48)	27.F1 (R'53)	42.L1	43.E1 (R'51)	43.E2	43.E12 (R'53)	43.E15	43.E16 (R'51)
11.C1 (R'52)	12.F1 (R'52)	12.N1	13.C10	13.C11 (R'51)	13.C12 (R'51)	14.H1	14.L1 (R'50)	14.L2 (R'50)	14.L3 (R'50)	14.L4 (R'51)	14.L11	43.Z2 (CR'49)	43.Z3	44.D1 (R'53)	44.D2 (R'51)	44.E1	44.E2
13.H1	14.L1 (R'50)	14.L2 (R'50)	14.L3 (R'50)	14.L4 (R'51)	14.L11	14.M1 (R'49)	14.N1 (R'49)	14.N2 (R'49)	14.N3 (R'49)	14.N4	14.N5 (R'49)	44.J1	45.A1 (R'53)	46.Z (Three Sheets)			
14.M1 (R'49)	14.N1 (R'49)	14.N2 (R'49)	14.N3 (R'49)	14.N4	14.N5 (R'49)	14.N6 (R'49)	14.N7 (R'49)	14.N8 (R'49)	14.N9 (R'49)	15.B1 (R'53)	15.B3						
14.N6 (R'49)	14.N7 (R'49)	14.N8 (R'49)	14.N9 (R'49)	15.B1 (R'53)	15.B3	28.A1 (R'53)	28.A2 (R'53)	28.A3 (R'53)	28.D1 (R'53)	28.E2	28.E10 (R'53)						

The letter R after the number of the Information Sheet indicates that the Sheet has been revised and is followed by the year in which the latest revision was made. The letters CR indicate that the Sheet has been cancelled and republished and are followed by the year of re-issue.

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REVISIONS 1953

During the last few weeks all published Sheets have been carefully examined to bring the information up to date. All Sheets, with the exceptions noted below, are certified as current and correct.

The following list sets out revisions to the Library for the year ending December 24, 1953. A record of the revisions for 1948 to 1952 was published in the JOURNALS of the corresponding dates in those years.

1.B60.—Face—The following additions to the range of letters are now available: Baal, l.c. 25 mm.: Balit, u.c. and l.c. 10 mm.: Duc, u.c. 25 mm.: Senor, u.c. and l.c. 6, 10 mm.: Louve, l.c. 20 mm.: Garit, u.c. and l.c. 15, 50 mm.: Altra, u.c. 10, 15, 30 mm.: Consul, u.c. and l.c. 20 mm.

6.A1.—Reverse—Heading "Prestressing," "120,000 lb./sq. in." to be altered to read "140,000 lb./sq. in." Under heading "Methods of Prestressing" second column, line 14 add "200 in. diameter" between "eight wires" and "two in each of four." The Company's address is now "Lynton House, 54, South Side, Clapham Common, London, S.W.4. Telephone Macaulay 3391/2."

6.Z1.—Face—In the table the inflation pressures given are in lb./sq. in. and not lb./sq. ft. as shown.

10.B2.—Reverse—note the following changes of address: British Aluminium Co. Ltd., Norfolk House, St. James's Square, London, S.W.1.; L.M.F.A. Development Ltd., 69, Harborne Road, Birmingham 15. The following companies are to be added to the list: Almin Ltd., Farnham Royal, Bucks.; Venesta Ltd., Vintry House, Queen Street Place, London, E.C.4.

10.J3.—Reverse—Heading "Fixing" "i.e. 3 across each lap joint and 3 across the middle of the sheet" change "across" for "along" in both cases.

15.B1, 15.C1, 15.C2, 15.C4, 27.F1, 28.D1, 28.E10.—The address of Bowaters Buildings Boards Limited is now Bowater House, Stratton Street, London, W.1. Telephone: Grosvenor 4161.

15.C1.—Delete all references to Bituminous Board and Medium Hardboard.

18.G1.—Heading "Sizes" delete "6 in. by 6 in." Heading "Applications," sub-heading "Wood sub-floors" delete "When plywood or hardboard are unobtainable." Sub-heading "Non-absorbent sub-floors," "Tile," should read "quarry tile."

19.G1.—Face—Table "Application according to thickness," readings to be amended as follows: Domestic 1.50 mm. ($\frac{1}{8}$ in.) to 3.20 mm. ($\frac{1}{4}$ in.): Showrooms and offices 3.20 mm. ($\frac{1}{4}$ in.) to 4.50 mm. ($\frac{3}{8}$ in.): Hospital wards, restaurants and shops 4.50 mm. ($\frac{3}{8}$ in.): Ships, cinemas, etc. 6.00 mm. ($\frac{1}{2}$ in.) and 6.70 mm. ($\frac{5}{8}$ in.).

19.G1, 19.G2, 19.G3, 19.G4.—Reverse—The association's address is now: 127, Victoria Street, London, S.W.1. Telephone: Tate Gallery 4218/9.

20.B1.—Reverse—Heading "Fixing" delete the sentence beginning "Transverse stiffening." Heading "Sizes and loadings": first sentence delete "the" before "simply supported spans" and "given applied loads." At the end of the paragraph add "The floor can also be designed for continuity." The company's address is now: 1, Wandsworth Road, London, S.W.8. Telephone: Reliance 5611.

22.D16, 24.J2, 24.M3, 24.N3.—The London address of W. H. Heywood & Co. Ltd. is now Hope House, Great Peter Street, S.W.1. Telephone: Abbey 1077/8.

23.C1, 23.C2, 23.C3.—Reverse—Delete Hills Patent Glazing Co. Ltd. from the list of manufacturers. Add: Williams and Williams, Roften Works, Hooten, Wirral, Cheshire. Telephone: Willaston (Wirral) 2171. London office: Victoria House, Southampton Row, W.C.1. Telephone: Holborn 9861.

24.C1, 24.C2, 24.C3, 24.D1, 24.D2, 24.D3, 24.D4, 24.D8.—Reverse—The address of the Association is now: Burwood House, 16, Caxton Street, London, S.W.1. Telephone: Abbey 5051.

24.C2, 24.C3.—The recently published Amendments No. 6 to B.S. 990: 1945 *Metal Casement Windows and Casement Doors* now alters the range of windows given. As many types have been withdrawn and others added, reference should be made to the new Amendments for the present range.

24.D1—24.D4, 24.D8.—See 24.C1.

24.J2, 24.M3, 24.N3.—See 22.D16.

25.A1-25.A6 inclusive.—Sheets under review: modifications to be announced.

26.E2.—Reverse—Under "Sizes" add the following entry to the list of wall thicknesses: "Thicker walls . . . Suitable groups of stools are arranged side by side enabling beams of any dimensions to be constructed. Special cases may require purpose-made castings."

27.F1.—See 15.B1.

28.A1, 28.A2, 28.A3, 28.E20.—Reverse—The company's address is now: 116, Horseferry Road, London, S.W.1. Telephone: Abbey 1180.

28.D1, 28.E10.—See 15.B1.

28.E20.—See 28.A1.

29.A1.—The name of the manufacturer is now "Spirax-Sarco Ltd."

30.C1, 30.C2.—Sheets under review: modifications to be announced.

32.B1.—Reverse—The ratings of models 65M and 80M are now 55,000 and 65,000 B.Th.U./hr. respectively.

32.C20-32.C32 inclusive.—The head office has now been moved to the same address as the works.

33.Q3.—The syphons may now be obtained with the piston chamber moulded in polythene to which the water acts as a natural lubricant. It is unaffected by corrosive acids and alkalis and is therefore suitable for use where these are present in the water.

33.U10.—Face—On the drawing of the type G gutter for a pitched roof the depth should now read 5 in. and not 4½ in. The stopped end shown as "type S/N" should read "Type A/N." Reverse—The company's address is now: Finlock House, 25, Frant Road, Tunbridge Wells, Kent. Telephone: Tunbridge Wells 3396 (4 lines).

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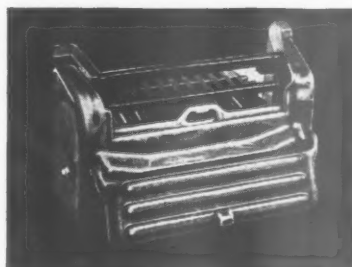


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36.B1.—Reverse—Heading "Other Types of Soda-Acid Fire Extinguishers" Model C15 should be altered to C50.

38.D1.—This classification number was incorrectly given to "Duradio Enamel Paint" (Walpamur Co. Ltd.) which should have been 38.C2. Sheet 38.D1 deals with "Pammastic Plastic Emulsion Coating." (Blundell, Spence & Co. Ltd.)

42.K1.—Reverse—In the first paragraph delete the last sentence commencing "The heavy duty model . . ." Heading "Operation," sub-heading "Light Control" and "At night artificial light is reflected back into the room."

43.E12.—Face—In the drawings of the unit for large kitchens the upstanding waste overflow and corner strainer should be in the back left-hand corner of both sinks.

44.D1.—Reverse—Heading "Applications" sub-heading "Plaster." Last sentence should now read: "Plastering is done after the steel channel has been screwed to the lintel and is allowed to dry thoroughly before the track is fitted. The spring clips should be evenly spaced along the track, the first and last being 3 in. from the ends. One edge of each clip is then placed into one side of the channel: a screwdriver

inserted in the clip on the opposite side and pressed firmly upward will cause the clip to snap into place."

45.A1.—Face—Range of colours: Transfer Forest Green and Gunmetal from Range B to Range A: add Grafton Grey and Mushroom to Range A and delete Silver Grey. Types of carpet: add "Royalist Wilton 27 in. wide is now available in grades I, II and III."

46.Z (A-F).—Face—Under "Boards Building" entry "general data, jointing" 15.B2 should read 15.B3. Under "Floor Construction" delete "concrete, dovetailed steel sheeting 20.Z12, 20.Z13" and "timber, dovetailed steel sheeting 20.Z12." Under "Furniture, Kitchen" entry "sink units, steel and aluminium" delete 43.E13.

CANCELLATIONS

Sheets **4.E1**, **8.E1** and **29.H1** were cancelled, revised and republished this year. Sheets **14.B1**, **15.T1**, **15.T2**, **22.D1**, **22.D2**, **22.D3**, **29.C20**, **29.K1**, **32.D7**, **32.D8**, **32.D9** and **32.D10** are being revised and will be republished. Sheets **19.J1**, **20.Z12**, **20.Z13**, **21.E1**, **22.D11**, **22.D14**, **22.D15**, **43.E13** and **43.E14** have now been cancelled and should be withdrawn from the Library.

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.

9.39 design: general AUSTRALIA

Ninth Annual Report. Division of Building Research. (Commonwealth of Australia. Commonwealth Scientific and Industrial Research Organization.)

A document mainly of interest to architects and builders in Australia. Interesting statements are that "substantial economies in commercial and industrial buildings can be made by using, in the place of orthodox heavy concrete, lightweight aggregate concrete for structural purposes and low-density plaster as fire protection for structural steelwork," and that "large precast gypsum plaster wall slabs are being increasingly used for house construction and are resulting in maked savings . . ." The report contains a number of other items of some general interest.

9.40 design: general BUILDING BYELAWS

Building Byelaws—Law and Practice. J. F. Garner and R. S. Offord. (Shaw & Sons Ltd. 1953. 45s.)

Main Volume covers the 1952 Model Byelaws but a supplement is now issued to cover the minor changes of the 1953 Model.

Tables of Cases and Statutes and 5 fairly brief chapters on legal provisions precede the main part of the book in which the Model Byelaws are printed on left hand pages and comments opposite on right hand pages. This arrangement makes for very easy reference. The comments appear to be very helpful in going rather beyond a mere classification of the clauses, as they include some sensible explanations of why the provisions are necessary, and sometimes quite valuable general comments in addition. Appendices list relevant British Standards and Codes of Practice and give notes on other building controls.

9.41 design: general NEW BUILDINGS IN BRITAIN

The New Architecture in Great Britain. Edward D. Mills. (Standard Catalogue Co. Ltd. 1953. £2.)

This is a serious attempt to record the contemporary architecture of Great Britain as more than a mere picture record. As an introduction to the main part of the book, which necessarily covers a limited number of buildings, there is a brief but interesting illustrated review of significant buildings of the 1925-46 period.

The bulk of the book consists of descriptions of 15 buildings. These are very largely reprints from articles specially written by the author for the journal *Architectural Design*. Each example is very well illustrated by photographs and drawings and the written description includes notes on planning, technical, economic and aesthetic considerations. An additional very welcome feature is a brief but personal criticism of each building.

While it is unlikely that all readers will see eye to eye with the author in his selection, the total result is interesting in its diversity of building types, of architects represented and of the kind of work which has been going on in the post-war years.

Doubtless, because of its fairly full descriptions of the buildings, it will be looked at with interest by members of the profession, but its most useful function might well be as a book for the interested layman.

Main titles and captions to illustrations are given in English, French and German, but the general letterpress in English only.

There is an introduction by Professor Sir William Holford.

10.108 design: building types OPERATING THEATRES

Floor Surfaces for Operating Theatres. (Official Architect. Sept., 1953.)

One page review of an MOH circular on "Interim Notes on Static Electrical Risks and Anti-Static Precautions in Anaesthetising Locations."

The risks of explosions in operating theatres has been a subject of some concern both here and in other countries and a good deal of attention is now paid to precautionary measures, especially in the choice of suitable floor finishes. The Ministry note is only an interim measure, pending the setting up of a Committee to advise on the problem. It does, however, give useful information, based on the results of a considerable survey of existing floors, and it mentions both suitable and unsuitable materials.

The note should be studied by those actively concerned with the problem but the Official Architect review is a useful summary for general knowledge purposes.

14.64 materials: concrete FIRE RESISTANCE

Investigations on Building Fires. Part VI. The Fire Resistance of Reinforced Concrete Columns. Building Research Board and Fire Offices Committee. (HM Stationery Office. 1953. 3s.)

Results of a considerable test programme shows trends of dependance of the fire resistance of RC columns upon the applied load, strength of concrete, column size and method of reinforcing. Gravel aggregate is not as good as limestone or blast furnace slag. The use of light mesh reinforcement in the concrete cover to main bars is important. Attempts to assess fire resistance by testing small scale concrete cylinders have not yet been successful.

Important test results for engineers to study.

Buildings Illustrated

Factories for Alford and Alder (Engineers) Ltd. and Rolls Razor Ltd., in Maylands Avenue, Hemel Hempstead New Town, Herts, for the Hemel Hempstead Development Corporation. (Pages 780-781, AJ, December 24.) Architect: W. Leslie Jones, L.R.I.B.A., in collaboration with H. K. Ablett, F.R.I.B.A., M.T.P.I., Chief Architect, Hemel Hempstead Development Corporation. Consultants: (electrical and heating), W. N. Mann, F.R.S.A., A.M.I.H. & V.E., A.I.E.C., M.A.M.E.R.S.O.C.H. & V.E. Structural steel: Bylander and Waddell. Quantity surveyor: W. E. T. Hoggarth, F.R.I.C.S., A.M.I.S.T.R.U.C.T.E. General contractor: J. Jarvis & Sons Ltd., 239 Vauxhall Bridge Road, London, S.W.1. Sub-contractors: dampcourses, Ruberoid Co. Ltd.; asphalt, Ragusa Asphalt Paving Co. Ltd.; reinforced concrete, Caxton Floor Ltd.; bricks, London Brick Co. Ltd.; artificial stone, Croft Granite Brick & Concrete Co. Ltd.; structural steel (offices) Aston Construction Co. Ltd.; (canteen) Redpath Brown & Co. Ltd., †Banister, Walton & Co. Ltd.; roofing, Ruberoid Co. Ltd. (steel roof deck) partitions, *Art Metal Construction Co.; glass bricks, *Pilkington Bros. Ltd.; patent glazing, Paragon Glazing Co. Ltd.; patent flooring (Grano), Empire Stone Co. Ltd.; Marley Tile Co. Ltd.; (Terrazzo), †Malacarp Terrazzo Co. Ltd.; *Mosaic & Terrazzo Precast Co. (Staines) Ltd.; central heating, *Harold Eldred Ltd.; †Walter Cowen Ltd.; gas fitting (canteen fittings), Radiation Ltd.; boilers, *David Paxman; electric wiring, *A. Saville Co. Ltd.; electric light fixtures *(Cables & Transformers), British Insulated Callenders Cables Ltd., British Thomson-Houston Co. Ltd.; electric heating, *Electric Panels Ltd.; sanitary fittings, W. N. Froy & Sons Ltd.; stair-treads, *The Mosaic & Terrazzo Precast Co. (Staines) Ltd.; †Malacarp Terrazzo Co. Ltd.;

door furniture Yannedis & Co. Ltd.; telephones, *Communication Systems Ltd.; rolling shutters, *Haskins Rolling Shutters, Marryat & Scott Ltd.; iron staircases metalwork, †H. H. Martyn & Co. Ltd.; cloakroom fittings, A. J. Binns Ltd.; lifts, *Marryat & Scott Ltd.; cranes, *Herbert Morris Ltd.; clocks, *English Clock Systems Ltd.

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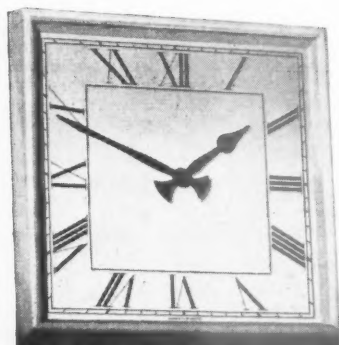
Export Offices for the Star Brush Co. Ltd., in Eden Grove, Holloway, London, N.7. Pages 782-783, AJ, December 24.) Architects: Hughes & Bicknell, M./M.A., F./F.R.I.B.A. Quantity surveyors: R. T. Dadson. General contractor: H. Fairweather & Co. Ltd. Sub-contractors: reinforced concrete, E. J. Cook & Co.; artificial stone, Gillingstone; special roofing and felt, D. Anderson & Son, Ltd.; woodblock flooring, Horsley Smith & Co. (Hayes) Ltd.; patent flooring, Armstrong Cork Co. Ltd.; central heating, boilers, J. Wontner-Smith, Gray & Co. Ltd.; electric wiring and light fixtures, Bective Electrical Co. Ltd.; stairtreads, Mosaic & Terrazzo Precast Co. (Staines) Ltd.; door furniture Dryad Metal Works Ltd.; casements, Rust-proof Metal Window Co. Ltd.; metalwork, S. W. Farmer & Son Ltd.; joinery J. P. White & Sons Ltd.

Shops and maisonnettes, Popple Way, Stony Hall, Stevenage New Town, Herts, for the Stevenage Development Corporation. (Pages 808-809.) Architect: Professor C. Holliday, M.A.R.C.H., F.R.I.B.A., M.T.P.I., formerly Chief Architect, Stevenage Development Corporation; Deputy Chief Architect: L. G. Vincent, A.R.I.B.A., M.P.T.I.; Group leader: D. S. Craig, A.R.I.B.A., M.P.T.I.; Assistant architect: D. F. Eatwell, A.R.I.B.A. Heating consultants: Oscar Faber & Partners. Quantity surveyors: Architect's Department, Stevenage Development Corporation. General contractor: Crook Bros. Clerk of works: L. A. Skinner.

General foreman: C. Parker. Sub-contractors: dampcourses, Permanite Ltd.; bricks, Uxbridge Flint Brick Co. Ltd.; steel reinforcement, Rom River Co. Ltd.; roofing felt, D. Anderson & Sons Ltd.; glass, Young & Marten Ltd.; patent flooring, Marley Tile Co. Ltd.; central heating, Matthew Hall & Co. Ltd.; gas fixtures and gasfitting, Eastern Gas Board; electric wiring, Stevenage Electrical Engineering Co.; plumbing, Econa Modern Products Ltd.; sanitary fittings, Dent & Hellyer Ltd.; suspended ceiling, Sundeala Board Co. Ltd.; glass roof dome-lights, T. & W. Ide; door furniture, W. N. Froy & Son Ltd.; metal windows and window furniture, Crittall Manufacturing Co. Ltd.; doors, Rippers Ltd.; ironwork, B. Finch & Co. Ltd.; special sunblinds, Tidmarsh & Sons; shopfronts and blinds, Harris & Sheldon Ltd.; kitchen fitments, Jayanbee Joinery Ltd.; plaster, R. S. Jones (Welwyn Garden City); garden furniture (flower boxes), Tercrete Ltd.; paint, Docker Bros.; shrubs and trees, Tursoil Ltd.

Conversion of Coach House at 37, Nightingale Lane, Clapham, London, S.W.12. (Pages 810-811.) Architect: Elie Mayorcas, F.R.I.B.A.; Assistant-in-charge, G. F. Goodwin. General contractor: Broadlands (London) Ltd. Sub-contractors: slates, The Bow Slate and Enamel Co. Ltd.; special roofings, William Briggs & Co. Ltd.; glass ("Vitrolite" panels to bathroom) and sanitary fittings, Stitson's Sanitary Fittings Ltd.; woodblock flooring, floor tiles, Horsley Smith & Co. Ltd.; waterproofing materials (external rendering) Cement Marketing Co.; electric light fixtures, Le Klint; electric heating, Aidas Electric Ltd., Bratt Colbran Ltd. (panel fires); door and window furniture, A. J. Binns Ltd.; "English Rose" metal cupboards in kitchen, C.S.A. Industries Ltd.; metalwork, The Fulham Art Metalworks Ltd.; marble (Travertine hearth), G. Walker & Co. Ltd.; wallpapers, John Line and Sons Ltd.; furniture, Ernest Race Ltd., and Heal & Son Ltd.

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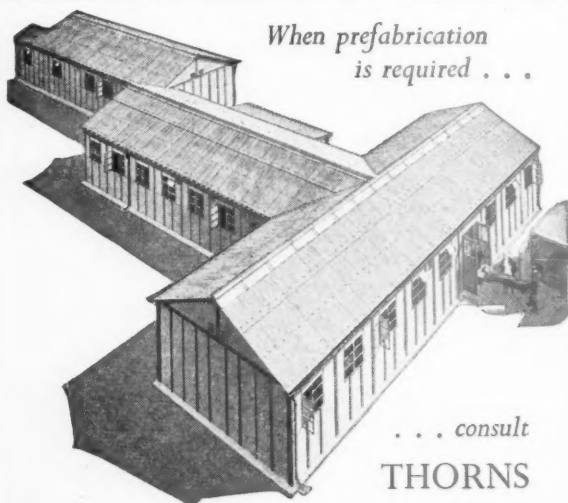
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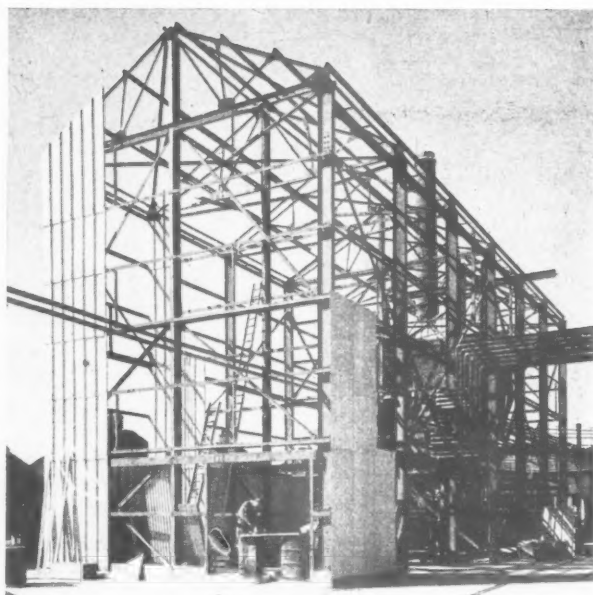
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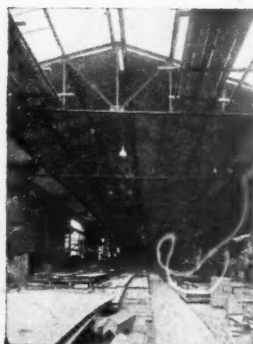
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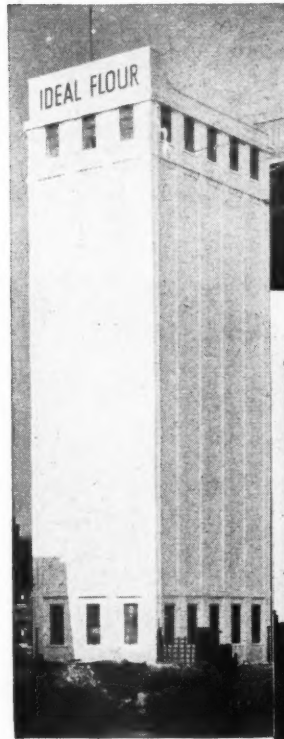
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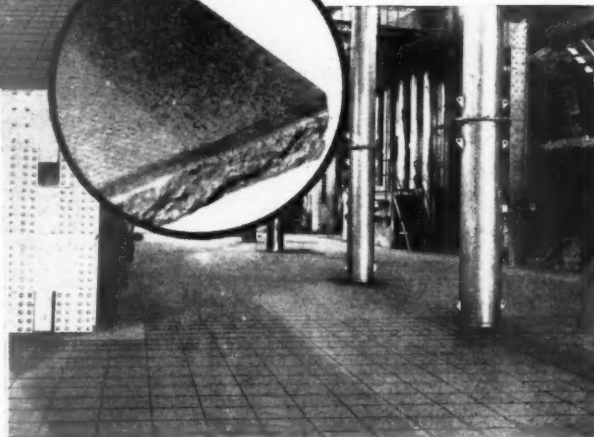
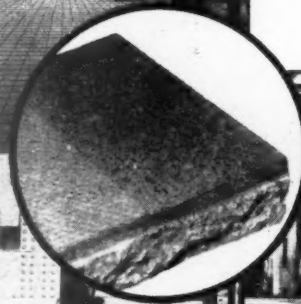
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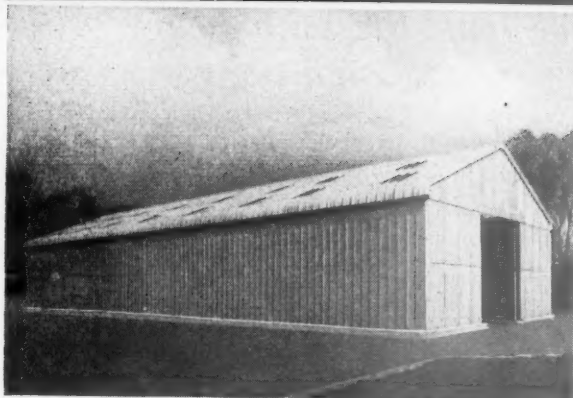


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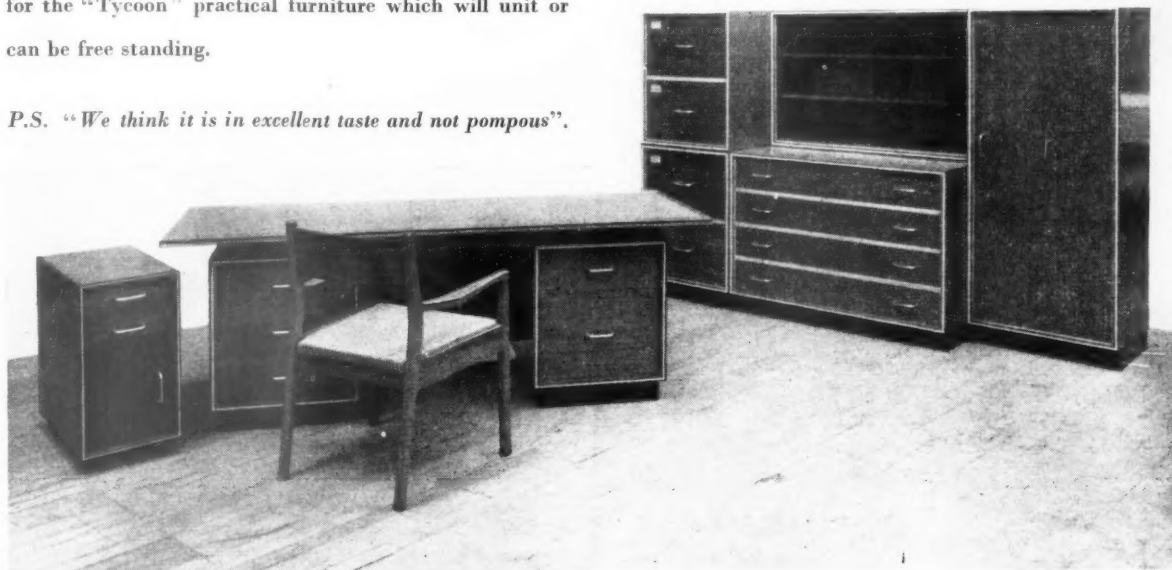
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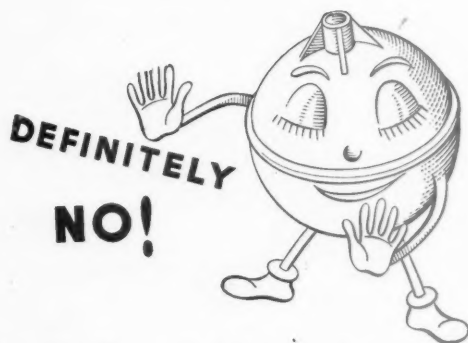
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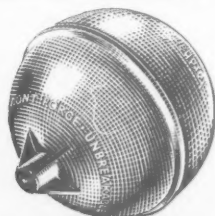


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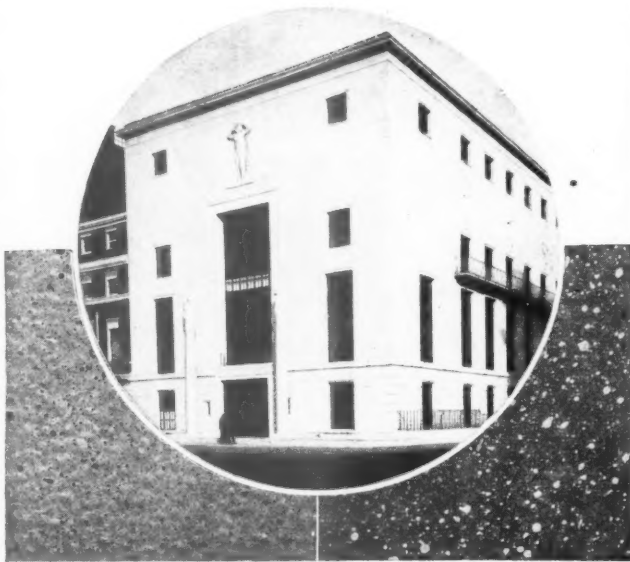
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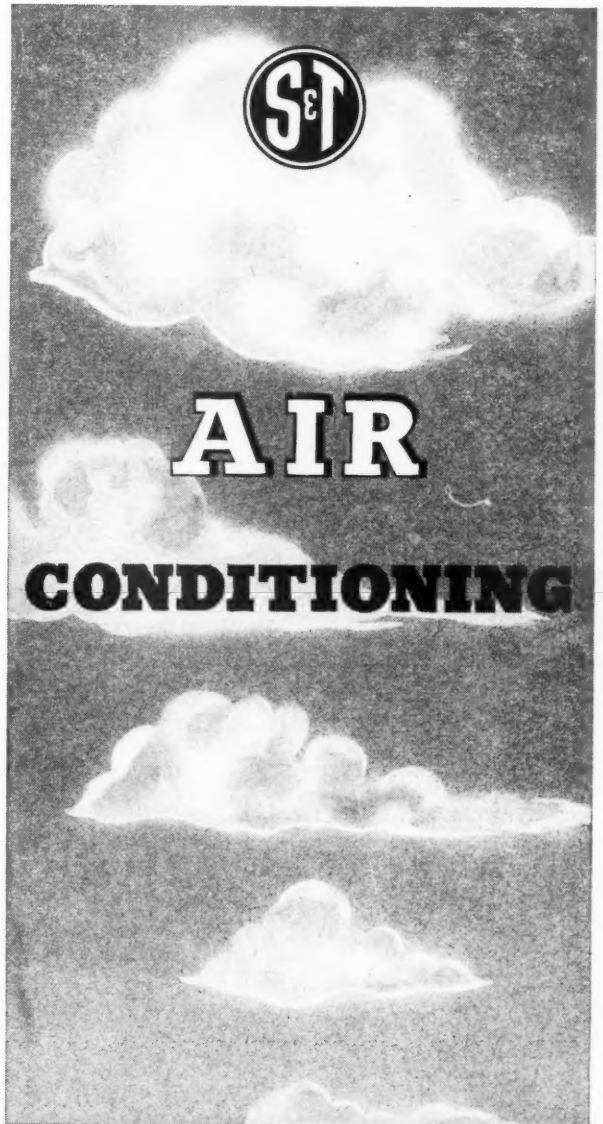
245 VAUXHALL BRIDGE ROAD, LONDON, S.W.1

Telephone TATe Gallery 0091/2.

Telegrams : Glazement, Souwest London.

NORTHERN IRELAND: Concrete Industries Ltd., 107a, Shore Road, Belfast. Phone : Belfast 76681

SCOTLAND: W. C. Simpson & Son Ltd., 30-42, Haymarket, Surry Place, Edinburgh. Phone : Edinburgh 62006



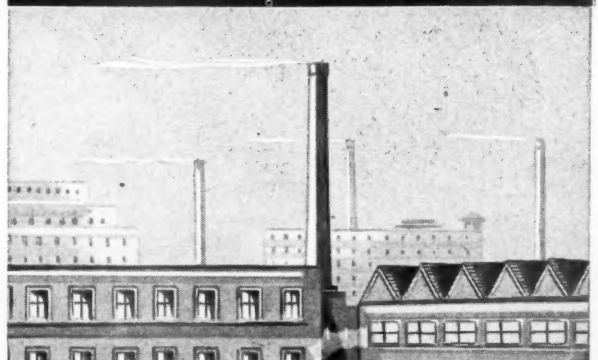
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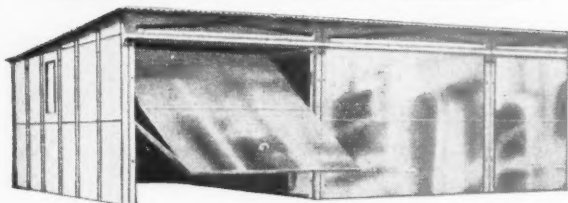
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No. of Garages	Size	Clear Height	Total Cost
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Plus £55 per additional garage to any number required in one block. Also available with a clear height of 7ft. 9in., an alternative length of 19ft. if required.

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of approximately 75% of Valuation

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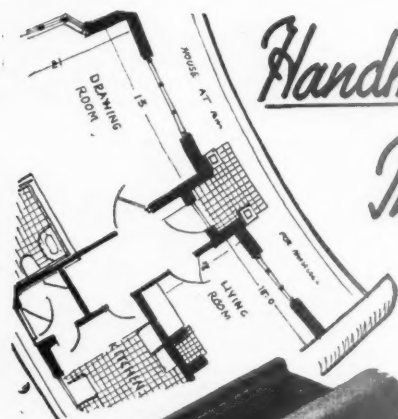
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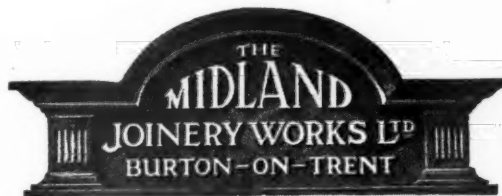
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CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, 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.

COUNTY BOROUGH OF GREAT YARMOUTH. EDUCATION COMMITTEE.

SCHOOLS ARCHITECT'S DEPARTMENT.

Applications are invited from Associate Members of the Royal Institute of British Architects for the appointment of PRINCIPAL ASSISTANT ARCHITECT on the permanent staff, Salary Grade VIII (£760-£835).

Candidates should have a knowledge of modern school design and construction. The person appointed will be in charge of the Drawing Office, and will be required to act as Deputy to the Schools Architect.

Further particulars and forms are to be obtained from The Schools Architect, 22, Euston Road, Great Yarmouth, to whom they should be returned by Tuesday, 12th January, 1954.

W. G. FARROW,
Chief Education Officer.
1227

HARROW URBAN DISTRICT COUNCIL. ENGINEER & SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT, A.P.T., Grade IV, Salary Scale £555-£600 per annum plus London Weighting. Candidates should have good office experience and preference will be given to those holding recognised professional qualifications.

Duties include the preparation of drawings and specifications and supervision of works on new buildings or works of maintenance and repair.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, the passing of a medical examination and to the National Joint Council's Scheme of Conditions of Service.

The Council are unable to assist in obtaining housing accommodation. Canvassing will be a disqualification.

* Forms of application can be obtained from the undersigned, to whom they should be returned not later than Friday, 8th January, 1954.

D. H. PRITCHARD,
Clerk of the Council.

Council Offices,
Harrow Weald Lodge, Harrow,
Middlesex. 1260

CITY ARCHITECT'S DEPARTMENT. EDINBURGH.

Applications are invited for the following vacancies:—

(a) 1 ASSISTANT ARCHITECTS, A.P.T., 7 (£715-£790).

(2) ASSISTANT ARCHITECTS, A.P.T., 5a (£650-£690).

(3) ARCHITECTURAL ASSISTANTS, A.P.T., 4/5 (£550-£650).

Candidates for (1) and (2) must be qualified by examination, be members of a recognised professional organisation, and should have had wide experience of design and construction.

Candidates for (3) must have passed the Intermediate stage of any examination recognised by the Architects' Registration Council for the United Kingdom as qualifying for registration.

(b) TEMPORARY TECHNICAL ASSISTANT, with experience in Architect's drawing office. (£450).

(c) ASSISTANT QUANTITY SURVEYOR, A.P.T., 7 (£715-£790).

Must be A.R.I.C.S. by examination, with experience in preparing schedules of quantities for minor works, the preparation of final accounts, and the checking of maintenance accounts.

(d) ASSISTANT ENGINEER, A.P.T., 7 (£715-£790).

Must be suitably qualified to take charge of design and installation of minor new works and maintenance of heating and/or electrical plant.

Applications, giving age and full details of experience, to be lodged with the undersigned by 13th January, 1954.

ALEX. STEELE,
City Architect.
1238

CHESTERFIELD RURAL DISTRICT COUNCIL

invite applications for the appointment of SENIOR QUANTITY SURVEYOR, salary A.P.T. V-VI (£595-£735). A travelling allowance for 3 h.p. cars will be paid. The Council will assist with housing accommodation. Applicants should have passed the Final of the R.I.C.S. (Quantities Sub-Division). Application forms from The Engineer, Rural Council House, Saltergate, Chesterfield, should be returned to the Clerk of the Council by 28th January, 1954. 1275

NATIONAL COAL BOARD—NORTH-EASTERN DIVISION.

Applications are invited for the following appointments to the staff of the Divisional Chief Architect at Denaby Main, near Doncaster.

(a) ARCHITECT, Grade II (£600×25—£650×£50—£900).

Applicants should have passed the Final Examination of the Royal Institute of British Architects, and have wide practical experience in preparing sketch plans, working drawings, specifications, and the supervision of contracts.

Committee experience is desirable, but not essential.

In the first instance the work will consist chiefly of Social Welfare Projects, i.e., Community Centres, Institutes, Sport Pavilions, etc.

(b) ASSISTANT ARCHITECT, Grade II (£440×£20—£540).

Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects and have had not less than 3 years' subsequent practical experience, and should be able to prepare sketch plans and working drawings under supervision and have a sound knowledge of building construction.

The work for this post will consist chiefly of Pithead Baths, Canteens, Medical Centres, Offices, Laboratories, etc.

The point of entry into the above scales will depend on qualifications and experience.

The above appointments are for the established staff and are subject to the Board's Superannuation Scheme.

Application forms may be obtained from Mr. J. A. Demster, F.R.I.B.A., Divisional Chief Architect, National Coal Board, Denaby Main, near Doncaster. 1299

COUNTY BOROUGH OF BARNSELY. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF TEMPORARY ASSISTANT ARCHITECT.

Applications are invited from suitably qualified persons for the appointment of Temporary Assistant Architect in the Borough Engineer's Department, at a salary in accordance with A.P.T., Grade V (£595-£645 per annum).

Applicants should be good draughtsmen and have had experience in the design of Municipal housing schemes and/or public buildings.

The appointment will be subject to (a) the Scheme of Conditions of Service for A.P.T.C. Staff; (b) any other general conditions of employment in operation within the Corporation from time to time; and (c) to one month's notice on either side.

Applications, stating age, present and previous appointments, experience, qualifications, etc. and giving the names of two persons for reference, should reach the Borough Engineer, Town Hall, Barnsley, not later than Friday, 15th January, 1954.

Canvassing will disqualify.
A. E. GILFILLAN,
Town Clerk. 1297

Town Hall, Barnsley.
December, 1953.

STAFFORDSHIRE COUNTY COUNCIL. EDUCATION COMMITTEE.

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

(a) ONE SENIOR QUANTITY SURVEYOR, Grade A.P.T. VIII (salary £750-£835 per annum). Must be a Member of the R.I.C.S. (Quantities Sub-Division) of the I.Q.S.

Applicants should have a number of years' experience in a similar appointment, embracing Estimating, Measuring on Site, Adjustment, and Settlement of Final Accounts, and be capable of assuming full responsibility for the Section in the absence of the Chief Quantity Surveyor.

(b) ONE EXPERIENCED QUANTITY SURVEYOR, Grade A.P.T. VI (salary £670-£735 per annum). Preference will be given to Members of the R.I.C.S. (Quantities Sub-Division) or the I.Q.S.

Applicants to state their experience in Estimating, Measuring on Site, Adjustment, and Settlement of Final Accounts.

(c) MEASURING SURVEYORS, Grade A.P.T. IV (salary £555-£600 p.a.). Experience in measuring and contract settlement essential.

Applications, stating age, education, qualifications, present and past appointments, together with copies of two recent testimonials, should be submitted to: A. C. H. Stillman Esq., F.R.I.B.A., County Education Architect, Green Hall, Lichfield Road, Stafford.

T. H. EVANS,
Clerk of the County Council. 1276

HARLOW DEVELOPMENT CORPORATION.

Applications are invited for post of ARCHITECTURAL DRAUGHTSMAN in the Architect Planner's Department. Salary: £475×£25 to £525 p.a.

Applicants must be experienced in general work of large Drawing Office engaged in housing and industrial works, and in particular in the preparation of record drawings.

Superannuation, Housing.

Applications, giving full details, including qualifications and the names of two referees, should reach the undersigned by 11th January, 1954.

W. ERIC ADAMS,
General Manager. 1295

"Terlings," Gilston, Harlow, Essex.

ASHBY-DE-LA-ZOUCH RURAL DISTRICT COUNCIL. APPOINTMENT OF CHIEF ARCHITECTURAL ASSISTANT.

Applications are invited for the post of Chief Architectural Assistant to work under the direction of the Council's Surveyor.

The person appointed will be required to prepare Estate layout plans, specifications, house designs, and working drawings for the Council's various Housing Capital Schemes, and to supervise the completion of Contracts in connection therewith. Preference will be given to holders of Examination qualifications of the Royal Institute of British Architects.

The salary will be according to A.P. & T. Division, Grade VI (£670-£735), commencement to be within this Grade according to qualifications and experience. The successful applicant will be required to provide a car, for which an appropriate Travelling Allowance will be paid.

The appointment will be for the duration of the Council's Housing programme, with a guaranteed minimum of 5 years, subject to satisfactory service, with prospects of further employment, depending upon continuation of the Housing Capital Programme, and will be subject to (a) the National Joint Council Scheme of Conditions of Service; (b) the Local Government Superannuation Acts; (c) passing a medical examination, and (d) termination by one month's notice on either side.

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

Applications, stating age, qualifications and experience, and giving names of three Referees, should be delivered to the undersigned not later than Monday, 18th January, 1954.

Canvassing, either directly or indirectly, will be a disqualification.

J. E. R. WILKINSON,

Clerk of the Council.
Council Offices, South Street,
Ashby-de-la-Zouch.
19th December, 1953. 1294

BRITISH ELECTRICITY AUTHORITY. EAST MIDLANDS DIVISION.

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

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

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

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

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

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

(i) Design and layout of Power Station equipment, including turbo-alternators, boiler plant, coal and ash plant, and general station auxiliaries.

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

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

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

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

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

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

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

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

L. F. JEFFREY,
Divisional Controller. 1296

COUNTY BOROUGH OF CROYDON. ARCHITECTURAL ASSISTANTS required:—

(a) Three experienced in housing. Salary: A.P.T. IV, £555 to £600 p.a., plus London weighting (£30 p.a. at age 26 and over).

The Corporation would endeavour to assist with living accommodation if necessary.

(b) Two with general experience. Salary: A.P.T. I, £465 to £510 p.a. plus London weighting.

Applications (on forms from the Borough Engineer, Town Hall, Croydon) must reach him by the 18th January, 1954.

E. TABERNER, Town Clerk. 1286

LANCASHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
 Applications are invited for the following appointment on the permanent staff:—
SENIOR ASSISTANT ARCHITECT, A.P.T.,
 Grade VIII (£760-£835).
 Application forms, to be returned by Monday, 11th January, 1954, obtainable from the County Architect, County Hall, Preston.
 December 31, 1953. 1281

METROPOLITAN BOROUGH OF FULHAM.
ASSISTANT QUANTITY SURVEYOR.
 Housing and Public Buildings Dept. A.P.T., VI, £670-£735 p.a., plus London weighting, £30 p.a. over 26 years. Main duties "taking-off" for large blocks of flats and other public buildings, measurement of works on site and finalising accounts. Final R.I.C.S. (Quantities) exam. or equivalent. Forms from Town Clerk, Town Hall, S.W.6. Closing date: noon, 11th January. 1280

LONDON ELECTRICITY BOARD.
JUNIOR QUANTITY SURVEYOR.
 Applications are invited for the above position in the Chief Engineer's Department in Central London. Applicants must have had experience in working up in all trades, and the successful candidate will work under the direction of a Chartered Quantity Surveyor.
 The post is graded under Schedule "C" of the National Joint Board agreement as Grade 9—£415 per annum, rising to £600 12s. per annum, inclusive of London allowance.
 Application forms obtainable from Secretary, 46, New Broad Street, E.C.2, to be returned completed within 14 days of the publication of this advertisement. Please enclose addressed envelope and quote ref. V/1695/A. on envelope and all correspondence. 1293

CITY OF LEEDS.
CITY ENGINEER'S DEPARTMENT.
 Applications are invited for the appointment of a **PLANNING ASSISTANT, Grade A.P.T., VII** (£710-£785).
 Candidates should be Corporate Members of the Town Planning Institute and have had extensive experience.
 The successful candidate will be required to pass a medical examination, and the appointment will be probationary for 6 months.
 Applications on the forms provided, which are obtainable from the undersigned, to be delivered not later than 4th January, 1954, accompanied by copies of not more than three testimonials.
 Canvassing in any form, either directly or indirectly, will be a disqualification.
D. CURRIE, M.I.C.E.,
City Engineer.
 Civic Hall, Leeds, 1. 1298

MANCHESTER MUNICIPAL COLLEGE OF TECHNOLOGY
(FACULTY OF TECHNOLOGY IN THE UNIVERSITY OF MANCHESTER).

Appointment of
LECTURER IN STRUCTURAL ENGINEERING.
 The Governing Body invites applications for Lectureship in Structural Engineering in the College with the title and status of Lecturer in the University of Manchester.

Candidates should be graduates in Science or Technology, and should possess a good knowledge of Theory of Structures. The person appointed will be required to undertake research work on Structures and to assist in lecturing and laboratory work in Structural Engineering.
 Salary: £650 per annum, rising by annual increments of £50 to £1,200 per annum. Commencing salary according to qualifications.

Conditions of appointment and form of application may be obtained from The Registrar, College of Technology, Manchester, 1. The last day for the receipt of applications is Wednesday, 20th January, 1954.

Canvassing, either directly or indirectly, will disqualify a candidate for appointment.

B. V. BOWDEN,
Principal of the College.
 1289

METROPOLITAN BOROUGH OF WOOLWICH.
ARCHITECTURAL ASSISTANTS (Temporary)
 required. Grade V (£595-£645), plus London weighting.

Applicants should be qualified.
 Applications (stating age, qualifications and experience, and giving two referees) to Town Clerk, Woolwich, S.E.18, by 9th January, 1954.
 Canvassing disqualifies.
 December, 1953. 1308

WEST SUSSEX COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT
 Applications are invited for the appointment of a **SENIOR ASSISTANT ARCHITECT**, at a salary in accordance with Grade VIII, A.P.T. Division (£760 to £835), of the National Scales of Salaries.
 Further particulars should be obtained from the County Architect, County Hall, Chichester, to whom detailed applications must be submitted not later than 14th January, 1954.

T. C. HAYWARD,
Clerk of the County Council.
 County Hall, Chichester.
 15th December, 1953. 1284

SENIOR ARCHITECTURAL ASSISTANT required in Worcester office. Experienced in drawing office and supervision of works. Five-day week. Write, giving particulars of age, qualifications, experience, salary required, if car driver, and if housing is required, to Box 1278.

Architectural Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.
 The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she is, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

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

SENIOR ARCHITECTURAL ASSISTANT required, full experience in preparation of Working Drawings, Details, and supervision of office and Industrial Buildings in the London Area. Good knowledge of construction and design essential. Apply in writing giving full particulars of qualifications, age, experience and salary required to Box 9829.

ARCHITECTURAL DRAUGHTSMAN required. Preferably Intermediate standard or higher, with experience of industrial work. Reply, giving full details of age, experience, and salary desired, to Box 1223.

VACANCY arises for Articled Pupil (Architectural or Building Surveying) in City firm. Box 9468.

ARCHITECTURAL ASSISTANTS, with experience, required for general practice. Reply, stating experience and salary required, to Thomas Worthington & Sons, 178, Oxford Road, Manchester, 13. 1255

JUNIOR ARCHITECT'S ASSISTANT required in busy Westminster office, with good prospects of advancement and interesting work. Salary £260 p.a. Box 1239.

ASSISTANT required in Architect's office in Exeter. Not less than Ipt. standard. Write, with full particulars and salary required. Box 1240.

ARCHITECTURAL ASSISTANT required by large industrial concern for work on factories, offices, canteens, etc., in Preston area. Applicants should be about R.I.B.A. Inter. standard, and good draughtsmen and detailers. The post offers good experience and prospects to the right man. Reply, giving details, to Box 1279.

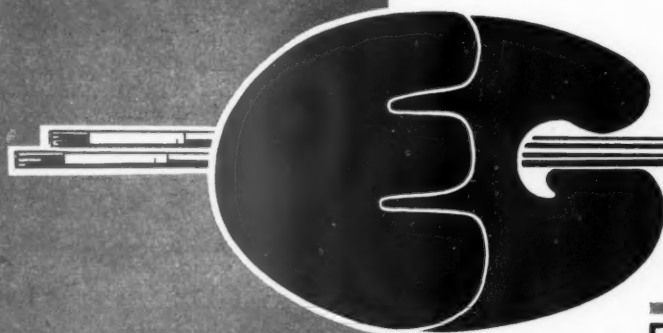
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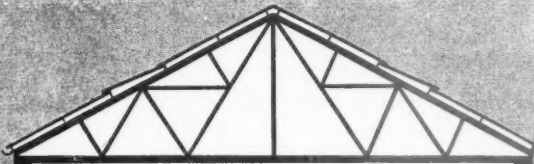
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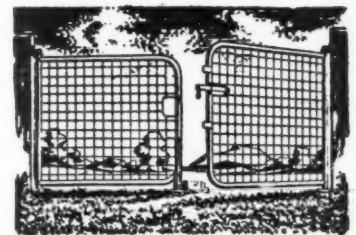
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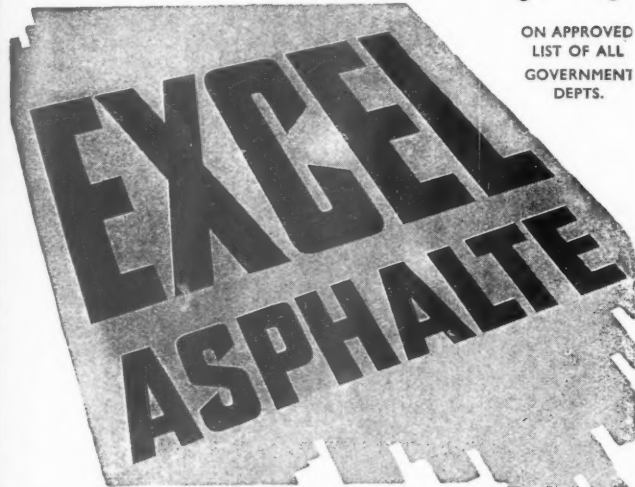


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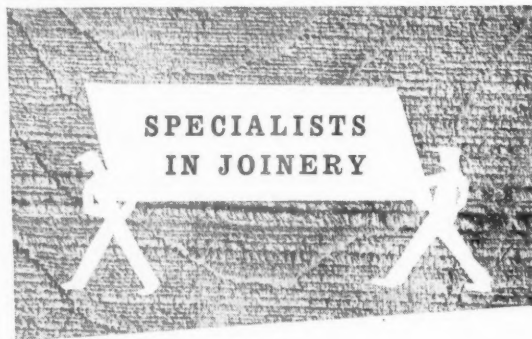


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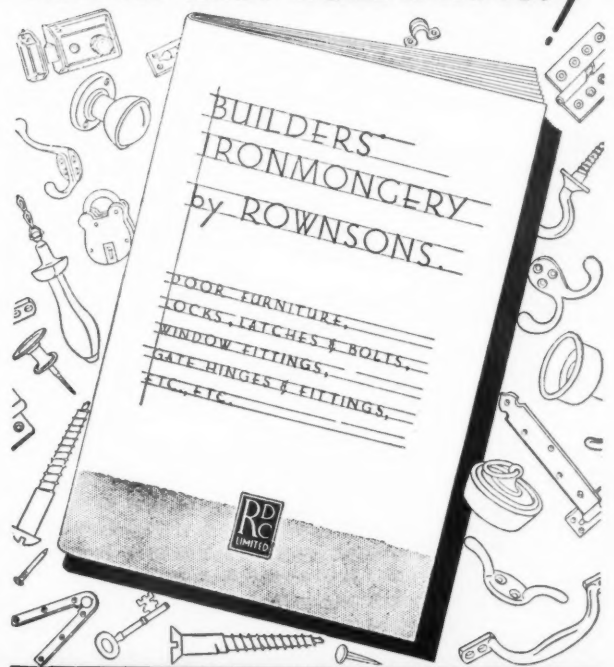
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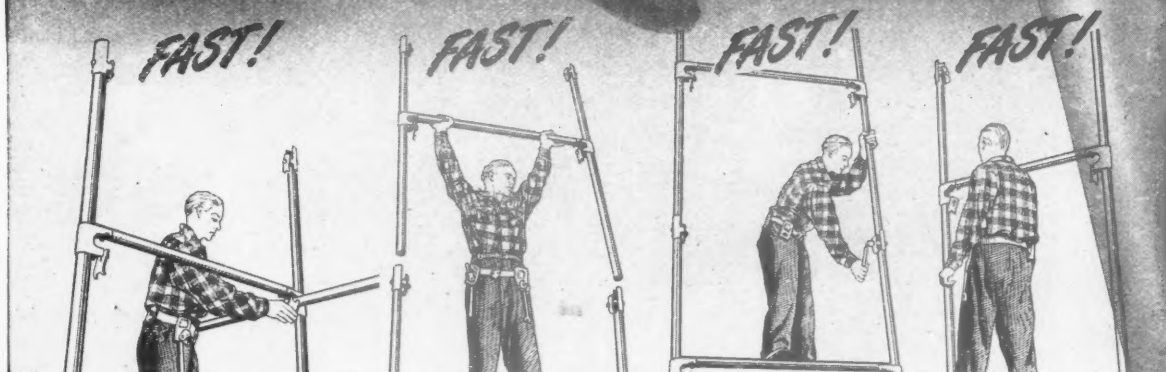
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