

THE ARCHITECTS' JOURNAL



standard contents

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

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

IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1	Sloane 3158
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
IGE	Institution of Gas Engineers. 1, Grosvenor Place, S.W.1.	Sloane 8606
IHVE	Institution of Heating and Ventilating Engineers. 72/74, Victoria Street, S.W.1.	Victoria 0146/7
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128-29
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MARS	MARS Group (English Branch of CIAM). 46, Sheffield Terrace, W.8.	Park 7678
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Belgrave Square, S.W.1.	Sloane 4522
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service. St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Abbey 7711
MOTCP	Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1.	Whitehall 8411
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 5277/8
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 8161
NCBMP	National Council of Building Material Producers. 2, Caxton Street, S.W.1.	Abbey 5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041
NFBTO	National Federation of Building Trades Operatives. 8, Rosebery Houses, Breams Buildings, E.C.4	Holborn 1881
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 2881/2/3
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4041
NHTPC	National Housing and Town Planning Council. 41, Russell Square, W.C.1.	Museum 1264
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NRIAD	National Register of Industrial Art Designers. National Gallery, Trafalgar Square, W.C.2.	Whitehall 2415
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211/2
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
PWB	Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Whitehall 9936
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Edinburgh 20396
RICS	Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1.	Whitehall 5322
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.9.	Wimbledon 5101
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Wellbeck 5721
RFAC	Royal Fine Art Commission. 6, Burlington Gardens, W.1.	Regent 1446
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Temple Bar 8274
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
SCR	Society for Cultural Relations with the USSR. 98 Gower Street, W.C.1.	Euston 6272/3
SFMA	School Furniture Manufacturers' Association. 13, New Square, Lincoln's Inn, W.C.	Chancery 5313
SIA	Society of Industrial Artists. Room 243, Empire House, St. Martin's-le-Grand, E.C.1.	Metropolitan 8344
SNTPC	Scottish National Town Planning Council. 11, Drumsheugh Gardens, Edinburgh, 3	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2	Temple Bar 5006
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	City 6146 (3 lines)
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 81, Cannon Street, E.C.4.	City 1476
WDC	War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1.	Mayfair 8866
WEDA	Welfare Equipment Development Association. 61, St. Paul's Churchyard, E.C.4.	City 4263/4
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988

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[Vol. 105

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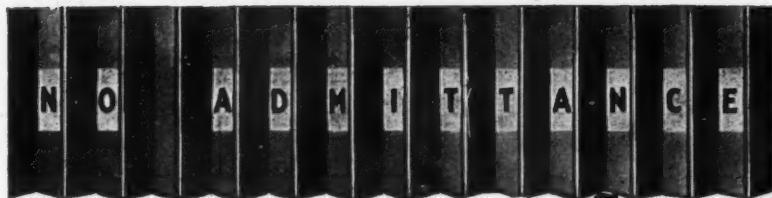


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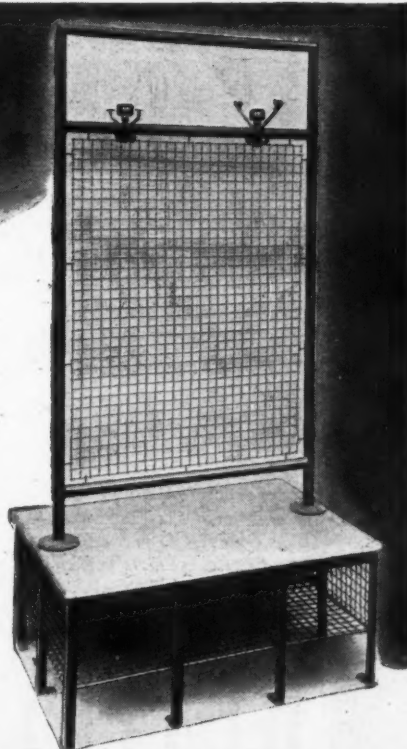
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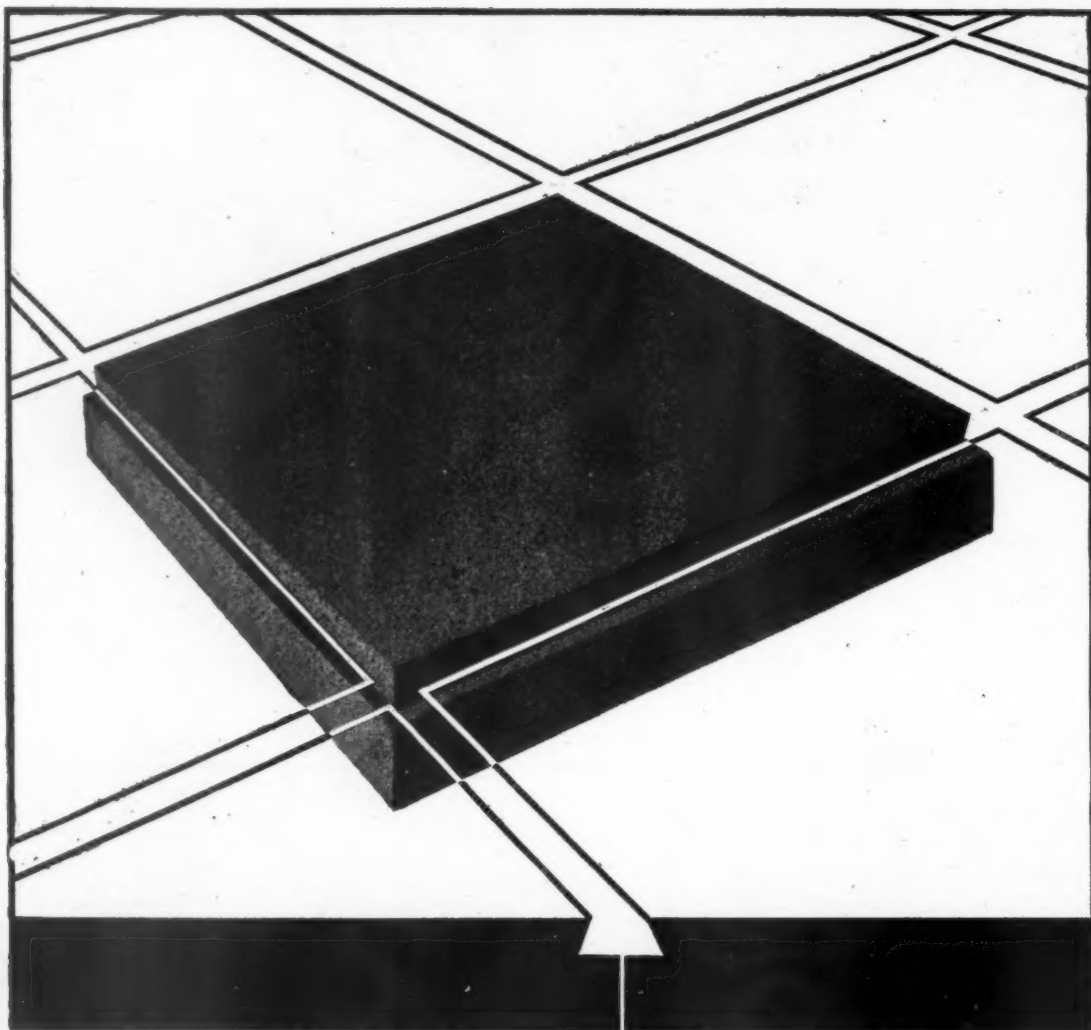
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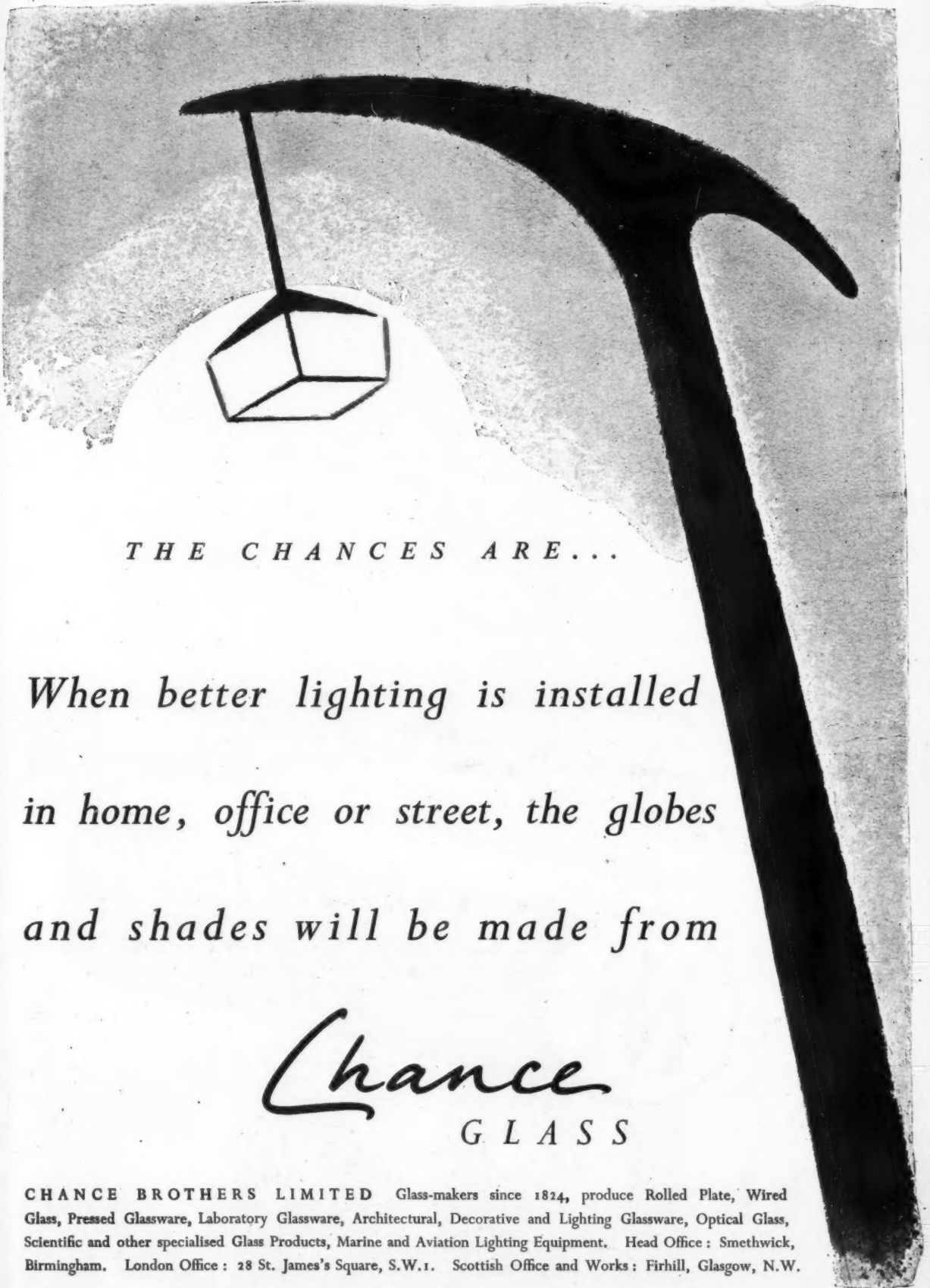
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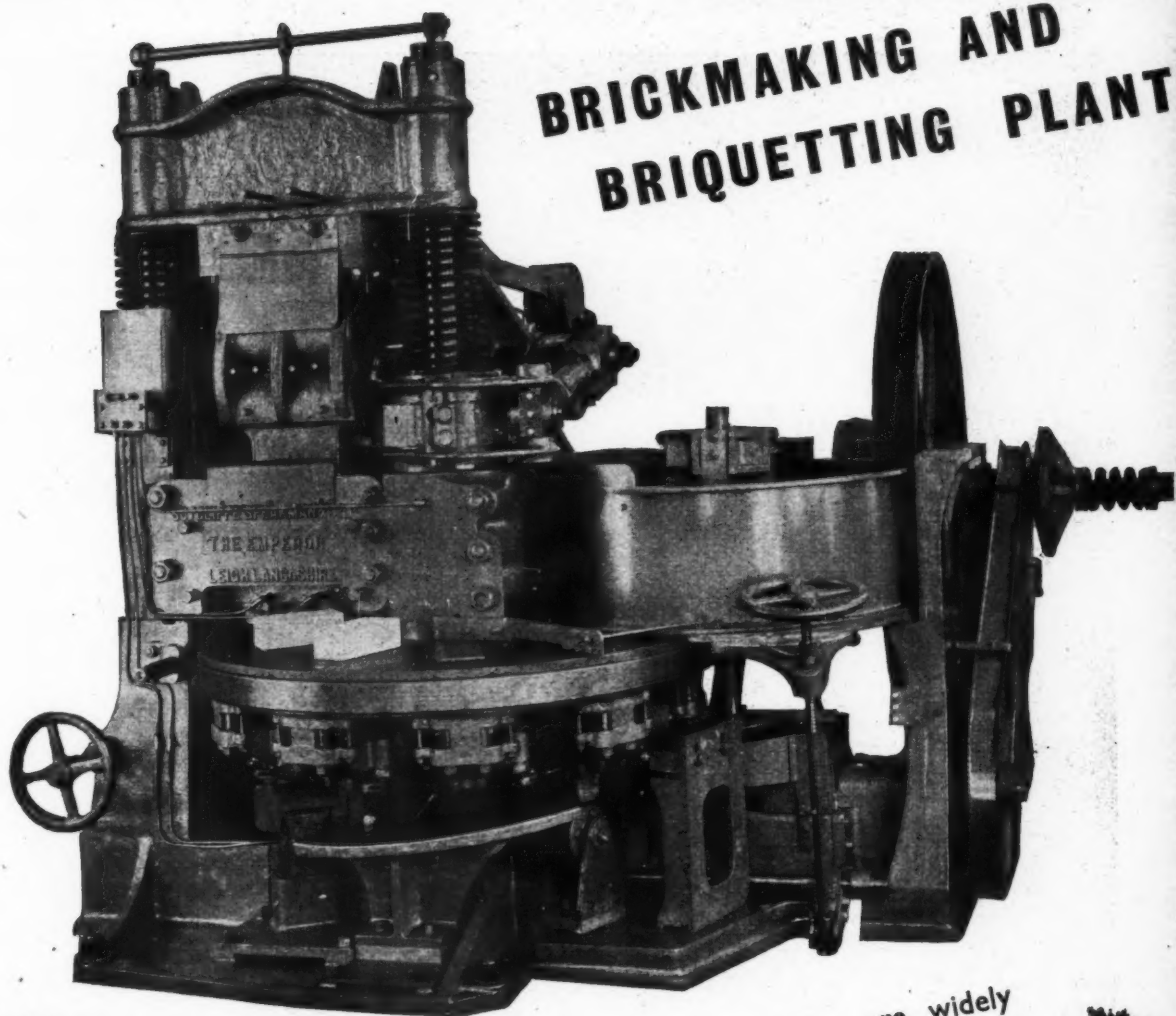
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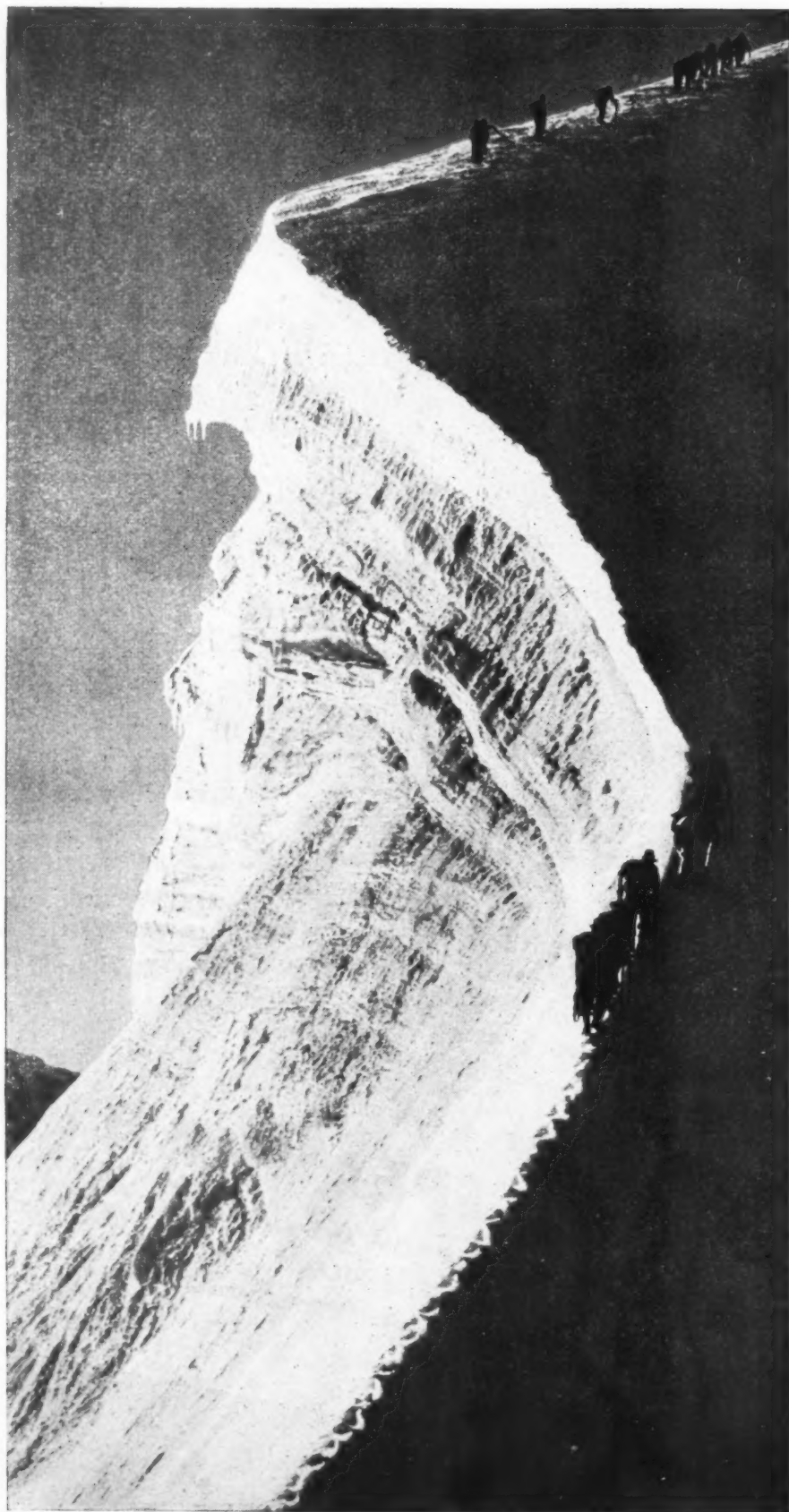


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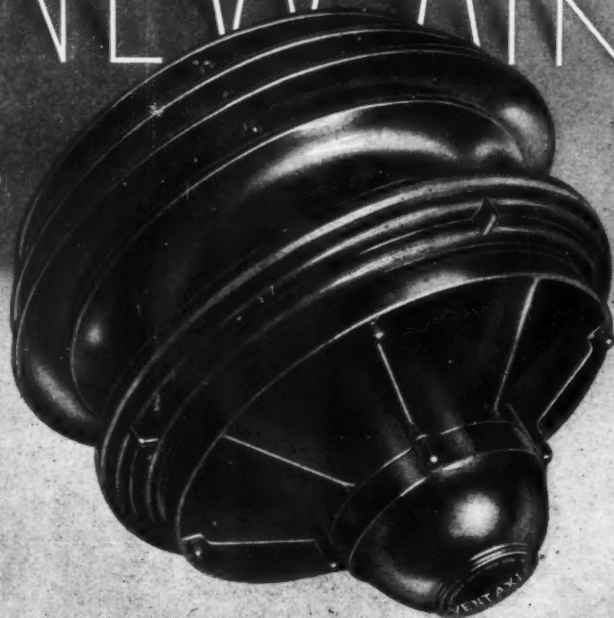


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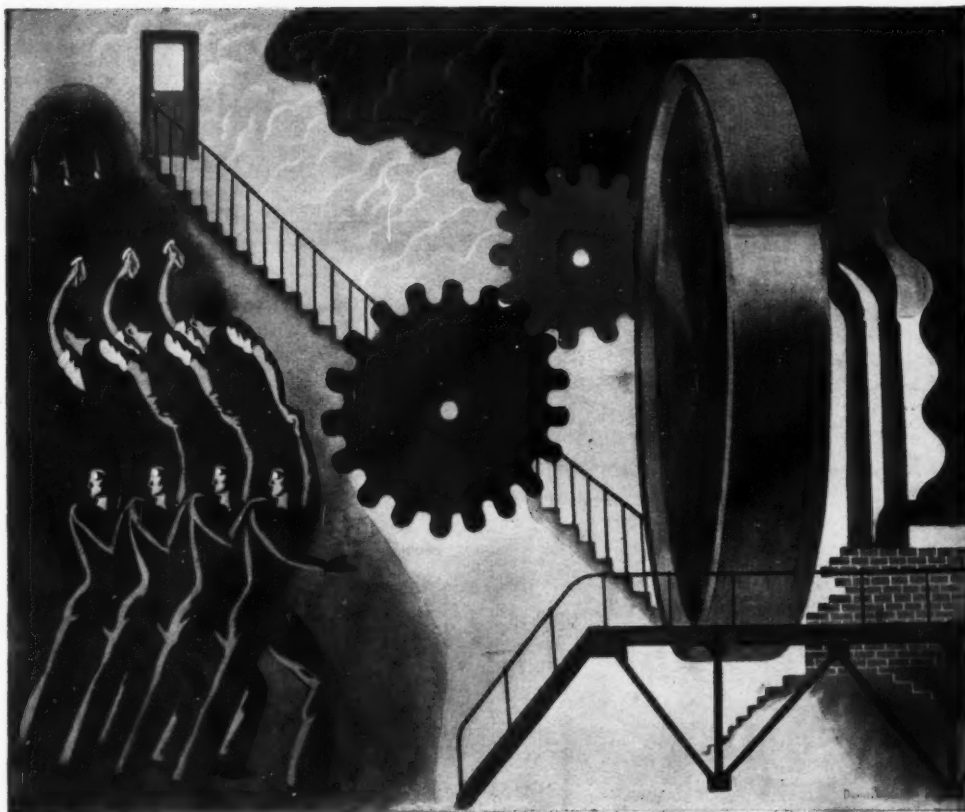
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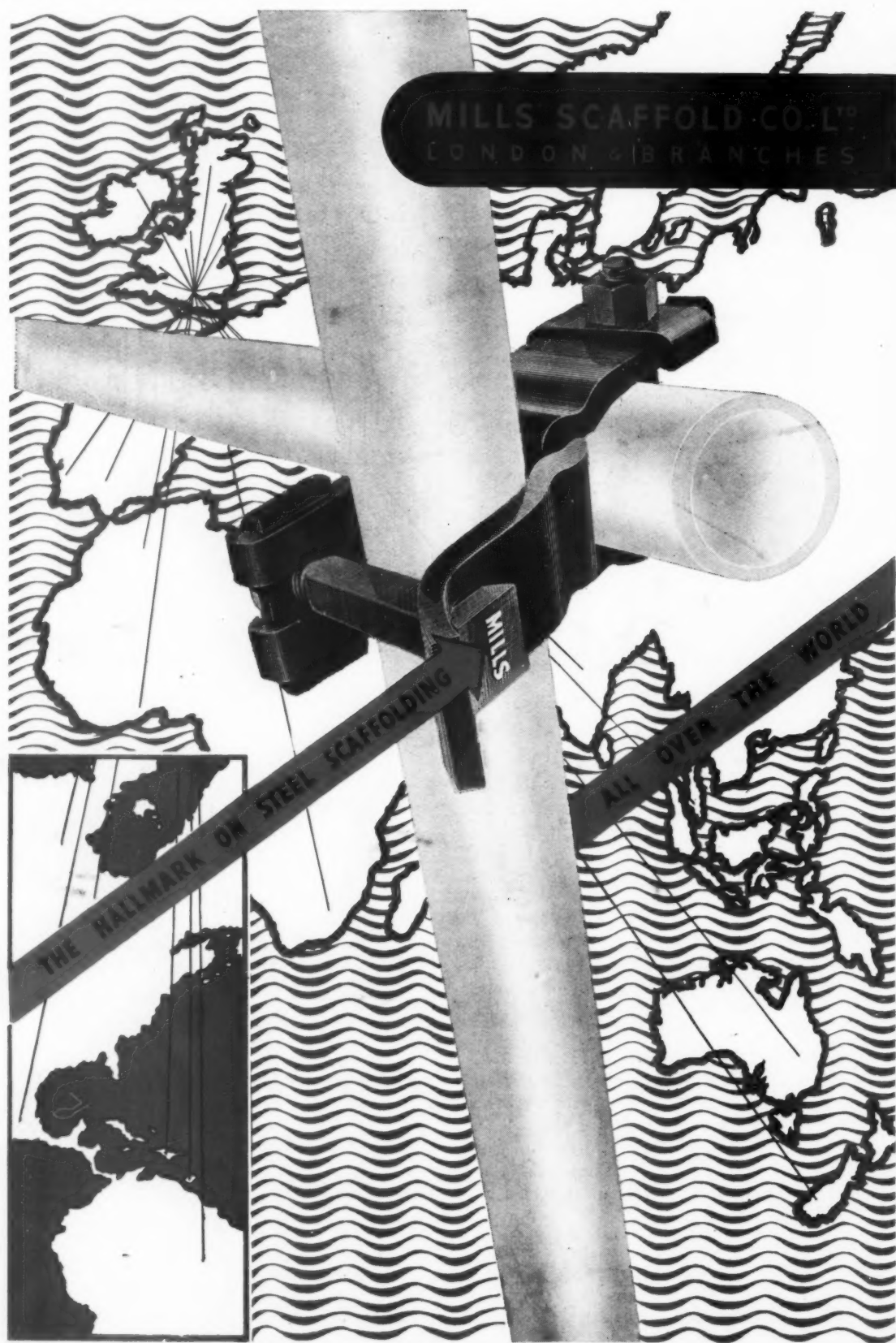
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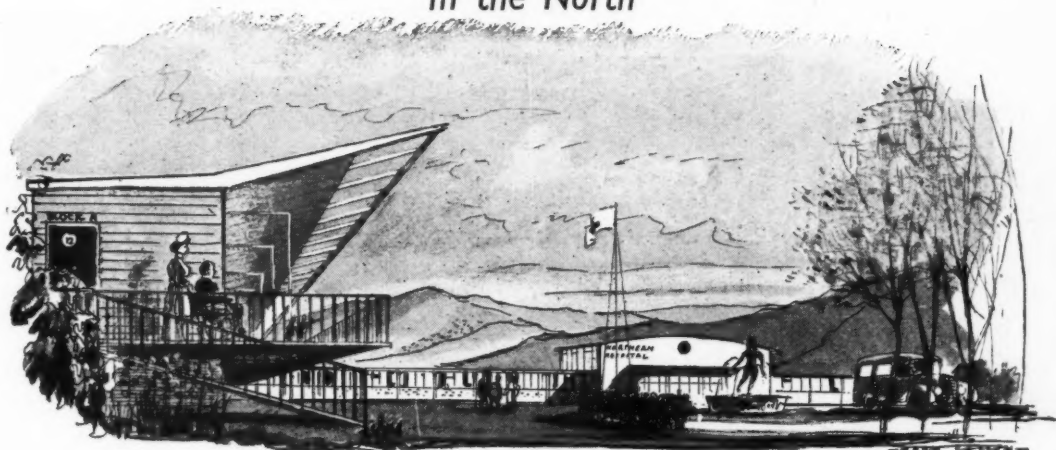
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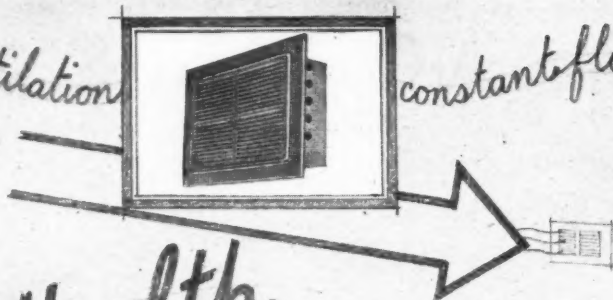
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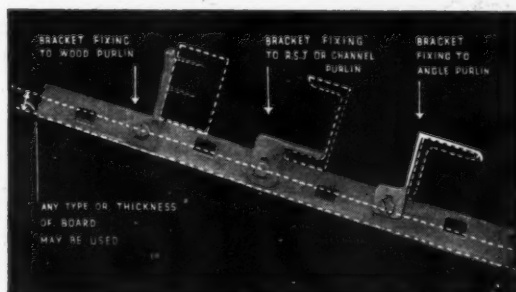
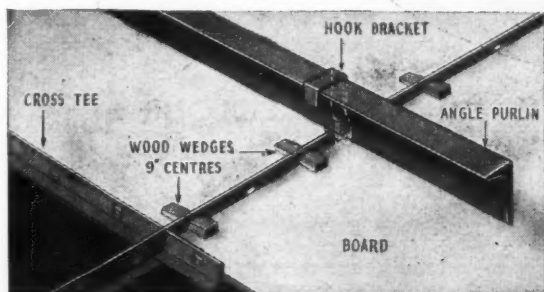


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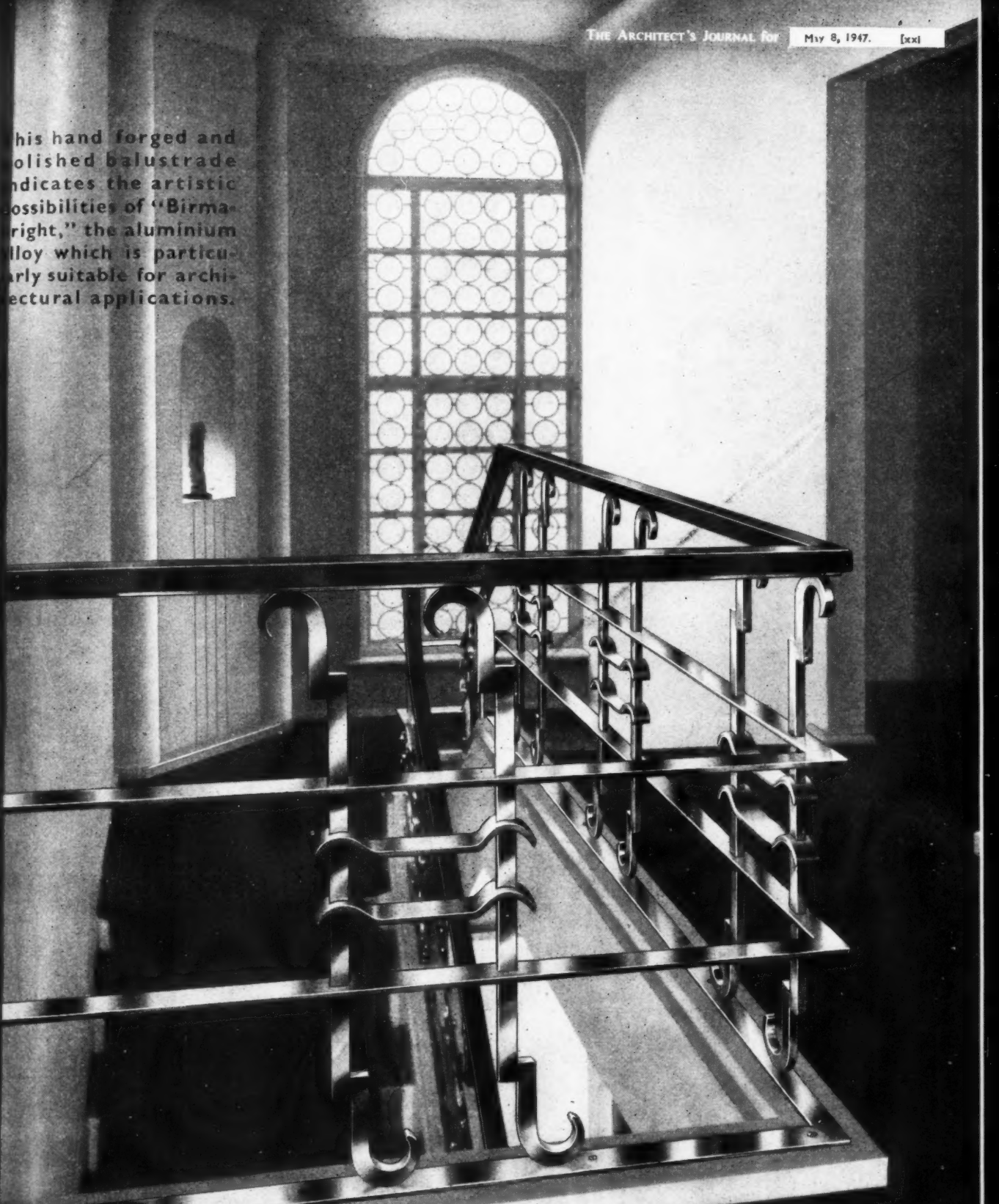
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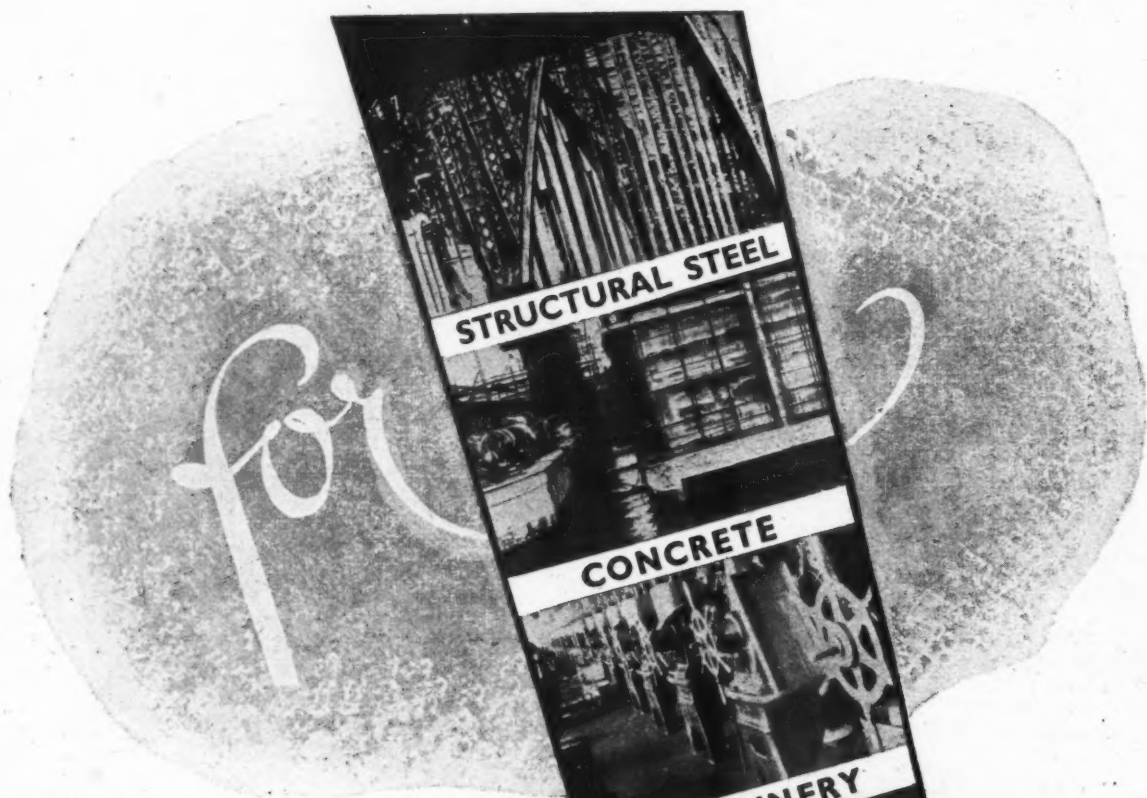
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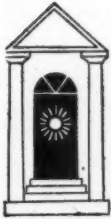
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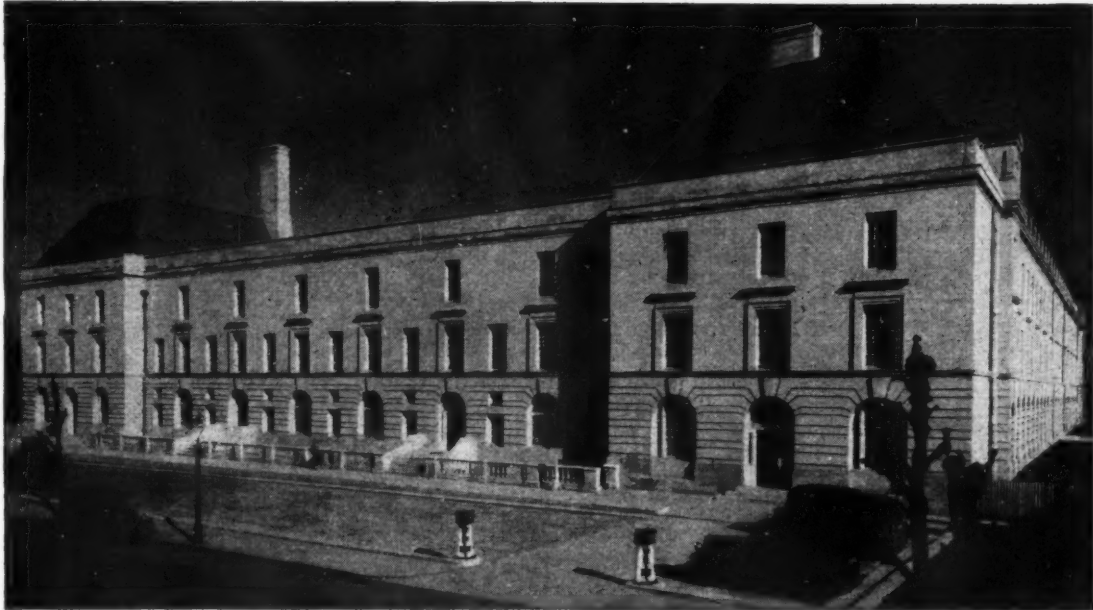
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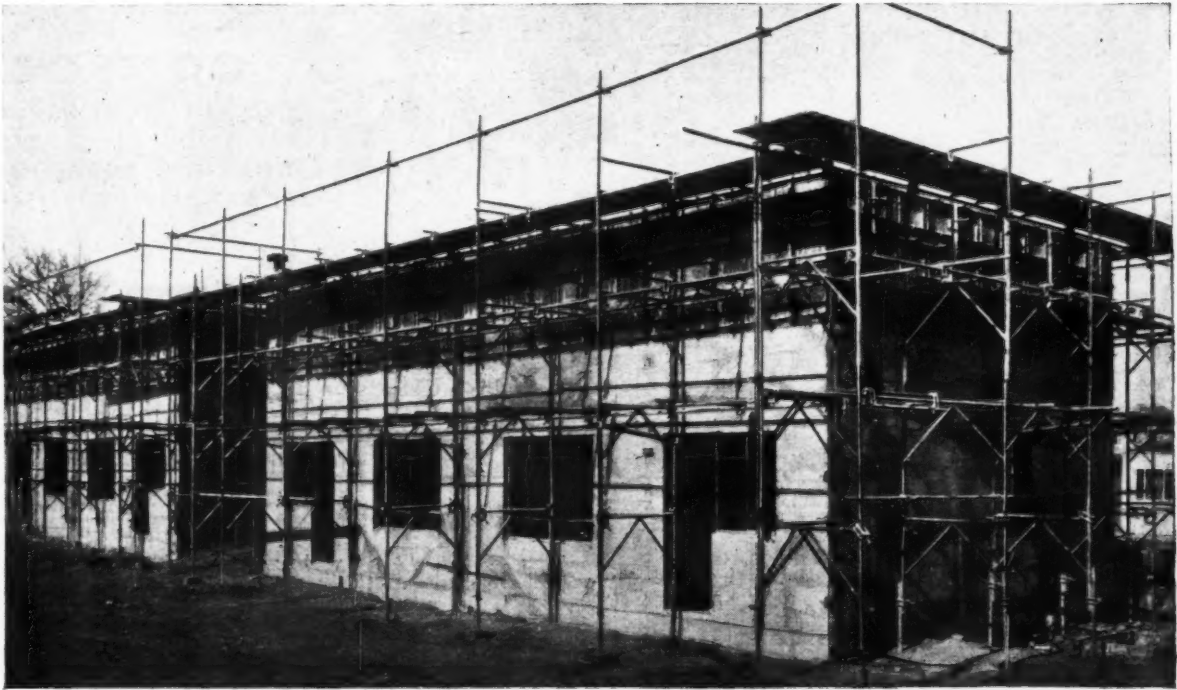
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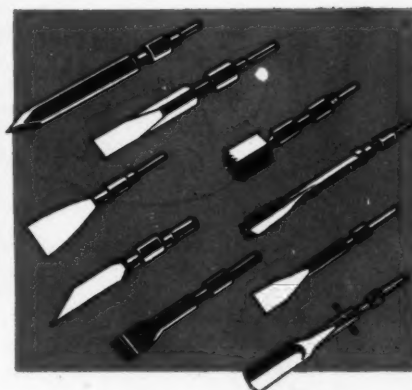
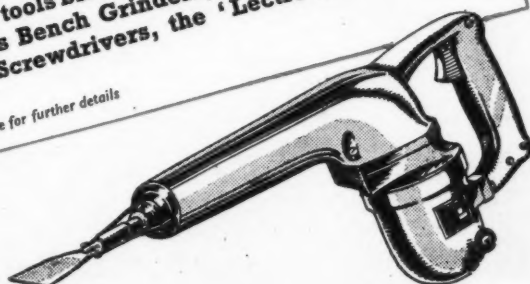


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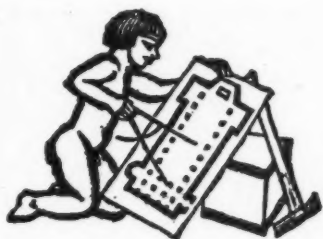
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DIARY FOR MAY JUNE AND JULY

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first. Sponsors are represented by the initials as given in the glossary of abbreviations on the front cover.

BIRMINGHAM. *British Industries Fair, 1947. Engineering and Hardware Section.* At Castle Bromwich. (Sponsor, Exhibitions Branch, Export Promotion Department, Board of Trade, in collaboration with Birmingham Chamber of Commerce.) UNTIL MAY 16

DUBLIN. *British Architects' Conference.* (Sponsor, RIBA.) JUNE 11-14

DUNDEE. J. Hacking. *The Generation and Wholesale Distribution of Electricity.* At the Training College Hall, Park Place, Dundee. (Sponsor, IEE, Scottish Centre.) MAY 23

LONDON. *Steel Door Frames.* Exhibition at Henry Hope and Sons, Ltd., 17, Berners Street, W.1. The object of the exhibition is to overcome any practical difficulties that architects may foresee or experience in fitting steel door frames to the various types of walls and floors in use to-day. (Sponsor, Henry Hope and Sons, Ltd.) MAY

Timber Technique Today. Forest Products Research Laboratory Exhibition of Timber Research in Building. At the RIBA, 66, Portland Place, W.1. The exhibition is part of an effort by the Laboratory to tell the building industry what it knows about the right way to use timber. Several expert members of the staff will be present all the time to explain details and to answer questions. The actual exhibits are to no small extent a basis for discussion. The visitor can come and go when he likes and ask what questions he wants. (Sponsor, FPRL.) Weekdays, 10.0 a.m. to 5.30 p.m.

British Industries Fair, 1947 (Lighter Industries.) At Earls Court. (Sponsor, Exhibitions Branch, Export Promotion Department, Board of Trade, in collaboration with the Birmingham Chamber of Commerce.) UNTIL MAY 16

Thirteen Nations Plan for Better Living. At the Institution of Civil Engineers, Great George Street, S.W.1. The material on show was originally collected for an exhibition held in conjunction with the 1946 Congress of the International Federation for Housing and Town Planning at Hastings, and, as now reconstituted, includes material from Australia, Belgium, Denmark, France, Great Britain, Greece, Netherlands, New Zealand, Norway, Poland, Sweden, Switzerland, United States of America. (Sponsors, Town and Country Planning Association, Institution of Civil Engineers, Town Planning Institute, and Institution of Municipal Engineers.) UNTIL MAY 24

J. H. Forshaw. *Housing and Town Planning.* Two lectures at University College, Gower Street, W.C.1. (Sponsor, UC.) 5 p.m. MAY 8 and 15

Miss B. Colvin. *Trees and Landscape Architecture in Relation to Housing.* At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) 12.45 p.m. Buffet lunch, 2s. 6d., 1.15 p.m. Talk and discussion. MAY 13

Engineering and Metalcraft Exhibition. At the Horticultural Hall, Westminster, S.W. (Sponsor, British Bulletin of Commerce (Exhibition Department.) MAY 12-23

T. B. Oxenbury, County Planning Officer, Suffolk. *Planning a Rural County.* At the Planning Centre, 28, King Street, Covent Garden, W.C.2. Third of a series of seven lectures on Planning. Charge for individual lectures, 2s.; students, 1s. (Sponsor, TCPA.) 6 p.m. MAY 13

Housing and You. An Open Meeting arranged by the Housing Section Committee of the National Council of Women of Great Britain, in the Henry Jarvis Hall, RIBA, 66, Portland Place, W.1. Speakers: Major Donald Bruce, M.P.; Alderman A. W. Curton, Chairman of the House-Building Industries' Standing Committee; Sir Harry R. Selley, President of Federation of Master Builders. Chairman: Miss Violet Markham. Admission, free. (Sponsor, NCW.) 6 p.m. MAY 14

Max Lock. *Planning Teamwork in Action at the Hartlepoons.* At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 12.45 p.m., buffet lunch. 1.15 p.m., talk and discussion. MAY 15

Announcement of Result of AA Election of Officers and Council for Session 1947-8. At the AA, 34-36, Bedford Square, W.C.1. (Sponsor, AA.) 6 p.m. MAY 28

MANCHESTER. *Newer Heat Exhibition.* At Milton Hall, 244, Deansgate, Manchester. An exhibition of new solid-fuel burning appliances for providing better standards of home heating and comfort. (Sponsor, Coal Utilisation Joint Council.) UNTIL MAY 10

ROTHESAY. P. W. Macfarlane. *Planning for Industry.* (Sponsor, TPI.) MAY 16

THE HAGUE. *Fuel Economy Conference.* Particulars from the British National Committee World Power Conference, 201-2, Grand Buildings, Trafalgar Square, London, W.C.2. SEPT. 2-9

NEWS

THURSDAY, May 8, 1947
No. 2726 Vol. 105

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Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL's starring system is designed to give this emphasis, but without prejudice to the unstarring items which are often no less important.

★ means spare a second for this, it will probably be worth it.

★★ means important news, for reasons which may or may not be obvious.

Any feature marked with more than two stars is very big building news indeed.

★ The Minister of Town and Country Planning has decided to make an order designating AYCLIFFE AS A NEW TOWN.

The Minister of Town and Country Planning, Mr. Lewis Silkin, M.P., has decided to make an order under the New Towns Act, 1946, designating Aycliffe, County Durham, as the site for a new town. There has been no change from the Draft Designation Order of February 18, 1947. No objections to that order were received by the Minister. Aycliffe is designed to house 10,000 people, mainly workers employed on Aycliffe Trading Estate which is being developed on the site of the former Royal Ordnance Factory. The site, covering an area of about 880 acres, is at present agricultural land bordered on the east by the Great North Road, on the south by the Shildon-Newport railway line and on the north-west by Woodham Burn.

A development plan, which involves the expenditure of £7,000,000 on NEW SCHOOLS, has been unanimously passed by a special meeting of the Newcastle-upon-Tyne City Council.

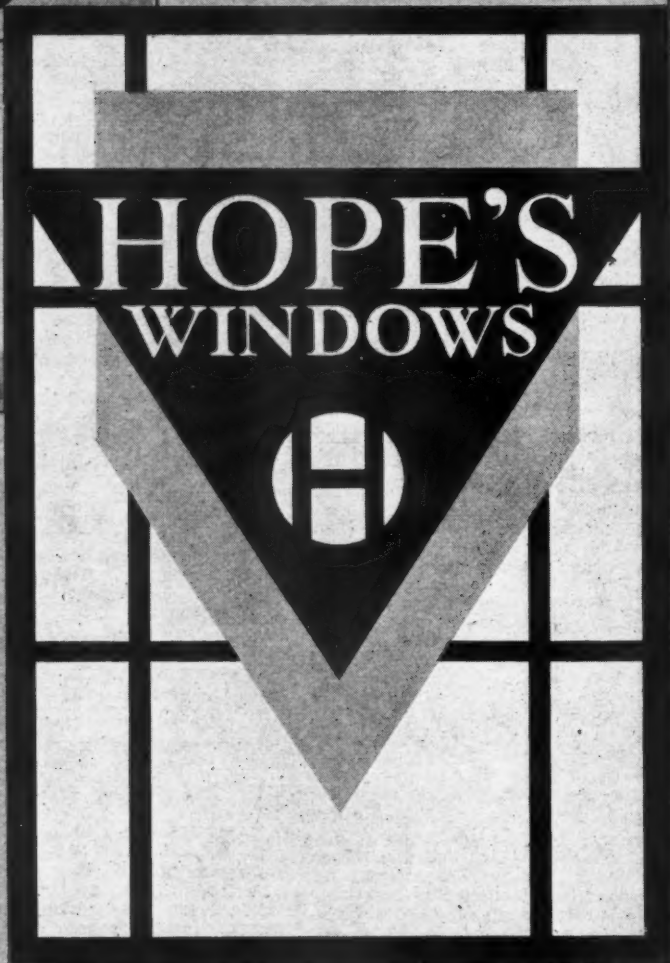
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AT CASTLE BROMWICH

From AN ARCHITECT'S Commonplace Book

REGULATING LINES. [*From Towards a New Architecture, by Le Corbusier (The Architectural Press).*] The man of today planes to perfection a board with a planing machine in a few seconds. The man of yesterday planed a board reasonably well with a plane. Very primitive man squared a board very badly with a flint or a knife. Very primitive man employed a unit of measurement and regulating lines in order to make his task easier. The Greek, the Egyptian, Michaelangelo or Blondel employed regulating lines in order to correct their work and for the satisfaction of their artist's sense and of their mathematical thought. The man of today employs nothing at all and the result is the BOULEVARD RASPAIL. But he proclaims that he is a free poet and that his instincts suffice; but these can only express themselves by means of tricks learnt in the schools. A lyrical poet let loose with a halter round his neck, a man who knows things, but only things that he has neither discovered for himself nor even checked, a man who has lost, through all the teaching he has received, the ingenious and vital energy of the child who never tires of asking "Why?"

The Ministry of Health recommends local authorities to USE STEEL FROM SHELTERS for housing.

In a circular to the housing authorities, except those in the London Region, the Ministry states: The Minister is advised that many of the steel components from shelters could be used to advantage in housing work, especially as a means of saving timber and new steel. It has accordingly been agreed that local authorities responsible for the collection of shelter material may retain (either out of existing stocks not yet declared as surplus, or from shelters which have yet to be dismantled and recovered) such quantities of the steel components as they are in a position to ear-mark at once as being required for their housing schemes. Local authorities are strongly recommended to make full use of these facilities. The supply of timber for new houses is likely to become even more difficult during the next few months, and the Minister wishes to stress that housing progress will only be maintained if housing authorities are ready to adopt every practicable means of saving timber by the use of alternative materials. The use of steel shelter material in the place of new steel sections and sheets will also help to relieve the present heavy demands upon steel production.

a realistic estimate, based on certain assumptions as to the supplies of labour and materials which will be available, not only of the number of houses which we might expect to be completed during the year, but, more important, of the number of houses for which contracts should be let. Since the Housing White Paper was published, the Ministry's Principal Housing Officers had been discussing at zonal conferences how the regional share of the programme should be allocated between each individual local authority. Allocations had now been made, and it is hoped to publish them with the next Monthly Housing Return. The housing need cannot be met by half-finished houses, and this is all we shall get if we go on letting contracts which it is beyond the resources of the industry to fulfil on reasonable time. To help in meeting the needs of agricultural workers, the Government had arranged for the production of components for 20,000 Airey houses. As these houses can be built with less skilled site labour than the traditional house, it might be possible in many cases to accept orders which go beyond the programme fixed at zonal conferences.

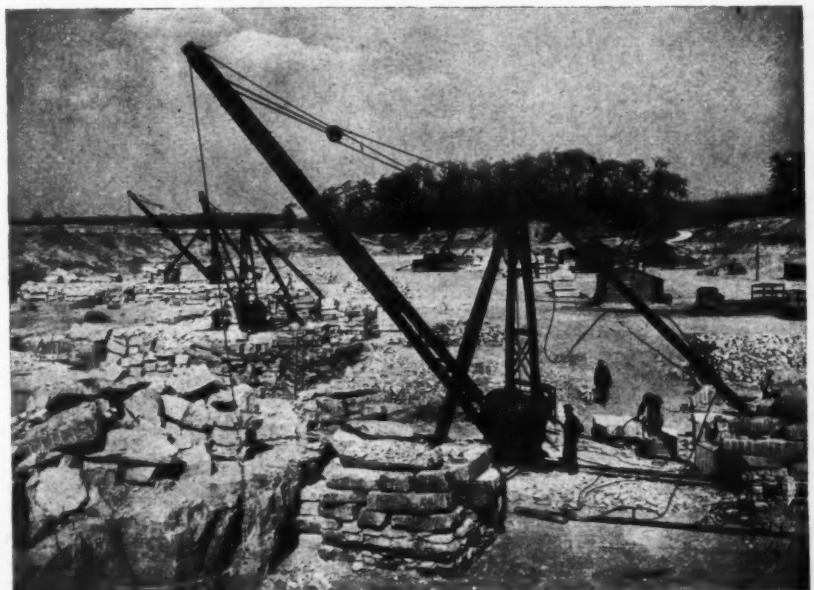
The Minister of Health, Mr. Aneurin Bevan, and the Minister of Agriculture, Mr. Tom Williams,

addressed a conference on rural housing held at the Ministry of Health to stimulate the building of Airey HOUSES IN RURAL AREAS.

The Government has sponsored a scheme for the production of 20,000 of these houses. Mr. Bevan said the Government has been faced with the fact that the building force available is fully employed and there is no pool of reserve labour which can be drawn upon. To try to solve this problem, the Government has selected the Airey type as one best suited for rural areas. We would be making a profound blunder, said the Minister, if we allowed ourselves to be panicked into building ugly houses in the British countryside. We want to build houses of such architectural standards that we shall be proud to look at them. The Minister of Agriculture stressed the need for an improvement in the number and quality of houses provided for agricultural workers. Agricultural workers, he said, do not want houses that are in any way inferior to those built in the towns. If we are to maintain agriculture in a flourishing condition we must change the pre-war drift from the land to the towns into a return journey—a drift from the towns to the countryside. Housing is the main limiting factor in attracting additional labour to agriculture.

Mr. John Edwards, Parliamentary Secretary to the Ministry of Health, told a regional conference of Lancashire and Cheshire local authorities organised by the National Housing and Town Planning Council that the OBJECT OF DRAWING UP A HOUSING PROGRAMME FOR 1947 is to bring home just what resources will be available for house building during the year, and just how many houses ought to be put under construction if those resources are to be properly spread.

The first objective when war ended was to stimulate as much new house building as possible all over the country so that building operatives coming out of the Forces would be able to find a job in their home area. But by the end of last year, it became apparent that the number of houses for which contracts had been let was in excess of the immediate building capacity. Therefore, if we are to get any houses completed at a reasonable rate during 1947, we have to reduce this ungainly spread of resources. For that reason the national housing programme had been worked out. It is



Clipsham quarries in Rutland from where the stone for the new House of Commons is being quarried. It is a warm, cream colour and best withstands London atmosphere.



S y m b o l i c a l A c t

Workmen recently demolished the wartime brick casing shielding the stone statue of Queen Anne standing against No. 15, Queen Anne's Gate. Although the sculptor is unknown and its origin is obscure, it is possibly, after Charles I, the most famous statue in London. The photos show the Queen, young and slightly puzzled, emerging from her long imprisonment. To the left of the two photographs in the centre, are 9-13, Queen Anne's Gate, offices of the ARCHITECTS' JOURNAL which regards the statue, quite groundlessly, as its own perquisite. Thus for the JOURNAL the picks and automatic drills symbolize the real end of the war and the real beginning of peace. Perhaps, despite the clouds, it will be better than it looks.

★★

A panel of fifteen firms of private architects has been engaged by Mr. S. H. Loweth, County Architect of Kent, to assist in the County's MORE THAN A MILLION POUNDS SCHOOL BUILDING PROJECTS.

On February 5, 1947, the County Education Officer for Kent received from the Ministry of Education a schedule setting out those building projects over £5,000 in value which the Minister proposes to accept for inclusion in the short-term programme of major building works. There are 34 projects which have, if possible, to be completed by September 30, 1948, or at the latest by the end of that year. The estimated cost of these projects is £1,370,000. They are additional to the buildings in light construction (3 county primary schools and 4 county modern schools) which are required by September 30, 1947. The County Architect, Mr. S. H. Loweth, F.S.A., F.R.I.B.A., has been authorised to engage private architects on any schemes which the Education Committee regard as urgent and which cannot be undertaken by his Department owing to lack of staff. In view of the present difficulty of securing the services of assistant architects, a conference was arranged with 15 firms of private architects who were in a position to assist with this programme, when the proposals, together with the proposed terms of their engagement, were explained to them. As a result, plans are already in course of preparation by the following firms of architects: Cecil J. Burns, F.R.I.B.A., C. J. Cable, F.R.I.B.A., A. W. Cooksey and Partners, F.F.R.I.B.A., W. R. H. Gardner, F.R.I.B.A., Jackson and Jackson, F.A.R.I.B.A., Arthur W. Kenyon, F.R.I.B.A., H. and H. Martin Lidbetter, F.A.R.I.B.A., E. D. Lyons and L. Israel, F.A.R.I.B.A., F. A. Perren, F.R.I.B.A., Elie Mayorcas, A.R.I.B.A., Moiret and Wood, A.R.I.B.A., E. B. Musman, B.A., F.R.I.B.A., Read and McDermott, F.F.R.I.B.A., R. L. Reynish, A.R.I.B.A., Willan and Stewart, F.A.R.I.B.A. Ten other firms of private architects are engaged on other architectural work for the Kent County Council, in collaboration with the County Architect.

★★

Mr. Brian O'Rourke has been ELECTED A.R.A.

At a general assembly of academicians and associates, Mr. Arnold Machin, sculptor, and Mr. Robert Buhler, painter, were elected Associates of the Royal Academy, and Mr. Ivar J. Tengbom, architect, and Mr. Dunoyer de Segonzac, painter, were elected Honorary Academicians. Mr. Brian O'Rourke, architect, and Mr. Edward Bawden, draughtsman, have been elected Associates of the Royal Academy.

The Minister of Town and Country Planning has decided that WANSTEAD FLATS are not to be built on.

Mr. Silkin gives the reasons for rejecting the proposal in a letter to the Corporation. He observes that the Flats are part of a well-established public open space extending into the densely built-up area of London, and strong objection was raised at the inquiry to the proposal to build over them. On the other hand, the council have a very urgent housing problem, and their land resources are limited. It has, or can make, land available in the borough for just over 3,000 new houses, with a possible addition of land for 1,800 houses outside its boundaries, but even if this additional number is allowed outside the borough the total of 5,000 houses is far short of needs.

FIRE

RUDYARD KIPLING has made it clear that in the natural jungle fire is so terrifying an enemy that in face of it the fear of other enemies disappears. The contemporary man-made urban jungle has perhaps no Kipling, but the danger remains.

After the Great Fire of London, the first serious attempts were made by controlling the construction of the new buildings to avoid another similar outbreak. Since then, the regulations and bye-laws designed to reduce fire hazards have become legion. They have, however, one feature in common, they are not based on any clearly apprehended principle, nor controlled by systematically studied data, nor is there any statistical material relating the cost of observing these regulations to the loss resulting from fire damage.

Some study of these problems has been made over a considerable period by the Fire Offices' Committee, but such a body has obviously a relatively limited interest, and when the Ministry of Home Security assumed responsibility for reducing war-time fire risks, the lack of systematized knowledge became obvious. The first step towards overcoming this gap has been taken with the publication of the post-war Building Study No. 20, *Fire Grading of Buildings*, which is discussed in detail in Information Centre item 17.10 this week. The authors of the report referring to the lack of data say "We have had . . . to place considerable and perhaps undue reliance on personal experience." Their report may be regarded as the first serious attempt to provide a reasoned framework for study of the fire problem, and a basis for a comprehensive code of practice designed to regulate fire risks. The report under discussion deals with *General Principles and Structural Precautions* and is to be followed by three more dealing with *Fire Fighting Equipment in Buildings*, *Means of Escape*, and *Chimneys and Flues*.

The main achievement of the report is to suggest a method of classifying or grading the various types of occupancy according to the fire hazards arising in each. Until now the assessment of fire risk has largely been a matter of personal opinion or accomplished by rule of thumb methods. The fire hazards are assessed on the basis of the fire load of the building, and this provides a measurable quantity instead of a personal opinion.

All this may be thought to be far from the province of the architect, but there are two ways in which the work of the committee may well affect the designer's work. The first and most obvious is that the suggestions made in the reports will become embodied in regulations adapted by various public authorities, and the second is the obligation laid upon the architect to advise his client bearing in mind all the relevant factors of which the fire hazards is clearly one. A study of the principles and suggestions in this report will add to the equipment of the architect. If these principles are well understood, there will be much less danger of an imaginative

and original design being hacked about to conform with the requirements of multifarious authorities or the recommendations of consultant specialists.

The danger of such admirable work as that under consideration is that it may be too rigidly embodied in codes of practice. As with by-laws, a performance standard is the basis to be aimed at unless we are to find ourselves bound by regulations as fundamentally meaningless as that limiting the glass area in the County of London to 50 per cent. of the area of the wall. Moreover as the authors of the report state, "From a material standpoint it would be uneconomic for the cost of precautions to exceed the expected saving except in certain cases, *e.g.*, where the risk of life justifies a greater expenditure." They add, "This is an aspect of our problem on which there is urgent need for detailed statistical data." The issue of the report is welcome and will give all those interested an opportunity of discussing the important questions involved.



The Architects' Journal

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N O T E S & T O P I C S

NOOSE FOR SILKIN

A discouraging footnote to the St. Paul's-Bankside controversy has been provided by the Minister of Town and Country Planning. "A few highbrows," he is reported to have said at a London meeting, "who probably only saw St. Paul's about once a year, are becoming extremely critical about the plan. I am quite sure," he continued, "they are not speaking for the people as a whole—if people were asked if they wanted more electricity

or a view of St. Paul's, I have no doubt what the answer would be."

Maybe so, but why ask so ludicrously irrelevant a question? Mr. Silkin knows well enough that these are not the real alternatives before us. He knows, too—for his advisers include several men of ability and taste (or should I say highbrows?)—that the power station dispute is only a detail, if an important one, in the wider problem of the future planning of South London, which so far, it appears, is having a rough passage.

The Minister in the past has always tempered his maladroitness in public relations with a plodding honesty which in its way was rather engaging. But this latest speech with its gibe at "the highbrow," its sentimentally placed capital P before People, and its distorted over-simplification, shows he is picking up party politician habits. A little less on the Cheapside in future, please Mr. Silkin.

NOTE FOR PHOTOGRAPHERS

The *British Journal Photographic Almanac* for 1947 has just been published for the eighty-eighth year. (Henry Greenwood, 24, Wellington Street, London; price, 4s. 0d.) For the amateur photographer obviously a generous four shillings' worth.

Amongst other material it contains a lot of technical data, some notes on new camera gadgets, interesting articles

on Photographic Old Masters and on Document Copying, and a yellow cover—is it the 1860 original—which should delight the sophisticated Victorianaphil. Also thirty-two examples of contemporary photography of great technical competence but, on the whole, of little imagination. *C'est magnifique, mais ce n'est pas Daguerre.*

INDUSTRIAL LANDMARK

This year's B.I.F.—anyway the London sections—ought to represent a landmark in the exhibition's history: for the first time a team of architects has been put in charge of the whole show instead of a riot of competing stands being allowed to produce a haphazard interior effect.

It is not the architects' fault that the result is not very inspiring, for the fuel crisis forced a number of compromises on them such as the necessity of re-using stand material from a previous exhibition. But they have made their mark, in the form of improved planning, a standard tubular steel exhibition stand which is at least workmanlike and a general effect of unity.

At least the B.I.F. now looks designed. It has been brought into line with the best Continental practice. Previously it was a disgrace to British showmanship. The same architects, given another chance next year, could work wonders, but one further step forward needs to be taken: a change in the method of letting floor-space by area irrespective of its effect on the plan. This is a handicap no architectural conception can be expected to survive.

NO FLAT FOR SGT-MAJOR ATKINS

Hamburg's grandiose rehousing scheme—the Hamburg Project—which was to have risen from the rubbles of the residential district of Harvestehude for the benefit, not of troglodyte families of bombed-out Germans, but for occupation forces and their families, has been abandoned by the Military Government. A number of dwelling houses—some undamaged—had been demolished, the

site cleared, excavation dug, cellars built and the steel frame construction ordered for ten blocks of flats of from ten to 14 stories high. Now the troglodytes are wondering what plans Military Government are likely to devise for the disposal of the corpse.

Will permits be granted to roof the cellars and so provide brand new hovels to ease Hamburg's overcrowded life in Nissen huts and derelict basements? And where are Sgt-Major Atkins, his wife and children going to live? Nobody thinks of that great day that might have been, had the project survived until completion, when the flats would have been handed over to German families.

Perhaps the present climate of international relations engenders in the minds of Hamburg citizens no thought to the future more distant than the next meal of bread and peas.

The project had been developed by a working party of Hamburg architects working presumably under the direction of Military Government. From a number of designs submitted an unfortunate plan was chosen embodying no particular town planning scheme more subtle than aligning a number of rows. Anxious though Hamburg must be to see any sort of building in progress at all, the scheme

failed to meet with approval from any city planners.

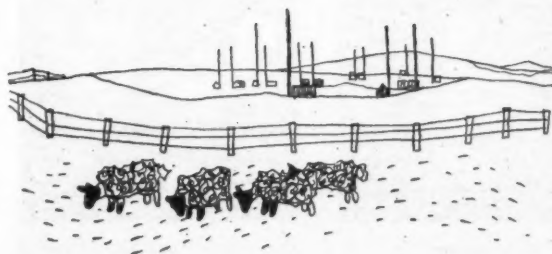
Some 250,000 dwelling units—more than half the pre-war total for the city—were destroyed in Hamburg and Military Government has attempted to ease the appalling accommodation misery by erecting several hundred Nissen huts on roads, green spaces and cleared ruins. They are laid out in long rows three or four feet apart and with windows placed very high. Green spaces amidst the ruins have been spoilt for an indefinite period.

RELAY THE RELAYS

From the Berkshire Downs, John Betjeman has warned of a threat to another piece of English soil. While the cause of amenity and beauty from time to time suffers from its friends, there are also too many Government departments that consider the protesters, as does Mr. Silkin to be irrelevant sentimentalists.

Those who know the wild peace of the Berkshire downlands and their unique monuments will be grateful to Mr. Betjeman and those who have supported him, for only too often those who have enjoyed our wilder and remoter countryside are not resident there and are unaware of the encroachments made upon them.

ASTRAGAL



Indignation has been caused by the proposal of the Post Office to erect a television relay station on White Horse Hill, Berkshire. The site is about $\frac{1}{4}$ mile south of the Ridgeway, just behind Uffington Castle, a mound at the top right hand of the photograph. How the station might look is suggested in the sketch. See Astragal's note.



LETTERS

A. F. B. Anderson,
(Chairman, RIBA Films Panel)

Films

SIR.—Mr. R. N. Paterson's article on films will have been of interest to many members of the architectural profession and, it is hoped, will have stimulated an awareness of the use to which the film can be put, particularly in the field of education.

To those, however, who have seen most of the films he mentions, the article appears to be slightly misleading in its emphasis on the number of films already in existence which deal in an informative way with architecture, town and country planning and building. With certain notable exceptions, the RIBA films panel is of the opinion that there are very few really first class films which can be said to materially advance the cause of any of these subjects. One of the principal reasons for this state of affairs is undoubtedly the high cost of production. This has influenced producers to make films likely to enjoy a wide circulation rather than to cater for a special section of the community, with the result that the treatment of a film has had to be so general that the subject had necessarily to be treated in a superficial manner. The shortage and high cost of projectors has undoubtedly been a contributing factor.

The value of a critical analysis of available films and of their suitability for different types of audiences is a point which has been strongly stressed by the Scientific Film Association. The RIBA films panel, realizing that this analysis is a pre-requisite to the sponsoring and encouraging of fresh films, has been summarising and appraising films which deal with any aspect of architecture, town and country planning or building. Later, it is intended to make an assessment of the needs of the varying types of audience.

The panel feels that the production of films for a particular type of audience merits more consideration than has been given in the past and that the schools of architecture and societies already constitute the nucleus of a specialised audience to whose film needs producers might well give their attention. It should, however, be emphasised that for such an audience the educational film on architecture and technical subjects, if it is to be really useful, must be made in collaboration with those who will use them for instructional purposes.

This is a question which intimately concerns the profession, and on which producers can feel assured of the Royal Institute's keen interest and co-operation.

A. F. B. ANDERSON,
Chairman, RIBA Films Panel

London



Walter Gropius



Frank Lloyd Wright



Alvar Aalto



Richard Neutra



Siegfried Giedion

PRINCETON BICENTENARY

"We, as Architects, shall never know Man as a whole until we discard the narrow, particularizing, separating view of science, and take the broad, unifying view of art," said Ernest J. Kump at Princeton University's Bi-centennial Conference. A gathering of some 60 eminent architects and industrial designers, some of whom are illustrated on this page, took place on March 5 and 6 to discuss the physical possibilities and limitations of design and the visual, social, philosophical and psychological aspects of environment—from city and regional planning to industrial and architectural design.



W. W. Wurster



George Fred Keck



Princeton Graduate School from across the golf course.



Roy Childs Jones



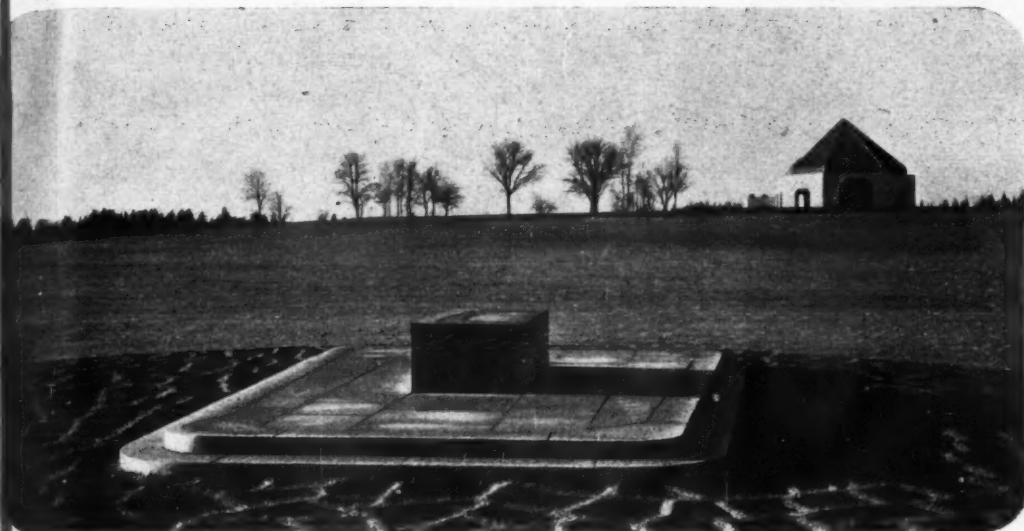
Ernest J. Kump



Jean Labatut

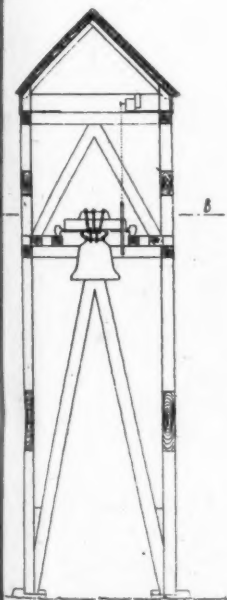


Marcelo Roberto and Serge Chermeyeff

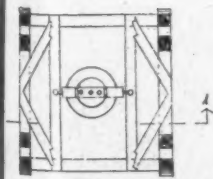


Left, the open area to the north of the axial road with its catafalque for use during large open-air ceremonies. Below, left, the wooden bell tower which stands near the crematorium; the bell is operated from the main building by electricity.

CREMATORIUM AND CEMETERY AT KARLSKOGA, SWEDEN DESIGNED BY ÅKE PORNE



SECTION AA



PLAN AT BB

The Östra cemetery and crematorium at Karlskoga lie amid typical Bergslagen scenery. They have been designed carefully to harmonise and link up with the landscape. The site slopes down from the west towards the Svärtälven valley and is framed by dark green walls of woodland.

The site is divided by the main approach road to the crematorium, which lies in the north west corner. On the south of the road is the actual burial ground, which is well planted with trees, shrubs and flowers, and joins up naturally with the surrounding woods. The upper westward end of this area, immediately south of the crematorium building is the urn garden, surrounded by elm trees. The lower eastward end, south of the brook, is devoted to individual graves. In between are the family graves separated by pathways.

Contrasting with this well planted area is the open ceremonial space to the north of the axial road which joins with the open landscape beyond. On the east of the open area is a catafalque for use during large open-air funeral ceremonies, while close by runs a little

brook with its banks planted with flowers running into the Svärtälven below.

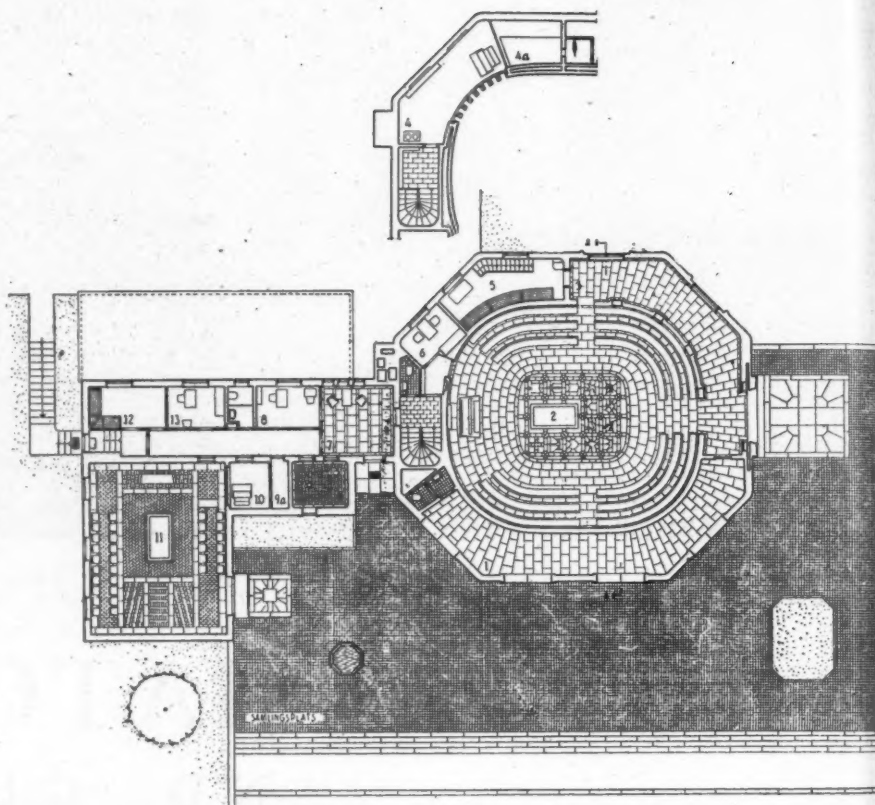
On the north and south extremities more informally arranged graves are arranged in the open spaces among the trees.

The building itself consists of two parts. The lower, to the west, contains the smaller of the two chapels with sacristy, waiting room, music room, urn room and other offices on the ground floor, with the furnace room and other rooms connected with the cremation technique in the basement. The taller block, octagonal in shape, contains the main chapel, surrounded with an overflow annex for standing mourners, a waiting arcade, a sacristy, flower room and water closets. In the basement is a coffin store, a cold store, plenum plant, general stores, etc.

The roof of the main block is covered with orange tiles. Walls throughout are of brick rendered externally and colour washed a light grey. The architraves of the openings round the main block are of granite. Granite is also used on the floor of the waiting arcade.

CREMATORIUM AND CEMETERY AT KARLSKOGA DESIGNED BY ÅKE PORNE

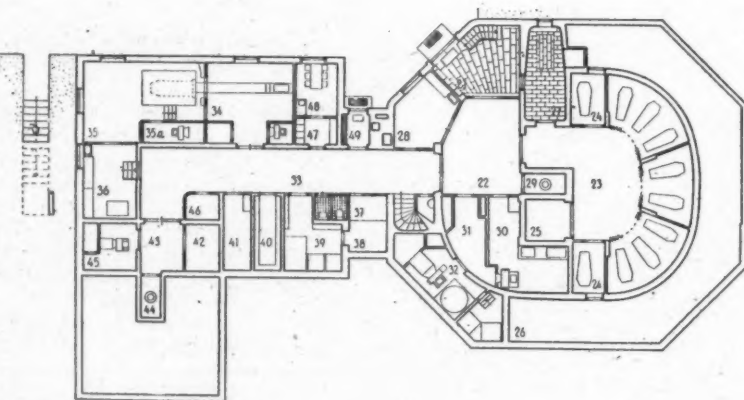
The main chapel has a roof of timber supported on a reinforced concrete dome, which has a plastered ceiling. The focus of the chapel is the catafalque which stands in the centre. A lift within the catafalque removes the coffin to the basement below where it is wheeled to the furnace. The altar is free-standing and is of stone. Above it is a piece of sculpture in oak representing the Prodigal Son by Torolf Engström. There is an organ loft within the roof area. This main chapel holds 148 people, apart from those who stand in the annex.



GROUND FLOOR PLAN

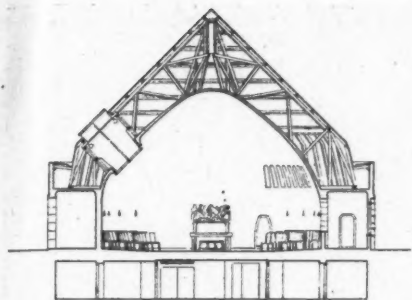
[Scale: 1"=1']

Legend of plans on left: 1, the waiting arcade; 2, the main chapel; 3, standing annex; 4, organ loft; 5, flower room; 6, sacristy; 7, waiting room; 8, office; 9, urn room; 9a, urn store; 10, music room; 11, small chapel; 12, flower room; 13, sacristy; 21, coffin reception; 22, hall; 23/24, coffin store; 25, cold store; 26, general store room; 27, viewing room; 28, post-mortem room; 29, coffin lift; 30, machine room; 31, store; 32, plenum plant; 33, corridor; 34, furnace reception; 35, furnace room; 35a, switch and fan room; 36, workshop; 39, switch and transformer rooms; 40, archives; 41/42, store; 43, ante-room; 44, coffin lift; 45, fan room; 46, tool store; 47, staff cloaks; 48, staff dining room; 49, staff entrance. Below, left, the waiting porch outside the main chapel; centre, entrance gates; right, the small chapel with its multi-coloured brick walls and stone catafalque.



BASEMENT PLAN





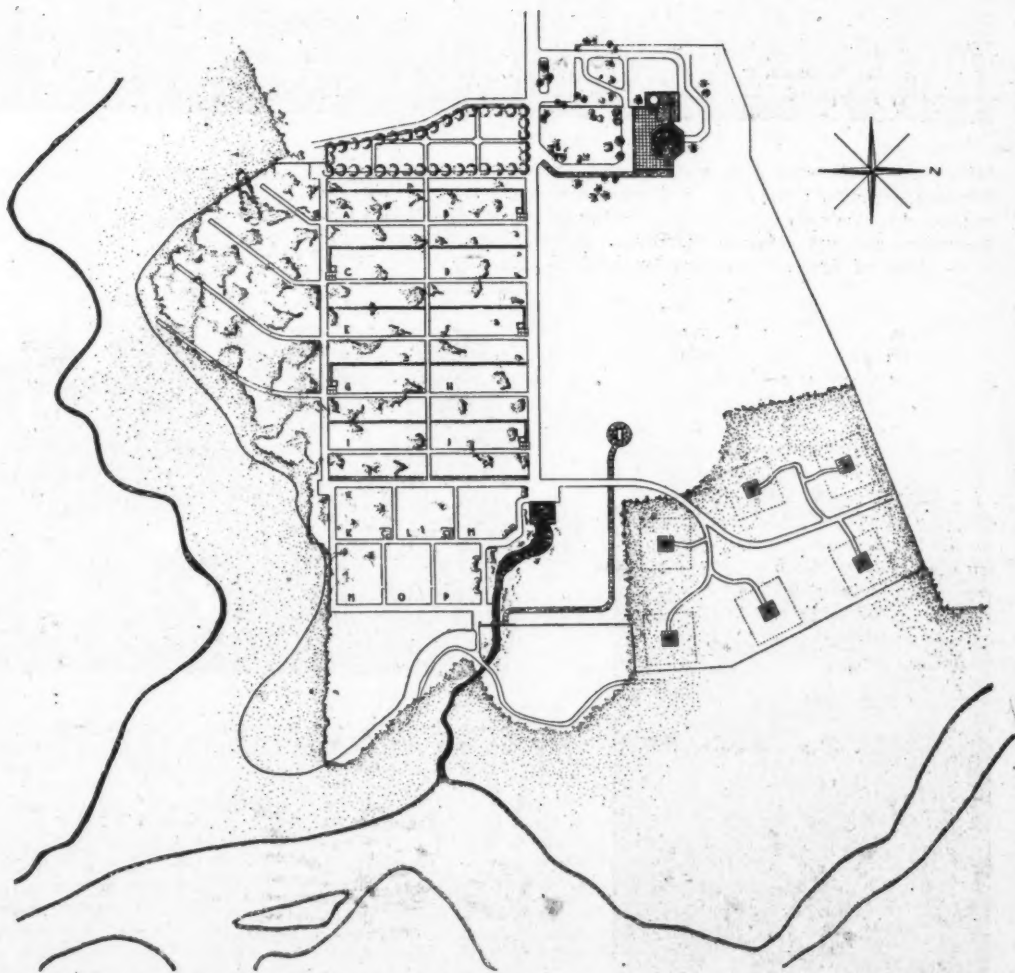
SECTION THROUGH MAIN CHAPEL

The smaller chapel, holding thirty mourners, is rectangular on plan and has a relatively low ceiling height.

Heating is electric throughout. The two chapels are heated partly by elements in the floors and partly by warm air.



The building containing the main chapel; view seen from the south west; the roof is of orange tiles and walls are rendered brick.



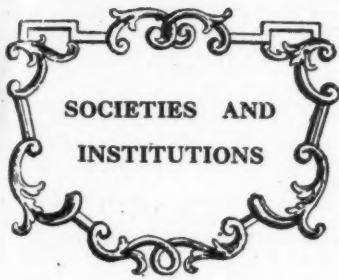
LAY-OUT OF THE CEMETERY



Above, the main chapel with its central catafalque in oak and its free-standing altar; the floor is of stone and the dome of reinforced concrete; on the right are the openings from the organ loft. Below, left, the brook which runs down to Svartälven. Below, right, the oak carving of the Prodigal Son above the altar by Torolf Engström.



CREMATORIUM AT KARLSKOĞA



Speeches and lectures delivered before societies as well as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economize space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front cover. Except where inverted commas are used, the reports are summaries, and not verbatim.

TPI

P. W. Macfarlane

April 17, at the TPI. A Town Planning Institute lecture on PLANNING FOR INDUSTRY, by P. W. Macfarlane, A.M.T.P.I., P.A.S.I.

P. W. Macfarlane : In presenting this paper the problem has been approached mainly from the point of view of the pre-war Distressed Areas—now rechristened Development Areas.

As a first step toward post-war industrial planning the Coalition Government issued a White Paper on Employment Policy; and in the main this still holds good. Here it was expressly stated that never again would the Development Areas be allowed to relapse into a state of chronic depression and that in future work would be brought to the worker in these areas rather than his having to migrate elsewhere for employment. The present Government has announced its intention of restricting further industrialisation of the London Area and this must be regarded as part of the larger strategic plan for steering industry to the Development Areas.

The following means of securing full employment were proposed in the White Paper:

- (a) Increasing the efficiency and encouraging the expansion of existing industry;
- (b) Providing Government or Local Authority sponsored relief works;
- (c) Introducing new industry;
- (d) Stimulating labour mobility;

- (e) Developing basic services;
- (f) Controlling investment and interest rates.

The White Paper was followed by the Distribution of Industry Act, 1945; this was to be the main means of controlling the location of industry, but unfortunately it falls far short of what is needed. Its principal provisions apply only to the Development Areas and it leaves untouched the larger problem of industrial location throughout Britain as a whole. Another major defect of the Act is the omission of any power to prohibit or restrict expansion in the over-industrialised areas of the South, and the present Government is having to fall back on the only weapon at its disposal to prevent firms building there—the refusal to grant building licences, a type of control never designed for this purpose.

How far does the recently introduced Town and Country Planning Bill hold out any hopes of the wider powers needed for overall industrial control? Clause 12 (4) provides that no industrial development may be approved by any local planning authority unless certified by the Board of Trade as consistent with the proper distribution of industry; but unfortunately nowhere in the Act is there any clue as to what is meant by the phrase "proper distribution of industry."

DEVELOPMENT OF INDUSTRIAL ESTATES

Reference has already been made to the Government's intention to introduce new industry into the Development Areas. In the main this will be achieved by the development of industrial estates. The modern industrialist is tending more and more to rent his factory rather than sink capital in building; he wants the airy single storey structure, easy to extend, with adequate space for expansion, attractive to look at, pleasant for his employees to work in, set in surroundings of high amenity and accessible for motor transport. He will want an adequate labour supply, which should possess steadiness and a sense of factory discipline rather than any particular skill, and he must have good transport facilities. He will not, in many cases, need direct rail connection as he normally distributes much of his production in small quantities to widely separated markets, for which he will use road transport. His raw materials will consist mainly of a large number of semi-finished articles which he will further process and assemble. He will probably not be a big consumer of gas, water and electricity; if these services are available at a reasonable price he is likely to be satisfied. And lastly, the industrialist will want to be reasonably near his consumer market, normally the general public, unless he supplies another industry.

The Board of Trade is sponsoring the development of numerous industrial estates and individual factories in the Development Areas; to these it is hoped to steer sufficient industry to diversify their structure and to absorb the existing and potential labour surplus. So great is the present shortage of modern factory floor space that the offering of factories to rent will attract much industry to these development areas, when materials are freely available to build the factories. With nationalisation of fuel and power, transport iron and steel production and the Bank of England, the State will possess a monopoly of key industries and can exercise powerful indirect pressure on industry to co-operate.

But not every firm will want to be regimented on to an estate, and for the most satisfactory build up of a town's industry other sites should be available. Individual concerns may well desire to build to their own designs on freehold sites and acquire sufficient land for future factory extensions.

It is thus important to provide the widest choice of sites to meet the varied needs of the industrialist.

Sizes of industrial estates have varied from over 400 acres down to 25, but probably 50 acres should be a minimum with 100/150 acres as a maximum. Travelling time between home and factory should not normally exceed half an hour.

INTERDEPARTMENTAL SET-UP

The planner will participate in work which has as its basis a vast interplay of industrial and economic forces, to some perhaps, rather a perplexing prospect. But he will not be playing a lone hand but working in co-operation (we hope) with the various Government Departments and it might be useful here to indicate the interdepartmental set-up with which at some stages he will almost certainly be brought into contact. At the top is a Ministerial Committee responsible for high policy. Under it an official Development of Industry Committee, representing the main Government Departments such as Board of Trade, Labour, Supply, Planning, Fuel and Power, Works, Admiralty, etc.; this is divided into two sections, Panel A and Panel B. Panel A is concerned with matters of general policy such as scheduling of Development Areas, with the approval of building licences for new factories under the Distribution of Industry Act, factory grants, clearance of derelict industrial areas, etc. Panel B deals with the allocation of surplus Government factories. At the more local level is the Regional Board for Industry which has an independent chairman and representatives of employers, employees and of the interests of Government Departments. The executive committee of this Board is the Regional Distribution of Industry Panel which is under the chairmanship of the Board of Trade; this consists solely of Government Departments and deals regionally with matters covered nationally by Panels A and B. Projects on which the regional panel fails to agree are referred to the official Development of Industry Committee at headquarters for decision; matters raising questions of high policy can presumably be referred to the Ministerial Committee for decision. In theory, therefore, this set-up should ensure that planning matters are fully taken into account in the working out of schemes of industrial development. Newest comer to these committees is the Physical Planning Committee, chaired by the Regional Controller of the Ministry of Town and Country Planning with representatives of other Departments—rather a wider representation of Government Departments in fact than on the Regional Distribution of Industry Panel. This committee is concerned with long term problems of major importance not specifically dealt with by the Regional Distribution of Industry Panel. Above it is a headquarters committee under the chairmanship of the Under Secretary of the Ministry of Town and Country Planning with equivalent representatives from other Government Departments.

The planner will want to collect much information about industry. He can send out a lengthy questionnaire to industrialists, probably to remain unanswered by many. He should not make himself a nuisance and he must remember that much of the data he wants is regularly sent in by these firms on innumerable forms to the Government Departments concerned. His first approach might well be to the Regional Office of the Ministry of Town and Country Planning, which, especially through its research section, can give a good general background picture; his second contact to the Ministry of Labour which is widely knowledgeable and has dealings with all industries and contacts with most other Government

Departments. The Board of Trade, too, should be able to furnish much useful information, though it only deals with particular sections of industry apart, of course, from its work under the Distribution of Industry Act. For information about iron and steel and engineering, for example, the Ministry of Supply is the appropriate Government Department and the Admiralty for shipbuilding. The Ministry of Fuel and Power is another key Government Department which will repay early consultation.

In presenting this paper the author is aware that only the fringes of the subject "planning for industry" have been touched upon. Nothing has been said about industrial decentralisation and relocation in new towns, about dispersal of Government offices and about comprehensive schemes of fuel and power conservation, the development of the many valuable industries which spring from coal processing, of hydro-electric power, the harnessing of tidal rivers, atomic power, mineral subsidence, the Reid Report on the reorganisation of the British Coal Industry, the need for wholesale schemes of clearance and rehabilitation in the decaying industrial areas and in the coalfields and of the part which forestry and agriculture can play. Had time permitted, mention might also have been made of the immensely varied location factors for individual industries and of the interdependence of industry here and abroad and of migration from and into this country. It is, however, hoped that this paper will in some small measure be a contribution to current thought.

ArchSA

Architectural Education

April 10. An ArchSA Conference at Brighton. A lecture on ARCHITECTURAL EDUCATION written by Percy Marshall and read by W. Tatton Brown.

P. Marshall: Consider first the condition of the architectural profession. In many ways it is a house divided against itself; each new change in society, whether economic, social or political, finds us collectively unprepared. The former ideal of every architect with his own private practice is no longer realistic, and basically new forms of organization have been springing up to meet current demands. Many other people have been doing work for which the architect is specially qualified, and conversely, the architect is engaged on many jobs which were unheard of not long ago. The war showed up our collective weakness in glaring fashion, but it also proved our individual flexibility, and the experience gained by architects in war time organization, planning, road, bridge, and airfield construction, should be of great value if appreciated and used properly.

SERVICE TO THE COMMUNITY

The present trends may best be explained in terms of increasing service to the community as a whole. Architecture is becoming more and more a social art.

This means that the experts who create the physical environment will be brought closer to the needs of the whole community in solving problems of equal interest to all its members, e.g., in Town Planning, the national schools and Public Health programmes, etc. This will become more obvious as social needs are considered in a co-ordinated instead of an isolated way, e.g., Neighbourhoods instead of Housing.

Politically, the trend is towards a more direct connection between the needs and

wishes of the people and their elected representatives in both central and local government.

This means that our clients are changing from individuals to community representatives, e.g., the recent growth of central and local government planning and building work. This trend has for some time been noticeable in town planning, where the private clients who commissioned the crescents of Bath and the squares of London have long since disappeared. Summing up our service to the community, it would appear that our job is not to struggle against existing well-defined trends in a changing society, but to help to mould and shape them, gaining the confidence and trust of the public by becoming their technical advisers and co-ordinators in the team of creators of the physical environment.

THE ENVIRONMENT

We are only too well aware of the present lamentable state of our existing environment, in spite of all the revolutionary technical discoveries of the last 200 years.

In order to create a new one more worthy of our civilization we must first consider who are the other technicians concerned in the process. One finds that they have frequently an entirely different background and approach, and a lack of understanding of each other's contribution. An historical survey is needed of technicians in relation to their work over the last 200 years in order to find out who was responsible and whose the directing influence on different types of project at various stages of industrial development. Having a clear picture of this man/work relationship we can then define more clearly and flexibly the responsibilities of the different technicians. Then, as we are faced with more complex development problems, we can build up our teams on a surer basis.

EDUCATIONAL METHODS

Turning from our brief review of present conditions in the world outside, let us look at the condition of architectural education. Although large numbers of people become architects in other and less satisfactory ways, the dominant method is the School system, and a careful study of how it evolved from apprenticeship would be invaluable. The RIBA Report on Architectural Education contains many valuable suggestions and would have been first rate if it had been produced thirty years ago. We must adopt wider terms of reference and survey the whole field of Technical Training as it evolved in the nineteenth century.

The introduction of Technical Education into the Universities was a part of the Industrial Revolution, as the founding of the numerous Scientific, Engineering, and Technical Colleges during the 19th century shows. The recessive position of the architect during this period is reflected both in the delay in following up the lead given by the Beaux Arts in grouping a number of ateliers to form the first School, and to the fact that when schools were started, they were attached to several different types of parent body, e.g., Faculties of Arts of Universities, Art Schools, Technical Colleges, etc. In fact, the Schools in England are a product of the early 20th century, since it was not until then that the demand for a higher standard of architectural training made itself felt, and the man who cast them in their present form was Professor Reilly.

The Schools today have, however, certain obvious defects, and it was in attempting to correct these that Professor Gropius evolved the Bauhaus, from which we have still a great deal to learn. It is significant that certain American Universities like Harvard and the MIT have followed up this experimental work, and are evolving some-

thing in the nature of a new Faculty, where education in a wide number of creative jobs is co-ordinated.

A NEW PROPOSAL

A proposal which was made for Indian and Burmese Universities by the Service Arts and Technical Organisations* may be of interest especially as Calcutta University has just adopted the first part of the scheme. The idea was to have a complete Faculty of Planning, Design and Technics, which would be based round a Building and Planning Research Centre. It was presumed that all students of the Planning, Building, and Works groups would have a common basic Art and Science Course. Most of the Engineering students would then go on to the existing Faculties of Engineering, and the rest would go to the new Faculty, including Architects, Landscape Architects, Town Planners, Structural Engineers, Heating, Lighting, and Ventilating Engineers, Industrial Designers, Painters and Sculptors. After an initial common training they would all proceed to specialized departments. City and Regional Planning would be a Post-Graduate study available to all Faculties of the University. Another new feature would be a School of Building and Post-Graduate Refresher Courses.

This proposal is one which appears to be eminently suitable for adoption in this country, but before starting on any scheme which involves comprehensive changes in the educational structure, a careful survey of existing conditions must be made.

CONCLUSION

Most people have an idea of the sort of things that are required. They are:—

- (a) An architecture which the people can understand and of which architects can be proud.
- (b) A good standard and public appreciation of design in every-day things.
- (c) Maximum use of modern techniques.
- (d) Maximum freedom for the architects within the broad social programme.
- (e) Adequate recognition for the experts.
- (f) Technical education free from economic disabilities.

Before, however, we can prepare our detailed programme, we must have a clear picture of things as they are to-day, to find out what is not only desirable but also practical, or we shall fall into the trap of all Utopian idealists. In this respect the ArchSA is to be congratulated on having already initiated a study of architectural education in conjunction with the MARS Group. From preliminary investigation the committee concerned have already outlined the necessary research. Students may wonder what they can do personally to help, and the following action is suggested:

- (1) Build up the ArchSA to 100 per cent. membership.
- (2) Take your share in Association duties, as apart from anything else the organizational experience is very valuable.
- (3) Help the survey work in architectural education.

When you have become architects, remember the need for a few strong and representative associations, based on clearly defined functions. For academic matters the RIBA should be given full support in the form of service on both council and committees, while for all problems concerned with conditions of work, etc., the Association of Building Technicians is the representative body, and needs all our help.

But remember, always, that architecture is the social art.

* See A.J. for November 7, 1946.



The entrance on the north.

HOUSE

NEAR BERKELEY,
CALIFORNIA

DESIGNED BY
DINWIDDIE AND HILL

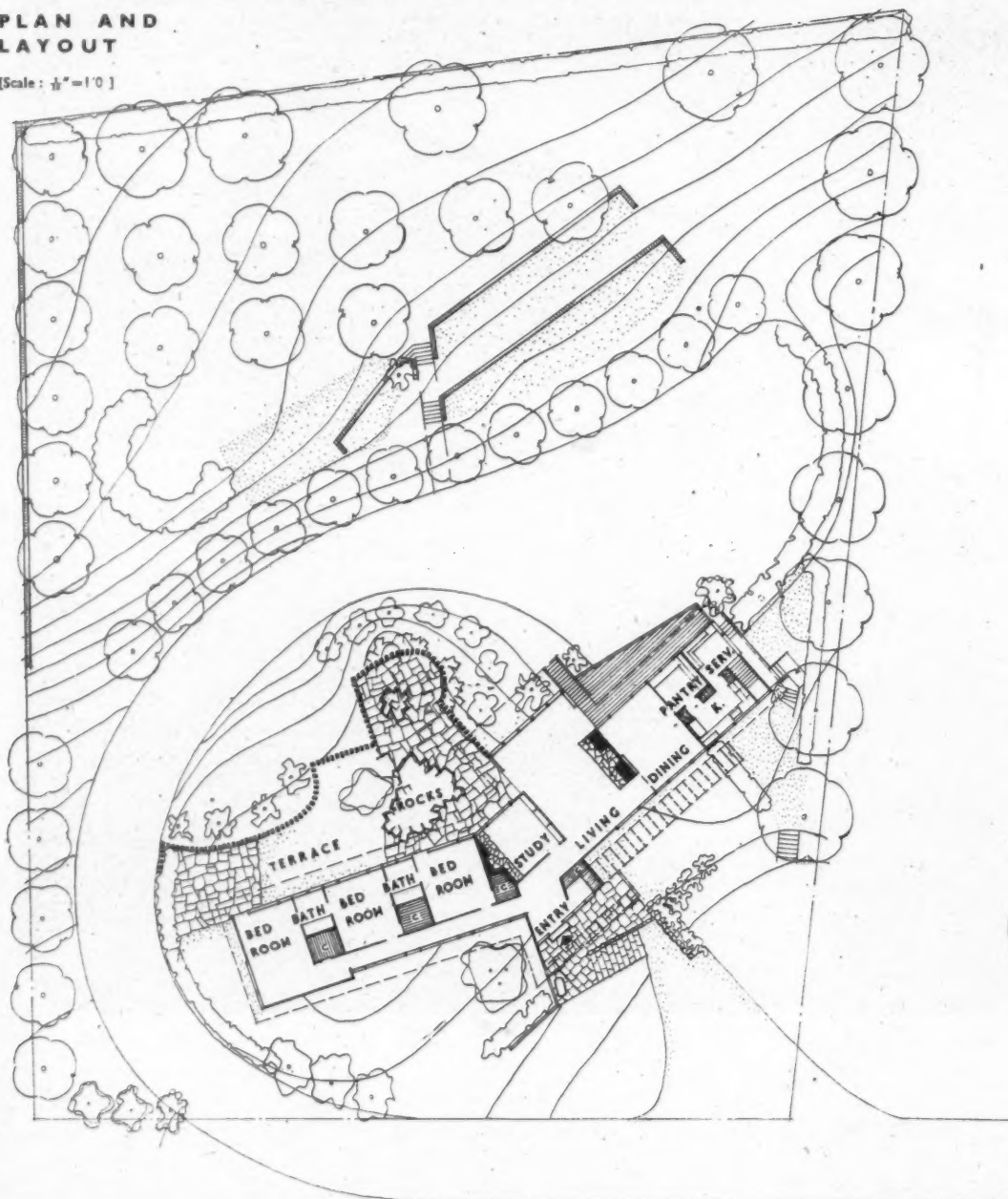
GENERAL.—The site commands a 360-degree panorama and was deliberately chosen by the owners, Captain and Mrs. Frank M. Harris, so that they could enjoy to the full the amazing climatic changes of this locality—where winds, mist and driving rains alternate with periods of great clarity in which mountains 135 miles distant can be seen.

CONSTRUCTION.—This is of wood frame with painted red wood siding externally. Roof covering is composition. Floors are oak. Ceilings are plywood. The fireplace in the living room is of stone, in which a mantel shelf of Herculite glass is embedded. Heating is by gas-fired hot air.

[The photographs are by Roger Sturtevant.]

PLAN AND
LAYOUT

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



Left, the north elevation. Right, the south elevation; the projection is the living room.



Above, left, the dining room. Centre, the living room looking into the dining room. Right, the living room. Below, the south elevation; the garage is below the kitchen and pantry.



HOUSE NEAR BERKELEY, CALIFORNIA

TECHNICAL SECTION

The function of this feature is to supply a digest of, and commentary on, current information of interest to architects as recorded in technical publications and statements of every kind throughout the world. Items are prepared by specialists of the highest authority who are not on the permanent staff of the Journal, and views expressed are disinterested and objective. Items are printed on one side of the paper only to permit of cutting out and pasting up in classified order in readers' files. The Editors welcome information on all developments from any source.

INFORMATION CENTRE

To enable items to be filed all information is classified under the following headings:

1 SOCIOLOGY. 2 PLANNING: General. 3 PLANNING: Regional and National. 4 PLANNING: Urban and Rural. 5 PLANNING: Public Utilities. 6 PLANNING: Social and Recreational. 7 PRACTICE. 8 SURVEYING, SPECIFICATION. 9 DESIGN: General. 10 DESIGN: Building Types. 11 MATERIALS: General. 12 MATERIALS: Metal. 13 MATERIALS: Timber. 14 MATERIALS: Concrete. 15 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Miscellaneous. 17 CONSTRUCTION: General. 18 CONSTRUCTION: Theory. 19 CONSTRUCTION: Details. 20 CONSTRUCTION: Complete Structures. 21 CONSTRUCTION: Miscellaneous. 22 SOUND INSULATION, ACOUSTICS. 23 HEATING, VENTILATION. 24 LIGHTING. 25 WATER SUPPLY, SANITATION. 26 SERVICES, EQUIPMENT: Miscellaneous. 27 FURNITURE, FITTINGS. 28 MISCELLANEOUS.

1.1 sociology

DEVELOPMENT OF ENVIRONMENT

Revolution of Environment. E. A. Gutkind. (Kegan Paul, Trench, Trubner and Co., Ltd., 1946, 30s. 0d.)

Assessment of architectural, educational and international problems involved in re-planning our environment, taking into account geography and economic history. Illustrated. Selected bibliography.

This book is a philosophical as well as a practical discussion on and investigation into the development of settlement in different countries with a two-fold purpose. "First . . . to show the need for a flexible adaptation of environment all the world over to changing conditions, and for this end to take into account not only international links such as trade, transport and other forms of international exchange, but also the impact of these factors on the social and economic structure of individual countries and the correlation of their internal pattern of living. The second object is to demonstrate by historical surveys that we need not fear far-reaching changes, and that their pace should be deliberately and systematically quickened."

Accordingly the book is divided into two parts. Part One consists of three essays entitled *Streets and Houses*, *Education for Planning*, and *An International Society*. "The Essay on *Streets and Houses* sets forth the need for a new conception of the inter-relationship of space and buildings. It tries to illustrate the permanent revolution of environment by the spirit of change and evolution striving to adapt man's living space to his aspirations as an individual and social being. In *Education for Planning* the spirit of intellectual adventure, of seeing things whole, is the guiding principle. . . .

In the essay on the *International Society* a spirit of international co-operation and understanding is the main postulate."

Part Two surveys the progress and procedure of settlement in Paraguay, China and Russia, three countries in which the conquest of space has proceeded differently and which provide an excellent background for the study of physical resettlement and reconstruction in general.

5.5 planning: public utilities

UTILIZATION OF WASTE

Wealth from Waste. M. George, Editor: *Survey before Plan* Series No. 3 prepared by the Association for Planning and Reconstruction. (Lund Humphries & Co. Ltd. 1946. 6s. 0d.)

Material compiled from various papers, reports and broadsheets issued during war years. Chapters on nature of waste; methods of disposal; organic manure; composting; methods of waste utilisation; and recommendations for future policy. Points of particular interest to planners include examination of damage done to agriculture by present system of water supply; reckless use of fresh water on account of largely increased domestic and industrial consumption; position of sewers on sloping sites; and refuse disposal. Photographs, diagrams, tables, and bibliography. Useful and clearly written introduction to further study of important planning aspect.

10.5 design: building types

HOUSING IN SWITZERLAND

Der Soziale Wohnungsbau und seine Förderung in Zürich 1942-45. (Low-cost Housing and its Progress in Zurich 1942-45). (Hochbauamt der Stadt Zürich (Building Department of the City of Zurich), Switzerland, 1946. 17s. 6d. Text in German.)

Two introductory chapters on housing policy of City of Zurich and on low-cost housing in relation to town planning. Well presented and fully described and illustrated survey of 48 housing estates. General table showing years of completion of all projects together with number of houses and dwelling units, sizes of various rooms, building costs, subsidies, mortgages, etc. Each single project described by means of site plan, typical floor plan, exterior views; and two tables, first giving type and number of dwelling units, and second an analysis of building costs of project. Types illustrated include

one to five room units, and two and three storey houses for one or more families.

10.6 design: building types

HUB OF THE HOUSE

The Hub of the House. E. M. Willis, Editor. (Lund Humphries & Co., Ltd. 1946. 6s. 0d.)

Booklet Uo. 2 of *Survey before Plan* Series based on material prepared by Association for Planning and Regional Reconstruction. Results of investigations undertaken to discover space requirements and general facilities needed by small to medium sized town and country households for maintenance of fair standards of cooking and cleaning including home laundry work and personal hygiene. Classified kitchen types. Examination of activities and equipment. Recommendations for standardisation of fittings with view to mass production. Position and space requirements of bathrooms and their equipment. Cleaning cupboards. Storage and destruction of refuse. Laundry equipment. Country domestic needs and work pertaining to country kitchens. Attractively produced, fully illustrated and most informative booklet with comprehensive bibliography covering Government publications, pamphlets, books and special periodical articles.

13.6 materials: timber

INFORMATION LEAFLETS

Timber Information Leaflets Nos. 25-30. (Timber Development Association.)

Microscopical Identification of Softwoods. Timber trusses. African and Chilean Timbers. Conversion Tables.

Six additions to the TDA leaflets. Of chief interest are two dealing with small span roof trusses suited to houses. Two types of nailed truss are given, one to be placed at 3 ft. 3 in. centres and covered with plywood with tiling battens glued on, the other at 5 ft. 0 in. centres with prefabricated frames of purlins and sub rafters. A third roof consists of plywood roof panels, plywood ceiling panels and a metal hanger. All are economical in timber.

15.3 materials: applied finishes and treatments

KNOTTING

Knotting B.S. 1336. 1946. (British Standards Institution. 2s.)

Quality of knotting for preparation of joinery for painting over knots and other resinous areas.

16.10 materials: miscellaneous

GLUES: ANIMAL

Glue. W. E. Fletcher (Journal of the Incorporated Clerks of Works Association, January, 1947, pp. 1-4.)

Historical references, development of methods of manufacture. Different varieties and their uses. Animal glues only with no reference to synthetics.

The author, who is chief chemist of the Croid Glue Products Co., Ltd., gives a brief, clear description of the process of manufacture of the many varieties of the main types of dried and undried animal glue, and indicates the factors such as chilling time, porosity of the surface to be

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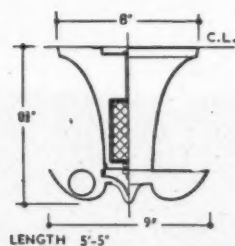
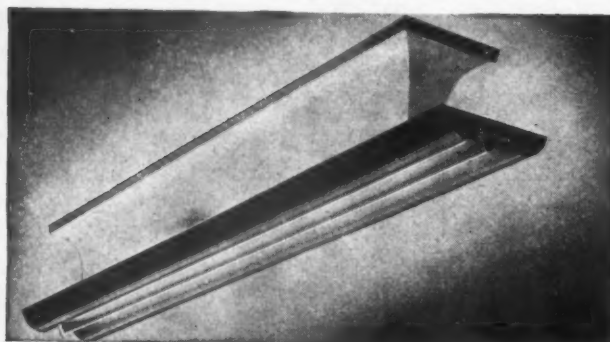
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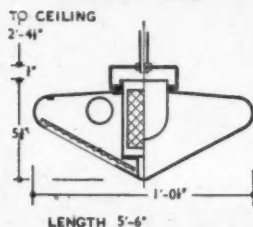
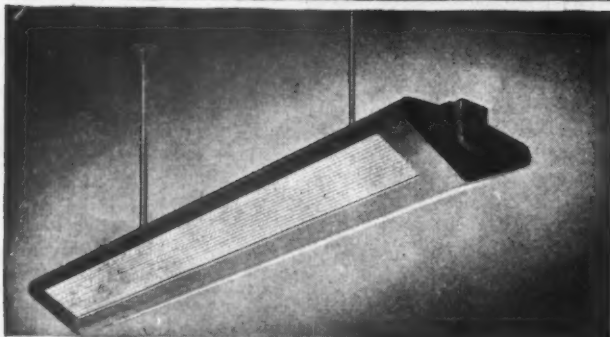
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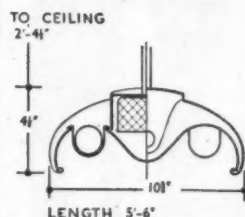
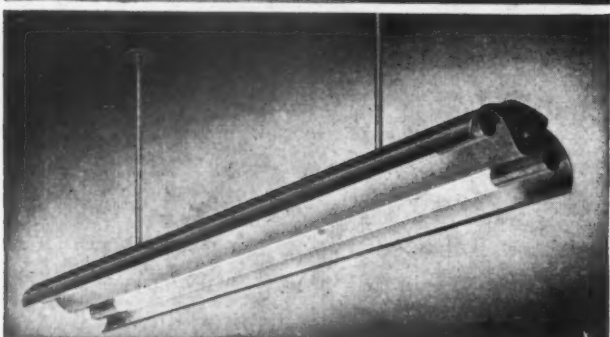
T.1
Finish:
 Stove — Enamelled
 Off-White
 Lamps: Two — 5ft 80W
 Tubular Fluorescent
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TUBALUX



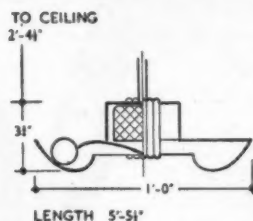
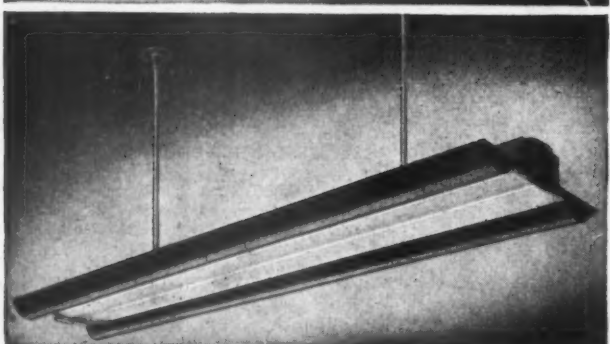
T.2
Finish: Body Stove —
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 End Pieces Duck Egg Blue,
 Reeded and Clear Glass.
 Chromium Suspension.
 Lamps: Two — 5ft 80W
 Tubular Fluorescent
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T.3
Finish: Reflector Stove —
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 Lamps: Two — 5ft 80W
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Finish:
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 Chromium End Pieces.
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glued, which influence the choice of any particular variety.

A useful tip is given for using hot glues. 140 deg. F., which is the maximum temperature to which glue should be heated, is also the maximum temperature at which one can immerse one's finger in the glue without discomfort.

The article concludes with practical comments about the uses and misuses of glue. Most of the information concerns the manufacturer and the tradesman rather than the architect, but some of it would be of considerable help in estimating quality of workmanship and in specifying glues for special purposes, for instance, where a glue of a special colour may be required.

17.10 construction: general FIRE GRADING

Fire Grading of Buildings. MOW Post-War Building Studies. No. 20. Part I. General Principles and Structural Precautions. By a Joint Committee of the Building Research Board of the Department of Scientific and Industrial Research and of the Fire Offices' Committee. London, 1946. (HMSO Is. 6d.)

Grading, requirements, protection against exposure hazards of buildings other than one- and two-storey dwellings. Recommendations for one- and two-storey houses. Appendix dealing with characteristics of materials, occupancies, severity of building fires, provision of MOH Model Bye-Laws for spacing of certain classes of buildings, fire resistance grading of elements of structure, methods of testing the spread of flames on surfaces.

The purpose of this report is to review the underlying principles of fire protection in buildings, and to present the results in the form of recommendations intended as a basis for codes or regulations applicable to new buildings.

The object of fire precautions is to safeguard life and property. This may be achieved by (a) preventing or reducing the number of outbreaks of fires; (b) limiting the development and spread of a fire in the event of an outbreak and (c) providing for safe exit for occupants.

The present Part I of the report is confined to general principles and structural precautions. It adopts the following subdivision:—

- 1.—*Personal Hazard*: the hazard to the occupants of the building.
- 2.—*Damage Hazard*: the hazard to the structure and contents.
- 3.—*Exposure Hazard*: the hazard due to fire from surrounding property.

Hitherto fire precautions as included in building bye-laws have been adopted more or less as rules of thumb. A more scientific approach to the problem is to consider precautions against fire and fire hazard as standing in much the same relation to each other as the strength of a structure and the loads it has to carry. Recent work has enabled an approximate quantitative measurement to be made of the probable severity of fires in buildings, but this is only one factor of the many which go to make up the total hazard. The report grades the various types of occupancy according to the fire hazards arising in each and sets out the precautions necessary for the various grades. For buildings other than one- or two-storey dwellings this is done in two stages:—

- (1) *On the basis of damage and exposure hazards.*
- (2) *On the basis of personal hazards.*

(1) is largely bound up with structural considerations, (2) is more a matter of providing easy means of egress and will be

included in Part III of the report (to be published later).

By analogy with structural loads the term "fire load" has been adopted to describe the quantity of heat (measured in B.T.U.s) which could be liberated per sq. ft. of floor area of a compartment by the combustion of the contents of a building and any combustible part of the building itself. The fire load of a building is the basis of the grading of occupancies. Thus 3 grades are established.

- (1) *Low Fire Load* (e.g., domestic buildings, offices, etc.).
- (2) *Moderate Fire Load* (e.g., factories).
- (3) *High Fire Load* (e.g., bulk storage buildings).

The grading alone is not sufficient to characterize the fire risk since materials of the same calorific value differ in their ease of ignition and the rate at which they burn. It is necessary to distinguish between occupancies which have a given numerical fire load but present no special risks (normal fire risk loads), and those of the same numerical fire load in which special risk arises (abnormal risk fire load). An occupancy may be made abnormal by the materials involved or by the process. In this way, it is possible for a designer to determine with the aid of tables of calorific values of materials (Appendix III) the numerical fire load of a building and to establish the class of occupancy. The "normality" of the occupancy may be determined in many instances with the aid of Appendix II.

On the basis of American test results, the three grades of fire load are related to the severity of fire in terms of hours of standard heating according to B.S. 476-1932.

Corresponding to the grading of hazards, buildings are graded according to the fire resistance of their elements. In a building of low fire load, a fire resistance of 1 hour of the elements of the structure would enable the building to withstand a complete burn-out without collapse. Similarly in a building of moderate fire load a fire resistance of 2 hours would be adequate, and for high fire loads 4 hours. A building which can resist a complete burn-out without failure is called "fully protected construction." However, reliance on structural means only, may be uneconomic as adding unduly to building costs, especially if efficient means of extinguishing the fire can be relied upon. The broad question is therefore one of striking the right balance between passive and active defence. In many types of building the elements have lesser grades of fire resistance in relation to the fire load of the contents. These are called "partially protected." The elements of such structures have a defined fire resistance but are not capable of resisting a complete burn-out without other means of defence. Altogether 7 types of construction are established with a gradually decreasing resistance to fire.

On the basis of the grading as described, the report deals in detail with the requirements of the various elements of structure, subdivision of buildings, limitation of openings, height, floor area and cubic capacity, accessibility, etc.

Protection against spread of fire between buildings, i.e., exposure hazard, cannot be based on quantitative considerations, but the various factors which influence the severity of the hazard can be assessed. The measures which can be adopted, either simply or in suitable combination, are

- Space separation of buildings.*
- Requirements in respect of wall and roof coverings.*
- Protection of openings.*
- Sprinkler protection.*
- Fire fighting services.*

The first three of these measures are discussed in detail. Sprinklers are suggested to be the last line of defence in view of the possible damage caused by fire.

The approach of the report to the problem of one- and two-storey dwellings is somewhat different from the preceding considerations. The house of normal construction is regarded as affording reasonable protection against fire, although occasionally the whole structure may be gutted, leaving only the walls and some partitions standing. Since the standard of protection of a 9-in. brick wall is far in excess of the requirements of a dwelling house lower standards are satisfactory for walls of houses commonly referred to as "prefabricated."

The chief aim of fire protection of dwelling houses is the protection of the life of the occupants. Regarding the structure, the report adopts the view that it may prove cheaper and better policy to suffer considerable structural damage on a few occasions than to incur the cost of widespread extra precautions. The essential requirement is that the structure should be such that flame and smoke will not spread so rapidly that the occupants have insufficient time to escape should fire occur. Questions relating to ease of ignition and surface spread arise mainly in connection with the use of combustible wall and ceiling linings. The ease of ignition and rate of spread of fire over the surfaces of certain types of wall boards are such that the occupants may be overcome before they are able to escape. A test has recently been developed by the BRS whereby the susceptibility to fire of various types of wall surfaces can be determined in terms of the rate of spread of fire. (Appendix VII.) On the basis of this test materials are classified in 4 groups and the report recommends certain restrictions regarding the use of materials of lower classes.

As far as exposure hazard is concerned, the external wall of brick and fire retardant roof covering on houses of normal construction reduces the risk to negligible proportions in present-day housing development of 12-16 houses per acre. Restrictions in the spacing of houses and number of houses per block are only necessary if the minimum fire resistance of the walls against internal exposure to fire is less than $\frac{1}{2}$ hour.

A few members of the committee have expressed certain reservations. One of the points raised is the desirability of distinguishing between recommendations which are "permissive" and those which should be made compulsory in future legislation. The suggestion of the report that floor space and cubic capacity of department stores may exceed the limitations contained in the tables (a concession made to comply with practice in provincial cities), is also criticised.

Certain aspects of clause 69 are also open to criticism; the Committee expresses the view that roof trusses are essential for certain buildings where large unobstructed floor areas are required and that it is then almost impossible to protect the members so as to attain any high grade of fire resistance. This point of view completely ignores Shell Roof construction which provides a high degree of fire resistance and is economically practicable for roofing over large unobstructed floor areas.

It is only natural that a report on such an intricate and highly controversial subject as the protection of buildings against fire is open to minor objections. These, however, do not affect the fundamentals of the report, which has established a new approach to the problem and is an altogether admirable piece of work.

18.2 construction: theory ARCHWORK

Constructional Archwork. H. P. Smith. (Corsby, Lockwood & Son, Ltd. 1947, 7s. 6d.)

Elementary theory of arches.

The aim of the author is to enable "practical men" to design arches by simple



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calculations, without the knowledge of calculus. For this reason, nearly all investigations have been made graphically. The view is expressed that calculus is only necessary for those who wish to solve examination questions. It is perfectly true that all the operations usually done by calculus can be replaced by graphical methods, although in most cases these are more cumbersome and less accurate. The main requirement for the designer is, however, clarity, irrespective of the method adopted, whether analytical or graphical. Unless he knows the purpose of each step and the meaning of the various operations involved, he is likely to make mistakes. By following certain prescriptions, without understanding their reasons, the designer cannot feel safe and may get confused. It is confusing to call structures which can withstand tensile stresses "elastic arches" in contrast to arches in which the pressure line must be confined to the middle-third zone since both types of arches are "elastic." The present book does not give a sound basis to those who do not possess the theoretical knowledge of arch design and is not needed by designers acquainted with the theory.

18.3 construction: theory

STRUCTURAL ANALYSIS

Structural Analysis. W. Fisher Cassie. (Longmans, Green & Co., Ltd. 1947. 16s.)

Solution of statistically indeterminate structures.

The book is particularly directed to engineering students and its subject matter is beyond the usual scope of architects. It shows by means of series of graded examples the use of the best known methods of solving statically indeterminate structures.

19.13 construction: details

FOUNDATIONS

The Foundations for the New House of Commons. (The Builder, January 10 and 17, 1947, pp. 54-59, 87-900.)

Details of design and construction of stanchion foundations, pipe subway, retaining wall on the east side and tunnel under Commons Court. Underpinning of existing structures.

The new stanchion foundations were set into the old 5 ft. thick concrete raft and tanked with specially selected asphalt, safe under a pressure of 6 t/sq. ft. The pipe subway is of box section and sits partly on the old raft, partly on the subsoil. In its central portion it necessitated the underpinning of an existing wall. The article describes many details of the interesting and difficult operations.

20.19 construction: complete structures

RECONSTRUCTED BRIDGES

Reconstruction of Bridges in France. (Concrete and Constructional Engineering, March, 1947, pp. 94-97.)

Short description of the reconstruction of four bridges in reinforced concrete. Welded reinforcement used in one, prestressed concrete in two others.

20.20 construction: complete structures

REPAIRS TO COLD STORE

City of Bradford Cold Air Stores. (The Builder, March 28, 1947, pp. 297-8.)

Reconstruction due to damage by frost.

The Bradford Cold Air Stores, having a total cubic capacity of 132,170 cu. ft., built in 1900, must be one of the earliest cold

stores and among the largest provided by municipalities. During the war the temperature had to be kept lower than before. Towards the autumn of 1942 it was noticed that the girders carrying some of the storage platforms within the rooms were out of level, and in one case had risen 4½ in., and it was evident that the short stanchions carrying the girders were moving. When the first of the rooms was emptied, the concrete floor, which had risen, immediately cracked, and on inspection it was found that the drainage trenches under two rooms were a solid mass of ice for about two-thirds of their length. One of the columns, estimated to carry 97 tons, was found to have gone up 2½ in. and the cap was cracked. The ground in places was frozen up to 4 ft. below the finished floor level. It was the expansion through freezing which had caused the rising of the floor.

The article describes the reconstruction of the damaged floor, which was carried out on a daywork basis continuously over a period of two years. It was most essential that a minimum disturbance should be caused to the cold store generally, and this condition rendered the operations particularly difficult, with great inconvenience to the workmen engaged.

20.21 construction: complete structures

PREFAB. MULTI-STOREY BUILDINGS

Prefabrication of Multi-Storey Buildings. Architects, A. C. Hare & Partners. (Building, April, 1947, pp. 130-132.)

Precast concrete beams and columns delivered to site as straight elements, assembled on ground by pre-stressing with non-bonded cables into complete one-storey frames. Frames, floor, partition and outer wall units hoisted by crane. Amount of steel required about one-sixth of that used in a normal steel-framed building. Full scale frame tested under the supervision of BRS.

20.22 construction: complete structures

PREFAB. PERMANENT HOUSES

Two-Storey Permanent Mass-Produced House. By Weir Housing Corporation, Ltd., Coatbridge. A. F. Cargill. (The Architect and Building News, March 28, pp. 217-9.)

Construction details of the Weir "Quality" house, now being mass-produced. Structure in pressed steel. Outer skin of walls and roof decking light gauge steel. Floors t. and g. timber.

23.20 heating and ventilation

COAL DISTRIBUTION, ASH DISPOSAL

Delivering Coal to the American Home. Lester Horne. (Fuel Efficiency News, Feb., 1947. Ministry of Fuel and Power.)

Rail and road transport methods for domestic coal in USA. Also reference to cellar capacity and ash disposal.

This note by a director of a large British coal supplying company is based on a survey of American methods of coal supply. It deals with sizes of train wagons, mechanised methods of loading from train to lorry and lorry design. For architects there is a note of importance on the value of US provisions for easy delivery and adequate storage at the house. The author confirms the general findings of the Report on *Domestic Heating in America* (see 23:3), but adds one point of considerable interest by pointing out the increased attention now being given to capacious ash containers beneath boilers which enable ash disposal to be done only once in several weeks.

The form printed below is to assist readers requiring up-to-date information on building products and services. Complete and post it to *The Architects' Journal*, 9, 11 and 13, Queen Anne's Gate, S.W.1, and the advertisers listed will be asked to supply information direct.

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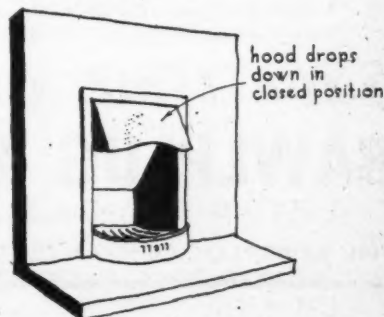
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What is the specific purpose of the hood? Does the fire give more heat with the hood open or closed?

A The adjustable hood that you have shown on your illustration over the fireplace, would, when open, increase the draught and correspondingly increase the heat of the fire.



Announcements

Messrs. Seth-Smith, Monro and Matthew have moved into temporary offices at 7, High Holborn, W.C.1. The late Mr. W. Howard Seth-Smith first commenced practice at 46, Lincoln's Inn Fields in 1884, and Mr. G. W. Collins, one of his employees at that time, still attends regularly at the office. The activities of the College of Surgeons are being extended all along the south side of Lincoln's Inn Fields, and as a result the firm has been compelled to seek other accommodation.

Mr. R. W. Mellor, A.R.I.B.A., has moved to 156, Princes Avenue, Palmers Green, London, N.13 (telephone, Bowes Park 6134) and would be pleased to receive trade catalogues and technical information.

By mutual arrangement, Mr. H. Place, F.A.S.I., has resigned his partnership and interests in the firm of Messrs. Garland and Place, architects and surveyors, 47, Hamlet Court, Hammersmith, W.6, and 82, Bromwich Street, Bolton, Lancs. The practice will continue under the same title as hitherto from the London office only under the entire supervision of Mr. T. C. Garland, L.M.I.A.A., M.INST.R.A., corporate and registered architect and surveyor (telephone, Riverside 6488).

The Register of Builders has been decentralised from 51-54, Gracechurch Street, London. All new applications for registration and communications regarding existing registrations should be made to the office of the Ministry of Works for the Region in which the contractors' permanent office is situated. The addresses are as follows: Government Buildings, Broadway West, Gosforth, Newcastle-on-Tyne, 3;

Government Buildings, Lawnswood, Leeds, 6; Government Buildings, Clifton Boulevard, Lenton, Nottingham; Shaftesbury Road, Brooklands Avenue, Cambridge; 6-19, Cornwall Terrace, Regents Park, London, N.W.1; Whiteknights Road, Earley, Reading; 5, Priory Road, Bristol; Somerset House, 37, Temple Street, Birmingham, 2; 76, Newton Street, Manchester, 1; Forest Road, Hawkenbury, Tunbridge Wells. In Scotland, to the Under Secretary, Scottish Branch Headquarters, Ministry of Works (B.C.E. Reg.), 9, George Street, Edinburgh, 2. In Wales to The Director, Central Office for Wales, Ministry of Works (B.C.E. Reg.), 42, Park Place, Cardiff. Under Defence Regulation 56AB it is necessary for a person carrying on a business as a building or civil engineering contractor to have a Certificate of Registration from the Minister of Works.

Mr. A. H. Bailey, F.S.I., M.R.S.I., A.I.A.R.B., Chartered Quantity Surveyor, has commenced practice at 17, Blenheim Terrace, Leeds, 2, and would be pleased to receive manufacturers' catalogues.

Messrs. Boot's Pure Drug Co., Ltd., of Nottingham, have placed a contract for the reinforced concrete design and construction of their new printing works, in Station Street, Nottingham, with the Trussed Concrete Steel Co., Ltd., of London. The scheme is to the plans of Boot's Chief Architect, Mr. Percy J. Bartlett, F.R.I.B.A. The General Contractors are Messrs. Gilbert Ash, Ltd., of London.

Mr. Geo. A. Saville, 4th-year architectural student, would be glad to receive trade catalogues, etc., at 51, Doncaster Road Selby, Yorkshire, and to be placed on manufacturers' mailing lists.

The Durable Asphalte Co., Ltd., flooring and roofing specialists, have moved their offices to 13a, Gorden Place, Kensington, W.8. Tel.: Western 1231.

Mr. John H. Bath, L.R.I.B.A., A.I.A.A., has taken into partnership Mr. A. W. Dickin, A.I.A.A., and will henceforth practice under the title of Bath and Dickin from 3, Berkeley Square, Bristol, 8. Trade catalogues, etc., would be appreciated.

Mr. John L. Gauldie, A.R.I.B.A., A.M.T.P.I., Chartered Architect and Planning Consultant, has resigned his appointment as architect on the staff of the Department of Health for Scotland, and has commenced practice at 21, Castle Street, Edinburgh, 2, Telephone 21726, where he will be glad to receive trade catalogues, etc.

Mr. Mordecai Pearlman, A.R.I.B.A., formerly of Sir John Brown, A. E. Henson and Partners, is now in practice on his own account. His temporary address is 205, Pavilion Road, Sloane Street, S.W.1. Telephone: Sloane 9477.

Mr. J. Hurst, A.R.I.B.A., formerly Senior Assistant Architect to the West Riding County Council, has been appointed Deputy County Architect to the North Riding County Council. During the war Mr. Hurst served with the Royal Engineers in Persia and Iraq Forces as Staff Captain.

Messrs. Gallannaugh, Nicholls and Walls, Chartered Architects, Olivers Chambers, Frankfort Street, Plymouth, would be glad to receive trade catalogues.

Mr. R. S. Garrað, F.A.B.S.S., A.M.I.B.E., has commenced practice at 108, Ashford Avenue, Hayes, Middlesex, where he would be pleased to receive trade literature, catalogues, information sheets, etc.

"THE BIGGEST PROBLEM IS THE ALMOST UNIVERSAL SHORTAGE OF MAN POWER"

Economic White Paper, January, 1947

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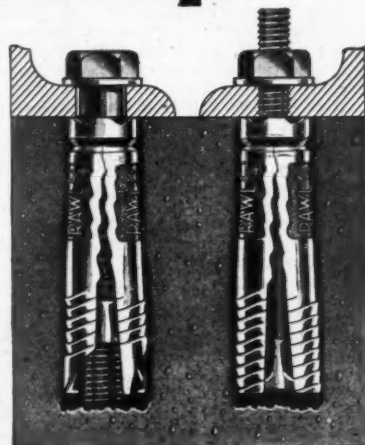
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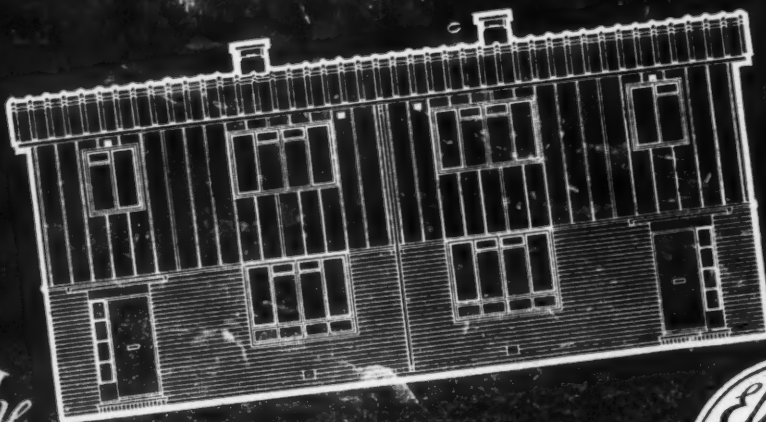
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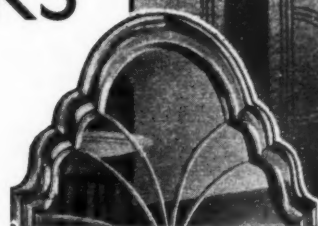
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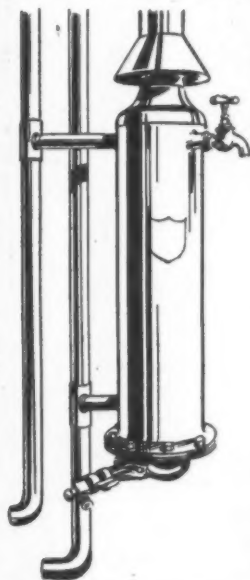


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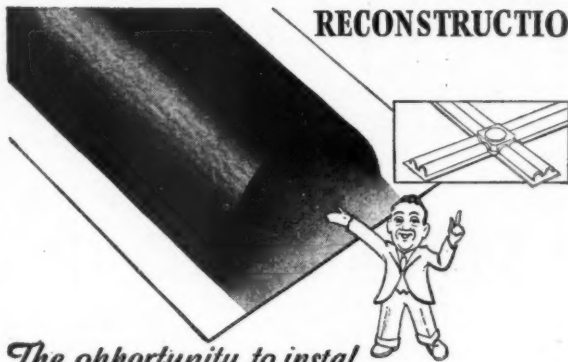
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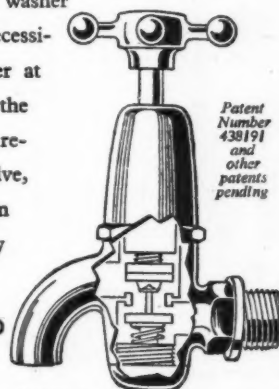
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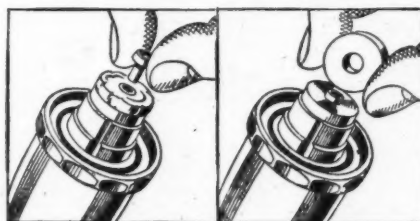
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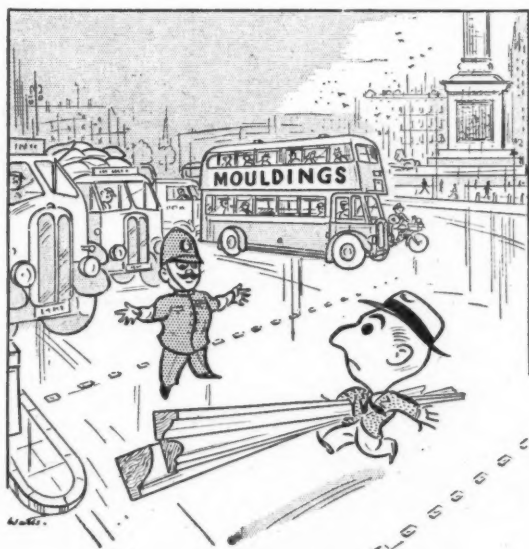
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Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

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THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Address: 75, MATON PLACE, LONDON, S.W.1. TEL. BLOANE 5618. 991

LONDON COUNTY COUNCIL.
VACANCIES FOR PLANNING STAFF IN THE ARCHITECT'S DEPARTMENT FOR WORK ON THE COUNTY OF LONDON PLAN.

Applications are invited for a number of positions in the following grades:—
PLANNING OFFICER (Grade III), up to £700 a year.

TECHNICAL ASSISTANT, up to £580 a year. Commencing rate of pay will be according to qualifications and experience.

There will be opportunities for competing, on merit, in due course for permanent appointment and for positions in the higher grades on the occurrence of vacancies. Successful candidates will be subject to the Council's Superannuation and Provident Fund.

The planning work involved includes assistance in the detailed development of Reconstruction Area schemes, and the preparation of revised zoning plans.

A knowledge of current town planning legislation is desirable in all cases, and candidates for Grade III positions should possess architectural or surveying or town planning qualifications.

Other things being equal, preference will be given to candidates registered under the Disabled Persons (Employment) Act, 1944, and ex-Service men and women will also receive special consideration.

Application should be made to the Architect to the Council, County Hall, Westminster Bridge, S.E.1, for forms of application (enclosing stamped addressed envelope), returnable not later than ten days from this date.

Canvassing disqualifies. 983

CITY OF COVENTRY.
Applications are invited for the following whole-time appointments on the permanent staff of the City Architectural Department:—
TWO ASSISTANT ARCHITECTS.

Salary Grade A.P.T.V., commencing at £460 per annum and rising by two annual increments of £15 and one of £30 to £510 per annum.

Candidates should be Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications. It is likely that one of these assistants would be involved in the redevelopment scheme, and planning experience would be an advantage.

Salary increments are subject to satisfactory service. The above salaries are exclusive of the Council's cost-of-living bonus, which may vary, but which at present amounts to 23s. per week.

The posts are subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Act, as amended in regard to annuities to widows by the Coventry Corporation Act, 1936, and a satisfactory certificate will be required from the Council's medical referee. The successful applicants will be required to contribute to the Coventry Municipal Officers', Widows' and Orphans' Pension Fund.

Applications must be made on the forms obtainable from the undersigned, and should be returned completed, together with copies of not more than two recent testimonials, or names of two persons to whom reference may be made, not later than Monday the 19th May, 1947.

Canvassing, directly or indirectly, will be a disqualification.

D. E. E. GIBSON, M.A., A.R.I.B.A., A.M.T.P.I.,
City Architect
1a, Warwick Row, Coventry.
Date as issue. 836

BOROUGH OF NEWBURY.

BOROUGH SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of **ARCHITECTURAL ASSISTANT**, in A.P.T. Grade IV. Preference will be given to candidates with housing experience and who have A.R.I.B.A. or similar qualifications.

Applications, stating age, qualifications, experience, previous appointments, and accompanied by copies of two recent testimonials, should be sent to the undersigned not later than 17th May, 1947.

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

V. W. HULTON,
Borough Surveyor and Water Engineer.
29th April, 1947. 885

LONDON COUNTY COUNCIL.
Required in the Secondary Technical School of the Brixton School of Building, Ferndale Road, S.W.4, as soon as possible, one Permanent and one Temporary **TEACHER OF SCIENCE** (Physics, Chemistry, Mechanics). Applicants should be science graduates of a British University, or hold other suitable qualification. Teaching experience desirable. Experience in industry and interest in the teaching of Building Science in senior courses will be a recommendation. Burnham Scale salaries, plus London allowance. Application forms and further particulars (stamped addressed foolscap envelope necessary) from the Principal, at the School, returnable by 31st May, 1947. (1392) 886

BANSTEAD URBAN DISTRICT COUNCIL.
Applications are invited for the appointment of Assistant Architect, on permanent staff, Grade IV (A.P. & T. Division) National Scale of Salaries including London weighting £440 p.a. rising to £485 p.a. Candidates should be Regd. Architects preferably holding A.R.I.B.A. or equivalent qualification. Experience of Local Authority housing schemes and good general experience desirable.

In addition to salary stated war bonus, at present £59 16s. p.a. for a man, £48 12s. p.a. for a woman, will be paid.

Forms of application to be obtained from the undersigned.

Last day for receipt of applications 19th May, 1947.

Canvassing directly or indirectly will disqualify.

F. H. WILTSHIRE,
Clerk of the Council.
The Council House, Brighton Road,
Banstead, Surrey. 815

HERTFORDSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF ASSISTANT ARCHITECTS AND QUANTITY SURVEYORS.

Applications are invited for the following appointments to the permanent staff:

A cost-of-living bonus, at present £59 16s. per annum, is to be added to the salary in each case.

(a) 3 SENIOR ASSISTANT ARCHITECTS. Salary £575-£650 p.a.

(b) 15 ASSISTANT ARCHITECTS. Salary £460-510 p.a.

(c) 4 ASSISTANT ARCHITECTS. Salary £360-£405 p.a.

One of the appointments under (b) is for an Architect or Surveyor experienced in land and building surveying.

(d) 6 ASSISTANT QUANTITY SURVEYORS. Salary £460-510 p.a.

(e) 4 ASSISTANT QUANTITY SURVEYORS. Salary £420-£465 p.a.

Candidates should state their age, training, qualifications and experience and this information, together with three references, should reach the undersigned not later than 15th May, 1947.

ELTON LONGMORE,
Clerk of the County Council.
County Hall,
Hertford, Herts. 851

COUNTY BOROUGH OF EAST HAM.
APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the following appointments on the Architectural Staff of the Borough Engineer's Department:—

1. **ARCHITECTURAL ASSISTANT—Grade V.** Candidates must be Associate Members of the Royal Institute of British Architects or hold an equivalent qualification, and have a general knowledge and experience of architectural work, preferably in the service of a local authority. Salary £480 to £530 per annum.

2. **ARCHITECTURAL ASSISTANT—Grade IV.** The qualifications required are as above. Salary £440 to £485 per annum.

The above appointments are on the permanent staff of the Council.

3. **TEMPORARY JUNIOR ARCHITECTURAL ASSISTANT—Grade I.** Preference will be given to candidates who have passed the Intermediate Examination of the Royal Institute of British Architects or hold an equivalent qualification, and have general knowledge and experience of architectural work. Salary £350 to £395 per annum.

The salaries quoted above include the London Allowance. War bonus (at present £59 16s. per annum in the case of men over 21) will be paid in addition.

The appointments will be subject to the Council's conditions of service in force from time to time for permanent or temporary staff, as the case may be, and to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications on forms obtainable from the undersigned must be delivered to me, together with copies of three recent testimonials, by not later than Monday, the 19th May, 1947. Applicants should state the position for which they desire to apply.

Canvassing will disqualify.

(Signed) H. A. EDWARDS,
Town Clerk.
Town Hall, East Ham, E.6.
April, 1947. 835

RHYL URBAN DISTRICT COUNCIL.
APPOINTMENT OF DEPUTY ENGINEER AND SURVEYOR.

Applications are invited for the above appointment, at a salary within the range of Grades A.P.T. VII and VIII of the National Scales, £535 to £700 maximum; commencing according to qualifications and experience (plus cost-of-living bonus, at present £59 16s. per annum).

Applicants (not exceeding 45 years of age) should possess a professional qualification (applicable to the appointment). Preference will be given to persons who are Registered Architects, and experienced in the design, construction, and layout of Promenades and Buildings peculiar to seaside resorts.

The appointment, which is subject to the National Scheme of Conditions of Service, and to the provisions of the Local Government Superannuation Act, 1937, offers scope for an energetic and competent official.

Candidates must comply with the following conditions:—(a) State age; (b) give particulars of education and qualifications; (c) quote experience with particulars of past and present appointments; (d) disclose whether related to any member or senior officer of the Council; (e) send copies of three recent testimonials (originals will not be returned).

Applications, endorsed "Deputy Engineer," must be delivered to the undersigned by not later than first post on 19th May, 1947.

A. H. EDWARDS,
Clerk of the Council.
Clerk's Office, Rhyl. 875

COUNTY OF LINCOLN—PARTS OF

KESTOVEN COUNTY ARCHITECTS' DEPARTMENT.

Applications are invited for the appointment of TWO **ARCHITECTURAL ASSISTANTS** in the above Department. Experience in Education and General County work is desirable.

Salary will be in accordance with National Scales (A.P.T. Division, Grades V and VI), i.e., £460, rising by annual increments of £15 and £20 to a maximum of £600 per annum, plus cost-of-living bonus of £59 16s. per annum on the Council's scale. Travelling and subsistence allowances will also be paid.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, to satisfactory medical certificates, and to termination by one month's notice in writing on either side.

Applications, stating age, experience, and qualifications, present appointment and salary, together with copies of two recent testimonials, should be received by the undersigned not later than the 17th May, 1947. Canvassing, either directly or indirectly, will disqualify.

J. E. BLOW,
Clerk of the County Council.
County Offices, Sleaford, Lincs. 877

CROWN AGENTS FOR THE COLONIES.

Applications from qualified candidates are invited for the following post:—

ASSISTANT DRAUGHTSMAN required by the Trinidad Government Public Works Department for one tour of two years, with prospects of permanency. Commencing salary according to age, experience, and war service in the scale \$72,400, rising to \$72,880, plus cost-of-living allowance, which on a salary of \$72,400 amounts to \$7364 a year (\$74,800 equals £1). Free passages. Candidates must have had at least seven years' experience as architectural draughtsmen, be capable of preparing working drawings and details for public buildings, and be familiar with all types of modern construction. They should possess aptitude for architectural design and planning. Ability to design simple structures in steel and reinforced concrete is essential. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/12864 on both letter and envelope. 879

COUNTY BOROUGH OF DERBY.

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointment on the permanent staff, in accordance with the National Scale of Salaries:—

ONE JUNIOR ARCHITECT (Grade I). Salary, £330-£375 per annum, plus cost-of-living bonus, at present £59 16s. (male).

Applicants should have passed the Preliminary Examinations of the R.I.B.A., and have had experience in general Architectural work.

The appointment will be subject to one month's notice in writing on either side, and to the terms of the National Joint Council's Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination.

Forms of application may be obtained from Thos. W. East, F.R.I.B.A., Borough Architect, The Council House, Corporation Street, Derby, and should be returned when completed, together with copies of two recent testimonials, to arrive not later than Friday, 16th May, 1947.

Canvassing, directly or indirectly, will be a disqualification.

C. ASHTON,
Town Clerk.
Market Place, Derby. 885

SITTINGBOURNE AND MILTON URBAN DISTRICT COUNCIL. APPOINTMENT OF ARCHITECTURAL ASSISTANT.

The above Council invite applications for the appointment of Architectural Assistant, in the Engineer and Surveyor's Department, at a salary within Grade IV of the A.P. and T. Division of the National Scale (£420 to £465 per annum), plus cost-of-living bonus (at present £59 16s. per annum).

Candidates should be Associate Members of the Royal Institute of British Architects, or hold equal qualifications, and should have good experience in general Architectural work, particularly in the layout of estates and the design of houses.

Applications, endorsed "Architectural Assistant," stating age, qualifications and experience, past and present appointments, accompanied by copies of two recent testimonials, must be sent to the undersigned not later than Wednesday, 14th May, 1947.

G. H. POTTER,

Clerk to the Council.

Town Hall, Sittingbourne.
26th April, 1947. 871

BOROUGH OF HARTLEPOOL. APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant, in the Borough Engineer's Department, at a salary in accordance with Grade III of the A.P. and T. Division of the National Scales, viz., £390×£15 to £435 per annum, plus cost-of-living bonus (at present £59 16s. per annum).

Candidates must have had previous experience of work in connection with municipal housing estates.

Applications, endorsed "Architectural Assistant," stating age, qualifications and experience, and accompanied by the names of three persons to whom reference may be made, must reach the undersigned not later than Friday, the 23rd May, 1947.

In the event of the successful applicant being married the Council will provide housing accommodation.

ARTHUR USHER,

Town Clerk.

Borough Buildings, Hartlepool. 859

COUNTY BOROUGH OF WALSALE. PUBLIC WORKS DEPARTMENT.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT, at a salary of £460 per annum, rising to £510 per annum (Grade V of the Administrative, Professional and Technical Division of the National Joint Council Scales of Salaries), plus war bonus, at present £59 16s. per annum.

Candidates must be Associates of the R.I.B.A., and must have had experience in Housing, Schools, and general Architectural work.

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

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, must reach the undersigned not later than Monday, 19th May, 1947.

Housing accommodation can be made available for the successful applicant.

M. E. HABERSON,

Borough Engineer and Surveyor.

Council House, Walsall.
24th April, 1947. 862

THE LONDON COUNTY COUNCIL

invites applications from ARCHITECTS in private practice for inclusion on a Panel with a view to acting in a professional capacity for (a) reconstruction works at the Council's school premises, and (b) the erection of new schools. The works are of an urgent character, and will require to be given immediate attention.

Applications should be forwarded to the Clerk of the Council, The County Hall, Westminster Bridge, S.E.1, not later than Saturday, 7th June, 1947, and should be accompanied by brief particulars of qualifications and experience. (1328)

865

CROWN AGENTS FOR THE COLONIES.

Applications from qualified candidates are invited for the following post:—

QUANTITY SURVEYOR required by the Iraqi State Railways, for a tour of three years in the first instance. Salary between I.D. 70 and 90 a month, according to qualifications and experience, plus high cost of living allowance between I.D. 18 and 24 a month. (Iraq Dinar 1 equals £1). Free passages.

Provident fund. Candidates should be Chartered Quantity Surveyors or possess similar qualifications. They must have had experience in a Quantity Surveyor's office, be competent to undertake all operations up to the final preparation of Bills of Quantities, with experience in the measurement of extras and omissions and the final adjustment of contractors' accounts. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/17612 on both letter and envelope. 889

WANDSWORTH BOROUGH COUNCIL. ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of temporary Architectural Assistants, in the Borough Architect's Department.

(a) A.P.T., Grade V—£480-£530 per annum (one post).

(b) A.P.T., Grade IV—£440-£485 per annum (one post).

The foregoing salaries include London weighting and, in addition, a cost-of-living bonus, at present £59 16s. per annum, will be payable.

Applicants for (a) above should be members of the Royal Institute of British Architects, and for (b) have passed at least the Intermediate Examination of the R.I.B.A.

Candidates should have had good professional training and experience in housing design and development and general Architectural work.

The appointments are subject to (a) one month's notice on either side, (b) the provisions of the Wandsworth Borough Council (Superannuation) Acts, and to the passing of a medical examination by a Medical Examiner nominated by the Council.

Canvassing, directly or indirectly, will disqualify, and applicants must disclose whether to their knowledge they are related to any member of, or holder of any senior office under, the Council.

Applications, in envelopes endorsed as to the appointment applied for, stating age, past and present appointments, details of qualifications and experience, together with particulars of two persons to whom reference can be made, and addressed to Mr. W. H. Beeley, A.R.I.B.A., E.S.I. Borough Architect, Municipal Buildings, Wandsworth, must be received by him not later than 24th May, 1947.

R. H. JERMAN,

Town Clerk.

Municipal Buildings, Wandsworth, S.W.18.
14th April, 1947. 860

ARCHITECTURAL ASSISTANTS REQUIRED BY MINISTRY OF WORKS.

Applications are invited to fill vacancies for Drawing Office duties in Risleigh, Warrington. The posts are in an unestablished capacity, and the inclusive salary is up to £550 per annum, according to qualifications and experience. Applicants should have had a recognised full period of training, and experience with a practising Architect or Local Authority, etc.

Apply in writing, giving age, details of training and experience, to Chief Architect, W.G.10, Ministry of Works, Abell House, John Islip Street, London, S.W.1. 806

COUNTY BOROUGH OF BARNSLEY. APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant on the permanent establishment of the Borough Engineer and Surveyor's Department.

The salary will be in accordance with A.P.T., Grade III, of the National Scales of Salaries, commencing at £390 per annum, rising to £435 per annum, plus cost-of-living bonus, at present £59 16s.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the passing of a medical examination, and will be terminable by one month's notice on either side. The appointment will also be subject to the general conditions of service within the Corporation, as varied from time to time.

Applications, stating age, qualifications and experience, together with copies of two testimonials, should reach the Borough Engineer and Surveyor, Town Hall, Barnsley, not later than the 17th May, 1947.

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

A. E. GILFILLAN,

Town Clerk.

Town Hall, Barnsley. 868

BOROUGH OF ASHTON-UNDER-LYNE. APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited from suitably qualified applicants for the appointment of an Architectural Assistant (A.P.T., Grade III), salary £390-£435, plus cost-of-living bonus, at present £59 16s. per annum.

Applicants should have experience in general Architectural work, house planning and design, including the preparation of working drawings and specifications.

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

The Corporation may be able to offer housing accommodation to the successful applicant within a reasonable period.

Applications, stating age, qualifications and experience, together with the names and addresses of two persons to whom reference can be made, to be forwarded to the undersigned not later than 16th May, 1947.

DONALD W. BROMLEY,

Town Clerk.

Town Hall, Ashton-under-Lyne.
24th April, 1947. 866

LONDON COUNTY COUNCIL. VACANCIES FOR ARCHITECTURAL STAFF IN THE ARCHITECT'S DEPARTMENT.

Applications are invited for a number of positions in the following grades:—

ARCHITECT (Grade III), £550-£700 a year (professional qualifications required).

TECHNICAL ASSISTANT (Section A), £440-£580 a year.

TECHNICAL ASSISTANT (Section B), Up to 167s. 6d. per week.

Commencing rates will be according to qualifications and experience.

Required for work in connection with the design and erection of new schools and other buildings, and structural alterations to existing buildings.

A number of technical assistants also required for the preparation of specifications and estimates for works of cleaning and painting, war damage repairs, and alterations at schools and other buildings.

Successful candidates are required to contribute to the Council's Superannuation and Provident Fund, and will be eligible for permanent appointment and for advancement to higher positions, according to merit.

Other things being equal, ex-Service men and women will receive special consideration.

Application forms may be obtained from the Architect to the Council, County Hall, Westminster Bridge, London, S.E.1, enclosing stamped addressed foolscap envelope.

Canvassing disqualifies. (1405) 891

SURREY COUNTY COUNCIL. EDUCATION COMMITTEE. GUILDFORD COUNTY TECHNICAL COLLEGE (STOKE PARK, GUILDFORD).

Applications are invited for Two full-time LECTURERS in the BUILDING DEPARTMENT.

(1) For one post candidates will be required to teach Mathematics, Mechanics and Building Science, principally with full-time senior students up to National Diploma standard. A degree or equivalent professional qualification is required, together with industrial or teaching experience.

(2) For the other post candidates will be required to teach Building Construction, Building Geometry and Land Surveying. Ability to offer one of the following additional subjects will be an advantage:—Quantity Surveying, Structural Engineering or Reinforced Concrete. An appropriate professional qualification is required, together with industrial experience, and preferably teaching experience.

In both cases salary will be in accordance with the Burnham (Technical) Scale, with appropriate allowances. Forms of application and further particulars may be obtained from the Principal (on receipt of a stamped addressed foolscap envelope). Candidates should state for which post they wish to be considered. 892

SLOUGH ESTATES, LTD., require a CHIEF SURVEYOR. A house at Slough (with garage) is included in the emoluments.

Applicant will be responsible—assisted by an adequate staff—for the development of the Company's Estates, involving factory design, land, and building surveying.

Advanced knowledge of modern factory and industrial design and construction, including steel-frame and R/C construction, is essential. In addition he must have had some experience in supervising the preparation of Building Quantities and preparing approximate estimates of cost of building work.

A qualification in Architecture is desirable.

He must also have had such experience as will enable him to direct theodolite levelling and making surveys, and to supervise the construction and maintenance of buildings, railways and sidings, roads, sewers and similar services.

Age: 35-45 years.

Duties to commence on 1st August, 1947.

Applicants should send full details of experience, qualifications, and salary to Messrs. Welch & Lander, F.F.R.I.B.A., 38, Gloucester Place, Portman Square, W.1, on or before 22nd May, 1947. 891

CITY OF WAKEFIELD. APPOINTMENT OF QUANTITY SURVEYOR.

Applications are invited for the position of Quantity Surveyor, in the City Engineer's department, at a salary of £460 per annum, rising by three annual increments of £15 per annum to a maximum of £510 per annum, plus cost-of-living bonus, which at present is at the rate of £59 16s. per annum.

Candidates must be capable of preparing specifications, taking off, abstracting and billing of quantities, and of adjusting and settling contractors' accounts, for building works.

The appointment will be subject to the Local Government Superannuation Act, 1937, and the selected applicant must pass a medical examination.

Applications (on the prescribed form to be obtained from the City Engineer, Town Hall, Wakefield), stating age and full particulars of experience, and enclosing two copies of recent testimonials, should be sent to the undersigned not later than 19th May, 1947.

W. S. DES FORGES,

Town Clerk.

Town Hall, Wakefield.
24th April, 1947. 864

CROWN AGENTS FOR THE COLONIES.
Applications from qualified candidates are invited for the following post:—
DRAUGHTSMAN required by the Government of Uganda Public Works Department for three years, with prospect of permanency. Salary according to qualifications, experience, and war service, in the scale £372, rising to £500 a year, plus cost-of-living allowance, which on salary of £372 is between £45 and £166, according to number of dependants. Outfit allowance £30. Free passages and quarters. Candidates must be rapid and accurate architectural draughtsmen, with considerable experience of the design and construction of public buildings. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/12940 on both letter and envelope. 890

Partnership

Size lines or under, 10s.; each additional line, 1s. 6d.

PARTNERSHIP.—Old-established firm of Architects, in large rural practice, offers post to young qualified Architect, with view to Partnership; sound prospects for energetic man; references required. Box 898.

Architectural Appointments Vacant

Four lines or under, 5s.; each additional line, 1s. 6d.

ARCHITECT required for busy Office within 30 miles of London, with growing practice in Home Counties; must be capable of supervising staff; good opportunity for man with initiative; state qualifications, experience, and salary required; employer can assist to provide housing accommodation. Box 770.

REQUIRED, for New Factory Buildings, Quantity Surveying, and the necessary Civil Engineering work, a fully experienced **SURVEYOR AND BUILDING DRAUGHTSMAN**; capable of making the necessary drawings and specifications; the factory is in the South Wales area, and accommodation is available for a single man; duration of appointment approximately two years. Applications, giving full details of training and experience, stating salary required and when available, should be made in the first instance to Box 861.

INTERNATIONAL Correspondence Schools require for immediate full-time employment **JUNIOR ARCHITECTURAL ASSISTANTS** (either sex), qualified by R.I.B.A. examinations. Write or 'phone (Hol. 3971), stating age, experience and salary required, to Director of Instruction, International Correspondence Schools, 71, Kingsway, W.C.2. 785

ARCHITECTURAL ASSISTANT required for Branch Office in East Dereham, Norfolk; intermediate standard; good draughtsman; two similar **ASSISTANTS** required for main office at King's Lynn; in each case send full details of age, experience, and salary required, to Harold Marsh, L.R.I.B.A., 14, King Street, King's Lynn. 811

REQUIRED IMMEDIATELY, in country office, Cotswold area, Chief Assistant; qualified or equal to in ability, and experienced in all duties; able to take charge of jobs. Living accommodation available. State qualifications, etc., and salary required, with testimonials. Box 840.

SENIOR & JUNIOR ARCHITECTURAL ASSISTANTS required in expanding practice. R.I.B.A. Final and Intermediate or equivalent standard required. Good salaries and prospects. Apply, giving details of training, experience and salary required to Anthony Steel & Owen, A.A.R.I.B.A., Cogan Chambers, Bowl-alley Lane, Kingston-upon-Hull. 817

COMPETENT JUNIOR wanted about Intermediate standard and some experience of outside measuring. F. J. Lenton & Partners, Chartered Architects, Stamford, Lincs. 820

ARCHITECTURAL ASSISTANT required immediately in busy London office. Working drawings, details, surveys, specifications and supervision of work. State age, qualifications, experience and salary required to Box 854.

ARCHITECT'S ASSISTANT with experience in industrial and commercial building required in London Staff Architect's office. Age 27-38. Salary £425-£500, according to experience. Reply with list of appointments and experience in chronological order to Staff Architect, 150, Goswell Road, London, E.C.1. 839

ARCHITECTURAL ASSISTANT required in general practice in Somerset; R.I.B.A. Intermediate standard; good draughtsmanship and experience essential; excellent prospects; salary by arrangement. Box 869.

ARCHITECTURAL DRAUGHTSMAN required, with good knowledge of construction; work entails the planning of new buildings as well as the reconstruction of old ones; salary offered, including war bonus, is £450 per annum. Applications, giving full details of qualifications and experience, should be addressed to the Personnel Officer, Birmingham Co-operative Society, Ltd., High Street, Birmingham, 4. 863

JUNIOR ARCHITECTURAL ASSISTANT required; should be interested in contemporary architectural exhibition and industrial design; some constructional experience and the ability to detail a job thoroughly essential; salary, £6 to £8 per week, according to experience. Apply in writing, Misha Black, Design Research Unit, 37, Park Street, W.1. 870

ARCHITECTURAL ASSISTANTS, Inter. R.I.B.A. standard, required immediately for interesting work in the Midlands office of London Architect; salary, £250 to £400 p.a. Apply F. Leslie Haaker, 18, Seymour Street, London, W.1, or telephone Birmingham Sheldon 2461. 872

SENIOR ARCHITECTURAL ASSISTANT required, having sound general office experience, and complete knowledge of engineering services, building construction, supervision, etc., on large scale high-class work. Reply, stating age, qualifications, experience, and salary required, to Herbert J. Rowse, F.R.I.B.A., Martins Bank Building, Liverpool, 2. 873

TWO ARCHITECTURAL ASSISTANTS wanted in Cambridge office; salary according to ability, up to £400 per annum. Full details to D. C. Denton-Smith, L.R.I.B.A., 40, Regent Street, Cambridge. 876

THE following ASSISTANTS required for London Architect's office:—Junior Architectural Assistant; inter. standard; salary offered, £250 p.a. Surveyor's Assistant, for schedules of dilapidations and compensation claims; salary offered, £400 p.a. Write, giving full details, to Atherton & Brenchley, 36, Paddington Street, Baker Street, W.1. 878

CHARTERED ARCHITECT wanted, for Surrey office of well-known London Land Agents and Surveyors; aged 34/45; experienced in domestic and ecclesiastical work; permanent post and good progressive salary to right man. Write, stating age, experience, and salary required, to Box 880.

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QUALIFIED ARCHITECT required by Building and Civil Engineering Contractors for British West Africa; must have had practical experience in design and layout of Houses, Factories and Commercial Buildings; age limit 35 years. Write, giving full details of qualifications and previous experience. Box 882.

ARCHITECTURAL ASSISTANTS required; experience in housing, hospital or laboratory work an advantage; good salary according to experience; 5-day week. Apply in writing, with full particulars. Lanchester & Lodge, Architects, 10, Woburn Square, W.C.1. 893

ARCHITECT'S ASSISTANT required urgently in established Architect's office; able to prepare working drawings and sketches for large Housing Schemes and other important commercial work; salary, 8 to 9 guineas per week, according to qualifications. Box 894.

Architectural Appointments Wanted

GROUP of experienced Architectural Assistants offer their spare-time services in all types of Architectural and Engineering projects, survey, specifications, models, etc. 40, Pilch Lane East, Roby, near Liverpool. 314

ASSOCIATE, with valuable connection for future work, now maintained by a retaining fee, would like to join West End firm of Architects as Assistant, with a view to Partnership arrangement when contracts materialise. Box 315.

SENIOR ASSISTANT requires position as Chief Assistant; wide experience in commercial buildings, factories and housing; competent in modern design and construction; good draughtsman; accustomed to take full charge. Box 308.

ASSISTANT (34), degree Polish School of Architecture, Liverpool School of Architecture, 6 months' experience in English office, desires change. Box 310.

YOUNG Lady requires position in Architect's office; secretarial work, surveys and plotting, tracing and colouring; 3 years' experience; provinces preferred. Box 309.

A. R.I.B.A. requires spare-time work; London or N.W. Kent area. Box 311.

STUDENT, Inter. R.I.B.A. standard, desires work in Architect's office during the summer vacation in Gloucester or the West Country. Box 312.

YOUTH, 15 years of age, now taking the First Year National Certificate, wishing for a post in Architectural Draughtsman's office, in Birmingham area. Apply Box 313.

ARCHITECT'S ASSISTANT (31), 6 years' experience, requires position; Cheshire, Lancashire or N.W. England; studying R.I.B.A. final; salary £420. Box 317.

ASSISTANT (21 years), wide experience, seeks three days' work per week in Essex or Suffolk; own car; salary, or fees by arrangement. Box 316.

Other Appointments Wanted

Four lines or under, 2s. 6d.; each additional line, 1s.

TYPEWRITING undertaken at home; Bills of Quantities, Specifications, Stencils, etc.; neat accurate work. Write Advertiser, 61, Curzon Road, Ealing, W.5. 599

EXPERIENCED SURVEYOR offers part-time assistance in own office; war damage surveys, specifications and schedules, working drawings, site supervision, etc. Box 804.

TYPEWRITING undertaken, bills of quantities, specifications, etc.; neat, accurate work. Write, Advertiser, 264, Hampton Road, Ilford, Essex. 849

DIP. ARCH., willing to undertake any architectural work in own home. Telephone AMB 2923, or Box 887.

SHORTHAND-TYPIST / PRIVATE SECRETARY, with considerable experience in Architect's office, seeks re-engagement. Please write Box 874.

SURVEYOR offers part-time assistance in own office; Quantities, Measuring, Final Accounts, Dilapidations, War Damage, Land and Building Surveys, Levelling, etc.; own car. Box 596.

ARCHITECT (21 years), wide experience all branches, seeks free lance or part time work in Essex or Suffolk; own car; fees by agreement. Box 887.

ARCHITECT offers assistance to Architects by undertaking Surveys anywhere in Greater London area. Box 897.

For Sale

Four lines or under, 5s.; each additional line, 1s. 6d.

FOR SALE—Lucigraph Photographic Copying Machine, No. 4; maximum size of print made 18 in. by 24 in.; in good working order; may be viewed or demonstrated. Reply Box 2081, Armstrong-Warden, Ltd., 69, New Oxford Street, London, W.C.1. 888

FOR SALE—Three screw, 14 in., Stanley "Engineer" Dumpy Level, with quick setting arrangement; 2 diaphragms, mahogany case and tripod; in new condition; seen King's Lynn; what offers. Box 896.

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Four lines or under, 5s.; each additional line, 1s. 6d.

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TYPING AND DUPLICATING—Orders executed promptly by fully experienced staff; Bills of Quantities, Specifications and Articles of Agreement a speciality and guaranteed. Write B.M.T. & Co., 1a, Churchyard, Hitchin, Herts. 781

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REGULAR supplies of the American "Architectural Forum" can be had by applying to me, Joseph Murphy, 4, Clare Street, Dublin. 792

WANTED—Large Stainless Steel Sink; 7 ft. upwards. Phelps, 6/7, Datchelor Place, Camberwell, S.E.5. Phone: Rodney 4071. 798

CHARTERED STRUCTURAL ENGINEERS, with wide experience in the design of reinforced concrete and steel structures of all types, are prepared to take on work involving the design, detailing, quantities, estimating, and specifications; reinforced concrete bar bending schedules prepared from working drawings; assistance also offered in the initial planning of any type of structure, together with electrical and mechanical requirements. 867

THE Commonwealth Experimental Building Station, Australia, would be glad to receive Manufacturer's Trade Catalogues and Literature on Building Materials, etc., which should be addressed to the above, at Room 608, Australia House, Strand, W.C.2. 884

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EX-SERVICE STUDENT urgently requires "Elements of Quantity Surveying," by Willis. Price and particulars to Box 895.

Educational Announcements

Four lines or under, 5s.; each additional line, 1s. 6d.

R.I.B.A. QUALIFYING EXAMINATIONS. Mr. C. W. Box, F.R.I.B.A., M.R.San.I. Courses of Correspondence and Personal to Studio, 115, Gower St., London, W.C.1. (Tel.: Boston 3908).

R.I.B.A. and T.P. INST. EXAMS. Private Courses of Tuition by correspondence arranged by Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I. Tutor, 212, Buxton Road, N.W.1. Tel.: BUS. 7766.

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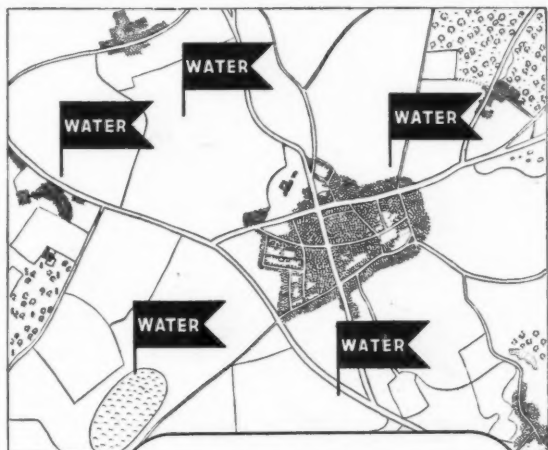
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