

# THE ARCHITECTS' JOURNAL



## standard contents

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

## NEWS and COMMENT

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## PHYSICAL PLANNING SUPPLEMENT

## CURRENT BUILDINGS

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Wanted and Vacant

★ 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
ICW	Institute of Clayworkers. 4, Vernon Place, W.C.1. Chancery 6258
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, Federal House, 20A, Cedars Road, Clapham, S.W.4. Whitehall 2881/2/3
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1. Whitehall 2881/2/3
NHBR	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
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1. Welbeck 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1. Whitehall 5322
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
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101
SBPM	Society of British Paint Manufacturers. 20, Piccadilly, London, W.1. Regent 6347
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	Structural Insulation Association. 14, Moorgate, London, E.C.2. Central 4444
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. Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. Holborn 2646
SPAB	
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

No. 2761]

[Vol. 107

THE ARCHITECTURAL PRESS  
9, 11 and 13, Queen Anne's Gate, Westminster,  
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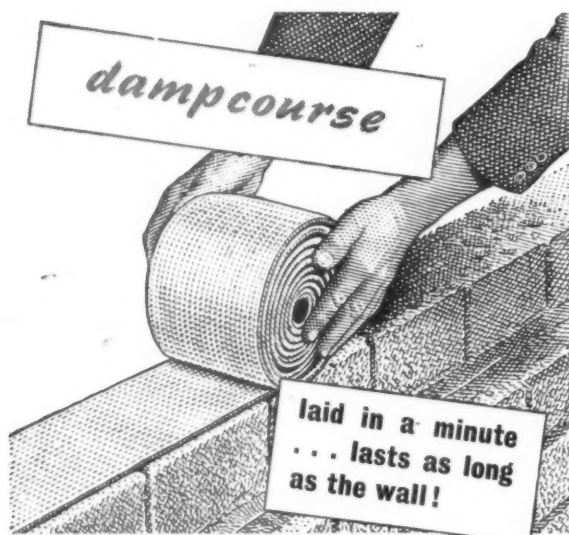
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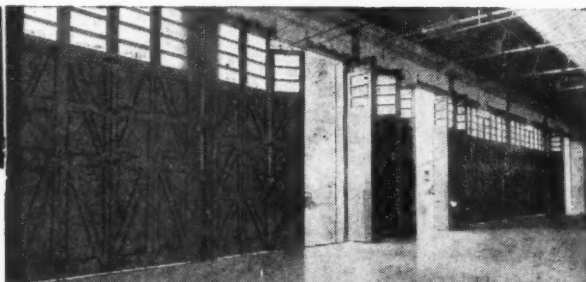
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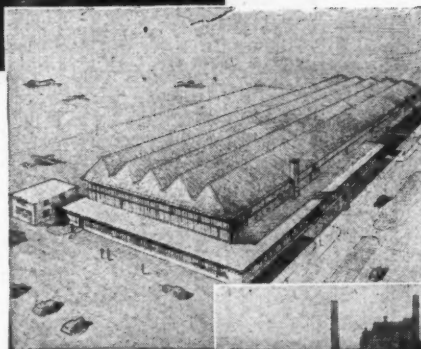
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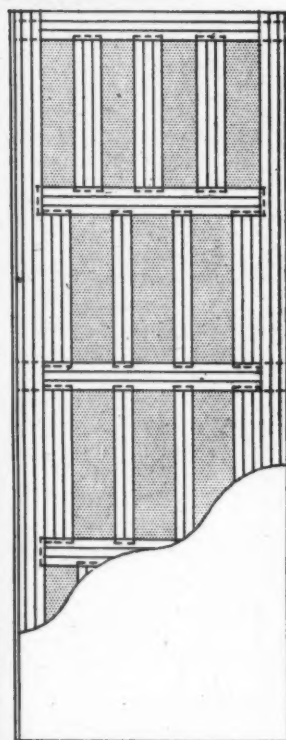
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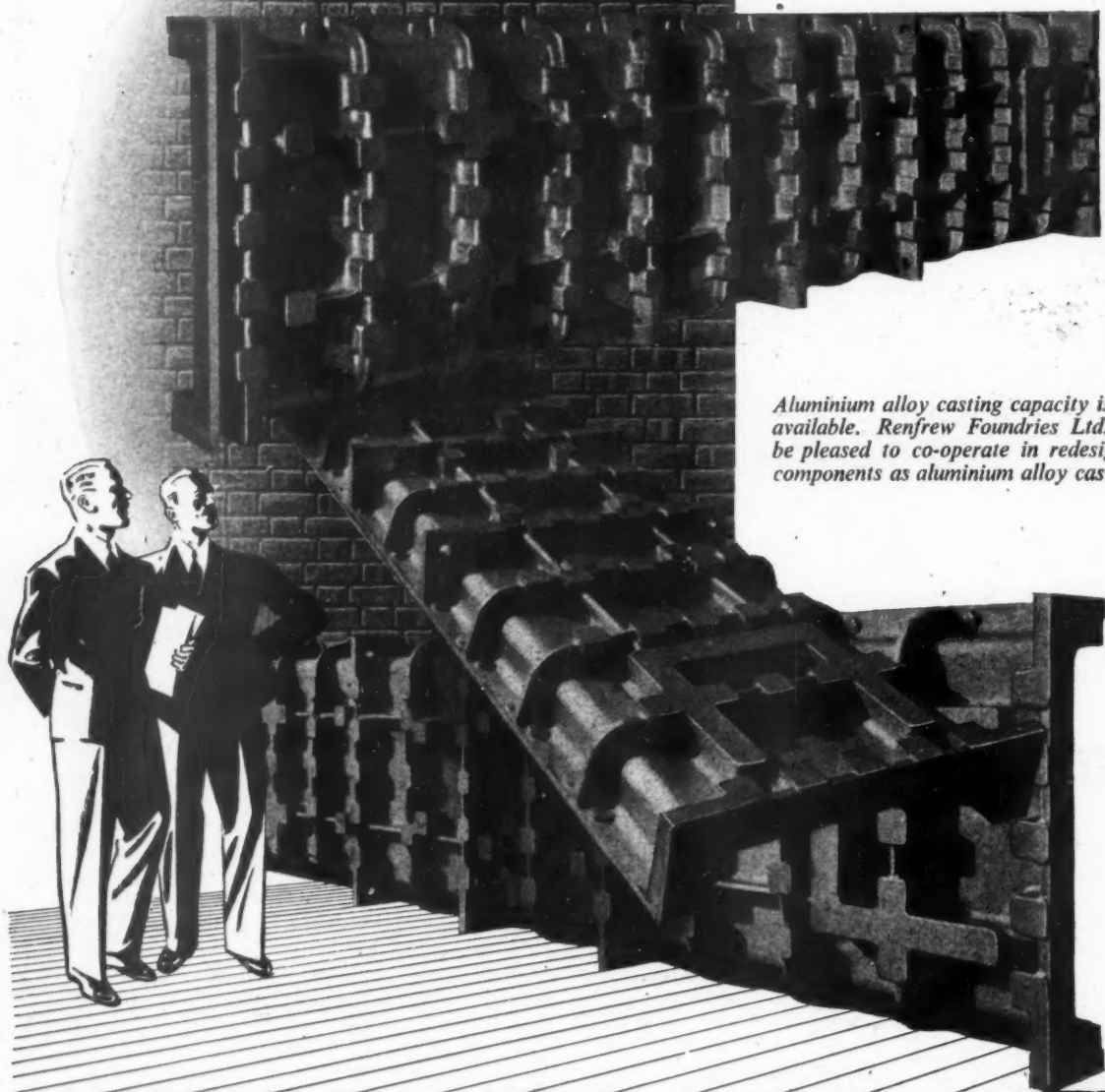
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## The human element in the BRICK industry

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Benefits enjoyed by London Brick Company employees include: Profit Sharing Bonus Scheme, introduced in 1926; Holidays with Pay, introduced in 1930; Pensions and Life Assurance Schemes, introduced in 1936; the Model Village and Social Centre at Stewartby; Canteens; comprehensive indoor and outdoor recreational facilities; sports grounds; club premises; welfare departments; safety and first-aid organisations.



LONDON BRICK COMPANY LIMITED

L.B. 29



## **“I was a bit uneasy at the prospect—just at first...”**

“I CONFESS I was in two minds about putting a disabled chap into a top job. It seemed to me his handicap might make for awkwardness, however suitable he might be otherwise.

“But I was impressed by his experience and by the hint from our Regional Appointments Office that ‘a man’s a man for a’ that’—and often more so! I liked him at once when I saw him. In fact, he seemed the best of a good bunch, and we took him on—one more for our quota. Yes, lost an arm in Burma. But handicap? About as much handicapped as Nelson! Right on top of his work, and such a good chap, too. He once explained—you have to decide whether to go under or make good. *He’d* decided all right. The Appointments Office told me that nearly all the disabled men they place are successful in their jobs.

“Yes, the Appointments Office have helped us find several of our present staff. We tell them just what we need, they look up their Register, and generally in two or three days give us details of a few picked men to choose from. You see, they’ve carefully interviewed *all* the applicants, so we only have to consider ‘probables.’ The

time it saves! And all the Regional Appointments Offices are linked by teleprinter, so wherever the right man for your job is registered, they’ll find him. . . .”

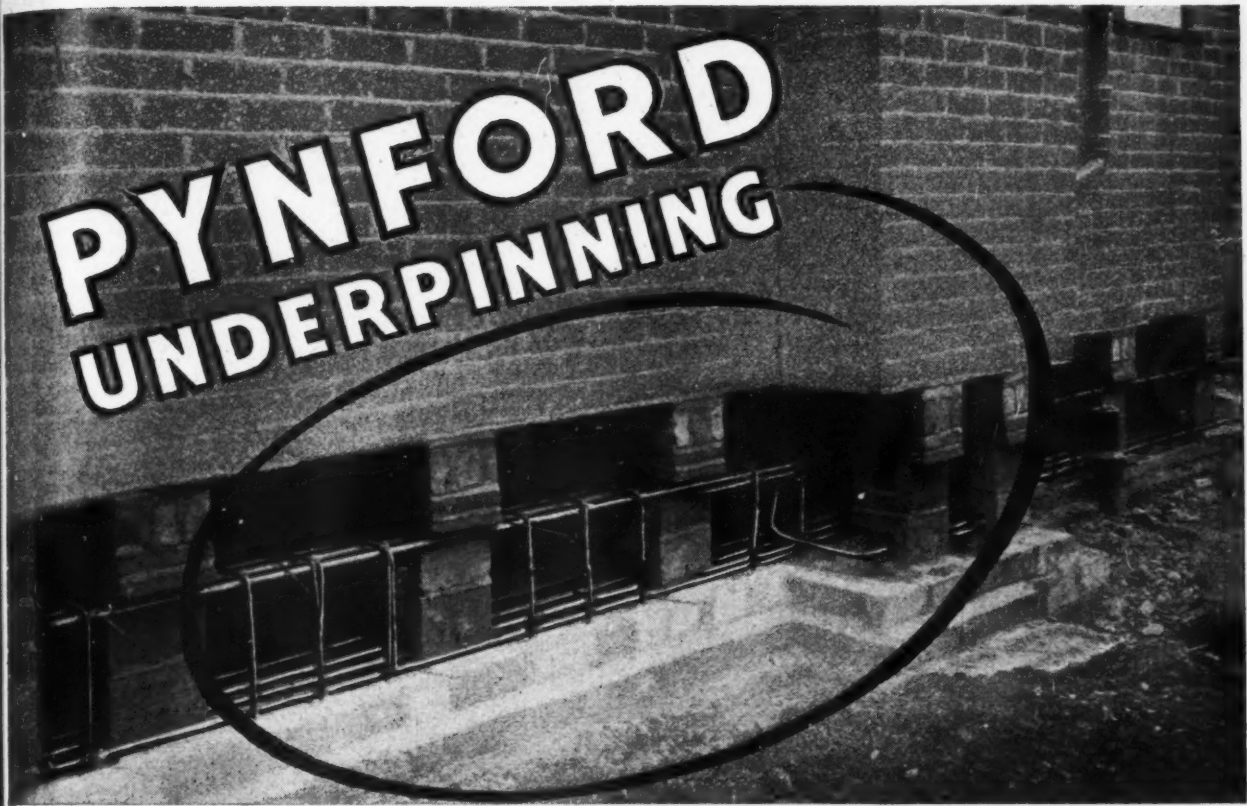
Hundreds of employers have commended the prompt and efficient service given by the fourteen Regional Appointments Offices. They are today’s logical starting-point in the recruitment of high-grade staff, whether the need is for men and women already experienced and who are sometimes holding responsible posts, or for promising younger candidates to train.

Your nearest Appointments Office “matches men with jobs” in the executive, managerial and administrative field. If you do not know the address, any local office of the Ministry of Labour will put you in touch at once.

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## **14 linked Appointments Offices cover the Nation’s potential executive manpower**



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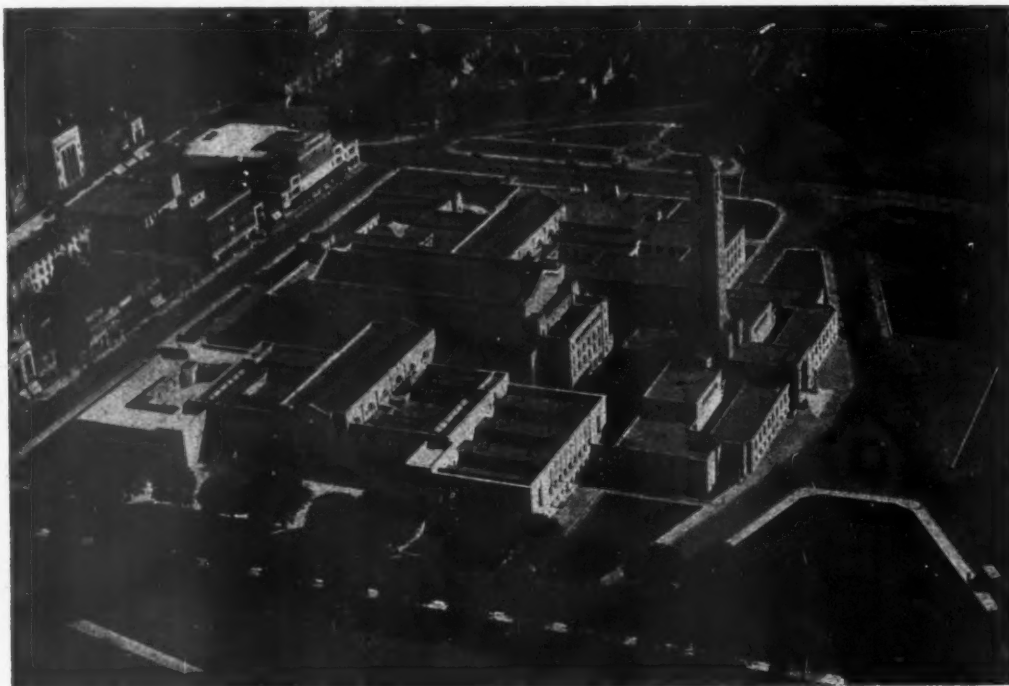
- The Pynford method enables beams of suitable size to be framed together under existing walls and so redistribute the building loads over the footings or carry the loads to the new bases or both
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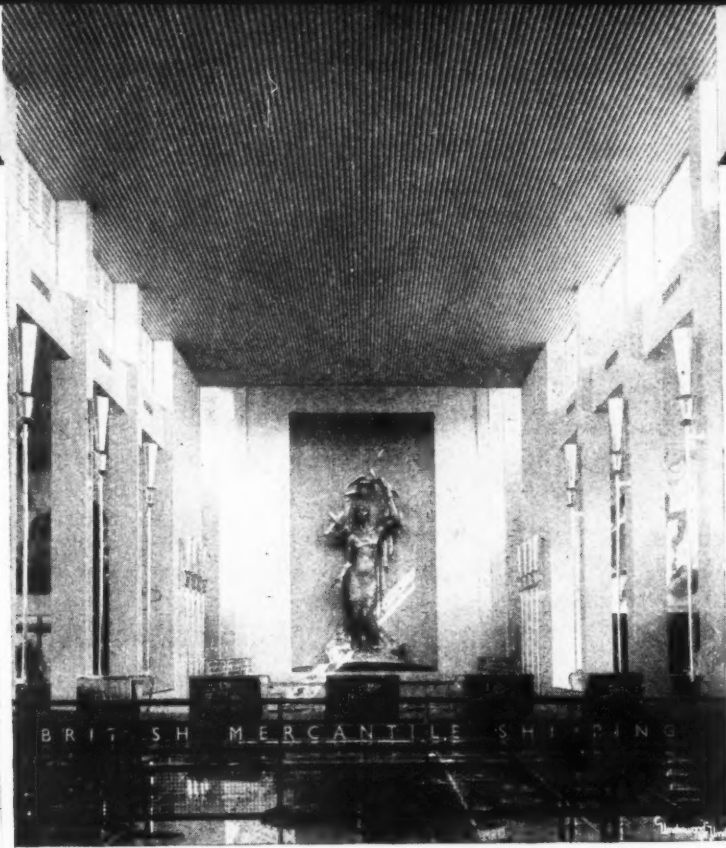
AND AT GLASGOW





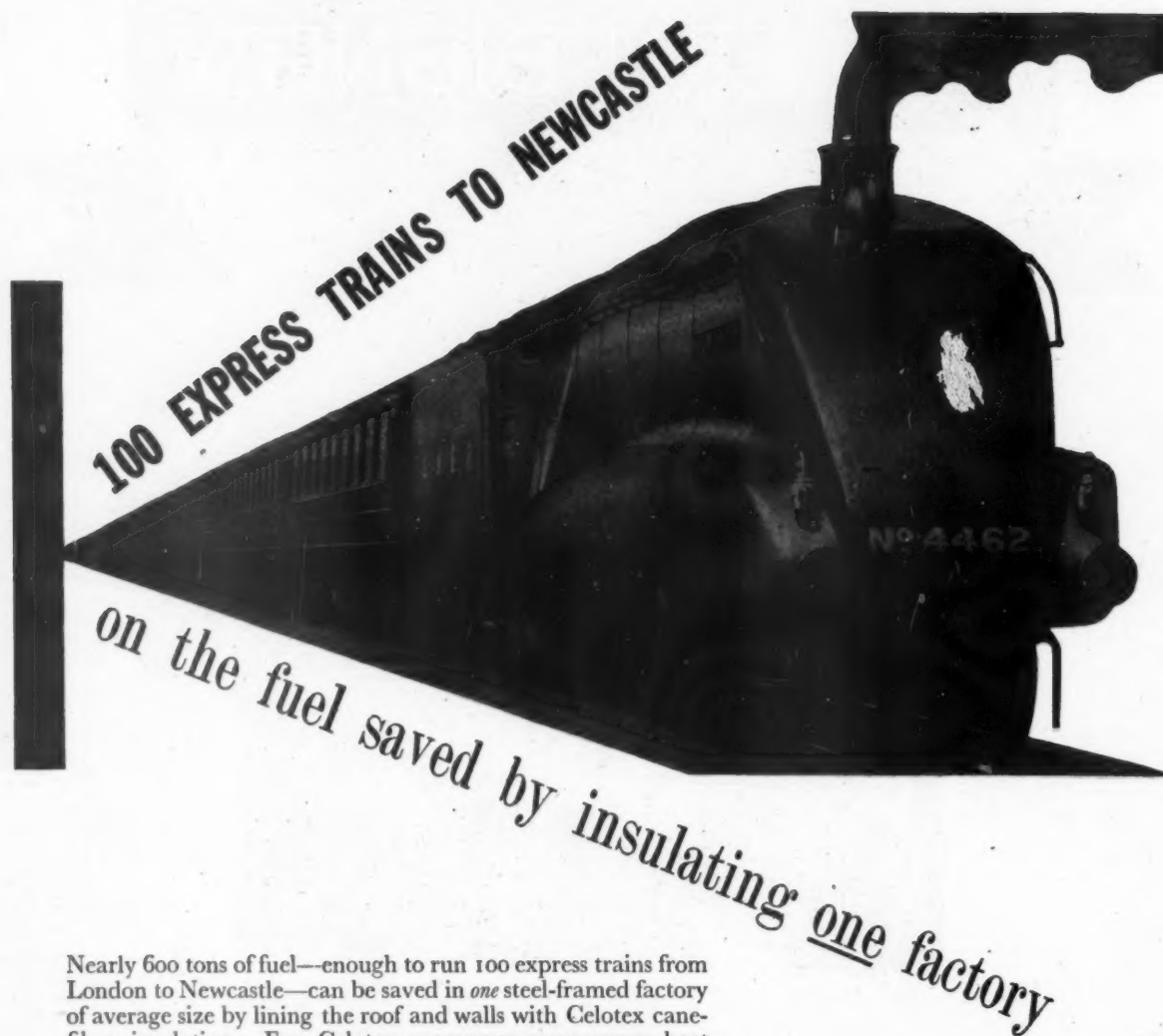


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**TRAFFORD PARK MANCHESTER 17**



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CONSTRUCTION		Uninsulated		Under-Purlin Insulation		Over-Purlin Insulation			
Corrugated Asbestos Cement		1/4"	—	1/4"	—	1/4"	1/4"	—	—
Corrugated Iron		—	226	—	226	—	—	226	226
Celotex Insulating Board		—	—	—	—	1/2"	1"	1/2"	1"
Air Space/Purlins		—	—	4"	4"	—	—	—	—
Celotex Insulating Board		—	—	1/2"	1/2"	—	—	—	—
Thermal Transmittance "U"		1.40	1.50	0.31	0.32	0.35	0.23	0.36	0.24
To make good heat loss of 1000 B.t.u.	Fuel Consumption tons p.a.	7.7	8.3	1.7	1.8	1.9	1.3	2.0	1.3
	Cost of Heating Plant. Cost £'s	88	94	19	20	22	14	22.5	15
	Saving in Plant and Fuel due to Celotex insulation %			78	79	75	84	76	84

invest in  
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- 2**: A tall, multi-tiered shelving unit with many small drawers.
- 3**: A large, arched structure, likely a cycle park or stillage.
- 4**: A low, wide platform or jack truck.
- 5**: A large, multi-tiered shelving unit with many small drawers.
- 6**: A tall, narrow steel clothes locker.
- 7**: A small, three-tiered steel tool stand.

STEEL 'ARC' WORK BENCHES  
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 STEEL CLOTHES LOCKERS  
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# LITHOFALT<sup>REGD</sup>

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THE LIMMER & TRINIDAD LAKE ASPHALT CO. LTD., STEEL HOUSE, TOTHILL ST., LONDON, S.W.1 ENGLAND



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REGD TRADE MARK

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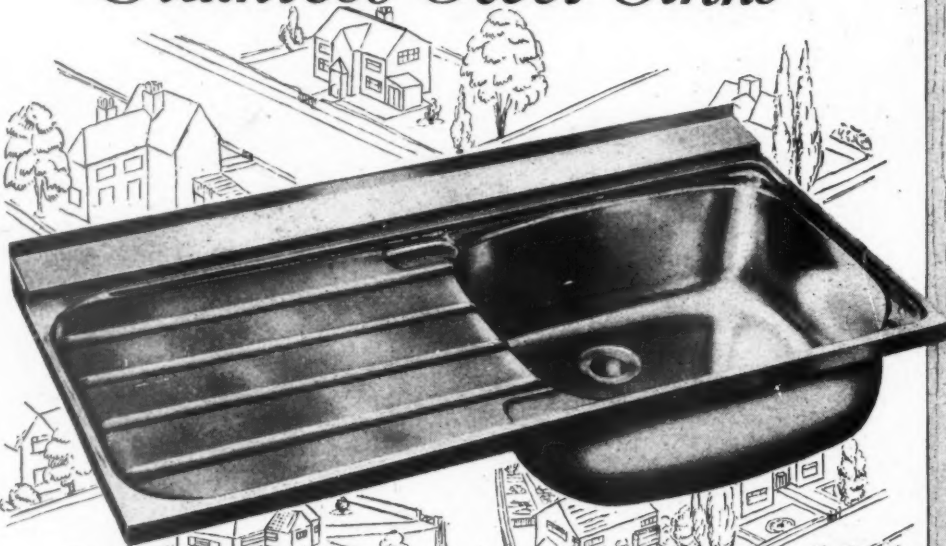
A web of silk and a metal, both a source of wonder to many, and having this in common—lightness and great strength. "DURALUMIN" the light metal alloy—a third the weight of steel yet as strong, easy to work and in ample supply—has proved its worth to British industry in a great variety of ways. Our wide experience is gladly at your service ; write to :—



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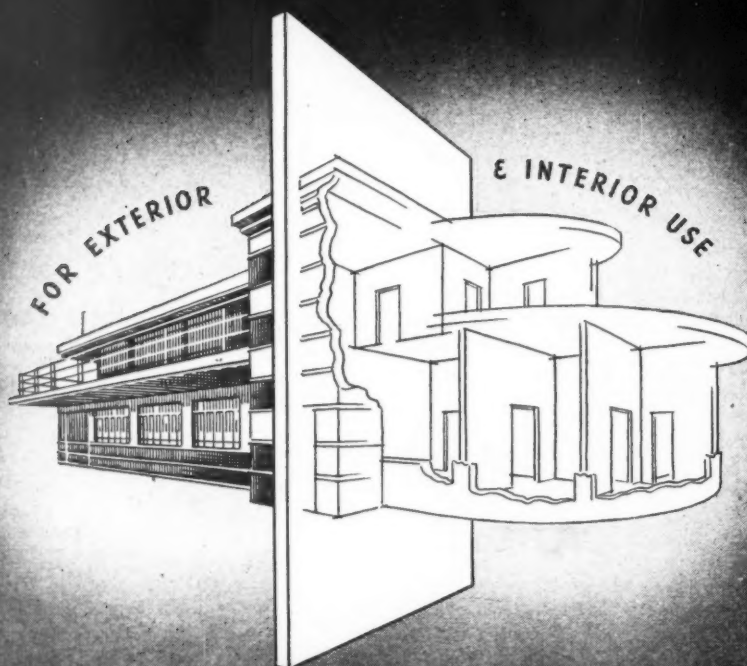
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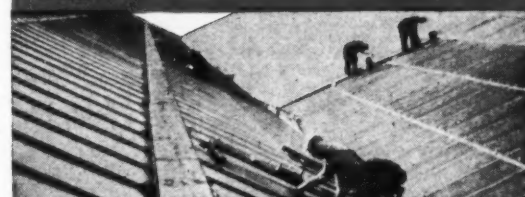
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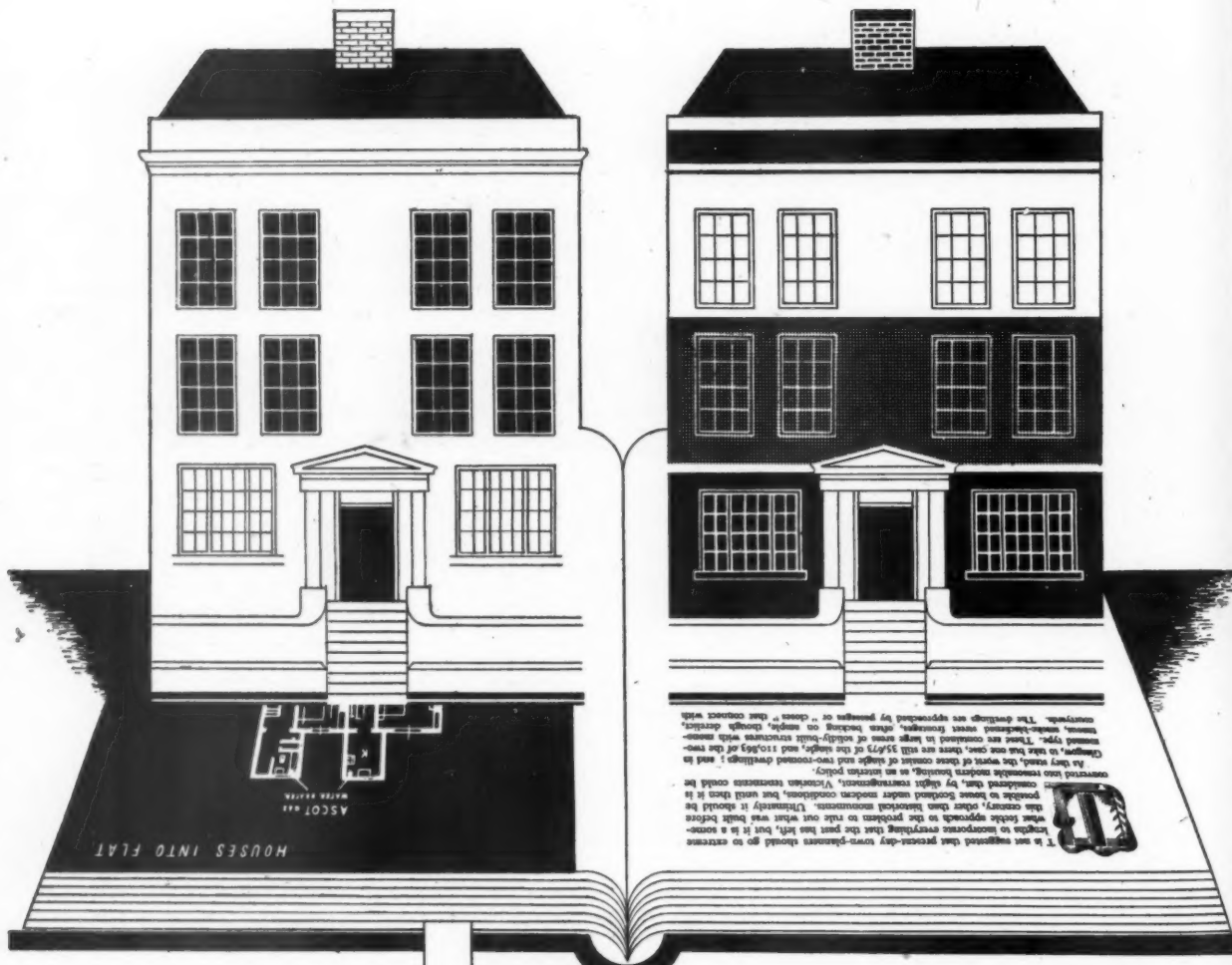
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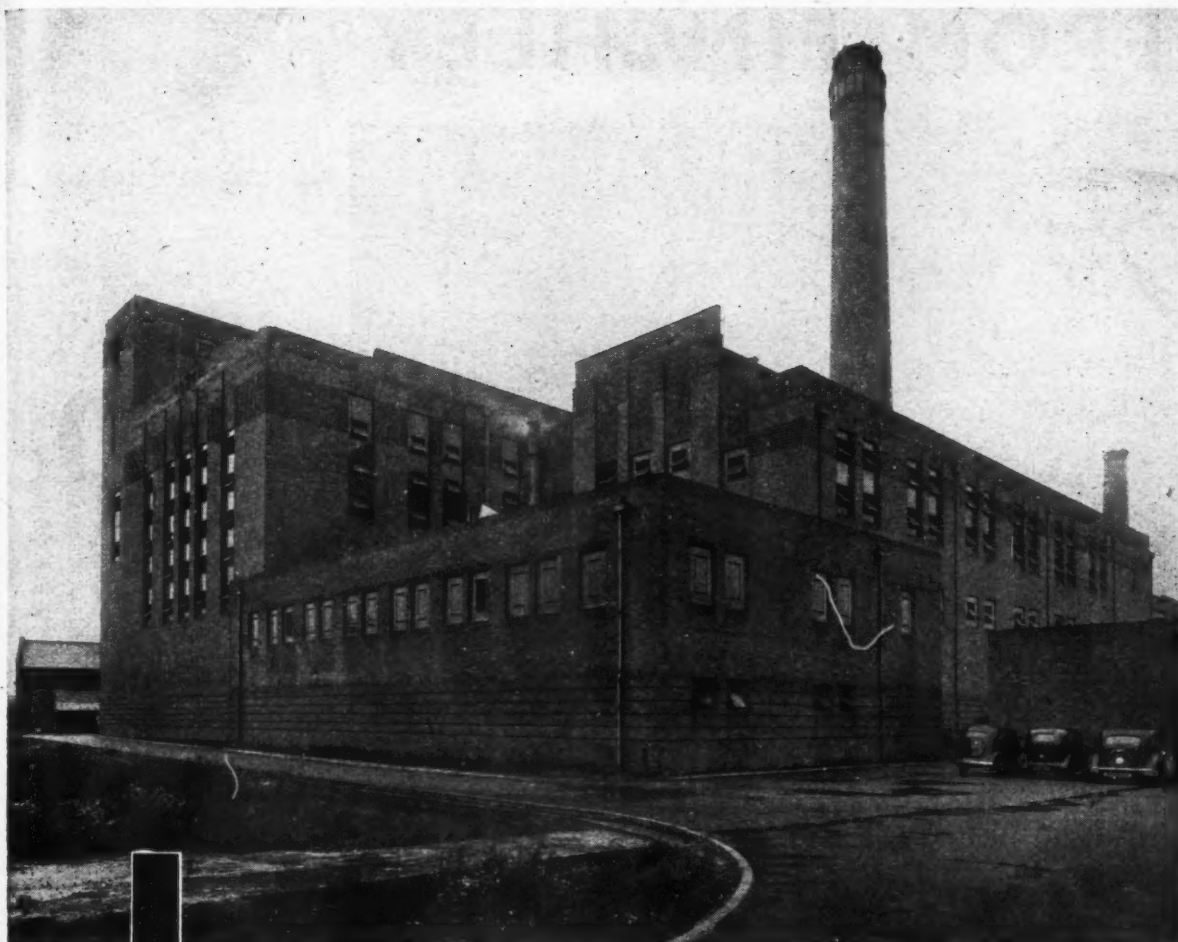


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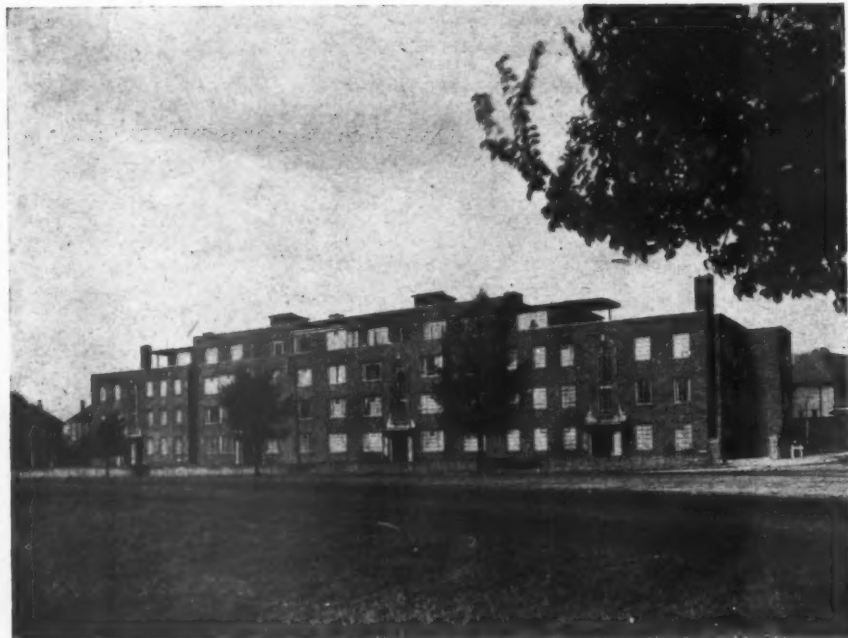
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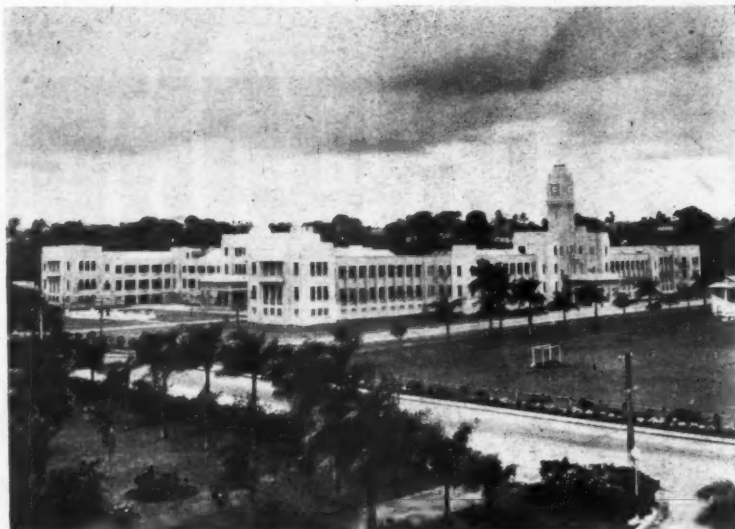
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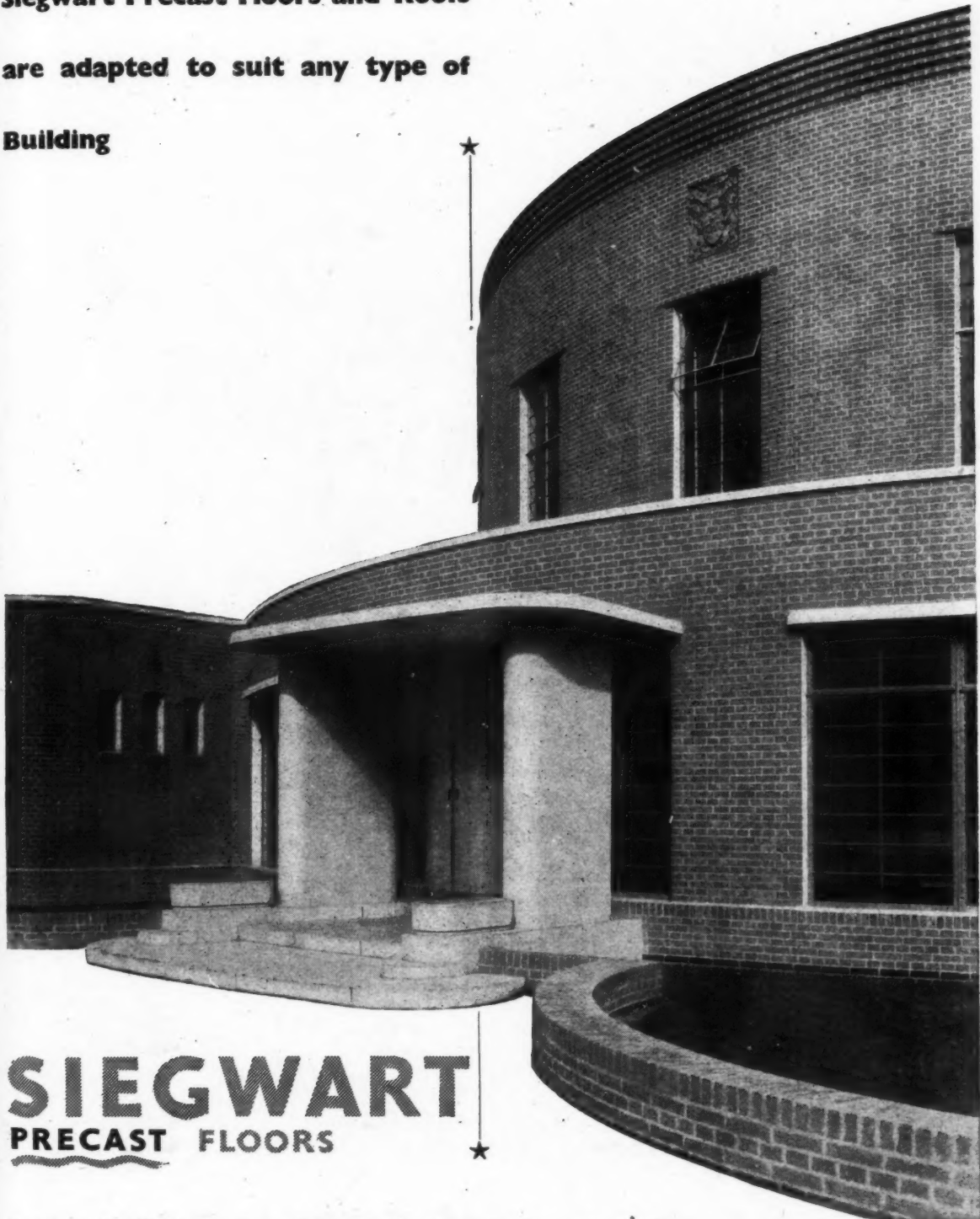
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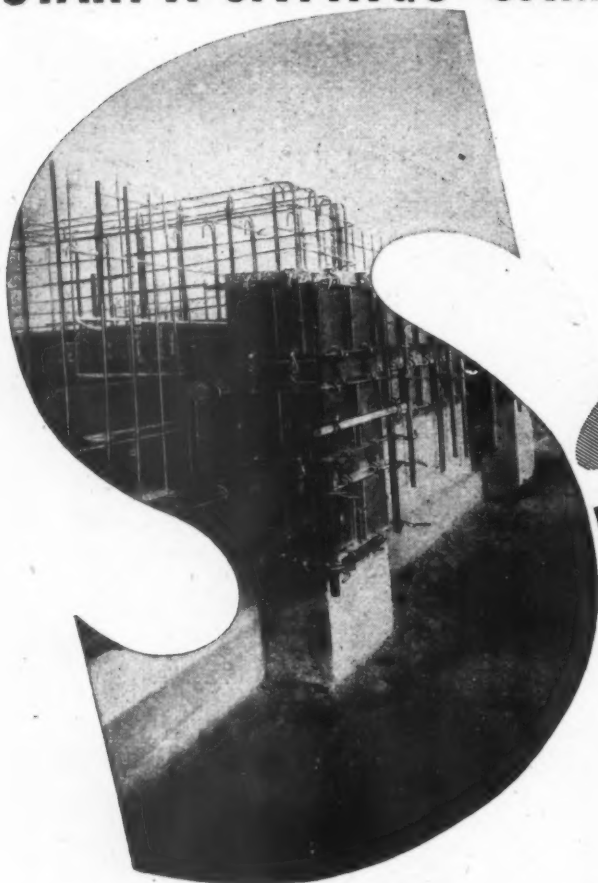
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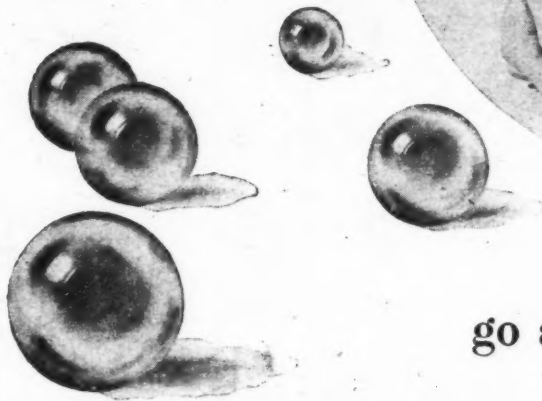
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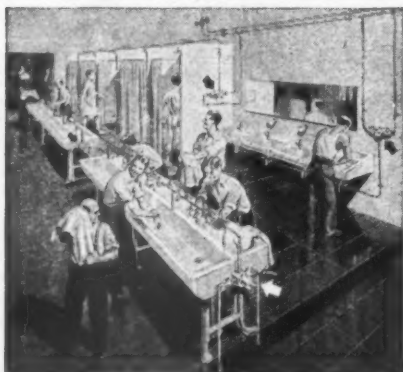


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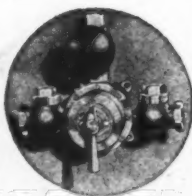
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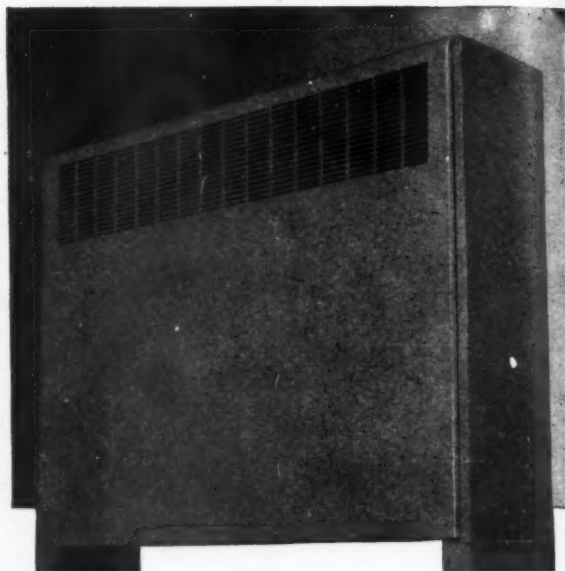
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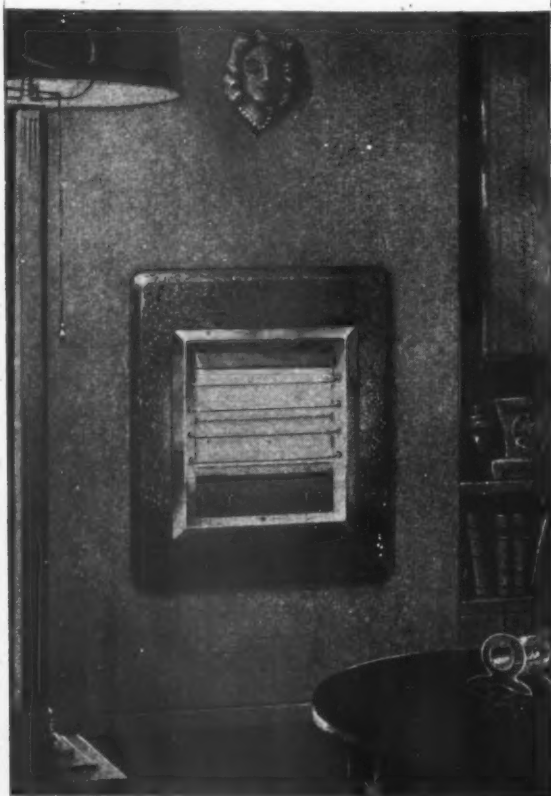
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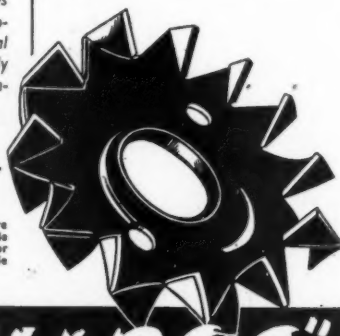
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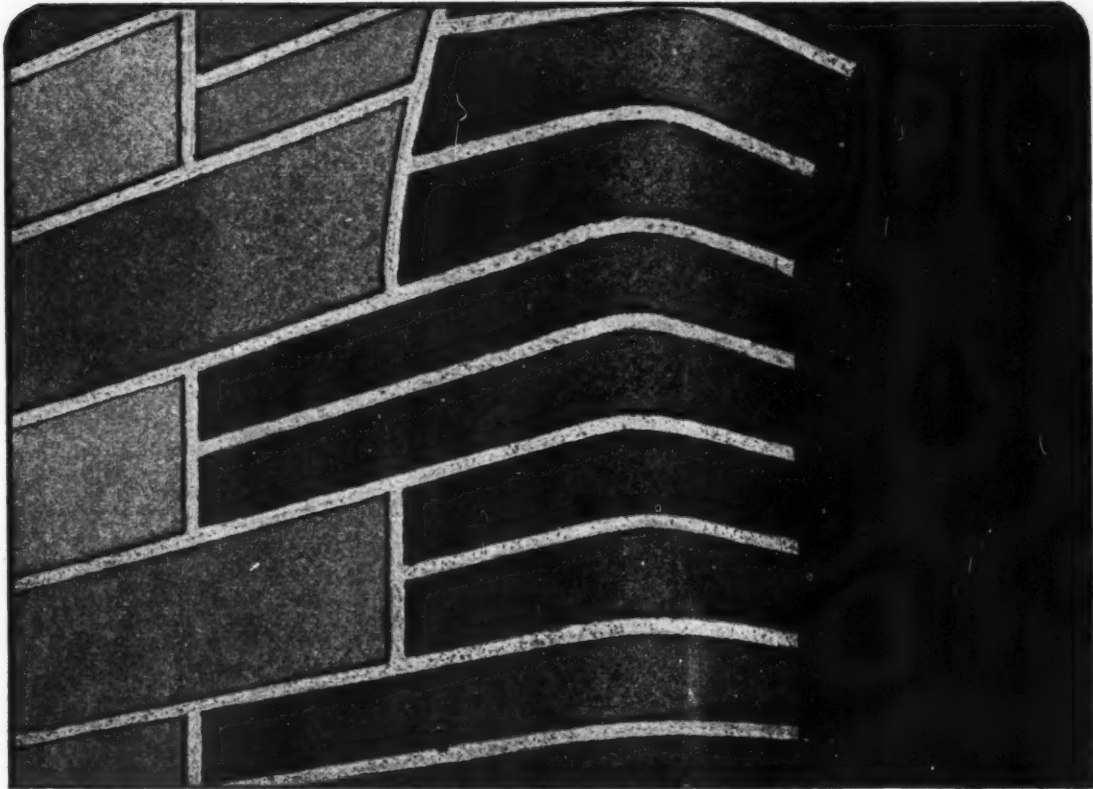


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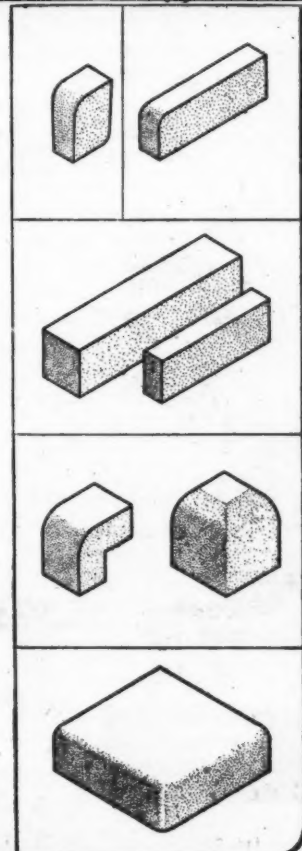
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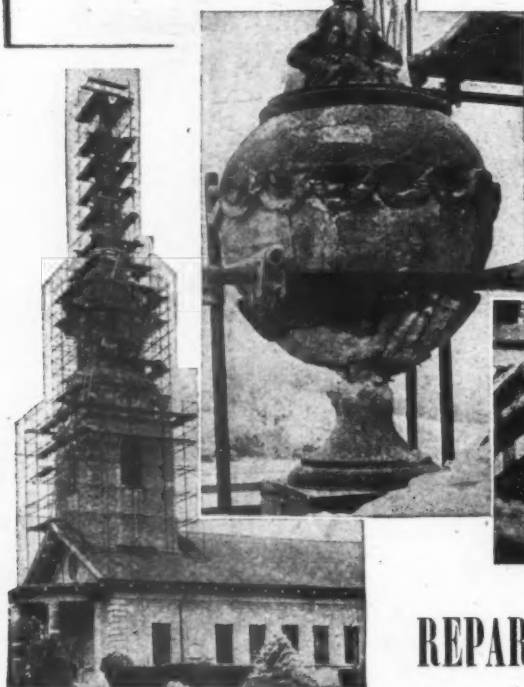
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W.H.3

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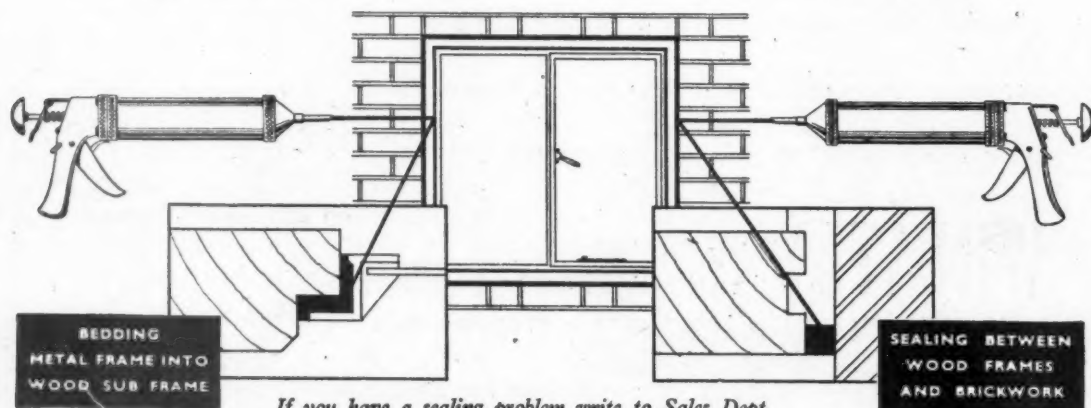
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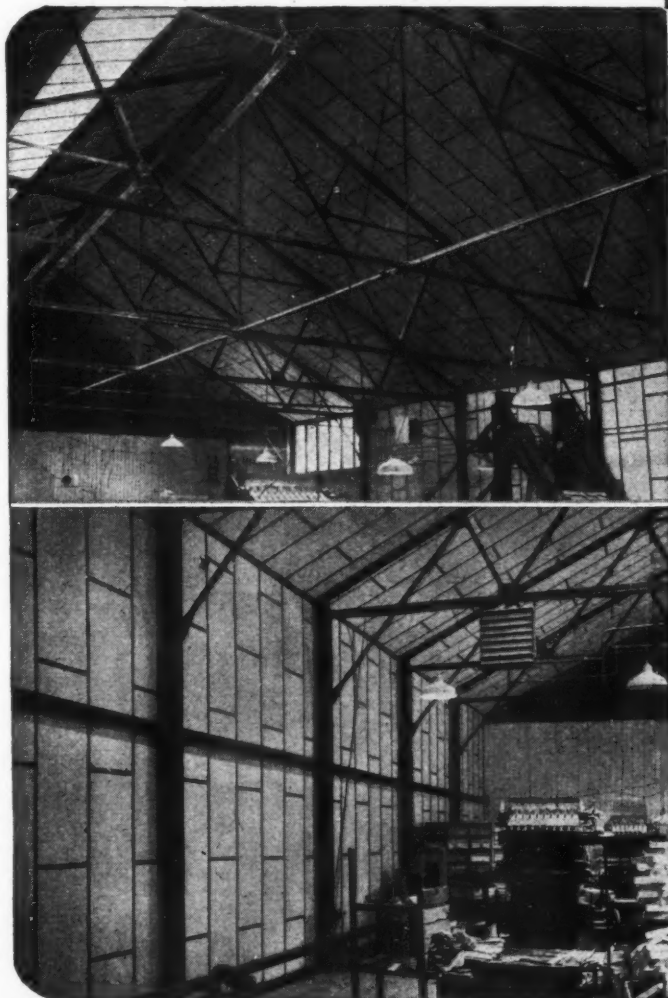
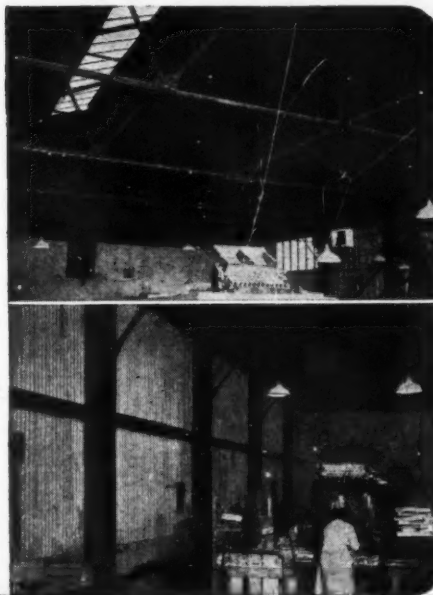
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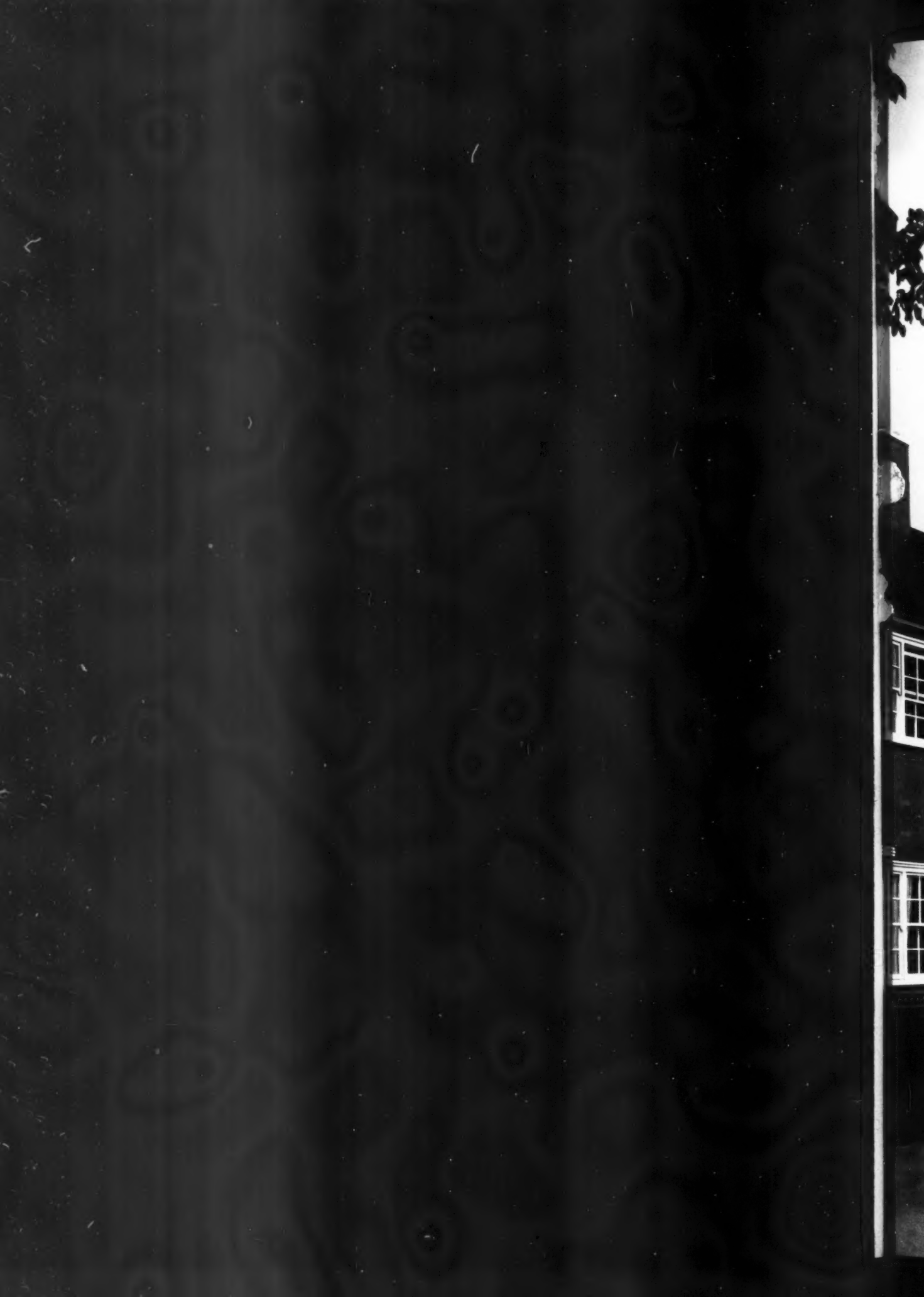
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In common with every other periodical this JOURNAL is rationed to a small part of its pre-war needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order." Subscription rates: by post in the U.K. or abroad, £1 15s. od. per annum. Single copies, 6d.; post free, 11d. Special numbers are included in subscription; single copies, 1s 6d.; post free, 1s. 6d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the JOURNAL and made of raw material now in short supply, are not necessarily available for export.



## DIARY FOR JANUARY FEBRUARY AND MARCH

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.

**CHIPPING NORTON.** *Exhibition: Ideas on Design in the Home.* Guide lecturer: G. Borchard. At the School House. (Sponsor, ACOB.)

UNTIL JAN. 13

**GLASGOW.** H. G. Jenkins and J. H. Bowtell. *High Voltage Fluorescent Tubes.* At the Institution of Engineers and Shipbuilders, 39, Elmbank Crescent, C.2. (Sponsor, IES.) 6 p.m. JAN. 15

**LEICESTER.** *Newer Heat Exhibition.* At the Museum and Art Gallery. (Sponsor, CUJC.) UNTIL JAN. 18

**LONDON.** Mrs. M. Pleydell-Bouverie. *Housing in US as I Saw It.* At the Housing Centre, 13, Suffolk Street, Haymarket, S.W.1. (Sponsor, HC.) Buffet lunch 12.45 p.m.—1.15 p.m., 2s. 6d. Talk 1.15 p.m.—2.15 p.m., 6d. JAN. 20

*Exhibition of Art, Chiefly from the Dominions of India and Pakistan.* At the Royal Academy Galleries, Piccadilly. An exhibition of sculpture, painting, textiles, jewellery, furniture. 10-7. Sundays 2-9. Admission 1s. 6d. UNTIL FEB. 27

R. Nicholas. *Planning Developments Abroad—Poland.* At the Planning Centre, 28, King Street, W.C.2. (Sponsor, TCPA.) 6.15 p.m. JAN. 13

**RIBA Award of Prizes and Studentships.** Criticism of work submitted by Ralph Tubbs. At 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. JAN. 13

Anthony Minoprio. *Planning an Old and a New Town—Worcester and Crawley.* The speaker will display plans. At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) Buffet lunch, 12.45 p.m.—1.15 p.m., 2s. 6d. Talk, 1.15 p.m.—2.15 p.m. JAN. 13

*Midwinter Madness.* New Year party and dance. At Caxton Hall, Westminster. (Sponsor, Polytechnic Architectural Students' Society.) 7.30-11.30 p.m. JAN. 15

Kenneth Holmes. *Museums and Industrial Design.* At the RSA, 6, John Adam Street, W.C.2. (Sponsor, RSA.) Buffet lunch, 12.30 p.m., 3s. JAN. 15

**IASS Annual General Meeting.** At the IAAS, 75, Eaton Place, S.W.1. (Sponsor, IAAS.) 6 p.m. JAN. 16

*Hotel, Restaurant and Catering Exhibition.* A section will be devoted to hotel and restaurant design and construction. At Olympia. (Sponsor, Trade and Technical Exhibition, Ltd.) JAN. 16-24

S. M. Reisser. *The Welding of Bridges and Buildings.* At Manson House, Portland Place, W.1. (Sponsor, Institute of Welding.) 7.30 p.m. JAN. 19

*Royal Institution of Chartered Surveyors' Agricultural Conference.* At 12, Great George Street, S.W.1. Morning session, 11.15 a.m. Afternoon session, 2.15 p.m. JAN. 20

F. J. Osborn. *Planning Developments Abroad—USA.* At the Planning Centre, 28, King Street, W.C.2. (Sponsor, TCPA.) 6.15 p.m. JAN. 21

Dr. K. W. Mantner. *The Design of Structures in Areas Subjected to Mining Subsidence.* At 11, Upper Belgrave Street, S.W.1. (Sponsor, ISE.) 6.0 p.m. JAN. 22

Arthur Ling. *Planning Developments Abroad—USSR.* At the Planning Centre, 28, King Street, W.C.2. (Sponsor, TCPA.) 6.15 p.m. JAN. 28

**MANCHESTER.** *Exhibition of Painting and Lettering.* By John Stanley. At the Municipal School of Art. JAN. 12-24

**NEWCASTLE-UPON-TYNE.** J. Bodger. *Kitchen Equipment in Industrial Canteens.* At the Institution of Mining and Mechanical Engineers; Neville Hall. (Sponsor, IHVE.) 6.30 p.m. JAN. 20

### COMPETITIONS

*Competition for War Memorial at Liverpool.* The Imperial War Graves Commission invites designs in competition for a memorial to be erected on the promenade at Liverpool to the Missing Naval Auxiliary Personnel of the Second World War. Open to architects who are ex-serving members of His Majesty's Forces. Assessor: Edward Maufe. Premiums: £100, £60 and £30. Last day for receiving designs, January 16. JAN. 16

*Competition for Design for Public Telephone Kiosks, Eire.* Designs in competition for Public Telephone Kiosks are invited by the Minister for Posts and Telegraphs. Designs should be of a standardized character. Assessors: Prof. J. V. Downes, B.A.R.C.H., F.R.I.A.I., F.R.I.B.A., C. MacFhionnlaioich, B.A.R.C.H., F.R.I.A.I., and Raymond McGrath, B.A.R.C.H., F.R.I.B.A. Premiums: £250, £70 and £25. Conditions from An Rúnaí, Roinn Post agus Telegraí. Baile Atha Cliath, not later than January 12.

## N E W S

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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 unstarred 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.

*A report on the administrative and financial measures necessary for the provision of NATIONAL PARKS in SCOTLAND and on the conservation of wildlife in Scotland has been published.*

The report assumes that the five areas on the priority list of the Scottish National Parks Survey Committee, published in 1945, will be established as national parks as soon as possible. These areas are Loch Lomond-Trossachs, Glen Affric-Glen Cannich-Strath Farrar, Ben Nevis-Glen Coe-Black Mount, the Cairngorms, and Loch Torridon-Loch Maree-Little Loch Broom. The capital costs of the scheme are estimated at £3,250,000, made up of £1,500,000 for acquisition and compensation, £500,000 for development, £750,000 for holiday accommodation and recreational facilities, and £500,000 for houses and other buildings. It is suggested that these capital costs should be met out of the National Land Fund. The total annual expenditure is estimated at about £150,000, part of which might eventually be met by revenue. (Cmd. 7235 Stationery Office, 2s.)

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## From AN ARCHITECT'S Commonplace Book

**BILL STICKERS**—Compare page 30. [*From Le Tableau de Paris, by Louis-Sebastien Mercier, 1782-1788.*] There are, as in the French Academy, forty of these functionaries, and the likeness between the fraternities does not end there. A bill sticker, too, must be able to read and write before he is considered eligible for the post, but he need possess no other qualifications. The bill sticker wears an apron, and a kind of copper medal, his licence, in his buttonhole; he carries, in addition to these insignia, a short ladder, a brush and a pot of paste. He will advertise anything and everything except himself, which is more than can be said of all the Forty Immortals. He is impartiality's very emblem; sacred or profane, the solemn condemnation or the lost dog, he slaps up his bills with no change of countenance, one after the other, and reads no word of any printed paper he handles, except the magistrate's name at the foot; on that authority, he would slap up his own death warrant unquestioning. Church doors and walls, and those of any religious house, are supposed to be safe from his activities, so far as notices of plays, or novels and such profane books, are concerned; however, the nature of a book is not always betrayed in its title, and walls, though they may have ears, can make no audible protest; and so the bill sticker may, and does, paste up pretty well what he pleases, where he chooses.

★

### *The Society for Cultural Relations with the USSR has brought an EXHIBITION OF SOVIET ARCHITECTURE to this country.*

It will be shown at the RIBA from March 3 to 20. The exhibition is in two sections; the first deals with Moscow from the twelfth century until the present day; the second with the architecture, past and present, of the Soviet Republics.

### *HOUSING PROGRESS REPORTS for November, published by the Minister of Health and the Secretary of State for Scotland show a reduction of 2,246 permanent and temporary houses completed during the month compared with October.*

Permanent houses completed in November totalled 15,281, a figure 117 below the October total of 15,398, which was the highest since the returns were first made in January, 1946. Temporary houses finished in the month numbered 3,247, compared with 5,376 in October. Comparative totals are 18,528 and 20,774. The total of completed houses—permanent 180,154 and temporary 135,298—to the end of the month was 315,452.

Of the completed houses local authorities were responsible for 104,419, private enterprise 57,011, and private builders 11,546.

The total labour force employed on the construction or repair of houses in Great Britain fell during November from 574,000 to 565,000. Production figures for cement were 632,000 tons in the four-week period of November compared with 817,000 during the five weeks of October, and for bricks 431 m. against 467 m.

★★

**NEW YEAR HONOURS:**  
Baron; Sir Valentine George Crittall, for political and public services; Knights Bachelor, Mr. George Lionel Pepler for services to town and country planning and Mr. John Walker Stephenson, general secretary, Plumbers' Glaziers' and Domestic Engineers' Union. Sir V. Crittall, J.P., Chairman of the Crittall Manufacturing Co., Ltd., and the Darlington

and Simpson Rolling Mills, was born in 1887. Educated at Uppingham, he became Labour M.P. for Maldon Division in 1923, and in 1924 held the position of Parliamentary Private Secretary to the Minister for Air. Mr. George Lionel Pepler, C.B., P.P.T.P.L., F.S.I., F.R.S.A.I., HON. M.INST.M. AND C.Y.E., HON. A.R.I.B.A., Chairman of the International Federation for Housing and Town Planning, was born in 1882. He has laid out many large estates on Town Planning lines, and was awarded Gold Medals for the Wolverhampton Model Housing Exhibition in 1908 and the South Wales Model Housing Exhibition in 1910. He was President of the Town Planning Institute in 1919, and President of the International Federation for Housing and Town Planning from 1935-38. He was chairman of the Inter-Allied Committee for Physical Planning and Reconstruction during the years 1942-45, and was Chief Technical Adviser of the Ministry of Town and Country Planning from 1943 to 1946. Other New Year Honours were: K.C.B.: Sir Thomas Herbert Sheepshanks, Permanent Secretary, Ministry of Town and Country Planning; C.B.E.: W. H. Forsdike, lately President, National Federation of Building Trades Employers; O.B.E.: J. A. Cope Christie, architect, S. Rhodesia; J. Greaves, principal architect, Ministry of Health; B. Spence, architect to the *Enterprise Scotland*, 1947, Exhibition; F. L. Thompson, Country Planning Adviser to Essex County Council; H. R. Wardill, Ministry of Town and Country Planning.



Mr. G. L. Pepler who was created a Knight Bachelor in the New Year Honours List.

### *The proposal to extend the Council's housing estate at Boroughbridge, Yorkshire, in the direction of the PREHISTORIC DEVIL'S ARROWS has aroused opposition led by the Yorkshire Archaeological Society.*

The three "arrows" are said to be the finest remaining megalithic monoliths in northern Europe. The tallest "arrow" is 30 ft. 6 in. high, and its greatest circumference 16 ft. They are of millstone grit, and the nearest quarry from which they can have been brought is not far from Harrogate, some eight miles away.

The Yorkshire Archaeological Society points out that the vast labour of our ancestors in setting up these stones should entitle them to protection, whilst adjacent housing would narrow the field of further archaeological investigations. The local council is of the opinion that they are likely to be better preserved if the housing plan is approved. Provision has been made in the plans for an open space which is to be retained in perpetuity for the people of Boroughbridge. The Boroughbridge Parish Council has unanimously approved the plans for the new houses and considers the Yorkshire Archaeological Society's objection without foundation. The "arrows" extend in an irregular line for some 550 ft., and the area proposed to be left undisturbed around them is approximately four acres. The Yorkshire Archaeological Society maintains that this would not compensate for interference with the site and that until further investigations and excavations can be carried out the land should be left undisturbed, and, as prehistoric burial remains were found while digging out the foundations of houses, any investigations would have to cover a wider area than four acres. It is also pointed out that the land proposed for build- is first-class agricultural land.

### *The RIBA Board of Architectural Education has published the FINAL EXAMINATION PROBLEMS IN DESIGN for 1948.*

The subjects are: a golf clubhouse (No. 85); a lecture hall at a college of music (No. 86); an ice rink (No. 87); auction rooms for a firm of fine art dealers (No. 88); an open-air theatre (No. 89); a housing scheme (No. 90). Dates for submission of designs: No. 85, February 27; No. 86, April 30; No. 87, June 30; No. 88, August 31; No. 89, October 29; No. 90, December 31. Copies of the papers are obtainable from the RIBA.





## Jerusalem: The Dome of the Rock

A picture of the heart of the Holy City, seasonable both on account of its wintry quality and of Palestine's place in the news of to-day. The landscape is covered by one of Jerusalem's rare falls of snow. The Dome stands on a site sacred to Jews, Christians and Moslems alike, for it has been successively the Altar of David, the Temple of Solomon, the Temple erected by the Jews after their exile, the Temple of Herod, destroyed after the Roman sack of Jerusalem, and the Emperor Hadrian's Temple of Jupiter. Later the shrine was erected which stands second

only, to Mecca throughout the Moslem world. From the rock the Prophet himself is supposed to have ascended to Heaven. The present structure, one of the outstanding examples of Islamic architecture, was begun in 691 and is remarkable for its octagonal plan and the richness of the mosaics added by Suleiman the Magnificent in 1561. The intermittent arcading of the outer perimeter uses columns probably taken from the Temple of Jupiter, with Byzantine capitals and dossier blocks bringing them to a uniform height.

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*Representatives of the Scottish National Town Planning Council discussed on December 23 their HOUSING problems with the Secretary of State for Scotland.*

The Council representatives stated that timber, cast-iron goods and electrical components were scarce, and continuity of supply would mean the quicker completion of houses. Scotland should be allowed the same conditions as England. The Secretary of State replied that continuity of supply could not be guaranteed as stocks were exhausted and materials were obtained direct as they became available. In completing houses Scotland was far behind England, and had been over-contracting. However, contracts placed would not be cancelled, and authorities well ahead in their programmes could consult the Department of Health with a view to further development.

★

*Liverpool's Corporation Highways and Planning Committee has prepared a £100,000 scheme TO RECLAIM 43 ACRES OF LAND from the river foreshore.*

The project is for improvements along the banks of the Mersey to the south of the landing stage. Features of the plan are the provision of a promenade and an open space with gardens. This stretch of the Mersey forms the boundary of a densely populated area, and the object of the scheme is to afford to this area amenities comparable with those along the Wallasey foreshore and the northern reaches of the river.

*For the purpose of promoting the science and art of town and community planning among members of the profession, an association under the name of the INSTITUTE OF PROFESSIONAL TOWN PLANNERS HAS BEEN FORMED IN CANADA.*

The Officers are:—Mr. Tracy D. LeMay, President; Mr. John Kitchen, Vice-President; Dr. E. G. Faludi, Secretary-Treasurer; Mr. John Layng, Director; Mr. John van Nostrand, Director; Mr. Gordon Culham, Director. Thirty-five consultants, architects and engineers engaged in one phase or another of Planning, have already joined the Institute in Ontario; and it is expected that many others in all parts of Canada will be invited to join.

*Negotiations for the building of a NATIONAL THEATRE on the SOUTH BANK of the Thames are held up pending the choosing of a site.*

The Joint Council of the Shakespeare Memorial National Theatre and the Old Vic are unable to conclude negotiations with the LCC for the building of the theatre on the Thames south bank between Waterloo and Charing Cross bridges because the joint council has been unable to arrive at a final decision on the site.

## A MILLION ACRES

THE White Paper on service requirements of land,\* promised by Mr. Attlee nearly a year ago and published last December, has given rise to considerable uneasiness. It postulates an allotment to the Armed Forces of rather more than a million acres, or nearly 2 per cent. of the total land area of Great Britain. It discusses service needs in a very general way, but produces no really cogent arguments to justify handing over such a vast area to an economically unproductive use.

It is not that the need for an adequately trained defence force is not fully appreciated throughout the country; as a primary national need it is now axiomatic. But all the aspects of the situation must be carefully weighed and that does not appear to have been done. The White Paper argues that for purposes of military training—as opposed to operations in war—the barren areas of Scotland and the less populous land of Northern Ireland are unsuitable in view of the difficulties imposed by climate and terrain, with the consequent wear and tear on men and equipment, and of the cost of new installations. The upshot is that the bulk of the land designated for training is in England.

These arguments are not entirely convincing. They purport to deal with the problem from an economic aspect, but it is very much to be questioned that the White Paper's solution is economically sound. The general wastage of land promises to be immense, and the resulting dislocation of civil activity hardly less so. The White Paper savours too much of expediency—of the attitude of a military commander in war-time seeking for a solution to a problem in sweeping and drastic action. It tends to subordinate non-military considerations in a very cavalier way and mentions only in passing that its policy will entail “a sacrifice both of wealth in so far as land is used that is of agricultural or other economic value, and also of recreation and enjoyment.”

But apart from the disquiet aroused by the basic policy, further anxiety arises with regard to the way in which it is proposed to select land for compulsory acquisition. Military use of 2 per cent. of the total land available will have immediate and far-reaching repercussions upon planning of every kind—the more so since the bulk of the land is intended for the more thickly populated south. The White Paper promises inter-departmental consultations with MOTCP, the Department of Health for Scotland, local authorities and amenity societies. But much military activity is, for security reasons, not open to public scrutiny, and it is admitted that where security dictates, public enquiry will have to be abandoned, and decision left to consultation between the ministries concerned. That is a procedure that has on too many occasions proved fallible and is no adequate substitute for watchfulness by the public of its own interests.

Apart from the major consideration of positive planning,

\* Needs of the Armed Forces for Training and Other Purposes. Cmd. 7278, Stationery Office, 4d.

there is the no less important negative aspect of access to the countryside. This may at present be difficult, but it is something to be enjoyed as soon as time, purses and easy transport permit. Moreover, the beauty of the English countryside, if destroyed, cannot be replaced in a year or a decade. It is far better that any sacrifices that must be made should be in money, which is replaceable, than in amenities which are not. The Services' predilection for scenery is notorious.

The White Paper is merely a broad delineation of policy. Apart from well-known names like Aldershot and Catterick, no sites or localities are mentioned. The next step, which should be taken as soon as possible, is the publication of a detailed survey and a report of exact proposals, so that military requirements can be coordinated in advance with civil interests.



*The Architects' Journal*

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

### NEW YEAR HONOURS

The New Year Honours list contains several names familiar in the architectural world. Astragal offers his congratulations especially to Sir Valentine Crittall, who becomes a baron, to Mr. G. L. Pepler, who receives a knighthood, and to Mr. Basil Spence, who gets the OBE.

The name of Crittall has been a household word since Sir Valentine's father pioneered the metal window; Sir Valentine is honoured both as a politician (he was an MP for several years before the war) and as one of our most enlightened

and energetic industrialists. In planning circles Pepler's name is equally a household word, and if it is not well known to the general public, that is due to the modest way he has exercised his enormous influence behind the scenes, first at the Ministry of Health and then, till his retirement in 1946, at the Ministry of Town and Country Planning.

Basil Spence's name was brought prominently before the public at the *Britain Can Make It* exhibition, the credit for which he shared with James Gardner. Gardner, as a result got the OBE in the Birthday Honours; Spence is suitably honoured now, having done another brilliant job as designer to *Enterprise Scotland*.

### NATIONAL PARKS AND THE SERVICES

The Services need a lot of land. The Ministry of Agriculture and the Forestry Commission have strong views on the use of agricultural and forest land, so the Services naturally demand large areas in the proposed National Parks. Dartmoor, Ashdown Forest, N. Devon, Pembrokeshire Coast, the Lake District, and the Yorkshire Moors are all involved.

As a sort of Christmas present the Government announced its decisions on the Services land requirements in a White Paper. In brief, the Services need just over a million acres for all purposes, 700,000 for training and 300,000 for all other purposes,

including airfields. Of the 700,000 acres, only about 8 per cent. is land lost to farming, and agriculture seems at first glance to have been carefully protected. On the other hand, 512,000 acres of training land is to be in England, 107,000 in Wales and only 83,000 in Scotland; and it is admitted that a good deal of the English land will fall in potential National Parks.

The Government's case is well argued as regards the difficulties of training abroad, but the failure to use more land in Scotland—in time if not at once—is not explained convincingly. "Remoter areas" of Scotland are said to be unsuitable owing to terrain and climate.

It would be interesting to compare the rejected areas with those which the Services do intend to use in England, from this point of view. Secondly, the question raised by Mr. Osmond at a recent TCPA-CPRE Conference, as to whether there could not be more sharing of training areas by two or more Services is dealt with in a 3½ line paragraph, which says that an Inter-Service Committee has been established to make such arrangements where possible.

On two occasions recently an irreducible minimum of Armed Forces has been severely cut, so Service Ministers have only themselves to blame if the public wonders whether the 700,000 acres cannot be at least halved.

That the Service authorities are sometimes responsive to persuasion is evidenced by the reversal of the decision to extend the ranges on Dove-dale. This is a very welcome change of heart, and gives hope that other areas of equal beauty will be restored to public and private use.

### TO THE OXFORD STATION

As a foretaste of what might be done now rail transport is under State patronage, the new proposals for reconstruction of Oxford stations have been made public. The scheme is the product of collaboration between Mr. Thomas Sharp, the city's planning consultant, the GWR and the LMS.

The old LMS station is to be swept away, and a new one, enlarged to six through platform lines, two outside running loops and two through goods lines and bays, is to take the place of the existing GWR station.

The new station proposals, which include a new bus station, are designed to fit in with Thomas Sharp's plan for the City of Oxford. After his admirable proposals for Durham and Exeter, everyone will look forward to seeing how Sharp tackles the even more complicated problem of Oxford, torn to pieces as it is by the rival claims of the University and industry. I understand that Sharp's plan for Oxford is to be made public very soon.



*The Grinling Gibbons statue of James II as it used to stand outside the Admiralty. See note on this page.*

#### THE JAMES II STATUE

It is entertaining and somehow comforting the way there always seems to be a new minor architectural controversy to follow the last one along the accepted paths that such controversies take. They begin, when the word has leaked out from someone on the inside, with gossip in the clubs and round the more knowledgeable dinner tables. The next stage is a letter or two to *The Times* and lobbying by—let us say—the Georgian Group or other interested parties; then there may be a leader in *The Times*—coolly judicial—a personal anecdote—not always relevant to the issue—in the gossip-column of the evening paper and perhaps, in special cases, a question in the House. A little more lobbying follows, and the subject is considered ripe for the verdict of the Royal Fine Arts Commission or whatever public body is expected to pronounce on it. Then decisions are made—or not, as the case may be—and the slate is wiped clean all ready for the next controversy that comes along.

The case of the Grinling Gibbons statue of James II began by jogging smoothly enough along this gay little chain of formalities. The controversy promised to be an enjoyable one for all because it seemed clear that one solution met the case better than any other, and there were not likely to be hard feelings at the end. But the Ministry of Works has now stopped everybody's fun by deciding the issue on its own account and deciding it in favour of the least popular solution.

The question was a simple one: where should the statue go now that it has been displaced by the Admiralty's war-time citadel from its old position in St. James's Park? The obvious solution was to re-erect it in one of the courts of Chelsea Hospital, which James II helped to build, where it would be seen against a background of its own period and where Grinling Gibbons's companion statue of Charles II already stands. The Ministry of Works choice is Trafalgar Square, though it was pointed out that, so delicately designed a piece of sculpture would not have much chance amid that whirl of traffic circulating round so many assorted monuments.

Another point, of which I do not think enough has been made, is that this is a statue that ought to be seen all round, as it would be at Chelsea. The site in Trafalgar Square is on one of the grass plots in front of the National Gallery, where it will be seen only from the front. The Ministry of Works, however, only refer to the site as a temporary one, pending the completion of the new Government building in Whitehall. It seems that James II must be classed as a displaced person for some time yet.

#### LIMITED ARCHITECTS

An Irish correspondent has sent me details of a limited company incorporated in Eire earlier this year with

the object, amongst others, of carrying on the profession of an architect. My correspondent asks what would be the position of such a venture over here.

I should have thought that the situation was reasonably clear. The Architects Registration Acts, 1931 to 1938, provides that no one may practise as an architect in Britain or Northern Ireland unless he is on the register of architects, and it is no use thinking that working for someone else is not practising, for the cunning chaps who worked out these Acts thought of that one, too, and made it clear that that was practising within the meaning of the Act.

There is every reason to suppose that if anyone not on the register, company or individual, did set out on a business venture as architects our governing body would descend on them with the full weight of the law. In short, here in Britain our architects are not nebulous incorporated bodies. They are individuals with bodies to be kicked and souls to be damned.

ASTRAGAL

## LETTERS

Ian Melville

### The AA Centenary

SIR.—Informed members of any community, including members of universities, have never been accustomed to accept as of any consequence the improperly expressed opinions of apparently misinformed writers, and it is not likely that such people will accept either the tone or the substance of your Editorial in the issue dated December 11, 1947

IAN MELVILLE,  
President,  
for Liverpool University  
Architectural Society.

Liverpool

[The paragraph in our leading article on the subject of the AA School, referred to in the above letter, reads: "We have no desire to deny the importance of the School of Architecture at Liverpool, where Sir Charles Reilly inspired many brilliant architects. Liverpool students are found in many of the most responsible public appointments, but it is doubtful whether anyone would look to the Liverpool school to-day for a glimpse into the future of architectural ideas and expression, and this is one of the main functions of a university, the nurture of intellectual ferment."—Ed., A.J.]



# ADVERTISEMENTS IN THE SWEDISH STREET



The defacement of buildings, streets and the countryside by advertisement hoardings regularly causes outbursts of protest, but constructive solutions are rarely suggested. These Swedish photographs show how such potential eyesore can be turned to decorative account. The colour and gaiety characteristic of advertisements can, by good design and careful placing, be made the basis of a decorative feature in streets and squares.

Top, a polygonal advertisement post which stands in the centre of Gothenburg. It is lit from the inside and slowly revolves. Centre, left, a new standard telephone kiosk produced by the Swedish G.P.O. A frame of steel tubes painted red holds four deep panels which form the walls of the kiosk. These are indirectly lit from the top edges by concealed lamps, and are sufficiently deep to enable three-dimensional display advertisements to be inserted behind the glass. On the top of the kiosk is a well-designed lamp. Centre, right, an advertisement post with a domed top containing lights which stands in the Kungsträdgård in Stockholm. Bottom, left, a simpler example from the town of Orebro, and bottom right, a square one owned by the Swedish State Railways having a projecting canopy with panel lighting. Other European countries besides Sweden use advertisements in the same way, as shown by the German example in the above line drawing which was published in the A.J. of July 31, with a letter from Mr. Meyer-Montague, who contrasted it with the glaring blot of advertisement hoardings in the English landscape.



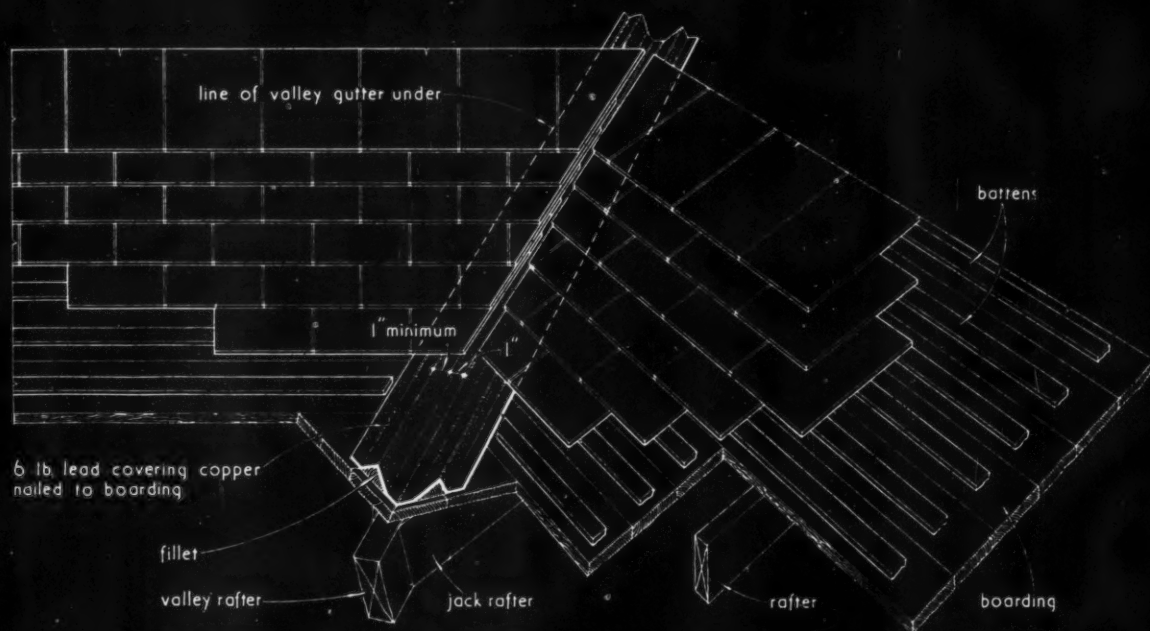
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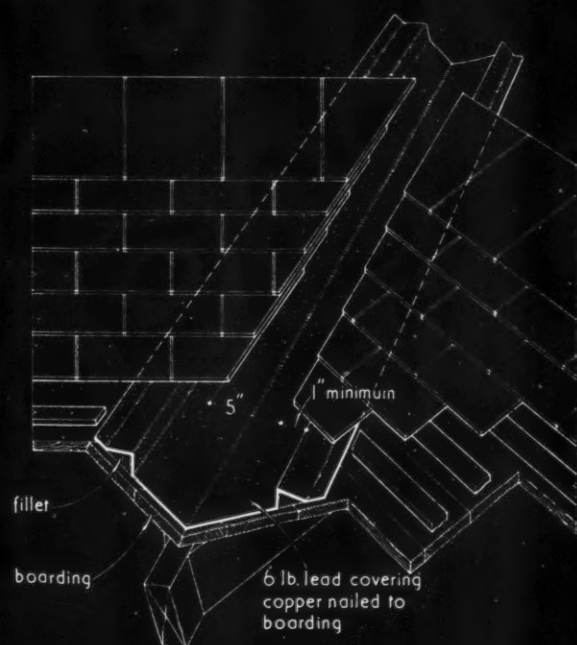
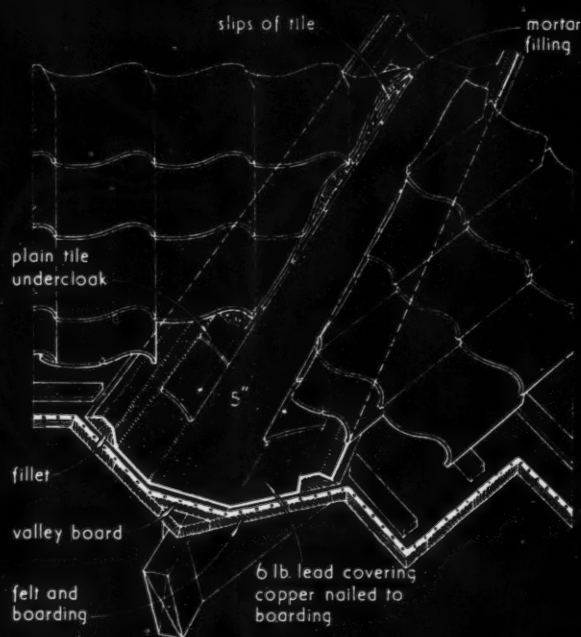


**LEAD AND ALLOYS | APPLICATIONS****10.G3**

The Architects' Journal Library of Information Sheets 29. Editor: Cotterell Butler, A.R.I.B.A.



SECRET LEAD VALLEY GUTTER TO TILED OR SLATED ROOF.

OPEN LEAD VALLEY GUTTER TO  
TILED OR SLATED ROOFLEAD COVERING TO VALLEY WHEN  
SINGLE LAP TILES ARE USED.

LEAD COVERING TO VALLEY GUTTERS.

Compiled from information supplied by The Lead Industries Development Council.

## 10.G3 LEAD COVERING TO VALLEY GUTTERS

This Sheet is one of a series dealing with lead and its applications and describes three types of lead covering (lining) to valley gutters. The first two types give details for a tiled or slated roof; the third gives details for a single lap tile roof.

### Secret Lead Valley Gutter : Plain Tile or Slated Roof

The tiles next to the valley are all tile-and-a-half splay cut. The edges are mitred, kept approximately 1 in. apart and supported by small fillets nailed to the roof boarding. This form of valley is liable to become choked with leaves if in the vicinity of trees.

### Open Lead Valley Gutter : Plain Tile or Slated Roof

This is the most common method of forming a valley, but the appearance, if the valley is wide, may be considered objectionable in tiled work.

The valley is also liable to act as a wind duct in very exposed positions and loosening of the adjacent tiles or slates may occur unless they are held at the lower edges with tingles. The width of the gutter is from 5 in. to 7 in. between the mitred tiles.

### Lead Valley Gutter : Single Lap Tile Roof

The method varies according to the roof construction. In the detail shown on the face of this Sheet the lead covering is laid across a valley board and turned up the roof slope each side over the fillets and copper nailed to the roof boarding. The open parts of the cut tiles are filled with mortar in which slips of plain tile are embedded. The plain tile undercloak is laid on the lead but is not bedded.

### Weight of Lead

6 lb. lead is recommended but lighter substance lead has, with careful working, been used with satisfactory results.

### Lapping

Laps should not be less than 4 in. and the length of one piece of covering should not exceed 7 ft.

### Fixing

Each piece of lead should be secured near the top edge and at the sides with copper nails. The bottom edge of the overlapping sheet must be left free.

### Further Information

The Lead Industries Development Council maintains a Technical Information Bureau which is available to answer questions and advise on technical problems dealing with this subject generally.

*Compiled from information supplied by :*

**The Lead Industries Development Council.**

Address : Eagle House, Jermyn Street, London, S.W.1.

Telephone : Whitehall 7244.







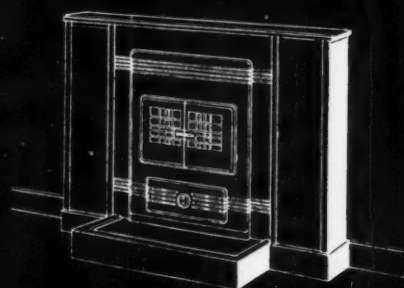
## COOKING | SOLID FUEL

31.B2

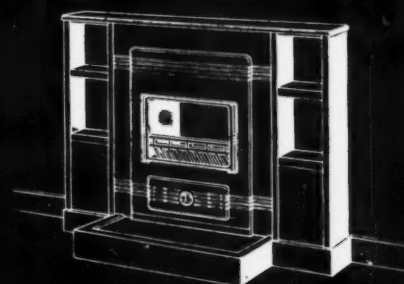
The Architects' Journal Library of Information Sheets 30. Editor: Cotterell Butler, A.R.I.B.A.



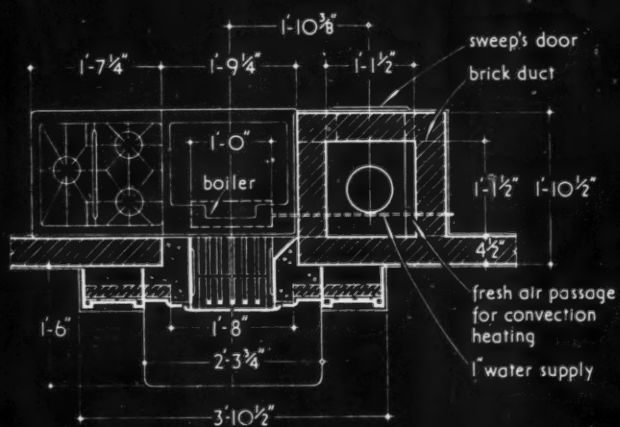
KITCHEN RANGE (COMBINING SOLID FUEL OVEN  
AND GAS COOKER).



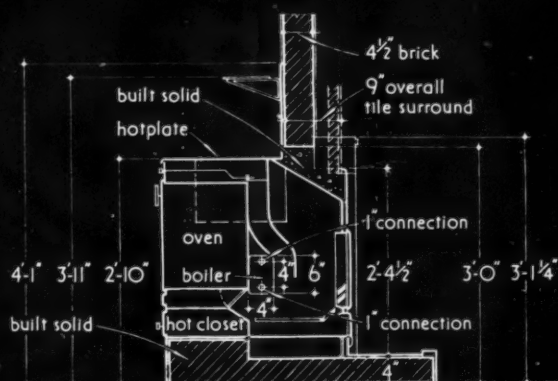
SLOW COMBUSTION STOVE (CLOSED)  
SHOWING PLAIN JAMBS.



SLOW COMBUSTION STOVE (OPEN)  
SHOWING SHELVED JAMBS.



PLAN AND SECTION OF RANGE WITH SLOW COMBUSTION STOVE.



### 31.B2 No. 3 YORKDALE BACK-TO-BACK RANGE: DETAILS

This Sheet illustrates, together with leading dimensions and general assembly, the kitchen range and living room open and close fire which comprise the Yorkdale Back-to-Back Range. The general arrangement and details of duct and flue are shown on Sheet 31.B1.

#### Kitchen Range

*Description :* The range is available as a single unit—a solid fuel oven—or combined with a New World gas cooker, Regulo controlled. The internal dimensions of the oven are 1 ft. 3½ in. wide by 1 ft. 1 in. deep by 1 ft. 4 in. high and the hot closet below measures 1 ft. 3½ in. wide by 1 ft. 1 in. deep by 5 in. high. The top of the range is fitted with a back and side plate and a removable plate rack.

*Material and finish :* The main body of the range is of cast iron, external surfaces being finished in seagreen mottled porcelain enamel with black top. The back plate is of mild steel finished cream porcelain enamel and the plate rack of plated mild steel.

*Fixing generally :* After the solid fuel oven is placed in position with fire parts screwed up to back of oven the underside and space round outside of fire cheeks from front to back of oven are built solid. The gas cooker, when supplied, is fixed last (after the range and living room fireplace are in position).

#### Fireplace Surround in Living Room

*Description :* The design of fireplace surround used will depend on the thickness of the partition wall. The Yorkdale fireplace, as illustrated on the face of this Sheet, is complete with a vitreous enamelled surround and combined raised hearth and curb. A metal mantelpiece with either plain or shelved jambs

may be obtained. As an alternative the surround may be formed of tiles, also as shown on the face of this Sheet, or of any other material.

*Material and finish :* The fireplace surround and hearth are of cast iron finished light mottled brown porcelain enamel. The mantelpiece and jambs are of steel and may be prime painted finish or stove enamelled cream, light green or brown. The fire back high-pressure boiler may be obtained in copper or wrought iron.

*Fixing :* The fireplace is fixed after the solid fuel oven is in place and is sealed by cementing in position.

#### Slow Combustion Stove in Living Room

*Description :* This is supplied as illustrated on the face of this Sheet. The fire doors slide back out of sight giving the appearance of an open fire.

*Material and finish :* The stove is cast iron finished in light brown mottled porcelain enamel.

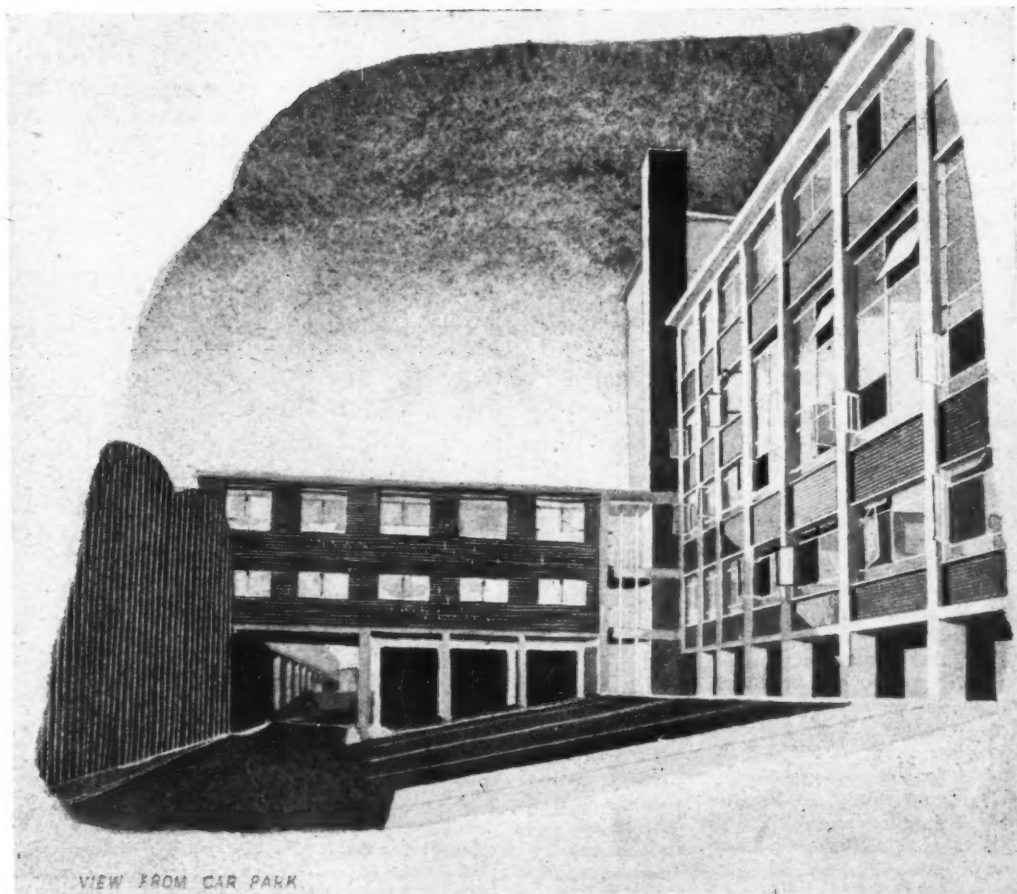
Compiled from information supplied by ;

Wilsons & Mathiesons, Limited.

Address : Leeds, 12.

Telephone : Leeds 38011 (5 lines).





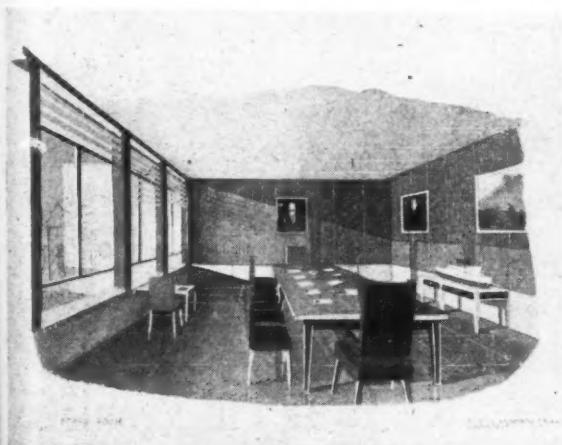
VIEW FROM CAR PARK

# OFFICE

## BLOCK FOR A SHIPYARD.

### II.—THE ADMINISTRATIVE OFFICE

[An outline of the whole reconstruction scheme was published last week]



Top, view from car park; bottom, the board room

*D E S I G N E D B Y*  
*R I C H A R D S H E P P A R D A N D*  
*J E A N S H U F F L E B O T H A M*

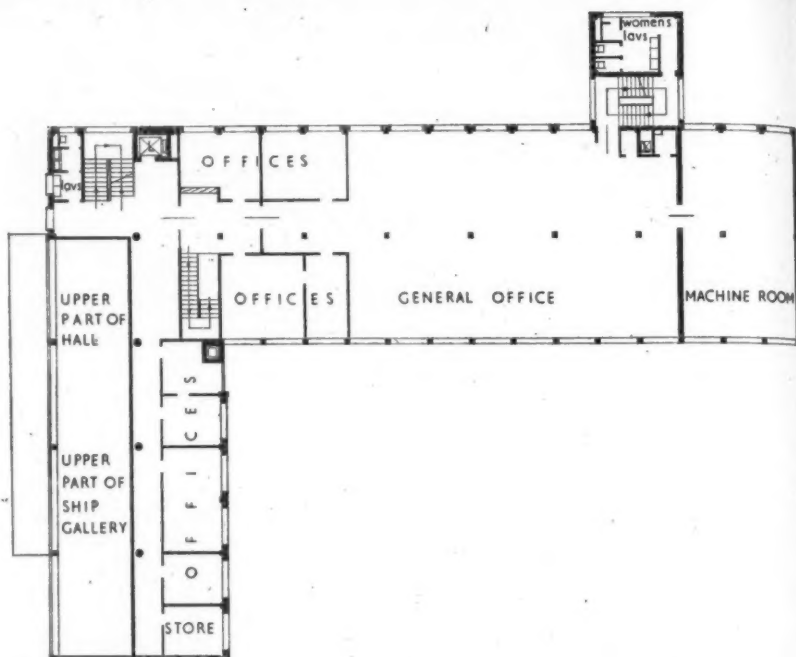
ASSISTANTS: G E O F F R E Y R O B S O N  
A N D C . E . B A N T I N

**GENERAL.** This week we illustrate the new administrative offices for Messrs. Swan Hunter and Wigham Richardson, the first section of the reconstruction of the firm's Wallsend Shipyard plans, and a description of the drawing offices; a general outline of the whole of the reconstruction work was published last week.

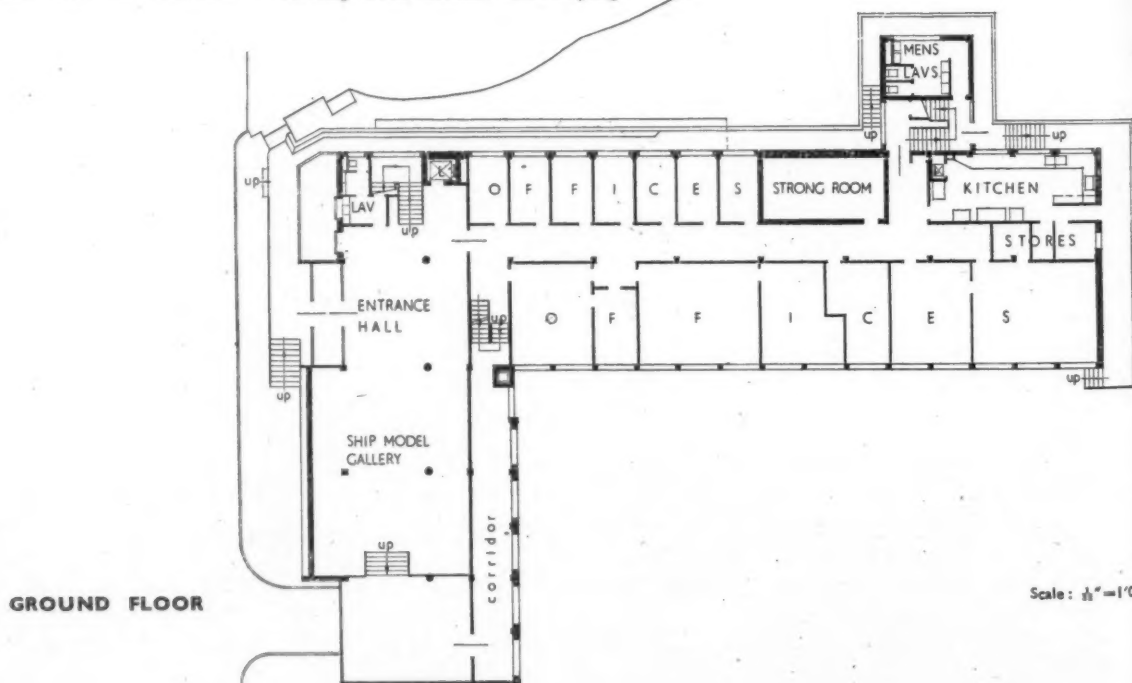
#### ADMINISTRATIVE OFFICES.

The five-storey office block is placed at the top (north) of the site to obtain (a) maximum sunlight unobstructed by the surrounding sheds, (b) direct access from the road outside the main gates of the yard, (c) views over the top of the frame shed and new drawing offices to the river and shipping. Advantage is taken of the falling site to keep the entrance floor at the same level as the drawing office, whilst retaining a minimum of 12 ft. headroom for the roadway passing underneath the drawing office block. The main entrance hall extends into the two-storey ship model gallery, whilst a corridor behind the gallery keeps it free from through circulation between the two blocks, and a minor staircase gives direct access to the yard from the ground and first floors. Floors are used as follows:—

ground, offices directly connected with and requiring constant access to the yard and ships; first and second, clerical staff, accounts, etc.; third, senior executives and staff dining room; and fourth, directors rooms (set back behind terrace) and board room. The link block contains the boiler room serving both blocks, and buying



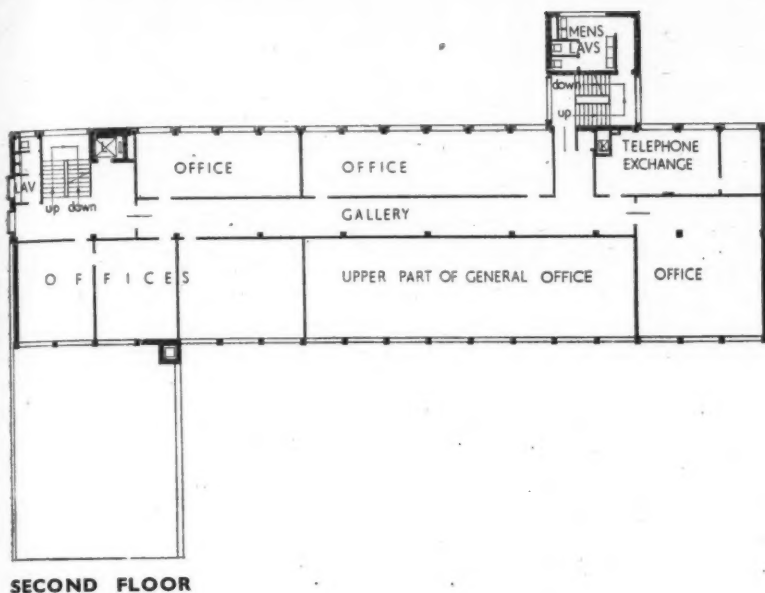
FIRST FLOOR



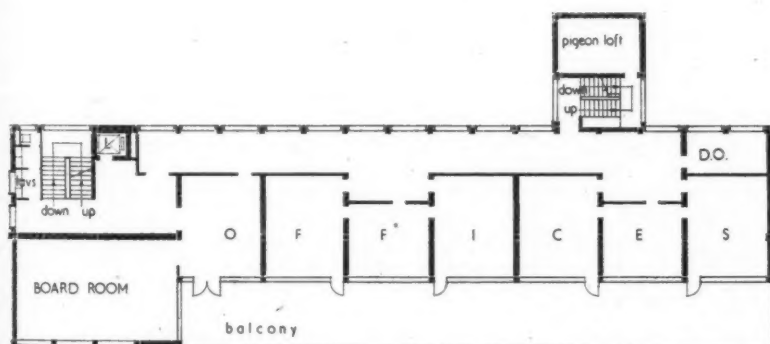
GROUND FLOOR

Scale:  $\frac{1}{16}'' = 1'0''$

## OFFICE BLOCK FOR A SHIPYARD:



SECOND FLOOR



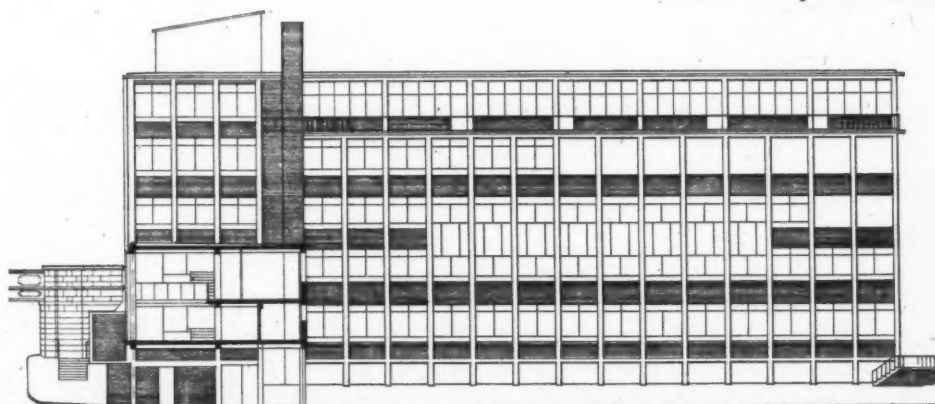
FOURTH FLOOR

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

department, which requires contact with yard and outer world equally.

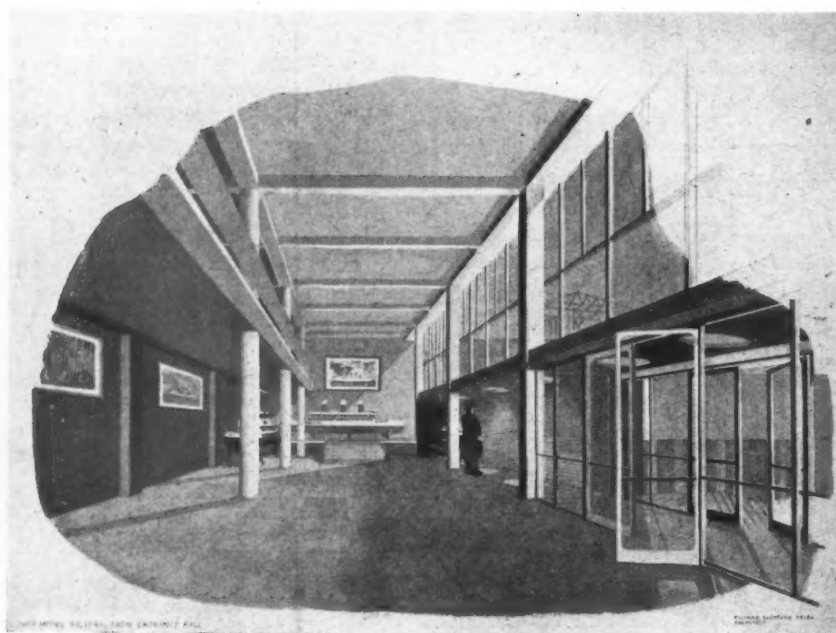
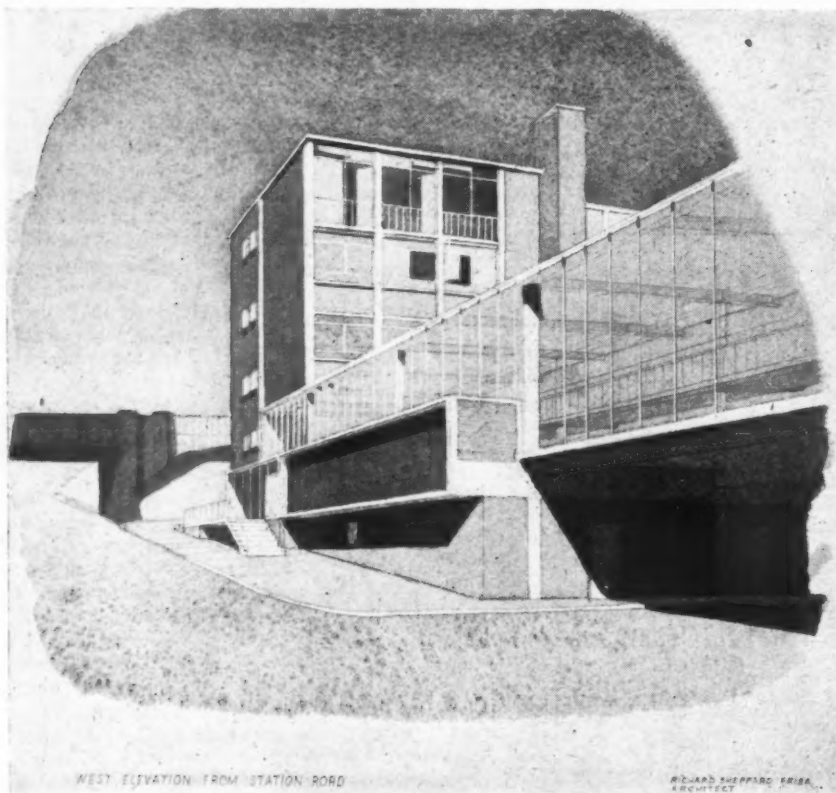
**CONSTRUCTION.** *Administrative offices and link block:* steel frame, concrete cased with infilling panels of sand-faced brick, cavity, and  $4\frac{1}{2}$  in. pumice concrete; *in situ* 4-in. concrete slab floors, screeding laid on 1-in. glass silk quilting to reduce sound transmission; *in situ* R.C. roof with all guttering formed in concrete; asphalt finish on 1-in. insulating board and lightweight screed; and piled foundations. *Drawing office block:* main floor slab in mushroom construction on 25 ft. by 25 ft. bays; north light roof to drawing office in shell concrete in 25 ft. by 75 ft. bays. *Offices on south and east:* R.C. frame, brick and pumice concrete cavity wall infilling; internal partitions: breeze, except in drawing office, where movable steel partitions are used to enable subdivisions to be altered. Large window areas are required. All exposed concrete frames, etc., are painted with cement paint, and all external facings are golden brown sandstock bricks. External doors and glazed screen to porch are teak, external handrails at main entrance aluminium; otherwise there are no decorative details. Purpose-made steel casements are used; double glazing had to be rejected on grounds of cost.

**INTERNAL FINISH.** Floors: entrance halls paved with York stone; elsewhere on ground, first and second floors,  $\frac{1}{4}$ -in. Semtex on screed laid on 1-in. glass silk quilting; third and fourth floors, compressed cork tiles on similar screed; lavatories—quarry tile floors. Walls: mainly washable distemper on plaster. In rooms where silence is important, walls plastered with acoustic plaster, and ceilings either in acoustic tiles or plaster to absorb sound waves from outside. Board room panelled in straight-



SOUTH ELEVATION

BY RICHARD SHEPPARD AND JEAN SHUFFLEBOTHAM



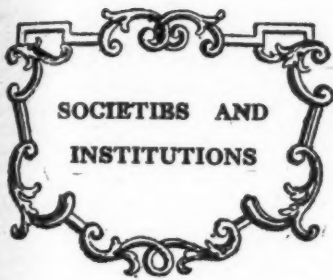
Top, west elevation from Station Road; bottom, ships model gallery from entrance hall.

OFFICE BLOCK FOR A SHIPYARD  
DESIGNED BY RICHARD SHEPPARD & JEAN SHUFFLEBOTHAM  
ASSISTANTS: GEOFFREY ROBSON AND C. E. BANTIN

grained mahogany and pearwood—flush panels with recessed joints, and aluminium fillets and skirting. Staircase: concrete carcase, with Jarrah treads and aluminium balustrading. Ceilings: mainly plastered direct to slab; suspended ceilings over fourth floors and over all corridors, where they provide space for heating and lighting services. Joinery: counters, hatches, commissionaire's desk, etc., in teak; doors and frames on ground, first and second floors flush, with paint finish and painted softwood frames; on third and fourth floors, flush doors with mahogany veneer and hardwood frames, polished; all swing doors and glazed doors are in hardwood throughout. Lavatories: senior staff lavatories, glazed tiled walls; on fourth floors terazzo floor and walls.

SERVICES. Kitchen on ground floor with bulk service to servery on third floor via 1 cwt. electric service lift. Washing-up, dishing out of meals, tea and coffee, etc., carried out in third floor servery. 60-80 lunches served, including directors, whose dining room can be cut off by folding doors if required. Lifts: six-passenger 250 ft. per minute lift in administrative office block, two-speed sliding doors to landing and lift. Ten-passenger lift in drawing office block. Heating: embedded panel sub-floor heating throughout. Pipe coils are encased in asbestos tubes to allow for expansions, and embedded in screed; glass silk below screed cuts down heat losses to concrete slab. Piping is led from boiler room through sub-floor ducts on ground floor and thence by vertical ducts in lavatories and main duct adjacent to lift well. Distribution on upper floors is in the false ceiling over corridors, with access panels in ceiling. Hot and cold water supply is through ground floor ducts to lavatories and thence by vertical ducting. All plumbing is in internal ducts, which also enclose rain water pipes. Oil fired boilers are to be installed for heating and hot water supply, with oil storage tank under staff car park. Post Office telephones are to be installed and inter-comm. telephones in all offices.





*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.*

AA

## M. Le Corbusier

December 18, 1947, at the Architectural Association, 34/6, Bedford Square, W.C.1. A lecture by M. Le Corbusier, given to the students on the occasion of the AA Centenary, on THE GOLDEN SECTION. The speaker was introduced by the students' Chairman, B. M. Feilden.

**M. Le Corbusier.** I shall speak to you first of the phenomenon of harmony which runs from architecture to music. I shall show you the principle of the unity of a consistent scale. And, further, as you have asked me to tell you something of my ideas on the century to come, I shall tell you my ideas for the coming year.

I shall start drawing at once to avoid too much discussion. I am going to tell you something which seems stupid but which constitutes the basic matter of architecture. I draw a man (1)\* I draw his eye, his spectacles, and I give the fundamental measurements for the appreciation of architecture, 1.65 metres. One cannot accept the idea that is current and imagine a man placed in the middle of a circle with a simultaneous synthetic perception. I write above the circle, "high renaissance," and underneath, "it is false." Man has his eyes in front of him, not behind, and it is thus that he gains his impression of architecture. It is pure illusion, this idea that man can see from one side to another at the same time. The impression of architecture is consecutive. One thing follows another and

that gives you the way in which you can appreciate the essential processes of architecture. Here I do another drawing; it is my proper man and the visual rays, i.e., what he can see. I draw what one sees in general in this interior perception and what one tries to do on the pretext of normalisation and standardisation. I make architecture and I write underneath "it is poor, it is miserable." Then I draw the other thing which is this, my proper man with his visual rays. I then refine the thing and I put an eye sign like this to show vertical perception. I draw the head of my man, his eyes, his spectacles, and I elaborate on my outline in this way. I will explain to you. This is a refined phenomenon or the process of perception itself, and I write here "it is mathematics, it is rich, it opens the door to miracles, the miracle of numbers."

I should like to show you, in the architectural phenomena that interest us, the possibility of extending beyond arithmetic to mathematics all the proportions that limit a work, which gives you extraordinary richness and comprises a great part of the architectural phenomenon of harmony.

### THE MODULOR

I have spent 30 years in research. We have, in our studio, discarded the principles officially in force in France. We have created what I call "Modulor," which will be put at the disposal of all architects—a scale which obeys the golden mean and follows the human figure. I will explain this to you immediately. Here is a man with his arm raised. Here you have his solar plexus, and you see that in making this sketch, if I measure it while doing it, I disclose a salient function. It is a given measure which is double the previous measure: the golden section in relation to the first. We have thus been able to create a measure which begins at zero and extends to infinity and which, for example, can begin at 1/15,000 of a millimetre, a microscopic measure, and extend to the circumference of the earth, 40,000 kilometres, which contains 272 intervals. With this measure I can show you how mathematics can be introduced into architecture.

There is another reason for having produced this measure. It is the obligation of the modern world always to be capable of movement and yet to maintain all contacts at the same time. Music is made of sound. Sound is an absolute physical event. When one day Pythagoras had the idea of writing music, he had to find some means of writing it down, and of writing down something

which was continuous and limitless in a notation made of sounds. What did he do? He took the audibility of the human ear and he investigated the physical and biological laws. On the other side he studied mathematics, and in numbers he found the means of an extraordinary combination. He created musical notation which is called the "Ionic mode" which lasted through the centuries until the renaissance, when an effort was made which is not yet exhausted. John Sebastian Bach created the modified scale, and with this modified scale, man can write down his understanding and imagination and transmit it through time and space, thanks to the miracle of the door opened by numbers.

### METRIC MEASURE AND BRITISH MEASURE

In architectural matters, that is to say visual matters, the question did not arise for primitive man, the great architect. He took the measure nearest to him, the foot, the length of hand, fore-arm, finger, thumb, and as civilisation was not in simultaneous movement in all countries this mode of procedure has been sufficient through the ages. Now we have found ourselves through the last 110 years in a new period where contacts are more and more shattering. Not only people, feelings and ideas, but manufactured goods and products travel, and the modern world finds itself in its present crisis, divided into two, by two very different and irreconcilable methods of work. They are the foot, the inch, the scale of the Anglo-Saxon world on one hand, and on the other, the metric scale, which divides the world into two irreconcilable groups. The metre was invented at the time of the French Revolution by savants who were not sculptors and who had forgotten that the circumference of the earth has not the slightest importance for us and that one does not measure houses by the circumference of the earth. But the advantage of it was that it obeyed the decimal system which allows exactitude of computation.

We have created modestly then, this thing based on spiritual means similar to music. You have this measure which is a series of golden sections, and this measure of millimetres, that is the decimal and the foot-inch systems, but the two measures are related. My measure will appear in two forms—a tape measure 2.26 metres long, and a rule which begins at zero and which extends on the scale of the human eye from one metre to about 400 millimetres.

I would like to point out one thing here. This method cannot give intelligence to idiots. It must be used with delicacy. And then with it you can attempt to give proportion, and the harmony of music, to architecture. Music, like architecture, is concerned with time and space.

All architecture has begun to lose its human reality when it has forgotten that man has his eyes in front of his head. This is the great evil of the academician and even the defect of classicism, very beautiful but of no use.

### MUSIC AND ARCHITECTURE

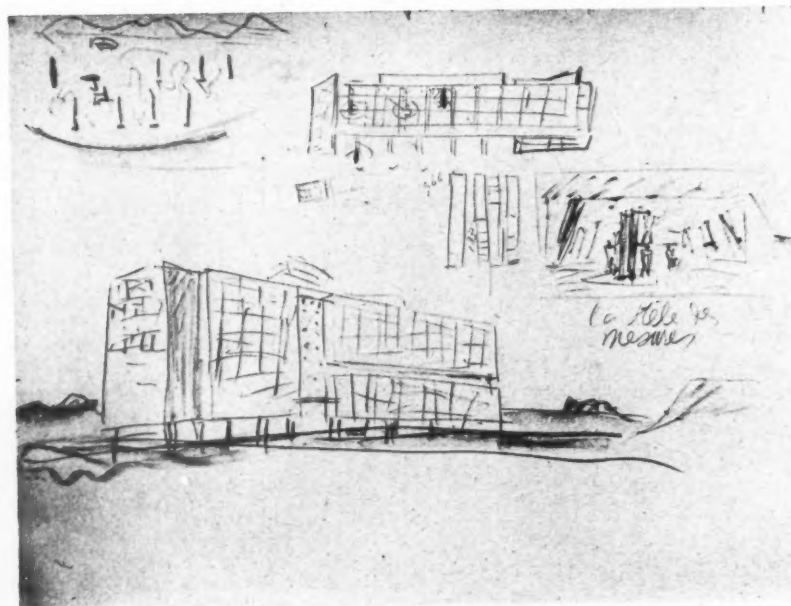
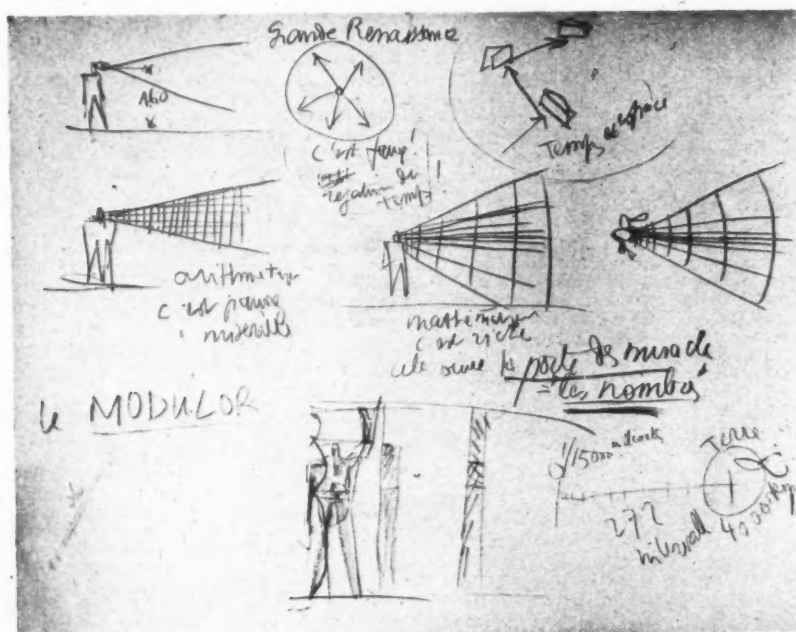
I am going to try and show you what I mean by music as an architectural phenomenon, if you are not too tired. Perhaps you remember the town plan of St. Dié. I have almost forgotten it, but it is something like this (2)\*. Something is happening here in this country surrounded by mountains, in this town which is a green town. What does the human eye perceive? That everything has a relationship. It is finesse—one of the joys of architecture and of civilisation. It is urbanity that lets you appreciate in the countryside the music of these great buildings which produce an architect-



*After the meeting: Le Corbusier with Clive Entwistle his interpreter (centre) and G. A. R. Ballantyne, student interpreter.*

\* See illustration 2, overleaf

\* See illustration 1, overleaf.



2

Two of the drawings made by Le Corbusier as he talked to AA students. The numbers are referred to in the text of his talks, of which extracts are printed on this and the preceding page.

tural rhythm. Here I put a little factory and with the mathematical module I give proportion to the thing and introduce a whole musical series in counterpoint and fugue. The building is a single thing. It has no symmetry. Here is a wall built of stone from bombed rubble. The floors are related thus and we are going to play with four sorts of dimensions. The first is the spacing of the stilts which carry the building. The second is that of the sun-break, which serves to protect the glass facades. It is quite different from the other and plays its own music. Here is a third one behind it; it is the dimensions of the carcass framework and of the structure. It is shortly going to contain the window frames. Finally,

there is a fourth dimension in the window frames, the final layer which is going to cover all this. These dimensions, different in scale, play one against the other, but they have the secret harmony of the golden section of the modern world which allows us to create out of them an architecture that smiles. It smiles not with the eyes of women or angels but through the absolute calm of proportion. This study is an eloquent demonstration of how one can introduce a delicious harmony into building.

#### THE STELE OF PROPORTION

Now I am going to show you a very much larger building—the great building which we

are constructing at Marseilles (2)—and how the same golden module can control everything. Perhaps some of you know this monument. It is 150 metres long by 56 metres high, and it will house 1,600 people who will all go in through the same door. Here you have a building which through its masses provides architectural impact. Here I draw the sea with its islands. The countryside can be seen from each apartment. Naturally there is green space all around. This immense construction on which 30 architects, engineers and administrators have worked for 2½ years completely obeys the golden rule of the proportions of modular.

The other day I had an idea. It was while we were laying the first stone, which is a little souvenir with the names of the authorities of Marseilles. I thought that we could put an inscription above it—a stele of proportion. Now the whole building is based on a standard unit of 3.65 metres. You have another measure, half of that, which is, like the magnificent Englishman six feet tall. Then we have the man with his arm raised (1) and a few measures here and a few measures there. This has allowed me to create here this stele of 3.60 metres, resting on four sardine-like feet, since this is Marseilles.

Here we have the proportion set by the superimposed stature of two men, one on the other, and here we have the man with his arm raised, and the stele will have blue and red faces and will be placed beneath the tremendous supports of the building. You can see between these supports the countryside and the sea. The stele will be under the building near the entrance. Everybody will know that on its four sides are all the measurements used in the construction of the building from a millimetre to the largest of them. These things will be explained later in writing and then you will be able to see them better than I am able to demonstrate them now. I am going to show you that this dwelling unit—I insist upon the word—of adequate scale is the key to all buildings with urbanity, the key to all conformable dwelling units, and the point of precipitation for all human problems. It is the key to individual and comprehensive syntheses, and in this harmonious revolution, this binary equation individual and collective, architects can give modern society the solution for which it is waiting—happiness in the home and social strength in its development, permitting the phenomena of participation which are the very condition of joy, and enabling us to expel the egoism which destroys individuals and peoples.

#### DWELLING UNITS

In the study of the dwelling unit one finds great ethical and aesthetic problems that are the means through which society has changed in the last hundred years, a change which has been terrible since the Great War. We still have the old customs and habits in the old towns but already a modern conscience has appeared everywhere and this reformation of modern understanding is made manifest by architecture. You are going to see the whole built-up domain of the world and of each country transformed during the years to come. The centenarians among you will recall this statement; they will see that the world is hatching new buildings. Do you remember that in the Middle Ages Abbé Alain wrote "The earth will be covered with a mantle of churches"?

Instead of churches there will be the factories of technical civilisation. A vast revolution will be accomplished. The great moment is coming when architecture will forsake mighty cornices, and concern itself with the good of man in his dwelling, the homes of families, houses for work, for things, for institutions and for gods.

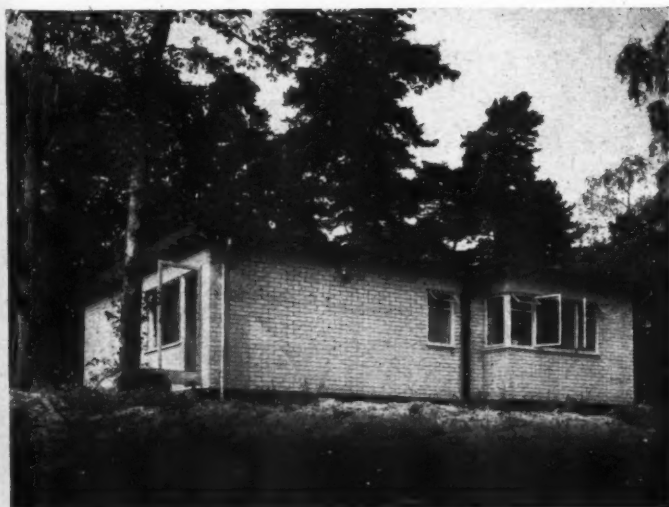


# HOUSE

## AT DORKING

*H. U. GERSON, DESIGNER;*

*A. G. GIBSON, ASSOCIATE*

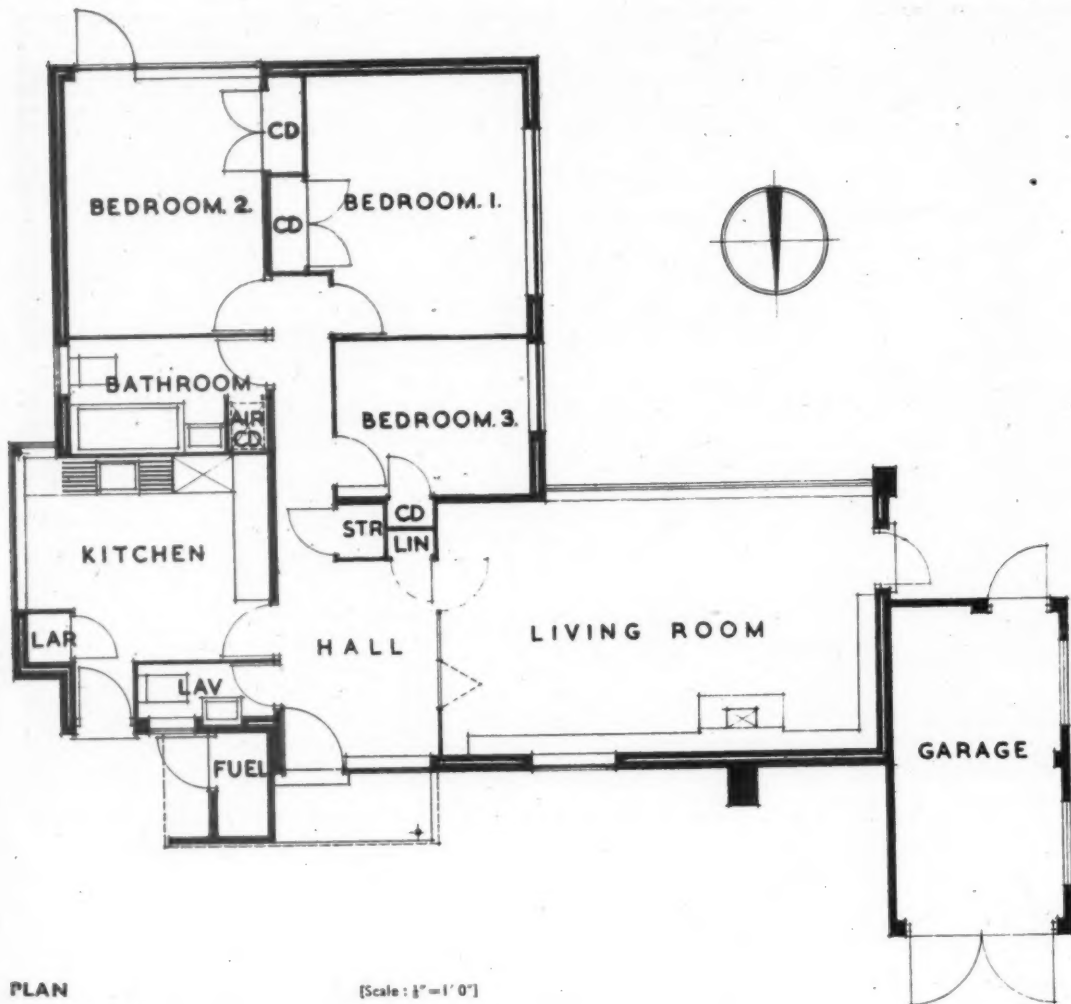


*Top, the north front; bottom, view from south-east*

**GENERAL.** This single storey house, built to the maximum 930 sq. ft. allowed, was designed so as to be readily extendable and provision has been made in the tentative final plan for adding three bedrooms, a second bathroom, laundry, workshop, tool shed and covered sitting space. After the house was completed a second licence was granted for building a minimum garage. Later this will be converted into a workshop and tool shed, and a larger garage will be added in front.

**SITE.** On a hilltop with a magnificent view to the south-west. There is a large red Victorian house to the south-east. On the site were plenty of trees and shrubs. These have been thinned, and to some extent settled the position of the house.



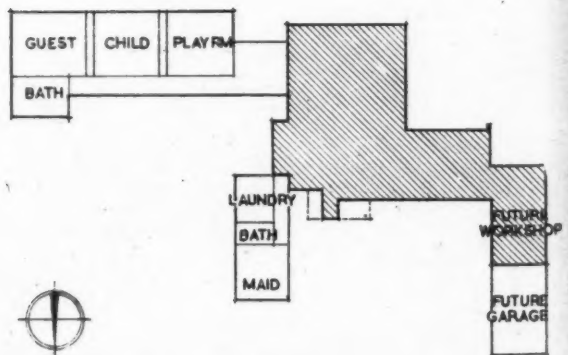


PLAN

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

**PLAN.** The L-shaped plan was adopted to give: (1) good orientation, (2) an informal atmosphere, (3) ease of extension, (4) sheltered sitting space and (5) exclusion from view of the nearby Victorian house from the living room. Originally the house was designed with a steeper pitched roof with an interesting intersection at the junction of the wings, but the local Town Planning Committee would only pass the plans on condition that the roof was flat.

**CONSTRUCTION.** Walls, 10-in. cavity with a  $4\frac{1}{2}$ -in. brick outer skin and a 3-in. hollow clay block inner skin; roof, 7 in. by 2 in. wrot joists at 18-in. centres,  $\frac{1}{2}$ -in. insulating board and  $1\frac{1}{2}$ -in. heavy duty woodwool slabs on top of joists, covered with 3-ply felt with mineral dressing; gutters and downpipes pressed steel; partitions,  $4\frac{1}{2}$ -in. brick to bedroom wing, 2-in. breeze elsewhere;



PLAN OF FUTURE EXTENSIONS

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

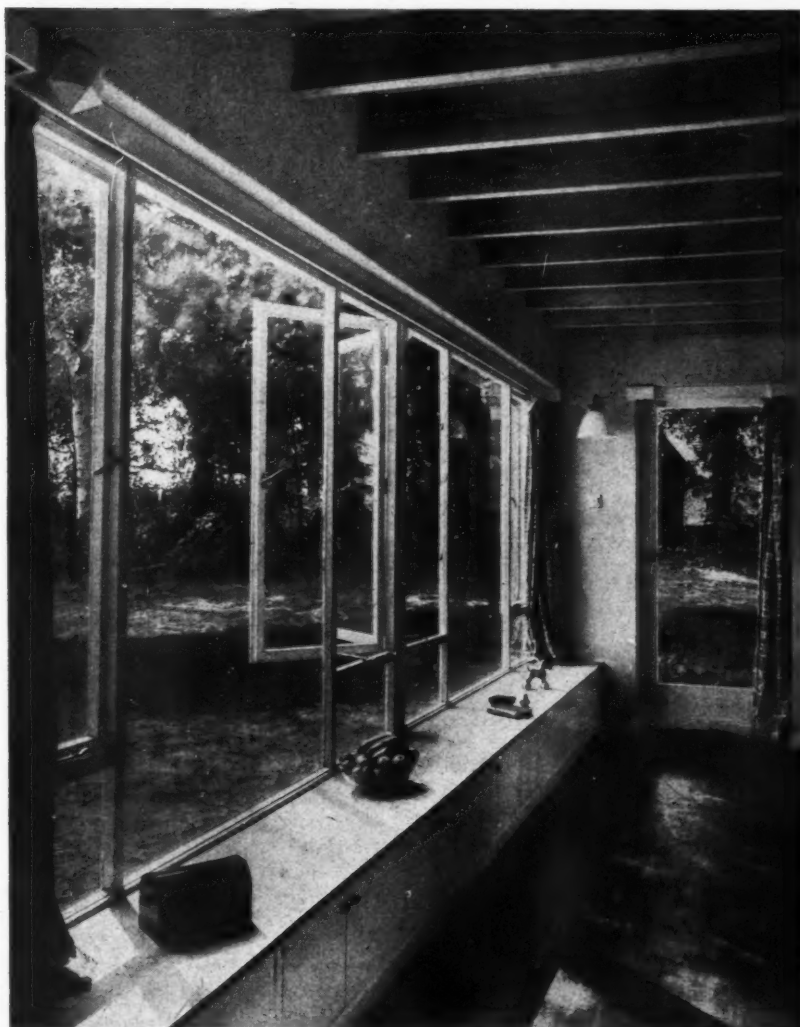


floor,  $\frac{5}{8}$ -in. pine blocks laid in bitumen on a 5-in. concrete floor; windows and French windows, EJMA standard; internal doors, standard two-panel, except the doors between hall and living room, which are glazed and in three leaves. The licence to build the garage was granted subject to no bricks being used for the walls and no timber for the roof. The walls therefore are of 6-in. concrete blocks with piers, and the roof is of  $1\frac{1}{2}$ -in. heavy duty woodwool slabs laid on standard RC farm roof units. The front and back will eventually be extended to form a larger garage and sitting space respectively.

**ELEVATIONAL TREATMENT.** White sandlime bricks, chimney stacks and pier in Dorking second facings.

**INTERNAL FINISH.** Walls of kitchen, bathroom and lavatory are finished in hard plaster, dis-tempered, all other rooms in rough textured lime plaster without decoration. The joists and insulating board ceiling are left natural and all paintwork is dead white, except front door, which is a dull pink. The fireplace surround in the living room is in 2-in. sand faced facing bricks.

**SERVICES.** Heating is by slow combustion stove in living room and electric points elsewhere, and hot water supply is supplied by a 20-gallon electric water heater. The general contractors were Messrs. Pledge and Keen. For sub-contractors see page 44.



*Top, the south windows in the living room; bottom, left, a view from the south-west; right, looking from the hall, through the glazed folding doors into the living room.*



H. U. GERSON, DESIGNER; A. G. GIBSON, ASSOCIATE

INFORMATION CENTRE . INFORMATION SHEETS  
QUESTIONS AND ANSWERS . CURRENT TECHNIQUE  
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## TECHNICAL SECTION

*A digest of current information prepared by independent specialists; printed on one side of the paper only, to allow readers to cut out the items for filing and paste them up in classified order. Headings below.*

### INFORMATION CENTRE

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.

#### 4.27 planning: urban and rural NEW TOWNS: FARMING

*Farming Policy for the Agricultural Belts of New Towns.* E. G. Parsons. (Town and Country Planning Association, 1947.)

Report of talk given at TCPA meeting on October 9, 1947, by Director of New Town Agricultural Guild at Welwyn Garden City. Discussion of farming systems most suitable for conditions present during period of growth of new town.

#### 6.16 planning: social and recreational SECONDARY EDUCATION PLANS

*Secondary Education for All: An Analysis of Local Education Authorities' Development Plans: A Report prepared for the Fabian Society's Education Committee.* Joan Thompson. (Fabian Publications Ltd. and Victor Gollancz Ltd, 1947. 1s.)

Summary of enquiry undertaken to discover what common principles, if any, are actuating Local Education Authorities in preparing area Development Plans under Education Act, 1944. Aims of secondary education. Useful information on factual survey of 54 actual Development Plans, covering types of secondary schools, voluntary schools, co-education, boarding accommodation, and finance. Valuable tabulated data appended.

#### 13.16 materials: timber PLYWOOD

*The Surface Checking of Plywood in Service* R. A. G. Knight. (Wood, October, 1947, pp. 285-287.)

Description of two tests made at FPRL on surface checking of plywood; first test designed to show influence of surface veneer thickness and geometry of board; second

to discover effect of species. Results of tests given. Photographic illustrations.

The kind of information given in this article is of great value to architects; for it makes quite clear what at present is involved in the use of unpainted and untreated plywood out of doors—a matter of considerable interest when from an assessment of the behaviour of the phenolic resin glues one might be tempted to assume that the problem was solved.

In fact, this article points out that all exposed panels become a uniform grey, and that surface-checking occurred in every case. On the other hand, the evidences showed that checking, woolliness and erosion could be mitigated by the selection of suitable species and, even more important, by the use of thin face veneers. The author makes it clear that only a limited number of species may be forthcoming as they are tested.

#### 16.18 materials: miscellaneous ASPHALT

*Mastic Asphalt Flooring: Natural Rock Containing 6-10 per cent Bitumen.* BS 1410:1947. (British Standards Institution. 2s. 6d.)

Describes a particular mastic asphalt flooring designed to range from "light duty" to "heavy duty"; material specified by composition; analysis and testing clauses included; remelting of mastic on site; recommendations (pending issue of Code of Practice) for application of mastic asphalt flooring.

#### 16.19 materials: miscellaneous HEAT INSULATION

*High Temperature Insulation.* R. L. Ballard. (J. Junior Institution of Engineers, October, 1947, pp. 20-27.)

Review of basic materials used for high temperature furnaces and hot pipes, boilers, etc., heat insulation and of factors governing choice of materials; form of application suited to specific purposes; a valuable paper containing useful comparative data.

The properties required of a good insulating material for such purposes as lagging pipes, boilers, etc., are listed; some of these properties, such as that the material may need to be structurally self-supporting, or resist contraction when vibrated, are not always taken into account, and the author's remarks on this subject are a useful reminder. A list is then given of the basic insulating materials: asbestos, magnesium carbonate, diatomaceous silica, vermiculite, cork wool, glass wool or slag wool, cork, cattle hair and wool, and some account of their origins. Crumpled aluminium foil is also mentioned.

The main part of the paper deals with various forms of insulation such as coverings for hot pipes, for valves and fittings on hot pipes, for cold pipes, block insulation for large surfaces, sheet insulation, blanket insulation, insulating fillers, insulating cements and concrete, insulating bricks.

Throughout the discussion the usual temperature ranges for which the various types of insulating material are applicable are

given, together with a description of suitable techniques for them.

A table is included giving the thermal conductivity and maximum safe temperatures for the materials under review.

#### 19.29 construction: details TIMBER ROOF

*The TDA Roof.* (Wood, November, 1947, pp. 321-323.)

Illustrated article describing development of design for economical timber roof undertaken by TDA's Directorate of Constructional Research. Claims for roof are that it is economical in use of timber, stronger, easier to erect, and relatively cheaper. Full details given in article, also illustrations of prototype in actual practice.

#### 20.49 construction: complete structures PRECAST R.C. STRUCTURES

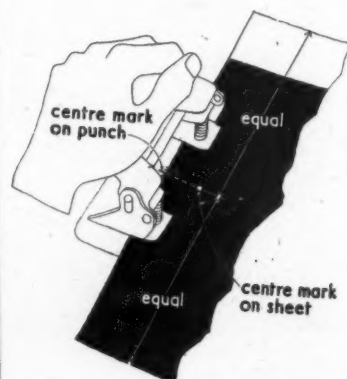
*Fertigkonstruktionen im Beton und Stahlbetonau.* (Precast Reinforced Concrete Structures.) A. Kleinogel. 2nd edition. (W. Ernst u. Sohn, Berlin, 1947.)

Advantages and disadvantages of precast reinforced concrete structures. Principles of design. Applications in floors, roofs, staircases, single- and multi-storey buildings for dwelling and industrial purposes, bridges, railway platforms, retaining walls, river banks, docks and harbours, churches,

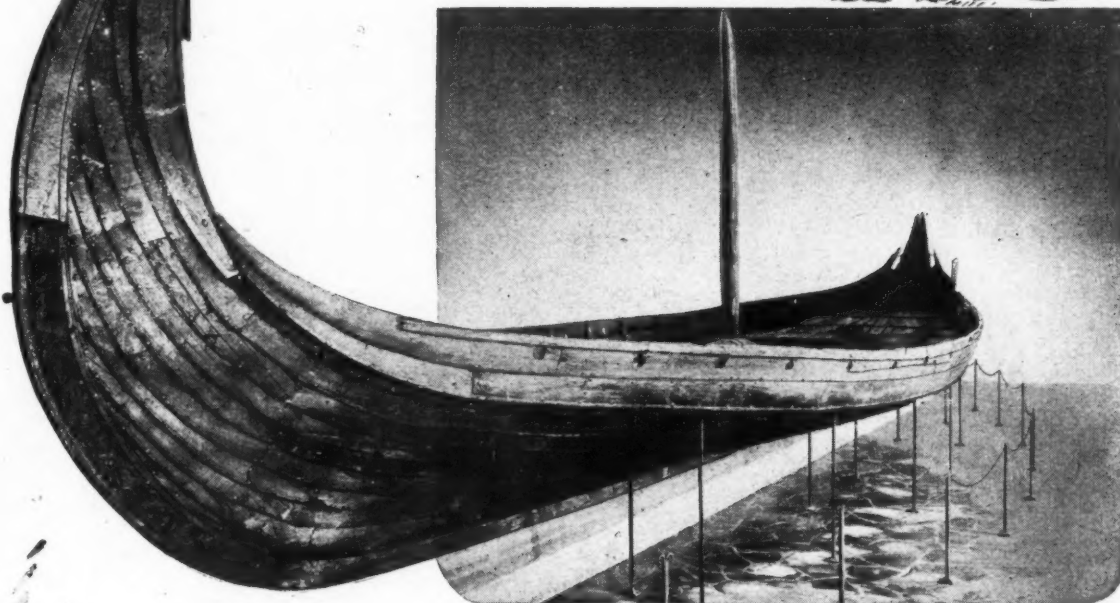
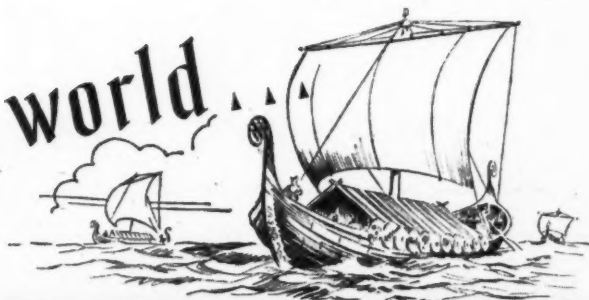
### THE LIBRARY OF INFORMATION SHEETS



This week another suggestion for Information Sheets is being adopted; one that has been made by Mr. J. C. Butters. A small white dot is being printed on the left-hand side of each Sheet. This mark, which is central with the Sheet as a whole, is intended as a guide when punching holes in Sheets for filing in a ring binder, making it easy to punch the holes in the same relative position. If the punch used has no central mark, one may easily be scratched or painted on.



In a changing world



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## Timber endures



About 850 A.D., the Norsemen put their faith in sound timber to build this 70 foot Viking ship—a frail looking craft for the hazardous North Sea crossing. Eleven centuries later it was found in a good state of preservation at Oseberg Farm, Slagen, Norway, and now stands in Bygdøy Museum, Oslo, justifying their faith in the enduring qualities of timber. In modern craft of all types, fine woods are selected with assurance and with a wider choice of timber than builders have ever known. Hardwoods and veneers from many countries, plywoods (flat, shaped and metal-faced), and all prepared for a multitude of uses by processes and equipment which incorporate all the advantages inherent in modern scientific development.

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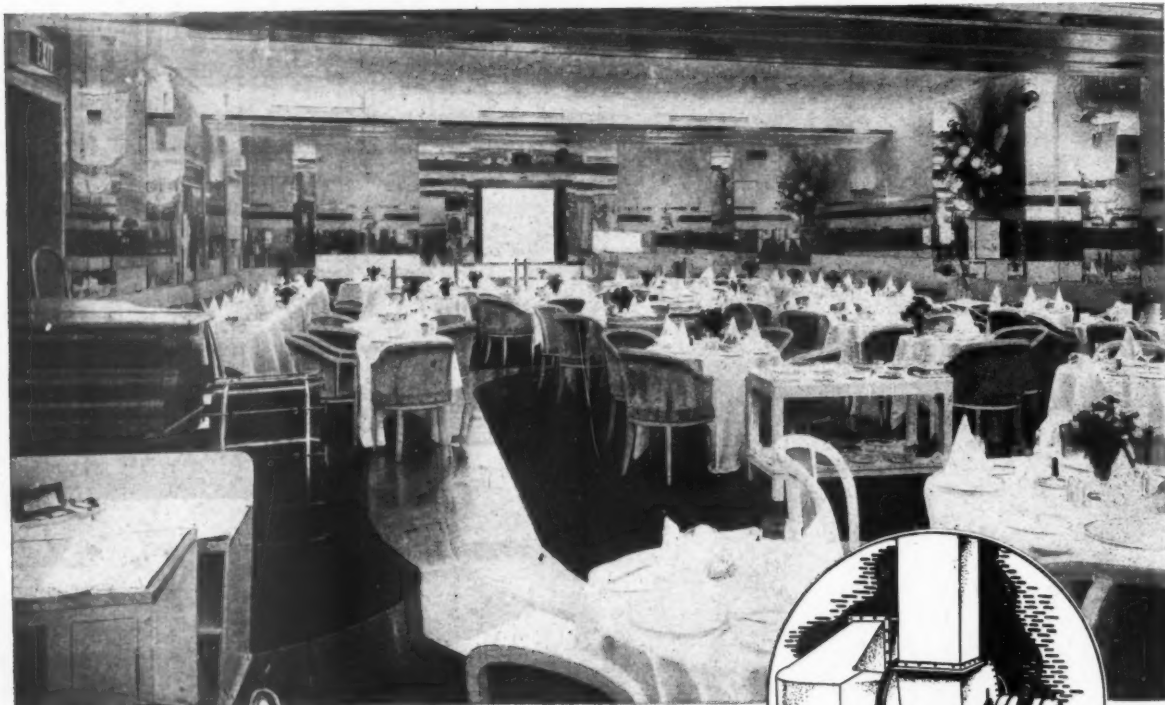
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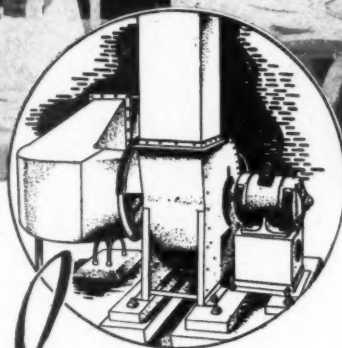
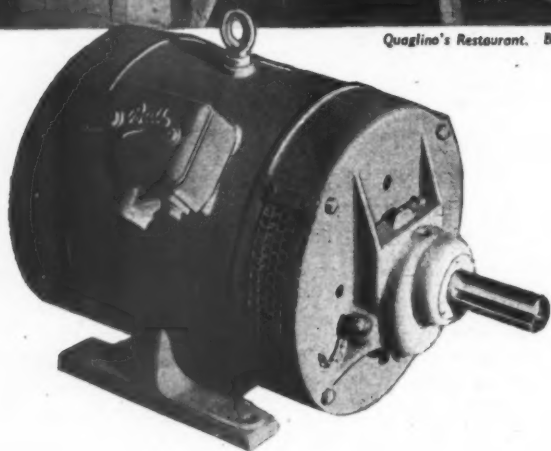
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canals, greenhouses, etc. Details of construction. Economic considerations.

The first edition of this book was published in 1929 and incorporated the developments during World War I and the early post-war years. Afterwards there was not much progress until World War II gave another big impetus to the application of precast concrete work instead of *in situ* construction, and also as a substitute for steel and timber. The main advantages of precasting reinforced concrete members are: saving in timber, concrete, and reinforcement, employment of unskilled instead of skilled labour, independence of weather, speed of erection, etc. On the debit side are: loss of continuity and of the monolithic character of reinforced concrete, special equipment for manufacture, transport and erection. The design must be carefully prepared and alterations during construction are not as easy as with *in situ* construction.

The book contains 227 figures. A great variety of examples, most of them from Germany, are included. Common applications of precast work, such as lintels, curbs, fence posts, slabs, etc., have been omitted. Among the precast floors published, the most interesting is the Schäfer system, consisting of pre-stressed hollow slabs, in lightweight concrete, with a layer of dense concrete at the bottom.

Among roofs, the cylindrical shells by Dywidag deserve special attention. Units of 33 ft. by 16 ft. 6 in. have been mass-produced and erected by cranes. Various systems for pitched roofs have also been adopted.

For industrial buildings, different types of rigid frames, tied arches, lattice girders, etc., are shown. During World War II factories with spans up to 100 ft. were carried out in precast construction, and units up to a weight of 12.5 tons were handled.

An interesting application are bridges carrying pipes and conduits in industrial plants. In certain plants, particularly in the chemical industry, up to 50 pipes of different diameters are carried on bridges over many miles.

The book as a whole gives an impressive picture of the possibilities of the use of precast reinforced concrete units. There is still much scope for further development, both on the design side (standardisation) and on the manufacturing side (organisation of labour). The bibliography, with references to a series of German codes for precast concrete, is valuable.

### 23.49 heating and ventilation

#### HEATING YEAR BOOK

*Year Book of the Heating and Ventilating Industry.* (Technitrade Journals Ltd. 1947. 5s.)

Year Book compiled in conjunction with the Association of Heating, Ventilating, and Domestic Engineering Employers. Contains several articles on special aspects of heating, together with contractual information, a buyer's guide and a list of trade names.

This is the first issue of this Year Book. It contains an article giving useful information on Thermal Insulation and several articles of a more general nature on such subjects as District Heating, Types of Heating Installation, Maintenance, Chimneys. Various Rates of Wage and other agreements are included and a list of Trade Names. These latter should be valuable for reference purposes.

### 23.50 heating and ventilation

#### DOMESTIC GAS HEATING

*Space Heating by Means of Independent Gas Appliances (Single Family Dwellings).* BS C. of P. 332.301:1947. (British Standards Institution. 2s.)

Selection and installation of independent gas heating appliances in dwellings. Mainly useful in guidance given to choice of correct size of appliance.

### 23.51 heating and ventilation

#### HOUSE HEATING

*Heating Studies in Occupied Houses.* P. Mason. (J.RIBA, Oct., 1947, pp. 589-597.)

Nine page detailed description of method and results of tests on heating eight houses having varying standards of thermal insulation. Houses occupied by tenants. Interesting and very important paper by member of BRS Staff. Illustrated by diagrams, photographs, graphs and tables.

An earlier paper (RIBA Journal Jan. 13, 1947) described these houses and the results of tests under unoccupied conditions arranged as far as possible to simulate "average" tenancy. The results of that earlier test showed clearly the value of thermal insulation if the now well known

Egerton standards of heating are maintained. There was also some interesting additional information about the comparative values of constant heating of the Living Rooms as against background heating plus topping up.

The present paper deals with the following stage of the experiment. The houses were tenanted and the occupiers allowed to use fuel as they needed it. Part of the cost of this fuel was paid for by the Building Research Station. During the next stage in the experiment all fuel used will be paid for by the tenants so that some indication of the effect of this may be obtained later. Very elaborate arrangements were made to record temperatures, hot water usage, etc., by means of distant recording apparatus but as all of the equipment was not available at the commencement of the experiment some of the earlier recording was done by tenants. A check using both tenant recording and automatic recording at the same time showed that for simple recordings the tenants' observations could be relied upon for a very satisfactory standard of accuracy.

The paper explains in detail the experimental technique. Temperatures were recorded at nine positions in each house and automatically recorded every few minutes. Weather conditions were measured at four points on the site. Solid fuel was supplied to each tenant in measured containers and frequent analyses of the calorific value of the fuel were made by the Fuel Research Station. Electricity consumption was metered to each house and an additional meter was installed to check on the amount used for topping up in Living Rooms. A record was made of how many people were in each house for how many hours per day and an approximate check was made on the amount of window opening by periodic visual inspection. Hot water consumption was also measured.

It is impossible to make an adequate summary of the results given in a paper of this nature which should be read in full by all concerned with house building but among the many interesting points brought out are the following:—

1. Ventilation in a house of pre-war insulation value but heated by radiant heating will account for something like one-sixth of the total heat loss.

2. With heating by radiators in a pre-war type of house, ventilation would rise to about one-quarter of the total heat loss.

3. In a really well insulated house the ventilation may account for as much as one-half of the entire heat. (Ten shillings in the pound blown away to heat the surrounding district.)

4. Temperatures maintained in the houses were *above* the Egerton standards.

5. The insulation of higher standards was economically worth while even with the very high efficiency boilers which were used. In fact the figures show the Egerton estimates were conservative.

6. A considerable economy is obtained, in all circumstances, where a continuously-operated hot water system is provided, by well insulating the storage tank.

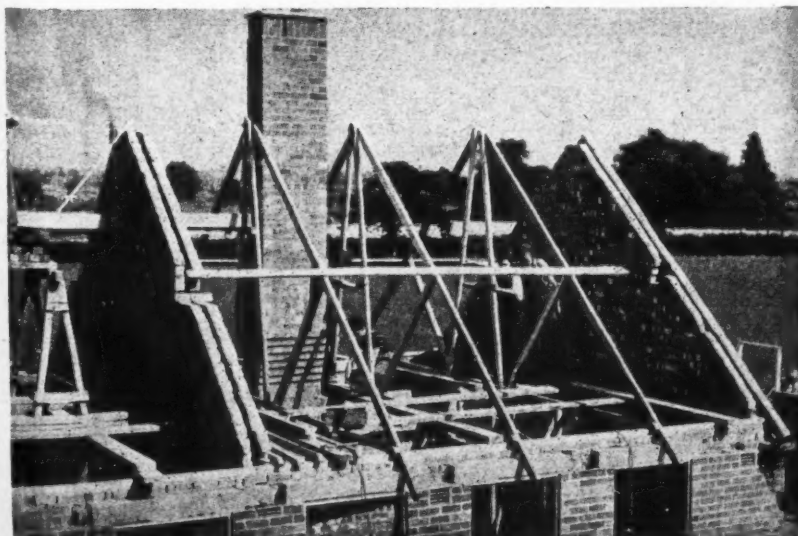
The experiment is a long range one and the present report can be considered only as an interim statement. It is, however, a first class piece of research which carries on the tradition of BRS for fine and original research on heating. Undoubtedly it will be studied in great detail by experts in other countries. It is to be hoped that its value will be equally recognised at home.

### 24.54 lighting

#### OFFICE LIGHTING

*Possibilities of Modern Lighting in Office Buildings.* Ely Jacques Kahn. (Illumination [USA], Vol. 6, No. 3, p. 2.)

Use of artificial light and wider office



An economical timber roof design. See 19.29

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areas; intensities; lobby treatment. Excellent article. Illustrated photos.

This is a thoroughly good, authoritative article.

Mr. Kahn's policy is to depend on artificial lighting for offices and increase working areas from 28 ft. to 50 ft. He provides windows, but does not rely on them for light.

A new office building is described. Main office lighting is from units of 1 to 4 fluorescent lamps, 3 ft. to 8 ft. apart, recessed in an "acoustical" ceiling which itself hangs on the light fittings. This is so designed to provide 40-50 foot candles, and is the same throughout executive and general offices, except that in the former, egg-crate louvre ceilings are fixed below the lights to reduce glare. Attention is paid to the reduction of adverse contrasts tending to give the feeling of glare. Light colours are employed on floors as well as walls.

Much care was given to treatment of the lobby, which is carefully described. Instead of being two storeys high it is kept down to 12 ft. To relieve the resulting tunnel effect the ceiling undulates, with cold-cathode tubes in the crest of each undulation. Supplementary lighting is from egg-crates, cones and direct lights. 20-40 foot candles of intensity are provided, according to the density of foot traffic, the higher values being used partly to compensate for dark clothing on dense masses of people. Walls are grey marble, with pink across the end to reduce apparent length. Intensities at the entrance are less than inside, to attract people inward. Lamps for night and day use are on separate circuits so that burning hours will be known and re-lamping can be arranged efficiently.

All ballasts are localised near lifts. The cost of the extra wiring required is said to be offset by the simplification of maintenance, and by reduced wear-and-tear on the acoustical ceiling.

The windows are virtually continuous, with columns at 9 ft. 8 in. centres, wedge-shaped on plan, being 7 in. wide outside and 14 in. inside (the building is 21 storeys). This arrangement is used to give maximum glass area and flexibility.

#### 24.55 lighting

##### GAS LIGHTING: HOUSES

*Gas Lighting. Single Family Dwellings.* BS C. of P. 332.101:1947. (British Standards Institution. 2s.)

Methods of achieving standards of lighting as given in the Functional Code on Lighting (Chapter VII (F)). Mainly concerned with correct size of lighting units.

#### 24.56 lighting

##### SHOP LIGHTING

*Store Architecture and Lighting.* Morris Ketchum. (Illumination [USA], Vol. 6, No. 1, p. 3).

"Ideal" design; impulse and "demand" goods; the open-faced shops; planning and lighting service. Very good article. Illustrated 10 photographs.

This is a very useful note by an American shop architect. He visualises an ideal interior, having a low ceiling made of egg-crate louvres, with a mixture of incandescent and fluorescent light sources overhead for general lighting and supplemented by incandescent spots. There would be space for catwalks for maintenance and for moving the lights, as well as for sprinklers and ducts.

In the back of his mind are some general "rules." He distinguishes "impulse" from "demand" goods, the former being what you have to persuade people to buy, and the latter what they will buy anyway. Only the "impulse" goods need really skilful

attention, but the plan is arranged to put "demand" goods (such as prescription counters) farthest from the door so that people have to pass everything else. We are told there is a big development in America of what is called the open-faced shop, so-called because the whole interior is visible from the pavement, "to turn window-shoppers into store-shoppers." Display also goes inside, too, so that the buying instinct doesn't "die at the door." There must be enough light inside to let people see in despite reflections on the glass.

Outside design is carefully treated to make the name as visible to pedestrians as to motorists.

In working out how architects and shop managers should co-operate, the architect's job is described as covering space organisation, customer traffic, operational traffic, services, equipment and displays; all quite straightforward, but a useful list.

All this has a strong American flavour and not immediately relevant to a country which has more "demand" than "impulse" goods at home. But it is well-founded clear thinking, and that means efficiency.

#### 25.46 water supply: sanitation

##### MIXING VALVES

*Mixing Valves (Manually Operated) for Ablutatory Domestic Purposes.* BS 1415: 1947. (British Standards Institution. 2s.)

A Standard for Mixing Valves.

#### 25.47 water supply and sanitation

##### GAS WATER HEATING

*Domestic Hot Water Supply by Gas.* BS C. of P. 332.201:1947. (British Standards Institution. 3s.)

Recommendations affecting installation in single family dwellings. Covers instantaneous and storage heaters for single and multi-point use. 40 pp. with diagrams and tables.

In addition to brief descriptions of the various types of heater, this Code deals with pipe lay-out. Accessories such as draught diverters and gas governors are mentioned, the need for flues on the various types of appliance is discussed, and heat insulation of pipes and tanks is referred to, with a table showing heat loss to be expected for various diameters of pipe. Proper spacing of supports for pipe runs in steel, lead, and light copper pipes is given in tabular form, and other factors of importance in the correct installation of pipes are mentioned. A useful reference on the installation side of gas water heaters.

#### 26.15 services and equipment: miscellaneous

##### GAS LAUNDRY APPLIANCES

*Installation of Gas Heated Appliances for Laundering and Ancillary Domestic Purposes.* BS C. of P. 332.601:1947. (British Standards Institution. 2s.)

Wash boilers, washing machines heated by gas and operated by hand or electricity, drying cupboards and miscellaneous small gas appliances.

#### 26.16 services and equipment: miscellaneous

##### GAS REFRIGERATORS

*Gas Operated Refrigerators.* BS C. of P. 332.501:1947. (British Standards Institution. 2s.)

Description of types. Sizes for varying family size. Installation notes, particularly on need for air circulation.

*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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*This feature answers any question connected with building confidentially and free of charge. Questions to the Technical Editor, The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1.*

## QUESTIONS AND ANSWERS

### 2925 BUILDING COSTS 1917

**Q** I have been asked to make a valuation of several factory buildings at 1917 costs. The structures are steel framed, single storey (15 ft. to eaves), brick outer screen walls, timber lined roofs covered with felt and asbestos slates with substantial heating and electric lighting installations. All records of actual building costs have been lost. Can you advise me of appropriate cost per square, or alternatively, per cubic foot, relative to costs prevailing at 1917?

**A** It would appear that the factory building you have under survey would cost to-day about 35s. 0d. per ft. super. According to a building wages chart prepared by H. J. Venning, F.S.I., published in 1917, building costs were approximately 61 per cent. lower than they are to-day. On this basis (35s. 0d. less 61 per cent.) the factory would have cost 13s. 8d. per ft. super in 1917.

## Announcements

Mr. William Stukins who has been with the Cement Marketing Co. Ltd. for the past sixteen years, has retired. He has been connected with the cement industry for the past twenty-eight years.

The Council of the Institute of Welding has accepted the offer of the British Oxygen Company, Ltd., to provide a prize of £100 a year for three years, to be known as the BOC Welding Prize and to be awarded for a paper submitted by a member of the Institute on some aspect of gas welding.

In order to remove delays in the supply of materials required for small urgent repairs, it has been decided that within the specified limits merchants may supply goods without formality if they are satisfied that an emergency repair is involved. The limits are: Hardwall plaster,  $\frac{1}{2}$  cwt.; domestic type lavatory basins, 1; W.C. pans, 1; lead sheet not less than 3 lb. nor more than 5 lb./sq. ft. (for building only),  $\frac{1}{2}$  cwt.; lead pipe not less than  $\frac{1}{2}$ -in. bore nor exceeding 4-in. bore (for building only), 6 lin. ft.; copper pipe (for building only), 6 lin. ft.; clear sheet glass, 18 oz. to 32 oz., in sizes exceeding 144 sq. in., 10 sq. ft.

Mr. C. A. Pilkington, L.R.I.B.A., Principal Assistant Architect (Housing) in the City Architect's Department, Leeds, has been appointed Housing Architect to the City of Nottingham.

Sir Charles Ellis, F.R.S., President and Chairman of Council of the British Coal Utilisation Research Association, has announced the following new titles in respect of the Directorate of the British Coal Utilisation Research Association: Dr. D. T. A. Townend, Director-General; Dr. D. H. Bangham, Director of Research Laboratories; Dr. E. G. Ritchie, Director, Engineering Laboratories; Mr. J. S. Hales,

Director of Domestic Appliance Laboratories; Mr. H. T. Hathaway, Secretary and Finance Officer.

Sir Robert Fraser, K.B.E., C.B., has been appointed Secretary of the Central Land Board which has been set up by the Secretary of State for Scotland and the Minister of Town and Country Planning for the purposes of the Town and Country Planning Acts, 1947. Mr. H. B. Usher has been made Deputy Secretary of the Board. The Board's office in Scotland will be under the charge of Mr. A. C. Sheldrake, Assistant Secretary.

Mr. Lawrence Farman, F.R.I.B.A., has recently taken into partnership Mr. J. Mackie Murray, A.R.I.B.A., under the title of Lawrence Farman and Partners, with temporary offices at 42, Richmond Park Road, London, S.W.14; Telephone No. Prospect 1924. The partnership has also opened a branch office at 1, Middle Row, Maidstone. Telephone No.: Maidstone 2538, where trade catalogues would be welcome.

Mr. Arthur C. Braven, A.R.I.B.A., late of Braven and Cubitt, A./L.R.I.B.A., is conducting his practice from 430, Strand, W.C.2. (Telephone No.: Temple Bar 4953-4.)

The Pilgrim Trust has given £15,000 to the Dean and Chapter of Peterborough towards the restoration of the Cathedral. Payments will be made by the Trust as and when the Chapter are able to undertake the work.

Messrs. Cox and Hughes, M.B.E., A./L.R.I.B.A., National Provincial Bank Chambers, 21, High Street, Aylesbury, Buckinghamshire, have opened an office at 9, Old Burlington Street, Piccadilly, W.1 (Telephone: Mayfair 3914). Communications should, however, continue to be addressed to their Aylesbury office.

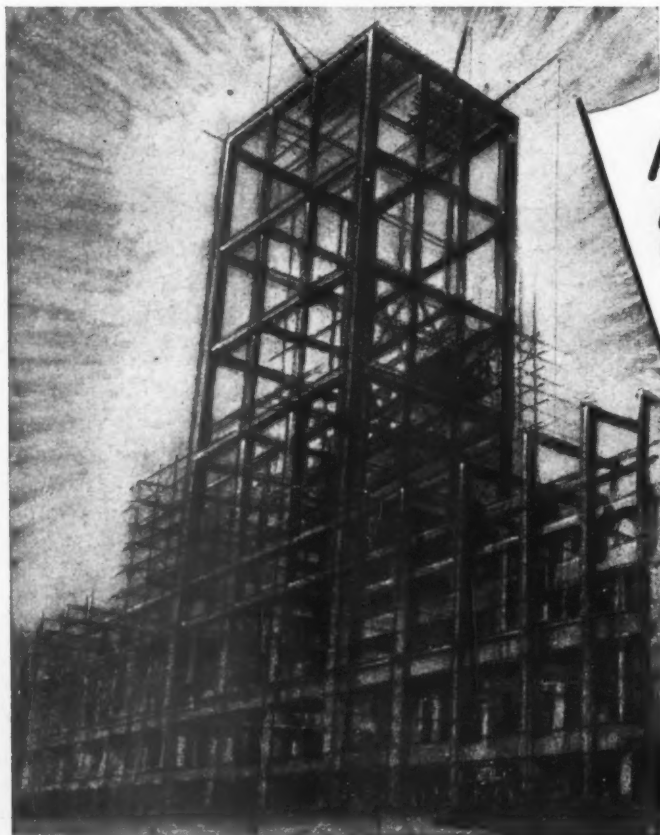
The partnership of Mr. W. R. Bennett, L.R.I.B.A., and Mr. R. R. Wilkins, A.R.I.B.A., with Mr. A. J. Hale, L.R.I.B.A., has been dissolved. Mr. Bennett and Mr. Wilkins will

continue to practise as before under the title of J. Stanley Beard, Bennett and Partners, at National Bank House, 101/3, Baker Street, London, W.1. Mr. Hale will continue to practise under his own name from temporary offices at 44, Broxholme Road, West Norwood, S.E.27 (telephone, Gipsy Hill, 2267).

The Minister of Works has approved increases of  $\frac{1}{4}$ d. a square yard in the price of wallboard and baseboard, and of 3s. 6d. a ton for Gypsum Rock. This is largely due to the higher costs of fuel, transport and paper.

## Buildings Illustrated

One storey house in Knoll Road, Dorking, Surrey, for Mr. Bruce Watkin (pages 37-39). Architects, H. U. Gerson (designer) (supervised by A. G. Gibson). General contractor, Pledge & Keen. Sub-contractors: Waddon Concrete & Building Materials Co., concrete blocks; Standard Brick & Sand Co. and Sussex & Dorking United Brick Co. Ltd., bricks; Clock House Brick Co., Ltd., hollow clay blocks; Leatherhead Breeze Blocks Works, Ltd., breeze partitions; William Briggs & Sons, Ltd., roofing felt; Pilkington Brothers, glass; Viger Brothers, Ltd., woodblock flooring; The Cementation Co., Ltd., wood wool slabs; Dorking Gas Company, gasfitting; Buchanan & Curwen, Ltd., electric wiring; Aidas Electric, Ltd., electric water heating; Associated Clay Industries, Ltd., sanitary fittings; Comyn Ching & Co., Ltd., door furniture; Duncan Tucker, Ltd., casements; Austins of East Ham, Ltd., kitchen fittings.



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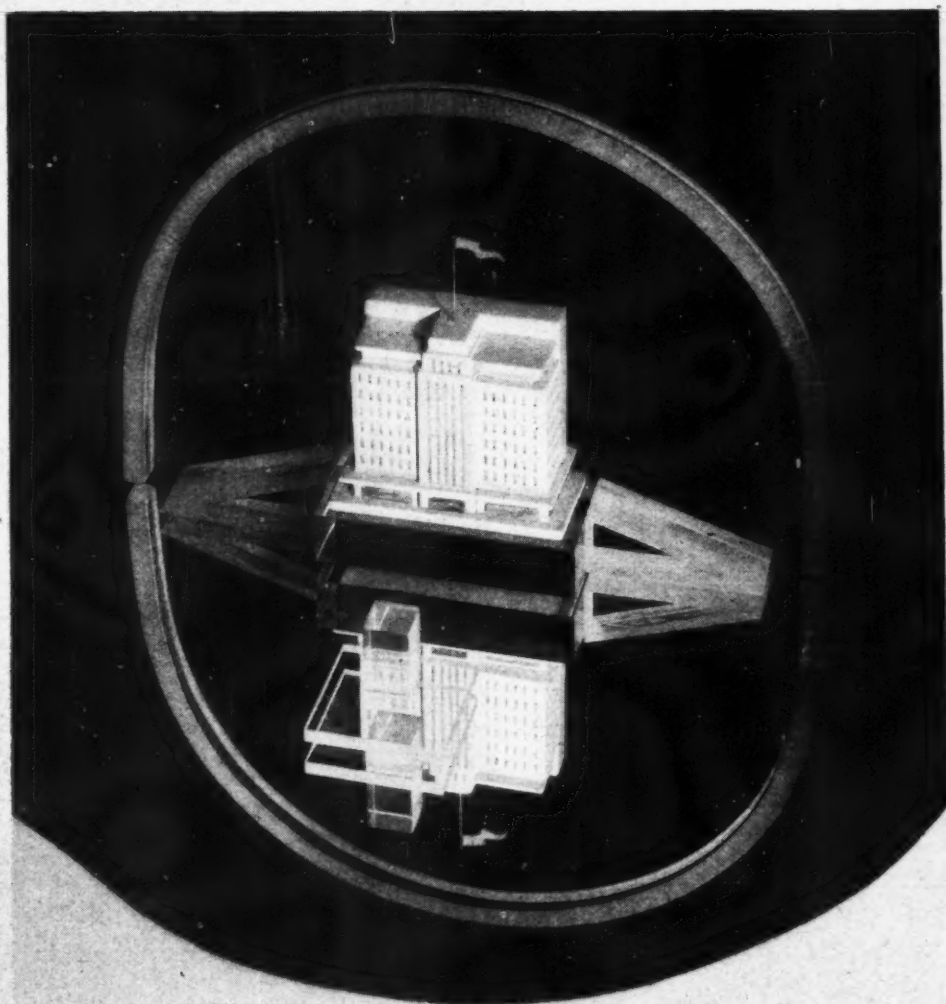
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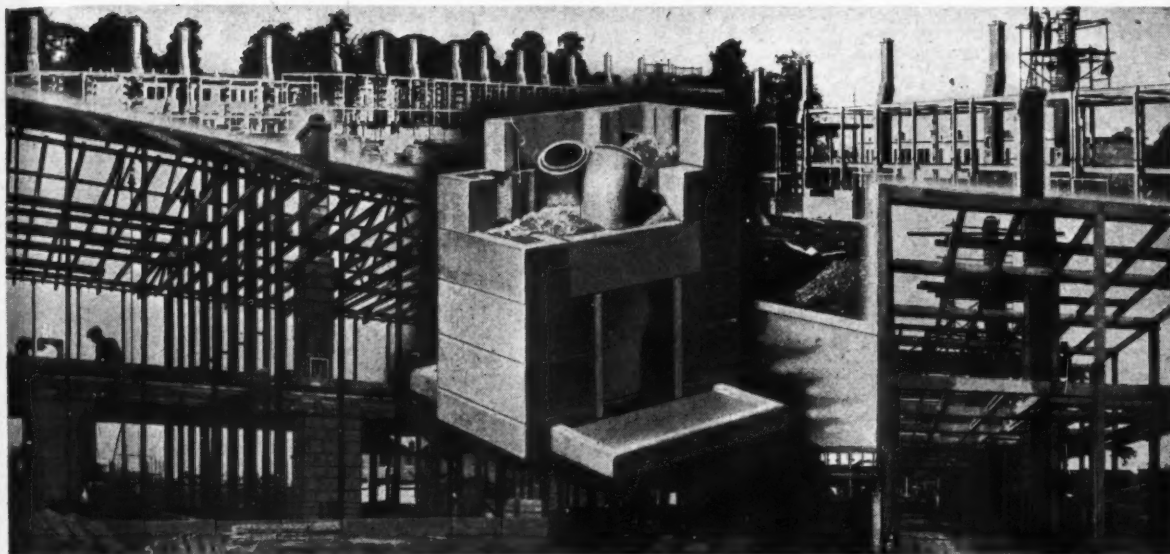
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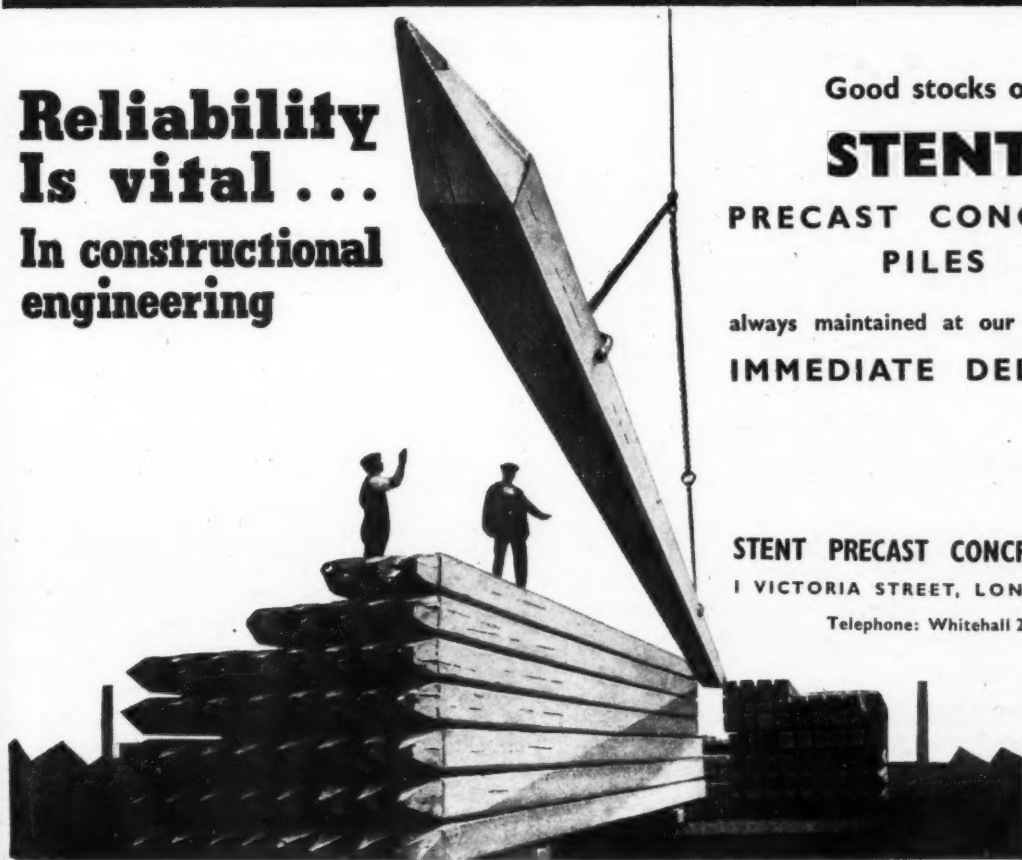
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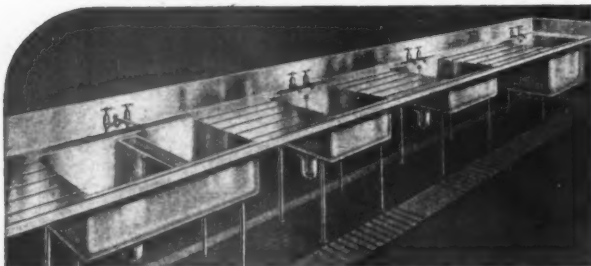


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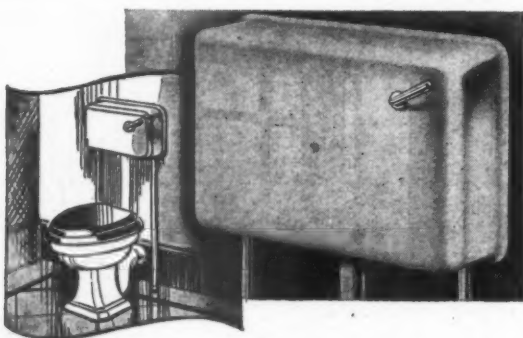
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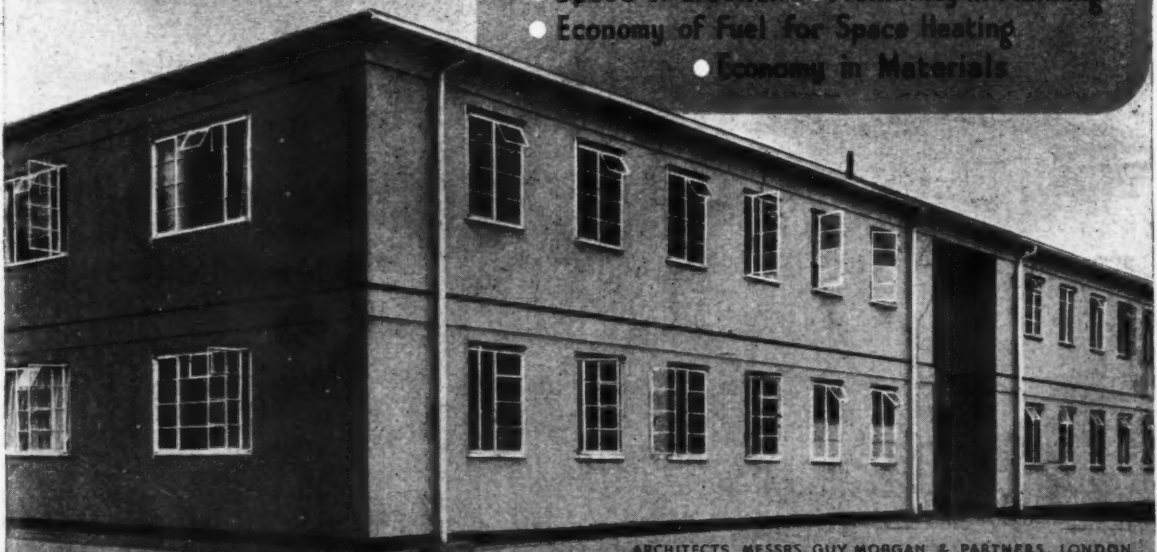
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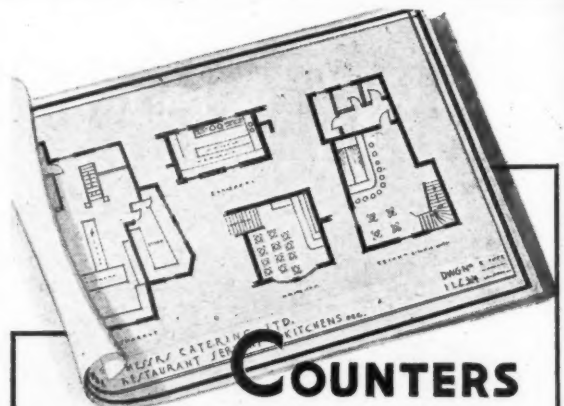
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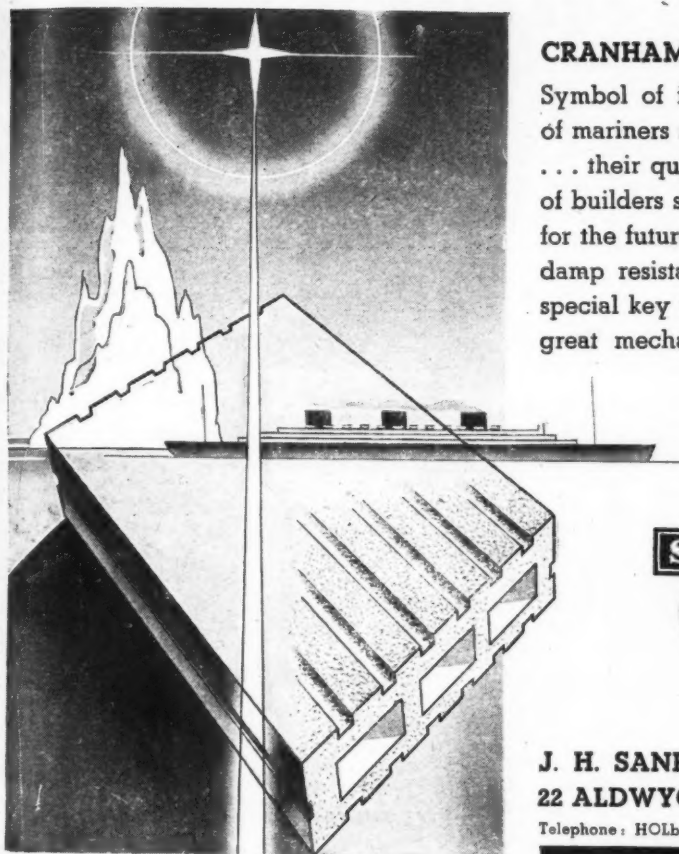
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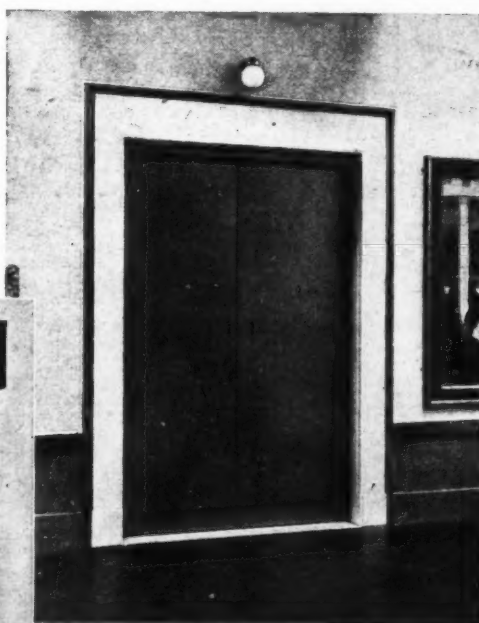
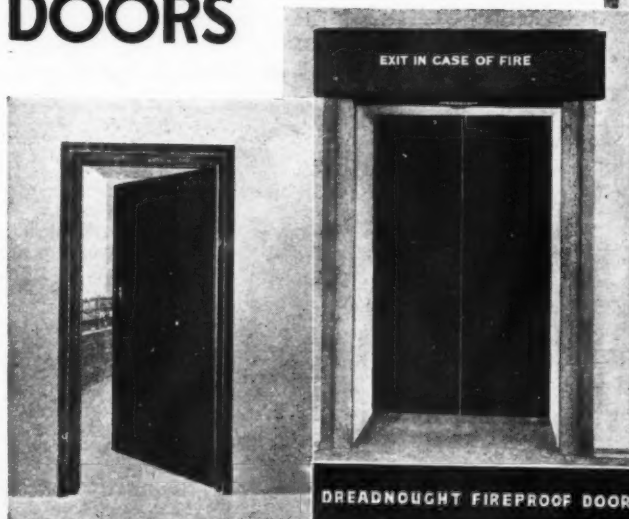
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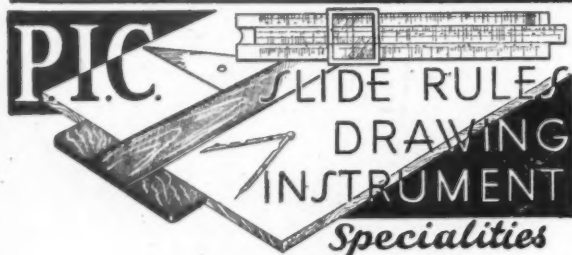
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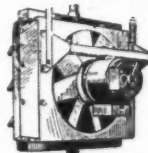
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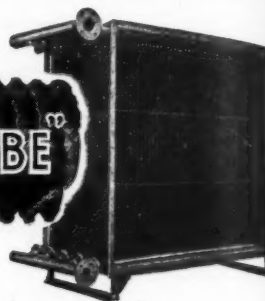
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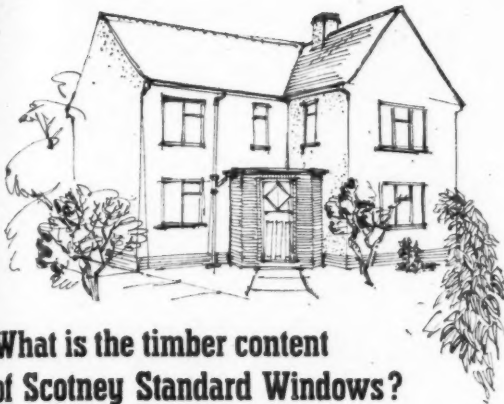
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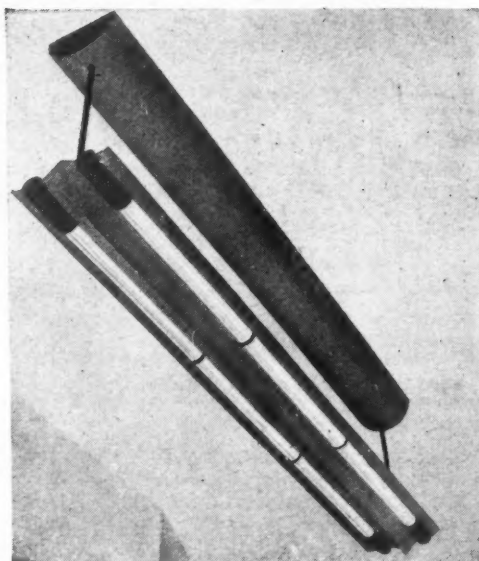


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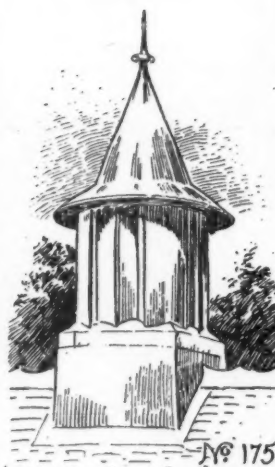
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## CLASSIFIED ADVERTISEMENTS

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

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

None of the vacancies in these columns relates to a man between the age of 18 and 50, inclusive, or a woman between the age of 18 and 40, inclusive, unless he or she is exempted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

## Public and Official Announcements

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

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 **5-12** vacancies. Address: 75, Euston Place, London, S.W.1. Tel. Stoken 5615. 91

### LONDON COUNTY COUNCIL. COUNTY OF LONDON PLAN-VACANCIES FOR PLANNING STAFF

Applications are invited for positions in the following grades:—

**PLANNING OFFICER, Grade III, up to £700 a year.**

**TECHNICAL ASSISTANT, up to £580 a year.** Commencing rate according to qualifications and experience. Opportunities for competing for permanent appointment and promotion. Successful candidates will be supernumerary.

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, surveying or town planning qualifications.

Application forms obtainable from Architect to the Council, County Hall, S.E.1 (enclose stamped addressed envelope, returnable not later than 10 days from this date.

Canvassing disqualified. (16801) 835

### SKIPTON URBAN DISTRICT COUNCIL. ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment, at a salary in accordance with Grade III of the National Scales (£390-£435), plus bonus, at present £59 16s.

Although the appointment is not within the permanent establishment, it is anticipated that its duration will not be less than two years.

Applications, on a form to be obtained from the undersigned, and giving the names and addresses of three persons to whom reference can be made, should be sent, in an envelope endorsed "Architectural Assistant," so as to be received by the undersigned not later than 14 days after the first appearance of this advertisement.

K. B. ROBINSON, B.Sc.(Eng.),

A.M.Inst.C.E.,  
Engineer and Surveyor.

Town Hall, Skipton.  
20th December, 1947. 661

### BOROUGH OF STRATFORD-UPON-AVON. APPOINTMENT OF TEMPORARY ARCHITECTURAL AND PLANNING ASSISTANT.

Applications are invited for the above appointment, in the Borough Engineer and Surveyor's Department, at a salary in accordance with Grades IV and V of the A.P.T. Division of the National Scale of Salaries (£420-£510 per annum), plus cost-of-living bonus (at present £59 16s. per annum); the commencing salary will be determined according to qualifications and experience.

Candidates must be Registered Architects, and preference will be given to those who are Associates of the R.I.B.A. and/or who have a Town Planning qualification. They should also have had experience in the design of Council houses, the planning of housing estates, and the preparation of Estimates, Specifications, etc.

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

Forms of application may be obtained from the undersigned, to whom they should be returned, together with copies of three recent testimonials, not later than Tuesday, 27th January, 1948. Canvassing in any form, either directly or indirectly, will disqualify.

P. C. SMART, A.M.I.C.E.,

Borough Engineer and Surveyor.

Municipal Offices, Stratford-on-Avon.  
19th December, 1947. 659

### CRAWLEY DEVELOPMENT CORPORATION.

The Corporation has a vacancy at Crawley for one **SENIOR ARCHITECT**, at a salary within the range of £1,000-£1,250 p.a., with superannuation. Applicants should have first-class experience in architecture and town planning, and have organising ability. Particulars will be supplied on written request before the 20th January, 1948.

A. G. SHEPPARD FIDLER, M.A.,

B.Arch., A.R.I.B.A., A.M.T.P.I.,  
Chief Architect.

13, Grosvenor Square, London, W.1. 682

### GARDINGSHIRE COUNTY COUNCIL— COUNTY ARCHITECT'S DEPARTMENT. APPOINTMENT OF QUANTITY SURVEYOR.

Applications are invited for the appointment on the permanent staff of a Quantity Surveyor, for the Architect's Department. Salary A.P.T.IV of the National Scheme of Conditions of Service, namely £460-£510, plus cost-of-living bonus (at present £59 16s. per annum).

Applicants, who should have passed the Final Examination of the Royal Institutes of Chartered Surveyors (Quantities Section), must be experienced in all branches of the work, and able to prepare estimates, bills of quantities, specification, contract documents, and cost statistics, and to measure-up for interim and final certificates and settle final accounts.

The appointment will be subject to:—

(a) The National Scheme of Conditions of Service;

(b) The provisions of the Local Government Superannuation Act, 1937, and

(c) A satisfactory medical examination.

The successful candidate will be required to produce a certificate of birth and devote the whole of his time to the duties of his office.

Applications, stating age, qualifications and experience, present and previous appointments and salary, together with copies of three recent testimonials, should be delivered to the undersigned in an envelope marked "Appointment of Quantity Surveyor," not later than Saturday, the 24th day of January, 1948.

IVOR EVANS,

Clerk of the Council.

County Council Offices, Abystwyth.

18th December, 1947. 671

### COUNTY BOROUGH OF DARLINGTON. BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following permanent appointments:—

(a) **CHIEF ASSISTANT ARCHITECT** (Grade VII), £375-£650.

(b) **ASSISTANT ARCHITECT** (Grade V), £460-£510.

(c) **ASSISTANT QUANTITY SURVEYOR** (Grade V), £460-£510, plus cost-of-living bonus of £59 16s. 3d. in each case.

Candidates for (a) and (b) should have had previous experience on Housing and Education work, and preference will be given to applicants who are Members of the Royal Institute of British Architects.

Candidates for (c) should be experienced in the preparation of Bills of Quantities, the checking of interim valuations, and the setting up of Final Accounts. Preference will be given to Fellows or Professional Associates of the Royal Institute of Chartered Surveyors (Quantities Division).

It will be a condition of all the above appointments that the persons appointed shall give an undertaking to stay in the employment of the Council for a period of not less than two years.

Applications, stating age, qualifications, present appointment and salary, and previous experience, accompanied by copies of three recent testimonials, and endorsed "Chief Assistant Architect," "Assistant Architect," or "Assistant Quantity Surveyor," should be delivered to E. A. Tornbohm, A.R.I.B.A., A.M.T.P.I., Borough Architect, Central Buildings, Darlington, not later than the 16th January, 1948. 664

### STAFFORDSHIRE COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

APPOINTMENT OF TECHNICAL STAFF.

Applications are invited from Male persons, with experience of Planning Work and procedure and having the required qualifications, for the following appointments in the County Planning Department. The salaries will be on the Grades of the National Scales indicated, plus cost-of-living bonus, at present amounting to £59 16s. per annum.

(a) **ONE PLANNING ASSISTANT, Salary A.P.T., Grade IV, £420-£465.**

(b) **FOUR PLANNING ASSISTANTS, Salary A.P.T., Grade I, £336-£375, or Grade II, £360-£405, according to qualifications and experience.**

Applicants for appointment (a) should be qualified planners, and those for appointments (b) should have had training in an Architect's, Engineer's, Surveyor's or Planning Office, and preference will be given to those who have passed the Intermediate examination of the Town Planning Institute or its equivalent.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937; the National Joint Council's Scheme of Conditions of Service as adopted by the County Council; the passing of a medical examination, and to one month's notice on either side.

Canvassing, directly or indirectly, will be deemed a disqualification, and relationship to any Member or Senior Officer of the Council must be disclosed.

Applications should give details of age, education, technical training, qualifications, present and previous appointments and experience, and should include copies of two recent testimonials and the names of two other persons to whom reference can be made. They should be addressed to the undersigned not later than the 17th January, 1948, and the envelope should be clearly marked in the top left-hand corner, with the name of the appointment to which the application relates.

T. H. EVANS,

Clerk of the County Council.

County Buildings, Stafford. 690

### CITY OF COVENTRY.

Applications are invited for the following whole-time appointments on the permanent staff of the City Architectural Department:—

(a) **TWO ASSISTANT ARCHITECTS.**

Salary grade A.P.T., Va, commencing at £400 per annum, and rising by three annual increments of £20 to £550 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.

(b) **ONE ASSISTANT ARCHITECT.**

Salary grade A.P.T., III, commencing at £390 per annum, and rising by three annual increments of £15 to £435 per annum.

(c) **ONE SENIOR ASSISTANT QUANTITY SURVEYOR.**

Salary grade A.P.T., Va (as above).

Candidates should be Professional Associates of the Royal Institution of Chartered Surveyors (Quantities Division).

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.

In certain circumstances housing accommodation may be made available for the successful candidates for the Grade Va posts.

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, 1935, and a satisfactory certificate will be requisite from the Council's medical referee. The successful male 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 January, 1948.

Canvassing, directly or indirectly, will be a disqualification. D. E. E. GIBSON,  
City Architect.

1a, Warwick Row, Coventry.

1st January, 1948. 675

### COUNTY BOROUGH OF HALIFAX. APPOINTMENT OF ASSISTANT ARCHITECTS (EDUCATION).

Applications are invited for the following appointments, in the A.P.T. Division of the National Scale:—

(1) **SENIOR ASSISTANT ARCHITECT, Grade V** (£460, rising to £510 per annum).

(2) **ASSISTANT ARCHITECT, Grade III** (£390, rising to £435 per annum).

Cost-of-living bonus, at present £59 16s. per annum, will be payable in respect of each appointment.

The successful candidates will be engaged both on the long-term development plan under the 1944 Education Act, and on projects which have already received Ministerial approval, and which include the erection of two Primary Schools, one Secondary School, and Technical College Extensions. Previous experience in Local Government is not essential, but preference will be given to candidates with appropriate qualifications.

The Corporation have decided that in the letting of requisitioned houses, consideration will be given to the requirements of newly appointed members of the staffs of Corporation Departments.

The appointments are subject to the conditions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to undergo a medical examination.

Applications, stating age, qualifications, present position and salary and experience, and accompanied by copies of recent testimonials and the appropriately endorsed, should be delivered to the undersigned, not later than Saturday, 17th January, 1948.

W. USHER,

Town Clerk.

Town Hall, Halifax.

18th December, 1947. 682

### CITY OF BATH. CITY ENGINEER'S DEPARTMENT. ARCHITECTURAL SECTION.

Applications are invited for the appointment of a **TEMPORARY ARCHITECTURAL ASSISTANT**, to be responsible for the preparation of surveys, drawings, schedules of dilapidations, state and condition, and specifications in connection with requisitioned properties and conversion schemes.

Salaries will be in accordance with A.P.T.D. Grade I, of the National Scales, plus cost-of-living bonus.

Applications, giving particulars of age, experience, and the names and addresses of three persons to whom reference may be made, should be sent to the City Engineer, Guildhall, Bath, to arrive not later than noon on Saturday, 17th January, 1948.

Canvassing will disqualify, and any applicant who is related to a member or senior officer of the Council must disclose the fact in his application.

J. BASIL OGDEN,

Town Clerk.

Guildhall, Bath.

15th December, 1947. 683



# ANGLESEY COUNTY COUNCIL COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following permanent appointment, in the County Architect's Department:—  
**ONE CHIEF ASSISTANT ARCHITECT (SCHOOLS).** Salary Grade VII, commencing at £275 per annum and rising to £650 per annum. Applicants should be Registered Architects and members of the Royal Institute of British Architects, with considerable experience in the design of educational buildings, preparation of working drawings, and the supervision of technical staff.

Cost-of-living bonus, at present £59 16s. per annum, is payable in addition to the salary scale given above.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination. The appointment will be subject to three months' notice on either side.

Applications, stating age, training, qualifications, experience, and present and past appointments, and giving the names of two referees, and accompanied by copy of one testimonial, should be sent to the undersigned not later than Monday, 19th January, 1948.

WILLIAM JONES,

Clerk of the County Council.

Shire Hall, Llangefni, Anglesey. 679  
23rd December, 1947.

# THE BOROUGH AND COUNTY OF THE TOWN OF POOLE.

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

(a) TWO ARCHITECTURAL ASSISTANTS. Salary, A.P.T., Grade I, £330-£375 per annum, plus current cost-of-living bonus.  
(b) ONE JUNIOR ARCHITECTURAL ASSISTANT. Salary in accordance with General Division, i.e., varying according to age, with a maximum of £300 per annum at the age of 30, plus current cost-of-living bonus.

Preference will be given to applicants who have passed a recognised professional examination. The appointments will be subject to the provision of the Local Government Superannuation Act, 1937, and the persons appointed will be required to pass a medical examination to the satisfaction of the Council. Canvassing, either directly or indirectly, is forbidden.

Applications, stating age, qualifications, full details of experience, and giving the names of three professional references, should be delivered to the undersigned not later than Thursday, 15th January, 1948.

WILSON KENYON,

Town Clerk.

Municipal Buildings, Poole, Dorset. 684

# DEVON COUNTY COUNCIL.

Applications are invited for the appointment of ASSISTANT ESTIMATOR AND SURVEYOR, in the County Architect's Department. Candidates need not necessarily hold professional qualifications, but must be experienced in the preparation of estimates for new buildings, extensions, and adaptations to existing buildings, measuring and pricing variations of drawings, and agreeing same with building contractors; and the preparation and settlement of final accounts.

Salary will be paid in accordance with Grade III of the National A.P.T. Scales (£390-£435 per annum), plus cost-of-living bonus, at present £59 16s. per annum.

Applications, stating age and experience, accompanied by not more than three recent testimonials, should be sent to the County Architect, 7, Heavitree Road, Exeter, not later than Monday, the 26th January, 1948.

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

H. A. DAVIS,

Clerk of the County Council.

The Castle, Exeter. 693  
1st January, 1948.

# ESTON URBAN DISTRICT COUNCIL. APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, at a salary in accordance with Grade A.P.T. III, of the National Scales, viz., £390 to £435, plus cost-of-living bonus, at present £59 16s. per annum. Applicants should have had good general training, with experience in housing work, and preference will be given to candidates who have passed the Intermediate examination of the Royal Institute of British Architects, or who are Registered Architects.

The conditions of service are those formulated by the National Joint Council, and the appointment is subject to the passing of a medical examination and the provisions of the Local Government Superannuation Act, 1937.

Applications, giving full details of training, qualifications, experience, and copies of two testimonials, should be sent to "The Engineer and Surveyor," by first post of Saturday, 14th February, 1948.

A. D. W. DIBBLE,

Acting Engineer and Surveyor.

Council Offices, Grangetown-on-Tees, Yorkshire. 694  
31st December, 1947.

# COUNTY OF ESSEX. BOROUGH OF WALTHAMSTOW COMMITTEE FOR EDUCATION.

ARCHITECT'S DEPARTMENT.  
Applications are invited for the following permanent appointments, in the office of the Architect to the Committee for Education, Mr. Frank H. Heaven, A.R.I.B.A., A.R.I.C.S.

FOUR ASSISTANT ARCHITECTS, at grades and salaries in accordance with the A.P. & T. Division of the National Joint Council Scales, as stated below, plus cost-of-living bonus, at present amounting to £1 5s. A London weighting addition of £20 per annum is also payable.

(a) ONE CHIEF ASSISTANT ARCHITECT. Grade VII, £575-£25 to £650 per annum.

(b) TWO SENIOR ASSISTANT ARCHITECTS. Grade V, £460-£15 to £510 per annum.

(c) ONE ASSISTANT ARCHITECT. Grade IV, £420-£15 to £465 per annum.

Applicants should be members of the R.I.B.A. or in progress of qualifying for membership, or hold other similar qualifications, and, for the two senior grades must have had considerable experience in an Architect's office in connection with the design and construction of Educational or similar buildings, with some administrative experience.

Conditions of service will be in accordance with the Scheme of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, as adopted by the County Council, and to the Standing Orders of the Essex C.C. from time to time in operation.

Canvassing, either directly or indirectly, will be deemed a disqualification, and candidates must disclose in writing whether to their knowledge they are related to any member or the holder of any senior office under the Essex County Council.

Forms of application may be obtained from and should be returned to the undersigned not later than three weeks after publication of this notice.

E. T. POTTER,

Borough Education Officer.

Town Hall, Forest Road, Walthamstow, E.17. 706  
January, 1948.

# CITY OF OXFORD EDUCATION COMMITTEE. SCHOOLS OF TECHNOLOGY, ART AND COMMERCE.

ARCHITECTURE AND BUILDING TRADES DEPARTMENT.

Applications are invited for the post of HEAD OF THE DEPARTMENT, which will become vacant on 1st April, 1948. The person appointed should be an Associate of the Royal Institute of British Architects, and should have had both teaching and professional experience. He must be prepared to take responsibility for the building trades as well as the architectural side of the Department. The Department is at present Grade II under the terms of the Burnham Technical Report, 1945.

Forms of application and further particulars may be obtained from the Chief Education Officer, City Education Office, 77, George Street, Oxford, to whom the completed forms must be returned not later than fourteen days from the appearance of this advertisement. 702

# BOROUGH OF MAIDENHEAD.

## APPOINTMENT OF ASSISTANT ARCHITECT.

Applications are invited for the appointment of Assistant Architect, in the Borough Engineer and Surveyor's Department. Salary in accordance with Grade III (£390-£435), plus bonus (£59 16s.) of the National Scheme of Conditions of Service.

Applicants should have had considerable experience in the design and construction of buildings, and must be capable of taking off quantities and preparing contract documents. Preference will be given to candidates who have passed a recognised, professional examination, preferably of the R.I.B.A. or the R.I.C.S.

The appointment will be subject to the National Scheme of Conditions of Service; to the Local Government Superannuation Act, and will be determinable by one month's notice on either side.

Applications, stating age, previous appointments, qualifications and experience, together with copies of three recent testimonials, are to be delivered to the Borough Engineer and Surveyor, Mr. C. T. Read, A.M.I.C.E., F.R.I.C.S., endorsed "Assistant Architect," not later than 23rd January, 1948.

J. A. BAIRD,

Town Clerk.

Guildhall, Maidenhead. 703  
24th December, 1947.

# FIFE COUNTY COUNCIL. PLANNING DEPARTMENT, CUPAR.

A vacancy exists for a PLANNING ASSISTANT, preferably holding the Associate Membership of the Town Planning Institute, and having practical experience in the preparation of planning schemes. Salary £480-£25-£630, plus £50 war bonus. Medical examination under Superannuation Scheme. Age under 45. Applications in writing, stating age, qualifications and experience, to undersigned not later than 3rd February, 1948. No canvassing.

J. M. MITCHELL,

County Clerk.

County Buildings, Cupar, Fife. 705  
30th December, 1947.

# COUNTY OF ESSEX.

## ILFORD COMMITTEE FOR EDUCATION.

The Essex County Council invite applications for an ARCHITECTURAL ASSISTANT, to work in the office of the Borough Engineer of Ilford, to deal with work for the Committee for Education.

Applicants should be members of the Royal Institute of British Architects, and have had considerable experience in the planning, designing, construction and supervision of School buildings, and have had administrative experience.

Applicants should have had good general training and experience.

The scale of salary will be in accordance with the provisions of the National Joint Council A.P.T. Division, Grade V.

There will also be paid such (if any) bonus and travelling and subsistence allowances as may from time to time be determined by the Council. The amount of bonus payable at present is 23s. per week.

In fixing the commencing salary, regard will be had to the qualifications and experience of the successful applicant.

The appointment will be held at the pleasure of the County Council, and may be terminated by the holder of the office by two months' notice.

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

Applications must be made on a form to be obtained from the Borough Education Officer, and returned to him at the Town Hall, Ilford, together with copies of not more than three recent testimonials, within fourteen days of the appearance of this advertisement.

Canvassing, either directly or indirectly, is forbidden. 689

# NEATH AND AFAN VALLEYS JOINT PLANNING COMMITTEE.

## PLANNING OFFICER'S DEPARTMENT.

Applications are invited for the appointment of TWO DRAUGHTSMEN, at a salary in accordance with the National Scale of Salaries in the General Division, ranging from £65 to £300 per annum for males, according to age.

The appointments carry in addition a cost-of-living bonus, which at present amounts to approximately £60 per annum for males for persons over 21 years of age.

The appointments may be terminated by one month's notice on either side, and will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the Scheme of Conditions of Service laid down by the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services. The successful applicants will be required to pass a medical examination.

Applicants must have knowledge and experience in land surveying and practical experience in survey work on the 1/2,500 scale, must be neat and expeditious draughtsmen and colourists.

Applications, giving full particulars of age, training qualifications and experience, together with the names of three referees, must be sent to the undersigned endorsed with the title of appointment, not later than 26th January, 1948.

T. D. WINDSOR WILLIAMS,

Clerk to the Neath and Afan Valleys

Joint Planning Committee.

8, New Street, Neath. 697

# BOROUGH OF GILLINGHAM. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

## ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant, at a salary in accordance with Grade II (£360-£405 per annum) of the Administrative, Professional and Technical Division of the National Scale of Salaries, plus cost-of-living bonus (at present £59 16s. per annum). Applicants should have had good experience in architectural design of a general character, including housing.

Forms of application and further particulars may be obtained from the Borough Engineer and Surveyor, Municipal Buildings, Gillingham. Applications, appropriately endorsed, must be received by the undersigned, accompanied by copies of not more than three recent testimonials, by not later than Thursday, 29th January, 1948.

Canvassing, directly or indirectly, will disqualify.

J. C. NELSON,

Town Clerk.

Municipal Buildings, Gillingham, Kent. 709  
1st January, 1948.

# ESSEX EDUCATION COMMITTEE. SOUTH-WEST ESSEX TECHNICAL COLLEGE AND SCHOOL OF ART.

## FOREST ROAD, WALTHAMSTOW.

The Governors invite applications from suitably qualified persons for the full-time permanent post of LECTURER IN STRUCTURAL ENGINEERING. Ability to take classes in Structural Specifications, Quantities, and Estimates, will be an advantage.

Salary according to the Burnham Scale, with London allowance and increments for approved industrial or professional experience.

Applications (no forms), giving full particulars of training, qualifications and experience, should be submitted to the Clerk to the Governors, at the College, within two weeks of the appearance of this advertisement.

B. E. LAWRENCE,

Chief Education Officer.

County Offices, Chelmsford. 708

**WESTMINSTER CITY COUNCIL—HOUSING DEPARTMENT.**

**THIRD ARCHITECTURAL ASSISTANT** (Permanent). Salary, A.P.T., III, of National Scales, £410—£455 per annum, plus bonus. Must be Registered Architect, with good architectural experience.

Bonus is at present: Men, £59 16s.; women, £48 2s. per annum. Age limit, 45 years (except members of Council's staff). Superannuation scheme. Canvassing disqualified.

Applications, marked "Housing Department—Third Architectural Assistant," stating full name, address, age, war service, examination qualifications, present and past appointments, experience, whether related to any member or chief officer of the Council, with copies of two recent testimonials, must be received within 21 days of the appearance of this advertisement.

**PARKER MORRIS,**  
Town Clerk.

Westminster City Hall, Charing Cross  
Road, W.C.2.  
1st January, 1948. 707

**Partnerships and Financial**

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

**CHARTERED QUANTITY SURVEYOR** in the North, with well-established practice, is contemplating retiring in the near future, and desires Partner with capital; or a firm may require a Branch Office. Apply Lingard, Wilson & Co., Incorporated Accountants, 10, Marsden Street, Manchester, 2. 712

**Architectural Appointments Vacant**

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

**DRAGHTSMAN**, with Architectural training, for Exhibition Designing and Detailing. David Meddell & Co., 30, Stannary Street, Kennington, S.E.11. Reliance 1566. 649

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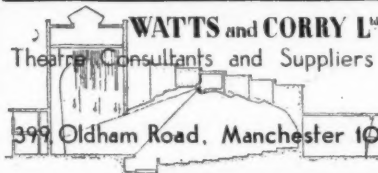
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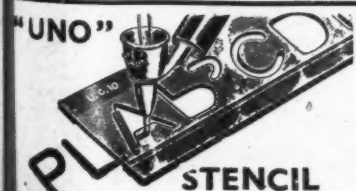
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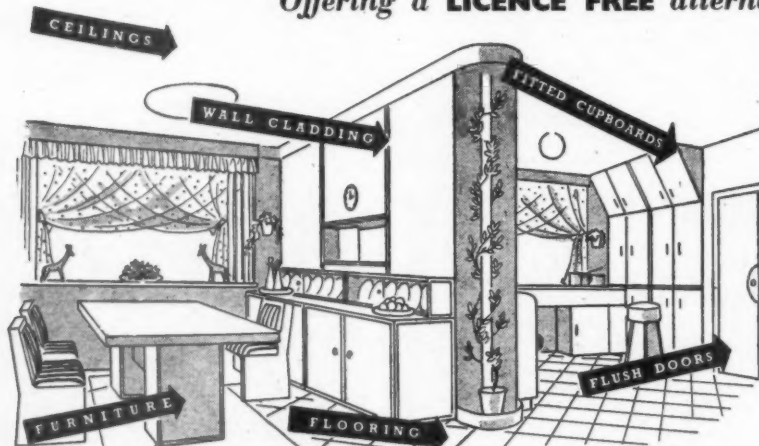
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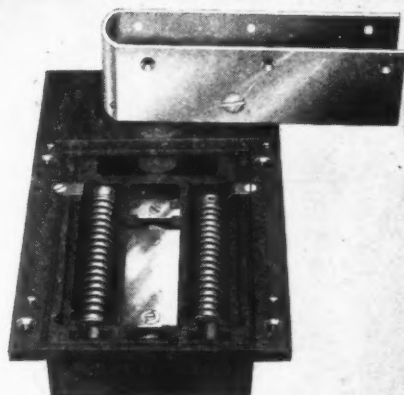
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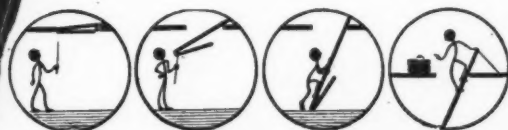
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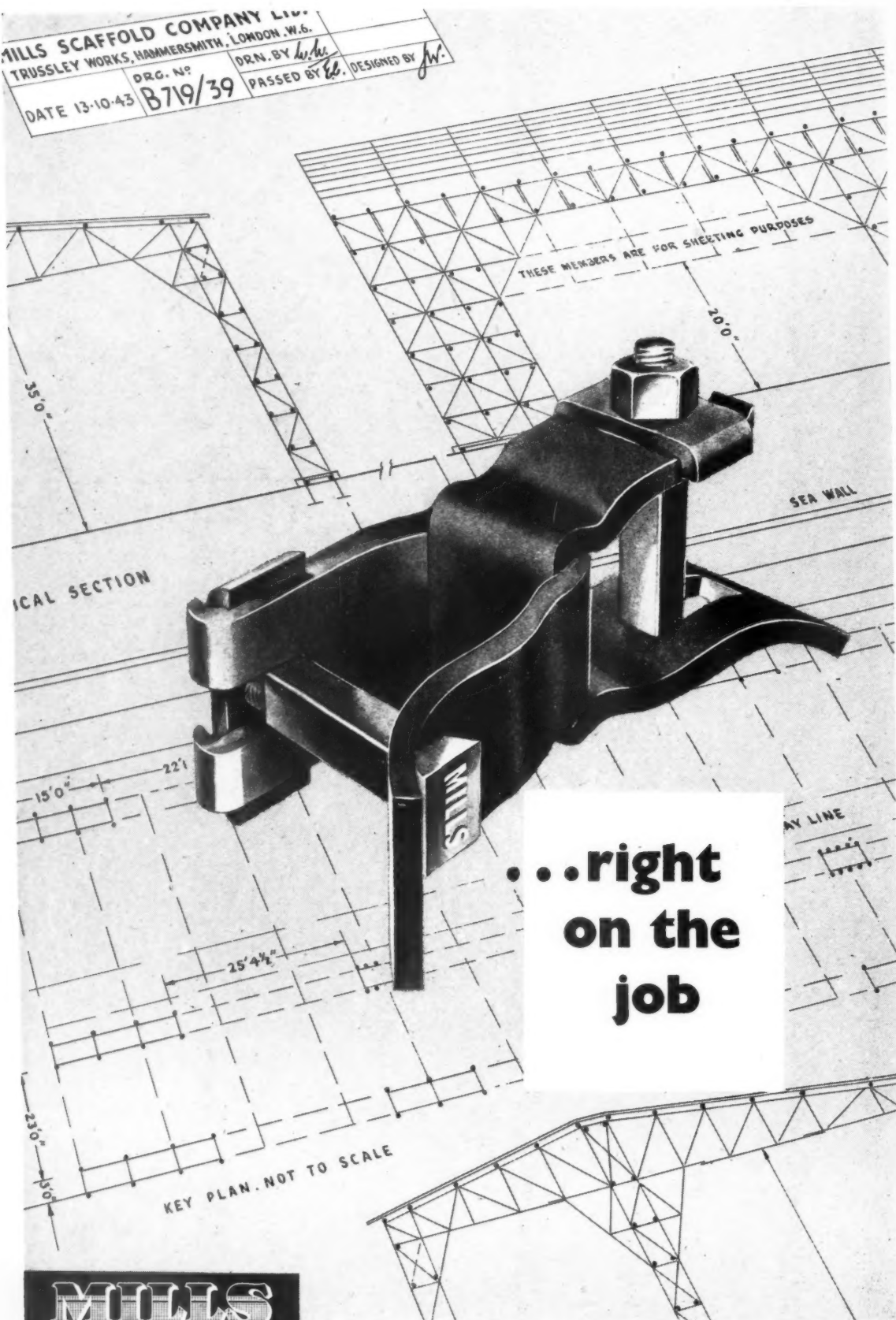
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