

# THE ARCHITECTS' JOURNAL



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

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No. 3183]

[Vol. 123

THE ARCHITECTURAL PRESS

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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ig one week, Ih 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. 1, 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
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.	Glasgow Central 2891
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Whitehall Gardens, Horseguards Avenue, Whitehall, S.W.1.	Trafalgar 8855
BRS	Building Research Station. Bucknalls Lane, Watford	Garston 2246
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. British Standards House, 2, Park St., W.1.	Mayfair 9000
BTE	Building Trades Exhibition. 32, Millbank, S.W.1.	Tate Gallery 8134
CABAS	City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Civic Centre, Newport, Mon.	Newport 65491
CAS	County Architects' Society. C/o F. R. Steele, F.R.I.B.A., County Hall, Chichester.	Chichester 3001
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CCP	Council for Codes of Practice. Lambeth Bridge House, S.E.1.	Reliance 7611 Ext. 1284
CDA	Copper Development Association. Kendals Hall, Radlett, Herts.	Radlett 5616
CIAM	Congrès Internationaux d'Architecture Moderne. Dolderal, 7, Zurich, Switzerland.	
COID	Council of Industrial Design. 28, Haymarket, S.W.1.	Trafalgar 8000
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.1.	Sloane 4280
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
CVE	Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1.	Reading 72255
DGW	Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
DPT	Department of Overseas Trade. Horseguards Avenue, Whitehall, S.W.1.	Trafalgar 8855
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 68, Gloucester Place, W.1.	Welbeck 9966
FASS	Federation of Association of Specialists and Sub-Contractors, Artillery House, Artillery Row, S.W.1.	Abbey 7232
FBBDO	Fibre Building Board Development Organization, Ltd. 47, Princes Gate, Kensington, S.W.7.	Kensington 4577
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	Regent 0221
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd., Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FPC	The Federation of Painting Contractors, St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4341
GBPA	Gypsum Building Products Association, 11, Ironmonger Lane, E.C.2.	Monarch 8888
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
GG	Georgian Group. 16, Hanover Square, W.1.	Mayfair 5454
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 5615
ICA	Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. 1, Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266



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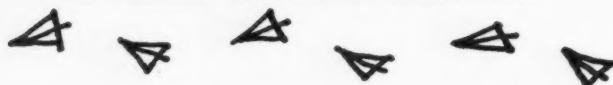
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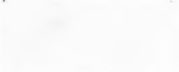
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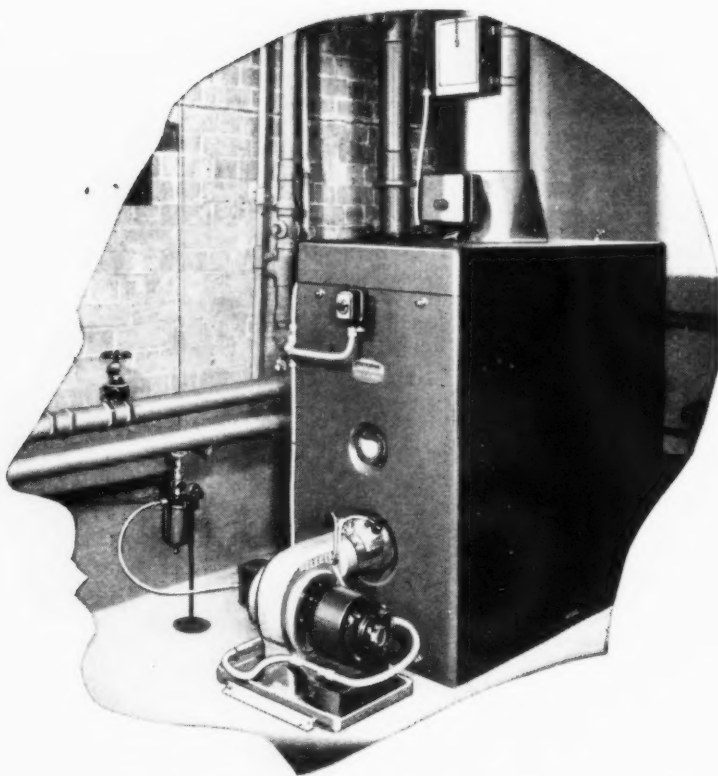
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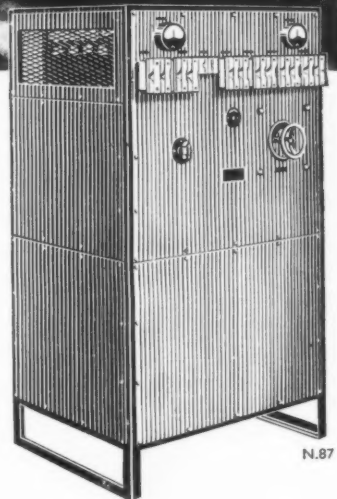


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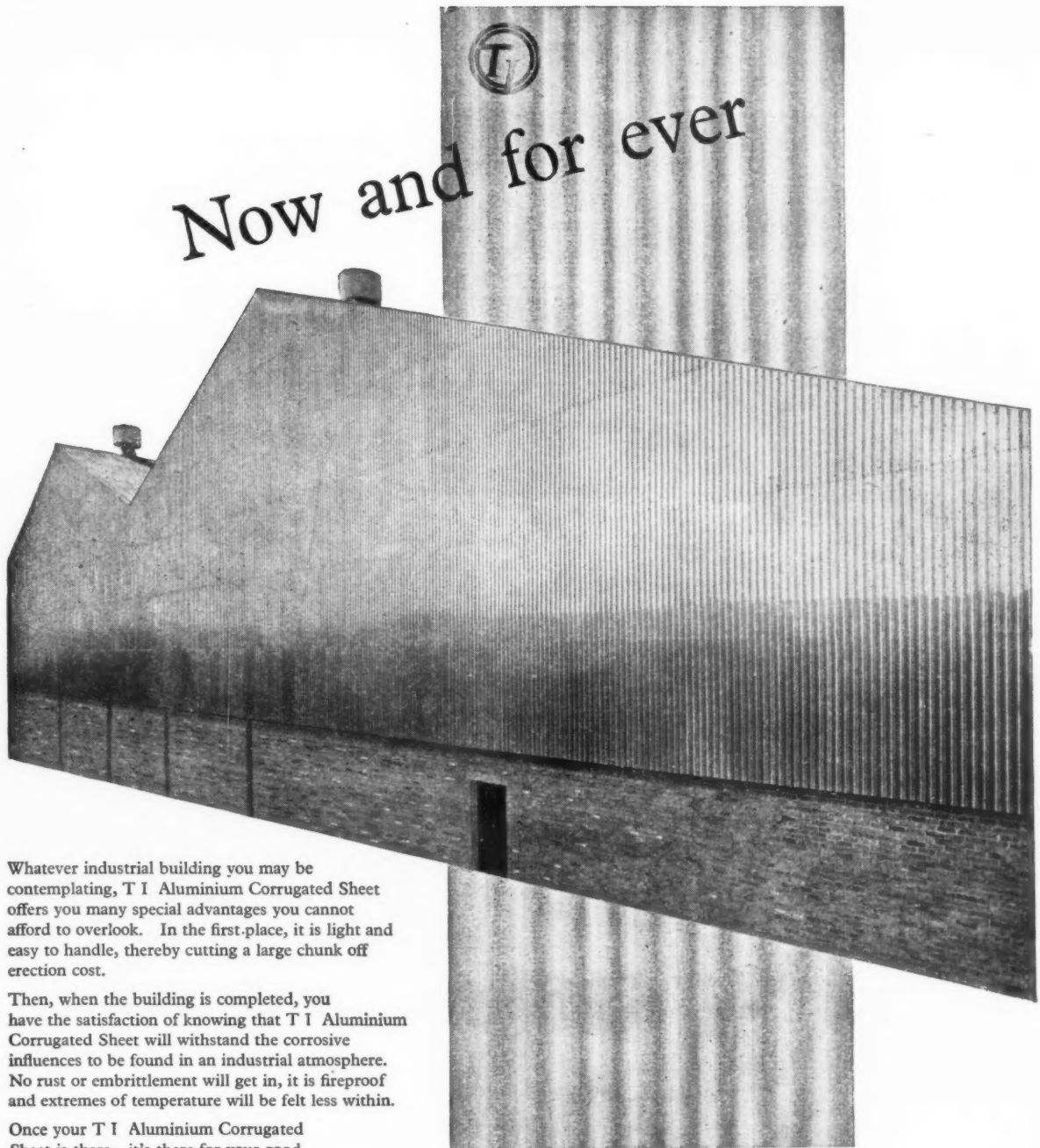


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\* To preserve freedom of criticism these editors, as leaders in their respective fields, remain anonymous.

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#### THE NEW U.S. EMBASSY

The American authorities have been very quick in judging and announcing the result of the limited competition for the new U.S. Embassy building in Grosvenor Square. The winning design was presented in London last Tuesday by the architect, Eero Saarinen in person, exactly three weeks after designs had to be sent in. The runner-up was Edward D. Stone.

Mr. Saarinen's is clearly only a preliminary sketch and we can be sure, knowing how beautifully detailed his buildings always are, that as the work proceeds he will introduce more elegance and refinement. But it is equally clear from the

sketch that the conception of the building is on exactly the right lines: although the architect has rightly made no attempt to design "in keeping" with the commonplace neo-Georgian blocks that have now replaced almost everywhere the original Georgian houses, he has retained the old rhythm and has been careful to avoid an abrupt change of scale.

The west side of Grosvenor Square will set a standard that perhaps the rest of Mayfair can be persuaded to follow, and I wish the opportunity could be taken of restoring some character to the garden in the middle, the banal layout of which dates from the time when the Roosevelt statue was put up at the end of the war.

#### BUILDING'S LOST MILLIONS

The title above was the title of a Sunday Times leader-page article a fortnight or so ago - number three in a series of articles entitled *Saboteurs of Prosperity*. It was depressing to read because it merely listed shortcomings, and you cannot even begin to analyse an industry in 2,000 words. Briefly, the argument put forward was that £1,400 m. a year is spent on building and civil engineering, and that if - as many people believe - the industry is about 25 per cent inefficient, the country pays £350 m. a year more than it should.

The trouble is, of course, that you cannot have mass-production efficiency when buildings are all "one-offs". Tendering inevitably costs money and the customers all pay in the long run for all tendering, just as your electricity bill includes a bit for generator transformer and boiler tenders. What with 10 per cent retention money and final accounts taking two years or so to be agreed, it is not surprising

that tenders are so high. On the other hand, several of the bigger builders have said publicly that money is "too easy to make", presumably because there is too much work to be done.

What architects can do about all this I don't know, but it is a little unnerving to realise that if we contribute even one half per cent to the industry's inefficiency, we cost £7 m. a year.

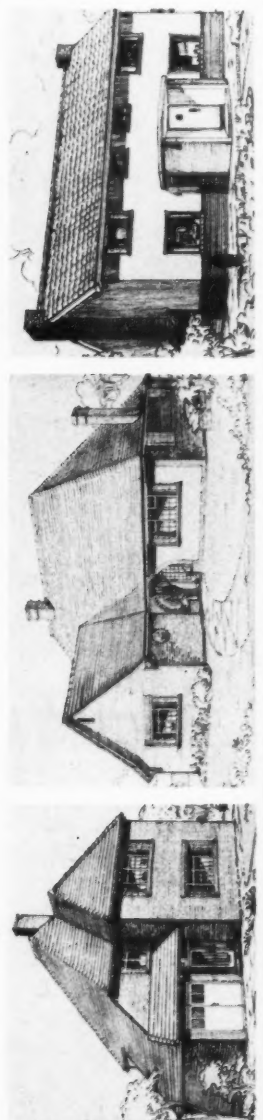
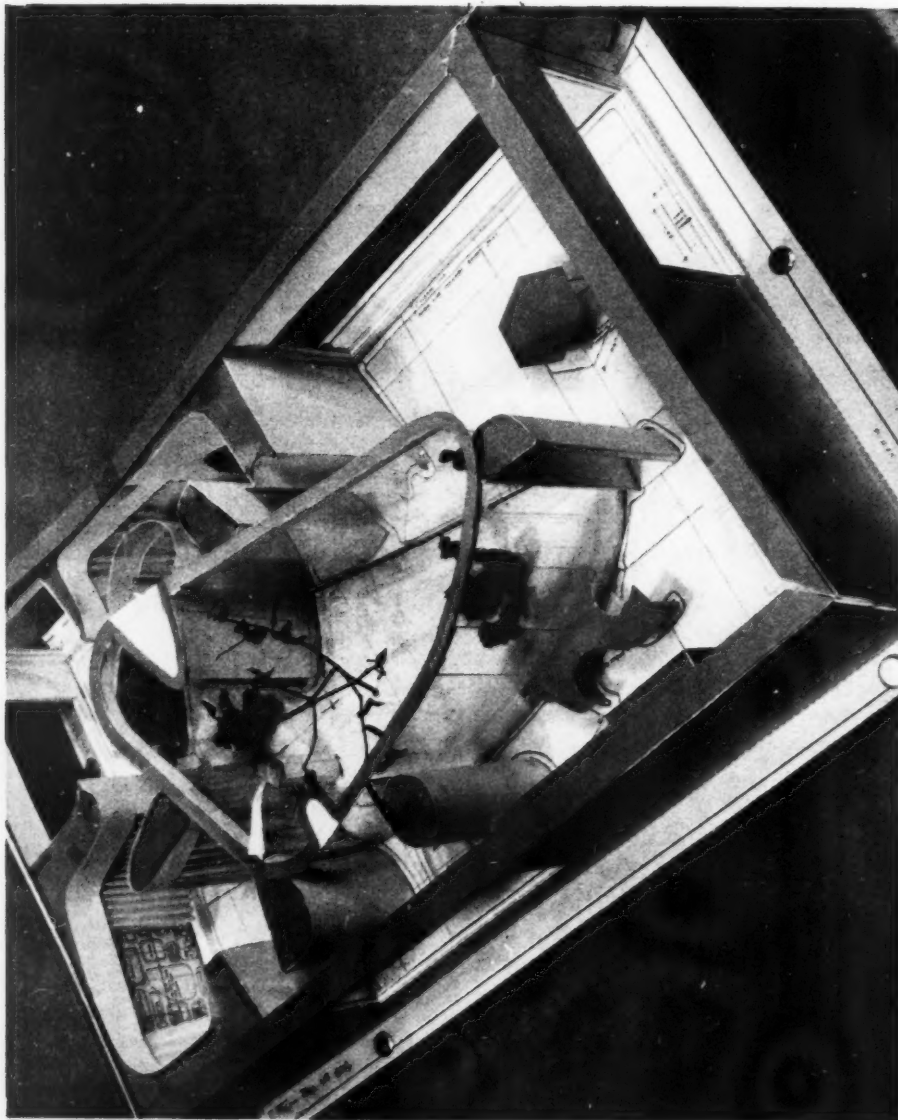
#### RUSSIA RE-VISITED

Architects had a rather earnest evening at Portland Place last week, listening to gentle-voiced J.H. Forshaw, chief architect of the MOHLG, describing his recent visit to Russia. A fellow-traveller - R. J. Bevan of BIS (a familiar name which ASTRAGAL can't quite place at Garsston) described the building research aspect of the visit. There was very little fresh to report, apparently. Indeed Mr. Bevan referred to the articles written and published after architects had visited Russia in '53 (such as the one by C.C. Handiside in the JOURNAL of October 22, 1953) as still the best sources of information. Particularly pleasing were Mr. Forshaw's pictorial comparison of Russian and American work (the Chicago Fair and the Moscow Agricultural Exhibition, for instance) and the story told about an old Russian architect who was distressed to learn of the death of William Wallcott, with whom he had trained at Leningrad.

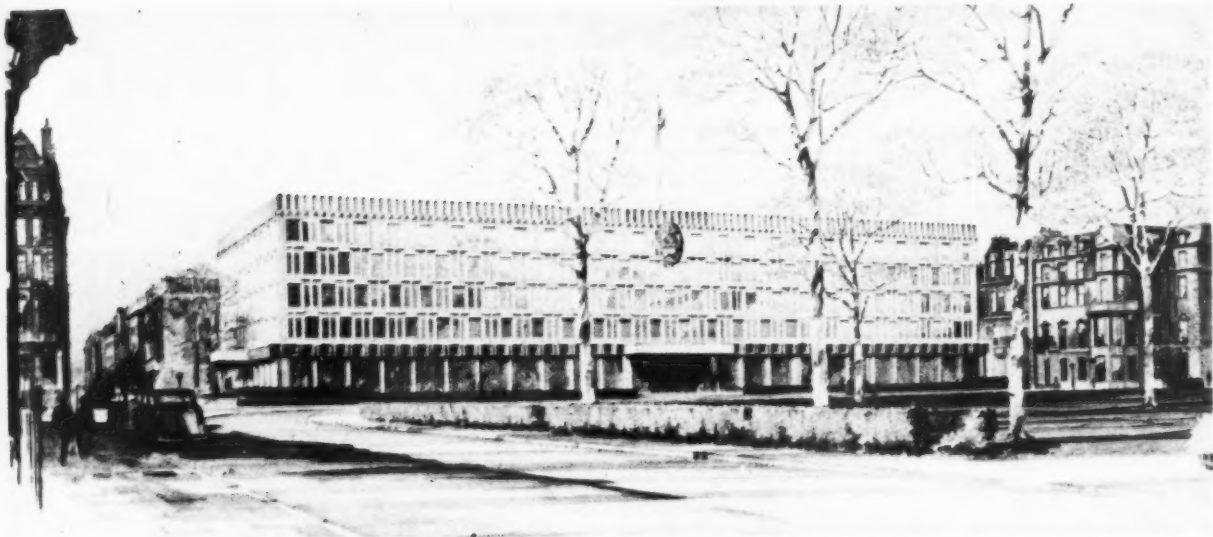
The proposer of the vote of thanks, S.W.C. Phillips, another member of the Russian tour, and Under-Secretary of housing in MOHLG, was obviously terribly impressed by the Russian way of life. "So much more rational than the way we do things" he said. "They will do what they are setting

## FIRING THE IMAGINATION

When the Ideal Home Exhibition opens next week at Olympia, the "Village of Today and Tomorrow" will include the four houses shown here. Which of these, do you suppose, is the house of tomorrow? Certainly not the one on the left, which has been designed by Alison and Peter Smithson (see pages 236-237) as the house, "not of tomorrow" - in the words of the publicity department - "but of the future". And which is the house of today? Here the publicity writer has been more helpful. The house in the bottom right-hand picture, which the builders, E. and L. Berg Ltd. have appropriately christened the "Surrey House", is apparently "a contemporary-style building". It would not be unfair to say that the exhibitors are being cautious. They tell the public that the Smithsons' house will not be built tomorrow, and they tie the label "contemporary" (which for most people means "tomorrow, perhaps") on to a very conventional structure. Nevertheless, they must be congratulated on commissioning the Smithsons to work for them. And the Smithsons must be congratulated for showing the public something that is out of their reach - something ingenious and impracticable. The bigger the spark used the more likely it is that some spectator's imagination will be fired. The Smithsons, with their "House, 1980", and Sir Hugh Casson, with his "Flat '56" exhibit at Sandersons (this page, February 2) might well shock conventional minds into accepting less extreme design with a feeling of relief. It is a pity there is no ideal home of first-rate design at this year's exhibition which the man-in-the-street can suddenly see as something pleasingly secure and familiar; after his exciting tour of the Smithsons'



the man-in-the-street can suddenly see as something pleasingly secure and familiar, after his exciting tour of the Smithsons.



The winning design by Eero Saarinen for a new American Embassy building in Grosvenor Square, referred to by ASTRAGAL on page 231. It will occupy the west end of the Square, and will be about 330 ft. long, 71 ft. high and 250 ft. deep. The U.S. Congress have appropriated £1,071,428 for the building, on which construction will start next January. The building is reported to be C-shaped on plan. The American State Department would therefore seem to merit congratulation on keeping their accommodation requirements so low that they can be adequately contained within a mere five-storey block. They have also made the significant statement that this design is not necessarily accepted as the final one, but only as the winning design in the competition.

out to do." He pointed out that the Russians had still a tremendous housing programme to fulfil. In Leningrad, he said, the present rate of building would have to continue for 15 years before there was a housing unit per family. As some English cities will keep their slums until 2,000, Russia is obviously not so far behind. The laugh of the evening, however, though not, perhaps, expected by Mr. Phillips, followed his description of Russian bewilderment when he endeavoured to explain his position as an administrator at the Ministry - a role which the Russians apparently do without. "It was difficult for them", explained Mr. Phillips, "to see what useful function an administrator could perform." A sentiment with which ASTRAGAL and other irresponsibles joyfully agreed.

#### STARTING A NEW CHAPTER

A colleague was invited to attend a recent inaugural dinner to celebrate the formation of a new chapter of the South Eastern Society of Architects, which has been started at Maidstone. It was, he reported, an occasion which showed the vigour and influence inherent in an active local society. The President and Mrs. Aslin attended - and, incidentally, Mrs. Aslin will surely be remembered as one of the most warm-hearted, amusing and altogether successful presidential wives the Royal Institute has had in recent years - and C.H. Aslin made a sensible little speech pointing out once

again how the RIBA depends on the allied societies for "producing the fuel and fire which makes the thing go". Alfred Bossom, the Mayor, E.T. Ashley-Smith, the Kent County Architect and witty Contran Goulden (of the Building Centre) also spoke.

★

The chairman of the new society, H.J. Dicketts, was ill, but his place was most ably taken by G.E. Soulsby, who, with Mr. Dicketts, had contributed a great deal towards the formation of the new chapter. In detail the evening was a success too - a pretty menu card printed by the local art school, and an interlude of madrigals sung by a choir formed by Mervyn Brunner, the director of music for Kent C.C., who acidly described the performance as liquid architecture.

#### SEATS OF MIS-LEARNING

Many must have read with pleasure, and perhaps a little chagrin, John Murray Easton's smooth and polished letter to The Times last week, agreeing to the demolition of Collcutt's block of the Imperial Institute. He suggested that not all the architectural profession is against the demolition and pointed out that the proposals (by Norman and Dawbarn, incidentally) for open planning, consisting of "blocks of varying height and shape, and of courtyards, terraces and lawns opening and visible from the surrounding streets," would not be possible

if the Collcutt building remained.

John Easton is obviously in the enviable position of having seen the plans. But who else has seen them? Is there any reason, save blue funk, why the clients - the Imperial College of Science - should not allow the designs to be published, and thus satisfy the citizens of London, whose skyline they are so anxious to alter, that the best proposals have been put forward?

★

And while on the subject of London University building, what about the plans for Bloomsbury? Houses are being, or about to be, demolished in Gower Street, Gordon Square, Woburn Square and elsewhere. Once again no one knows what the University's plans are. How much longer will the University, aided by Dr. Charles Holden, secretly nibble and gnaw at both the vitals and the bloom of Georgian Bloomsbury? The demolition may be essential, but at least we should be compensated with a preview of the architectural delights, if any, to come. Judging by the quality of post-war building in the area to date, the University is a most undemanding and indifferent client.

#### NEW INFORMATION SERVICE

Good news. George Mansell is to edit the A. & B.N. when Noel Musgrave goes to the RIBA Journal, and Eric Bird is to be Technical Education Officer in charge of a Building Centre architect-builder information service. More later.

ASTRAGAL



## The Editors

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### BUILDING ECONOMICS - A NEW SUBJECT ?

Now that we have published the final article in our series on building costs we must thank and congratulate the authors of this series - our 1955 Guest Editors (Stanley Farrow, Cleeve Barr, James Nisbet, Ivan Tomlin and Edward Brech), who gave their time, experience and knowledge to this vital, controversial and extremely topical subject. They have emphasised, throughout their series, that we should look not so much for ways of reducing costs, as for ways of getting more value for money in design and site operations. This is an important distinction. Most architects and builders would agree that better value for money is possible and that its achievement lies as much in the hands of architects and the other technical professions as with the builders, sub-contractors and manufacturers. But what we all lack are the agreed objective standards by which we can assess what value the building owner ought to expect for his money. It is impossible to say by how much the cost of a building is too high (or too low) until we can say how adequate the design is to its function; how appropriate the materials and construction; how efficiently the man-hours have been deployed in the offices, the workshops and on the site. The grossly inefficient job is easily spotted, but we have, so far, no recognised systematic technique for assessing the economics of constructional design or site operations. We have no standard by which to measure efficiency and decide what is fair and reasonable.

The Guest Editors showed in their articles that building economics is an almost unexplored field of study. They, and the authors they commissioned, O.J. Masterman and Clive Wooster, showed what work has already been done on cost analysis and on the management techniques of work study and programming. The researches of Dr. Weston at BRS on the economics of house and flat construction and the MOE work on site labour analysis clearly belong in this field. But there is a great deal as yet untouched - in the elucidation of all those questions which architects and builders ask themselves. Is in-situ concrete cheaper than pre-cast ? What are the economical spans for steel-work ? Or the economical heights for flats ? What would be the financial effect of using a tower crane ? What is the relationship between initial and maintenance costs ? How many man-hours should the heating installation require ? How do bearing pressures affect super-structure costs ?

If we are to recognise building economics as a distinct field of study, how should we deal with it ? Whose job should it be ? Clearly the basic information would come from all sides, from the records and cost analyses of executed work in the builders', architects' and quantity surveyors' offices; and clearly the fruits of study would be used by all. Who should collate and analyse we leave as an open question. The JOURNAL intends to continue the work begun by the Guest Editors. It will publish



cost analyses and such information on particular cost studies as are being made by individual architects, quantity surveyors, builders and engineers. But sooner or later building economics must take a recognised place alongside the other specialised disciplines which inform the design and construction of buildings.

**THE PRINTING TRADE DISPUTE.** We very much regret that owing to the dispute in the printing trade the editorial pages of the JOURNAL are fewer than usual. We are also sorry that some readers may receive their copies late.

## LETTERS

### BRILLIANT ESSAY ON ARCHITECTURE

SIR: I expect you will receive some letters of comment, and I hope of praise, for the exhibition of architecture recently opened at the Arts Council. The purpose of my letter is not to comment on the exhibition, but I would like to draw attention to the foreword in the catalogue, written by John Summerson. Without doubt this seems to me to be the best commentary on modern architecture which has been written in the last 10 years. Quite apart from its searching thoroughness, Summerson has explained in brilliantly clear and simple English many aspects of architectural philosophy. For all those who write on architecture this brief essay should serve as a model. There is no ambiguity, there is no political slant, and above all, there are no new words invented where perfectly good ones already exist.

MICHAEL PATTRICK, A.R.I.B.A.  
Principal, AA School

### SALARIED ARCHITECTS

SIR: We refer to your editorial column in the JOURNAL for February 9. Many will, as you aver, wish to congratulate the RIBA on its earnest endeavours on behalf of salaried architects. Many others may, we fear, withhold their congratulations for the time being.

We doubt, sir, whether the rank and file need to be kept alert and interested in the problems in this respect which exercise their elected leaders. In many cases, we imagine, sheer economic circumstances have no little part to play. Rather is the boot on the other leg - the rank and file, as the last AGM showed, are burdened with the task of keeping the RIBA aware and interested. Your analysis of the problem is, in many

respects, masterly but unfortunately you seem over-impressed by the amazing fact that the RIBA also comes to the same conclusions.

Of course, the recommendations of the ad hoc committee are in the right direction but we cannot agree that the RIBA's proposed action is timely. It is not! It is several years overdue!

And do the RIBA now propose any action likely to make up this loss of time - this falling behind teachers, bank clerks, etc. who have fallen behind everybody else?

On the contrary, the course proposed could be carried on interminably without any definite certainty of ultimate success.

The executive of the RIBA were opposed to any further action in this matter at the last AGM and it was only the clamour of an alert and interested rank and file which forced action upon them. It must be made clear that the course proposed by the ad hoc committee just will not do unless accompanied by a guarantee that it can be carried out within a known and relatively short period of time.

D.J. SMITH (A)	T. DORNE (A)
T.H. FRENCH (S)	H.A. HOGARTH (A)
G.F. GRANTHAM (S)	D. RAINTON (S)
R.H. MORFITT (A)	G.D. HALL (A)
M.S. PICKARD (A)	J.E. SHORES (A)
P.L. ANTHONY (S)	A.B. HOLMES (A)
G.D. WARDELL (A)	A. GREEN (S)
	V. DOBSON (S)

London.

### DISTRICT HEATING

SIR: John Madge's survey of "The Popularity of District Heating", published in your issue of January 26, has all the authority and impartiality that one would expect from the Building Research Station. (We were particularly interested to read that the most popular district heating scheme made provision for the additional use of coal fires).

There is, however, one direction in which the 1952-53 details which Mr. Madge gives

may be misleading: while quoting tenants' expenditure on district heating, he does not say what subsidy, if any, each scheme received from the local authority concerned.

One of the five district heating schemes which he studied, where the weekly charge for heating was 12s.6d. per dwelling in 1952-53, incurred in that year a loss to the housing revenue account amounting to £4,916. In 1953-54, weekly charges were increased to 15s. per dwelling, and the loss was £3,498. Over the six years 1948-54, the total deficiency borne by the housing revenue account was £25,520, which was said to equal a rate of 2s. in the £. The scheme quoted is apparently that described by Mr. Madge as Scheme C, where, in 1952-53, 60% of the tenants thought that district heating was worth what it cost them (i.e. £33 a year, plus £17 for electricity, gas, and solid fuel). One wonders whether as many would have been satisfied if the full cost of district heating had been charged.

J.S. WILLIAMS  
Director, Coal  
Utilisation  
Council

London.

### NO CHURCHES IN TEN YEARS?

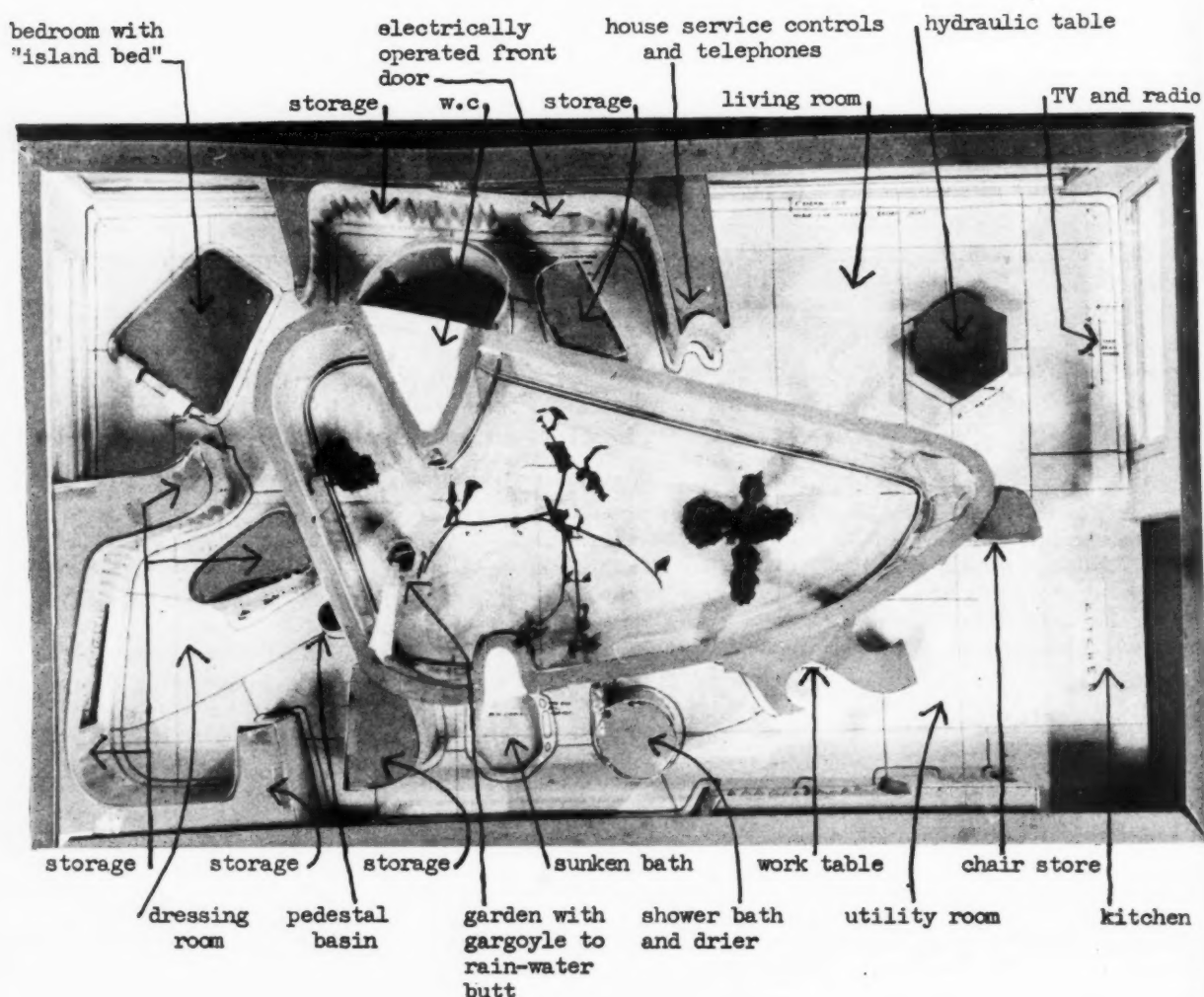
SIR: I would like to join the JOURNAL'S editorial (February 16 issue) in the praise given to the excellent "Ten Years of British Architecture" exhibition at the Arts Council, both with regard to the buildings shown and the method of presentation.

It was a disappointment however, to find that there were no churches exhibited, at a time when a lead on the design of this type of building is so much needed. While there is a paucity of examples for this purpose, there are a few churches (such as the Lansbury church) which could well have figured at this exhibition.

BRIAN ROBSON, A.R.I.B.A.

Kent.

## FORWARD TO BACK - TO - BACK HOUSING,



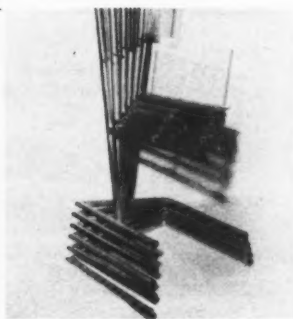
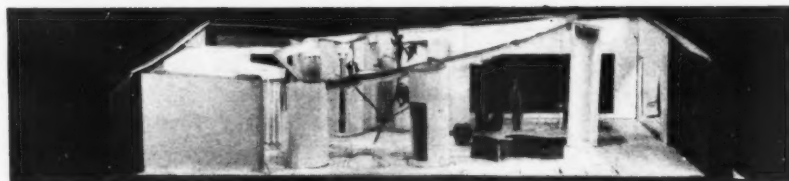
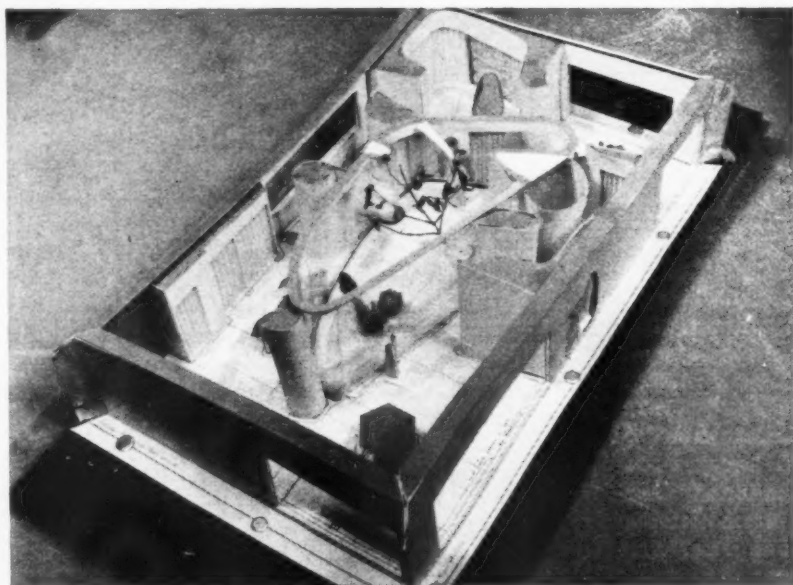
This "house of 1980" was designed by Alison and Peter Smithson for the Ideal Home Exhibition, which opens at Olympia next week. Other houses are shown on page 232. The architects, who are well-known for the "new brutalism" of their Hunstanton school, also designed the furniture; one piece, the "Pogo" stacking dining chair, is shown opposite. The house itself, which is heated and air-conditioned throughout, consists of a number of doorless compartments grouped around a central garden. These compartments, which are joined by a maze-like system of passages, differ in size, shape and height. The tilt of the roof over the bathroom, clearly shown in the photograph, bottom of opposite page, allows sunlight to fall across the internal garden into the living room. The construction of the house, which is designed to be one of a back-to-back group of terrace houses, is unusual. It is moulded in

plastic-impregnated plaster - a kind of skin structure built up in units each comprising the floor, wall and ceiling as a continuous surface. A flexible joint between each unit allows for thermal movement and provides a structural break for reducing noise. The three walls which adjoin other houses have a soundproof, fireproof, outer casing faced with aluminium foil. The wall facing the street is sprayed with a plastic protective skin. Inside the house the partly translucent walls, floor and ceilings are honey-coloured with brown "gasket" joints between each complete unit. The transparent wall to the central garden is moulded in metal-reinforced plastic and there is a sliding opening between the garden and the living room. All fittings are moulded to the wall surface and screened with flexible folding doors. The lighting, which is "an integral part of the wall surface... can be increased

## A PREVIEW OF THE SMITHSONS' IDEAL HOME

or dimmed to suit the requirements, or even the mood, of the moment". Visitors to this exhibition house will make a clockwise tour of the building as guests of "Anne and Peter, who live here". Anne, we are told, will open the electrically-operated, folding front door from the kitchen. She is not, it would seem, a very active girl, for she even controls the radio and TV set in the living-room from a push-button, short-wave transmitter. And if she thinks her guests deserve coffee, or something more, she can press a button and produce either a small or a large table out of the floor. Guests who see the table disappearing when they come in will, of course, take the hint and beat an anti-clock-wise retreat. But exhibition guests will move on from the living-room, with its mere "scattering of chairs", to the kitchen, where all fittings are above waist-level, all gadgets are female-saving and all equipment is built into the walls. A feature not shown in the model is a "galley-island", containing two ovens (one is "super-high-frequency"), which separates the kitchen from the utility room. This room contains a washing machine, a heated drying cupboard and a work-table (overlooking the garden) with its own water supply

and a built-in sewing machine. A cylindrical cubicle separates the utility room from the bathroom, where there is a self-rinsing, thermostatically-controlled sunken bath which fills from the bottom upwards. In the cubicle are nozzles which will spray Anne and Peter with water or warm air. From the bathroom the maze leads to a dressing room which has a pedestal handbasin, "masses of cupboards" and a series of niches which, as the Press hand-out says with curious reticence, "you can see the use for". And "now", as the hand-out says with renewed enthusiasm, "for the bedroom". There is nothing in it but a bed (one sheet only for the air-conditioned couple of 1980) and an electro-static dust collector. No telephone so far? It was on your left when you first came in, but Anne and Peter don't have to break their necks trying to get through the labyrinth before it stops ringing; if left alone it will take messages. As visitors unwind themselves from the bedroom they will find the WC, which has a unique feature - a door - on their right. It offers a magazine rack, a sun-lamp, an ash tray and a magnificent view of the gargoyle in the garden which trickles rainwater from the gutter into a pot at ground level.





# NEWS

AN EXHIBITION of Architecture in Australia opened yesterday at the RIBA, 66, Portland Place, W.1. It will be on view until March 23; weekdays, 10 a.m. to 7 p.m.; Saturdays, 10 a.m. to 5 p.m.

M.C.L. POWELL, assistant housing architect to the LCC, and formerly a partner in the firm of Powell and Moya, has been appointed LCC schools architect. He will fill the vacancy caused by the death of S. Howard.

APPLICATIONS for the travelling scholarship of £125 offered to associates of the RIBA by the Trussed Concrete Steel Co. Ltd. must be submitted by March 30. They will be considered by C.S. White, F.R.I.B.A., G. Grenfell Baines, A.R.I.B.A., and a director of the company. The winner will be accompanied on a continental tour by a member of the company's technical staff, who will have been awarded a similar scholarship. The two will then prepare a joint report on their study of reinforced concrete work, with special reference to architect-engineer collaboration. Applicants (under 35 on April 1) must state their age, architectural education, academic qualifications, present occupation, evidence of suitability and the names of two people who would give references. The company's address is Lower Marsh, London, S.E.1.

ARCHITECTS interested in the international competition for a new opera house in Sydney still have two weeks (until March 15) during which to submit applications. The designs themselves, for a building to be put up on the site ringed in white in the photograph below, do not have to be sub-

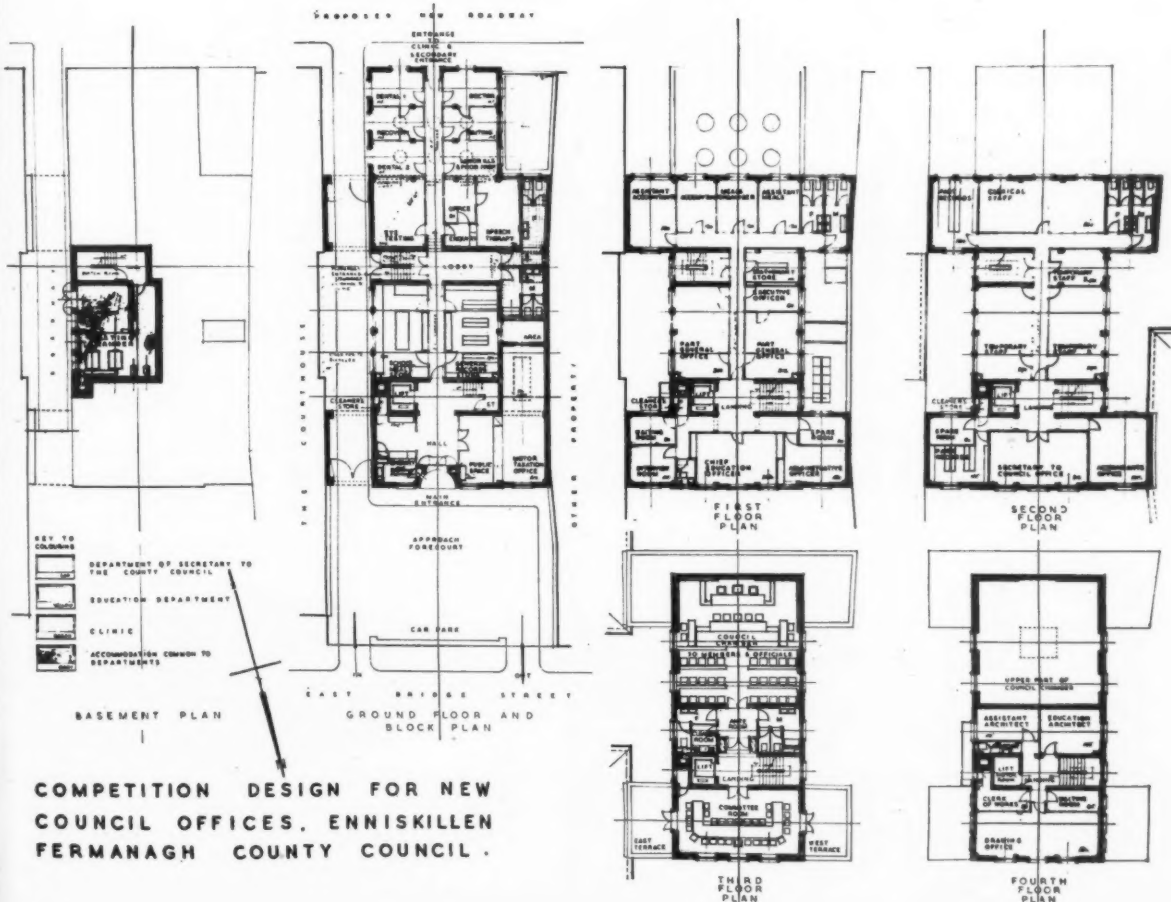
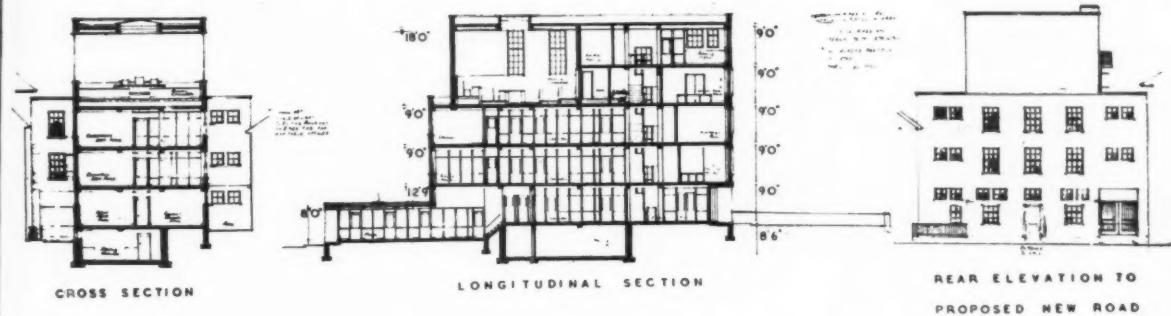
mitted until December. One of the four assessors will be Dr. J.L. Martin, architect to the LCC. The others will be Professor H. Ingham Ashworth, Dean of the Faculty of Architecture at Sydney University; Cobden Parkes, the New South Wales Government architect and Eero Saarinen, the American architect. The first prize will be £A5,000, the second £A2,000 and the third £A1,000. There is no need to write for application forms. The application for registration should be made in the form of a letter to The Opera House Committee, c/o Department of Local Government, Bridge and Phillip Streets, Sydney.

THE ILLUSTRATIONS on the right are of the winning design, by Harry Gibberd, A.R.I.B.A., of Birmingham, for council offices at Enniskillen. The first prize was £500. The second prize, of £200, was won by Thomas B. Fenton and Duncan MacLean, of Whitehouse, Co. Antrim. A correspondent says that the 200 designs submitted showed a very great variety of character. As a whole, he says, the standard of planning was not very high, particularly in the designs with the more progressive-seeming elevations. He believes that the assessor, R. Wilshire, chose the winning design largely because of the quality of the plan. All designs submitted will be on view at the Royal Society of Ulster Architects rooms, 7, College Square, Belfast, to March 10.

EDWARD D. MILLS, F.R.I.B.A., and Partners have won the £750 first prize in a competition for a legislative council building in Kampala. Moross and Graff, of Johannesburg, won the £500 second prize, and the third prize, of £250, was shared by Harry Gibberd (winner of the Enniskillen competition) and L.H. Wright and H. Noak, of Aden Public Works Department, S. Arabia. The assessor was H. Thornley Dyer.









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## INFORMATION CENTRE

9.56 design : general  
BUILDING CRAFT

*Building Craft Science.* A. W. Nobbs.  
(English Universities Press Ltd. 1955.  
12s. 6d.)

This book is specifically written to suit the needs of Building Craft Courses. It assumes that students have no previous knowledge of science so that although examples are carefully directed towards matters concerning buildings, the information is often of an elementary nature which most architectural students could be expected to know before

commencing their specialist training. Special attention is given to demonstration by experiment and there is an interesting range of well described examples. Some of these may be useful to teachers in architectural schools.

19.185 construction : details

### CIRCULAR LIFT SLAB CONSTRUCTION

*Expandable school built of circular lift slab units.* (Engineering News Record. USA. November 19, 1955, pp. 34-36).

Lift slab construction used for single storey 100-ft. diameter school building. Circular 10-in. slab supported on an inner ring of six steel columns  $5\frac{1}{2}$  in. dia. each 16 ft. from the centre and an outer ring of 12 columns  $6\frac{1}{2}$  in. square each 45 ft. from the centre. The completed building has an enamelled porcelain and glass treatment fitting within the outer columns. The circular design reduces the perimeter of the separate buildings. The

site has been planned to house similar buildings at a future date.

26.119 services and equipment  
PBC CABLES

*Polyvinyl Chloride Insulated Cables and Flexible Cords for Electric Power and Lighting.* BS.2004: 1955. (BSI. 6s.).

This revision of BS.2004 has been published to incorporate an amendment on tinned copper conductors, with plain copper conductors as an alternative, to be supplied when specified by the purchaser. In the first edition, issued in 1953, plain copper conductors only were specified, but it has since been found that many users require tinned conductors and the Standard has been modified accordingly. The specialist will find this Standard more useful as a reference than the architect.

26.120 services and equipment  
CEILING SWITCHES

*Cord-operated Ceiling-switches.* BS.2652: 1955 (BSI. 2s. 6d.).

This is the counterpart to BS.1299: Part I: 1946 which dealt with Tumbler Switches. Since the main disadvantage of this type of switch is the cost of replacement, architects will be most interested in the clauses specifying mechanical strength. Switches must be turned on or off "by a steady pull normal to the plane of the base not exceeding 10 lb." and should be "capable of supporting for five minutes a weight of 30 lb. suspended from the end of the operating cord." These seem to be very gentlemanly interpretations of the rough tugs such switches get in the ordinary household.

*Readers requiring up-to-date information on building products and services may complete and post this form to the Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1*

## ENQUIRY FORM

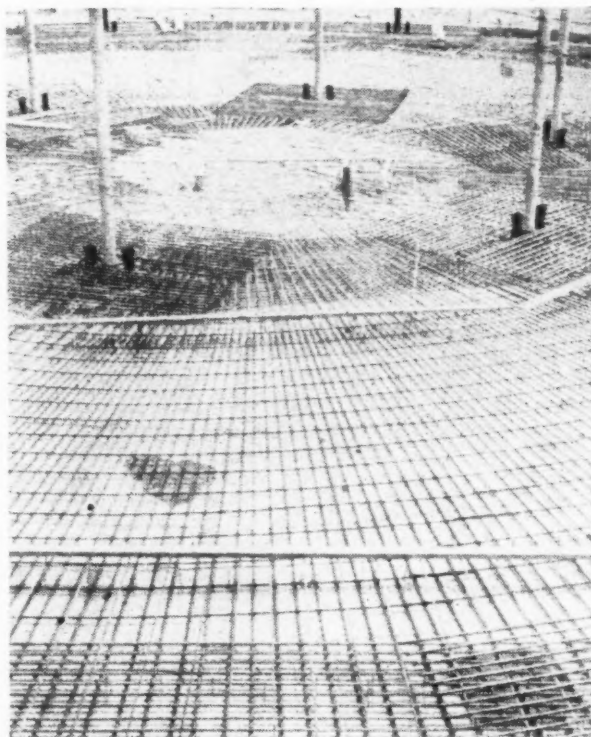
*I am interested in the following advertisements appearing in this issue of "The Architects' Journal."* (BLOCK LETTERS, and list in alphabetical order of manufacturers names please.)

.....  
.....  
.....

*Please ask manufacturers to send further particulars to :—*

NAME .....  
PROFESSION or TRADE .....

ADDRESS .....



## THE INDUSTRY

## PLASTIC CISTERNS

The photograph on the right shows the new Unimer well-bottom type of plastic flushing cistern. Plastic cisterns are not, of course, new, but this one is believed to be the first example of the well-bottom type and it is intended mainly to be used as a replacement for the traditional cast-iron models. The advantage of a plastic cistern is that the casing will not rust and produce stains while it also has a much greater resistance to frost damage—an important point when it is remembered that so many cisterns are fixed in outbuildings. The cistern is, of course, much quieter than the cast-iron type, not only because plastic is much less resonant, but because the operating bell has been fitted with a special P.V.C. rim which also decreases the noise.

This type of cistern has a wider market in this country than any other and it is estimated that there are between four and five million in use, while about a quarter of a million are supplied every year, mainly for replacement purposes. The Unimer cistern can be fitted in place of an old cast-iron type with a minimum of trouble and without any disturbance of the existing plumbing connections. It has a capacity of two gallons and conforms to B.S.1125. (*United Merchants Ltd., Walter House 418-422 Strand, London, W.C.2.*)

## NEW GAS COOKER

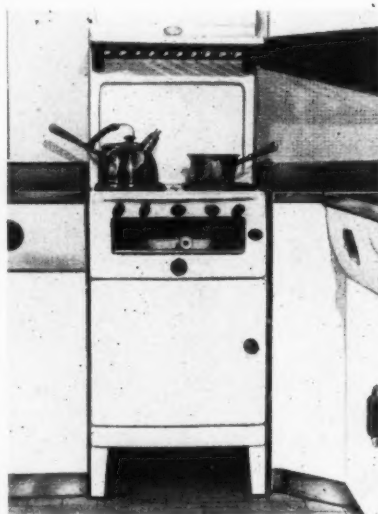
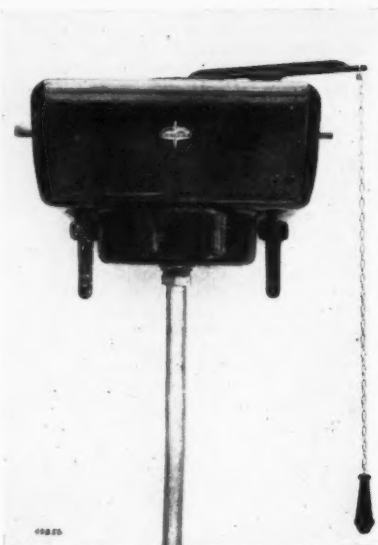
The photograph on the right shows Flavel's new Mercury cooker, which sells at approximately £29. Standard finish is in white, ivory or fawn, and there is also a choice of six colours for the safety plastic taps. (*Sydney Flavel & Co. Ltd., Eagle Foundries, Leamington Spa.*)

## POLYTHENE FOR PLUMBING

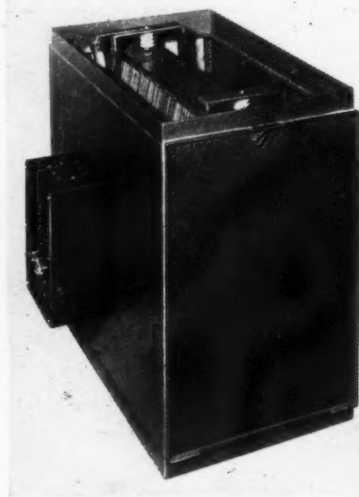
The Yorkshire Copper Works, who have for many years been making all types of copper tube for plumbing purposes, are now producing polythene tube to BSS 1972 and 1973 and fittings made from a newly developed high strength grade of polythene which has a higher melting point than the standard material. The polythene fittings have normal BSP threads and direct connections can therefore be made between the fittings and between copper or galvanized pipes. Special adaptors are also produced to allow connections to be made between plastic fittings and stopcocks or bib taps. At present the fittings are available in couplings or equal tees from 1½ in. to 1¼ in nominal sizes, but other fittings will be available later. The pipe can be supplied with either one or both ends flanged and with the nuts for the fittings and washers already on the tube. The manufacturers are also prepared to lend or sell special flanging tools. (*Yorkshire Copper Works, Ltd., Leeds.*)

## AIR CONDITIONING EQUIPMENT

The photograph on the right shows the Electro-Klean filter, an electrostatic type which has been designed for use in small



air-conditioning systems. The electrostatic charge, which is between 11½ and 12½ kilovolts, greatly improves the collecting effi-



ency of the filter, particularly with very small particles of two microns or less. The Electro-Klean is produced in several different sizes with filtering capacities up to an airflow of 2,400 cu. ft. per min.; each unit consists of a mild-steel frame containing one or more filter cells, which are supported in the frame between two metal plates with a rubber seal. Accordion-pleated mineral fibre is used as the filtering medium, the edges of the pleats being coated with a metallic compound which serves as a conductor for the electrostatic charge and distributes it uniformly over the entire filter cell, each filter unit having a radio frequency oscillator to provide the electrostatic charge from normal a.c. supply voltages. Each filter is therefore an entirely self-contained unit which needs only an electrical connection when it is installed in the ducting. If access doors are used in the ducting within 3 ft. of the filter, protective screens must be provided to prevent accidental contact with internal high-voltage parts.

After a period of use the filter will need changing and the necessity for this will be shown by a heavy deposit on the filter medium and diminished airflow. It is possible to prolong the active life of the filter cell by tapping out some of the heavier dust that accumulates on the surface of the filtering medium, and this expedient may be useful in a new installation where an excessive amount of construction dust may have been collected. A resistance indicator can also be provided to show when the cell needs replacement. (*Air Control Installations Ltd., Ruislip, Middlesex.*)

## OIL FIRED BOILERS

For some years Messrs. Thomas de la Rue have been producing the Potterton range of gas-fired boilers; this range has now been extended to include oil-fired boilers for both central heating and direct hot-water supplies. Four models are so far available with outputs varying from 108,000 to 216,000 BTU's per hour, but by the autumn of this year it is probable that there will be two further models with capacities of 252,000 and 288,000 BTU's. The boiler consists of cast-iron waterway sections which, when assembled, form a combustion chamber with a closed base and closed water-cooled sides, the lower part of the combustion chambers being lined with brickwork. The water tubes are finned to give a large heat exchange surface and this brings the heating efficiency up to 75 or 80 per cent., which is thought to be the maximum that can be used without risk of excessive condensation. Both waterways and flues are easily accessible and the burner is mounted on flexible connections so that it can be swung out of the way. Operation of the oil burner is entirely automatic with all the usual safety devices. Prices vary from £206 to £287 for the four models at present on the market. (*Thomas de la Rue & Co. Ltd., Gas Division, Cavendish Works, 20-30, Buckhold Road, London, S.W.18.*)





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For further information on the use of glass in building consult the Technical Sales and Service Department, St. Helens, Lancs. (Telephone: St. Helens 4001), or Selwyn House, Cleveland Row, St. James's, London, S.W.1 (Telephone: Whitehall 5672-6). Supplies are available through the usual trade channels. "Armourcast" is a registered trade mark of Pilkington Brothers Limited.

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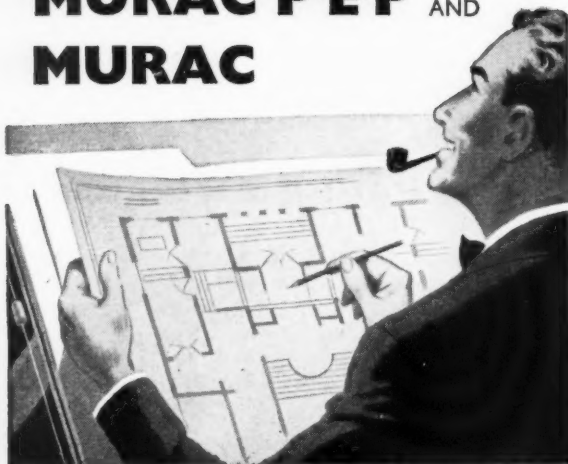
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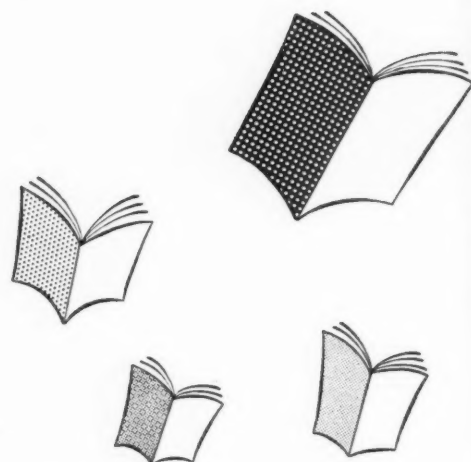
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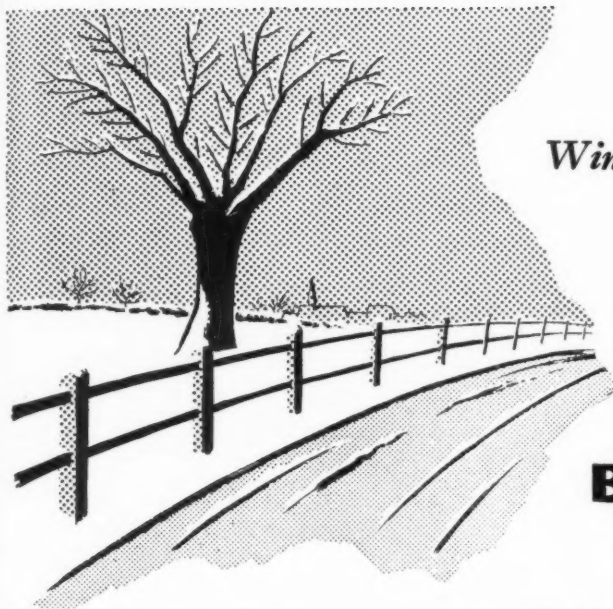
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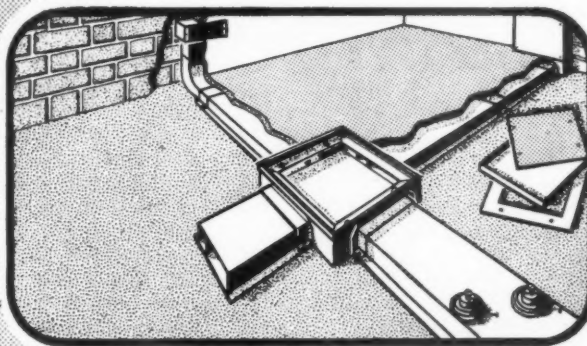
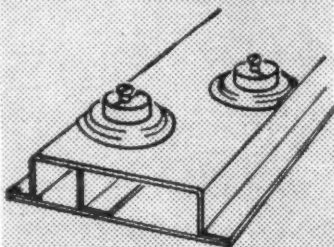
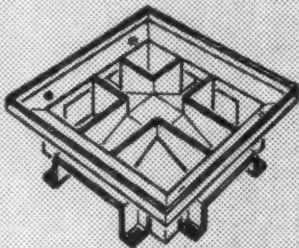
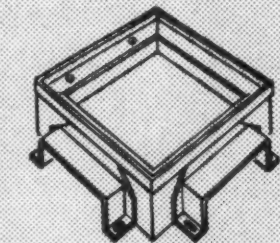
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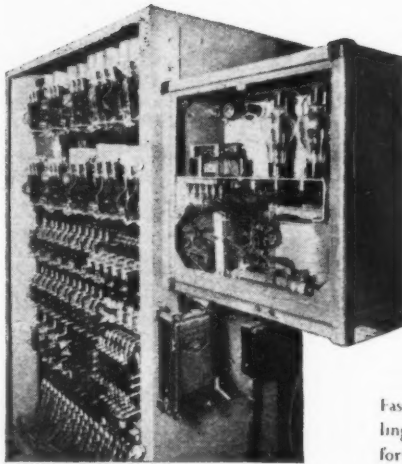
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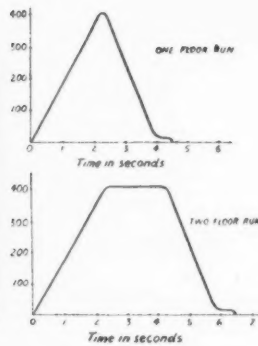
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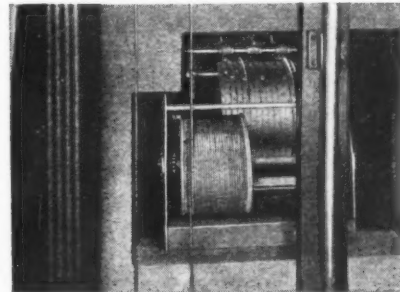




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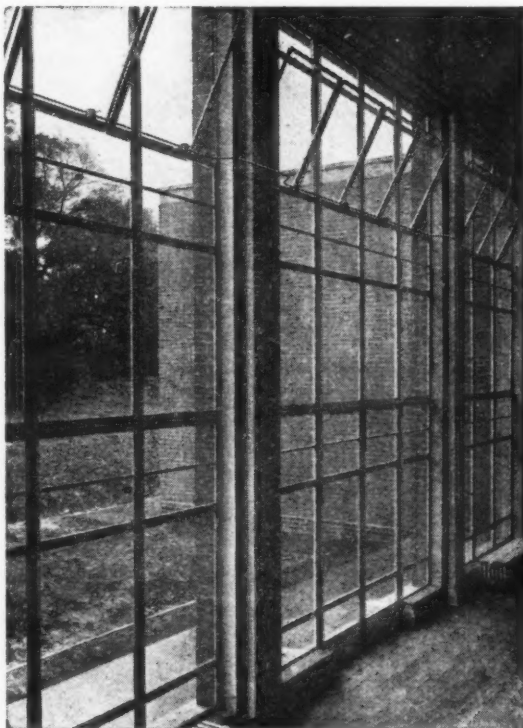


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