

THE ARCHITECTS' JOURNAL



standard contents

every issue does not necessarily contain
all these contents, but they are
the regular features which
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No. 3045]

[Vol. 118

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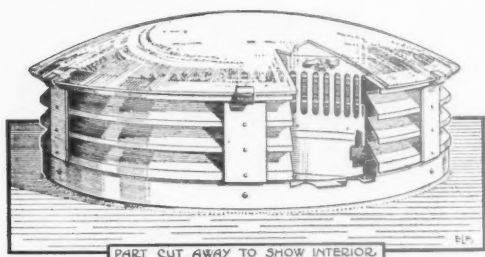
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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ig to Z the next. In all cases where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

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley," Castle Hill Avenue, Berkhamstead, Herts.	
ABS	Architects' Benevolent Society, 66, Portland Place, W.1.	Langham 5721
ABT	Association of Building Technicians, 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain, 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association, 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction, 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association, 34/36, Bedford Square, W.C.1.	
ARCUK	Architects' Registration Council, 68, Portland Place, W.1.	Langham 8738
AScW	Association of Scientific Workers, 15, Half Moon Street, Piccadilly, W.1.	Grosvenor 4761
BAE	Board of Architectural Education, 66, Portland Place, W.1.	Langham 5721
BATC	Building Apprenticeship and Training Council, Lambeth Bridge House, S.E.1.	Reliance 7611, Ext. 1706
BC	Building Centre, 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council, 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation, 17, Amherst Road, Ealing, W.13.	Perivale 6869
BCIRA	British Cast Iron Research Association, Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association, 10, The Boltons, S.W.10.	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
BIAE	British Institute of Adult Education, 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors, 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council, 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade, Millbank, S.W.1.	Whitehall 5140
BRDB	British Rubber Development Board, Market Buildings, Mark Lane, E.C.3.	Mansion House 9383
BRS	Building Research Station, Bucknalls Lane, Watford.	Garston 2246
BSA	Building Societies Association, 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution, 28, Victoria Street, S.W.1.	Abbey 3333
BTE	Building Trades Exhibition, 4, Vernon Place, W.C.1.	Holborn 8146/7
CABAS	City and Borough Architects Society, C/o Johnson Blackett, F.R.I.B.A., Civic Centre, Newport, Mon.	Newport 5491
CAS	County Architects' Society, C/o F. R. Steele, F.R.I.B.A., County Hall, Chichester.	Chichester 3001
CCA	Cement and Concrete Association, 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CCP	Council for Codes of Practice, Lambeth Bridge House, S.E.1.	Reliance 7611
CDA	Copper Development Association, Kendals Hall, Radlett, Herts.	Radlett 5616
CIAM	Congrès Internationaux d'Architecture Moderne, Doldertal, 7, Zurich, Switzerland.	
COID	Council of Industrial Design, Tilbury House, Petty France, S.W.1.	Abbey 7080
CPRE	Council for the Preservation of Rural England, 4, Hobart Place, S.W.	Sloane 4280
CUC	Coal Utilization Council, 3, Upper Belgrave Street, S.W.1.	Sloane 9116
CVE	Council for Visual Education, 13, Suffolk Street, Haymarket, S.W.1.	Reading 72255
DGW	Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
DIA	Design and Industries Association, 13, Suffolk Street, S.W.1.	Whitehall 0540
DPT	Department of Overseas Trade, 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 Architect and Surveyors, 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FASSC	Federation of Association of Specialists and Sub-Contractors, 5, Arundel Street, Strand.	Temple Bar 6633
FBI	Federation of British Industries, 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission, 25, Savile Row, W.1.	
FCMI	Federation of Coated Macadam Industries, 37, Chester Square, S.W.1.	Sloane 1002
FDMA	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 4041
FS (Eng.)	Faculty of Surveyors of England, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GC	Gas Council, 1, Grosvenor Place, S.W.1.	Sloane 4554
GG	Georgian Group, 27, Grosvenor Place, S.W.1.	Sloane 2844
HC	Housing Centre, 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors, 75, Eaton Place, S.W.1.	Sloane 5615
ICA	Institute of Contemporary Arts, 17-18, Dover Street, Piccadilly, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers, Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers, Savoy Place, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society, 32, Victoria Street, S.W.1.	Abbey 5215

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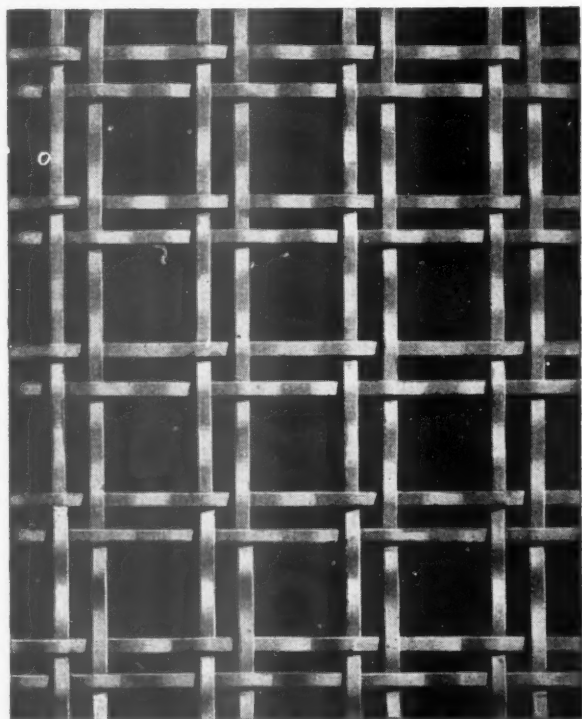
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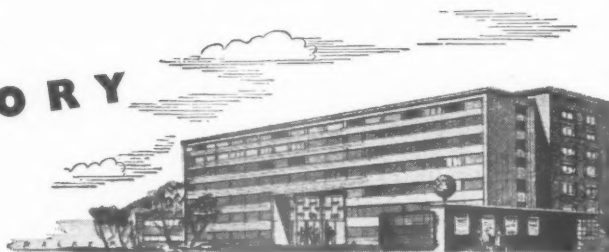
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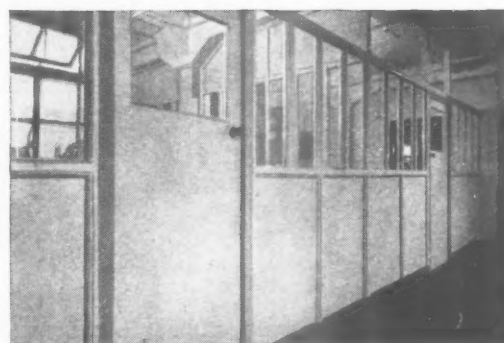
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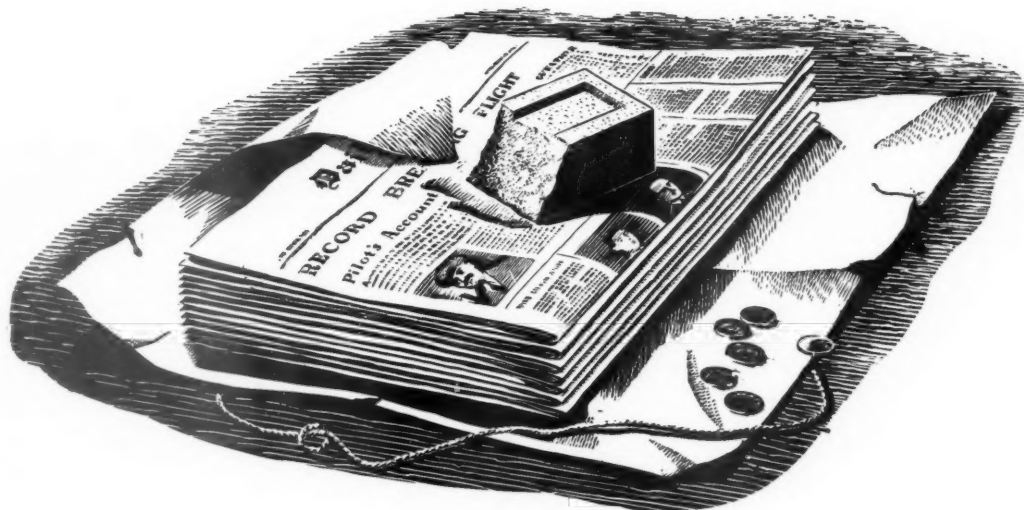
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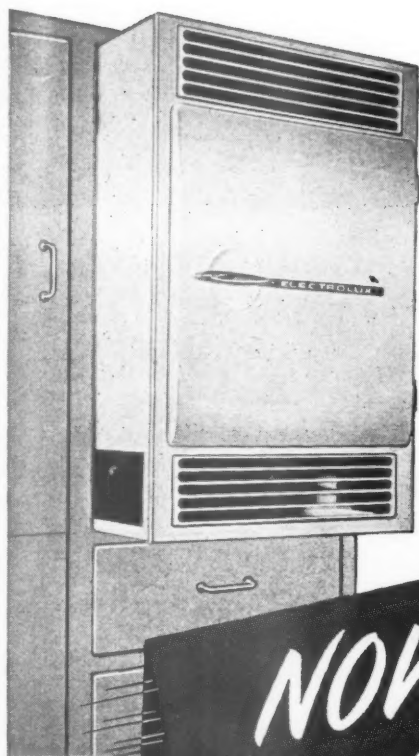


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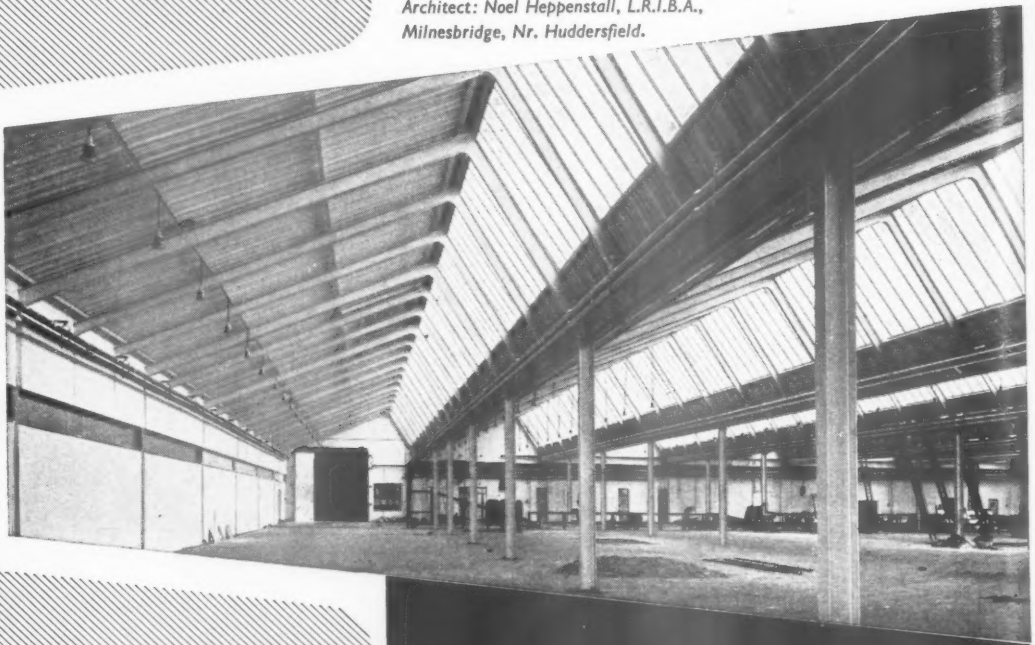
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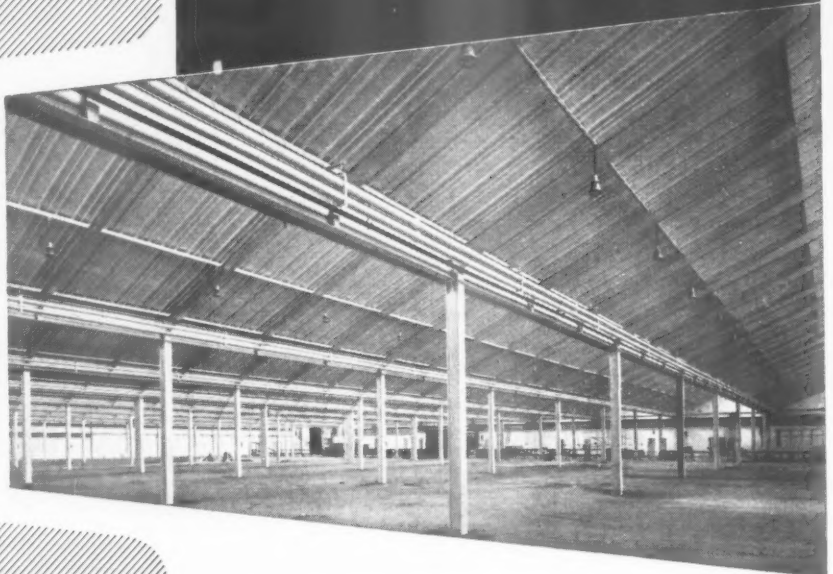


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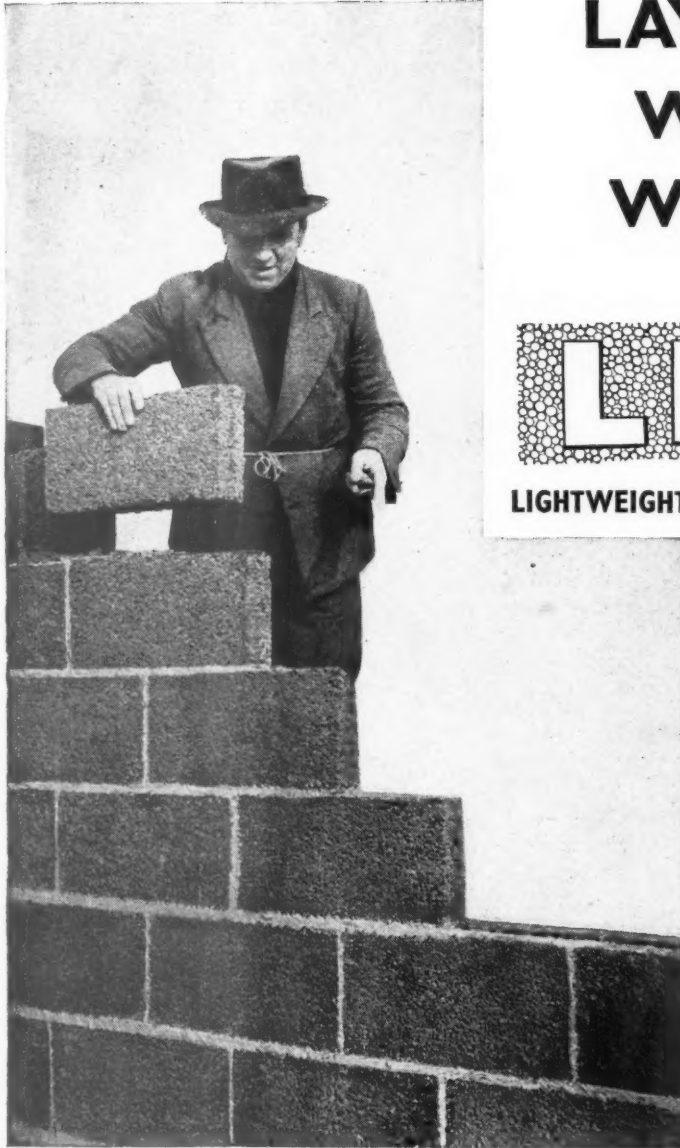
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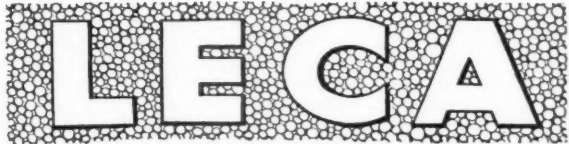
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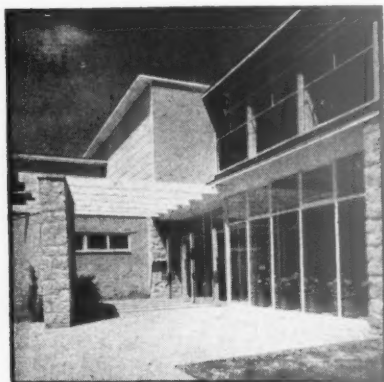
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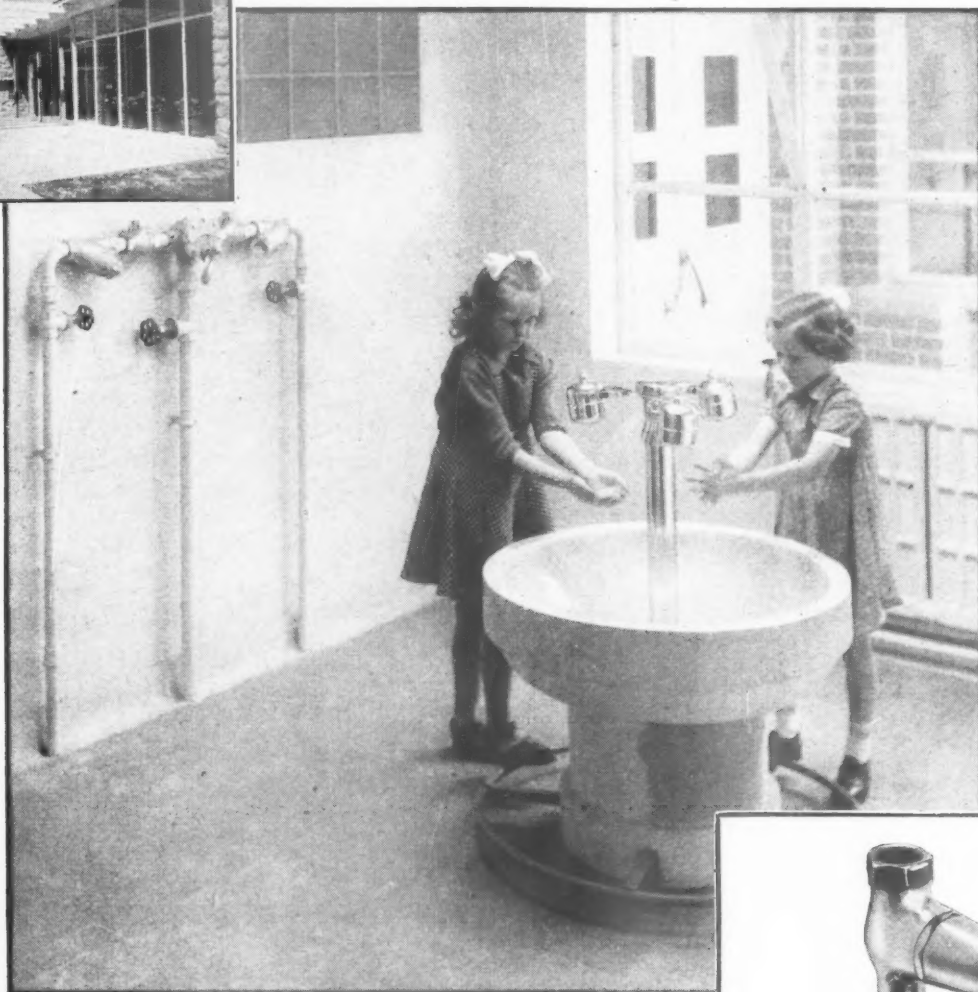
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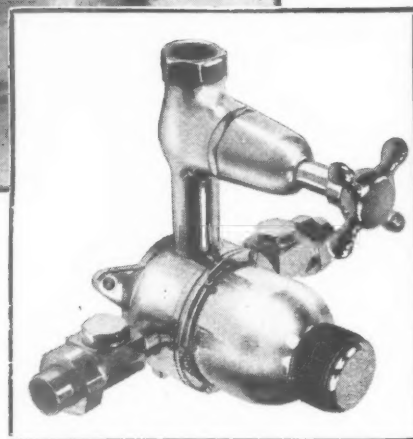
*Ministry of Education Memorandum on
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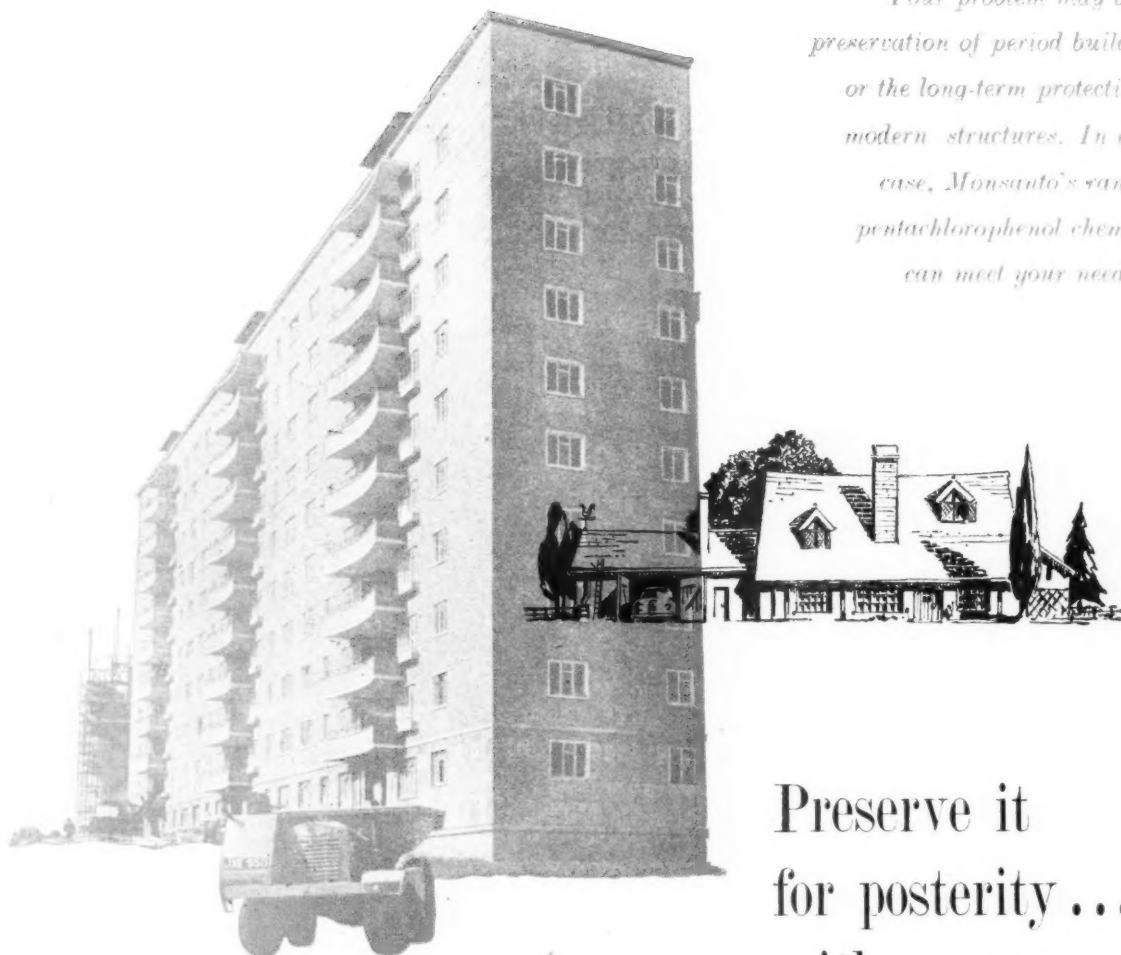
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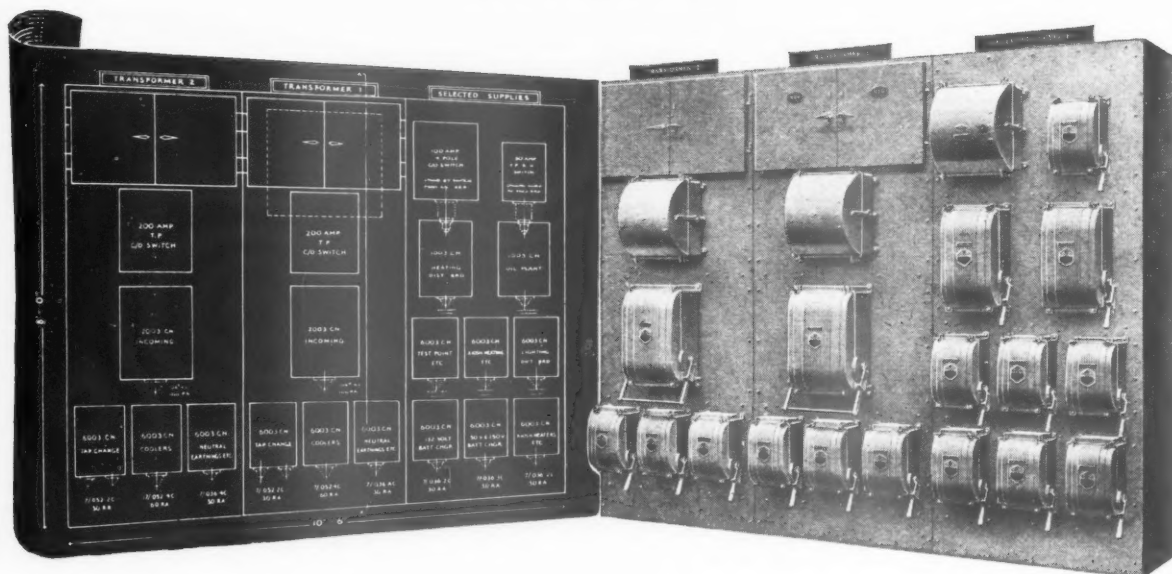
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NORTH WESTERN GAS BOARD: Bridgewater House, 60, Whitworth Street, Manchester, 1. Manchester Central 8121.

NORTH EASTERN GAS BOARD: Bridge Street, Leeds, 2. Leeds 32571/8.

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EASTERN GAS BOARD: 2, The Abbey Garden, London, S.W.1. Trafalgar 5373/7.

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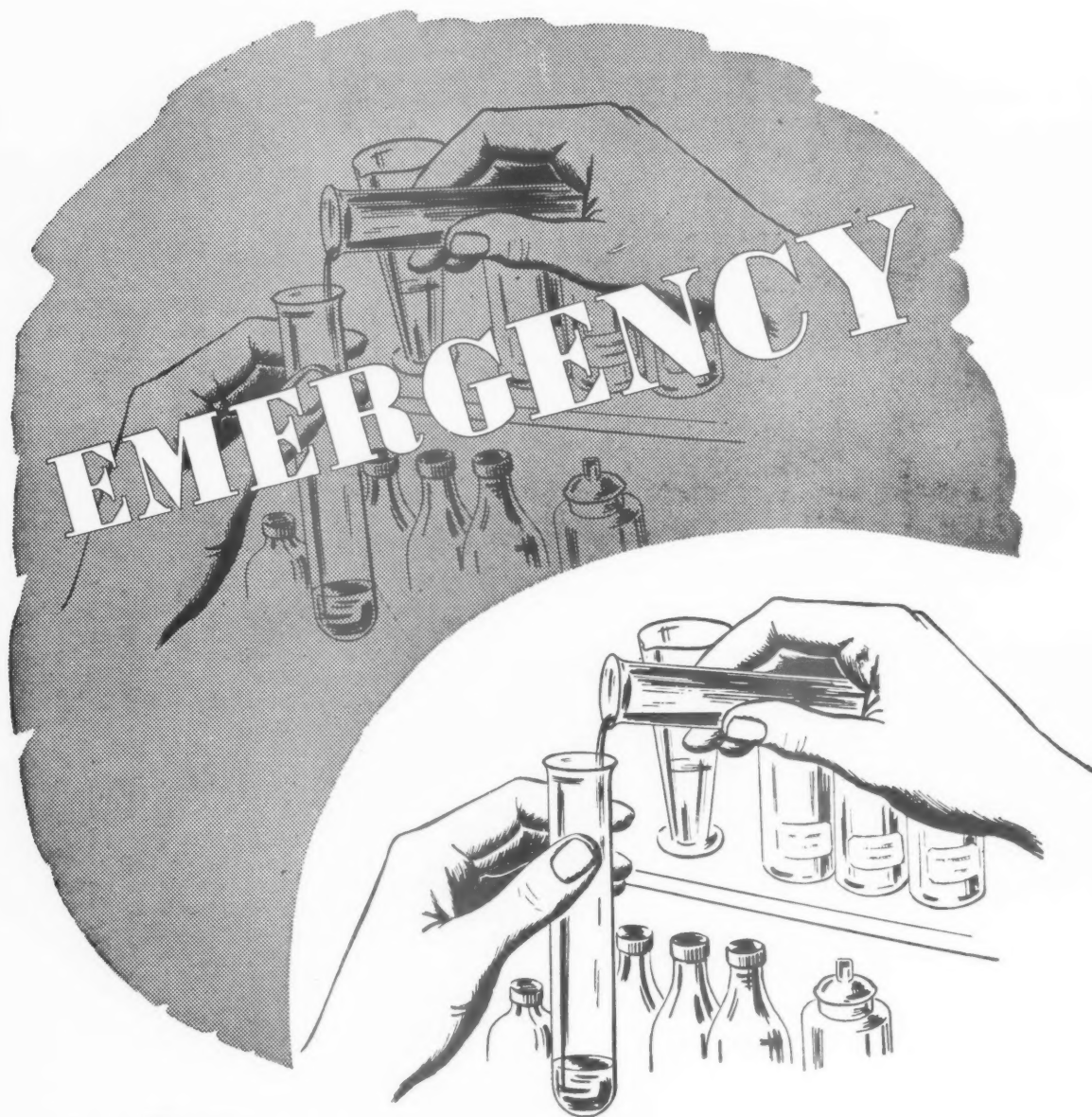
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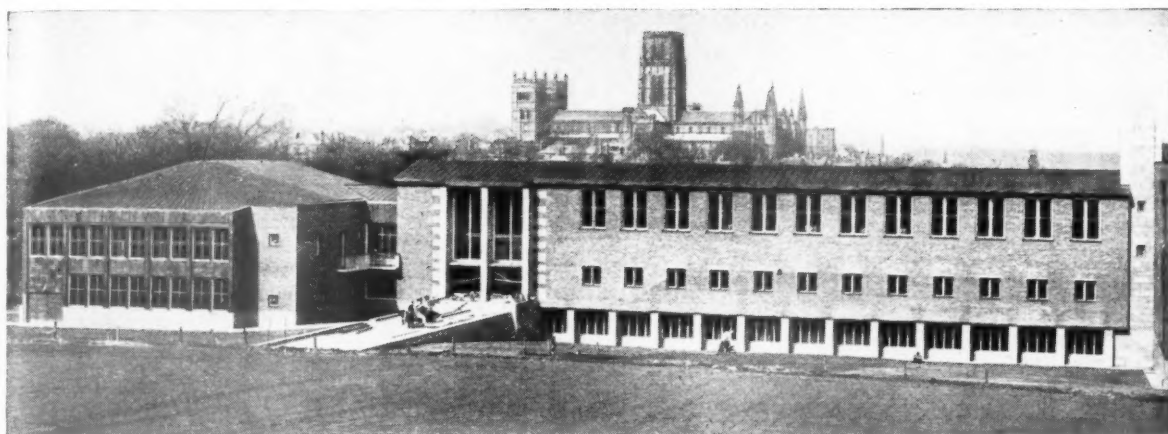
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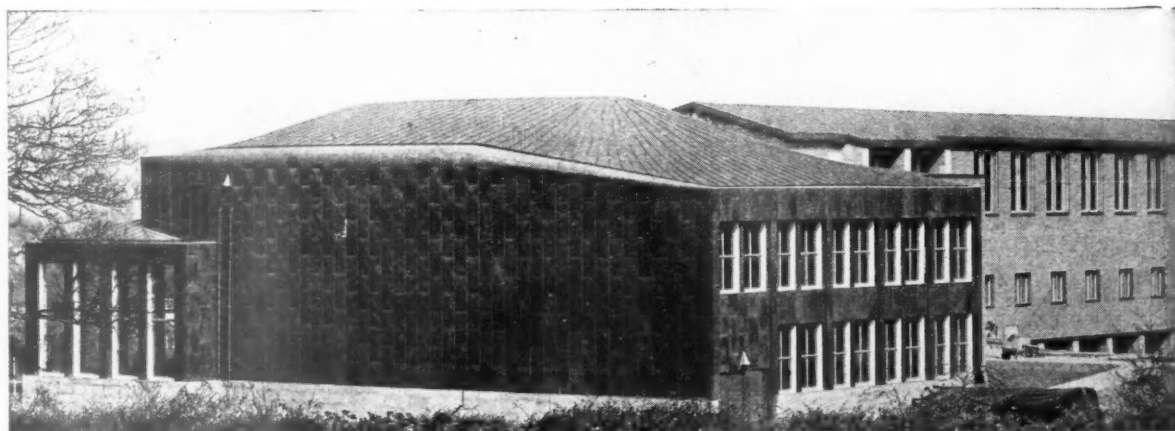
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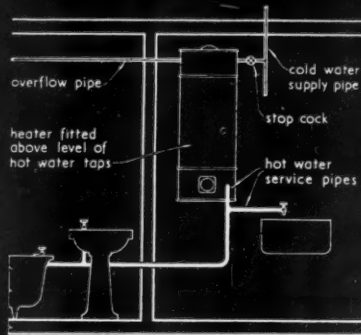


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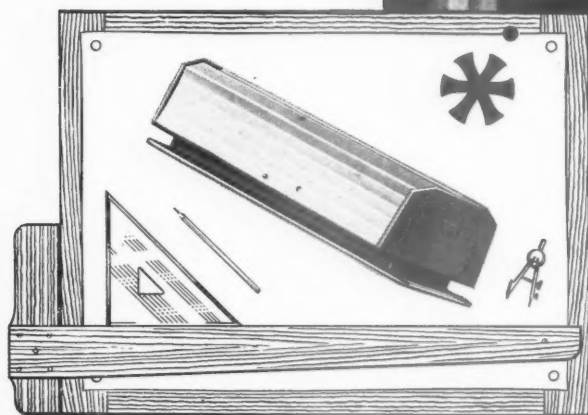
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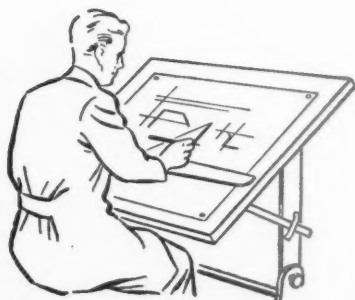
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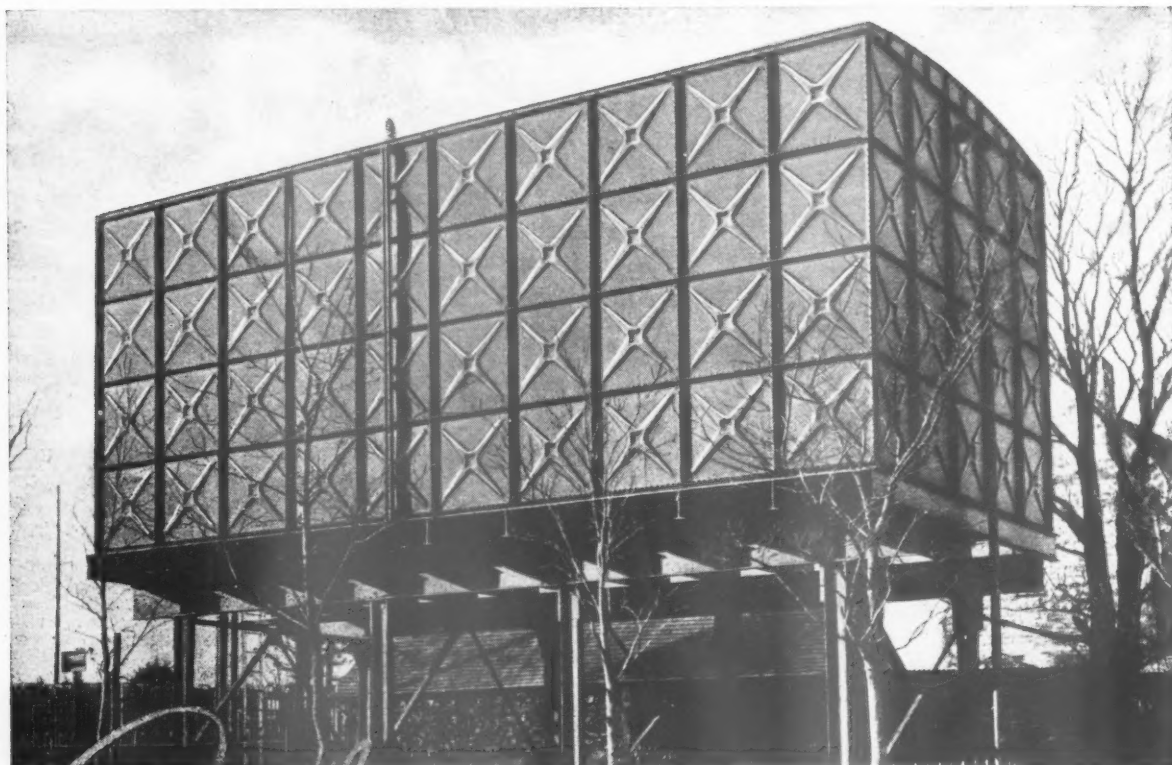


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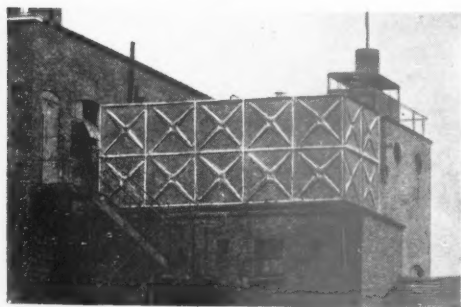
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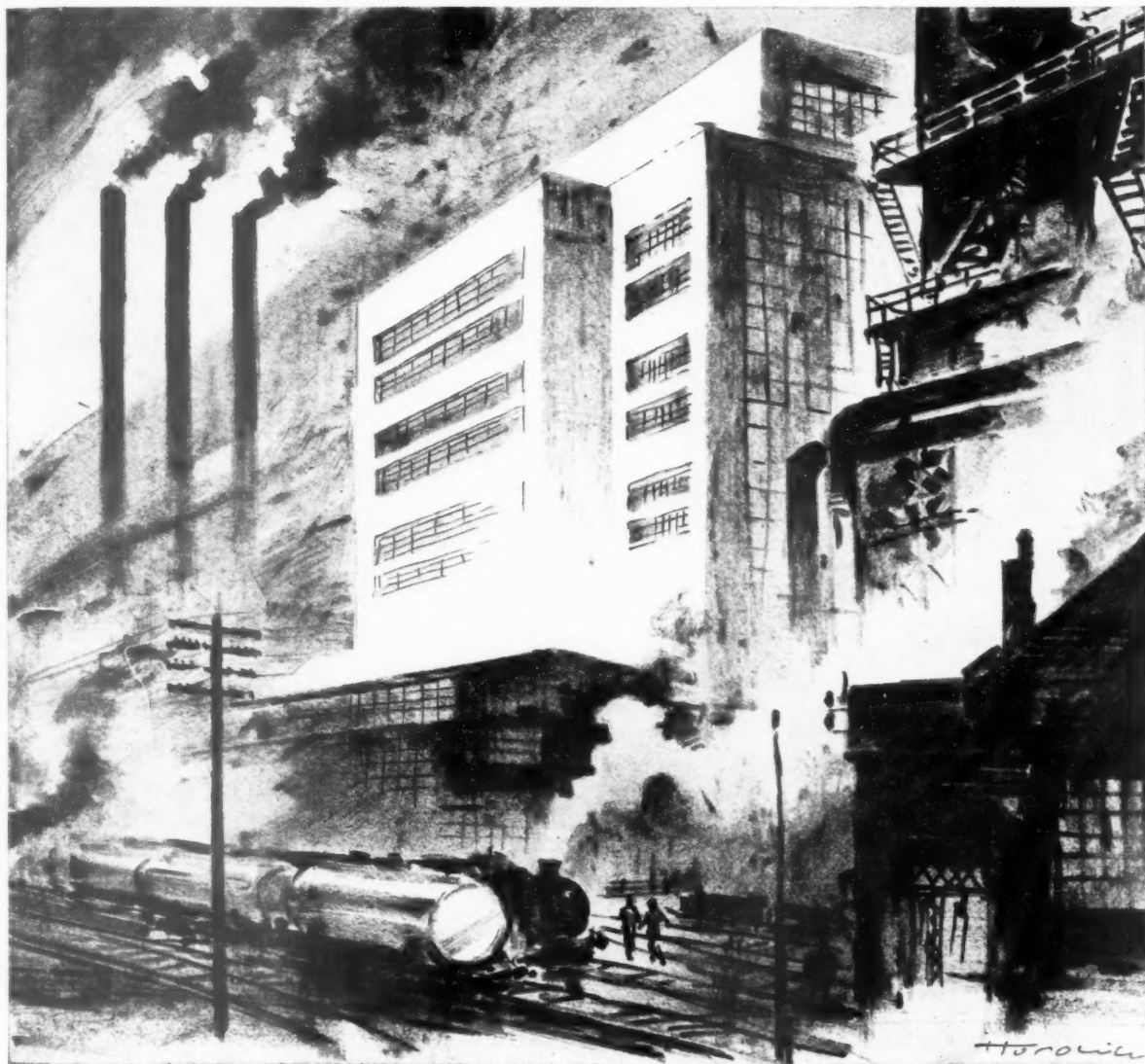
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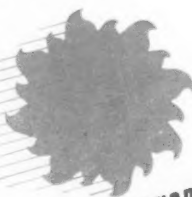
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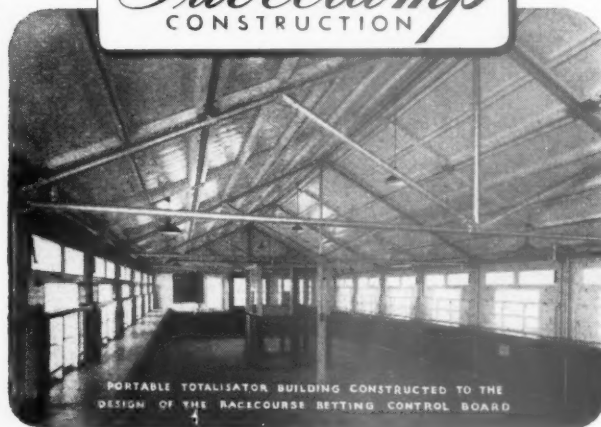
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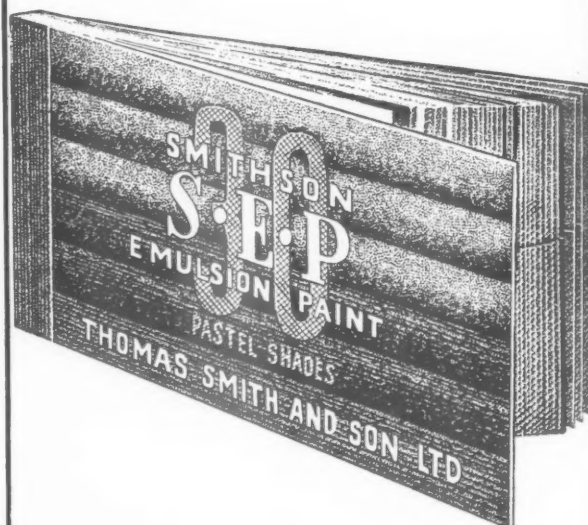
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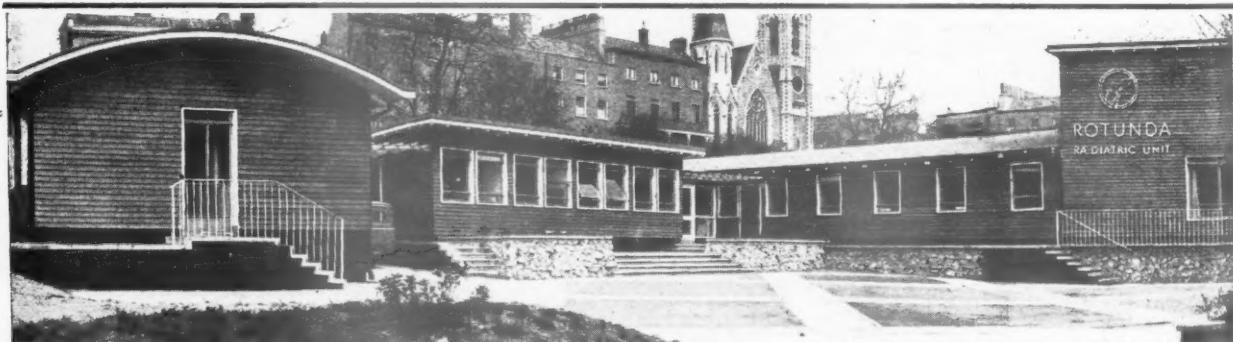
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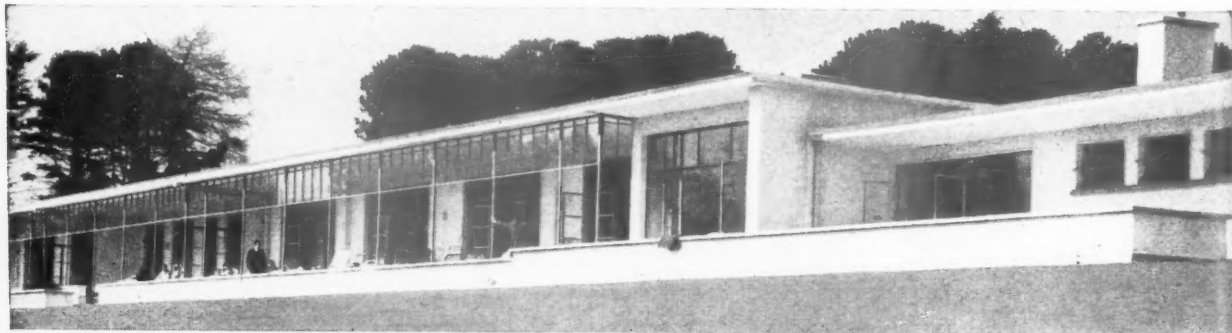
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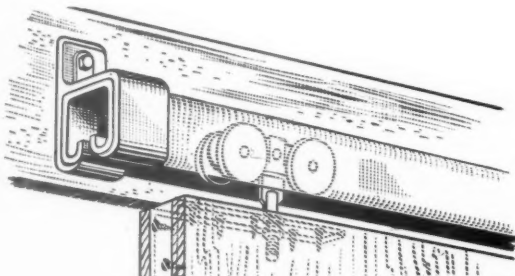
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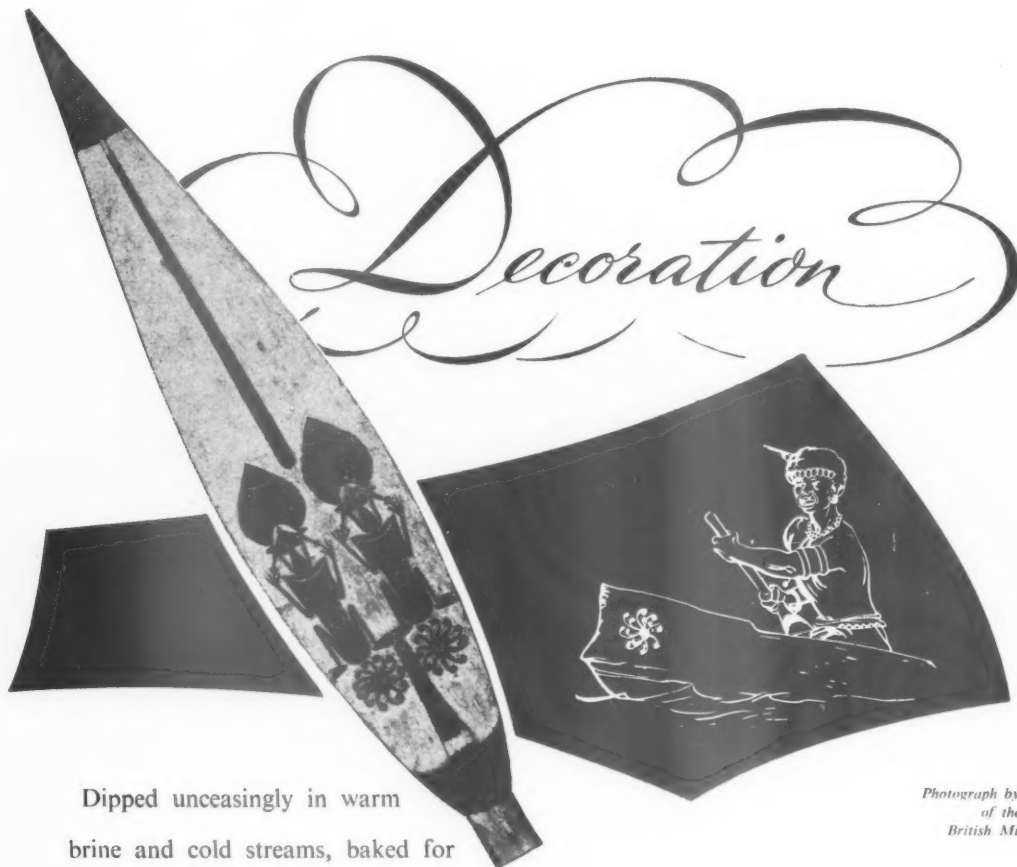


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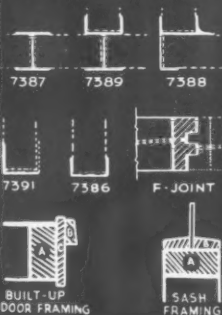
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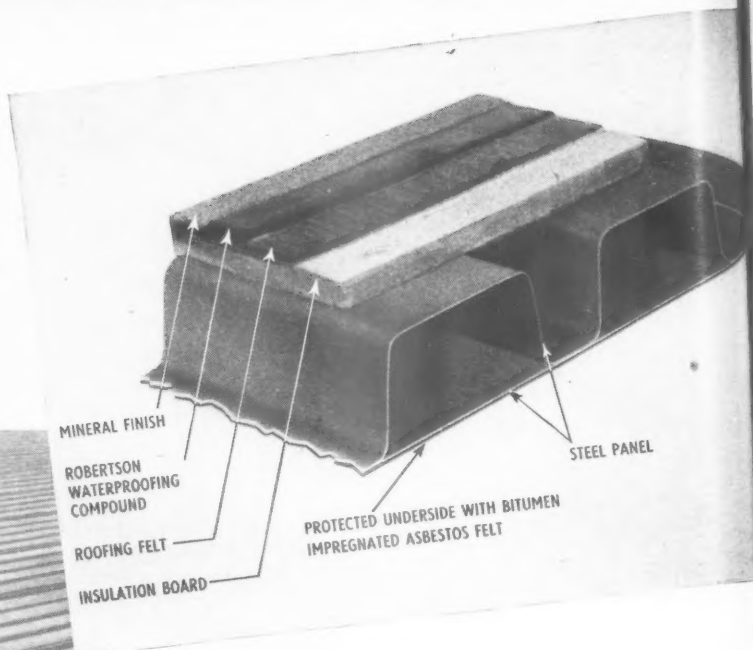
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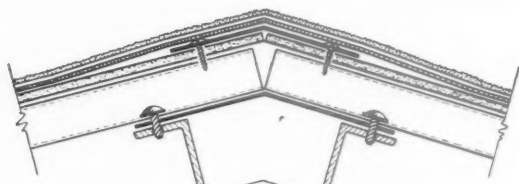
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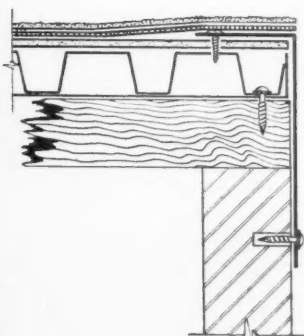
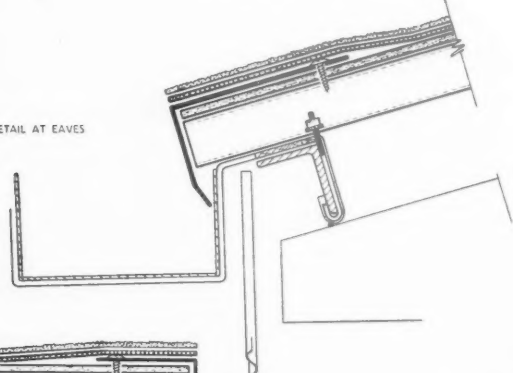
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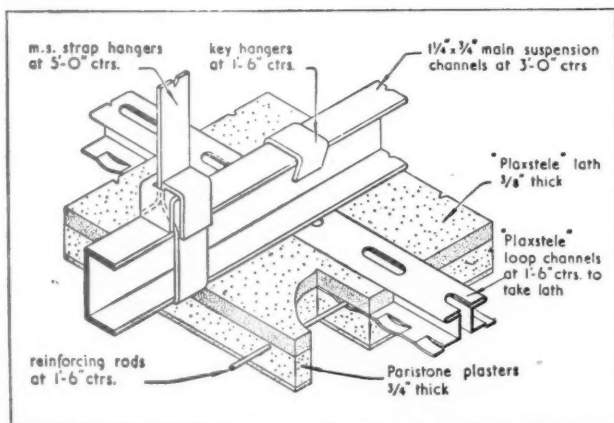
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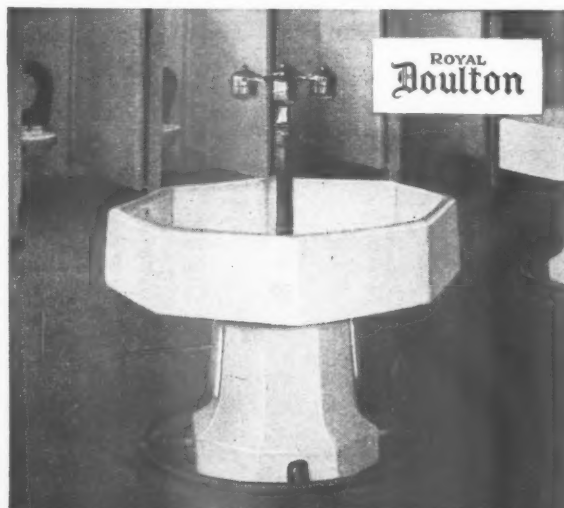
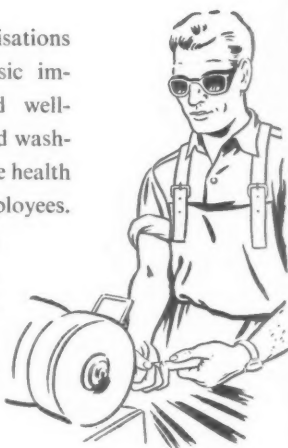
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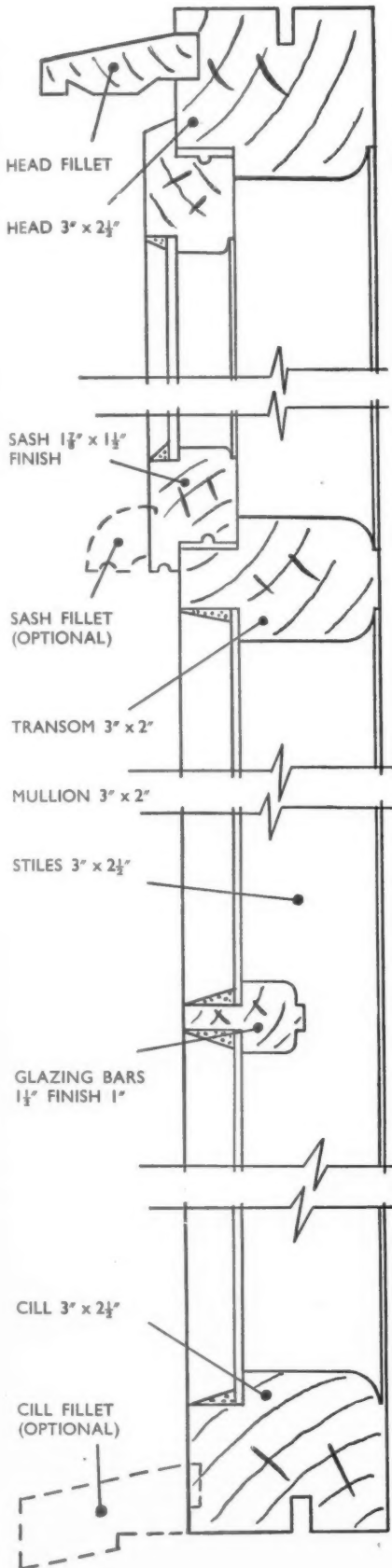
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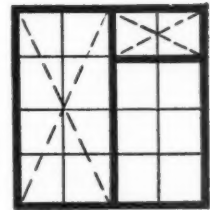
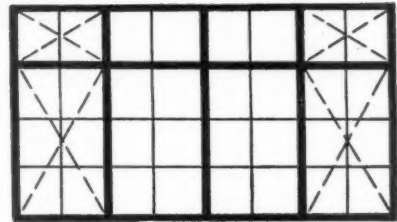
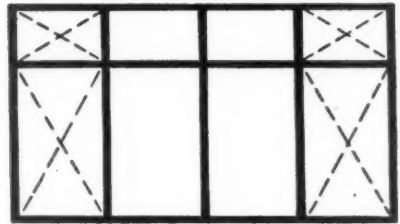
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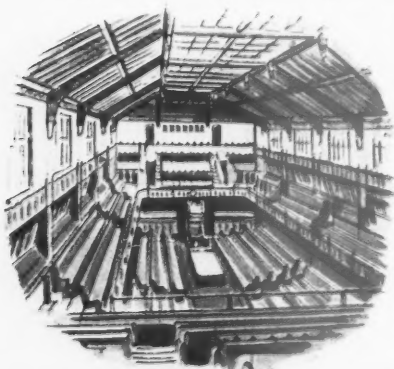
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the House was more than a figure of speech, and the relief of catching the Speaker's eye and so getting upon one's feet must have been doubly gratifying. It was not until the building was again destroyed (this time by enemy air action) and again rebuilt, that the installation of the superb seating luxury of Dunlopillo cushioning made sitting in the House — and, indeed in every upholstered chair in the new building—a pleasure as well as a privileged honour.

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THE NEW TECHNOLOGISTS

An old order is certainly changing at the AA school when a more or less organized evening meeting has to be laid on to get the students talking about *architecture*, of all subjects. The roaring bearded days of "Not drawn a thing, but we've decided how people should live" seem to be gone for ever, and ASTRAGAL, in his greying-at-the-temple way, thought there was something desperately nostalgic in the choice of "Living in Cities" as the subject for discussion. And frustrating too, since nearly everyone, including the platform speakers, talked about the rather narrower field of town-planning technique. There were a couple of protests against this, one

from an intense beard, the other from the expected political quarter, but the house in general showed no inclination to follow this lead, and reverted to questions of the location of industry and multi-level circulation.

*

There seems to be a growing feeling, accompanied by a recrudescence of the Gropius-type bow tie, that the only problems that can be discussed usefully by architects are technical ones, and that social and human problems must be taken as they are found. If this means less sentimental generalisation about the needs and abilities of the human race, and more attention to making buildings and districts really work, then ASTRAGAL welcomes it, but he hopes, all the same, that the New Technologists will raise their heads from the drawing board occasionally to see what the human race is up to.

INCENTIVES

It is now nearly five years since the contracting sides of the industry agreed to start bonus-on-output schemes, but in spite of a good deal of propaganda, progress has not been very rapid. The most recent figures, based on a year-old survey, show that on the larger jobs (over £50,000) nearly two-thirds have a bonus scheme. It seems, however, that only 41 per cent. of the workers are having any sort of bonus.

*

Employers may say that this isn't bad after only five years, but it is disconcerting to find that the 1952 figure and the 1951 figure are the same. It looks as though some more propaganda should be directed at the builders themselves, though admittedly the NFBTE has

been doing quite a lot. The trouble is, probably, that a bonus scheme is not too hard to arrange on a big job, but quite difficult when there are only a few men, or when it is a question of maintenance work.

THE FLOORSPEACE STRUGGLE

Central area redevelopment is the aspect of planning on which the most work, and the best work, has been done since 1939, and one can say flatly that what is needed in the City is "open development" with a Plot Ratio (*i.e.*, ratio of total floor space to area of plot) of between 5 and 6 and a Floor Space Index of between 3 and 4. If some buildings are allowed higher ratios the others must have lower; and of course the owners of these others will have a lot to say when they learn that a neighbour has collared some of their floor space.

*

Developers and their architects seem ready, or are prepared, to accept setbacks and open planning, but not the floor space ratios. And when thinking of building on one of the most expensive sites in the world, at 7s. 6d. to 10s. a ft. cube, floor space ratios must seem the most repulsive crammer of initiative ever thought up by bureaucracy. But apart from professional suffering when a particular job falls through, the facts are too well known to be denied. The City may either build high quality accommodation, of smaller bulk in individual buildings but impressive in total floor space if well spread throughout its hundreds of acres of ruins and willow-herb; or it can jam itself up with a few monsters and their smaller imitators along routes now most heavily trafficked.



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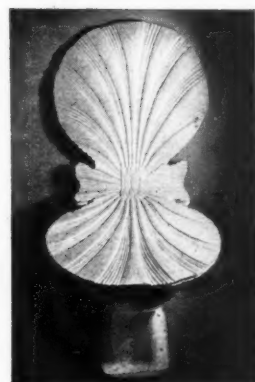
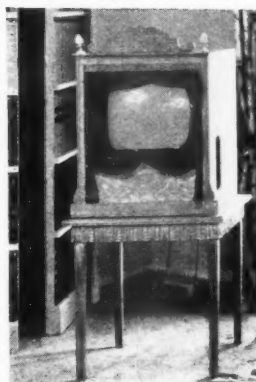
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GLORIANA BE, MR. MESSEL!

Do architects make good stage designers? ASTRAGAL—who hasn't yet seen Sir Hugh Casson's *Alceste*—doesn't think so. (Remember the awful mess Scamozzi made in the Teatro Olimpico?) And he certainly doesn't think stage designers make good architects. If you are in doubt, just glance at the pictures of Oliver Messel's decor for new rooms at the Dorchester. It is packed with clever ideas, charm and good taste, yet it is vulgar and irritating and will surely not stand the test of time. Why is this? Isn't it simply that the two arts are opposed? Whereas the stage designer can excite by illusion, the architect must excite by special forms of magic.

A selection from the conceits which Oliver Messel has introduced into new rooms at the Dorchester. Some of these are mentioned below by ASTRAGAL.

However amused you may be by carved shell lavatory seats, gold-plated dolphin taps (another shattered Edwardian legend—they are so much more dull than brass), puppet-theatre television sets, wine and wireless behind fake books, dicky-bird door handles and all the other conceits and paraphernalia of 18th century pastiche, you will not, I am sure, forgive the ornamental cement fountain on the terrace for its sketchy execution and faulty scale. An illusion of scale can be given in the theatre, but in architecture it must be created.

ASTRAGAL has no objection to gilt antique mirrors, bamboo chairs and printed taffetas—but why should they be designed specially when they can be picked up in antique shops. Certainly Robert Adam would never have approved of this hand-made "one off" stuff—Matthew Boulton would have churned it out for him on his new machines. Adam would also have seen that the key escutcheons of the locks and the espagnolette bolts and astragals were in scale and in their correct position. But Adam would have been a very bad stage designer.



Architecture in Brazil

The Building Centre is now staging the first exhibition of contemporary Brazilian architecture to be held in this country. Here at last may be seen, in a representative collection of excellent photographs, many of the buildings which have so excited our admiration from time to time in magazine features. But even the most able photographer cannot really do justice to architecture in which plastic form is so fully and sensuously realized, and in which the colours and the textures are handled with such

skill. Brazil is, alas, too far away for the quality of its contribution to the contemporary architectural scene to be common knowledge among our own architects. At least this exhibition will give an opportunity for its quality to be assessed here. (The photograph is part of the Pedregulho Neighbourhood Unit: architect, Affonso Reidy and associated architects and engineers. More photographs appear on page 44.) The exhibition is open daily, except Sundays, until July 31.

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MINOAN SCRIPT

It was pleasant to discover a *Times* leader the other day on architect Michael Ventris's hobby—if that is not too flippant a word—of breaking the Minoan code. On this subject, which has been a world mystery since the time of Sir Arthur Evans, Michael Ventris gave an interesting broadcast last year; but a *Times* leader being in the nature of a Papal Bull, the last doubt has now been removed. The code is broken; Minoan is established as a Greek language and the Greeks, therefore, as having been to Crete in the days of its earliest culture. Whether Greek or Hebrew is the living language with the earliest writing is now, it would seem, the only remaining doubt.

KUMASI COLLEGE

It seems that *The Times* publishes photographs of buildings for many reasons—their size, their site, their age, their foundation-stone layer, and so on. It would be impertinent to question the validity of all this, but ASTRAGAL was glad to find a building being illustrated and described in that paper because of its merits. And, to judge by this one Press photograph (see page 41), it is a very distinguished piece of tropical architecture.

BIGGER AND BETTER

If we must have large cinema screens—and ASTRAGAL sees no reason why not, except that he gets a crick in the neck from reading the credit titles Wimbledon-wise—then we might as well have something pleasant to look at, don't you think? The makers of *Genevieve*, the film comedy about the London-to-Brighton Old Cocks race, seem to have the right ideas. They have not only shown a nice disregard for geography by transferring Buckinghamshire scenery to the London-Brighton road, but they have provided some interiors (a mews flat and an hotel) furnished in the best contemporary manner. ASTRAGAL had to wait for the next showing of the film before he could find the art director's name on the enormous screen: it is Michael Stringer, who was partly responsible for Bernard Miles' Mermaid Theatre. As the film will have left Leicester Square by the time you read this, do make a point of seeing the smaller version when it comes your way.

ASTRAGAL

POINTS FROM THIS ISSUE

- Exhibition of **Brazilian architecture** pages 38 and 44
- Pub at Stevenage New Town**: described and illustrated page 50
- Lewis Mumford** talks about "architectural follies" page 56

The Editors

THE BATTLE FOR MODERN ARCHITECTURE

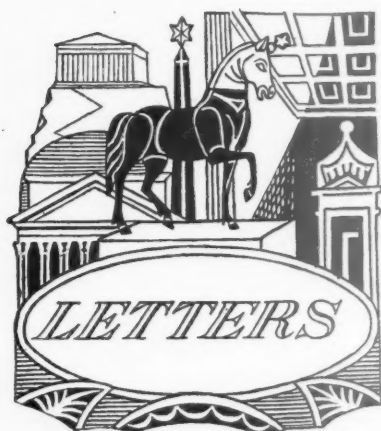
"THE battle for modern architecture has been won, . . . You could not produce any other kind of architecture if you were asked to do so." So said that great philosopher, Lewis Mumford, to AA students recently. And a little later he said: "In every architectural school . . . the younger generation is following van der Rohe and Le Corbusier into their bottomless pit." What is the "bottomless pit" to which he refers? In brief, it is the pursuit of a "style." It is the creation of a fashionable architecture which satisfies merely mechanically. Modern architecture today means the efficient creation of a smoothly functioning physical environment which enriches society and, at the same time, supports and encourages a pattern of behaviour for mankind which conforms to our ideals of both virtuous and gracious living. If any one disagrees with that, and finds some of the words a trifle archaic, let them read Mumford's talk, published in full on page 56, and think again of the true meaning of the words "virtuous" and "gracious."

Mumford criticized several buildings which today are loosely described as "modern." It is a pity that no one at the AA drew his attention to what is perhaps this country's greatest architectural advance in recent years, the schools in Hertfordshire. The technical achievements have been endlessly praised. Less frequent mention has been made of the attempts to create a better environment for children. The "institution" atmosphere has gone, of course, but what is the atmosphere which has replaced it? School design could, under the guise of "modern architecture," and littered with smart clichés, have extolled the virtues of State education, or the authority and power of the teacher, or the artistic outpourings of some architectural soul bent on self-aggrandisement. Instead, the best of our post-war schools set a pattern, a rhythm of behaviour, for the child, in three dimensions, which emphasizes what he should do, and with colour, form, light and space exercises his power of imagination and appreciation. Is that not a true function of a school? And also, therefore, of architecture? And are those not the extra qualities for which Mumford seeks in modern building?

In one other respect Mumford is wrong. The battle for modern architecture is *not* won. The battle for a modern

style is largely won, but that is all. Until recently, when with any design it was touch and go whether a new building went up with, or without, debased classical trimmings, the defenders of modern architecture have been prepared to accept any design as modern which sported sufficient contemporary clichés. But such tolerance has gone on long enough. Mumford's talk is the signal for a purge within the ranks of so-called modern architects.

Modern architecture, as Mumford says, is not the creation of pieces of sculpture on an expensive scale, or the creation of a monument to the architect. It is very much greater than that, if it is anything at all. It is the setting for civilization, and when we know what we mean by that we will know better than to go on tolerating the unfunctional "follies" of the UN Secretariat, and many other buildings, under the guise of modern architecture. The architectural profession is split, not in two, but in three—the modern architects, the old (and dear) brigade, and the fashion boys. We will be seeing a great deal less of the work of the second category as time passes. But we shall see a very great deal more of the work of the last category for many years yet, during which time the public will become yet more confused and misled. The battle, far from being over, is at its height. Indeed, it is right amongst us and we may have to fight many who are in our own ranks, including, no doubt, some of our so-called leaders.



Peter Trench (Managing-director of a firm of building contractors)

Contracting Procedure

SIR,—It is undisputed that there are deficiencies in the generally accepted method of placing and carrying out contracts. But do not let us delude ourselves into believing either that there is an existing ideal alternative for all circumstances or that further investigation will produce that ideal. Even in periods of economic stability different circumstances will dictate different methods of approach; the cut

and dried repetitive project, the job that has to start in a hurry, the job that must be varied during course of progress, the job that requires architect-quantity-surveyor-builder co-operation from the outset, the local authority contract where price competition is the key factor, the contract where prior estimating is well nigh impossible, and a dozen more will still exist and must be catered for.

In addition, there will probably always be the architect and quantity surveyor who are of the opinion that a builder cannot be trusted further than you can throw him, and the building owner who thinks that by some magic he can get a building at a price less than it costs to build it.

To my mind there are three objects to be attained:—(a) To achieve a better and closer relationship in the industry between the professions and the builder, (b) to convince the potential building owner that advice proffered to him is good advice and that to disregard it will be to his detriment, (c) to revise our methods of contracting procedure.

These objectives will not be reached overnight. There is little need to elaborate on objective (a) above; blame can be equally divided. Let me quote from two letters in your issue for June

18. A quantity surveyor writes on the subject of cost-reimbursement contracts "and even the most careful checking of invoices, etc., would not reveal discounts allowed by merchants to contractors based on the year's trading," and a builder writes "what is more the builder is inclined to feel, rightly or wrongly, that if any difference of opinion arises between himself and the building owner, the architect, as the owner's agent, will not necessarily be as impartial as could be desired." Need one say more?

Every effort should be made through professional bodies, the builders' associations, the schools of architecture and building, *ad hoc* associations, and members of the industry on site and in the office, to foster a spirit of understanding and confidence.

Let us study Mr. Johnson-Marshall's suggestions made at the recent RIBA Conference at Canterbury (*AJ*, June 18); let us study Mr. Richard Sheppard's Paper to the RICS on April 15 (*AJ*, April 30). Here we have concrete suggestions from leaders of the industry. They should be carefully examined.

The education of the building owner is probably more a matter for architects, and in this respect the RIBA has already made a start. All branches of the industry should help where possible. It is platitudinous but important to remember, however, that one can only expect to have advice accepted if it is good advice.

As for the ultimate objective, the revision of the methods of contracting procedure, this will assuredly follow in the wake of the successful achievement of the other two, and to my mind will fall into two categories. First, contracts let to competition on a restricted tender list with compensation for genuine tenders rejected. If a builder is called in for consultation before the contract is let, he should be paid an agreed fee for his services if he is unsuccessful in obtaining the contract when let. Second, cost reimbursement contracts on a fee basis of the type described and advocated by you on a previous occasion. Certain criticisms have been aimed at such contracts by one or two of your quantity surveyor correspondents, but I can assure you from practical experience that this criticism is unwarranted.

Cost can be and is controlled from the very start, and as for the incentive to keep costs down, avoid waste, etc., the main incentive is precisely that of the fee earning professional man, namely, "I won't get another job if I don't." This presupposes perhaps rigid adherence to the fee system of building to the exclusion of all others; but why not? This can be done, is done, and it works.

PETER TRENCH.

London.

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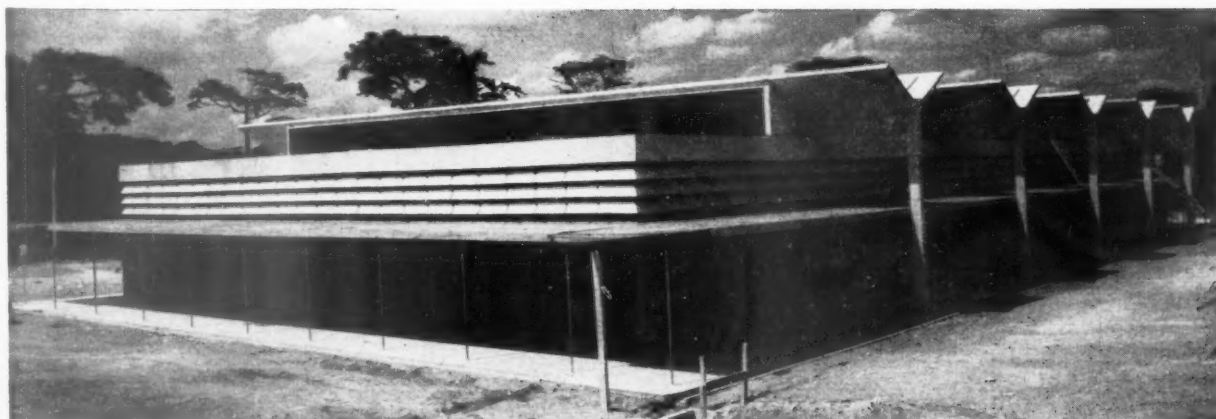
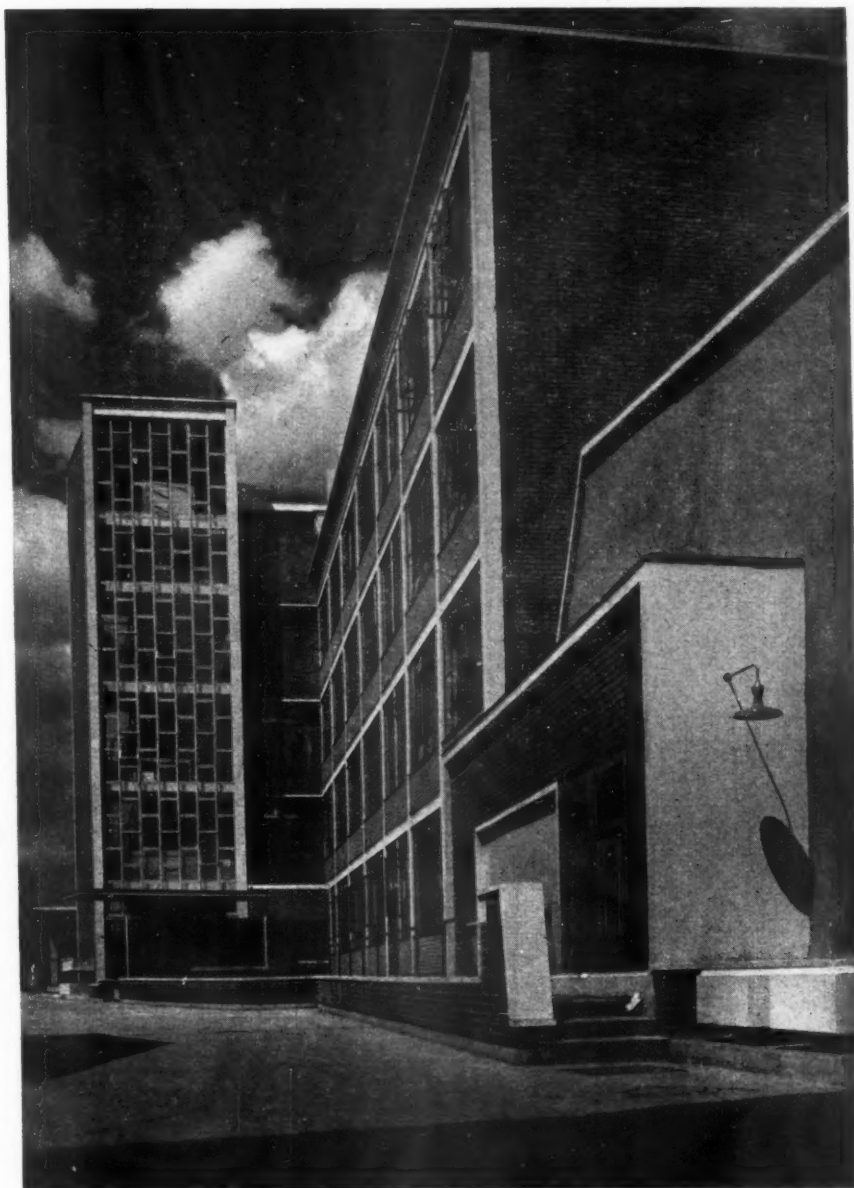
Linear Accelerator and Cyclotron Building, Hammersmith.

Right, the first building to house high voltage particle accelerators has been completed for the Radio-therapeutic Research Unit of the Medical Research Council at Hammersmith Hospital. This building, which was designed by Professor Basil Ward of Ramsey, Murray and White, will be fully illustrated in a future issue of the JOURNAL.

**BUILDINGS IN
THE NEWS**

Engineering workshops at Kumasi, Gold Coast.

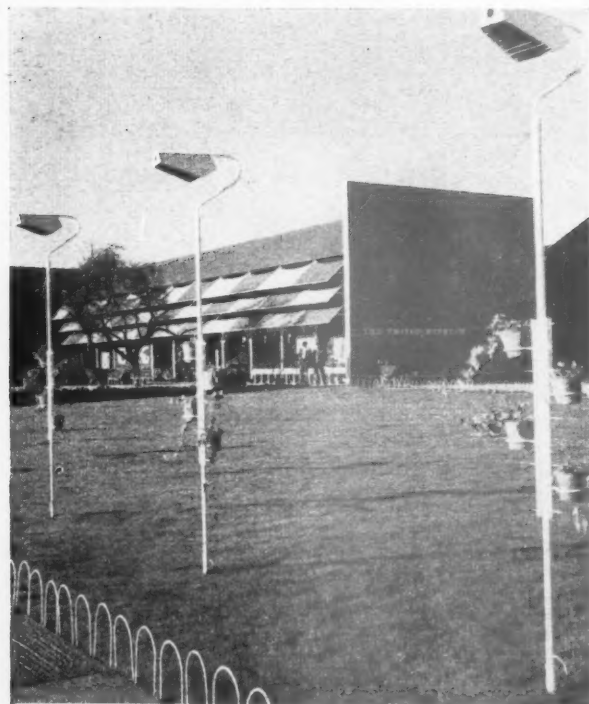
Below, the engineering workshops at Kumasi College of Technology on the Gold Coast. This block and the pharmacy building will, it is expected, be ready for use in the autumn. The architects were James Cubitt, Scott and Partners of Accra, in association with James Cubitt and Partners of London. The site covers about two and a half square miles of what was once impenetrable forest. Building science and agriculture departments are to be built later. There will also be 24 general classrooms and a library.





BUILDINGS IN THE NEWS

(continued)

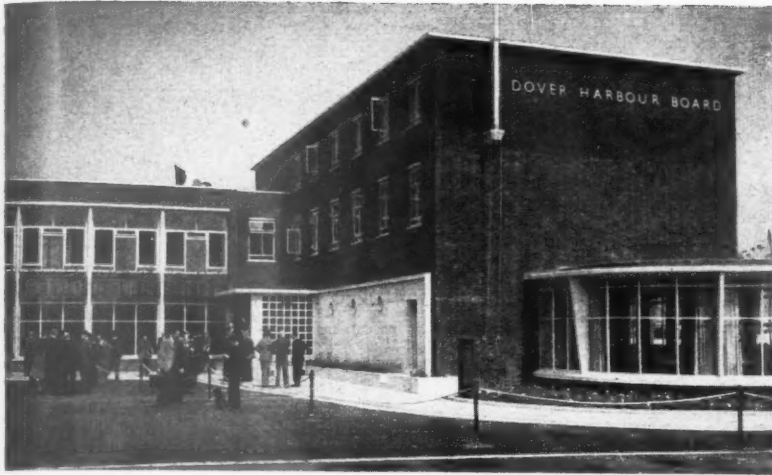


Travel Centre in London

Above, the British Railways Travel Centre, 15, Lower Regent Street, S.W.1, was opened recently. Designer Dr. F. F. Curtis, Architect to the Railway Executive; assistant-in-charge, F. W. MacIver. The Centre, which has a floor area of 9,000 sq. ft., accommodates 19 booking clerks and 4 information clerks. Travel films are shown on a back-projection screen in the waiting space. The cost per sq. ft., was approximately £5. The Centre will be fully illustrated in a future issue of the JOURNAL.

Exhibition Pavilion at Bulawayo

Left, the United Kingdom pavilion at the Rhodes Centenary Exhibition, Bulawayo, Southern Rhodesia, which was opened by the Queen Mother last week. The exhibition covers 50 acres. The UK pavilion is 12,000 sq. ft. in area and was designed by Misha Black and Alexander Gibson (assistants, Frank Briggs and John Diamond) in association with Ayers, Wilson and Parker of Bulawayo. The pavilion is built of Arcon components.

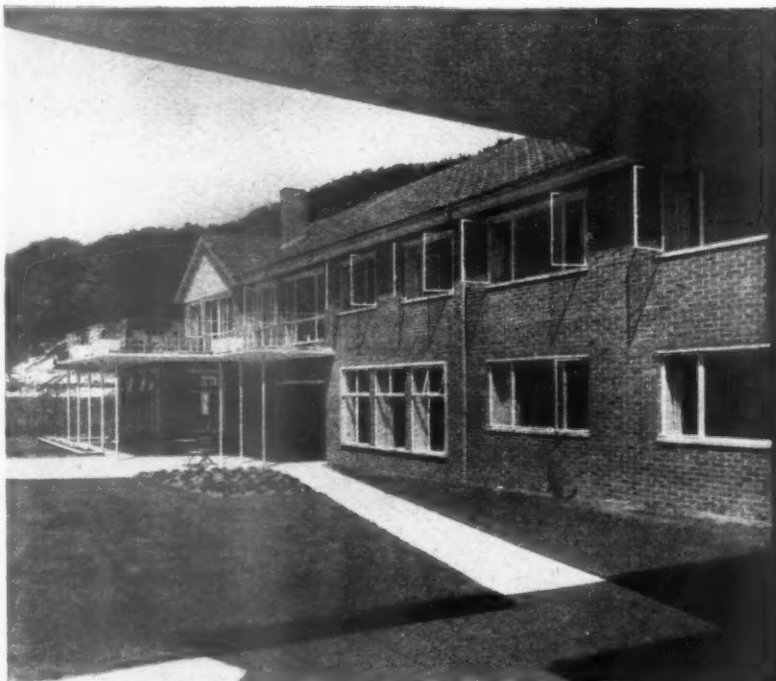


Reception Building, Car Ferry Terminal, Dover Harbour

Above, the reception building of the car ferry terminal for Dover Harbour Board, which was opened last week and was designed by J. M. Wilson, H. C. Mason and Partners. The main hall contains banking facilities, and a post office; there is also a buffet, shop, telephone booths, waiting and cloak-rooms and offices. The building is steel framed. The floor area is 16,700 sq. ft.

Old Peoples Home, Brighton

Below, Brighton's first old peoples' home, accommodating both men and women, was opened at Lower Bevendean recently. There are 35 beds and a resident staff of two. It was designed by the Borough Engineer's department; chief architect, P. Billington; assistant, M. E. Hayler. Rooms vary from 108 sq. ft. to 350 sq. ft. The cost per sq. ft. was £2 19s. Both buildings will be fully illustrated in the JOURNAL.



SCHOOLS

Building Programme

Chuter Ede moved that the House approve the Eighth Report of the Select Committee on Estimates dealing with school buildings, in the Commons last week. The committee had reported that the present rate of school building was quite inadequate for the nation's agreed aims on education.

Miss F. Horsbrugh, Minister of Education, moved the Government's amendment that the House welcomed the emphasis laid on school building in the report. She was confident that the Government was making the best use of available resources in the interests of the children in order to deal with the serious education situation. She pointed out that houses were competing with schools for labour and materials, but that it was the Government's policy that the schools building programme should keep pace with the housing programme.

Miss Horsbrugh reviewed the work of previous years and said that during 1946, 1947 and 1948 projects for primary and secondary schools to the value of £34,300,000 were started, but in 1947 only £5,500,000 worth of work was done and, in 1948, work to the value of £13,000,000. In 1948, despite the fact that so little was completed, a larger project, to the value of £51,700,000 was started. A year after the end of the programme only one-third of the programme was done. Two years after the end of the programme 40 per cent. was still not done. When she took office at the end of 1951, £120 millions' worth of work was on the ground and not completed. In that £120 millions were 400,000 school places. In November the Chancellor of the Exchequer announced the moratorium on new starts for three months. She was convinced that these places were wanted urgently and would be completed more quickly if no new starts were made.

The amount of work done increased in 1951 to £34.5 millions, and in 1952, £38 millions. In 1950, the number of places completed was 139,000; in 1951, 159,000; and in 1952, 218,000. She confidently expected the figure to rise to 250,000 this year. According to the report, the moratorium on new starts had undoubtedly an adverse effect, but the "adverse effect" was that there were more school places ready for the children.

She pointed out that in 1949, £1 million provided 2,800 secondary school places; now it provided 3,800. Primary schools in 1952 were being built at £136 a place, compared with the 1949 figure of £260 a place. Similar comparative figures for secondary school building were £434 and £235. The time taken to build schools by the traditional method had been reduced by about

one-third and sometimes even more. Prefabrication reduced the time again by about one-third.

Additional £10m. Needed

A sum of £10 millions a year, for five years, is needed in addition to the present amount spent on school construction. This was the text of a resolution moved by Alderman W. S. Howard on behalf of the executive committee, at the annual meeting of the Association of Education Committees, held at Eastbourne last week. Alderman Howard said this sum would cover the extra demand for teaching space arising from new housing estates and the bulge in the birthrate, as well as the reorganization by which secondary education would be made available to all.

LCC's Expenditure Cut

The LCC announced last week that the amount of money required for their programme of primary and secondary school building in 1954-55, amounting to £4,591,000, had been cut to £3,250,000 by the MOE. This will delay the provision of 1,100 primary school places and 3,000 secondary school places. The LCC considers the first figure to be the very minimum to meet essential needs and it is therefore asking the Minister to reconsider her decision.

RIBA

Appointments

The following appointments are announced by the RIBA:—S. Rowland Pierce, assessor for annual award of certificate for outstanding contribution to Suffolk architecture by West Suffolk County Council; P. G. Freeman in place of Kenneth M. B. Cross (second representative, Anthony M. Chitty), RIBA representative on council of the British School, Rome. The following RIBA representatives have been re-elected:—Michael T. Waterhouse and P. G. Fairhurst, National Consultative Council of the Building and Civil Engineering Industries; A. Neville Ward, National Advisory Committee on Art Examinations; F. Milton Cashmore, L. A. Chackett, George Fairweather, Lawrence A. D. Shiner, LCC District Surveyors' Examination Board; Anthony M. Chitty, AA Leverhulme Scholarship Committee; H. Martin Lidbetter, Wimbledon School of Art Governing Body; M. J. Slater, Ipswich Advisory Committee for the Building Industry; A. S. Belcham, Southend-on-Sea Municipal College, Architecture, Surveying and Building Advisory Committee.

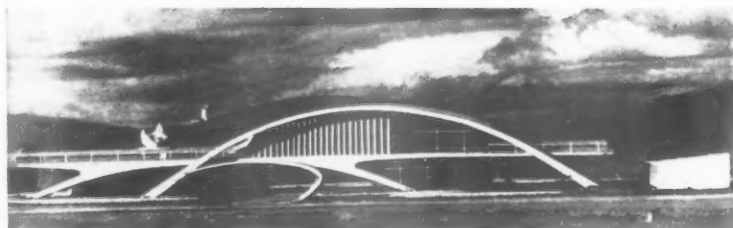
New Colour Range

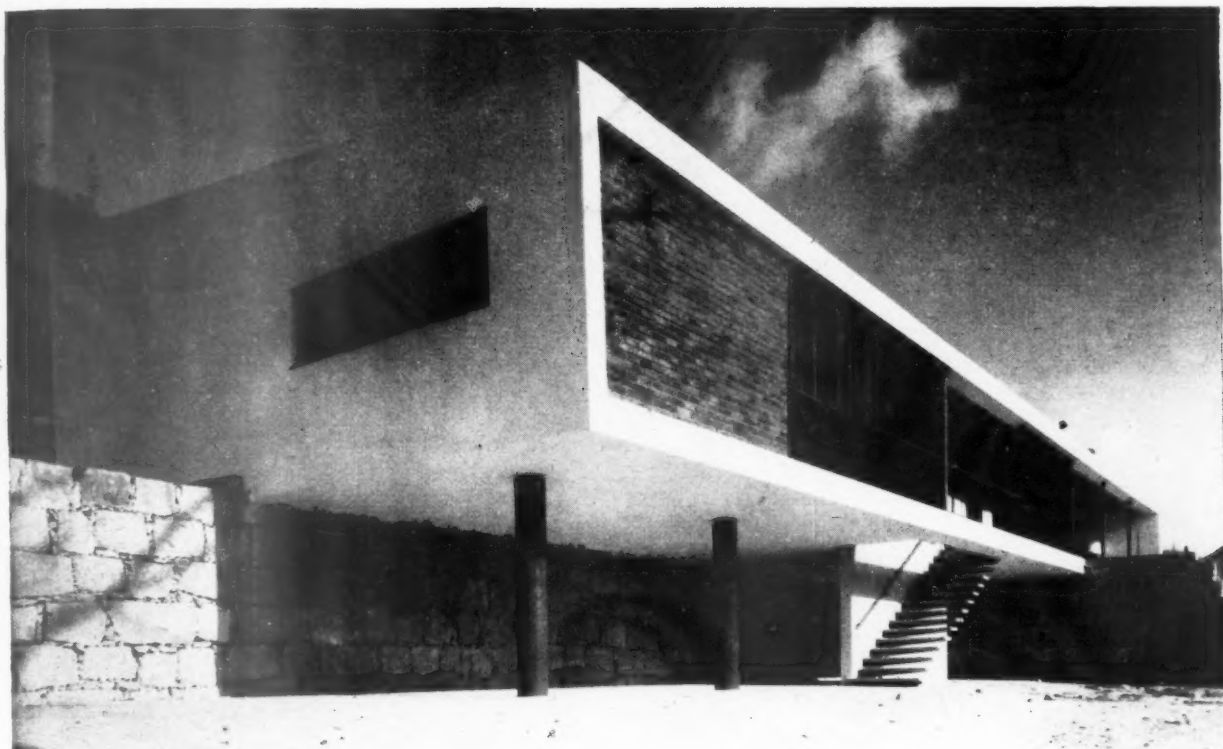
The RIBA council has considered a report submitted by the *ad hoc* Committee on Paint Colour Ranges and approved in principle the recommendations made by the committee. With the co-operation of the Paint Industry Colour Ranges Committee, the committee have prepared a range of 101 colours (including one white and one black), referenced according to the Munsell system, and to be known as the RIBA Range of Paint Colours for Buildings. This range has been devised to produce a basic palette for architects, and includes many of the colours in regular use by Government departments and other public bodies. It is hoped that the range will go some way in reducing the number of paint colours which have normally to be stocked by the industry and thereby also reduce the overheads of the manufacturers.

Architectural Photography

The RIBA and the Royal Photographic Society are collaborating in the preparation

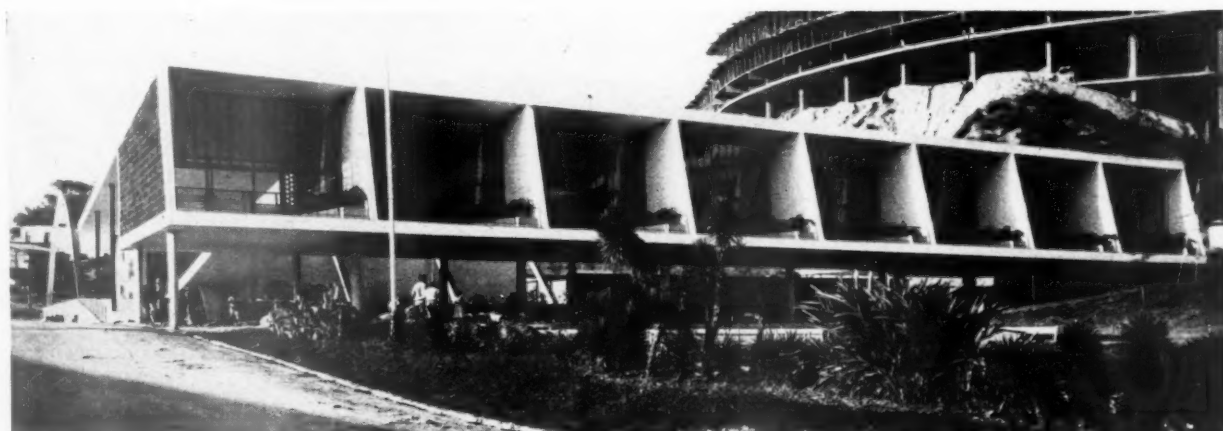
EXHIBITION OF ARCHITECTURE IN BRAZIL





About 220 examples of contemporary architecture in Brazil are on view at an exhibition which opened at the Building Centre yesterday. The exhibition (organized by the Brazilian Ministry of Foreign Affairs) was recently shown at the Museum of Modern Art at Rio de Janeiro. It is presented in London by the Anglo-Brazilian Society. On these two pages are some of the buildings, which can be seen at the exhibition. Above, a villa at Petroplis, near Rio de Janeiro, designed by Sergio Bernades. Below, the classroom block of a primary school in the Pedregulho (a suburb of

Rio) neighbourhood unit, designed by Affonso Reidy and associated architects and engineers. On the opposite page: top, a project for the Copan Hotel and flats in Sao Paulo, designed by Oscar Niemeyer, which will be completed next year; centre, a project for the Lebanese Club at Pampulha, a play resort outside Belo Horizonte (capital of Minas Gerais state); bottom, the sailors hospital at Rio de Janeiro, designed by Firmino Saldanha. The exhibition is open from 9.30 a.m. to 5 p.m. on weekdays; until 1 p.m. on Saturdays. It closes on July 31.



of an exhibition of architectural photographs of contemporary and historical subjects, to be held at the RIBA headquarters from October 9 to 29. Entries are invited (without entrance fee) from professional and amateur photographers in either monochrome or colour, prints or transparencies.

One of the aims of the exhibition is to assist architects in all parts of the country to get good quality photographs. Contemporary subjects are particularly wanted. The following architects, together with three representatives of the Royal Photographic Society, will form the selection committee:—G. S. Inglefield, Howard V. Lobb, Norman Westwood. The closing date is August 24. Entry forms and further particulars can be obtained from the Royal Photographic Society, 16, Princes Gate, S.W.7.

MOHLG

Housing Progress

The number of permanent houses completed in Great Britain during May was 26,013, as compared with 23,262 in April and 19,488 in May, 1952. In the first five months of this year 118,706 permanent houses were completed as compared with 90,498 in the same period of 1952.

CROYDON

Wrencote May be Preserved

Wrencote, the 18th century house in Croydon High Street, to which ASTRAGAL referred on April 2, may not be demolished after all. The Minister of Housing and Local Government may make a building preservation order. The situation at present is that the Planning and Development Committee of Croydon Council have recommended the council not to object to the owner's proposal to demolish Wrencote in order to build a modern block of offices. An inquiry will be held by a Ministry inspector at Croydon Town Hall on July 30, before the Minister makes his final decision. If a preservation order is made it will make the corporation liable for compensation for preservation of the building.

The owners have been advised by an architect that it would be impossible to restore Wrencote without destroying any ancient architectural character it once possessed. Wrencote requires an entirely new roof; the rather elaborate cornice on the outside cannot be repaired and there is a considerable amount of dry rot.

HC

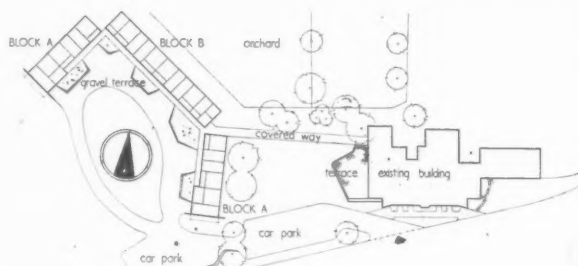
Housing Week for School Children

For the fourth year, the HC is organizing for school children a week of lectures on and visits to housing in and near London. The week will start on July 13 with an opening address by Sir Hugh Casson at the Conference Hall, LCC County Hall.

Papers to be read there will include "Making a Town" (the work of a town planner), by Max Lock; "From Drawing Board to Building" (the work of an architect), by R. A. Duncan; "Bricks and Mortar" (the work of a builder), by Woodbine Parish; "Furniture," by Gordon Russell; "A Survey of House Design and Construction and a Study of Modern Development," by the Hon. Lionel Brett. The week will end on July 17 with a Brains Trust, Miss P. J. Owen, an architect, will be question master and the experts will include D. R. Childs, town planner; H. Brockman, architect; S. D. Cooke, of the Building Trade

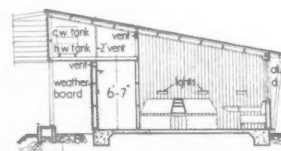
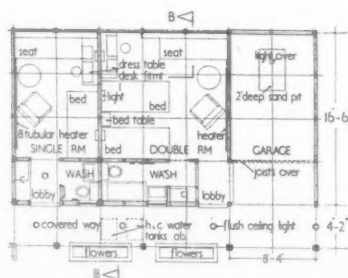
(Continued on page 49)

MOTEL AT NEWINGREEN, FOLKESTONE



Site plan

The motel (a hotel with letting units each consisting of a garage with living- and bed-rooms beside it) at Newingreen, Folkestone, is the second to be opened in this country. It was designed by Louis Erdi, primarily for motorists on their way to or from the Continent. There are ten garages and twelve sets of rooms, each containing one to four beds, designed on a 4-ft. 2-in. module. Each unit, except the two single bedrooms in block B, has a separate bathroom. The end unit of each block A is partly two storeyed and includes a living room. The construction is as follows. Floor: composition tiles on concrete raft on hardcore; walls: framing, 4-in. by 3-in. timbers; external cladding, waney edge elm on felt, or painted asbestos panels; internal cladding, flat asbestos sheets to garage and fireproof fibreboard sheets for external walls of rooms; partitions, plasterboard on vertical t. and g. boarding with glass wool blanket in between. Roof: three-ply felt on 2-in. compressed straw-board on 7-in. by 2-in. joists at 2-ft. centres. Hot water is supplied from 40-gallon tanks to every room.



Section B-B

Part of ground floor plan, block B

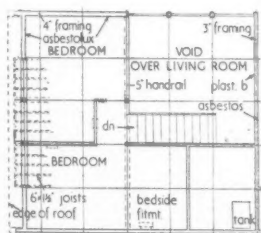
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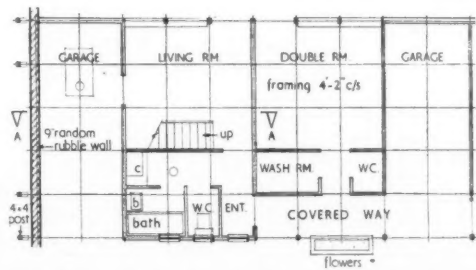


units, heated by thermostatically controlled 4-kW. immersion heaters. Rooms are heated by 8-ft. tubular electric heaters. Above, view from the west; opposite page, view from the east.

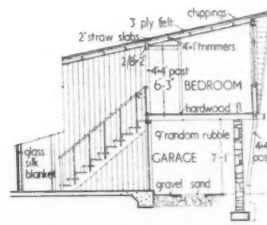
Below; left and centre, the living room and bedroom in the two storey unit, block A; right, the covered way in front of block B. The general contractor was C. Jenner & Son, Ltd.



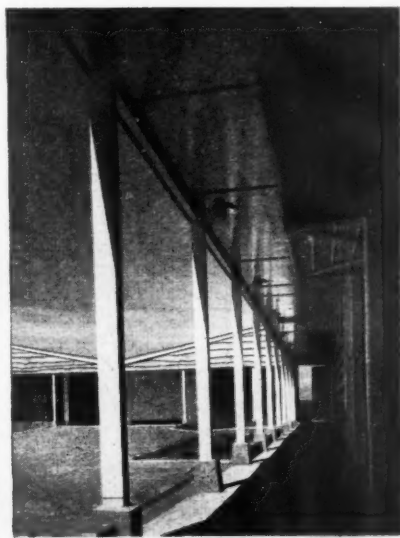
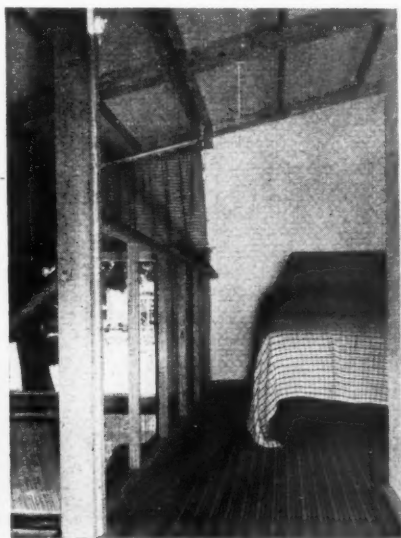
First floor plan, block A



Part of ground floor plan, block A [Scale: 1/8" = 1' 0"]



Section A-A



HOUSING IN MARK HALL, HARLOW NEW TOWN, ESSEX



Ground, first and second floor plans of three-storey house [Scale: $\frac{1}{4}'' = 1' 0''$]

The photograph above shows housing designed by Richard Sheppard and Partners in Area 11 of the Mark Hall Neighbourhood, Harlow New Town, for the Harlow Development Corporation. On the right are 3-storey, 5-bedroom houses with a total floor area of 1,400 sq. ft. and costing £2,210. On the left is one of the 4-bedroom terrace houses, which have an area of 1,100 sq. ft. and cost £2,020. The construction is similar for each type. Exterior walls are of 11-in.

cavity brickwork faced with Leicester straw scuff facings or Tyrolean rendering. Partitions are of 4½-in. brick or 2-in. breeze. Ground floors are of in situ concrete with asphalt tile finish and first floors are wood joists. Roofs are of wood trusses finished with slates on felt and battens. Ceilings are ½-in. plasterboard, plastered. Heating is by an open living room fireplace with back boiler for hot water.



Ground and first floor plans of two-storey house

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Exhibition, and E. E. Fletcher, Housing Manager.

Visits will be arranged to flats in the central London area, an LCC estate in Essex and furniture and equipment showrooms. Further inquiries should be made to the secretary, HC, 13, Suffolk Street, S.W.1.

CRICKET

Vitruvians v. NFBTE

The annual cricket match between the Vitruvians (architectural and building Press) and the NFBTE, for which the teams were announced in the JOURNAL for June 18, resulted in a draw. It was played at the Richmond Cricket Club ground on June 19. The NFBTE scored 217 for four wickets; the Vitruvians scored 63 for five wickets.

A REQUEST

... from S. H. Loweth

The following request was sent to us by S. H. Loweth, Kent's county architect:—

"After question-time in the Leas Cliff Hall, Folkestone, I was approached by several architects who asked me for copies of various documents regarding "Collaboration between Private and Official Architects." I made a note of their names and addresses which have since been lost.

"If those architects who gave me their names will write to me direct, I shall be happy to send them the documents they require."

CORRECTION

Architect in Hull

The architects employed by W. S. Atkins and Partners for Smith and Nephew's factory at Hull (see JOURNAL for July 2, pages 4 and 13) were Donald Hamilton Wakeford and Partners, Louis Erdi and K. S. Mobsby.

OBITUARY

Arnold Silcock

Arnold Silcock, who was a writer and lecturer on architecture and a practising architect, died on July 2, at the age of 63. He studied at the Bath School of Art and the AA. He was elected ARIBA in 1914 and FRIBA in 1927.

DIARY

Architectural Criticisms VI: Recent LCC School Designs. Discussion. At Roehampton School, in Alton Road, S.W.15. (Sponsor: ICA.) 8.30 p.m.

JULY 13

1953 *House and Garden Colours for Summer Living.* At the House and Garden Decoration Centre, 16, Grafton Street, W.1. Weekdays, 10 a.m. to 5 p.m.; Saturdays, until 12.30 p.m.

UNTIL JULY 31

Ten Selected "News Chronicle" *Coronation House Designs.* At Heal's, 196, Tottenham Court Road, W.1. Weekdays, 9 a.m. to 5.30 p.m.; Saturdays, until 1 p.m.

UNTIL JULY 31

Contemporary Brazilian Architecture. Exhibition at the BC, 26, Store Street, W.1. Weekdays, 9.30 a.m. to 5 p.m.; Saturdays, until 1 p.m.

UNTIL JULY 31

Furnishing to a Figure. At Heal's, 196, Tottenham Court Road, W.1. Weekdays, 9 a.m. to 5.30 p.m.; Saturdays, until 1 p.m.

UNTIL JULY 31

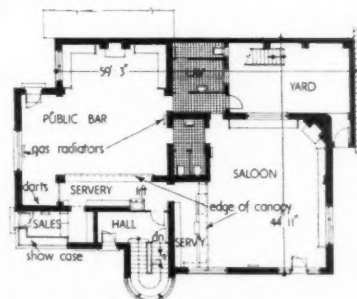
PUBLIC HOUSE IN ST. ANN'S ROAD, LONDON W.11



The "Kenilworth Castle" in St. Ann's Road, North Kensington, replaces a 90 year old licensed house of the same name, which is soon to be demolished to make way for flats on the large nearby estate. The architect is F. W. Handover, staff architect to the licensees, Barclay, Perkins & Co., Ltd. Above is a photograph from the south-east, on the left is the staircase tower glazed with glass bricks and lit internally with fluorescent lighting. Below is the servery in the saloon bar. This is panelled in mahogany-coloured plastic and has a counter top of plastic, which is impervious to cigarette burns and scratches. Above the bar is a mural designed by Mrs. M. Hoffer. Below right, the wall seating

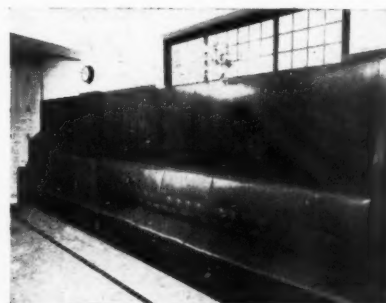


First floor plan



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

in the saloon bar. The rubber flooring has a design of knights' visors. General contractors, Hampton & Sons, Ltd. Sub-contractors, page 64.



PUBLIC HOUSE

in MONKS WOOD, STEVENAGE NEW TOWN, HERTS.

for the STEVENAGE DEVELOPMENT CORPORATION, designed by Professor CLIFFORD HOLLIDAY, former Chief Architect; LEONARD G. VINCENT, Deputy Chief Architect; OLIVER CAREY, Group Leader; P. HALLIWELL, H. BLAKE, TONY PILCHER and MICHAEL COTTON, assistant architects

At the time the "Twin Foxes" at Stevenage was designed, the Act bringing public houses in New Towns under State management had been passed. (It was repealed only after work on the building had begun.) As the Act had set new problems in pub design, it was decided that four architects on the staff of the Development Corporation should each prepare an *esquisse* independently and subsequently compare drawings and pool their research. The resulting plans had a striking similarity.

The west facade from the north-west



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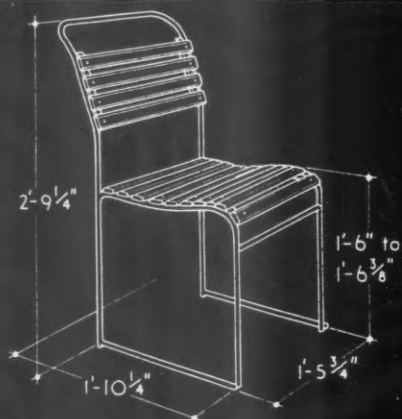
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FURNITURE | CHAIRS

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The Architects' Journal Library of Information Sheets 423. Editor: Cotterell Butler, A.R.I.B.A.



TYPE RP6.

material of back and seat	weight lb.	overall size of stack of 10 chairs
cane	8 1/2	3'-5 1/2" x 1'-6" x 2'-6"
canvas	8	3'-4 1/2" x 1'-5 3/4" x 2'-5 1/8"
plastic	8 1/4	3'-5 1/2" x 1'-6" x 2'-6"
plywood	8 1/4	3'-5 1/2" x 1'-6" x 2'-6"
upholstered	10	3'-10 1/4" x 1'-5 3/4" x 2'-6 1/2"
wood slats	10	3'-8" x 1'-5 3/4" x 2'-9"

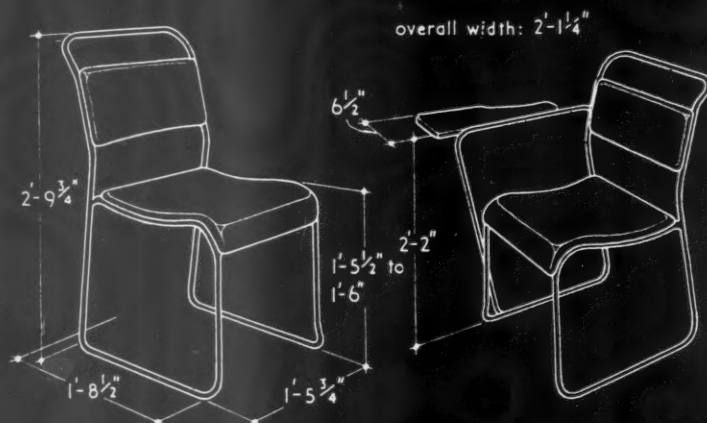


removable clip



integral hook

GROUPING DEVICES.
(for all types except
RP16, RP18, RP19)

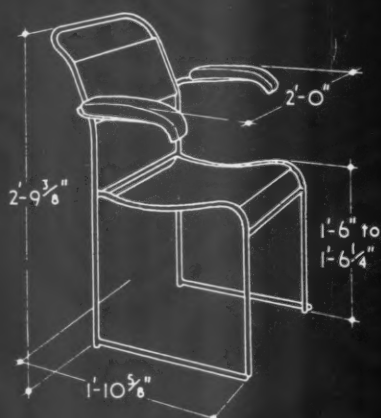


TYPE RP17.

TYPE RP16 (LECTURE ROOM CHAIR).

material of back and seat	weight lb.	overall size of stack of 10 chairs
canvas	12	3'-9 1/2" x 2'-2" x 2'-10"
	8	3'-7" x 1'-5 3/4" x 2'-8"
plastic	12 1/4	3'-9 1/2" x 2'-2" x 2'-10"
	8 1/4	3'-8 1/2" x 1'-5 3/4" x 2'-8"
plywood	12 1/4	3'-9 1/2" x 2'-2" x 2'-10"
	8 1/4	3'-8 1/2" x 1'-5 3/4" x 2'-8"
upholstered	14	3'-11" x 2'-2" x 2'-11"
	10	3'-10" x 1'-5 3/4" x 2'-9 1/2"

note: weights and sizes of RP16 are given: first



weight: canvas, 12 lb.

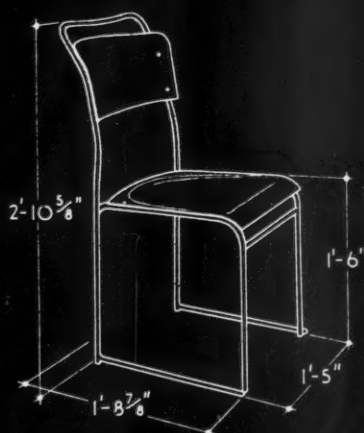
upholstery, 15 lb.

overall sizes of stack of 10 chairs:

canvas, 4'-1 1/4" x 2'-0" x 2'-6 1/4"

upholstery, 4'-1 1/4" x 2'-0" x 2'-6 1/4"

TYPE RP18.

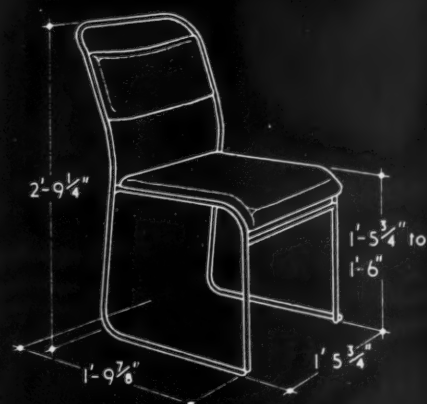


weight: 9 lb.

overall sizes of stack of 10 chairs:

3'-9" x 1'-5" x 2'-4"

TYPE RP19.



weight: canvas, 9 lb.

upholstery, 11 1/2 lb.

overall size of stack of 10 chairs:

canvas, 3'-4 1/2" x 1'-5 3/4" x 2'-7"

upholstery, 3'-10" x 1'-5 3/4" x 2'-7 1/4"

TYPE RP60.

42.D1 • PEL • FURNITURE : NESTING CHAIRS

This Sheet describes the Pel range of nesting chairs. Sheet 42.L1 deals with nesting and folding tables and Sheet 43.A1 with special seating for public buildings.

Material

Frames: These are of $\frac{3}{4}$ in. diameter electrically-welded steel tubing (except for type RP 18 which is $\frac{7}{8}$ in. diameter). With some types the seat-support tubes and floor rails are in one continuous piece; where this is not so, floor tubes are fitted with domed plugs of pressed steel.

Seats and backs: These are available in a choice of materials in most cases and a fairly wide range for some types. A general description of each material and relevant data are given below.

Material	Description
Cane	Natural polished full-round cane, hand-woven directly to the frame.
Canvas	Polished or unpolished stretched cotton canvas reinforced with eyelets and rivets.
Plastic	Shaped laminated brown Delaron sheet plastic, $\frac{1}{8}$ in. thick, secured to frame by rivets.
Plywood	Pre-formed moulded plywood, 6 mm. thick, natural-polished and secured to frame by rivets.
Upholstered	<i>Seat</i> —Formed plywood base with shaped hardwood frame, screwed and glued together. Hair mat and wool filling.
	<i>Back</i> —Shaped bent plywood, 6 mm. thick, reinforced with hardwood fillets. Hair mat and wool filling.
	<i>Cover</i> —May be of hide, Rexine or Vynide brand leathercloth or of material supplied by customer.
Wood slats	Hardwood, with all sharp edges removed and an oiled finish. Four slats to back, nine to seat; riveted to hardwood bearers screwed to frame.

Additional fittings: The writing blocks on lecture chairs are in polished solid hardwood.

Ashtrays in oxydized copper may be supplied for fitting to chairs.

Sizes

The principal sizes of each type of chair are given on the drawing. Seat heights vary within the limits indicated, according to the material used.

Grouping

Permanent grouping: Chairs may be supplied in groups of two to five. They are riveted with distance pieces giving a $1\frac{1}{4}$ in. space between the chairs. All types, with the exceptions of RP 16, RP 18 and RP 19, may be grouped in this way and stacking is unaffected.

Temporary grouping: Two temporary grouping devices are illustrated on the face of the Sheet. The removable clips enable chairs to be fitted closely together and may be readily clipped or unclipped. The integral hooks are in heavy gauge wire, welded to the frame, and four are provided to each chair.

Tie bars can also be used for grouping chairs together in conjunction with removable clips.

Finish

Frames: Chair frames may be chromium-plated, or stove-enamelled with one or two-coat finish after rustproofing.

Seats and backs: For description of the finishes of the various materials, see *Materials*.

Colours

The stove-enamelled frames and the canvas, hide and leathercloth seats and backs are available in a wide range of colours, particulars of which may be obtained from the manufacturer.

Further Information

Details of the full range of Pel furniture, which includes other types of chair, settees, stools, folding and nesting tables, desks, coat-stands and tea-trolleys, may be obtained from the manufacturer.

Compiled from information supplied by:

Pel Limited.

Head Office and Works: Oldbury, Birmingham.

Telephone: Broadwell 1401-6.

Telegrams: Equip, Oldbury.

London Office: 15, Henrietta Place, W.1.

Telephone: Welbeck 1874.

Bath Office: 7, North Parade, Bath.

Telephone: Bath 5586.

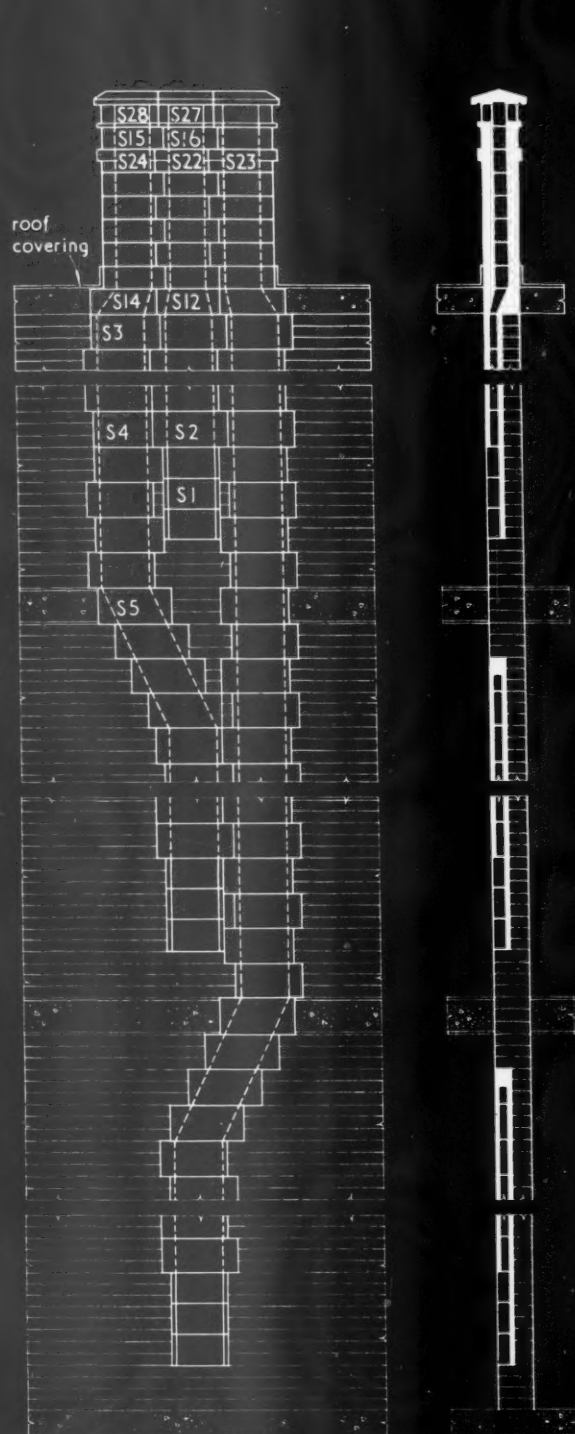
Glasgow Office: 50, Wellington Street,
Glasgow, C.2.

Telephone: Central 8886.

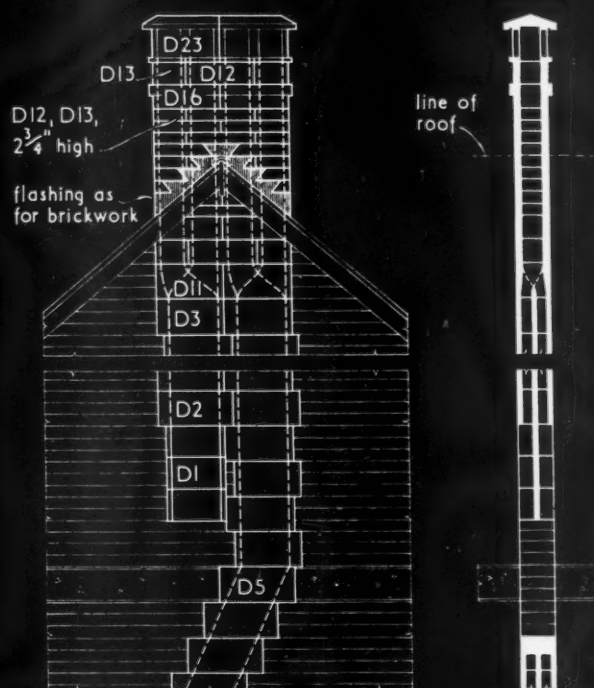


FLUES | GAS

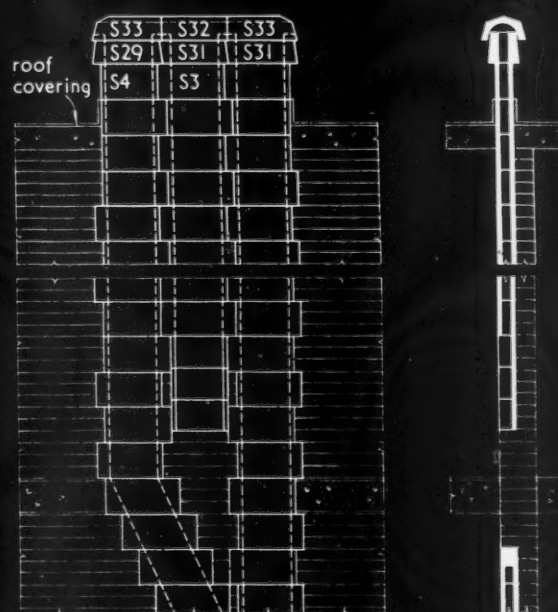
The Architects' Journal Library of Information Sheets 424. Editor: Cotterell Butler, A.R.I.B.A.

30.B5
30.B5

SINGLE FLUE BLOCK INSTALLATION (showing flat roof).



DOUBLE FLUE BLOCK INSTALLATION (showing pitched roof).



SINGLE FLUE BLOCK INSTALLATION WITH 'OLD TYPE' TERMINALS.

30.B5 · NAUTILUS · FLUE BLOCKS 3 : TYPICAL INSTALLATIONS

This Sheet is the third in a series dealing with Nautilus flue blocks. The drawings show three typical installations which will serve as a general guide to fixing the blocks for any number of flues in various situations. The notes give further details of fixing and show how the number of blocks required for a given installation may be computed. Sheet 30.B3 gives general data on the blocks and describes in detail those used for building up single flues, and Sheet 30.B4, those used for double flues.

General

The blocks used for building up single and double flues are similar in function, as may be seen in the two previous Sheets. Differences in the flue construction are therefore due only to the type of roof (pitched or flat), the type of terminal or whether a brick stack is to be employed.

Bedding mortar : For bedding and jointing the blocks it is recommended that a lime mortar be used. It should be mixed in the proportion by volume of 1 : 3 lime/sand.

Flashings and d.p.cs. : It is essential that flashings and d.p.cs., be provided where the stack penetrates the roof. They should be similar in all respects to those used in good building practice for brick stacks.

Rendering : To ensure that the stack is kept dry it is advisable to render the exposed blocks above roof level.

With Flat Roof

When the "new type" terminal is used with a flat roof the straight flue blocks are carried up to roof level, where a course of conversion blocks adapts the flue to the size required by the stack blocks. The roof covering is carried up to the first joint above roof level and a d.p.c., and flashing is inserted in the usual way. The stack should be built above the level of the parapet wall, if any; otherwise it should rise 2 ft. above roof level.

With "old type" terminal : The "old type" terminal is very often used with flat roof construction, especially where there is a parapet wall. The flue is not converted except in the terminal block itself, so that the straight flue blocks are carried right up to the terminal.

With Pitched Roof

With a pitched roof a minimum of one course of standard stack blocks above the conversion blocks (and any raking blocks) should occur below roof level. If the normal type of metal flashing is desired the $2\frac{3}{4}$ in. high stack blocks used above roof level will give the required spacing of joints for neat flashing. When the stack is not situated at the ridge it should be carried up to the maximum height permitted by the local bye-laws.

Ventilating ridge-tile : Where a single flue runs up to a pitched roof and no stack is desired it may be gathered into an asbestos-cement trunking by means

of one of the adaptor blocks shown on Sheet 30.B3, the top of the flue terminating in a ventilating ridge-tile.

With Brick Stack

When the flue blocks are used with a brick stack each flue must be kept separate and terminate in a chimney-pot of which the internal diameter must be at least 6 in.

Number of Blocks Required

In large installations the number of blocks required may be assessed, after the drawings have been prepared, without the necessity for counting them separately. This method of computation is described below.

Pitched roof : A measurement is taken (in feet) from the underside of the conversion block to the underside of the cover block at the base of the flue; this is repeated for each flue. The sum of these measurements is the total length of flues in feet up to the level of the conversion blocks and the number of blocks required will therefore be $\frac{2}{3}$ (or $1\frac{1}{3}$) of this figure. From this is deducted the number of special blocks (e.g., cover, raking, coring, offset and closer blocks). The remaining figure gives the number of standard blocks. The number of building-in sets must be assessed separately.

From the conversion block upwards, the blocks, being $5\frac{1}{2}$ in. high, and the terminals must be counted on the drawings.

Flat roof : Where the "new type" terminal is used, the calculation is carried out exactly as for a pitched roof. With "old type" terminals, however, measurements are taken from the underside of the terminal to the underside of the cover block for each flue. The sum of these figures gives the total length of flues in feet and the number of blocks required is, as before, $1\frac{1}{3}$ of this total. The number of special blocks is deducted to obtain the number of standard blocks required. Building-in sets and terminal blocks must be assessed separately, from the drawings.

Further Information

Detailed information on the design and siting of flues for gas appliances will be found in British Standard Code of Practice CP 331.104 : 1947 *Flues for Gas Appliances*.

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The Marley Tile Company Limited.

Head Office : London Road, Riverhead, Sevenoaks, Kent.

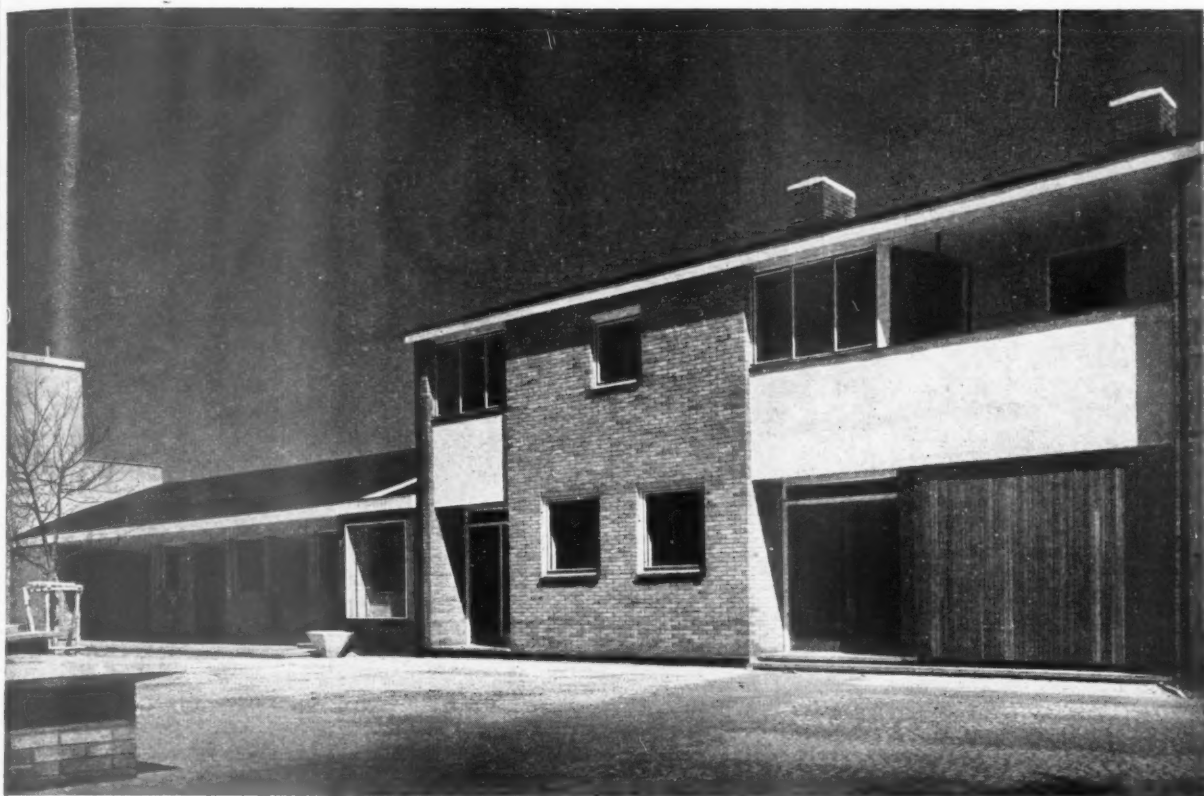
Telephone : Sevenoaks 2251 (8 lines).

Branch Offices : Aveley, Bedfont, Bridgend, Burton-on-Trent, Delamere, Glasgow, Harriets-ham, Leighton Buzzard, Poole, Storrington.

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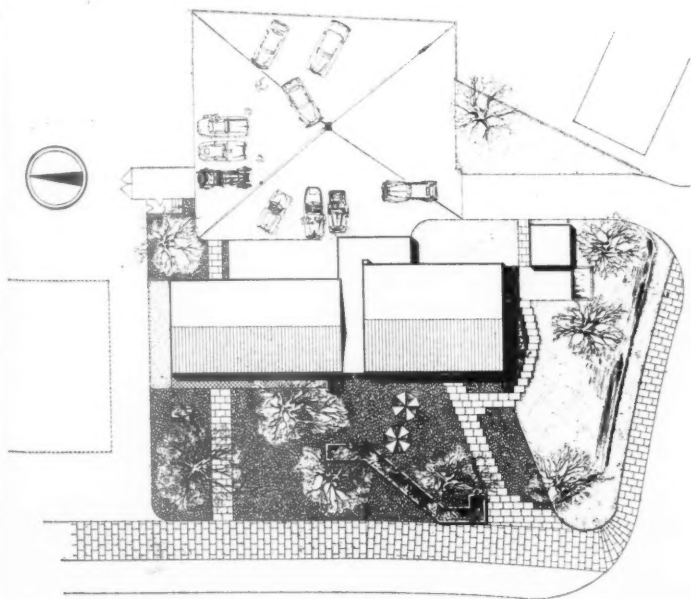


Site pl



SITE.—The site is 0.41 of an acre and its general orientation is east-west. There is a main neighbourhood road on the west side, and on the south is a secondary road, from which there is access to a car park. To the north of the site is a new block of three-storey shops and maisonettes. The cobbled forecourt on the west side of the public house has paving slab paths leading to entrances. Three lime trees, two chestnuts and one magnolia have been

Above, view from the south-west across the courtyard. Right, the south side of the sign. Designed by Edward Wright, these figures represent the two Fox twins, Albert Ebenezer and Ebenezer Albert, of Stevenage, born in 1857, the sons of a baptist preacher. During their lifetime these remarkable characters accumulated over 200 convictions for poaching.



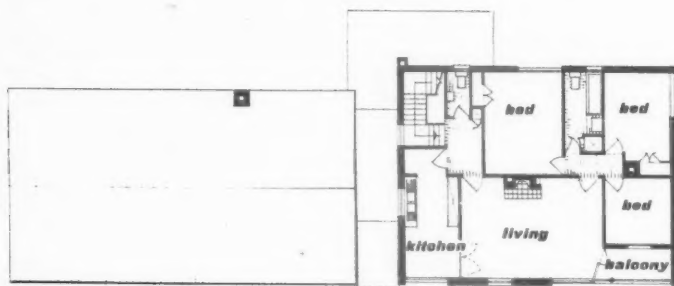
Site plan



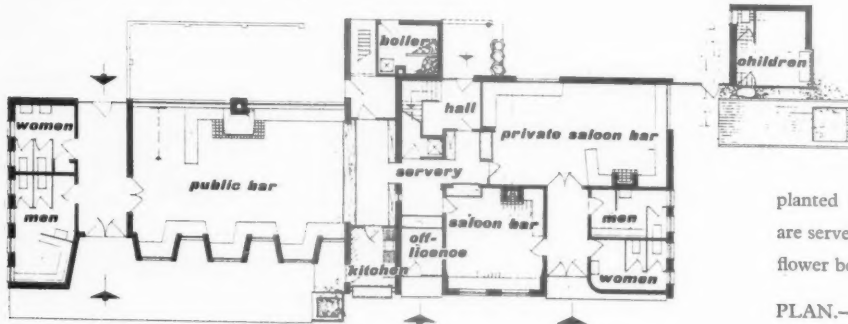
PUBLIC HOUSE

at STEVENAGE NEW TOWN,
HERTS.

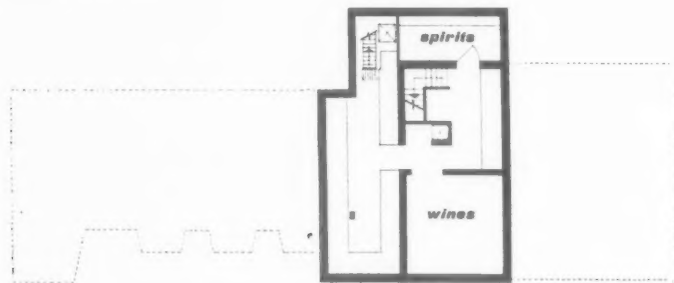
designed by CLIFFORD HOLLIDAY



First floor plan



Ground floor plan



Basement plan (Scale: 1/4" = 1' 0")

PUBLIC HOUSE

in STEVENAGE NEW TOWN, HERTS
designed by CLIFFORD HOLLIDAY

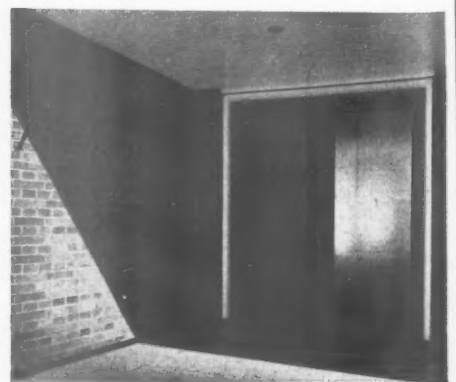


planted in this forecourt, on which refreshments are served in the summer months. To the south are flower beds, a small lawn, and a children's playground.

PLAN.—The "Twin Foxes" has been designed to cater for approximately 200 customers at peak periods and details of accommodation had to be approved by the Home Office, who were to be responsible for its management. It became evident later that the scheme would not necessarily meet the requirements of a company of brewers, who are bound to have strong views on how a public house should be run. However, arrangements were made for three firms, McMullen & Sons, Mann, Crossman & Paulin, and Whitbreads, to run the inn as a joint venture, and only minor alterations were required to various fittings by the tenants. The servery has been planned in a central position to serve the public bar, two saloon bars, off-licence and has access to the kitchen, the cellar and stairs to the manager's flat.

CONSTRUCTION.—External walls are of 11-in.

Left, the rear facade, showing private entrance to manager's flat. Below, entrance to the public bar.



Right, view on the rear of the public house, showing a ceiling with a white pattern per design Minton. Right, view in the (This was illustrated in a Detail issue of

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PUBLIC HOUSE

at STEVENAGE NEW TOWN,
HERTS

designed by CLIFFORD
HOLLIDAY

Top, public bar servery, Above, left, door to men's bar (shown on plan as saloon bar). Above, right, servery in same bar. (This will be shown as a Working Detail in a later issue of the JOURNAL.)

panels of 6-in. hollow clay blocks finished with vermiculite rendering. The roof is covered] with cedar shingles at a pitch of 2:1 deg. and has concealed, copper-flashed gutters. The pyramid truss roof of the children's play pavilion is covered with copper. The manager's flat is sound-insulated from public

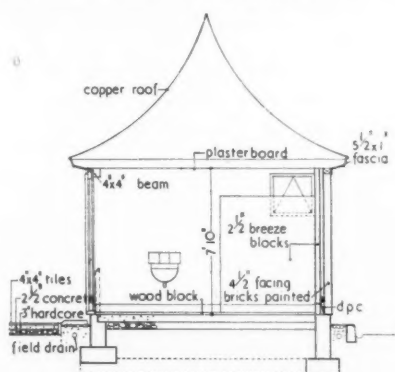
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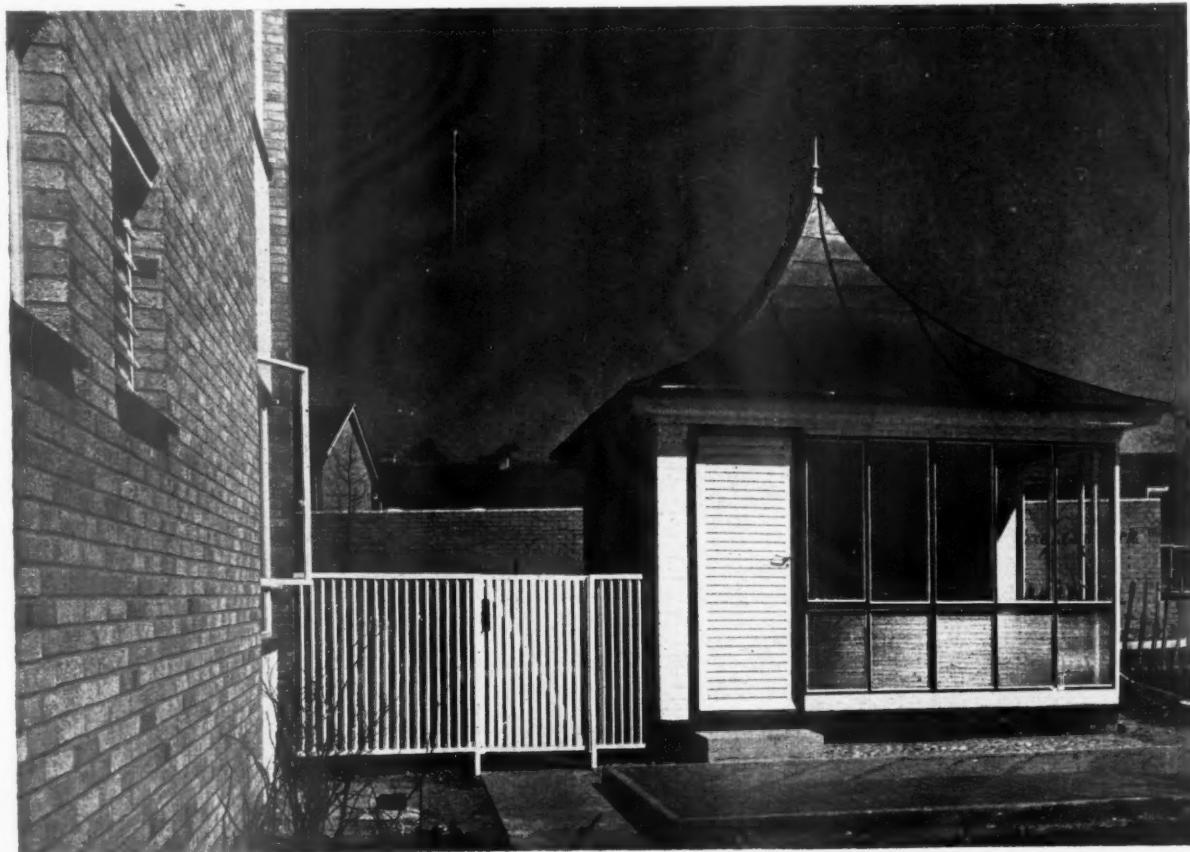
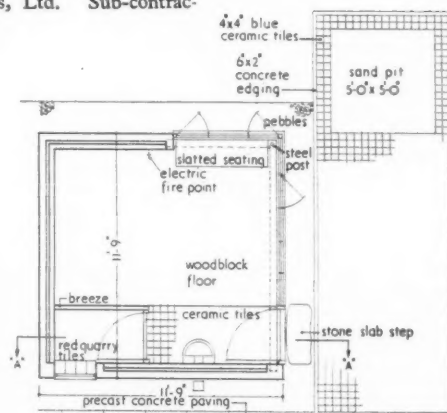
rooms by a layer of glass fibre under the floor boards. It was required that all public rooms should have a minimum ceiling height of 9 ft. Contrast has been obtained by the use of suspended ceilings over the foyer, cloakrooms and bar counters. An attempt has been made to make the three public room interiors different in character. In the public bar the ceiling is covered with a green and white patterned wallpaper. This paper and the marble paper used on the wall adjoining the entrance hall, were specially treated for easy cleaning. The remaining walls are finished with rough lime plaster or fair-faced brickwork. Bar counter fronts are in sapele and sycamore strips. The floor is covered with panga panga hardwood blocks, laid in brick

pattern. In the private saloon bar the ceiling is covered with natural cork with a hardwood edge. One wall is covered with a large ordnance map of part of the county. The floor is Rhodesian teak blocks and there is a slatted false ceiling over the bar. This false ceiling contains concealed lights. The saloon bar has plain lime plastered walls and a floor of panga panga wood blocks. All bars have fixed seating in slatted sapele, wax polished. The ceiling and wall light fittings are specially designed and purpose-made in brass and copper.

The total area including basement, flat and playroom is 5,104 sq. ft. The contract price was £19,699. General contractors, Tersons, Ltd. Sub-contractors, page 46.



Below, the children's playroom which is an entirely new departure for a public house scheme. (The roof will be illustrated as a Working Detail in a later issue of the JOURNAL.)



FOLLIES OF MODERN ARCHITECTURE

LEWIS MUMFORD TELLS AA STUDENTS OF "BACKWARD STEP"

The buildings shown on these two pages were cited by Lewis Mumford as examples of folly-architecture when he spoke recently to AA students. The UN secretariat (right) was said by Mr. Mumford to "disregard the functional working of the United Nations." The Pimlico housing scheme (opposite page, top) also received the label of "folly". And Mies Van der Rohe's Lakeside apartment houses at Chicago were described as "pieces of sculpture on an expensive scale which have no relation to the problems of domestic habitation." The statements made in Mr. Mumford's talk, which is reproduced below, could not be allowed to pass without comment. The talk is the subject of this week's leading article on page 39.



I UNDERSTAND that you are all more or less still under the sway of a gentleman who is even more ancient than me—Le Corbusier—and what I should like to do now is to go into the situation in architecture in our civilization as I see it so that we shall understand better the problems which await us in the post-Corbusier period which will come about in the natural progression of things.

The battle for modern architecture has been won, and even the determined opponent of Le Corbusier would be basely ungrateful if he did not realize how much we owe to the magnificent propagandist genius, the extraordinary facility with a pencil, and the tenacity and persistence with which Le Corbusier, a hundred years after the modern movement began, set back on the particular route which started at the beginning of the Victorian period, clarified all its problems and re-introduced them to our generation. That was a great contribution. It would be very small-minded of anyone to belittle it. Thanks to Le Corbusier and his associates in the CIAM, Gropius and the great giants of the 1920's, the battle for modern architecture has now been won. You could not produce any other kind of architecture if you were asked to do so.

I understand that people who want

something less than modern architecture go to the office boy or to the little draughtsman who will obey their wishes and pretend to produce architecture. As I say, the victory has been won, and the real question is whether we are moving in the direction of good architecture, or whether we are fast approaching the end of a blind alley. I uphold the thesis of the blind alley this morning, and that you are yourselves groping towards the end of it. As soon as you hit the wall you must wake up and turn in another direction.

What do I mean when I say that?

The great contribution of the pre-Victorian and early Victorian architects and engineers—the people who built Liverpool Docks for example—was to acclimatize the Western mind to the use of the machine, to understand its great potentialities, and in understanding its potentialities to realize all sorts of biological, human, social and personal possibilities which are also directly concerned with architecture. In order to achieve their goal they had to neglect many elements which were not by any means side issues; but with the system of mechanization, mass production and of standardized units, architecture proceeded along the only lines it could go, deserting old forms, symbols and modes, and creating the architecture of the future—the architecture of the Man-

chester cotton buildings, new railway stations, bridges, and so forth. That movement had its repercussions. In the United States we went through the same evolution, and then it petered out for many reasons.

One of the reasons was the reaction of human sentiment against something that in its primitive form was imperfect and undeveloped. But, unfortunately, the reaction took the form of Victorian ornament, Victorian gothic and Victorian sentimentality which led nowhere. It did not even lead into the past, for you cannot lead a generation back into the past. You can only deform the present by attempting to imitate the past. So although there was a great period in English architecture, I am afraid you do not sufficiently recognize the period between, say, 1895 and 1910 in which genteel Edwardian and Georgian reaction took place, and when some of the very best town planning and the very best housing produced in the Western world, with qualities that Victorian engineers and planners had not recognized, was actually created here. You departed from that movement which had so influenced the continent and went to Lutyens Georgian—and that was one of the sad things which happened to modern architecture.

So it was necessary for Le Corbusier in the 1920's to re-state and re-discover,

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as if for the first time, the movement which had been gathering headway, but which had never fully crystallized throughout the 19th century. There was recognition that the machine age gave us forms in which new architectural modes should be conceived and that one cannot create modern buildings by using old-fashioned methods of production and therefore old-fashioned solutions in design. It was associated with the clarification that took place in the purist movement which Le Corbusier founded in 1919.

That purification of architecture, which Le Corbusier had in mind on the basis of the cubist paintings at that time, was a great contribution to modern architecture. It restricted your choices and enabled the last traces of inert sentimentality to be wiped off. It existed in the best Victorian work and in the great skyscrapers in Chicago, with not a trace of extraneous ornament and nothing but the finest type of factual statement. But this movement is now beginning to run into a blind alley, and the proof of that is that it has led to the creation at the hands of the masters of a series of buildings which, if they go on being imitated, will cast such discredit on the modern movement that your little engineering draughtsman and surveyor will take possession of the entire art of building unless your generation correct it.



The form which this backward step has taken must be termed a folly-architecture of pure caprice without any rational functional basis, without any consideration of the human and social problems which the work of architecture conjures up; a folly which consists in creating a monument to the architect and not a solution of his client's problem.

If any of you wish to question me on what I mean by folly, I would refer by way of example to the United Nations Secretariat building. That is a folly in that its basis is a complete disregard of the functional working of the United Nations. The problem set before the architects was to create a symbol for mankind of a world unit, but the symbol was an American skyscraper which is, for the larger part of mankind, a thing of horror, something which represents imperialism and the white man's domination of life.

If you want another folly I would turn to van der Rohe's houses in the Middle West and the Lakeside apartment houses. Both are pieces of sculpture. van der Rohe was an artist, and they are pieces of sculpture on an expensive scale which have no relation to the problems of domestic habitation. One wonders what sort of life such an architect lived in an apartment with one room and nothing private except the water closet! It is a mode of life that is almost unthinkable when you examine the details of a day's routine in such a place. That is what I mean by folly, and it is accompanied by a new kind of academicism which inflicts upon the fundamental solution of every problem a facet which has nothing to do with the actual operation and actual enjoyment of the structure itself.

In every architectural school—I know it is so in America, and it is presumably the case throughout Europe—the younger generation is following van der Rohe and Le Corbusier into this bottomless pit, and is losing its grip on the real problems which await the modern architect. The problem which Le Corbusier never formulated—except in an abstract way—is how to advance from the mechanical solution to one which will be biologically, socially and personally satisfactory; how to enrich architecture through an analysis of the problem and the client and the situation, and to enrich it with qualities that do not belong to the machine age.

We are living in an age which is achieving greater psychological understanding than ever before, when the doctrines of a profound humanism and organism and a profound conception of the human personality must find a way of being embodied through the architects of our time in forms which will have all the necessary mechanical requisites, but which will do justice to the human personality—and not to one type of personality; not to the intellectual such as Le Corbusier, who everywhere has designed



"I cannot think of a happier building to work in than Lever House, New York," said Mr. Mumford. "It is the best place from the point of view of light, air, and pleasantness of outlook for the office workers that I have discovered anywhere."





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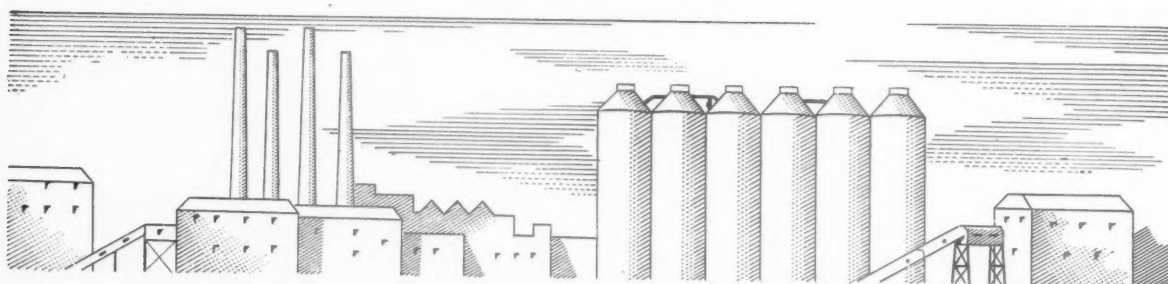
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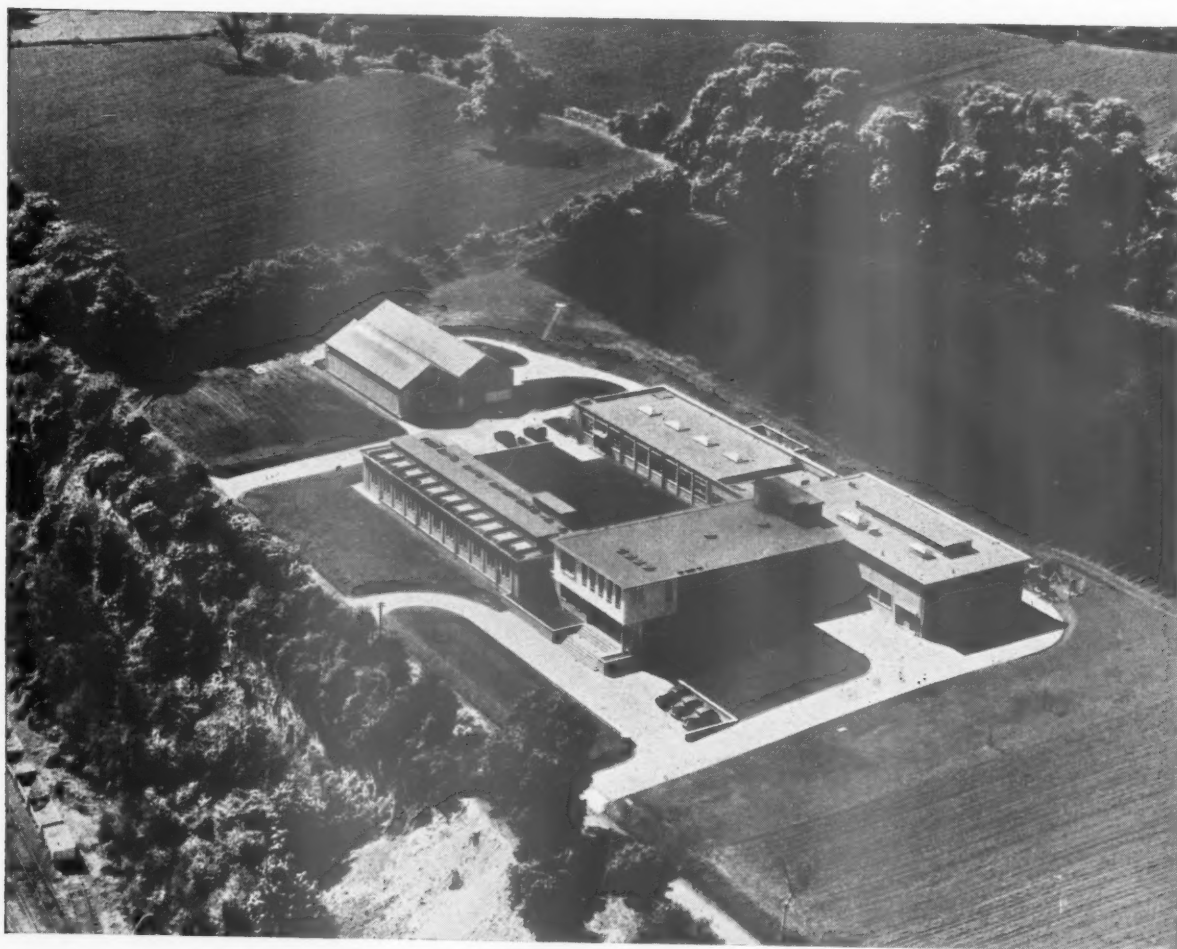


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great buildings for one man alone—Le Corbusier. There is an enormous variety in human nature. There is the extrovert who likes an exposed life, the introvert who likes to withdraw, and the balanced man who wants something of both. There is a difference between the intellectual personality with his endeavour to think his way through the world, and the more practical types who have other architectural requirements. Their needs must be formulated in a different version if we are to have a satisfactory architectural solution.

So, since it is the business of the old to give unwanted advice to the young and to see it disregarded, I would say that the problem for the young architect today is to realize that the modern world offers infinitely richer possibilities for the architect than the purely formal and aesthetic solutions of Le Corbusier and Van der Rohe indicate. The task of the new age is to confront architecture with a sense of what it means for the development of the human personality, and not to do the old Greek trick of Procrustes of taking a human being and then stretching him or crushing him in order to fit into the architectural form, as has been done with the United Nations building in which most of the poor stenographers work in artificially lighted quarters with no sense of the outside world in their daily work.

Mr. Mumford followed his talk with answers to questions put to him by students. These are excerpts from three of them.

ON CLIENTS

The lack of good clients and good patrons is fatal to architecture, because no architect should have a completely free hand. The worst buildings result from architects having completely dominated their clients, and the good buildings are the result of a tussle or a conflict between the client and the architect. In the absence of an understanding body of people such as existed in England in the 18th century, what I say to the young architects is this. Your first duty is to arrive at a fundamental understanding of the possibilities that your client is putting before you. Sometimes that involves the very dangerous business of challenging the client with the possibility of losing the job to somebody with a less challenging disposition, but in the long run this examination of the client's programme is essential for the development of good building, and the few architects I know who have followed that particularly difficult line have been rewarded in the end.

Matthew Nowicki, a great architect of this generation who died tragically in 1950, used to say that a good building could only be done with a great client,



In answering one student's question, Mr. Mumford had this to say about Corbusier: "His solution of the problem of a house at the end of a narrow cul-de-sac with a restricted view was to raise the house, which gave a good view of the garden. It was a wonderful solution, but now he cannot create a building without this waste of space underneath it. How long will building on stilts be modern? How long will it be before it will look as quaint and as absurd as Victorian gothic?" (Photo: Marseilles flats.)

and that is a lesson for the architect. He must approach the client with a certain kind of humility. He can learn from the most insignificant expression on the part of his client something he did not know about the kind of building he could live in. The one thing you cannot accuse the leaders of the modern movement of is that quality of humility! Frank Lloyd Wright does not possess it; Le Corbusier does not possess it. They are great men—the old fashioned, Victorian, Wagnerian great men!

One does not have to accept a problem. It is always possible to resign; it is always possible to go on strike; it is possible to cry out at the top of one's voice, "This is the wrong thing to do and, as an architect, in all decency you must not ask me to do it. I should not do it if I was starving." With such strong morals and principles, our town councils and governmental bodies would presently be ashamed into doing the right thing. If, on the other hand, the architect merely accepts a commission and carries out his work in accordance with what he is told by his superiors, then our civilization is in a bad way. We must create conditions in which real architecture will be possible.

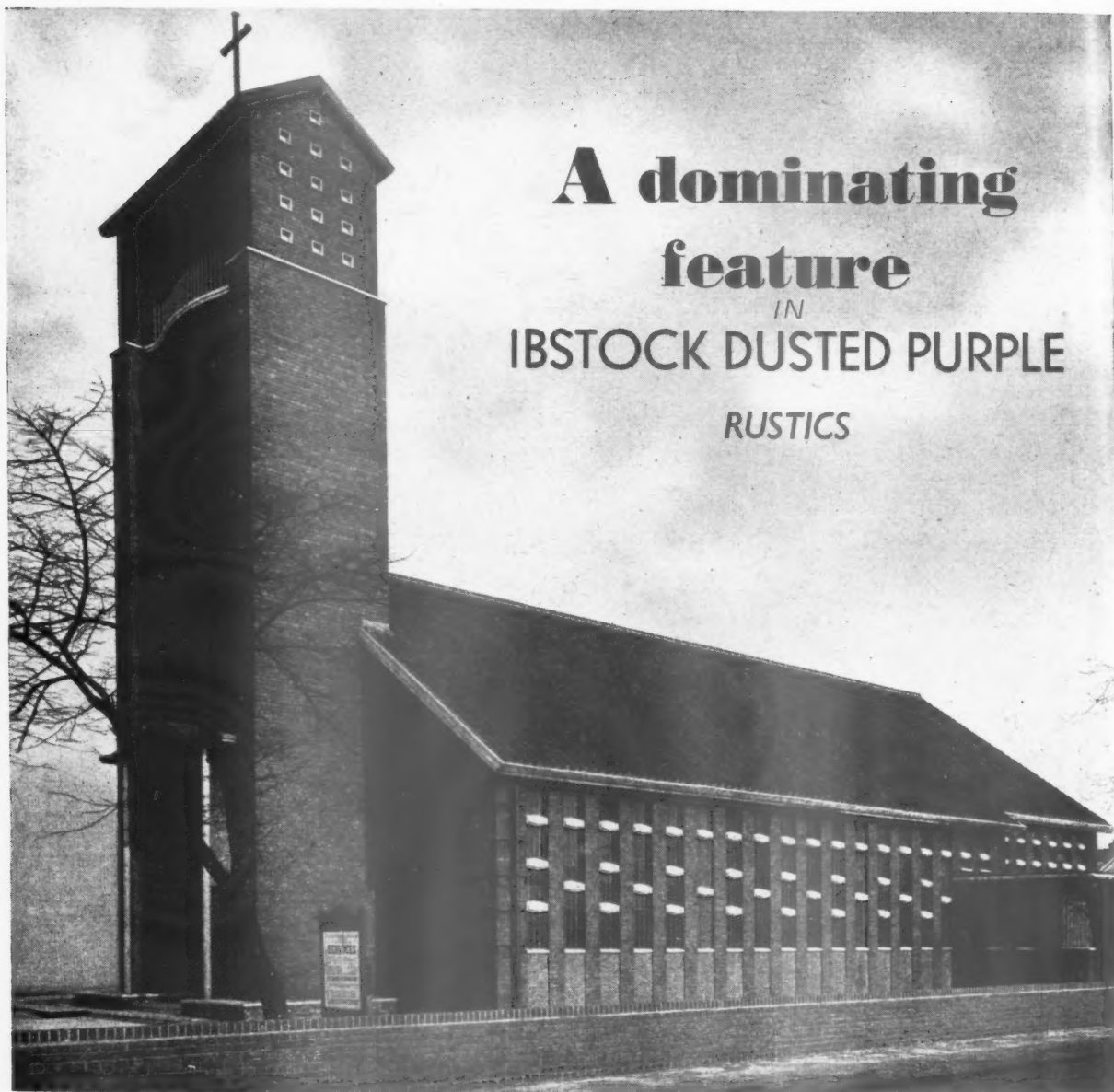
ON THE PIMLICO FLATS

If I were to give another example of the folly, I should refer to the Pimlico

dwellings. Under what terms can we make our cities as they were again, and under what terms can we cease to produce urban barbarians? That problem is at the basis of every architectural solution of housing. It is something which looks good on a drawing board but lacks the human quality.

ON LEVER HOUSE, NEW YORK— "A HAPPY BUILDING"

If an architect examines the client's programme and accepts it, I think that Lever House in New York would be an example of a good solution of the problems presented. You have to accept the client's programme. He is interested in advertising, and he is willing to be extravagant in order to gain publicity, but it is the best place from the point of view of light, air, and pleasantness of outlook for the office workers that I have discovered anywhere. It is a luxurious solution, but if you are condemned to be a stenographer, a filing clerk or a minor administrator, I cannot think of a happier building to work in than Lever House, New York. It involved saying, "We shall not go as high as possible; we shall not crowd the site, and we shall leave half of it open to get the light. Nobody will be more than thirty feet away from the window."



**A dominating
feature
IN
IBSTOCK DUSTED PURPLE
RUSTICS**

Parish Church of St. Paul, Maryland Road, Stratford, London, E.15.

Architects : Humphrys & Hurst, F/A.R.I.B.A., London, W.1.

Contractors : Hammond & Miles Ltd., Ilford.

IBSTOCK
Facings

Rising from the centre of a much-bombed area, this tall parish church, faced with Ibstock Dusted Purple rustics, accented with stone dressings, brings dignity and soft colour to this sombre locality.

For colour and texture in fine brickwork, choose an Ibstock facing brick.

Owing to present heavy demand, supplies of facing bricks of all types are booked for a long time ahead and reservations for 1954 are now being made.

for COLOUR

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London : L.M.R. Goods Depot, Wright's Lane, Kensington, W.8.

Phone : Western 1281 (2 lines)

TECHNICAL SECTION

Reports by rather remote bodies such as the Advisory Council on Building Research and Development are easily missed in the rush of everyday practice. It would be unfortunate if the Council's recently published Second Report* were overlooked, for it contains a number of points of vital concern to the future of the building industry. And if one reads between the lines one finds in it rather more than a hint that the Council feels that the government's attitude towards expenditure on building research is too cheese-paring. The report deals mainly with government-sponsored work and, therefore, with BRS and MOW. It appears that the net cost of BRS for the year 1951-52 was £630,000 and the net cost of MOW services in disseminating technical information was about £60,000. Adding a few other costs the total comes to about £700,000 a year. This is equal to a little over £2 for each new house built.

He would be a very bold architect, or a very dull one, who would argue that any house he now builds does not benefit by far more than this from the work of BRS. And, if all the benefit to other building and civil engineering works is added, it is clear that expenditure on research is paying a very handsome dividend. If this is so, the recent cuts in expenditure must be very severely criticised.

Government action is notoriously dependent on pressure being applied: is the industry, through *all* of its organizations, pressing sufficiently hard for the recent cuts to be made good?

* MOW Advisory Council on Building Research and Development. Second Report. (HMSO 1953 1s. 3d.)

14 MATERIALS: CONCRETE lightweight concrete blocks

This week's
special article

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

Specialist Editor No. 12 (Materials) reviews below two recent BRS publications dealing with lightweight concrete blocks. Their use should be increased and extended, he says; BRS should publicize further the savings in bricklayers' time that their use effects; and manufacturers should try to raise the quality of their products to the point where they can be used internally and externally without plaster or rendering, as is common practice in America.

Although, in recent years, there has been an increase in the use of lightweight concrete blocks for housing work, their advantages would justify a much wider use—as is common on the

Continent and in America. A recent BRS Digest* lists some of the advantages of lightweight concrete blocks, suggests possible methods of using them and describes the precautions that should be taken, both in design and in specifications.

* *Lightweight Concrete Blocks for Housing.* BRS Digest No. 52. (HMSO, 1953, 3d.)



Finlock forms the eaves and gutters (says Mr. Fin)

... and saves £15 per house! (says Mr. Lock)



USING this system of Guttering shows a tremendous saving in cost, material and maintenance charges. Finlock Gutters are made with a fine waterproof concrete—simple in design, easy

to use and permanent.

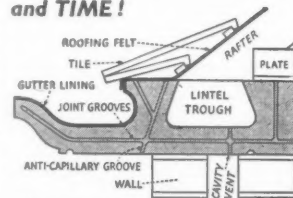
On the illustration below "a" shows the trough in which lintels can be cast *in situ* if required, "b"

shows the large sectioned gutter channel which permits laying without fall. Strong enough to walk in and to withstand all building stresses. Completed by a "FINLOCK" waterproof mastic after laying. "c" indicates the jointing grooves.

★ A fully illustrated Technical Booklet is available on request, from our Head Office
(A.J. Information Sheet No. 33V10)



HOW FINLOCK SAVES MONEY and TIME!



This sectional drawing shows the system in detail and illustrates the ways in which FINLOCK saves approximately 5 yards of brickwork, 80 ft. of rafter, 40 ft. of normal guttering, 40 ft. of fascia, 40 ft. of soffit and 80 ft. super of roof tiling per single house. Painting is eliminated and a reduction in down pipes and drainage is obtained. The complete eaves for a building, with all fittings, can be fixed in one day. Some typical FINLOCK units are shown below:—



Regd. Pat.



Finlock Gutters are being used by the following County Councils: CAMBRIDGESHIRE, DERBYSHIRE, EAST SUSSEX, GLAMORGANSHIRE, GLOUCESTERSHIRE, KENT, LONDON, MIDDLESEX, NORFOLK, SURREY, STAFFORDSHIRE, WARWICKSHIRE, WORCESTERSHIRE.

Over 300 local authorities are now using Finlock.

* The buildings shown are in accordance with the winning design in the £1,000 low cost housing competition organised by "THE BUILDER". By courtesy of J. L. Womersley, Esq., A.R.I.B.A., A.M.T.P.I., late Borough Architect for Northampton.

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DHB



Unplastered and unrendered walls of light-weight concrete blocks can be very pleasing in appearance.

These two American examples show, left, walls in a house in Buffalo, New York; right, walls, of tinted expanded slag concrete blocks, of a church at Niagara Falls. (Photos by permission of the Director of Building Research, BRS; Crown Copyright Reserved.)



Local authorities' objections to the use of these blocks should no longer be found troublesome, since the new model byelaws have clarified the question.

SHRINKAGE

An important point raised in the Digest is shrinkage control. This can be achieved only by the careful control of the quality of the materials used and of the manufacturing process, by adequate drying before delivery (not always easy in winter) and by proper precautions (often neglected) on the site to avoid saturation of the blocks.

Mortar, plaster and rendering should always be of the cement/lime type and when the blocks are used for the external face of walling there should be movement joints every 20 or 30 ft.

It should be noted that not all light-weight concrete blocks that meet the requirements of BS's are necessarily strong enough for use in load-bearing walls, and care must be taken to specify, when required, blocks with the readily attainable crushing strength of 400 lb./sq. ft.

It is a pity that there is only a very brief reference in the Digest to the economy in bricklayers' time which results from using lightweight blocks. The first National Building Studies Technical Paper, *A Work Study in Block-laying* (HMSO, 1948, 1s. 6d.), gave details of the possible savings, but many builders still seem to believe that, when lightweight blocks are substituted for bricks, it is necessary to adjust only the materials' price. BRS would do well to give further publicity to the savings in labour, since few builders have sufficiently accurate costing analyses to find out for themselves.

LIGHTWEIGHT CONCRETE IN AMERICA

A recently-published report on the use of lightweight concrete in America* shows that much wider use is made of this material there than in this country.

* *Lightweight Concrete in America*. National Building Studies Special Report No. 13. (HMSO, 1953, 4s. 6d.)

The quality of the material is higher and walls of lightweight concrete blocks are often constructed without plaster or rendering, although they are usually cement-painted externally.

The report lists the various types of aggregate used, giving details of manufacture, and describes the manufacture and use of wall blocks and precast roof

units. *In situ* construction is also dealt with and the use of very light aggregates for concrete and plaster is mentioned.

This is an important report; some of the developments described in it could lead to cheaper, yet satisfactory, building here, if our manufacturers of light-weight concrete products could achieve American standards of quality.

THE INDUSTRY

From the Industry this week, Brian Grant reports on a continuous process of manufacturing building board, a glass fronted radiant electric heater, two new catalogues (one for sanitary equipment, one for electric clocks) and further developments in explosively-actuated plug-driving equipment.

BUILDING BOARD PRODUCED CONTINUOUSLY

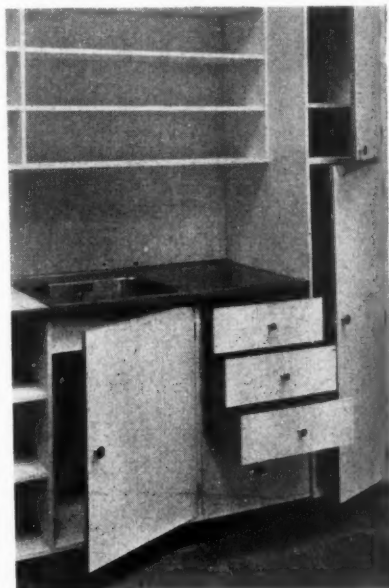
As long ago as 1948 a small press was producing timber board in 18-in. wide strips, the production being continuous and the strips being cut to the required length as they came out of the press. Since that date further experiments have been carried out, and the result is the "Bartrev" press, a full-scale version of which was shown to the Press for the first time a fortnight ago, in a factory at Marks Tey.

The board could probably be produced from almost any fibrous material, but at the moment wood chips are being used. It is possible also to make use of the cuttings, tops and branches which the lumber industry normally discards as well as factory waste. The characteristics of the finished board vary according to whether hardwood or softwood is used.

The press at Marks Tey will have an annual output of about 16,000 tons of board, or from 25 to 40 million sq. ft., according to the thickness produced, while

the price is remarkably low, from 4d. to 9d. per sq. ft., plus a further 1/4d. or so if the board is to be paper faced. The standard width is 4 ft. and the board is cut to length by a flying saw as it comes off the press so that the long dimension can be anything that is required. Part of the display to the Press was a 60-ft. length, 1/2 in. thick, but this was no more than a stunt to show what could be done. Thickness can be anything from 3/8 in. to 1/2 in.

The board can be used for any of the normal purposes—walls, ceilings or floors.



Kitchen fittings (designed by Gaby Schreiber) in the "Bartrev" factory at Marks Tey, constructed throughout of building board from the "Bartrev" continuous process press.

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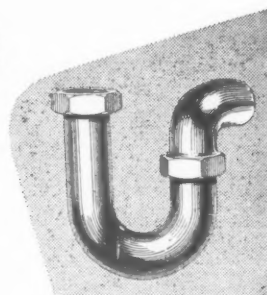
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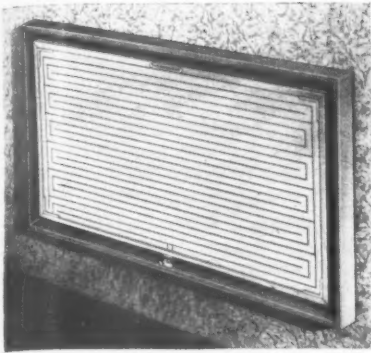
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E. K. Cole's Thermopanel "Radiant Glass" heater with frame (also available without frame), for 750 or 1,000 W. loading.

It is also used for furniture making, numerous examples being on show, with the material either veneered or used plain for the construction of drawers or linings. It can also be metal faced, and there seems to be no reason why it should not be faced with aluminium foil, in the same way as some of the plasterboards, as a form of reflecting insulation; in fact, the manufacturers claim that it can be faced with any material which can be supplied in rolls.

It should be understood that the manufacturers are interested mainly in the sale of presses to potential board producers. For this reason the work of the existing press consists mostly of demonstration runs for possible buyers, but a good deal of material is being produced which is for sale. When the press is in serious quantity production the distribution of the board will almost certainly be through the normal building trade channels, but in the meantime any enquiries should be addressed to the makers: (The Vere Engineering Co. Ltd., 3 Vere Street, Oxford Street, London, W.1.)

SANITARY EQUIPMENT

Leeds Fireclay have just issued a new list (Catalogue K) of porcelain sanitary equipment. The catalogue provides photographs and dimensioned sketches of the full range, which includes many different types of lavatory basin, urinal, w.c., drinking fountain, shower bath, sink and all other forms of sanitary equipment likely to be used in factory or public buildings, including white-glazed channelling and fittings for laboratory work. The catalogue is sensibly produced in loose-leaf form. (The Leeds Fireclay Co. Ltd., Sanitary Department, Wortley, Leeds, 12.)

ELECTRIC HEATING

The illustration, above, shows the Thermopanel "Radiant Glass" heater, produced by E. K. Cole. These panels are intended for wall mounting 9 or 12 in. from floor level, and safety has, therefore, been carefully considered. The heating element is fused to the back of the "Armourplate" glass front of the heater and runs at too low a temperature to do any damage. There is also a heat reflector at the back to keep down losses through the wall. Two types are available—with or without the wall frame—and there are two electrical loadings—750 and 1,000 W., prices varying from £10 1s. 4d. to £15 9s. 9d. including P.T. The heaters will be on show shortly in the firm's Vigo Street showroom. (E. K. Cole Ltd., Southend-on-Sea, Essex.)

ELECTRIC CLOCKS

Gents of Leicester make two types of clock—one working on the impulse system

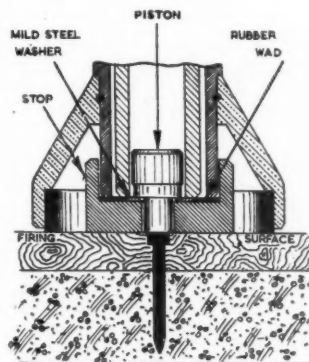
with any number of slave dials; the other the synchronous type connected direct to A.C. mains, the controlled frequency of which provides the time-keeping qualities. The former system is probably the best for a large installation where a number of dials are required, and it has the further advantage of not being interrupted by failures in the supply. The latter type is dealt with in Gents' latest catalogue, and is quite satisfactory for small commercial premises.

The models illustrated in the catalogue are for surface or sunk mounting in commercial or public buildings, and nearly all the designs are very good, being simple and without "ornamentation." There is one model with the case constructed of lead coated sheet for corrosive atmospheres, and a sealed one for atmospheres containing steam or dust.

The firm also produces suspension clocks and time recorders, and a programme instrument which can be set to transmit sound or other signals for starting or stopping work in factories or schools. This is done by inserting pegs in the rim of a large 24-hour wheel; the times can be chosen to the nearest five minutes. (Gent & Co. Ltd., Faraday Works, Leicester.)

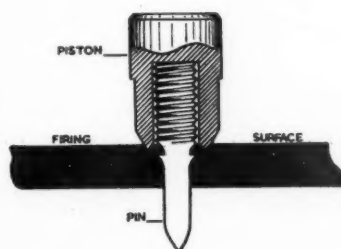
PLUG-FIRING GUNS

Bourner's, whose plug-driving gun (the "Supa-Dynamic") was first described in the JOURNAL for November 29, 1951, now have several new gadgets which increase the scope of their tool. The first improvement is a piston, which, used in conjunction with the "stop" (see illustration below), controls accurately the depth to which the pin is driven when fixing a soft material such as timber to



a wall. The normal methods of control—the size of the cartridge and the length of the pin—are insufficient for this purpose. When the tool is fired, the piston is arrested by striking the base of the stop, and the impetus is thus taken from the pin which comes to rest with the head flush with, or countersunk into, the receiving surface, as required.

A special piston with a chisel edge is the second new device, which makes possible fixings into thin sections of steel, where the area of contact is insufficient to provide an ade-



quate frictional grip. The chisel edge of the piston swages the receiving surface of the steel over and around the barbed shoulder of the special pin (see illustration at bottom of previous column).

The third new development is a larger barrel, which can be accommodated in the standard gun, for fixing larger—1-in. diameter—pins.

At a recent demonstration arranged for the Press, I discovered for the first time why these plug-fired fixings actually hold. The secret apparently is the speed at which the pin enters the material, which is so great that the material is only temporarily forced out of the way, after which it tries to return to its original position, thereby exerting a tremendous frictional grip. The demonstrator gave as an analogy the fact that a 0.303 bullet fired through a log of wood leaves a hole so small that it is difficult to force a matchstick through it. The pins used, incidentally, are of hard steel, so that their value in sheer is as great as much larger nails or screws of mild steel.

Bourner's gun remains the same price as when it was first shown at the 1951 Building Exhibition (just under £40 for a complete kit). The cost of operation is slightly down, at 4½d. to 8d. per shot, for cartridge and pin. There are now 28 different standard pins; "specials" can be supplied at an economical price in quantities of about 500, or sometimes even less.

It is good to know that plug-driving guns are a British invention, first patented just after World War I, although no one could be found to take up the invention in this country until after World War II. (J. H. Bourner & Co. (Engineers), Ltd., Manor Royal, Crawley, Sussex.)

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.)

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Buildings Illustrated

The "Kenilworth Castle," Public House, at 104, St. Ann's Road, Notting Hill, London, W.11, for Barclay Perkins & Co. Ltd. (Page 49.) Architect: F. W. Handover, F.R.I.C.S., L.R.I.B.A. Murals designed by Mrs. M. Hoffer. Sign designed by Miss Herry Perry. General contractors: Hampton & Sons Ltd. Clerk of Works: A. Barton. General Foreman: A. Younger. Sub-contractors: excavation, foundations, reinforced concrete, Kerridge (Cambridge) Ltd.; asphalt, The General Asphalt Co. Ltd.; bricks, Henfield Brick Co.; artificial stone, Malcolm Macleod & Co. Ltd.; structural steel, W. H. Armfield Ltd.; tiles, The Isle of Purbeck Decorative Tile Co.; glass patent glazing, W. & E. Crawford; gas fixtures and fittings, boilers, electric wiring and fixtures, bells, electric heating, ventilation, metalwork, J. Biggs Ltd.; stairtreads, Ferodo Ltd.; door furniture, J. Shimeild & Sons; casements, R. L. Muir (Joinery) Ltd.; iron staircases, Haywards Ltd.; joinery, R. L. Muir (Joinery) Ltd.; marble, Anslem Odling & Sons Ltd.; furniture, S. C. Crosse Ltd.; lifts, Aldous & Campbell Ltd.; clocks, Smiths English Clocks Ltd.; signs, The Lettering Centre.

"Twin Foxes" Public House, Stevenage New Town, Herts. (Pages 50-55.) Architects: Professor Clifford Holiday, M.A.R.C.H., F.R.I.B.A., M.T.P.I., former Chief Architect, Stevenage Development Corporation; Leonard G. Vincent, A.R.I.B.A., A.M.T.P.I., Deputy Chief Architect; Oliver Carey, A.R.I.B.A., Group Leader; P. Halliwell, A.R.I.B.A., H. Blake, A.R.I.B.A., Tony Pilcher, A.R.I.B.A., and Michael Cotton, A.R.I.B.A., Assistant Architects. General contractors: Tersons Ltd. Sub-contractors: metal windows, The Crittall Manufacturing Co. Ltd.; precast concrete floors, Flooring Contracts (London) Ltd.; wood block floors, V.G.

(London) Ltd.; copper roof (children's playroom), Broderick Insulated Structures Ltd.; ventilating apparatus, Z. D. Berry & Sons Ltd.; display window, Rippers Ltd.; bar counters and shelving, Foster's (Woodworkers) Ltd.; w.c. cubicles and door fittings, William Mallinson & Sons Ltd.; ironmongery, Dryad Metal Works Ltd.; beer engines, Frederick Sage & Co. Ltd.; lighting fittings, Hume Atkins & Co. Ltd.; flushing valves, Victory Valves Ltd.; sanitary fittings, Dent & Hellyer Ltd.; wallpaper, Arthur Sanderson & Sons Ltd., John Line & Sons Ltd.; inn sign, Foster's (Woodworkers) Ltd.; supply of trees, R. Wallace & Co.; kitchen cabinets, etc., Jayanbee Joinery Ltd.

Announcements

The TDA has gained exemption from purchase tax for the TDA-designed Monopitch Suburban Bus Shelter. In some areas local officers of the Customs and Excise have ruled that the shelter be subject to tax and in future cases of difficulty the manufacturing company should contact the secretary of the TDA at 21, College Hill, E.C.4.

Among those in industry to whom the Queen has awarded the Coronation Medal for loyal service to the Crown is Dr. S. English, joint managing director of Holophone Ltd., and a past president of the IES. Dr. English is also vice chairman and treasurer of the National Illumination Committee of Great Britain, and member of the executive and finance committees of the International Commission on Illumination.

The Press Office of Monsanto Chemicals Ltd. has been removed to 25-27, Charles II Street, London, S.W.1. Correspondence should be addressed to 8, Waterloo Place, London, S.W.1 (Tel., Whitehall 2913).

The partnership between Ronald Homes and E. Cooke-Yarborough under the style of Cone Fittings Co. has been incorporated in

a limited company. The company, Cone Fittings Ltd., will be at 9, Rosemount Road, Hampstead, N.W.3 (Tel., Ham 6618).

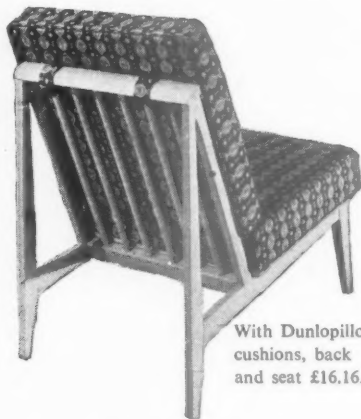
Messrs. Bromley & Cartwright, of 6, Clarendon Street, Nottingham, and 111, London Road, Derby, and Messrs. Evans, Clark & Woollatt, of Eldon Chambers, Wheeler Gate, Nottingham, have amalgamated. They will practice under the style of Evans, Cartwright & Woollatt at 6, Clarendon Street, Nottingham.

Bernard Taylor & Associates, of Macclesfield, Cheshire, have removed their offices to The Market Place, Macclesfield (Tel., Macclesfield 3843).

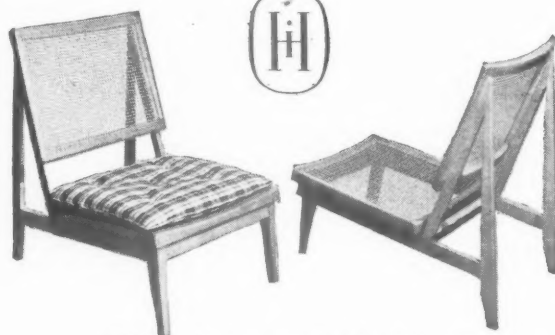
In view of the great public interest which it has attracted, the RICS has decided to continue, until July 25, its exhibition "Five Centuries of Maps and Map-Making." The one thousand maps, atlases, books and instruments assembled for the occasion portray the story of cartography and accurate surveying during the last five hundred years. These include many early maps and atlases, plans for early British canals and railways, hydrographic and aviation charts, a demonstration by the Ordnance Survey of the processes of modern map-making, and a wide selection of modern maps and plans. The exhibition also includes a collection of maps from the Windsor Castle Library, loaned by the Queen, a number of captured German military maps of the last war, and an original map from the cabinet war room, which was in daily use during the war by Sir Winston Churchill and his advisers. The exhibition is open daily (except Sundays) from 10 a.m. to 8 p.m. at 12, Great George Street, Westminster. (Admission 2s. 6d.; children 1s. 6d.)

Basil Marriott, L.R.I.B.A., F.R.S.A., has been appointed technical director to the Fibre Building Board Development Organization Ltd., which has been recently formed to promote and extend the uses of fibre building board in this country.

"Bahama" Chairs by Ian Henderson



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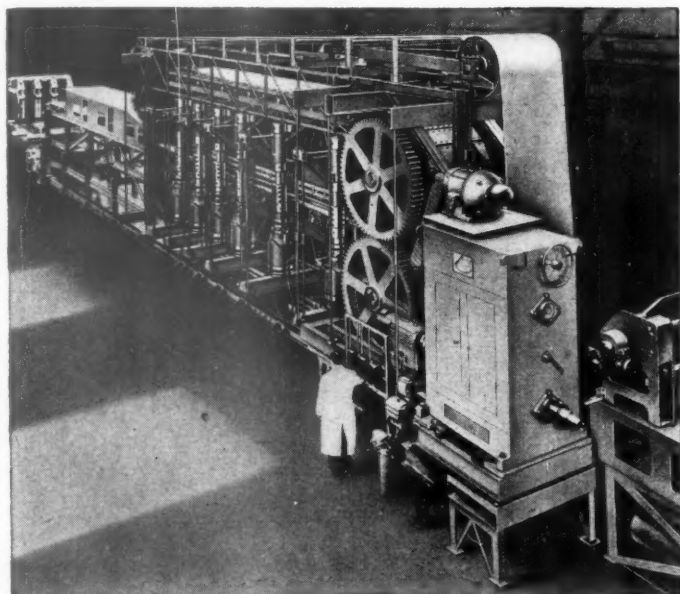
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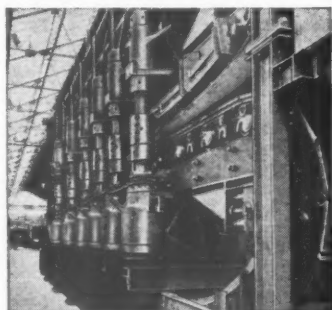
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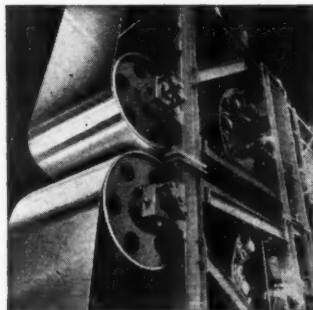
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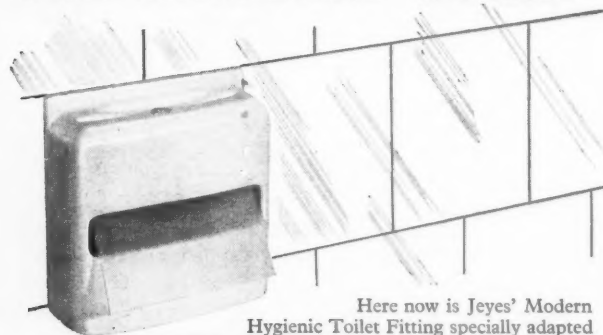
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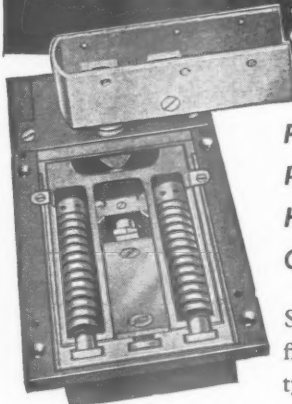
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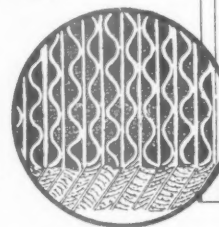
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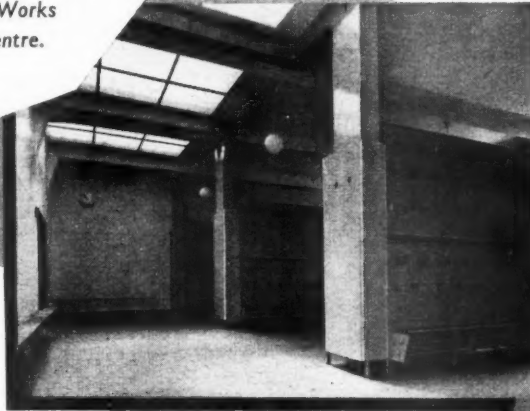
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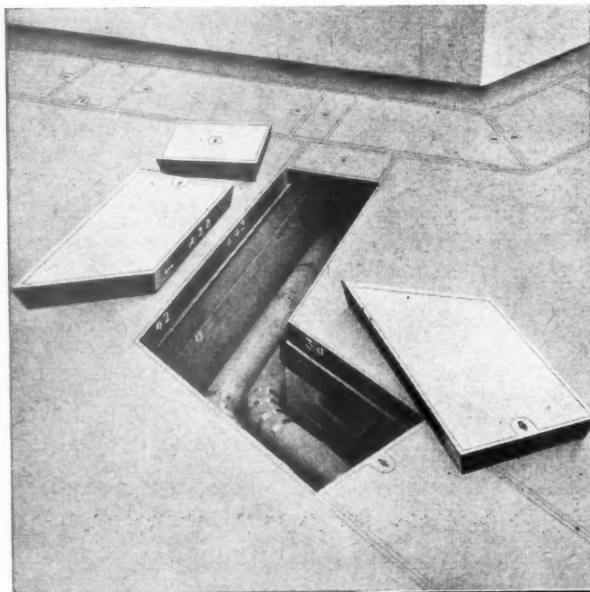
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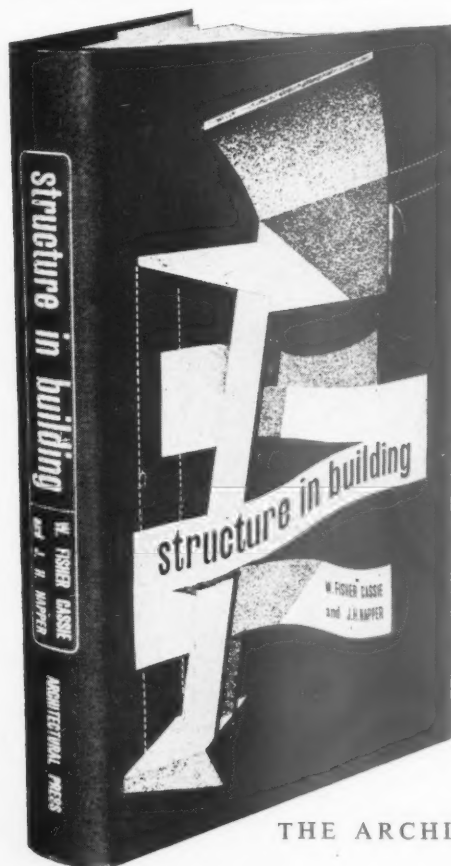
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Foreword by W. A. Allen, B.Arch., A.R.I.B.A.

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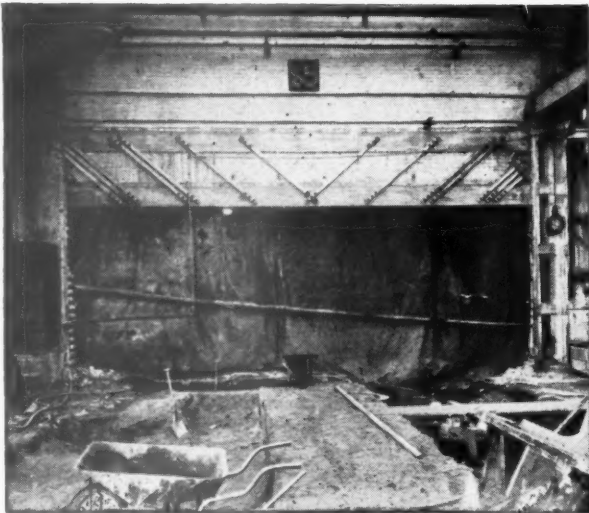
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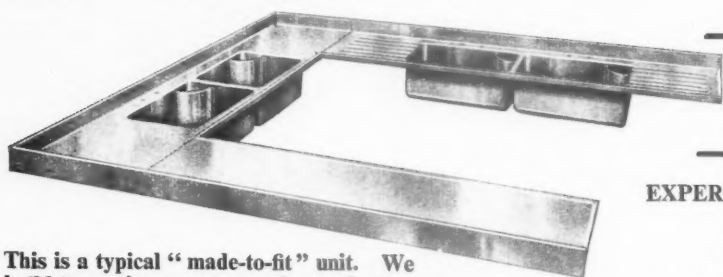
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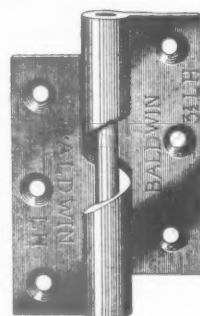


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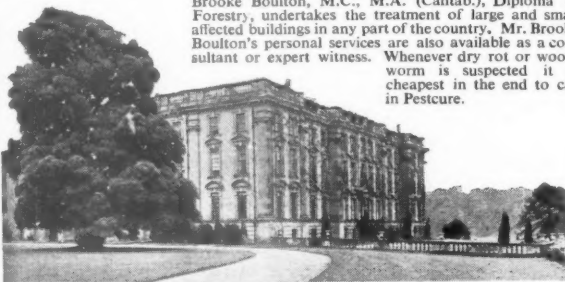
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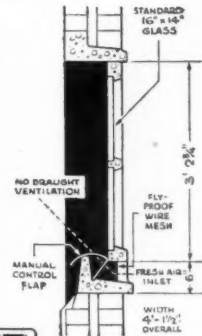
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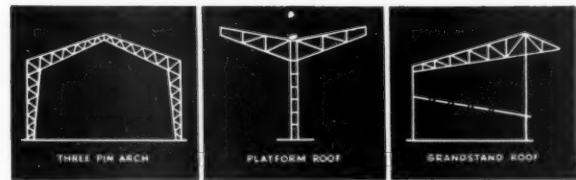
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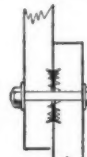
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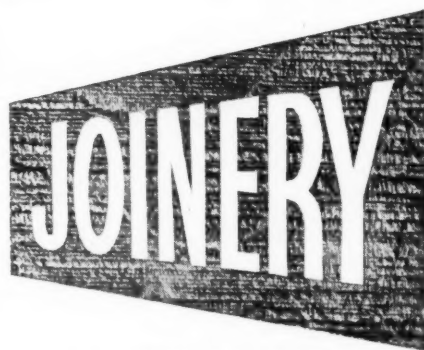
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Applications are invited for this appointment, at a salary according to the Miscellaneous Division, Grade III (£375-£440 p.a., plus London weighting), commencing first year.

The appointment is subject to (a) provisions of National Scheme of Conditions of Service, (b) Local Government Superannuation Act, 1937, and (c) passing of a medical examination.

Applicants must possess good knowledge of building construction and preferably have had experience in a Building Inspector's office, whilst a general knowledge of Town Planning would be a desirable qualification.

Written applications, stating age and detailing experience, etc., with names and addresses of two referees, to reach the undersigned not later than the 14th July.

W. F. J. CHURCH,

Town Clerk.

9096

Town Hall, Chiswick, W.4.

BOROUGH OF EALING require a JUNIOR TECHNICAL ASSISTANT in the Town Planning and Building Inspectors' Section of the Borough Surveyor's Department. A.P.T. 1 (£465 to £510 per annum), plus London weighting. N.J.C. Service Conditions. Superannuation. No housing accommodation. Canvassing disqualifies. Application forms from Borough Surveyor, Town Hall, Ealing, W.5, to be returned to E. J. Cope-Brown, Town Clerk, Town Hall, Ealing, W.5, by 20th July, 1953.

MINISTRY OF WORKS.

Vacancies exist in the Chief Architect's Division for ARCHITECTURAL ASSISTANTS with recognised training and fair experience. Vacancies mainly in London and Risley (Nr. Warrington). Successful candidates will be employed on wide variety of Public Buildings including Atomic Energy and other Research Establishments, Telephone Exchanges and Housing.

London Salary: Up to £228 per annum. Starting pay according to age, qualifications and experience. Rates outside London slightly lower.

Reasonable prospects of promotion to Leading and Senior Architectural Assistant. Although these are not established posts many have long-term possibilities and competitions are held periodically to fill established vacancies.

Write stating age, nationality and full details of training and experience, to Chief Architect, W.G.10/C.A.2, Ministry of Works, Abell House, John Islip Street, London, S.W.1.

8760

COUNTY BOROUGH OF SOUTHEND-ON-SEA. ASSISTANT ARCHITECT-BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for this established post. Salary: £595-£715 (2) x £20-£645.

Applications, together with names of three referees, should be addressed to the Borough Architect, 30, Alexandra Street, Southend-on-Sea, to be received not later than 15th July, 1953.

ARCHIBALD GLEN,

Town Clerk.

9108

LANCASHIRE COUNTY COUNCIL-PLANNING DEPARTMENT.

SENIOR PLANNING ASSISTANT, A.P.T. VI (£670-£735), required at Bury.

Candidates should be qualified architects, surveyors or engineers. A planning qualification or planning experience will be an advantage.

Applications, giving experience, present salary and two referees, to the County Planning Officer, East Cliff County Offices, Preston, by 22nd July, 1953.

9109

HERTFORDSHIRE COUNTY PLANNING DEPARTMENT.

PLANNING ASSISTANT (GRADE IV, A.P.T.), £555-£615-£660.

Experience in work of a Planning Office, together with skill in draughtsmanship, are essential qualifications.

Candidates must have reached, as a minimum, the Intermediate stage of R.I.B.A., or T.P.I., or R.I.C.S.

Application forms from County Planning Officer, County Hall, Hertford, to be returned by 20th July, 1953.

9110

ISLE OF ELY COUNTY COUNCIL.

Applications are invited for the post of ASSISTANT ARCHITECT on the staff of the County Architect.

The post is on Grade A.P.T. V, £595-£645 p.a., is permanent, subject to the provisions of the National Scheme of Conditions of Service, the Local Government Superannuation Act, and to the passing of a medical examination.

Forms of application may be obtained from the County Architect, County Hall, March, to whom they must be returned not later than Monday, 20th July, 1953.

R. F. G. THURLOW,

Clerk of the County Council.

9111

CITY OF STOKE-ON-TRENT.

CITY ARCHITECT'S DEPARTMENT. Applications are invited from suitably qualified persons for the following appointments:—

(a) ASSISTANT QUANTITY SURVEYOR. Salary: A.P.T. Div., Grade VIII (£760-£835).

(b) ASSISTANT QUANTITY SURVEYOR. Salary: A.P.T. Div., Grade VII (£710-£785).

Note.—Suitable Housing Accommodation may be made available to successful candidates.

The selected applicants will be required to pass a medical examination, and the appointments will be subject to the provisions of the Local Government Superannuation Act, 1937.

Applications, stating date of birth, particulars of training, experience, etc., with copies of two recent testimonials, should be received by J. B. Piggett, F.R.I.B.A., City Architect, Kingsway, Stoke-on-Trent, Staffs., endorsed with the title of the appointment, not later than Friday, 24th July, 1953.

HARRY TAYLOR,

Town Clerk.

Town Hall, Stoke-on-Trent.

25th June, 1953.

9112

PADDINGTON BOROUGH COUNCIL require ASSISTANT QUANTITY SURVEYOR (A.P.T., V, £625 to £675 p.a.; £10 p.a. less if under age 26). Final R.I.C.S. (Quantities Section) or at equivalent stage of qualification. Following experience essential: taking off, working up, abstracting, billings, dealing with final accounts; negotiations with contractors; interim and final measurements for certification purposes; and ability to control junior assistants.

Applications (age, qualifications, past and present appointments, experience, names of three referees), to the Town Clerk (A.124), Paddington, W.2, by 20th July, 1953.

9127

COUNTY BOROUGH OF EAST HAM.

SENIOR ARCHITECTURAL ASSISTANT. Salary: £670-£735 (Grade A.P.T. VI).

ARCHITECTURAL ASSISTANT. Salary: £595-£645 (Grade A.P.T. V).

ARCHITECTURAL ASSISTANT. Salary: £555-£600 (Grade A.P.T. IV).

SENIOR ENGINEERING ASSISTANT. Salary: £670-£735 (Grade A.P.T. VI).

ENGINEERING ASSISTANT. Salary: £595-£645 (Grade A.P.T. V).

QUANTITY SURVEYOR. Salary: £555-£600 (Grade A.P.T. IV).

CLERK OF WORKS (Road and Sewer Works) (Temporary). Salary: £555-£600 (Grade A.P.T. IV).

London weighting is paid in addition. Salaries in excess of the minima may be paid, according to the qualifications and experience of successful candidates.

Subsistence allowances may be paid to persons appointed, if unable to obtain suitable housing accommodation.

Further details and form of application (returnable by Monday 20th July 1953), obtainable from the Town Clerk, Town Hall, East Ham, E.6. 9128

THE URBAN DISTRICT COUNCIL OF KEYNSHAM.

APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR (A.P.T. V).

Applications are invited for the appointment of Assistant Quantity Surveyor, in the Engineer and Surveyor's Department, at a salary in accordance with A.P.T. Grade V (£600-£650).

Applicants, who must have the Intermediate R.I.C.S. Certificate, should have had experience in taking off building quantities for housing and other building works.

The appointment, which will be to the permanent staff, will be subject to one month's notice on either side, to the Local Government Superannuation Act, 1937, and to the submission of a satisfactory medical report.

Applications, stating age, qualifications, and particulars of experience, and the names of two persons to whom reference may be made, should reach the undersigned not later than the first post on Monday, 27th July, 1953.

GEO. R. ASHTON,

Clerk of the Council.

Council Offices, Keynsham, Bristol.

9137

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

Applications are invited for the undermentioned appointments:—

(a) QUANTITY SURVEYING ASSISTANT, A.P.T., Grades III/IV. Salary: £525-£500 per annum, plus London "weighting." Applicants should have passed the Intermediate examination of the R.I.C.S. (Quantities) or its equivalent.

(b) ARCHITECTURAL ASSISTANT, A.P.T., Grade IV. Salary: £555-£500 per annum, plus London "weighting." Office experience is essential, and preference will be given to applicants 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 appointments will be subject to the provisions of the Local Government Superannuation Act, 1937; to 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.

Forms of application may be obtained from the undersigned, to whom they should be returned not later than Friday, 31st July, 1953.

D. H. PRITCHARD,

Clerk of the Council.

Council Offices, Harrow Weald Lodge, Harrow, Middlesex.

9126

HARLOW DEVELOPMENT CORPORATION. JUNIOR ASSISTANT ARCHITECTS (THREE).

required by the Harlow Development Corporation. Commencing salary: £525 per annum x £25-£525. Candidates should have passed the Intermediate examination of the R.I.B.A. or its equivalent, and should be experienced in the preparation of working drawings and details. Superannuation. Housing. Detailed applications to General Manager, "Terlings," Gilston, Harlow, Essex, by 24th July, 1953.

9134

MANCHESTER MUNICIPAL COLLEGE OF TECHNOLOGY.

(FACULTY OF TECHNOLOGY IN THE UNIVERSITY OF MANCHESTER). APPOINTMENT OF ASSISTANT LECTURER IN STRUCTURAL ENGINEERING.

The Governing Body invites applications for an Assistant Lectureship in Structural Engineering in the College with the title and status of Assistant 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: £500 per annum, rising by annual increments of £25 to £600 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 Friday, 24th July, 1953.

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

D. CARDWELL,

Acting Principal of the College.

9135

BOROUGH OF SLOUGH.

TECHNICAL ASSISTANT (Architectural Section), Grade A.P.T. VI. For further particulars apply Borough Engineer, Town Hall, Slough, Bucks. Tel.: Slough 23881.

9136

SOUTHERN ELECTRICITY BOARD.

SUB AREA CIVIL ENGINEERS. No. 2 (Newbury) and No. 3 (Portsmouth) Sub-Areas. Salary: N.J.B. Grade 7, Column 1 of the Agreement, i.e., £926 for the post at Newbury (Class L), and £817 for that at Portsmouth (Class J). N.J.B. Conditions of Service.

The Sub-Area Civil Engineer will be responsible, under the general supervision of the Area Civil Engineer and with architectural advice, for the design, construction and maintenance of all building and civil engineering works throughout the Sub-Area, including sub-station buildings, workshops, stores and office and showroom premises. He will be responsible for carrying the work through to completion, and will be required to deal with planning authorities, local surveyors and contractors, and to handle a small direct labour force.

The qualifications required are a comprehensive knowledge and experience in the design and construction of Building and Civil Engineering works, including the design of steel and reinforced concrete structures and preparation of specifications and bills of quantities. The knowledge and experience should be to the standard of associate membership of the Institution of Civil or Structural Engineers or of the R.I.B.A.

Applications on forms obtainable from the Sub-Area Secretary (a), 7, Oxford Road, Newbury, or (b) Lower Drayton Lane, Cosham, Portsmouth, and returned in envelopes suitably endorsed, not later than 20th July, 1953.

The successful candidates for the above appointments will be required to contribute to the B.E.A. and Area Boards' Superannuation Scheme, if eligible.

9133

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 re-inforced concrete structures, piled and slab foundations for heavy plant, culverts, cable subways, etc., for general building construction, drainage and sanitation schemes, associated with office 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 posts are pensionable within the provisions of the British Electricity Authority and Area Boards Superannuation Scheme. Application forms may be obtained from the Divisional Establishments Officer, British Electricity Authority, Barker Gate, Nottingham, and should be returned to the undersigned by the date stated.

L. F. JEFFREY,
Divisional Controller.
9132

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.

ARCHITECTURAL DRAUGHTSMAN wanted Maidenhead; permanent position; good salary and prospects. Full particulars training, experience, age, salary, to Box 8668.

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 by London firm. Should be Associate R.I.B.A., age about 35. Must be fully experienced both in design and construction. Box 9084.

ARCHITECTURAL ASSISTANT, Intermediate standard or approaching Final, with previous office experience. Commercial and industrial practice. Watson, Johnson & Stokes, Victoria Square, Birmingham. 9049

ARCHITECT'S ASSISTANT required in South-West London. Intermediate standard. Accustomed to busy office and with good knowledge of construction. Salary and experience to Box 9064.

FULLY qualified and experienced **SENIOR ASSISTANT** to take charge of drawing office. Varied projects including industrial, commercial, ecclesiastical. Opportunity for one with contemporary outlook. Five day week and good salary offered to suitable candidate.

JUNIOR ASSISTANT, intermediate or just qualified with some experience, also required. Reply in writing, stating age, experience and salary required to Alleyne & Mansel, F./R.I.B.A., Staple Inn Buildings, High Holborn, W.C.1. 9102

ARCHITECTURAL ASSISTANT, with experience, required for general practice. Reply, stating experience and salary required to Thomas Worthington & Sons, 178, Oxford Road, Manchester. 13. 9077

SENIOR ARCHITECTURAL ASSISTANT required in London office with experience in private practice, able to control works throughout. Highest qualifications and training necessary. Salary £800 p.a. Write full particulars in confidence to Architectural Assistant, No. 1. Old Burlington Street, London, W.1. 9123

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APPLICATIONS are invited for the following:

STRUCTURAL ENGINEER'S ASSISTANT, aged 20/25. Should have experience in structural steel design to B.S.S. 449, 1948, and C.P. 113.

Experienced **WORKER-UP** with thorough knowledge of Abstracting and Billing for Quantity Surveyor's Section.

ARCHITECTURAL ASSISTANTS, aged 21/25, of about Inter. R.I.B.A. standard.

The appointments are permanent and offer prospects of up-grading.

Successful candidates will be required to undergo medical examinations for compulsory superannuation scheme.

Applications stating age, experience, qualifications and salary required to W. J. Reed, F.R.I.B.A. Chief Architect, Co-operative Wholesale Society, Ltd., 99, Leman Street, London, E.1. 9099

APPLICATIONS are invited for the following appointment in the office of the Civil Engineer, British Railways, N.E.R., York.

ASSISTANT ARCHITECT. Should be qualified or have had several years' experience. Responsible for developing schemes and preparing working drawings under supervision and possessing a sound knowledge of building construction. Commencing salary approximately £600 per annum, according to qualifications and experience. Applications should be sent to the above address to arrive not later than 25th July, 1953. 9107

SURVEYOR, Hampstead, requires immediately **JUNIOR ARCHITECTURAL ASSISTANT**. Write stating age, experience, etc. Salary by arrangement. Box 9113.

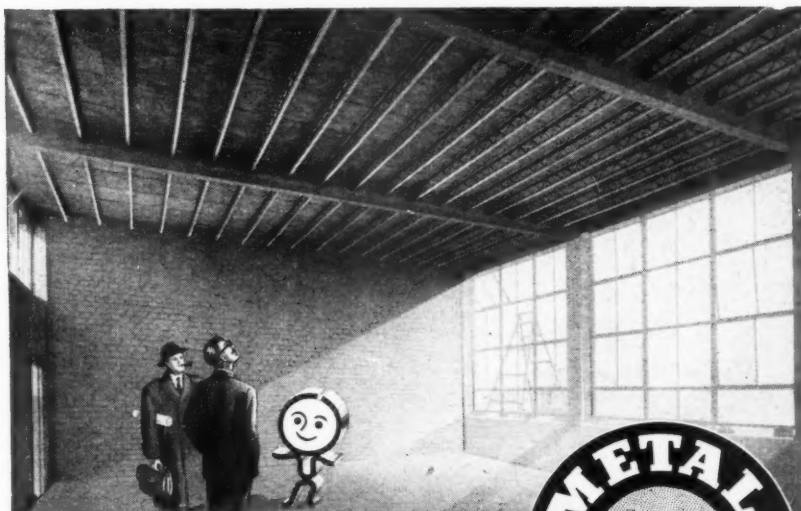
JUNIOR ARCHITECTURAL ASSISTANT required; Inter. Standard. Write stating age, experience and salary required to Frederick Gibberd, 8, Percy Street, London, W.1. 9117

ARCHITECTURAL ASSISTANT, Intermediate R.I.B.A. Standard with office experience, required in small private office. Write stating experience and salary required, to Robert S. Shaw, A.R.I.B.A., 402, Bitterne Road, Southampton. 9118

ASSISTANT required, versatile, with some office experience. Salary approx. £500. Write Eric Lyons, F.R.I.B.A., Mill House, Bridge Road, Hampton Court, Surrey. 9115

JUNIOR ARCHITECTURAL ASSISTANT required. Write, stating age, experience, and salary required, to Portess & Richardson, Lloyds Bank Chambers, Peterborough. 9129

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SENIOR AND JUNIOR ARCHITECTURAL ASSISTANTS required for general and commercial practice. Also QUANTITY SURVEYOR'S ASSISTANT. Apply, stating age, experience, qualifications and salary required, to Duncan Clark & Beckett, F./L.R.I.B.A., F./F.R.I.C.S., Architects and Surveyors, 7, West Stockwell Street, Colchester. 9124

ARCHITECTS' ASSISTANT required for general practice in Darlington. Intermediate standard, with some previous office experience. Apply in writing, stating age and salary required, to J. R. Wetherell & Lamb, Chartered Architects, Picton Place, Newcastle-upon-Tyne, 1. 9121

BELFAST ARCHITECT

REQUIRES experienced ASSISTANT. Must be a fast and accurate draughtsman, capable of preparing complete working drawings for large contracts. Apply in writing, giving details of age, experience, salary expected, and enclosing copies of testimonials, to Messrs. T. D. Lorimer & Company, Chartered Accountants, 41, Royal Avenue, Belfast. 9122

Architectural Appointments Wanted

A. R.I.B.A., 35 years' old, with specialized hospital knowledge, also good general experience, seeks employment with established practice on or near the South or S-West Coast with view to eventually obtaining a partnership. Own car. Salary by arrangement. Box 715.

SENIOR ASSISTANT, (27), B.A., A.R.I.B.A., requires position on North Wales Coast. Box 719.

ASSISTANT (25) seeks position in contemporary office in London. Intermediate standard. Six years' provincial office experience. Available early in August. Box 720.

Other Appointments Vacant

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

A SENIOR REPRESENTATIVE is required by leading manufacturers of prefabricated buildings. Architectural background, with practical or technical experience of prefabrication in building, would be a considerable asset. Sound commercial ability in initiating and negotiating at highest level in municipal and commercial undertakings for the successful development of new projects. Box 9120.

METALWINDOW DRAUGHTSMAN required. Good salary; pension scheme; canteen on premises; modern drawing office. Morris-Singer Co., Ferry Lane Works, Walthamstow, London. E.17. 8936

APPLICATIONS are invited for the following appointments in the Civil Engineering and Building Departments of The Steel Company of Wales, Ltd., Steel Division, Port Talbot:—

(1) **SENIOR ENGINEER**, with overall responsibility for Buildings and Steel Structures.
(2) **ASSISTANT ENGINEER**, on General Building work, including Industrial and Administrative Buildings.
(3) **ASSISTANT ENGINEER**, on Structural Steelwork. A sound knowledge of Electric Arc Welding essential.

The duties connected with these appointments are primarily maintenance, alterations and minor new work. Practical experience and professional qualifications are essential, particularly for the senior appointment. Salary will be commensurate with qualifications and experience. Applications in own handwriting, giving details, including age, experience, qualifications, etc., should be addressed to the:—

PERSONNEL SUPERINTENDENT,
The Steel Company of Wales, Ltd.,
P.O. Box No. 3,
Port Talbot. 9061

REPRESENTATIVE wanted by firm specialising in architectural iron work (gates, railings, grilles) for contact with the architectural profession. Need not be a qualified architect, but some background knowledge of architectural practice desirable, and previous experience essential. Age 30/35. The work will demand travelling to different parts of the country but will be based on London. Write, giving particulars of experience, age and salary required to Box 9116.

HIGGS & HILL, LTD., require a SURVEYOR to agree the terms of principal contracts and arrange matching sub-contracts and insurances. Must be familiar with current forms of contract and be able to co-ordinate the work of agreeing sub-contractors' account. This is a senior appointment for a man interested in contract matters rather than in site work. Write for appointment giving, in confidence, particulars of experience and salary expected to: The Secretary, Higgs & Hill, Ltd., Crown Works, South Lambeth Road, S.W.8. 9139

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ARCHITECTS experienced and reliable SECRETARY seeks sole charge job. Please write Box 9130.

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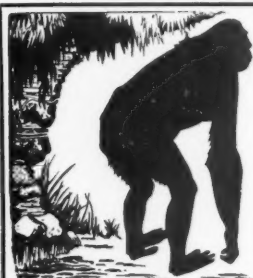
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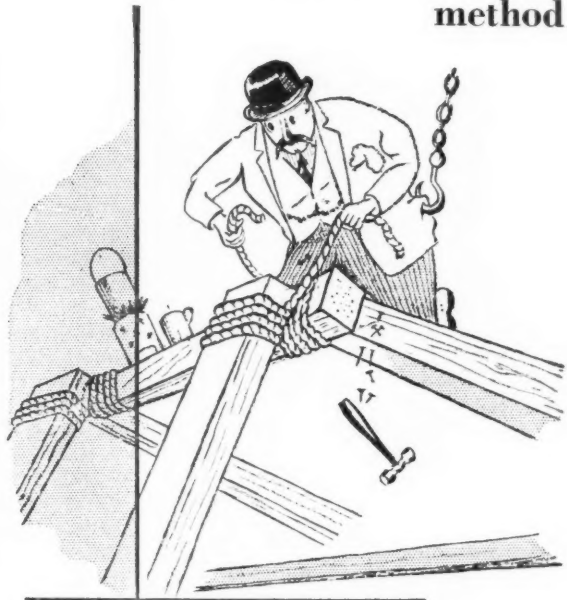
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