

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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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.

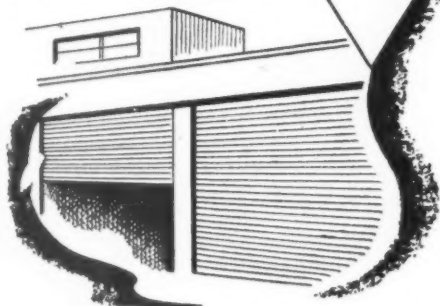
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1. Sloane 3158
ICE	Institution of Civil Engineers. Great George Street, S.W.1. Whitehall 4577
ICW	Institute of Clayworkers. 4, Vernon Place, W.C.1. Chancery 6258
IEE	Institution of Electrical Engineers. Savoy Place, W.C.2. 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. 8, Rosebery Houses, Breams Buildings, E.C.4. Holborn 1881
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1. Whitehall 2881/2/3
NHBRC	National House Builders Register. 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 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 Street, 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	Society of Industrial Artists. Room 243, Empire House, St. Martin's-le-Grand, E.C.1. Metropolitan 8344
SNTPC	Scottish National Town Planning Council. 11, Drumsheugh Gardens, Edinburgh, 3
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2. Temple Bar 5006
TDA	Timber Development Association. 75, Cannon Street, E.C.4. City 6146 (3 lines)
TPI	Town Planning Institute. 18, Ashley Place, S.W.1. Victoria 8815
TTF	Timber Trades Federation. 81, Cannon Street, E.C.4. City 1476
WDC	War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1. Mayfair 8866
WEDA	Welfare Equipment Development Association. 61, St. Paul's Churchyard, E.C.4. City 4263/4
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford. Oxford 47988

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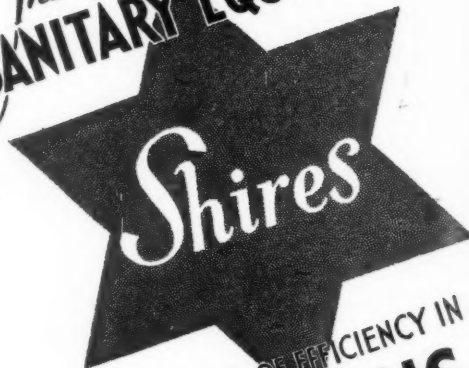
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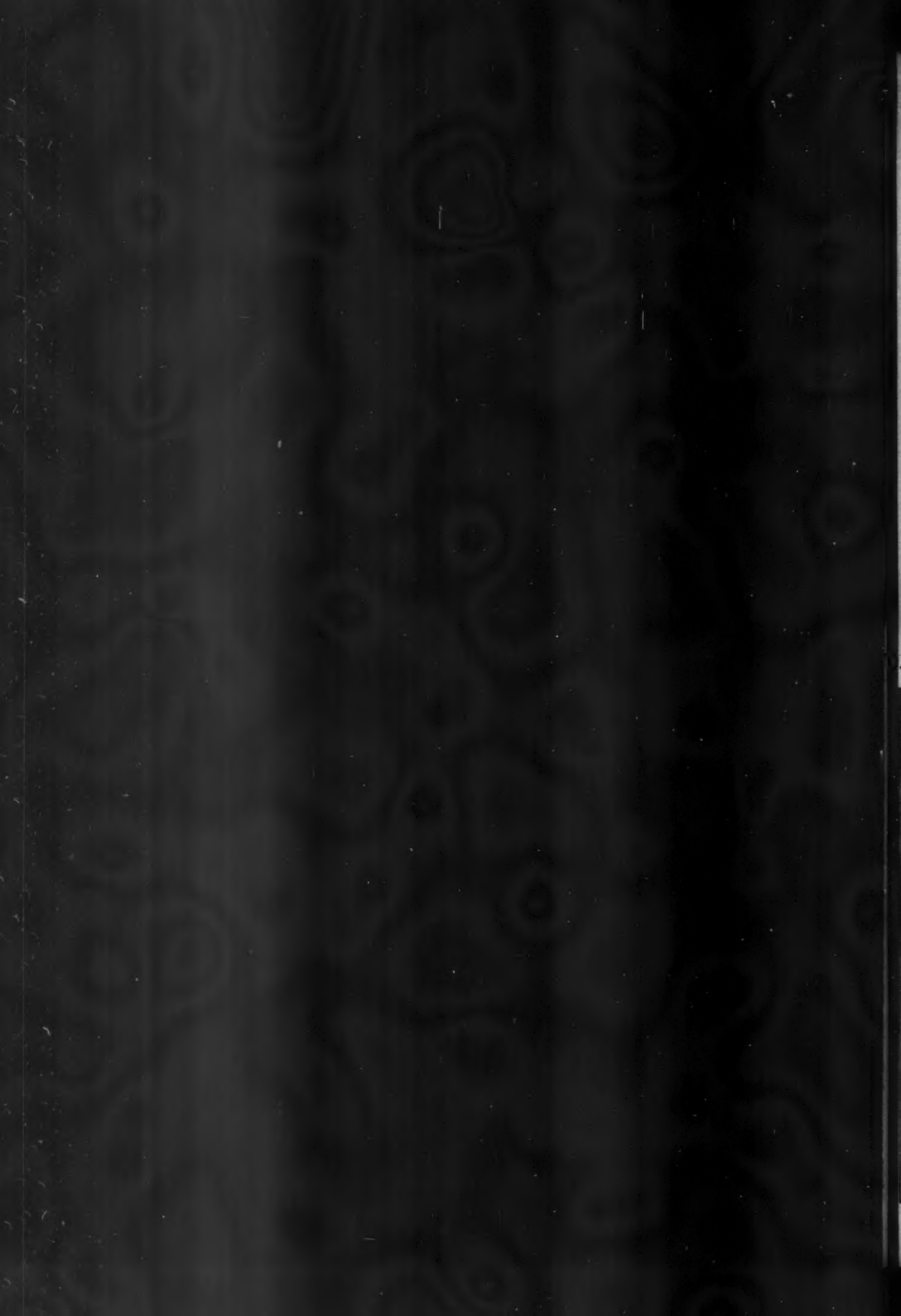
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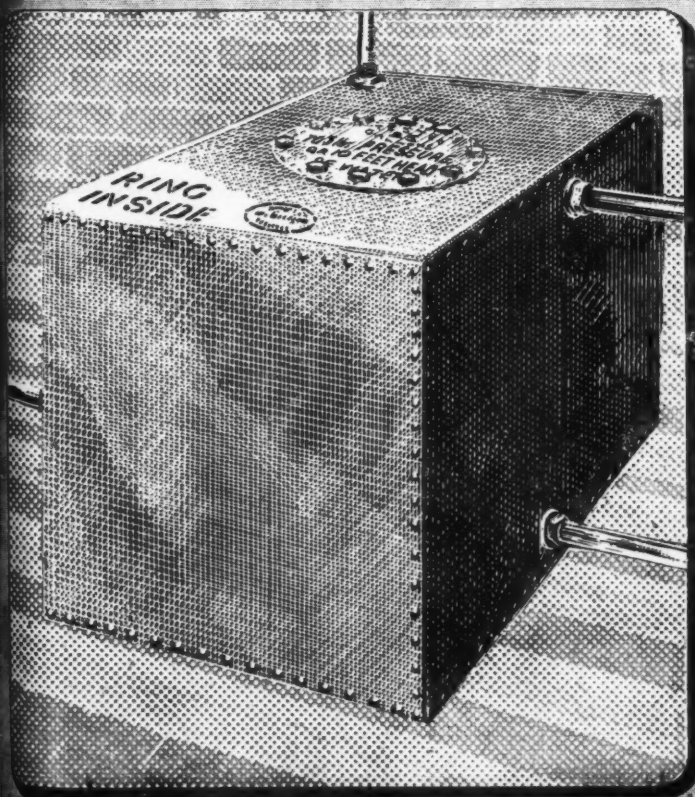
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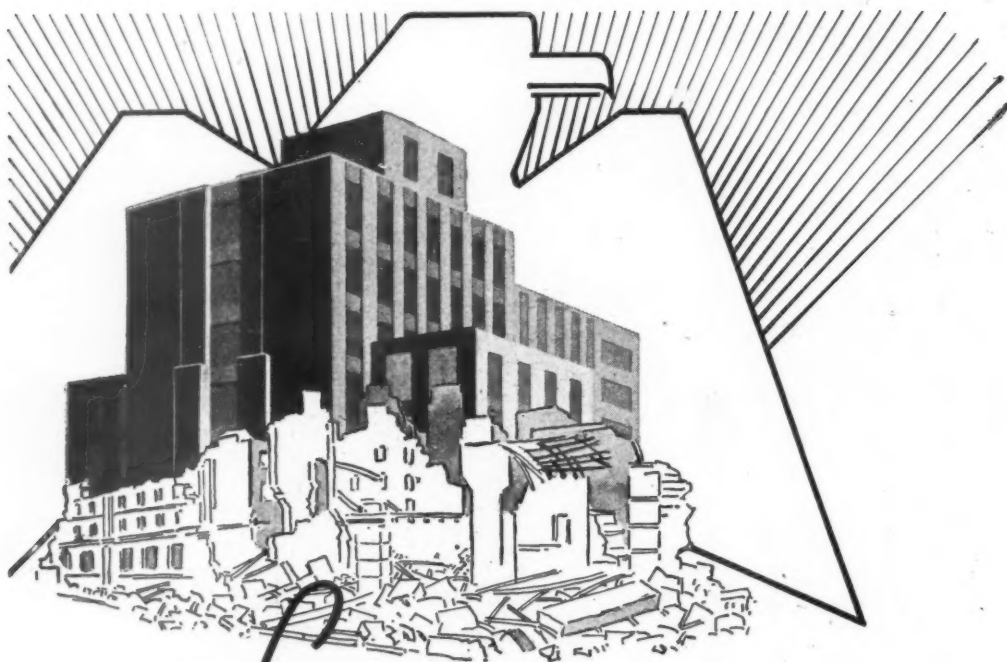
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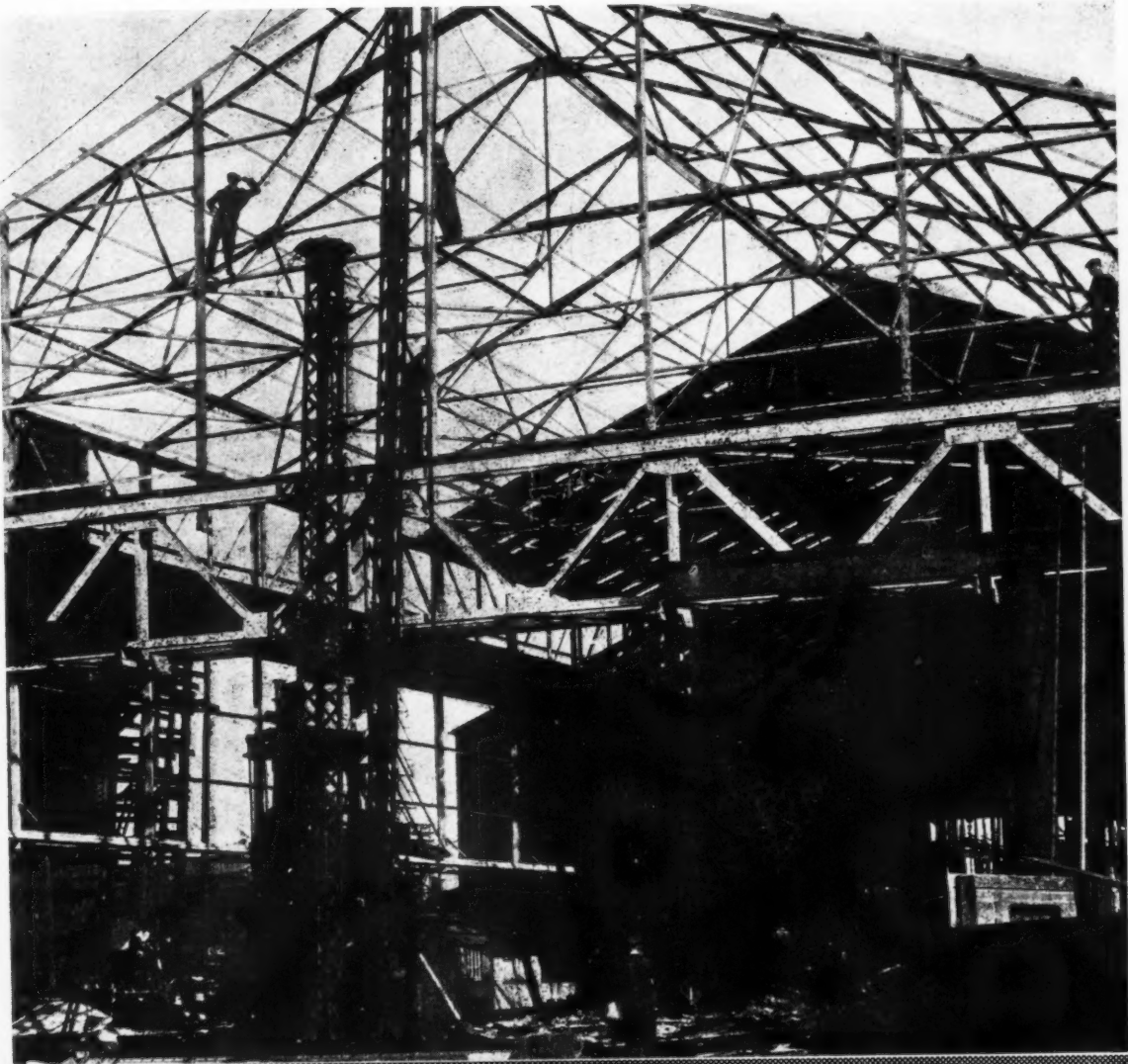
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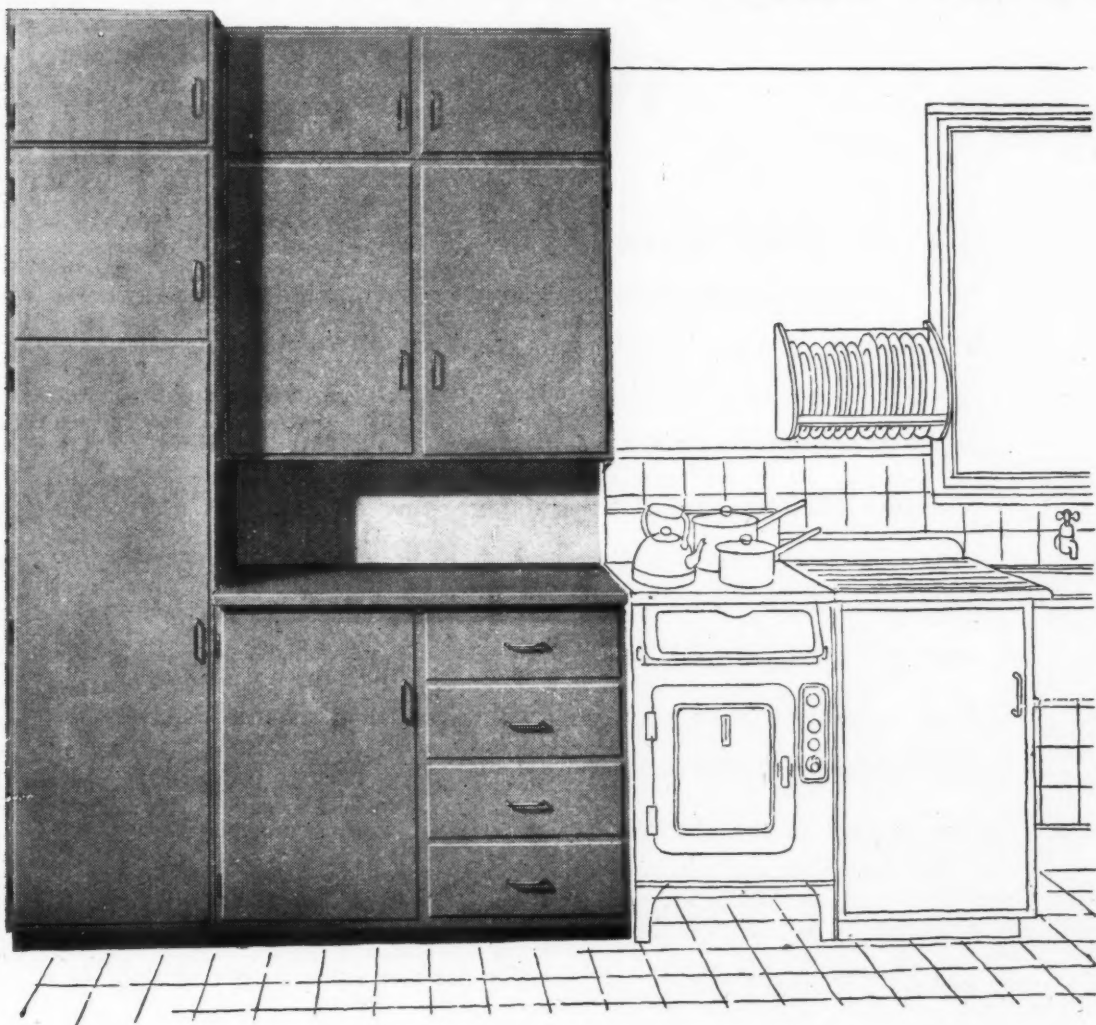
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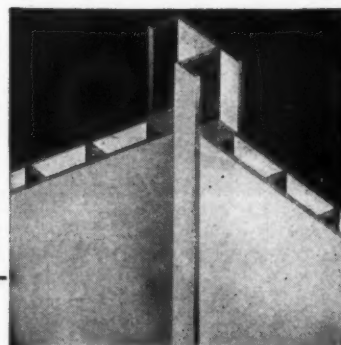
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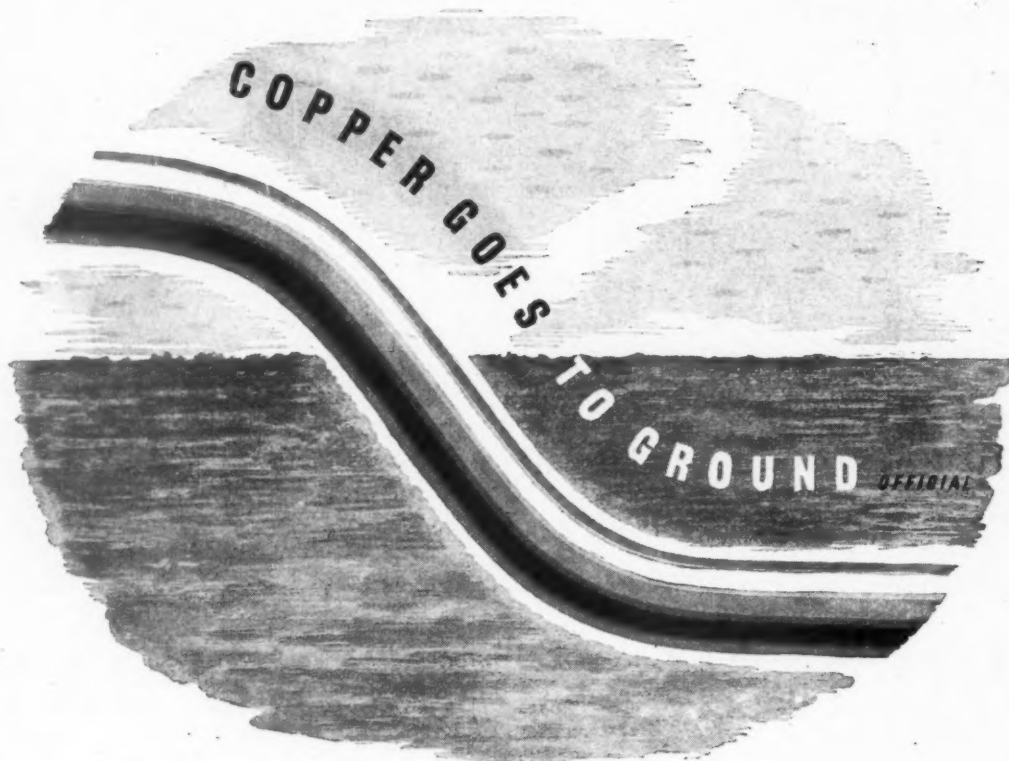
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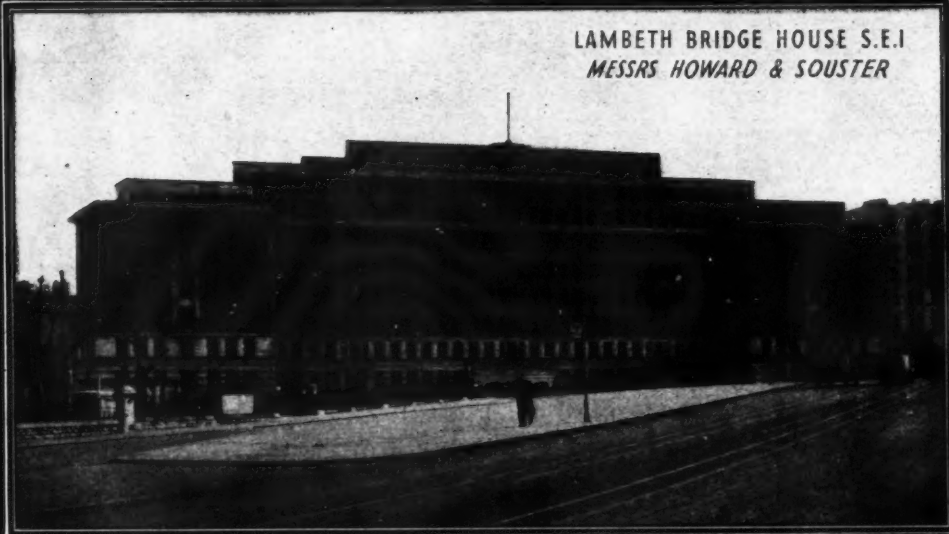
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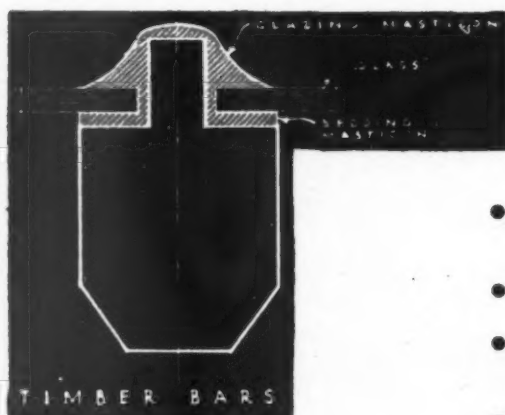
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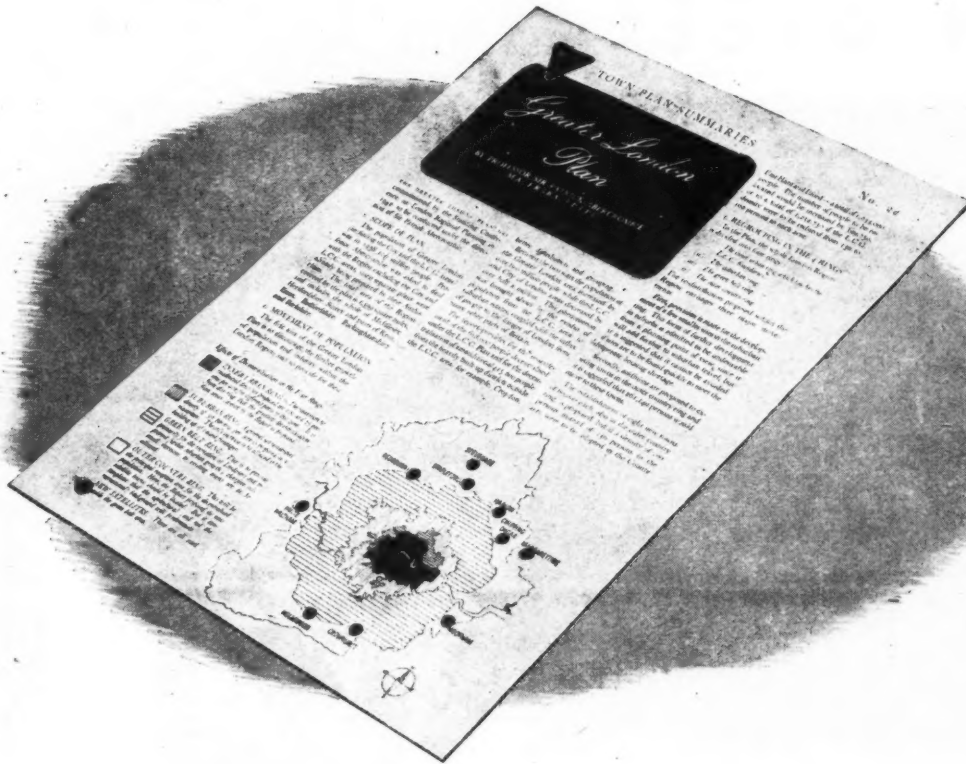
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GREATER LONDON PLAN



Ascot Town Plan Summary Number 2a

This is one of the series of Summaries of the more important Town and Regional Planning Schemes which are being produced by a team of planning experts for the benefit of those who have not the time to study the full reports. The Summaries so far published are listed below. Applications for copies of these and subsequent Summaries, should be made on professional or official notepaper.



LIST OF PLANS

GREATER LONDON PLAN
COUNTY OF LONDON PLAN
MANCHESTER REGION PLAN
CITY OF MANCHESTER PLAN
CITY OF NORWICH PLAN

No. 1
No. 2 (a)
No. 2 (b)
No. 3 (a)
No. 3 (b)
No. 4

EXETER PHENIX
A PLAN FOR PLYMOUTH
PLAN — NEWCASTLE-UPON-TYNE
A PLAN FOR MIDDLESBOROUGH
MERSEYSIDE PLAN: 1944
GLOUCESTERSHIRE

No. 5
No. 6
No. 7
No. 8
No. 10
No. 11

ASCOT GAS WATER HEATERS LIMITED, 43, PARK STREET, LONDON, W.1. Phone: GROsvenor 4491.

WE BUILD IN STEEL

BY all means let us admire the excellence of the spider's craft, but let us remember that all the structural problems of the spider were solved millions of years ago. Man continually faces new problems calling for fresh solutions ; that he can assess, judge and act in changing conditions is the measure of his genius.



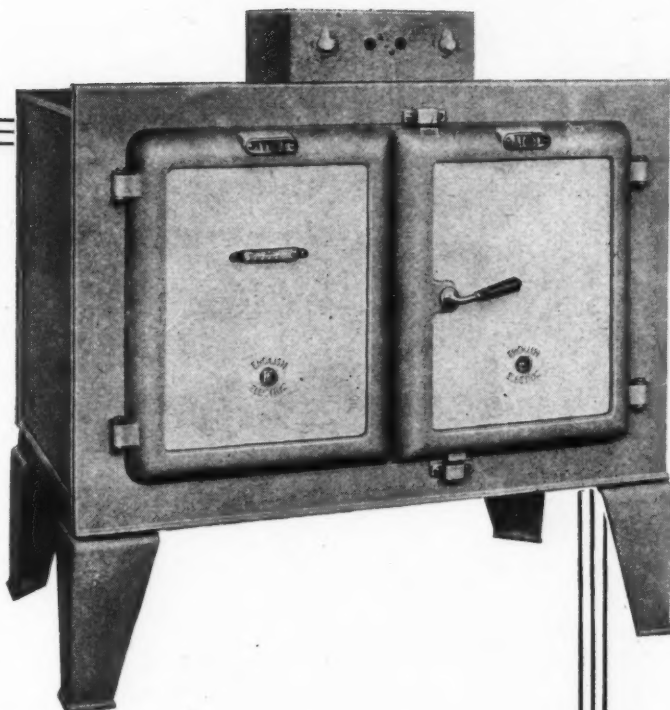
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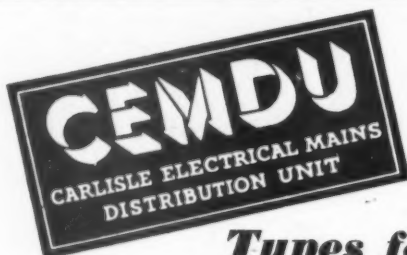
Telephone: CHAncery 8159

WORKS: SUNBURY-ON-THAMES, MIDDLESEX

GLASGOW: Baltic Chambers, 50, Wellington St., C.2

NEWCASTLE-UPON-TYNE: Northumbria House,
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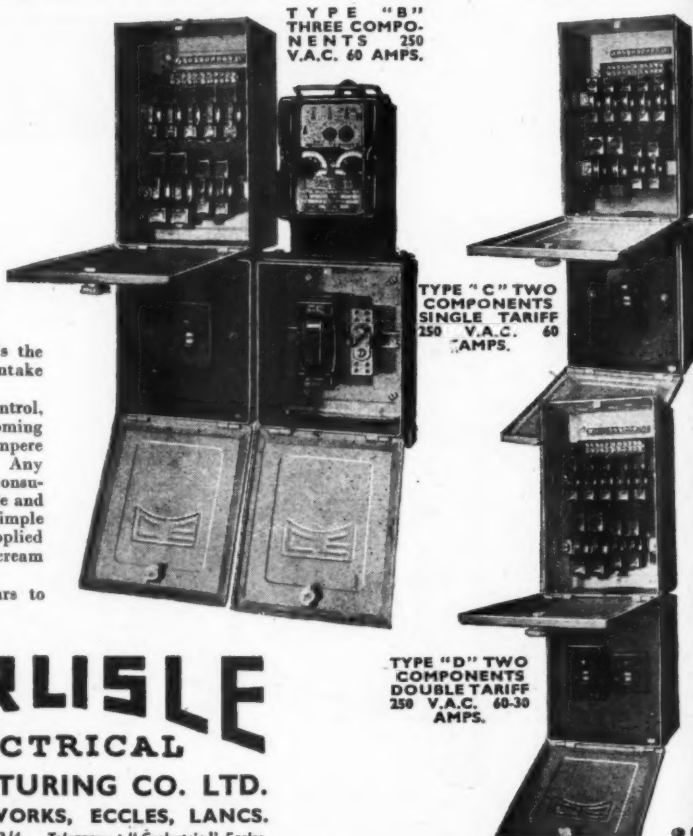
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THREE COMPONENTS
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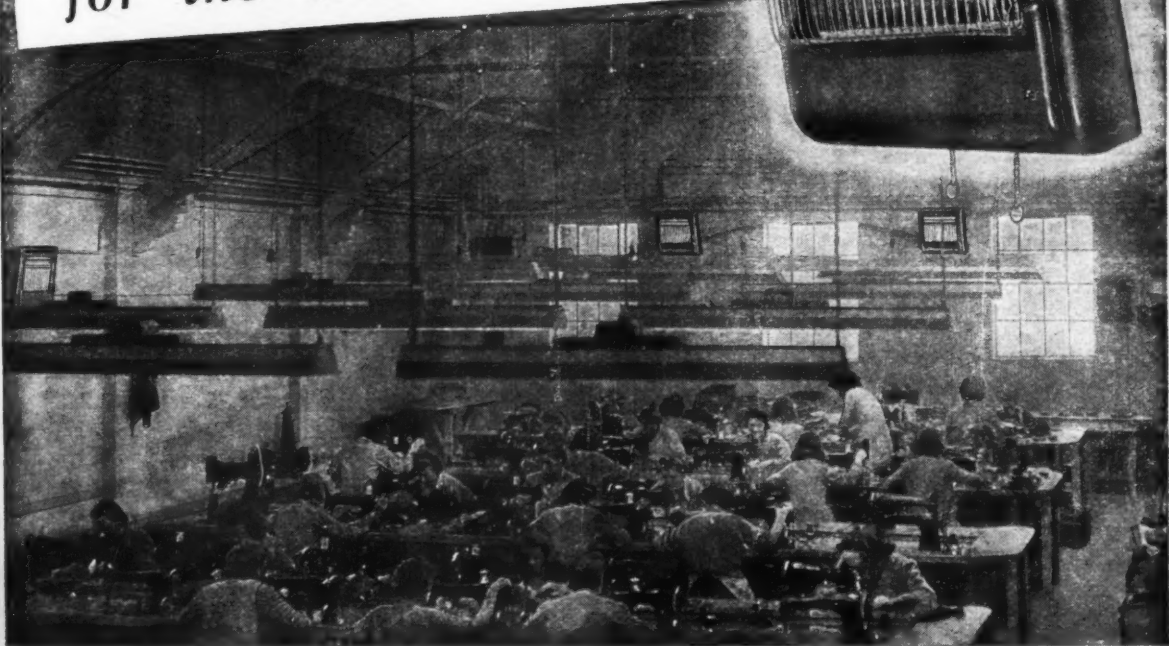
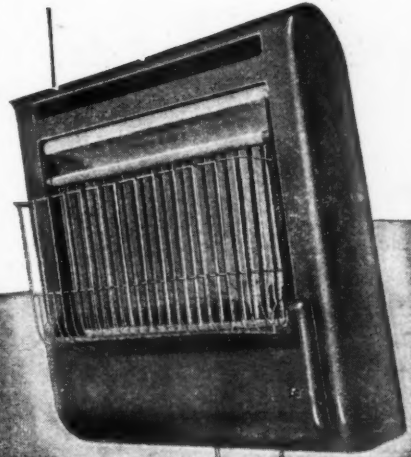
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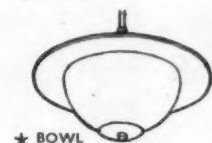
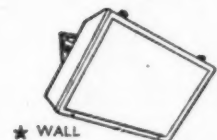
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The Cylinder Latch that Deadlocks

The K146 Cylinder Deadlocking Rim Latch is truly the safest lock to fit. A half turn in the opposite direction to unlatching deadlocks the door against entry and exit, and it is a small and neat piece of door furniture.



LOCK

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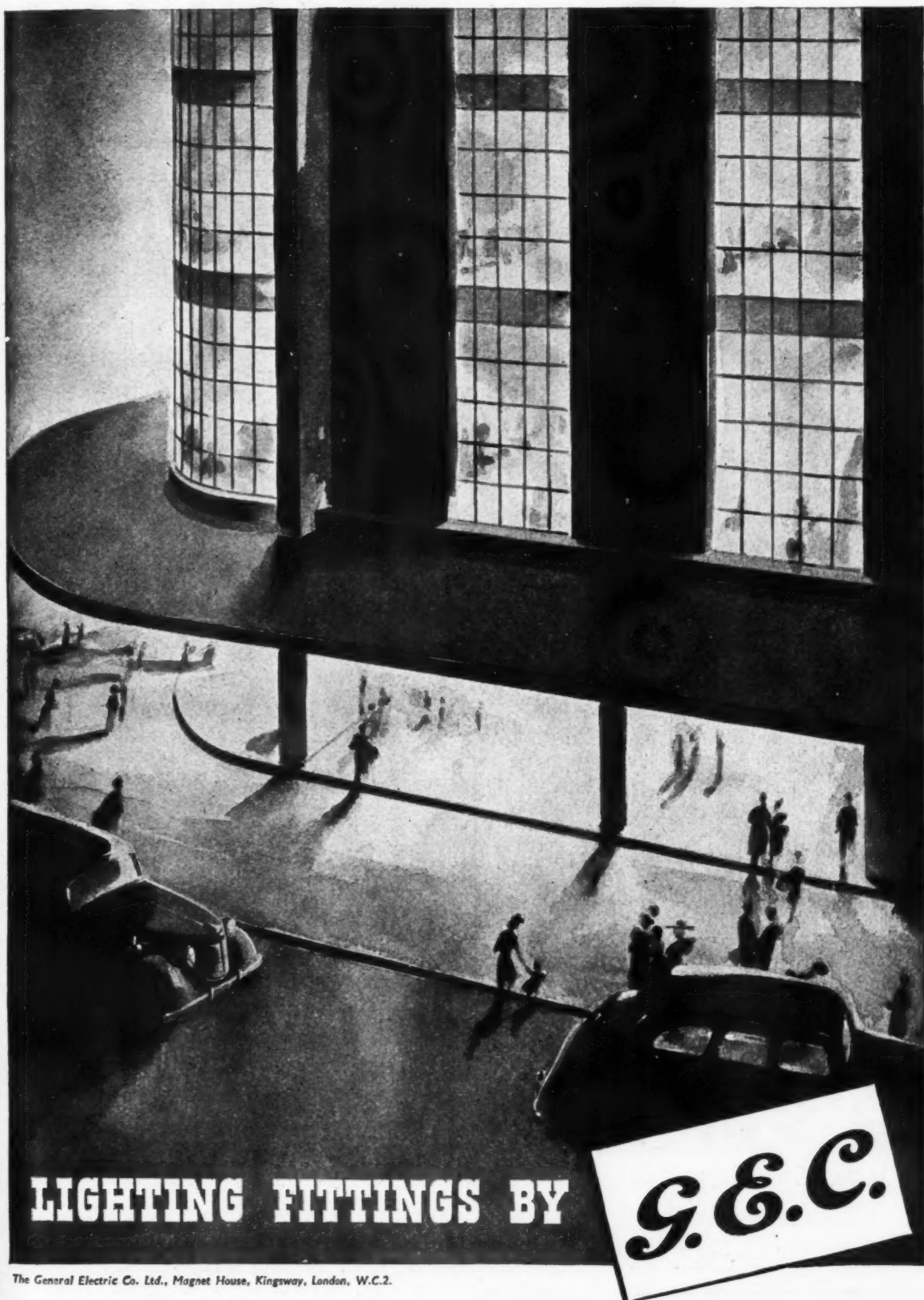
- The bolt stop is operated by a press button which cannot fall into or out of engagement
- The concentric tumbler arrangement gives a greater degree of individuality
- Interchangeable between right and left hand doors
- Will fit any door thickness from 1" to 2 1/2" without bolster ring



The escutcheon or rose is solid and fits flush to the door panel. The cylinder is fitted with a hardened steel protection plate which cannot be drilled.

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EMERGENCY LIGHTING, essential to the safety of many types of public buildings, should be planned when the building itself is planned, by the architect. When the problem arises, remember Chloride. They are the makers of Keepalite, the automatic system which uses the mains interruption itself to switch on the emergency lighting. Chloride's knowledge of emergency lighting is unrivalled. Their experience is always at your service.

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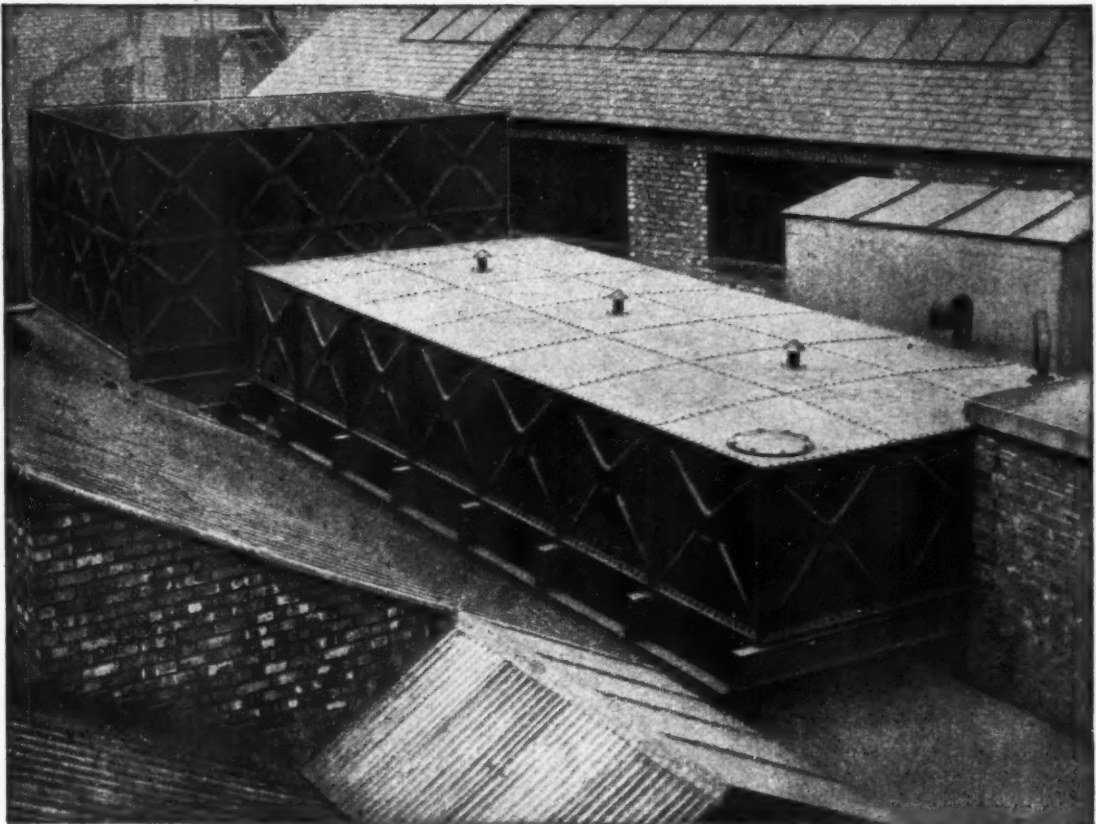
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This is the first of a series of informative advertisements which are intended to show how the various models of SIESTA STOVES can be incorporated to best advantage in Heating Schemes.

PLANNED HEATING ...

Using the 3D SIESTA to provide—

Space heating for one living room.

Convected heat to two bedrooms and kitchen.

Adequate hot water for domestic purposes and a towel rail.

The diagram shows a typical installation for fully utilising the heat output of the 3D SIESTA. Alternative schemes are, of course, possible, and we shall always be pleased to advise on the most suitable installation for specific conditions.

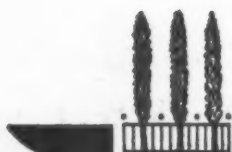
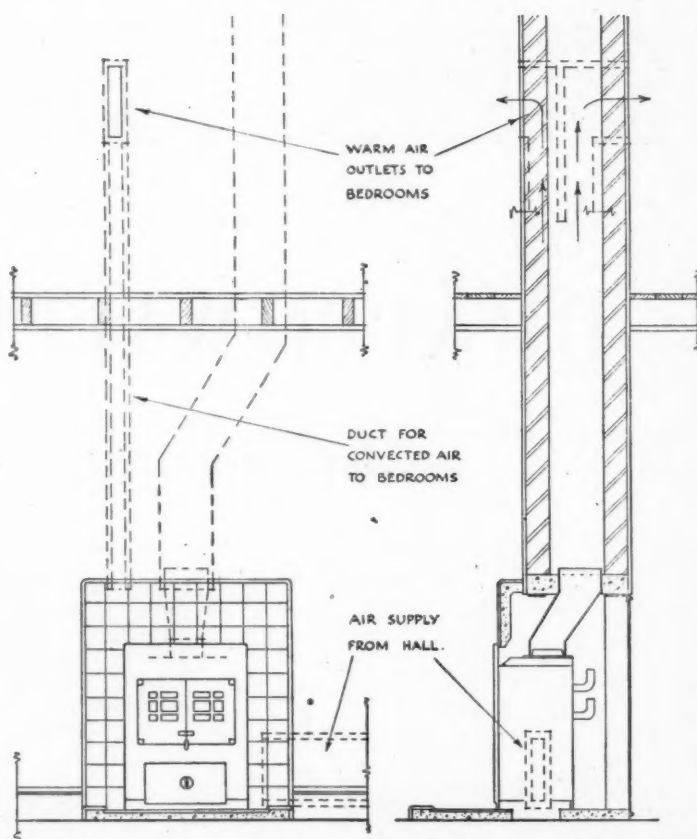
The 3D SIESTA burns coke, anthracite, coal or commercial fuels. It is finished in fine quality vitreous enamel, available in brown, green, stone mottle or black.

Simple and effective air control is provided on the ashpit front and fine adjustment can be obtained to give the range of burning rates required for overnight and daytime.



A special feature of the 3D Model is the way the doors disappear into the body of the stove when opened.

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With these outstanding advantages!

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"BIRMID" RAIN-WATER GOODS ARE THE JOINT PRODUCTION OF THREE ASSOCIATED COMPANIES:

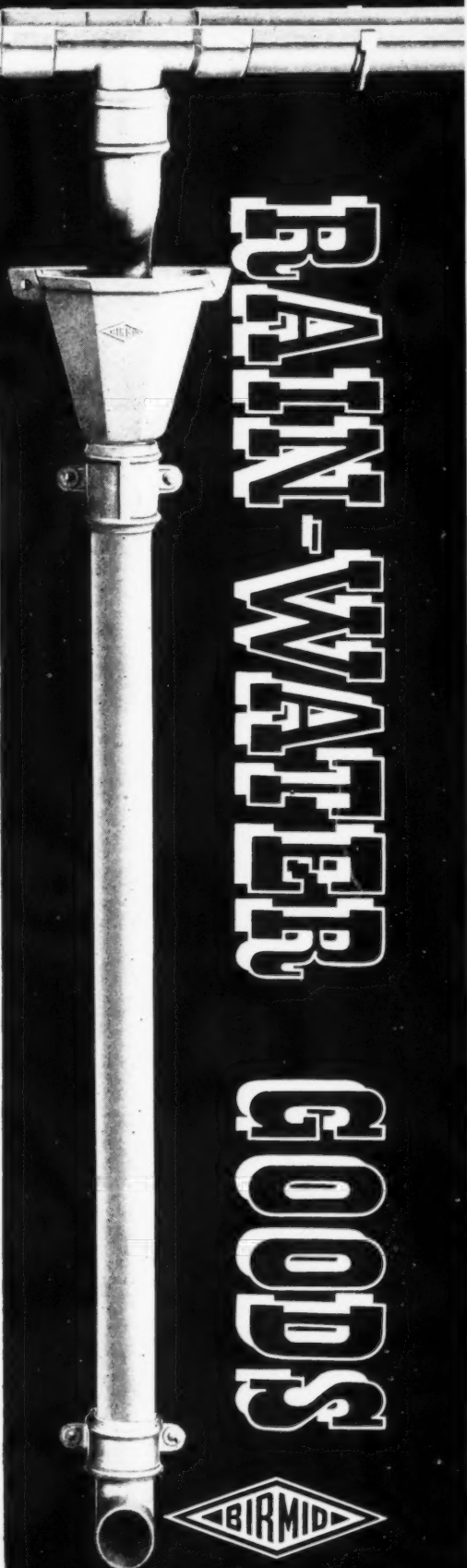
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BIRMID RAIN-WATER GOODS

BIRMID WORKS, SMETHWICK 40, STAFFS.

RAIN-WATER GOODS



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SYNDEC is laughing on the outside whilst WENTWORTH is glowing inside. It does sound rather like a popular song, but you should hear the songs of praise by the mixed chorus of painters and decorators! SYNDEC is recommended for exteriors and WENTWORTH for interiors. Two paints with but a single thought—quality, with all the features that a quality standard gives—glass hard glossy surface—fast to light—high cover—easy working—economy—durability and beauty.



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Will any gentleman in the audience lend us . . . an ordinary glass marble? Thank you, Sir. It has no sentimental value, Sir? No? Splendid! Now, ladies and gentlemen, observe . . . We take this clear glass marble—so—between finger and thumb, and drop it into a small electric furnace (lined, we may say, with the finest platinum). With a touch of our wand—so—we draw from one hundred and two tiny holes at the bottom of the furnace no less than one hundred and two *miles* of fine glass filament. More than a hundred miles (you can measure it if you like) from one glass marble! That, ladies and gentlemen, is 'FIBREGLASS'. Did we hear a lady ask why we take so much trouble to get rid of a glass marble? We must refer her to the footnote below★. Did a gentleman ask what 'Fibreglass' has got that the marble hadn't got? He should read the other footnote ☾. Thank you, ladies and gentlemen.

FIBREGLASS

★ We don't make 'Fibreglass' just to show that it can be done. In the first place it's the world's best all-round insulator for heat and cold, sound and electricity. And it is already doing a score of other jobs, from air-conditioning and theatre decoration to firemen's helmets and electric blankets.

☾ Like all glass, 'Fibreglass' is waterproof, vermin-proof, stable. But it's also light, resilient, fire-resistant to the very high melting point of glass and insensitive to vibration—and the fibres have the tensile strength of steel.

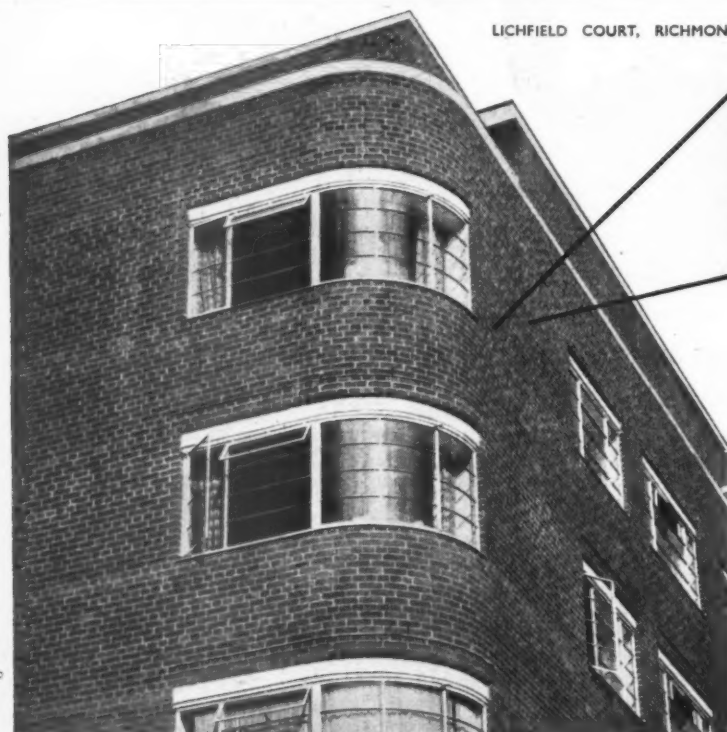
FIBREGLASS LTD., RAVENHEAD, ST. HELENS, LANCs: FIRHILL, GLASGOW, N.W. London Office: 10 Princes Street, Westminster, S.W.1



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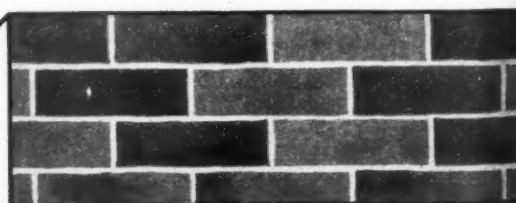
A. DREYFUS LTD., 28, TOULMIN STREET, LONDON, S.E.1.: Tel: HOP 2366

Scientific 400



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Architects: Messrs. Bertram Carter & Slood, A.A.R.I.B.A.



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- Intimate bond between mortar and brickwork.
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Patented Steel Shuttering



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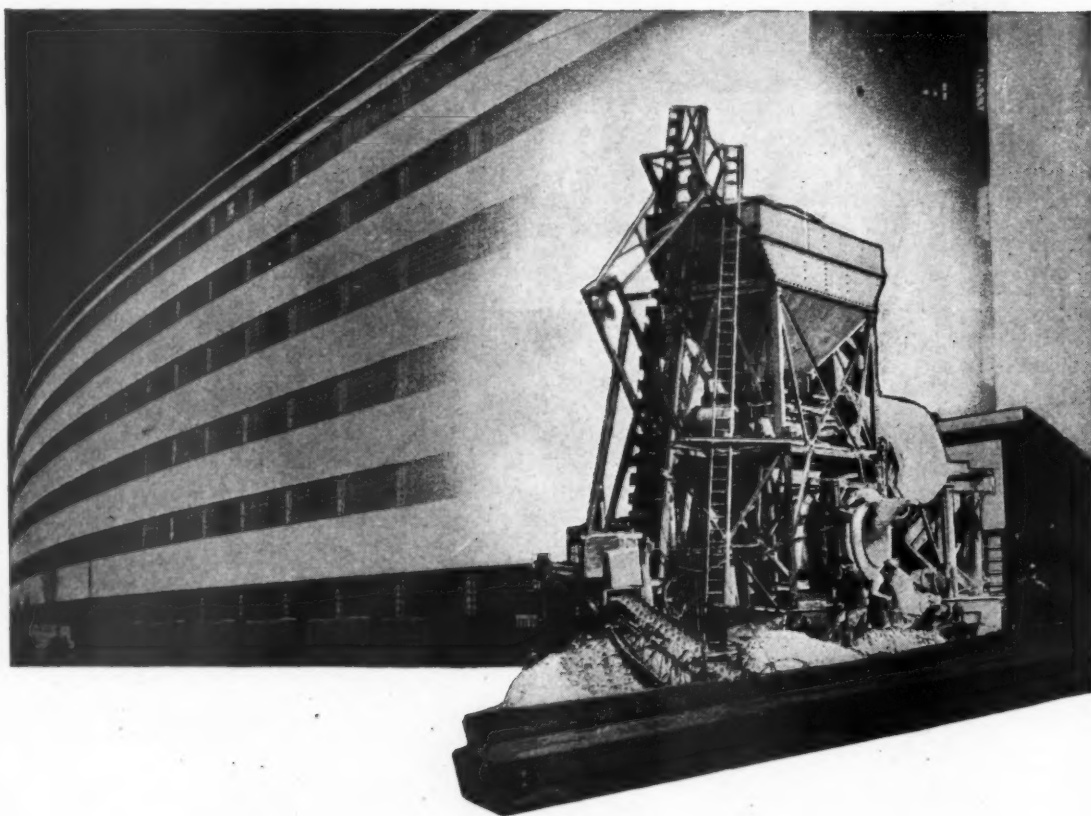
And at the same time cut your costs! Kwik-form patented Shuttering was used on this contract COMPLETED IN 16 DAYS AND NIGHTS. Wherever Shuttering is required KWIK-FORM is the answer. Speedy and simple in operation and handled with efficiency by inexperienced labour under adequate supervision.

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BIRMINGHAM (TECHNICAL & SALES OFFICE) 67, WHITMORE RD. 10. GRAMS: KWIKFORM, SOWEST, LONDON.
TEL: VIC. 1253
GRAMS: KWIKFORM, B'HAM.



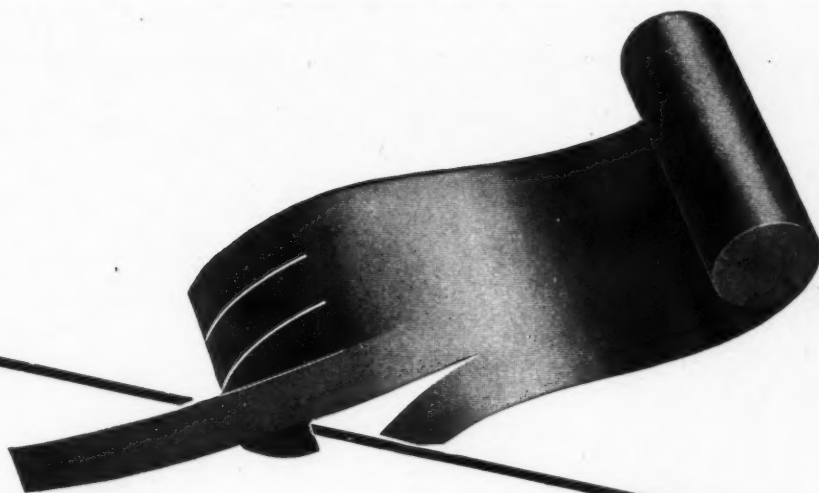
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WATERPROOFER



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to ensure proper setting and
out of wood floors, walls or
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The

Daleware★

SINK

*Heavy cast
aluminium*

£8·18·6

- *Unique
Daleware finish*
- *Fits standard cabinets*
OR BRACKETS AVAILABLE
- *Nothing ever to chip
wear or warp*
- *Easiest to clean*

NEIL NIMMO

The Greatest

Daleware★

CONTRIBUTION to EASIER KITCHEN WORKING

This announces the new DALEWARE SINK and DRAINING BOARD, which really brings within the reach of every home the advantages of the all-through metal Sink—and at an absurdly reasonable price. It is of heavy cast aluminium with the unique everlasting hammered-hardened Daleware surface. It is completely rigid; cannot chip, rust, wear or warp and fits all standard cabinets, or it can be supported by two

brackets. Enormous manufacturing facilities ensure large deliveries soon, but may we suggest you make immediate enquiries? Literature is available.

Size 42" x 21" deep. Simplest possible fitting. Bosses provided for fitting pillar taps or mixer at 6, 7, or 8 inch centres; either handed; Belfast waste; chain; plug; washers and overflow pipe supplied. Retail price complete £8. 18s. 6d. (Brackets extra, per pair 7s. 6d.)

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The **Daleware★** *Range*

ROUND AND SQUARE SAUCEPANS • MILK SAUCEPANS
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OF EXPERIENCE—

at your service

At a conservative estimate, we have supplied to various parts of the world, during the past 25 years, well over 1,000 miles of sliding door track and ancillary gear. The resulting fund of experience is freely at your service, together with fully trained technical representatives and a drawing office equipped to ensure that your requirements are efficiently interpreted.

New Information Volume No. 47, with diagrams, photographs and complete specification data, will shortly be available and will be reserved for you upon request.

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GEAR FOR ANY DOOR, PARTITION OR WINDOW THAT SLIDES

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NEWS

THURSDAY, September 11, 1947
No. 2744 Vol. 106

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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.

The Ministry of Health has issued a statement declaring **LOANS** sanctioned during the quarter ended June 30, 1947, to local authorities in England and Wales.

Housing	£ 41,753,977
Municipal Services (including clinics, sanatoria and mental hospitals)	539,352
Gas Works	1,551,723
Police Purposes	45,087
Swimming Pools, recreation grounds, open spaces, etc.	129,838
* Water Supply	1,499,054
* Sewerage and Sewage Disposal	726,480
Refuse Destruction	71,003
Education Services (including libraries and museums)	4,714,209
Roads and Bridges (including Private Street Works)	280,324
Town and Country Planning	250,208
Other Services (including loans to defray contributions, etc., under War Damage Act, 1943)	1,001,123
Total	£52,562,378

* These are net figures after allowance has been made for capital grants and contributions deducted from the capital cost before loan sanction. The gross cost of schemes are:—£1,537,184 for water supply and £287,300 for sewerage and sewage disposal.

In common with every other periodical this JOURNAL is rationed to a small part of its previous 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, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. 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 SEPTEMBER
OCTOBER AND NOVEMBER

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.

BRIDGWATER. *Opening of the Bridge-water Plasterboard Factory*, by the Rt. Hon. Charles W. Key, Minister of Works. Lunch, Clarence Hotel, 1 p.m. Opening ceremony, 3 p.m. SEPT. 30

BRISTOL. *Building Science Exhibition.* At George Wills Museum. (Sponsor, DSIR.) OCT 20-Nov. 1

CARDIFF. *Building Science Exhibition.* (Sponsor, DSIR.) SEPT. 29-Oct. 11

EDINBURGH. *Enterprise Scotland 1947.* An exhibition of industrial design. At the Royal Scottish Museum, Edinburgh. (Sponsors, Scottish Committee of the CID.) UNTIL SEPT. 30

FOLKESTONE. *Fourth Building Congress.* At Leas Cliff Hall, Folkestone. (Sponsor, BINC.) Admission 1 guinea. Nov. 18 and 19

LONDON. *Photography Aids Export Exhibition.* At the Alpine Gallery, 74, South Audley Street. (Sponsor, Institute of British Photographers.) 9 a.m.-7 p.m. UNTIL SEPT. 30

Industrial Wales. An All-Wales and Monmouthshire Exhibition. At Olympia. The main purpose of the exhibition is to make more widely known the importance of Wales as an existing and potential industrial centre, and to demonstrate the wide variety of products now manufactured there. (Sponsor, Industrial Association of Wales and Monmouthshire.) UNTIL SEPT. 13

Exhibition of Work by Candidates for RIBA (Archibald Dawney) Scholarships. At RIBA, 66, Portland Place, London, W.1. The Scholarships are intended to foster the advanced study of all forms of construction, and are tenable at the Schools of Architecture recognized for exemption from the examinations of the Royal Institute. (Sponsor, RIBA.) 10 a.m.-7 p.m. (Sat. 10 a.m.-5 p.m.) UNTIL SEPT. 15

The Miner Comes to Town Exhibition. At the C.O.I. Exhibition Centre, Marble Arch. There are nine sections dealing with all aspects of the mining industry. (Sponsor, COI for MFP and N.C.B.) SEPT. 11-Oct. 23

F. J. Osborn. Impressions of Sweden. At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) Buffet lunch, 12.45 p.m. Talk, 1.15 p.m. SEPT. 11

African Housing Projects. Discussion on material sent in by an architect in Africa engaged on large-scale housing schemes. At 34, Gordon Square, W.C.1. (Sponsor, APRR.) 6 p.m. SEPT. 18

Desmond Donnelly. Town Planning in Eire. At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) Buffet lunch, 12.45 p.m. Talk, 1.15 p.m. SEPT. 25

Exhibition of Architectural Lettering. At Friends House, Euston Road, N.W.1. 3-6 p.m. *English Monumental Sculpture*, a talk by Frederick Burgess, A.R.C.A. Percy Delf Smith, R.D.I., the President, in the chair. (Sponsor, The Guild of Lettering Craftsmen.) 5 p.m. SEPT. 27

E. Geoffrey Parsons. Farming Policy for Agricultural Belts of New Towns. At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) Buffet lunch, 12.45 p.m. Talk, 1.15 p.m. OCT. 9

Woman's Fair Exhibition. At the Dorland Hall, Regent Street, S.W.1. (Sponsor, "Woman.") SEPT. 23-Nov. 22

IHVE Jubilee, 1897 to 1947. The President and Council have arranged the following celebrations: *Meeting of Council.* At the Institution of Mechanical Engineers, Storey's Gate, S.W.1, 2 p.m. OCT. 7. *Banquet and Dance.* At the Savoy Hotel. Dancing from 9 p.m. to 12.30 a.m. 6.30 for 7 p.m. OCT. 7. *Special Meeting of Members.* At the Institution of Mechanical Engineers, Storey's Gate. Paper by Mr. C. G. Vokes, A.M.I.MECH.E., A.F.R.E.S., M.S.A.E., on *Air Filtration.* 2.30 p.m. Tea 5.30 p.m. OCT. 8 *District Heating.* At the Institution of Mechanical Engineers, Storey's Gate. A special "Jubilee" paper by C. G. Carruthers. 5.30 for 6 p.m. OCT. 8

Course of Lectures. School Planning and Construction. At the RIBA, 66, Portland Place, W.1. The course will be open to members of the RIBA and of allied Societies and, in addition, the Clerks to Local Authorities will be invited to nominate professional representatives to attend. (Sponsor, RIBA.) OCT. 23-25

Twenty-second Building Exhibition, 1947. at Olympia. (Sponsors, H. Greville Montgomery, A.R.I.B.A. (HON.) and Hugh R. C. Montgomery, M.C.) NOV. 19-DEC. 4

SOUTHAMPTON. *Building Science Exhibition.* At the Art Gallery, Civic Centre. (Sponsor, DSIR.) UNTIL SEPT. 20

HOPE'S

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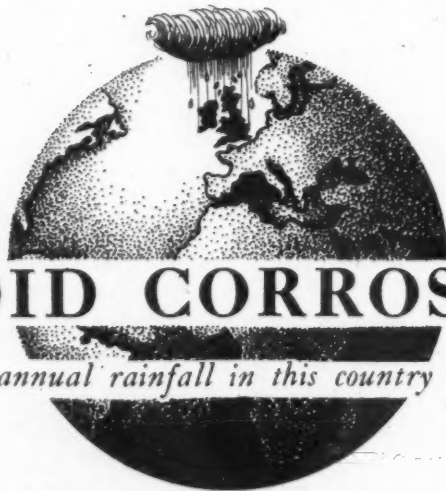
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From AN ARCHITECT'S Commonplace Book

ORIENTATION. [From *Home-Made Home*, by Ronald Duncan (Faber and Faber).] Two houses were built in my village before the war. They both commanded the best of views and looked straight out across the Atlantic. I have seen the occupants crawling on all fours up to their front door, and when they had managed to open it, seen their roof lift like a hat to acknowledge the wind. Obviously, therefore, the front door of a house should be on the sheltered side away from the prevailing wind. In building we should emulate a horse and sensibly turn our rump to the wind, not, like a stupid cow, stand full to the gale. That is only asking for toothache, rattling windows, and, what is worse, a smoking chimney, every time the front door is opened.

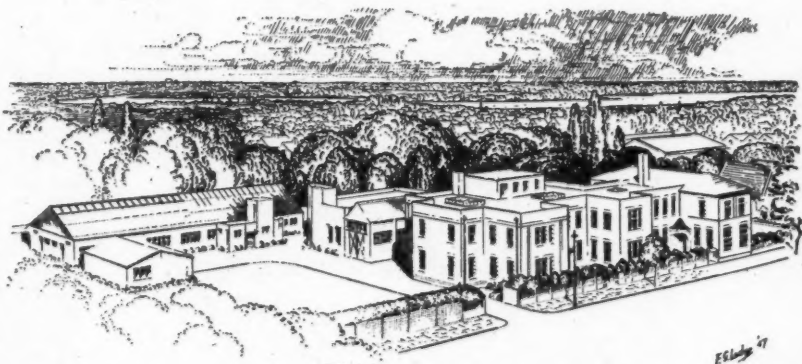
From October 1 to 11 will be held the first post-war RADIOLYMPIA.

In the modified scheme arranged this year there will be some standardisation of colour but exhibitors otherwise will be allowed a free hand. The lay-out of the exhibition as a whole is uniform, but individual designs of stands are allowed with certain limitations. A novel decorative feature is the use, on stands and at the west end of the Grand Hall, of steel aerial masts, constructed of tubular steel with lattice wiring and surmounted by pennants. Main decorative feature is the west end of the Grand Hall, where a lion rampant surmounts a globe, with the slogan below in Playbill lettering *Britain Builds Radio for the World*. Each stand in the Grand Hall has two aerial masts or pylons which have a treble purpose. They serve as a decorative feature; they display the exhibitors' names on pennants; and they carry the various electrical networks, including wiring for both sound and television. Architect of the exhibition is Mr. J. Lansdell and the exhibition organiser, Mr. Alex Moody. Mr. Lansdell is responsible for the general lay-out of the exhibition, for the aerial pylons and for the overseas visitors' reception rooms.

A programme of special lectures has been arranged by the RIBA dealing with the **DESIGN of POST-WAR SCHOOLS** with particular reference to the requirements of the new Education Act. On Thursday, October 23, at 11.0 a.m. Mr. Denis Clarke Hall will lecture on "Secondary Schools"; at 2.30 p.m., after an address by the Rt. Hon. George Tomlinson, M.P., Minister of Education, Mr. John

Harrison will lecture on "Nursery, Infant and Junior Schools," Sir Lancelot Keay, K.B.E., President, RIBA, in the chair. On Friday, October 24, at 10.0 a.m., Mr. William Allen will lecture on "Standard and Quality of Lighting," and at 11.30 a.m. Mr. C. C. Handisyde will lecture on "Heating and Ventilation," Mr. H. S. Goodhart-Rendell, Past-President, RIBA, in the chair. At 2.30 p.m. Mr. Hope Bagenal will lecture on "Acoustics," and at 4.0 p.m. Mr. Robert Fitzmaurice is to lecture on "Use of Materials," Sir Lancelot Keay, K.B.E., President, RIBA, in the chair. A small technical exhibition will be held in the foyer of the Jarvis Hall as a visual aid to the lectures. It will illustrate and supplement some of the points discussed during the course. Certain details of school planning will be contrasted

with the work of other countries, and there will be a few plans and illustrations of foreign schools. This exhibition will be in the nature of an experiment and will differ very widely from the popular exhibitions which the RIBA has organised in the past. It is felt that at the present time such an exhibition may be of considerable value to architects and others who are concerned with school buildings, and every endeavour is being made to include as much up-to-date and interesting work as possible. It is probable that as a result of the preliminary work undertaken for this exhibition, a much larger and more popular exhibition will be organised in the spring in which one of the aims will be to put over to the general public the more important features of school planning at the present time.



The 21st anniversary of the foundation of the Research Association of British Paint, Colour and Varnish Manufacturers is to be commemorated by an Open Week and Exhibition at the Paint Research Station, Teddington, from September 22 to 26. The drawing shows the Research Station with the garage on the extreme left, which has been transformed into laboratories. These extensions are to be formally opened by Sir Edward Appleton on Tuesday, September 23.



A drawing of the proposed new Forth Road Bridge. The Clyde Valley and Central and South East Scotland Regional Plans together provide for a new system of arterial roads and motor ways. Important links in this system are a new Forth Road Bridge and a tunnel under the Clyde at Glasgow. Details of the scheme are presented by the Department of Health for Scotland in the Scotland Tomorrow Hall at the Enterprise Scotland Exhibition in Edinburgh. See A. J. last week.



Backyards

These tiny whitewashed backyards hugging the town wall of Conway, N. Wales, surely indicate a triumph of working-class domestic arrangements. No other yards might be smaller or neater and the similarity of one to another is raw material enough for Mass-Observation. The photograph is by Mr. K. F. L. Farnfield, A.R.I.B.A.

★
Professor Robin Darwin has been appointed **PRINCIPAL** of the **ROYAL COLLEGE of ART** as from the retirement of Mr. P. H. Jowett at the end of 1947.

Professor Darwin, who is at present Director of the King Edward VII School of Art, Newcastle-upon-Tyne, and Professor of Fine Art in the University of Durham, was educated at Eton College and the Slade School of Art. He was an assistant master at Eton before the war, and during the war years served with the Camouflage Directorate of the Ministry of Home Security and with the Ministry of Town and Country Planning. Subsequently he was on the staff of the Council of Industrial Design. Thirty-seven years old, he is a great-grandson of Charles Darwin, the eminent scientist.

★★
Mr. S. Gordon Russell has been appointed **DIRECTOR** of the **COUNCIL of INDUSTRIAL DESIGN**.

He has had wide experience in the industrial design of furniture, pottery, glass, carpets, furnishing fabrics, and the radio and light metal industries. In 1920 he joined the Design and Industries Association and was for some years a member of its Council. In 1926 he was elected a Fellow of the Art Workers Guild and in 1927 he was elected a Fellow of the British Institute of Industrial Art and of the Arts and Crafts Exhibition Society. In 1940 Mr. Russell was elected a Royal Designer for Industry (the Faculty of the Royal Designers for Industry is limited to 40 members who are adjudged by their fellows to have achieved eminence in their profession). In 1947 he was elected Master of the Faculty. In 1943 he was appointed Chairman of the Design Panel at the Board of Trade and a member of the Furniture Production Committee and Furniture Trade Working Party, and in 1944 he was appointed a member of the CID. He is a member of several committees of the Ministry of Education, and Chairman of the Furniture Design Committee at the Ministry of Works. He has acted as adviser on design matters to the Admiralty, Post Office and Colonial Office. In 1945 he was elected a First Fellow of the Society of Industrial Artists.



Mr. S. Gordon Russell who has been appointed Director of the Council of Industrial Design.

WATER, SEWAGE AND DROUGHT

FROM whatever point we draw it, the ultimate source of all water supply is rain. In this country rainfall is fairly evenly distributed throughout the year and there are no marked wet and dry seasons, as occur in tropical regions. Because of this we tend to take our water resources for granted and are both surprised and annoyed when, after 15 consecutive rainless days, there is an official drought. Something must be wrong with the management of our water resources when, less than six months ago, over our richest agricultural land there were disastrous floods and at the same time East Londoners had to get their drinking water from trucks and bowsers because the flood waters had contaminated the filter beds.

Over the years the variation in our rainfall is not great, so it is the use and misuse of our water resources which requires further examination. While water from upland catchment areas is carefully guarded from pollution, custom and indifference have allowed many of our rivers to become so polluted in their lower reaches that fish-life is extinguished and the river channels themselves have degenerated into open sewers. A recent Report on the Thames floods considered three types of remedial measures—to widen and deepen the channel so as to accommodate the maximum flow; to provide balancing reservoirs temporarily to retain the flood waters; and to designate certain areas as liable to floods, carry out minor training works, and accept as inevitable the periodic flooding of houses, streets and fields. Of these alternatives, the first would entirely change the character of the river Thames as we know it, since the channel would have to be three times its present cross-section at Teddington weir. The second alternative would sterilize some of the finest agricultural land in the Thames valley, and would also involve new channels and earthworks of considerable magnitude. The third alternative would logically mean the eventual re-location of a large population outside the Thames catchment area and the reversion of all floodable, though built-upon, land to water meadows.

In the valley of the river Lee the problem is complicated by the use of the river simultaneously as a channel for sewage and a source for the drinking water of East London. Into this river, above the intake of the King George reservoir at Chingford, are poured each day some 13 million gallons of sewage effluent. In dry weather the flow of fresh water in the Lee is estimated at 15 million gallons per day. Sound sanitary engineering practice requires that even the highest grade effluent from a sewage disposal works should only be discharged into a river whose dry weather flow is at least five times the volume of sewage effluent admitted. When the proportion of fresh water to sewage is less than five to one, a point may be reached where the river ceases to be self-cleansing and becomes progressively fouler and more polluted.

What, then, should be our water policy? Whatever is proposed will take years to complete, and will require clear thought in the formulation of a plan. London has outgrown the water resources of its catchment area, yet continues to make increasing demands for water. New sources of supply must therefore be sought, possibly by reviewing the late Sir Alexander Binnie's project for an aqueduct from Wales, or perhaps by the construction of a large-scale pumping main from the Great Ouse. Our planners should make certain, in accommodating London's overspill, that no more sites within the Thames catchment area are covered with impervious roofs, roads and yards from which the storm-water run-off would go to swell future floods. A new approach is necessary to the problem of sewage purification, on the lines of the work of Dr. Abel Wolman of Johns Hopkins University, USA, to enable trade and domestic sewage to be rendered harmless at the source of its production and to return valuable fertilizer to the land, rather than dump it in the sea.



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

ENTERPRISE SCOTLAND

Conflicting reports from my Edinburgh spies left me no alternative but to go and see for myself, and now I'm very glad that I did. In great comfort, too, up by Dakota one morning and back the same evening the same way; extravagant, but worth it. Display, on the whole, looked better than *Britain Can Make It*, perhaps because smaller space meant fewer hands, but the goods seemed vaguely disappointing, or perhaps there just wasn't quite as much for the architect as there was at the V. & A. That the Department of Health should show Scotland To-morrow was presumably a

good idea, though it seemed hardly likely to interest foreign buyers very much; but I was frankly disappointed with the shipping. If you are selling the Clyde you obviously can't leave out the *Queen Elizabeth*, and for the same reason you may as well start with the *Sirius*, or the *Charlotte Dundas*, or whatever it was. But the intermediate steps conveyed to me the impression that the Clyde was mainly interested in the North Atlantic passenger route, and there seemed to be no attempt to convey how much bread and butter comes from things like trawlers, and floating docks, and dredgers, and light-ships, and all the other things which float. And how many ships are now pounding round the world simply because some doughty Scots chief engineer has nursed them along for twice their allotted span? Did it *all* have to be left out?

STRONG LAD WANTED

The Royal Fine Arts Commission is one of those institutions whose value depends on the people who belong to it. It has recently been given wider powers, though they are still rather vaguely defined, and, with a much more energetic and enlightened membership than it had in the past, it has become a real power for good—especially in its architectural work.

Now it is advertising for a secretary. This is a key appointment; the right man—who must be a man of vision and

determination as well as architectural judgment—can exercise an enormous influence on standards of design at a moment when the effect will be lasting. The Commission is in a way the nearest we have now to the eighteenth-century Man of Taste—and how much he is needed.

CID'S NEW DIRECTOR

In Gordon Russell, the Council of Industrial Design has as its new Director a man who has proved his mettle as a designer and as a manufacturer: who can speak, therefore, on equal terms to designers and to manufacturers. In announcing his appointment, the Council listed all the letters that Mr. Russell can put after his name and dealt with the activities that have brought him into the limelight in recent years, but said nothing about the story of the Russell furniture business—a story which even Samuel Smiles might not have found wholly unworthy of his attention.

The business began in the early 1900's, when G.R.'s father bought the Lygon Arms at Broadway, and found it necessary to set up a workshop for the repair of the antique furniture with which he was equipping the place. This activity led, a few years later, to the selling of antique furniture, at first mostly to Lygon Arms hotel patrons.

After the 1914-18 war the young Gordon Russell took over this side of the family business; and in 1920 for the first time he included some new furniture of his own design among the antiques displayed in the Broadway showroom. These pieces and others which followed them not only sold but were appreciated and found their way into several exhibitions. In 1929 Gordon Russell Limited was formed as a separate manufacturing company. The part had grown greater than the whole.

Gordon Russell co-operated with architects on several notable jobs—among them, the furniture for the new Shakespeare Memorial Theatre. Perhaps more significantly, he also co-operated as a designer with other industries; the radio cabinets which he

designed for Murphy in the early 1930's set a standard which no other radio-maker has yet excelled and few have equalled. More recently, G.R. has been an active member of the BOT Advisory Committee on Utility Furniture; the fact that the best Utility range is called Cotswold may be taken as a clue to the source of inspiration of its design.

Critics of the CID have said in the past that its staff included too many people who knew too little about design. Even the most biased could not number Gordon Russell among them.

THE GRAND TOUR SUSPENDED

One part of the new austerity measures will disappoint architects, and that is the ban on foreign travel. The sterling area is still open, but Gibraltar, Malta and Cyprus are no substitute for Paris, Rome, Gothenburg and Stockholm. Perhaps we shall see an enormous increase of international congresses and conferences for architects of which this week's session at Bridgewater of CIAM may be but the first. One interesting point: What about the RIBA travelling scholarships? At present there still seems to be some uncertainty about the position; nobody yet knows whether the winner of the Bossom will be able to go to the USA or the winner of the Tite to Italy. It is much to be hoped that the Ministry of Education will do what it can to see that students will be able to extend their experience by studying Continental exemplars.

STARRING ORSON WHEELER

From the Syndication Department of the *Montreal Star* comes an interview with Orson Wheeler, a noted Canadian

sculptor who has taken up architectural modelling. "It all began," he says, "when I heard people in Montreal taking a look at St. James's Cathedral, Dominion Square, and assuming it was the same as St. Peter's, Rome. I knew it wasn't—but I wanted to find out the difference." The difference, he discovered, is that St. James's is only one-eighth the size of St. Peter's. Mr. Wheeler, who is crazy about comparative sizes, continued his researches, and with the help of plasticine discovered that Salisbury Cathedral spire is higher than the Sun Life Building in Montreal, which is a little higher than the Great Pyramid, which is higher than Mont St. Michel. Stonehenge is one of the smallest models—"I showed it to an Englishman," says Mr. Wheeler, "and he was insulted"—and the Eiffel Tower isn't that much shorter than the Empire State Building.

Mr. Wheeler, who is apparently no taller than the average sculptor and considerably shorter tempered than the insulted Englishman, thinks modern architects are "mousy and conservative," says plasticine is simply no good for making models of skyscrapers, and finds Viollet le Duc very inaccurate on detail. He should be interested in Birmingham's new pub—the competition drawings of which were published in a recent issue of the *AJ*. This, besides being surely the biggest pub in the world, is the only one I know of which possesses a full-size quadriga on its roof. Like Mr. Wheeler, I know it's different from the Wellington Arch at Hyde Park Corner, but unlike Mr. Wheeler I am not going to make models of them both to see which is the larger.

ASTRAGAL

LETTERS

Maude Kemper Riley.

Young Mother Riley versus Mr. Marshall

SIR.—Many thanks to Astragal for his support of freedom in the arts. Mother Riley appreciates his moral backing which she enjoys from time to time. It is extremely interesting to me that he appreciates that governments may foster art, clear the way, and even spend some money in advertising the national produce (I am thinking of the Henry Moore exhibition here); but that it should not officially direct art's course.

I don't know what officially commissioned art or officially purchased art works look like in Britain, but ours is usually quite bad—from portraits of presiding presidents to commemorative statues, to historical rotunda decorations in government buildings. I am sending you under separate cover a photograph of a painting called *The Peacemakers* which President Truman purchased this year for the sum of \$10,000. It shows Civil War



The Peacemakers, by George P. A. Healy (1813-1894). President Lincoln, Generals Grant and Sherman and Admiral Porter discussing prospects of peace between the states at a meeting on the "River Queen" off City Point, Virginia, in March, 1865, during Grant's siege of Richmond.

personnel aboard a river steamer and was painted in Rome by a run-of-the-mill American academician three years after the meeting took place, photographs of Lincoln, Grant, etc., being furnished the painter along with a written description of the interior involved. Probably worth about \$500 as an historical curio.

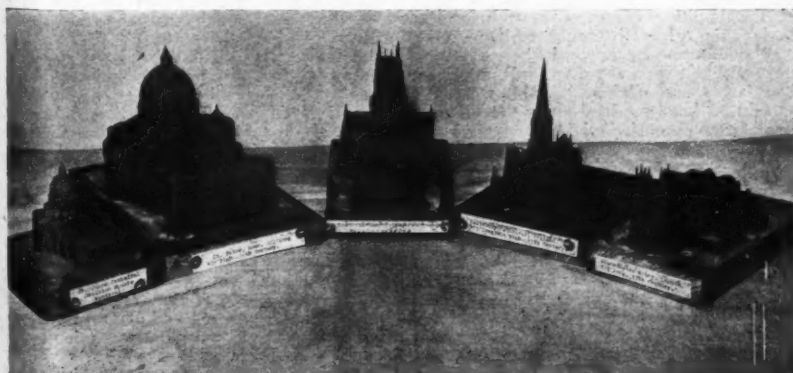
British papers probably didn't copy, but after some attempt to recall the letter, then to make it a "top secret," it got out to the press that President Truman had written Assistant Secretary of State William Benton a letter during the late controversy over the American paintings touring Europe, on which you have commented. This letter leaves no doubt of presidential comprehension of the arts. Here it is: (See *Time Magazine* for June 16, 1947.)

"I don't pretend to be an artist or a judge of art, but I am of the opinion that so-called modern art is merely the vaporings of half-baked lazy people. An artistic production is one which shows infinite ability for taking pains, and if any of these so-called modern paintings show any such infinite ability, I am very much mistaken.

"There are a great many American artists who still believe that the ability to make things look as they are is the first requisite of a great artist. . . . There is no art at all in connection with the modernists, in my opinion. (Signed) Harry Truman."

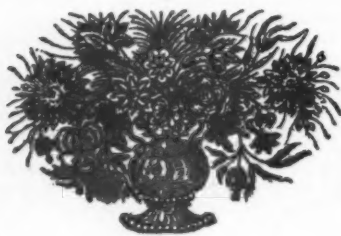
MAUDE KEMPER RILEY,
Publisher and Editor,
MKR's Art Outlook

New York



Mr. Orson Wheeler's essays in plasticine sculpture. From left to right, St. James's Cathedral, Montreal; St. Peter's, Rome; St. John the Divine, New York; Salisbury Cathedral; Westminster Abbey. See Astragal's note above.

In his first article in our issue for August 28 Ian Bowen referred to the difficulties and dangers resulting from the partial abolition of Regulation 56AB. This week he discusses a substitute for the regulation and points out that the Government should favour the giving of work to the more efficient contractors, whether they are large, medium or small.



Re-Organisation of the Building Industry

[by Ian Bowen]

II.—New Techniques and New Organisation

PANACEAS VERSUS PLANS

The present situation is one where the pot, kettle, and frying-pan as well, vie in calling the other black. Which party is blackest is difficult to discover. Although 100,000 new permanent houses have been completed since the end of the war, the public at large has never been provided with an analysis of the cost of even a single one of these houses. This silence is itself a reflection on building employers, building workers, and the Government itself; none of these interests seems to have felt that a publication of detailed costs would earn it credit. In this judgment at least all may have been wise.

Instead of plans based on facts the industry is offered, and offers itself, panaceas. The latest is payment by results, with the target of an increase of 20 per cent. in the earnings of the building operatives and also, presumably, of such an increase in productivity as would prevent this from driving up costs. The objective is unimpeachable, but its vague formulation at this late stage makes it a panacea rather than a plan.

Such well-meaning bodies as the Association of Building Technicians, in their *Homes for the People*, have offered new methods of construction as a way out of the post-war impasse. They offered improvements in the design of the house, which they believed "will increase costs by about 33 per cent. on the basis of pre-war prices and methods." They hoped that better organization of the industry and more advanced technique would reduce costs again by at least this amount. In October, 1945, the Minister of Health advised demobilised men to hesitate to take out mortgages for new homes, presumably on the grounds that costs and/or

the rate of interest would fall; in fact, the price of houses has risen steeply.

It must be admitted that the planners are no less to blame than the two sides of the industry. The extraordinarily low output of labour on housing sites since 1945 could hardly have been achieved without the concerted incompetence or indifference of those who planned materials programmes, those who diverted and organised the jobs, and the workers themselves. Between them these three influences have driven up the man-hours taken per house to record high levels.

It is a mistake to believe that any plan is better than no plan at all. Some plans have proved themselves positively harmful. The only plans that are of any use are realistic programmes linked with strong executive action. If political or administrative timidity and slowness of action rule out this kind of planning, the planners would be better employed elsewhere.

A SUBSTITUTE FOR 56AB

First necessity is to cure the labour trouble. The pressure on building labour supply is soon going to become intense. With labour in the coal mines now actually declining, and agriculture short of 100,000 men, a re-deployment of the male labour force inimical to building is quite probable. The problem of getting a reasonable output from labour must be solved. There are several possible lines of action:

(a) An increase in the coverage of the apprenticeship and training scheme, so that a bigger proportion of craftsmen have had an adequate training. This might more than pay for itself in a year or two.

(b) The new payment by results scheme must be based on the scientific measurement of work, not on some political-industrial compromise over a schedule of prices. For instance, it may well be found by observers that the biggest waste of time on sites is not when men are actually at work but coming to work late, leaving early, taking lengthy tea-breaks, and so on. Output might be improved by eliminating the causes of these periods of idle time, and payment by results should be carefully designed to this end. Extended sub-contracting might be useful in conjunction with bonus payments.

In "putting over" a schedule to the men, whether nationally or locally, the greatest care must be given to publicity methods. There must be no sense of grievance on any site, nor need there be if the schedules are properly drawn up and explained. But uniformity of method and application must be enforced on all employers. In other words, some substitute for the dead 56AB will have to be found. A compulsory order will have to be issued on this point or, if the scheme is not compulsory, some incentive to apply it must be granted.

CONTROL OF SIZE OF FIRMS

The Government directly, or rather indirectly through the local authorities and local education authorities, controls many of the building contracts now being let. Paying the piper, it could call the tune. It should know by now whether, as seems most probable on *a priori* grounds, the larger firms are more efficient in labour time in putting up houses. In the war the Government, after expensive trial and error, learnt to distinguish the efficient from the inefficient contractors. This lesson should by now have been re-learned.

The Government should therefore favour the giving of work to the more efficient contractors, whether they are large, medium or small. To do this adequately a much greater centralisation at least of knowledge, and perhaps even of the actual letting, of contracts would be necessary. This would not present much difficulty, as all the necessary Government machinery now exists.

It is preposterous for the Government to take a *laissez faire* attitude towards the industry's internal organisation. As the biggest customer it must be interested: if it is not interested it had better stop being so

large a customer. The only hope for the efficient firms in the industry is that they should attract more work at the expense of their less efficient competitors. The Government should be quite ruthless in diverting contracts away from the high cost organisations. The technique either of a register of contractors (for contract-letting purposes), with a record against each name of its recent performances, should be circulated, and/or a system of regional letting of all local government contracts should be substituted for the present unco-ordinated tendering system.

NEW METHODS OF CONSTRUCTION

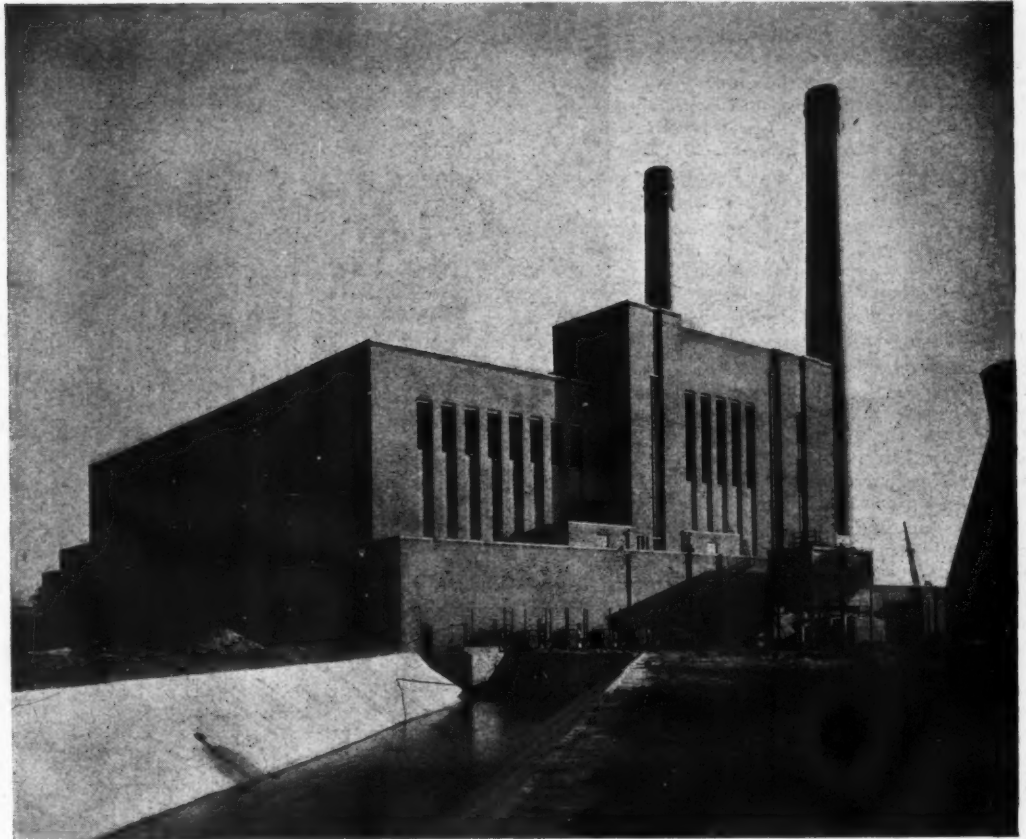
On this subject, too, current thinking tends to run to panaceas instead of plans. New methods of construction are not a medicine that will cure in one or two doses. They are the result of the application of sound principles to building technique. All of them need extensive and expensive field trials before being generally used; mostly a "new method" applies only to a small section of a house at a time, so that the final result depends on the architect fully-versed in the new techniques and their possibilities. But most new methods (like most old methods for that matter) will never be economic unless they are carried out, for cheap housing, on a very large scale. They need to be applied on a large scale, but at the same time piecemeal.

Recently published papers have shown that experiments on new methods for walls and partitions have now advanced beyond the trial stage. Substantial savings on the man-hours needed for certain parts of a house are now proved to be feasible; but savings in costs will not be simultaneously possible unless the next step is taken—letting of contracts for houses designed according to the new techniques on an adequate scale. Holders of patents, or of manufacturers of parts needed for the new techniques must also be prevented from charging prohibitive prices so as to exploit the present situation and defeat the objective of lowered costs; obviously they will be economically tempted to do this as long as they have heavy overheads to cover and no guarantee of a continuous flow of orders. Thus the whole purpose of new methods, which is lowered costs, is bound up with the problem of Government planning and organisation—as long as Government is the industry's chief customer.

THE INDUSTRY'S CHANCE

A plan for the industry must not be regarded as something which an outside Government must impose on recalcitrant industrialists. The objectives of a sound plan would be better incentives for employees, but also for employers, and lower costs. Each of these three objectives may involve, it is true, resolute Government action—a compulsory order for the first, a new system of contract-letting for the second, and the deliberate encouragement of new designs and methods for the third. But these drastic steps must be acceptable to the more enlightened and progressive forces within the industry itself. The economic crisis is indeed going to be a headache for the building industry itself, not only for the Government. The country will soon realise that it cannot afford the luxury of an old-fashioned, badly-organised, constructional industry. Possibly exaggerated economies will be enforced unless there is a manifest improvement in technique. On this subject individual firms need to think big—it may only be the larger firms that can survive in the new conditions.

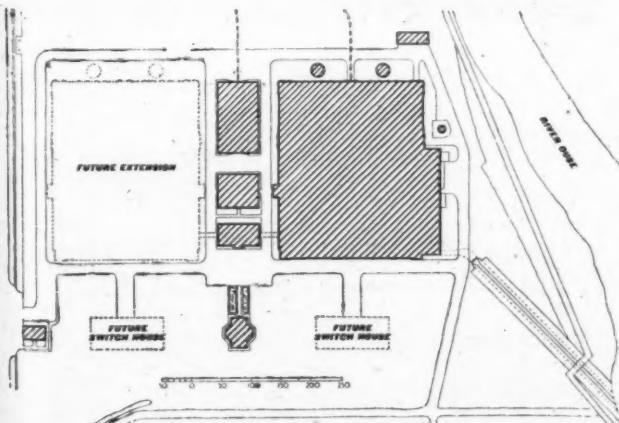
It cannot be too often repeated that an industrial crisis in the industry may be dangerously near if its organisation, its methods of payments and its prospects are not improved. The first post-war depression might even begin with a building strike, or building unemployment, if the drift continued. Housing programmes are all very well; an industrial plan is something more complex than a "target figure," and one is urgently required.



A general view of the first unit from the north-west.

FOUR POWER STATIONS

DESIGNED BY
FARMER AND DARK



SITE PLAN

It is refreshing to discover that architects are now recognized as a necessary part of the power station design team of consulting engineer, architect and civil engineer. We illustrate in the following pages four important power stations in the design of which the architects concerned have played an important part. In the case of Little Barford and Llynfi, the somewhat monumental treatment was demanded by conditions imposed by the client authorities.

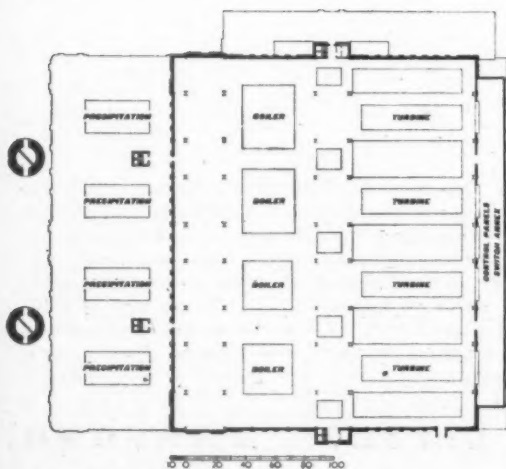
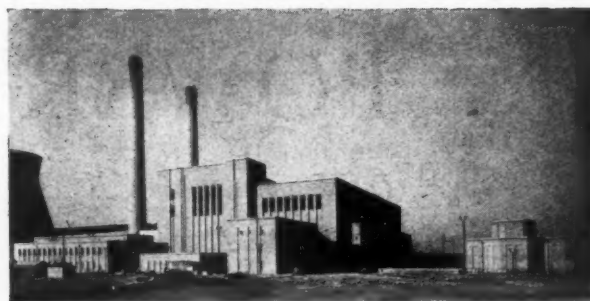
I. LITTLE BARFORD

Here there will be two separate stations, one on either side of a group of subsidiary buildings common in use to both. These consist of the control building, office buildings, mess rooms, together

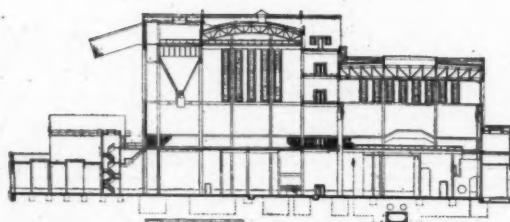
with lockers, lavatories and showers, workshops and stores. Centrally in front of the two stations and on the axis of the control building and gate house will be the two switch houses. In this power station the consulting engineers, Messrs. Ewbank and Partners, first introduced into this country the unit system of plant layout, i.e., one boiler and one precipitator to one turbine with each unit planned on a common centre line. The boilers were a specially encased pulverized fuel type which largely eliminated the dust problem and allowed the usual wall or screen dividing the boiler house from the turbine house to be omitted. In effect, the building becomes at operating floor one large generating house.

Construction is a steel frame with brick walls externally finished with hand-made golden biscuit and golden russet facings. Internally the walls are finished with white sand-lime bricks above an 8-ft. high dado of black moulded faience and turquoise coloured eggshell finished tiles at operating floor level. The operating floor is finished in black, turquoise and fawn-coloured non-slip tiles. The wells and staircases have a balustrade in wrought iron with an orange-coloured handrail.

Right, a view from the north; and right, below, a general view from the north-east; the site of the future extensions is to the left.

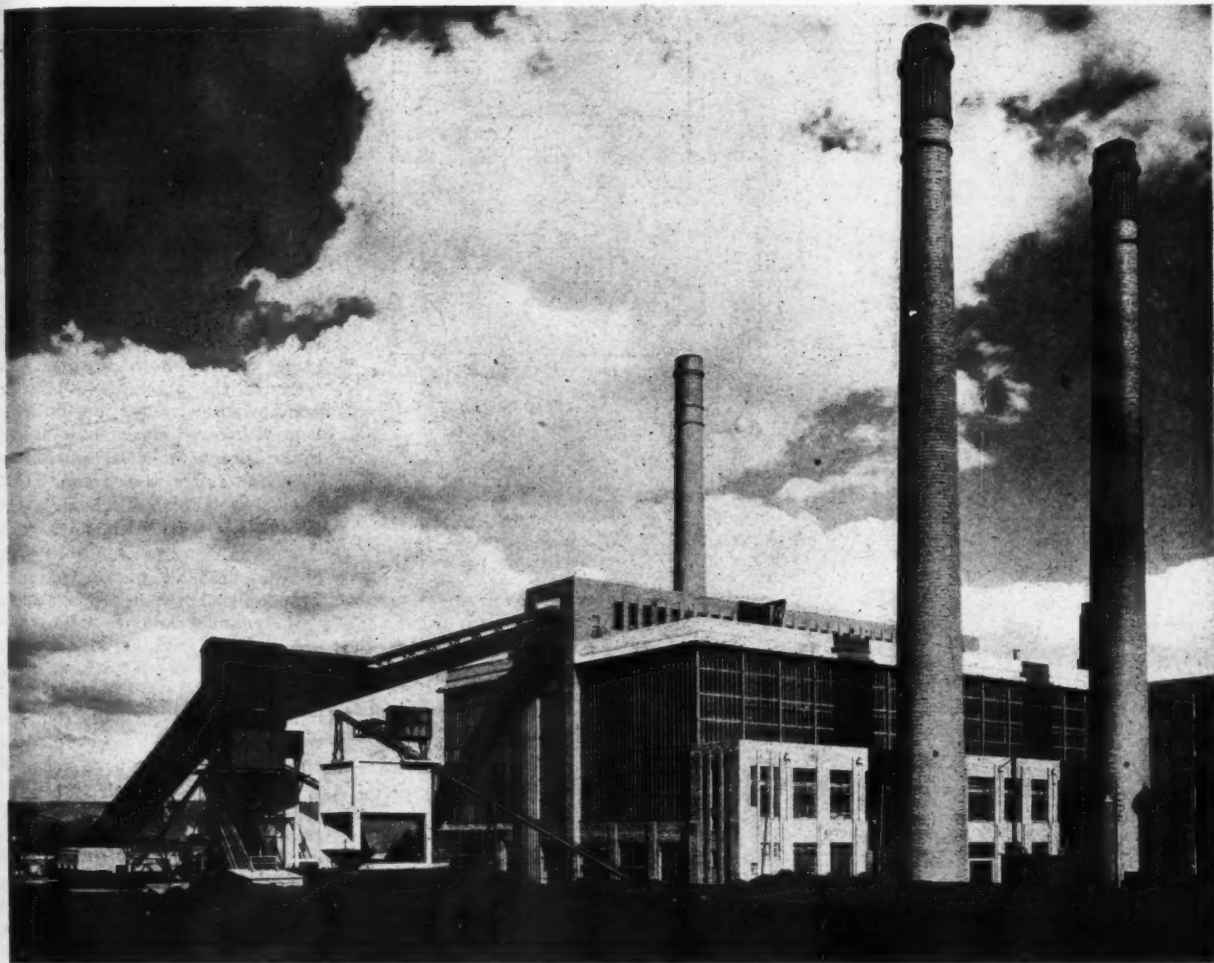


PLAN AT 28' LEVEL.



SECTION.

I. LITTLE BARFORD

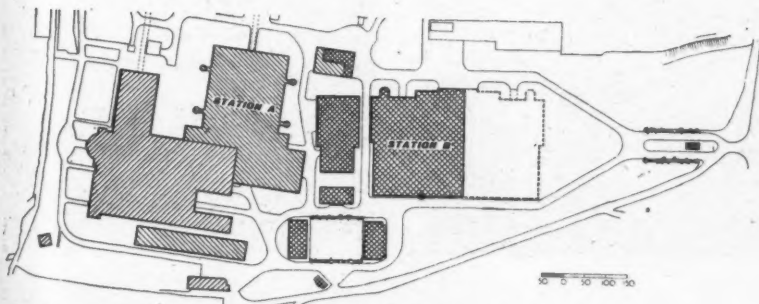


Above, a general view of station A from the north-west; bottom right, an interior view showing the generating plant.

2. STOURPORT

The original work completed by the Shropshire, Worcestershire and Staffordshire Electric Power Co. in 1925, comprises a boiler house and turbine house at right angles to each other, with a semi-circular office block at the end of the latter. In the 1936-37 work, carried out by Farmer and Dark, the same plant layout was adopted because the additions were extensions to the old buildings. The engine room

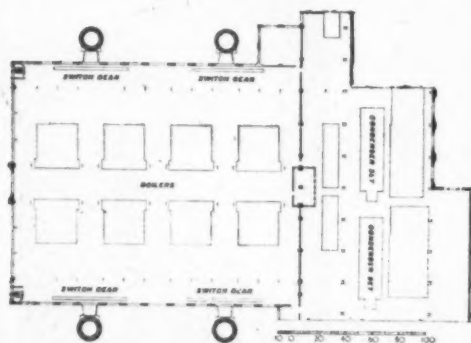
was an extension of the steel frame and brick construction. Patent glazing was used for the wall finish of the boiler house, with glazing girts fixed 18 in. from the stanchions and Georgian wired glass. The roof was in reinforced concrete which overhung the glazing sufficiently to allow a cradle to hang clear for washing. The water supply pipes formed the handrail to the roof balustrade.



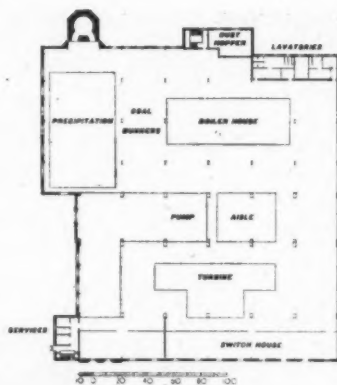
SITE PLAN

2. STOURPORT

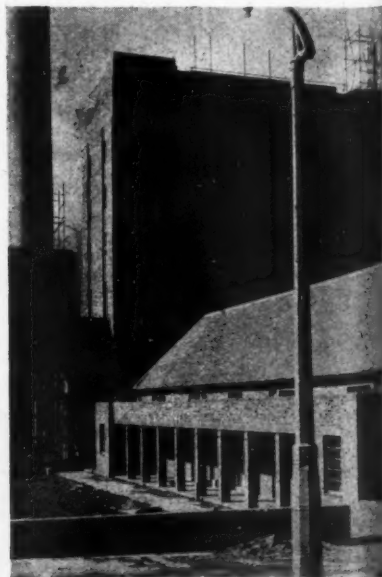
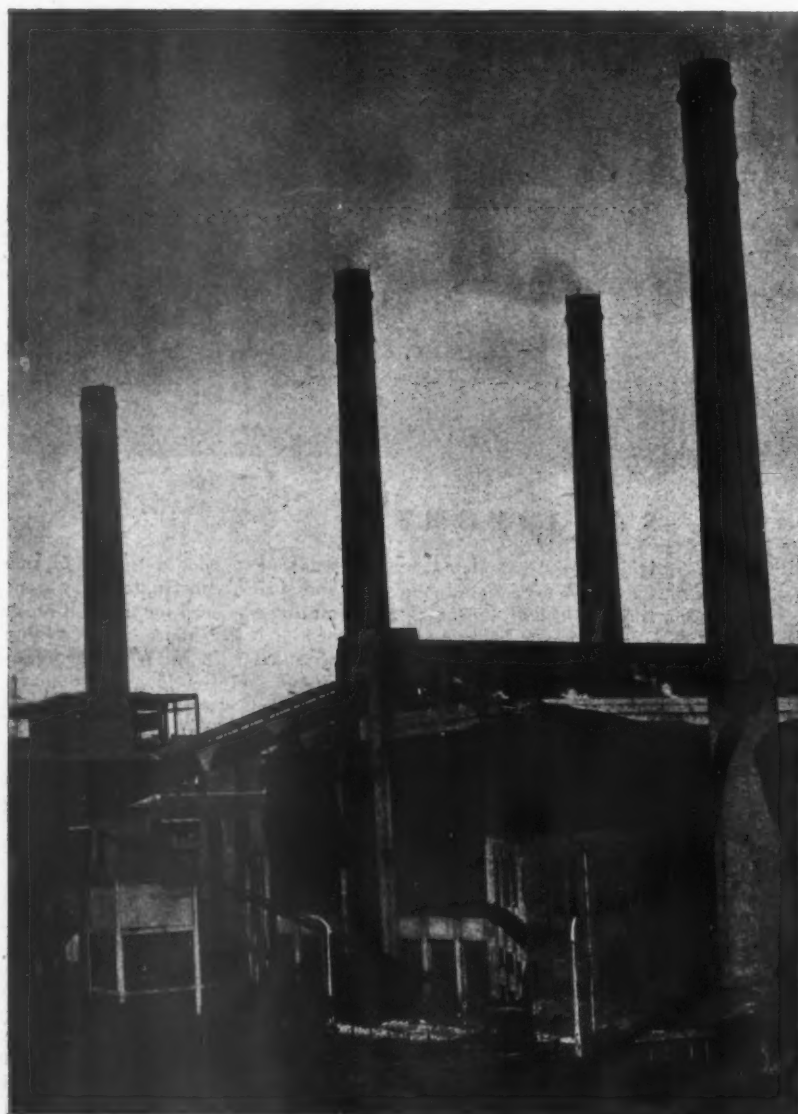




STATION A.



STATION B (first half)



In 1944 designs were being prepared for station [B, which is now being built in two halves. The first half will be completed in 1948 and the other in 1950-1. The original office building in the 1924 building was obviously in the wrong place for the control of such a large plant and a new office building has been erected between stations A and B with connecting bridges to the two operating floors of the turbine houses. Behind the office building is a large block of workshops and stores serving both stations. In front of the offices is a bowling green with a recreation building comprising a lounge with a bar, billiards room and card room on the east side and a mess rooms block on the west with kitchens. The two boilers will be the highest in the country and housed in a building 127 ft. to the parapet. The boiler house is open to the turbine house and the plant layout is based on the unit system of one boiler to one turbine. The turbine house is entirely top lighted because the side opposite to the boiler house is occupied by a multi-floored annexe necessitated by the cramped site. The walls and free ceiling space are treated acoustically. The bricks used are a brindle red and all windows are painted the same colour as the lime and red sand mortar. Internally the steelwork is painted orange-red and the acoustic cover sheets in a mushroom-pink glaze on aluminium.

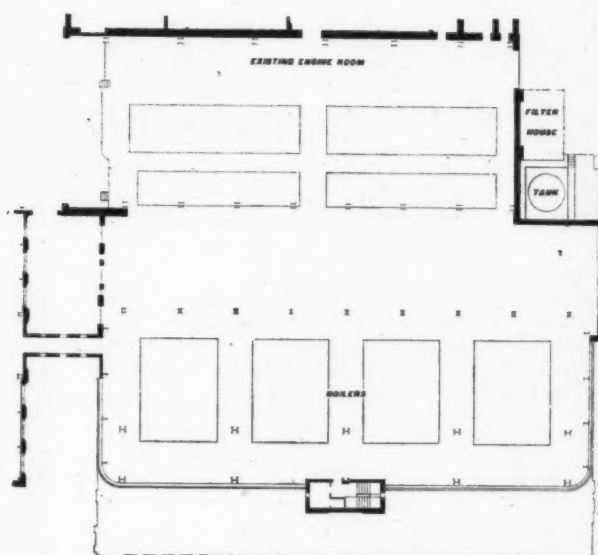
2. STOURPORT

Above, left, station A, built in 1936-37, the engine room in steel frame and brick, patent glazing being used for the walls of the boiler house; right, the recreation building facing a bowling green.

3. HAYLE

The station was first commissioned in 1910 and was built of local stone. After that small additions were made each year until 1916. In 1928 the architects built a new boiler house of steel frame with concrete block walls and large factory-type windows. Stone was not used because of its cost and unsuitability for light construction, while bricks are not a local material. Larger turbines being required in 1938, the old turbine house was remodelled and a new boiler house planned, half of which was then built. The other half was completed this year. The operating floor is finished in light green tiles and the boilers and constructional steel in aluminium. A new switch house and control room building has also been completed this year, together with new mess rooms. The whole of the control room switch panels, mimic diagram panel and the control desks were designed by the architects. Considerable additions to the existing turbine house are now planned, together with another boiler house. When this work is complete, it will extend over the site of the 1928 boiler house, which will then be obsolete.

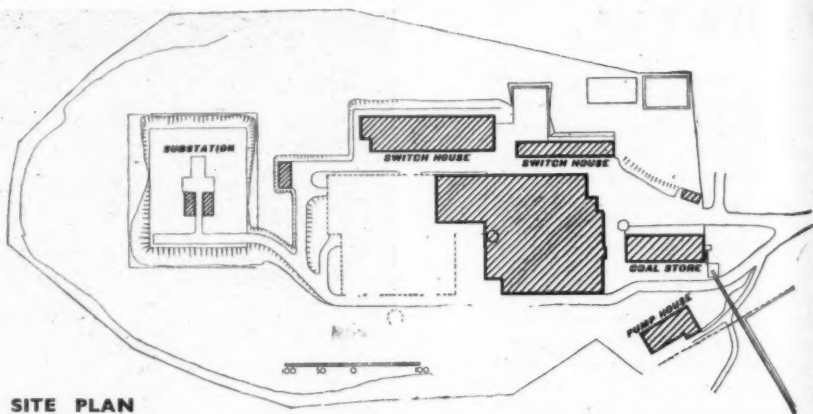
Right, the boiler house, built of concrete block walls and large factory type windows; below, a view of the interior.



FIRING FLOOR PLAN

3. HAYLE

The turbine house extensions will be a steel-framed building with concrete block walls and large windows. The roof will be a concrete flat and not an extension of the original light steel truss roof with partial glazing. The boiler house will be similar, but larger than that recently completed, and the internal finishes throughout will be the same.



SITE PLAN

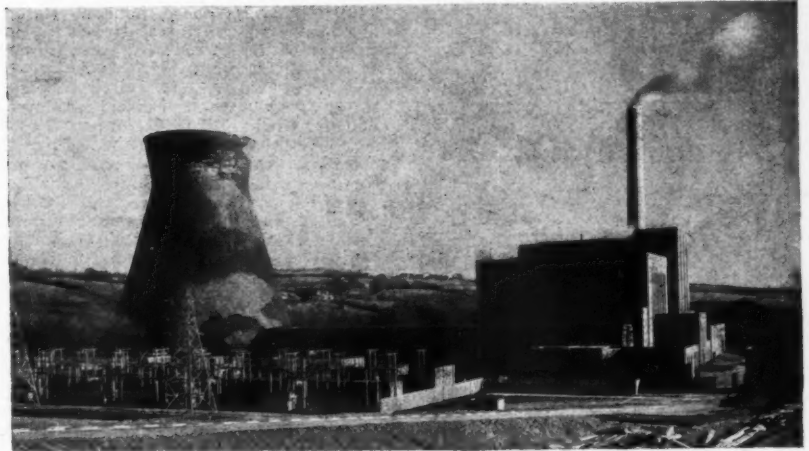


Above, a general view from the south, the new buildings will extend over the site of the 1938 boiler house on the left, and are shown dotted on the site plan at the top of the page. Right, a range of transformers.

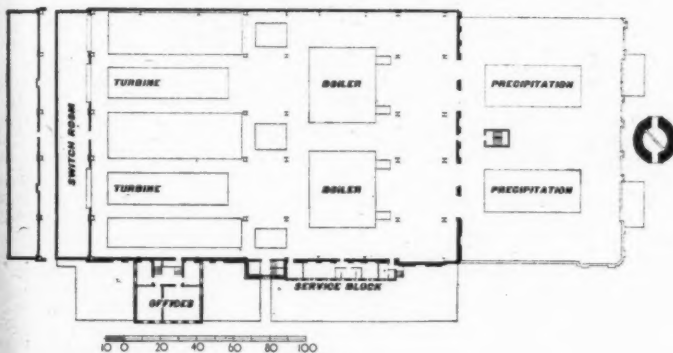


4. LLYNFI

The station layout is the same unit system plant as used at Little Barford power station. Site conditions determined a different scheme for the subsidiary buildings and the offices and mess rooms were annexed to the main building. This station was erected during 1942-3 and electricity was being generated nineteen months after the arrival of the contractors on the site. Apart from the building of the station, much levelling had to be done and all embankment, bridge, roads and sidings constructed. The walls are of brick

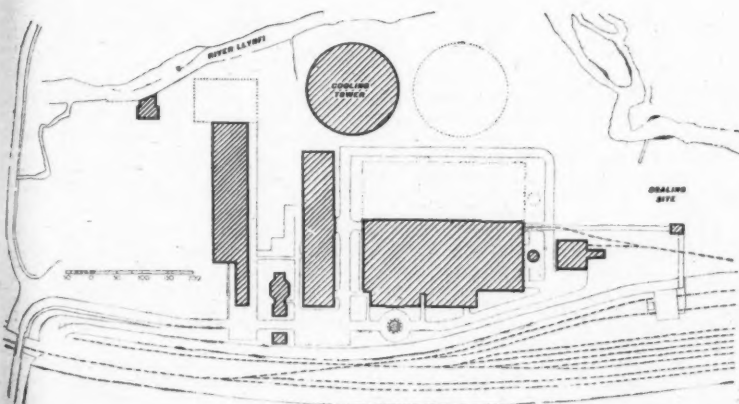


Above, a general view from the west. An extension is planned to be built between the cooling tower and the building on the right; bottom, the west side of the main building; the offices are housed in the three storey projection.



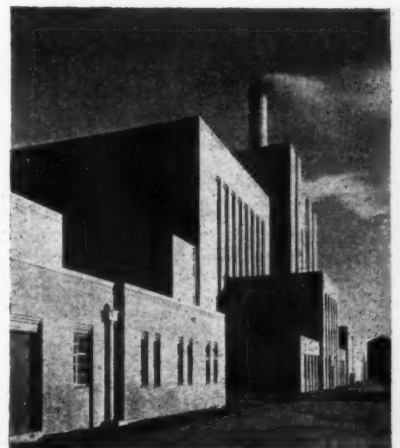
PLAN AT 28 FT. LEVEL

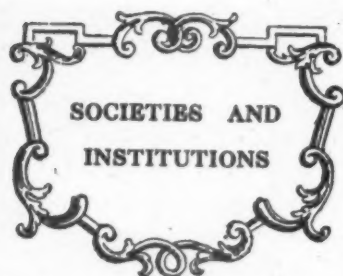
with fawn and brown facing externally. Internally there is a blue brick dado to the operating floor with black tile skirting and the floor is finished with 12 in. by 12 in. compressed granite tiles. The more elaborate finishes adopted at Little Barford had to be omitted due to wartime conditions. The whole of the control room switch panels, mimic diagram panels and the control desks in this building and in the main station were specially designed by the architects.



SITE PLAN

4. LLYNFI





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.

RIBA

Examinations

RIBA Final Examination, July, 1947. Held in London, Edinburgh, and Belfast from July 2 to 11, 1947. Of the 212 candidates examined, 101 passed as follows:

Passed whole examination, 48; passed whole examination, subject to approval of Thesis, 28; passed whole examination, subject to approval of remaining Testimonies of Study and Thesis, 2; passed whole examination, subject to approval of remaining Testimonies of Study, 2; passed Part 1 only, 21; 111 candidates were relegated. The successful candidates are as follows:—

Whole Examination

Adams, Ernest G. Y., Dartford (distinction in Thesis); *Alden, Marguerite Y. (Miss), Oxford; Allen, Frances E. (Miss), Hassocks (distinction in Thesis); Barry, Patrick H., Bristol; Bartholomew, Victor G., London; *Bates, Jack, Leicester; †*Baxter, Kenneth M., Manchester; *Beard, Geoffrey J., Great Missenden; Bellamy, Ivan M., Strood; Bishop, Lloyd J., Haywards Heath; Boddington, Geoffrey D., Chelford; Bordoli, Maurice R., Leicester; Bowes, Joseph, Manchester (distinction in Thesis); Brewins, Cyril D., Wakefield; *Brewster, Kenneth A., Norwich; Brooks, Emily K. (Miss), London; Brown, James, H. C., Manchester (distinction in Thesis); Buckler, Derek, Gillingham; *Busbridge, Pauline (Miss), Worsley (distinction in Thesis); *Chessum, Brian C., London; *Clarke, Arthur D., Margate; Coughlan, Neville G., Newcastle-under-Lyme; Cox, Neville H., Halifax; *Craig, Cameron N., London; †Day, John B., Bristol; Drinkwater, Norman, Plymouth; Eckersley, Henry, Nottingham; Farrar, John, Blackpool; Forth, Harold, Harrow; Fletcher, Dorothy M. (Miss), Stockport; *Frost, Fergus H., Bristol; Fury, Ronald W., London; *Gardiner, Mary V. (Miss), Oxford; *Hall, Frederick E., Pres-

ton; Hargreaves, Harry, London; Hartley, Thomas C., Nelson; Hayes, Thomas R., Nottingham; Horton, Ronald W., York; Howard, Albert V., Leicester; Hughes, Arthur G., Wembley; *Lawson, John B., Chichester; *Lowden, Douglas J., Dalkeith; *Magson, William, Blyth; Mitchell, Norman B., Belfast; Norfolk, Derek E. W., Brighton; †*Nullis, Norman C., Westcliffe-on-Sea; Nurse, Cecil R., Bristol; *Patten, Ronald A., Thundersley; *Pearcy, Douglas, Billericay; *Pearson, Gerald M., Preston; Pepperell, David G., Bristol; *Pert, Keith G., Bangor, North Wales; Platt, Geoffrey P., Manchester; Pollitt, Eric, Wallasey; Poole, Ralph S., London; Price, Arthur G., Rhondda; Prichard, Victor H. S., West Monkton; Quickenden, Anthony M., London; *Roscoe-Hudson, Alan, Cheltenham; *Sanderson, Willie H., Exeter; Schwartzel, Stanley H., London; †Searle, David O., London (distinction in Thesis); *Sherret, David, Glasgow; *Sherwood, Arthur D., Manchester; *Shuttleworth, Herbert, Manchester; *Smith, Haydn W., Oldham; *Sowerby, John G., Darlington; Tallet, Margaret (Miss), Walton-on-Thames; Thornton, Frederick, Wakefield; *Tomlinson, Sydney G., Exeter; Tucker, Ernest F., Plymouth; Vere, Stanley, Birkenhead; Versino, Andrea G., London; *Vincent, James L. S., Liverpool; Vine, Sidney, F., Hailsham (distinction in Thesis); Watson, Alexander, Edinburgh; *Wickham, James H. D., Bristol; *Wilson, James A., London; Wood, Cyril R. M., Belfast; Woods, Roy, London.

Part 1 only

Alton, Jack P., Birmingham; Bance, Roy E. K., Sunbury-on-Thames; Bennis, David, Hove; Blockley, Leonard H., Shelford; Carman, John R. W., Nottingham; Chandler, Leslie, Portsmouth; Chitty, Howard J., Farnham; Curtis, John, Burton-on-Trent; Davies, Frederick C., Crediton; Driver, Margaret E. P. (Miss), Plymouth; Hutchings, Lois M. (Miss), Surbiton; Jacob, Christopher H., Dublin; Jhabvala, Cyrus S. H., London; Jopling, Victor T., London; Roberts, Jack, Liverpool; Sherman, Madeline M. (Miss), Seven Kings; †Thorne, George E., London; Watson, Douglas H. R., Shortlands; West, John C., Gloucester; Whitney, James S., Paisley; Woodcock, George F. H., Southsea.

The Special Final Examination, July, 1947. Held in London, Edinburgh, and Belfast from July 2 to 11, 1947. Of the 320 candidates examined, 134 (30 in Part 1 only), passed; 186 candidates were relegated. The successful candidates are as follows:—

Whole Examination

Anderson, Robert, London; Bancroft, Bernard, London; Barbary, Peter J., Cornwall; Barrell, George W., Sutton; Barrow, William L., Bristol; Beech, Geoffrey C., Sutton; Betts, Joseph H., Eastbourne; Bidmead, Rowland J., Stafford; Brown, James, Bristol; Brown, Thomas, Greenford; Burbidge, Kenneth D., Claygate; Butler-Bowdon, Anthony W., London; Carver, Owen P., London; Cavanagh, Edmund J., Oxford; Clarke, Edward A., Cirencester; Conway, Leslie J., London; Cook, Claude O. J., Brighton; Cooper, Lyndon C., London; Cowan, William, Strathpeffer; Crocker, Montague E., Bristol; Crowther, John, Ilford; Date, Patrick, Banstead; Dickson, William R., Motherwell; Dixon, Arthur A., Edinburgh; Double, Robert J., London; East, Francis J., Nottingham; Evans, Cecil W. T., London; Everett, Alan G., London; Faulkner, Patrick A., Crawley; Furbank, Ronald E., Clacton-on-Sea; Fox, Leslie P. J., Edenbridge; Garrett, Rodney C., Hassocks; Gates, Albert G., London; Gomersall, Eric, Chester; Greatrex, Rolland I., London; Griffiths, Charles L., Birmingham; Grimes, James W. P., Richmond, Surrey; Harvey, Eric G., Barry; Haydon, George C., Norwich; Henderson, John E., Juniper Green; Hepworth, Arthur J., London; Hollingworth, Harry, Dukinfield; Johnson, Frank P., Chester; Kiddall, Joseph M., London; Knight, Victor C. H., Fleet; Leach, Robert H., Birm-

ingham; Leary, Patrick J., St. Leonards-on-Sea; Lees, William P., Utttoxet; Leopard, Gordon C., Whitechurch, Glam.; Lewis, Hubert R., Ilford; Locke, George S. K., Nottingham; Lockerbie, James N., Edinburgh; Lusty, Raymond C., Farnham; Malkin, Henry F., London; Mann, Maurice J., London; Marinier, Hildyard V., Orpington; Mason, Frank L., London; Matthews, Leslie B., Hove; Miller, Eric V., Cheltenham; Mimmack, Maxwell A., Fatfield, Co. Durham; Morley, Leslie, Middlesbrough; Mort, William I., Wrexham; Muirhead, William, Falkirk; Neale, Peter W. J., Birmingham; Neil, Robert, Bushey; O'Neill, Vincent H., Dublin; Panditratne, Andreas, Ceylon; Parkinson, Leslie E., Newport, Isle of Wight; Parsons, Howard C., Yetton; Paul, Ernest H., Oxford; Pearson, John H., Middlesbrough; Pethybridge, Robert E., Goffs Oak; Pomfret, Arthur, Macclesfield; Pope, David T. B., Woodford Green; Powell, Patrick J. L., Oxford; Power, Alan J., Hertford; Purnell, Norman K., Purley; Ramsay, James, Surbiton; Sawyer, Peter R., Winchester; Sheffield, Frank C., Upminster; Shepherd, Alexander, Auchtermuchty; Smeed, Gordon E., Portsmouth; Smith, E. Watson, Durham City; Soulsby, George E., Maidstone; Southey, Frank L., Cheam; Stansfield, John C. O., York; Stark, Ivan A., Winton; Stronach, Elsbeth F. (Miss), Hounslow; Stroud, Harry A., Cheam; Swift, Stanley, Leamington Spa; Symes, John J., Newport; Van der Steen, J. W., Barnet; Venvil, Brian F., Cambridge; Vernon, Russell G. D., London; Vint, George B., London; Walker, Denis V. C., London; Ward, William M., Manchester; West, John C. P., Welwyn Garden City; Whiffen, Robert F., Camberley; Wigley, Ronald R. D., Enfield; Williams, John S., Manchester; Williamson, Stephen S., Bridport; Wilson, James H., Warrington.

Part 1 only

Barns, Kenneth W., London; Belam, Horace G. B., Croydon; Beesley, Sidney, North Cheam; Bellamy, Alfred J. S., Beeston, Notts.; Bird, Kenneth J., Norwich; Boak, James L., Perth, Scotland; Boyd, Dennis F., Reading; Brown, Reginald J., London; Crammond, Maurice M., Shenfield; Elmer, Joseph H., London; Gasson, Arthur J., West Wickham; Hanchet, Sidney J., London; Hannaford, Avro F. J., London; Hodnett, Alfred Ernest, London; Hunt, Douglas, London; Kane, John R., London; Kenshole, James H., Cardiff; Kinsman, Sidney J. C., Bracknell; Langston, Albert H., London; Little, John, M. D., London; Lovegrove, Cyril E., Brighton; Luck, Leslie L., Fareham; Rowling, Alfred C., Stanmore; Russell, Charles S., Coventry; Stacey, Stephen L. G., Beckenham; Stent, John A., Cambridge; Summers, Robert E., London; Whitehouse, Joseph D., Manchester; Wilcox, Harold, Walsall; Young, Kenneth M., Perth, Scotland.

The following candidates have also passed the Special Final Examination:—

Beresford, Jack, Doncaster; Chapman, Charles W. E., Enfield; Graham, Robert M., London; Knott, Ronald F., London; Makins, Thomas K., Emsworth; Matthews, Gordon E., Eastbourne; Nicholas, Sydney E., Northolt; Powell, Patrick T., Coventry; Raynham, James E., Rochester; Slater, John M., St. Albans; Tyler, Richard M. T., London; Whitelaw, Alexander R., Glasgow; Williams, William T., London.

The Examination in Professional Practice for Students of Schools of Architecture recognized for exemption from the RIBA Final Examination. The Examination was held in Edinburgh on July 8 and 10, 1947. Of the 16 candidates examined, 11 passed and 5 were relegated. The successful candidates are as follows:—

Borland, Marjorie K. (Miss); Buchanan, Alexander M.; Cina, Alan J.; Doak, Archibald M.; Elborn, Arthur J.; Robertson, Robert M.; Rogerson, Robert W. K. C.; Torrance, Hugh D. B.; Wallace, Kenneth G.; Watson, Alexander, R. S.; Wheeler, Harry A.

* Subject to approval of Thesis. † Subject to approval of remaining Testimonies of Study.

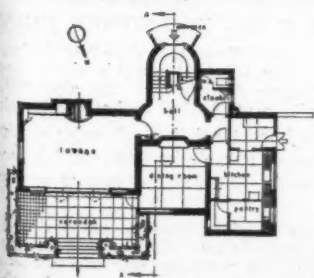
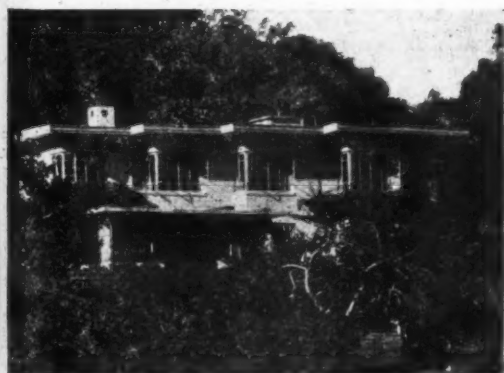


Top, the entrance from the south; bottom, the north front.

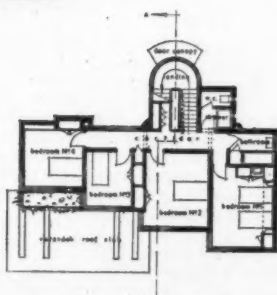
HOUSE

AT MUTHAIGA, NAIROBI

BY BLACKBURNE AND NORBURN



GROUND FLOOR PLAN



FIRST FLOOR PLAN

The site slopes down steeply from south to north. To meet the client's requirement that the house should have four bedrooms all taking advantage of morning sun and to avoid a great deal of underbuilding, the bedroom plan was evolved first and the ground floor rooms arranged under. Walls are stone, the floor, slabs and beams reinforced concrete and the wood flat roof is covered with bituminous sheet. Windows are metal. There are hardwood joinery and wood block floors. External walling is distempered cream, and the fascia, windows, etc., are painted blue.

TECHNICAL SECTION

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

INFORMATION CENTRE

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

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

4.23 planning: urban and rural

MIDDLESBROUGH SURVEY

The County Borough of Middlesbrough Survey and Plan. Directed by Max Lock. (The Middlesbrough Corporation, Yorkshire, 1947, 25s.)

Limited edition of full report of Middlesbrough survey and planning proposals. First scheme to be published based upon methodical and comprehensive survey. Important contribution to study of survey methods and technique in urban areas, demonstrating advantages of well co-ordinated teamwork among planners, architects, sociologists and geographers. Magnificently produced and fully illustrated.

The various fields of survey and planning cover the following aspects.

General Survey and plan: Commercial, social and administrative background. Physical structure. Existing town planning schemes. Land use as existing and proposed. Land values and ownership. The outline master plan and its implementation.

Geographic and economic background: Major physical features. Mineral resources. Regional land use. Spheres of influence of Middlesbrough.

Industry: Local and national importance. Occupational structure. Production. Dock trade. Proposed industrial sites.

Transport: Transport network and accessibility. Regional road and rail system as related to Middlesbrough. Traffic flow within the Borough. New road proposals.

Neighbourhood structure: Household survey. Catchment areas of institutions. Location of social services. Special study of Council Estates. Determination of neighbourhoods. Proposed neighbourhood services. Proposed population density.

Housing: Blight factors. Housing types. Rateable value and ownership. Redevelopment proposals.

Open spaces: Regional amenities. Location of all kinds of open spaces, including allotments. Existing deficiencies. Proposals relating to required new standards and for permanent zoning of open space.

Education: Present location of schools. Size and recreational facilities. Catchment areas. Proposals related to the new Act.

Health and public utility services: Location of existing services. Vital statistics. Infant welfare. Atmospheric pollution. Sewerage, drainage, gas, water, and electricity.

Retail trade: Present location of shops and shopping centres. Relative prosperity. Catchment areas of shops including regional delivery. Proposals for regrouping of shops.

Detailed proposals for typical neighbourhoods: Town centre. Central, inner suburban, and outer suburban neighbourhoods.

The report ends with three interesting appendices giving further details in relation to the industrial and social surveys, and discussing some special aspects of retail distribution in the town.

13.14 materials: timber

B.S. RELATING TO TIMBER

Timber Information Leaflet No. 31. List of British Standards relating to Timber and Wood-working Accessories. (Timber Development Association.)

Complete list of all B.S. relating to timber, its treatment, derivatives, and wood-working accessories. Includes reference to about 120 Standards. Useful for reference purposes.

15.10 materials: applied finishes treatments

COLOURING WOOD

Colouring Wood, by K. E. Marsden. (Wood, May, 1947.)

Description of four methods of colouring wood, together with examples of suitable materials for each. Sources of supply for the materials given.

A concise account of colouring wood (a) together with filling materials; (b) by staining processes; (c) by dyeing processes; (d) by the use of oil and spirit varnishes. Information is given on suitable fillers and dyes, and the names of manufacturers are given.

There is little indication of the final appearance of timber treated by these methods, but the information given would be a useful guide for experiment.

18.7 construction: theory

DOMESTIC STRUCTURES

The Structural Sufficiency of Domestic Buildings. David V. Isaacs. (Bulletin No.

1, Department of Works and Housing, Commonwealth Experimental Building Station, June, 1946, North Ryde, Sydney, N.S.W.)

Data on loading, deflections and stresses. Recommendations for a code of structural sufficiency.

This booklet attempts to establish basic data on a scientific basis for the design of domestic buildings. It is correctly stated in the introduction that from the point of view of structural stability current specifications are quite inadequate to deal with the problem of construction for housing. This is of particular importance in connection with "unorthodox" types of structure.

Part A examines some available codes and then develops a logical series of floor loadings and limitations of deflection for Australian use. It contains an interesting analysis of various types of loading, e.g., foot traffic loads, crowd loads as caused by domestic assemblages of people, semi-fixed loads such as given by tables, bookcases, pianos and other heavy furniture, occasional moving loads, etc., and their combinations. For the purpose of practical design, the idea of "effective" loading is introduced, which is an evenly distributed full span load equivalent in its effect to a partial-span loading applied over a limited area. In the case of a floor consisting of joists at certain spacings, the effective load recommended varies greatly with the spacing and the span. The value of 30 lb./sq. ft., adopted in the British Standard Code of Practice CP 4:1944, Chapter V (see No. 1776:1.2.45) is only applicable if the span and/or the spacing is sufficiently large, for smaller spans or spacings, higher "effective" design loads are suggested. The probable duration of loading, essential in the case of materials like timber, is also to be taken into account. This is done by allowing in such materials higher working stresses for live load than for dead load.

With regard to deflection, the main consideration hitherto has been the avoidance of cracks in the ceiling. The Australian Report starts from a different angle, it wants to avoid discomfort to the occupants of the house. This may consist of discomfort to the walker, discomfort to persons on adjacent areas of the floor, and discomfort to the ear as caused by rattling of furniture and crockery. The Report arrives at the conclusion that the ratio deflection:span should not exceed 1/600, which is a much more severe requirement than the ratio of 1/325 usual in this country. There are many cases where a floor has ample safety against loading but does not comply with the deflection requirements as specified in the Report.

Further parts of the Report deal with live loading and limiting deflections for domestic roofs, walls and foundations, wind loadings on domestic structures, working stresses and test loadings. The results of the various investigations are summarized in a Recommended Code of Structural Efficiency. In an Appendix approximate formulae for the lateral distribution of localised loading are given.

The very thorough Report deserves the attention of all concerned with the structural design of domestic buildings.

20.35 construction: complete structures

PRECAST R.C. TWO-STOREY HOUSE

The B.C.C.F. System of Two-Storey House Construction. (Leaflet issued by the Cement and Concrete Association.) See also "The Builder," August 8, 1947, and other journals.

Precast framed building. Framing consists of columns two stories high, wall beams, eaves beams. Outer skin of precast concrete slabs.

This system of construction was devised by the British Cast Concrete Federation (B.C.C.F.). A prototype pair of houses was erected at Sandy Lane, Prestatyn, Flintshire. Illustration.—



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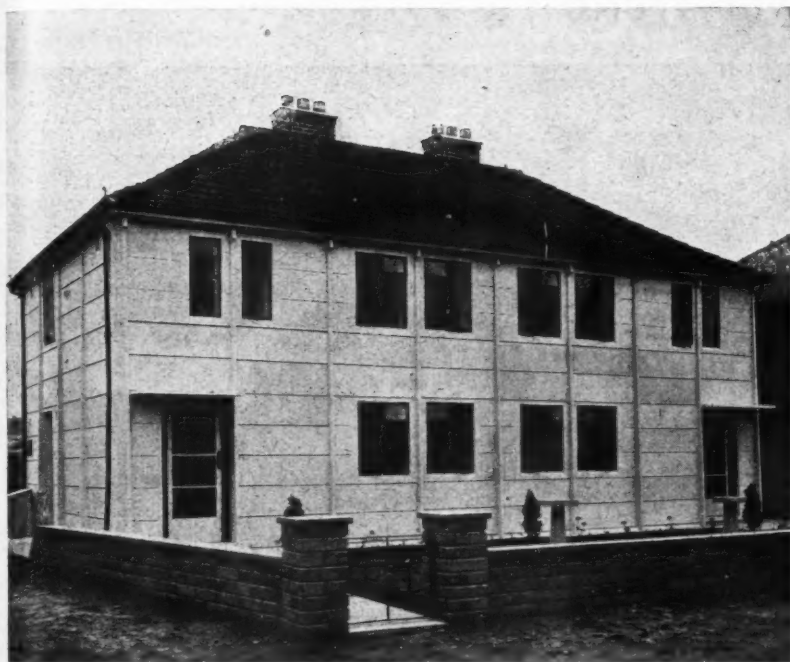
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The B.C.C.F. two-storey house. See 20.35

The T-shaped columns, spaced at 5 ft. 6 in. or 6 ft. centres, are provided with brackets for seating the wall beams at first floor level and with a projection at the top to accommodate the eaves beam unit. The standard wall panels are 1½ in. thick with 4 in. flanges all round and fit horizontally between, and into the rebated sides of the columns. The horizontal joints are weathered and jointed in mastic. The inner lining of the external wall may be of 3 in. light weight concrete blocks or wood wool slabs plastered, with an air space between them and the external lining. The party wall is normally of concrete block, cavity construction, the partitions are of 3 in. and 4 in. light weight concrete blocks.

The first floor may be of normal timber construction. Lateral stiffness is provided by bolting the end of a joist to each column in the longitudinal walls. The roof may be pitched or flat, either timber or concrete. The system allows flexibility both in planning and in the use of materials.

From the experience gained at Prestatyn it is estimated that 5 men working 8½ hours per day would erect the precast units of 3 pairs of houses in 465 man hours, exclusive of supervisor's time.

24.39 lighting

EYE DISCOMFORT: BLINKING

The Blink-rate and Ease of Seeing. M. Luckiesh, S. K. Croth and M. A. Eastman. (Illum. Eng. [USA], May, 1947, p. 585).

Defence of validity of test method. Specialist interest.

Luckiesh and his co-authors have used blink-rates as a measure of discomfort. Others have used them and there have been some criticisms of the Luckiesh methods. The paper defends them.

24.40 lighting

COLOUR MATCHING

Changes in Hue, Lightness, and Saturation of Surface Colours in Passing from Daylight to Incandescent Lamplight. H. Helson and J. Grove. (J. Optical Soc. America, May, 1947, p. 387.)

Effect of different coloured light sources

on colour viewed against black, gray and white backgrounds. Two invariant hues observed. Specialist interest only. Graphs.

Munsell samples were viewed under incandescent and daylight against gray, black, and white backgrounds. Hues containing red and blue become redder in incandescent light, while hues from purple-blue to yellow-red shift towards reddish-yellow. Two invariant hues (i.e., colours which do not appear to change) were observed with all backgrounds. Greatest shifts occur against black, least against white.

24.41 lighting

LIGHTING: INFLUENCE ON DESIGN

Light and Form. J. C. Kromhout. (Illum. Eng. [USA], May, 1947, p. 545.)

Discussion of work and attitudes of lighting engineer and architect. Interesting. Illustrated. 11 photographs.

This paper is primarily addressed to lighting engineers to indicate to them the nature of the interests and competences of the architect, and to suggest how lighting engineers can better fit themselves to serve the needs of building designers. Surprisingly, it does not reflect current American interest in brightness ratios as the basis of design, and in ignoring these it falls back upon the time-worn "values" of light in helping to "model space, to define its flow and relationships." There is no suggestion that the requirements of vision dictate the ways in which light can be used. At the same time it raises the important point that lighting engineers and architects should organize a joint attack upon such problems as how lighting conditions affect behaviour and moods, and should carry out analyses of significant systems. These and other useful suggestions are made for study, and might quite usefully be kept in mind over here.

25.33 water supply and sanitation

FACTORY AND TRADE WASTES

The Drainage of a New Industrial Estate. H. F. Bryant. (Journal of the Royal Sanitary Institute, July, 1947, Vol. LXVII, p. 318.)

Trade effluent problem and sewer design. Summary of legal position under Public Health (Drainage of Trade Premises Act), discussion of desirable extent of conditions to be imposed by local authority. Method of estimating effluent quantities for sewer design, based on actual survey of existing industrial area in Leicester. Tabulated statistics of effluent discharge from varied trades.

A survey of an existing factory area in Leicester established that the amount of trade effluent discharged into the sewers per 20,000 square feet of factory floor area could vary from 11,000 gallons an hour from a brewery to almost negligible quantities from some "light" industries; trades like bulk dairies and canneries may give even larger flows, which are, furthermore, very difficult to treat at the sewage works. A basic problem for the planner in zoning an industrial area is therefore that of drainage of effluents, both in relation to existing sewers and disposal works, if any, and also the magnitude of new sewerage required. This problem is often left to a late stage, with resulting difficulties. This paper is important as an attempt to arrive at a method of estimating probable flows of trade wastes from a basis of observed facts. Measured discharge figures for about forty industries are tabulated, and the author arrives at an overall discharge figure of 0.063 cusecs per acre of trade waste from the industrial area investigated. He considers that this figure can safely be applied to sewer design for new industrial estates in the same district, and suggests similar surveys of existing industry where new industrial estates are contemplated in other areas. His account of the Leicester survey is preceded by a useful and balanced discussion of the legal position and the control policy to be exercised by local authorities.

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.

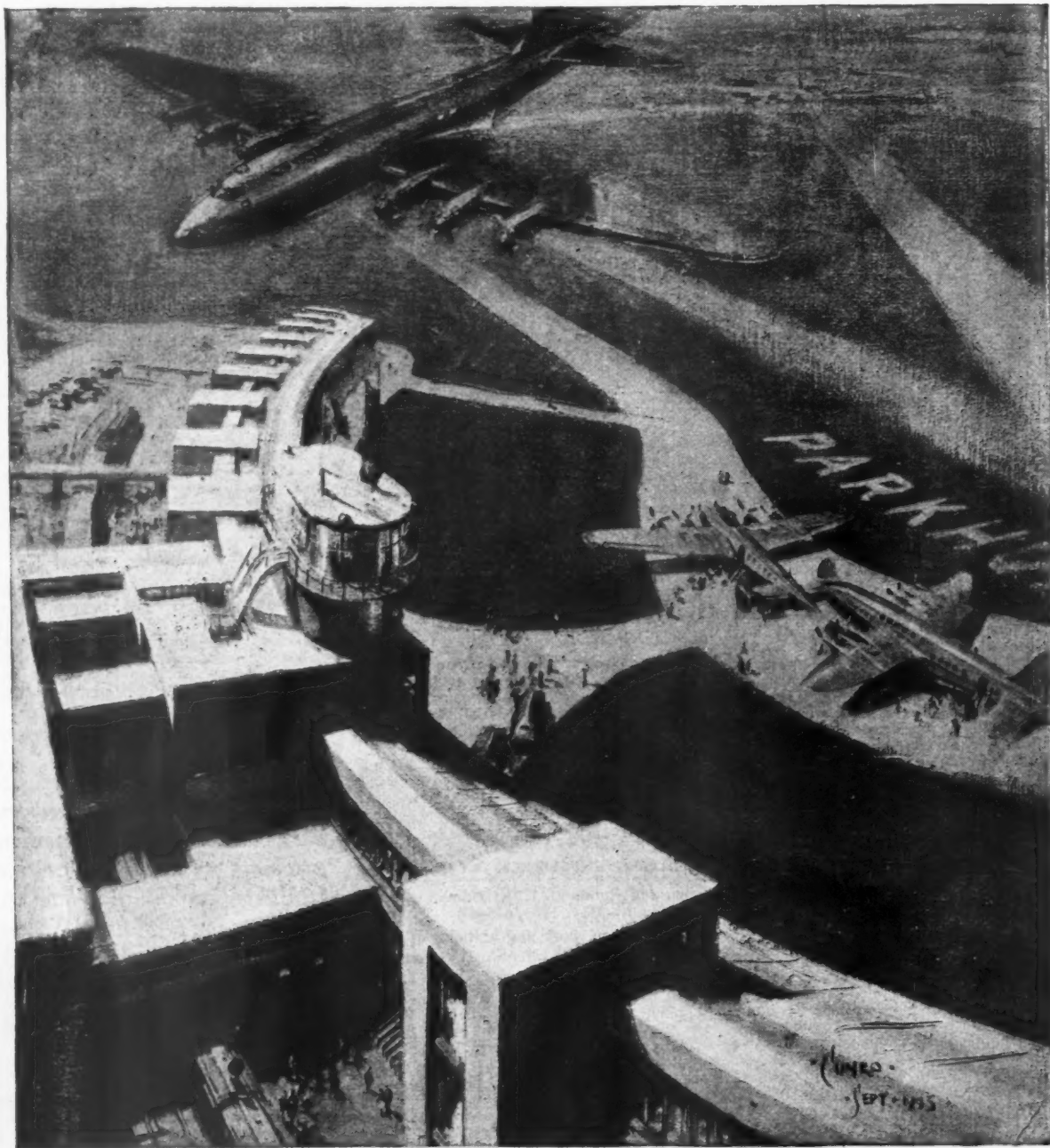
QUESTIONS AND ANSWERS

2910 CLEANING BRICK FIREPLACE

Q Can you advise me as to the best method of removing from a brick fireplace blackening caused by smoking. In a house which I am at the moment redecorating there are two fireplaces so affected by years of smoking.

A The most satisfactory method of doing this would be by a mechanical steam process, but unfortunately it might not be possible to get the apparatus into a domestic house. An alternative is carefully to take out and reverse the discoloured bricks. The danger here would be that the surface of the bricks which are built into the wall might become damaged in removing them. Another alternative would be to wash the bricks down with a hard brush and a little soap or a fine abrasive such as carborundum powder or ground cinders. Soda or other similar chemicals should not be used as these would cause discoloration and efflorescence in the brickwork. Care must be taken with this last method to preserve as far as possible the surface of the brickwork.

Building the Post-war World . . .



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Whatever cuts in the building programme the Government decides to make, August 1947 marks a turning point. How will this turning point be reflected in materials' prices? Will not a slowing down, and reduction, of building activity result in lower prices? These and other problems are discussed in

A New Index Number of Building Materials' PRICES

No. 6

[by Ian Bowen]

THE INDEX NUMBER AT AUGUST, 1947

The index number for the middle of the third quarter of 1947 has now been calculated. The average of the price quotations of the 44 Building Materials covered by the Index, weighted according to peace-time usage, stood at 200.7. Thus, for the first time, the statement that "materials have doubled in price since before the war" is statistically justifiable, even in terms of price quotations.

The Index has moved as follows since the end of the war:—

	Index (Aug., 1939 = 100)	Number of points increase on previous quarter
1945—Quarter 3..	160.5	—
" 4..	164.2	+ 3.7
1946— " 1..	167.6	+ 3.4
" 2..	170.2	+ 2.5
" 3..	178.8	+ 5.6
" 4..	180.7	+ 4.9
1947— " 1..	183.5	+ 2.8
" 2..	197.2	+ 13.7
" 3..	200.7	+ 3.5

The rise in prices between May and August was considerably smaller than the rise which took place in the previous quarter, but the rate of increase since the beginning of this year was nevertheless still greater than at any time after 1940. Steep advances in the prices of imported timber and of paint were mainly to blame for the enormous increase in the second quarter. These materials have shown no further rise since May. The prices of the ballast and gravel group, however, which rose by over 10 per cent. between February and May, have risen again between May and August by some 5 per cent. The cement industry, which lowered its price at the end of last year, has felt itself obliged to restore half of the cut. The price of machine-made tiles has jumped by

21 per cent., and a similar rise took place in the price of manhole covers. There have also been small increases in the prices of roofing slates, steel wood screws, slow combustion stoves and tubular bends.

The relatively small advance in the Index between May and August cannot, in fact, be taken as indicating that the rise in materials prices is beginning to flatten out. Increases in the price of fuel and in haulage rates, soon to come into force, will exert an upward pull on the prices of manufactured materials and of those with freightage costs forming a large part of the price.

ANALYSIS OF PRICE MOVEMENTS BY GROUPS OF MATERIALS

For studying the past trends and possible future movements of prices, it is convenient to analyse the Index into groups of materials.

Group I consists of products that are mainly imported, or contain imported raw materials (e.g., timber, paint and linseed oil putty).

Group II is a class of metal products, such as steel, cast-iron pipes, lead piping, baths, locks and tanks.

Group III includes all quarried products, in which the main ingredients of cost are labour and transport (gravel, ballast and sand, etc.).

Group IV is a large class of clay and quarry products worked up into primary building materials, such as bricks, cement, salt-glazed pipes, sanitary ware and glass.

The weighted average index number for each of these groups in the first three quarters of 1947, as compared with August, 1945, is as follows:—

	(August, 1945 = 100)		
	Quarter I	Quarter II	Quarter III
I. "Imported" products ..	141.0	175.5	175.5
II. Metal products ..	124.9	127.3	129.3
III. Quarried products ..	114.8	125.1	131.5
IV. Primary materials ..	101.1	100.8	102.6
Average of all materials	114.1	121.5	123.6

"Imported" products are having a breathing-space after their big rise between the first and second quarter. The steepest rise is shown by "quarried" products with an advance of 14.5 per cent. over Quarter I.

and metal products follow with 3.5 per cent. Primary materials, having remained fairly steady for over 18 months, have perhaps now recommenced an upward trend.

MOVEMENTS IN PRICES SINCE 1939

Taking our base at August, 1939, instead of 1945, the prices of the four main groups of materials have moved as follows in the first three quarters of 1947:—

	(August, 1939 = 100)		
	Quarter I	Quarter II	Quarter III
I. "Imported" products ..	268.0	336.9	336.9
II. Metal products ..	201.5	205.9	209.2
III. Quarried products ..	176.5	191.5	201.4
IV. Primary materials ..	149.8	149.3	152.1
Average of all materials	183.5	197.2	200.7

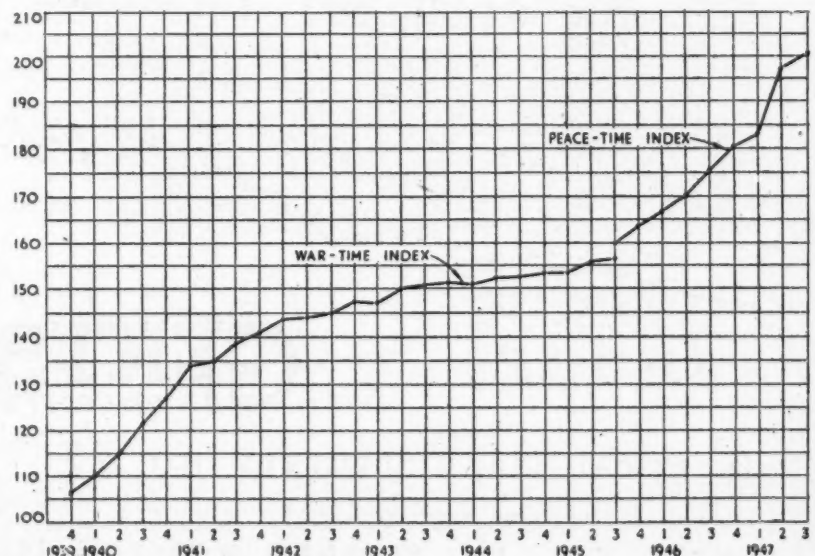
THE WORST OF TWO WORLDS

The doubling of building materials prices has been achieved by August, 1947, a month almost as full of foreboding and rumbling crisis for Great Britain as August, 1939. In this month the whole plan for post-war reconstruction and re-building has had to be entirely reconsidered.

Whatever cuts in the building programme the Government decides to make, August, 1947, marks a turning-point. How will this turning-point be reflected in materials prices? Will not a slowing down, or reduction, of building activity result in lower prices—just as the huge and growing demand for building materials over the last two years was a major cause of the rapid rise in prices?

Unfortunately, there is little hope that this will be the result. Three factors will operate in the upward direction, and will together probably outweigh the depressing effect on prices of a decline in demand.

First, there is the continuing boom in prices in America. Lumber prices there have risen by 60 per cent. in twelve months. As long as there is a price boom continuing the other side of the Atlantic, and the £ is not re-valued upwards (an unlikely step), import prices of timber and other imported materials will continue to increase. Secondly, there are the rises of price consequent upon the 4s. rise in coal prices in September, to be



Graph showing price index from 1939 to the present.

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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followed by the at present incalculable effects of dearer transport later in the autumn. Both metal products and primary materials are bound to feel the effect of both these changes, and quarried products will be affected by the rise in transport charges. Thirdly, as output of building materials increased, economies of larger-scale production were constantly occurring, and these to some extent offset the rise in costs. Now the position will be reversed. As production is curbed well below the capacity of firms, costs in some industries will increase. In this way the unfortunate building programme will have suffered the worst of two worlds—increasing costs as an overwhelming demand pressed upon supplies, and increasing costs again as supply is cut (by direct action and by the effect of the coal shortage) below its optimum level.

ALTERNATIVE METHODS OF CONSTRUCTION

From an architect's point of view, the continued rise in building materials' costs has one specific lesson—the need for taking the economic factor into account in all problems of design. This is not merely a question of devoting more time and energy to the cheaper kinds of housing, and the non-traditional types of houses. As materials' costs rise, and the general economic crisis deepens, price becomes increasingly important for all classes of building owner. The building of schools, colleges, universities, hospitals and civic centres may to some extent be postponed by Government action; some others may find themselves "priced out of the market," as Americans say. Permanent and satisfying designs for such buildings must in future be economical designs. The paring of unnecessary expenditure, reduction of the weight of steel and timber used to an abso-

lute minimum, and all the other economy tricks resorted to in the war, must now be turned up again and reconsidered. The need for extreme economy is not likely to be as short-lived as most designers had hoped. As we are not yet in sight of the end to the rise in materials prices, so we are not yet able to foresee when the economy drive will finally cease.

It would be a mistake to regard the schools, colleges and other buildings as "luxuries" even if some of them have to be postponed. The more economically that they can be built, the sooner the chance of a start on the more spectacular reconstruction of cities, or building of new towns and the very necessary provision of educational and amenity buildings. Design can materially assist, by spreading such resources as we shall have to obtain the widest possible results.

Announcements

The Control of Iron and Steel (No. 59) Order came into force on September 3. It amends maximum prices—the principal alterations being increases in the price of Rainwater and Soil Goods, Roping Wire and Wire Ropes. Maximum prices for extra light weight quality screwed and socketed tubing are established. Copies of the Order may be obtained from H.M. Stationery Office, Kingsway, W.C.2 or through any bookseller, price 2d. (S.R. & O. No. 1897, 1947).

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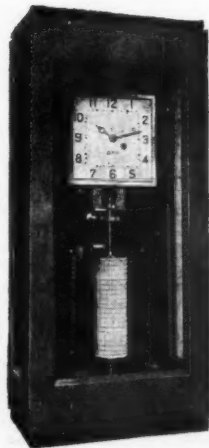
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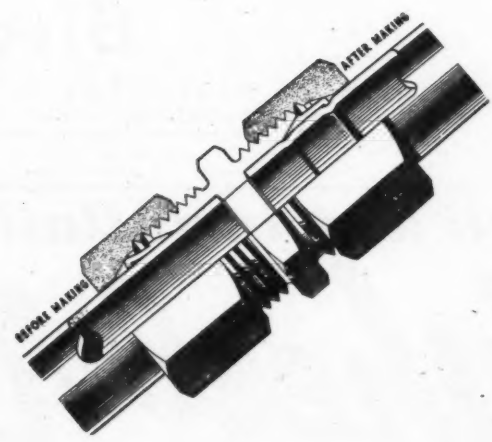
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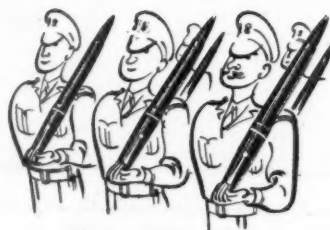
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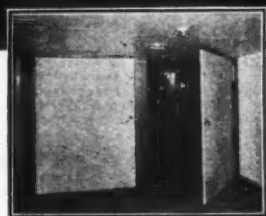


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Enrolment week—15th September, 1947.

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Day and Evening Classes in:

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JUNIOR DEPARTMENT.

The Secondary Technical Schools (Junior Art and Junior Building) resume on 8th September, 1947.

For further information for any of the above, apply to the School. (1223).



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

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

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 staff vacancies. Address: 75, Eaton Place, London, S.W.1. Tel. Sloane 5615. 591

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 superannuable.

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 disqualifies. (1590) 535

CORPORATION OF LONDON.
CITY SURVEYOR'S OFFICE.

APPOINTMENT OF TECHNICAL STAFF.

Applications are invited for the following appointment in the City Surveyor's Office:—
ASSISTANT ARCHITECT AND SURVEYOR.
Salary up to £475 p.a. (inclusive of consolidated bonus), according to age, qualification and experience.

The applicant should either have qualified or be about to qualify for Associate Membership of the Royal Institute of British Architects or Associate Membership of the Royal Institute of Chartered Surveyors (Building Sub-division).

The appointment is for the present on a temporary basis, and will be concerned principally with the reinstatement of war damage to a variety of types of properties. In the event of establishment to the permanent staff temporary service will count for the purpose of superannuation. Such appointment will be subject to the provisions of Local Government Superannuation, and applicants will be required to pass a medical examination.

Previous experience with a Municipal body is not essential.

Applications, endorsed "Technical Staff," to be made to George Holliday, F.S.I., City Surveyor, 3-61, Moorgate, E.C.2, giving the following particulars: Service with Armed Forces, age, qualification or intentions in connection therewith, previous training, positions and experience, date when available to commence duties if selected, together with copies of two testimonials. 579

WARWICKSHIRE COUNTY COUNCIL.
APPOINTMENT OF COUNTY PLANNING
OFFICER.

Applications are invited for the appointment of County Planning Officer, at an annual salary of £1,400, rising by annual increments of £50 to £1,700, plus cost-of-living bonus in accordance with the Council's scale from time to time in force.

Applicants must be Corporate Members of the Town Planning Institute, and have had considerable experience in the preparation and administration of planning schemes. Preference will be given to persons who also possess a recognized qualification in architecture, civil engineering or surveying.

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

The person appointed will be required to use his own motor car in the service of the Council, and will be paid travelling and subsistence allowances according to the Council's scales.

Forms of application and any further particulars required may be obtained from the undersigned, to whom applications, with copies of not more than three testimonials, should be sent not later than the 29th September, 1947.

Canvassing, directly or indirectly, will be a disqualification.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall, Warwick.
30th August, 1947. 684

MARTLEY RURAL DISTRICT COUNCIL.
APPOINTMENT OF ARCHITECT.

Applications are invited for the above appointment from persons qualified as Members of the Royal Institute of British Architects, at a salary in accordance with Grade VIII of the A.P.T. Division of the National Scheme of Conditions of Service, commencing salary £525 per annum, plus cost-of-living bonus. The person appointed will not be allowed to engage in private practice, and will be required to devote the whole of his time to the duties of the office. He will be required to provide and maintain a car for the purpose of his duties for which a travelling allowance will be paid in accordance with the Council's scale. The appointment will be subject to the National Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act, 1937, and to the successful applicant passing a medical examination, and will be terminated by three calendar months' notice on either side.

Applications, endorsed "Architect," stating age, qualifications, and giving the names of three persons to whom reference can be made, should be delivered to the undersigned not later than 22nd September. Canvassing in any form will disqualify.

H. W. EVANS,
Clerk to the Council.
Council Offices, 1, The Tything, Worcester.
23rd August, 1947. 671

EAST SUSSEX COUNTY COUNCIL.

Applications are invited for the following appointments:—

(a) A CHIEF ASSISTANT COUNTY PLANNING OFFICER, with salary at the rate of £800 per annum, rising by annual increments of £50 to £900 per annum.

(b) ASSISTANT COUNTY PLANNING OFFICER (Male or Female), with salary on A.P.T., Grade VII (£575-£650 per annum).

Candidates for appointment (a) must be Corporate Members of the Town Planning Institute, and preference will be given to persons who also possess a recognized qualification in architecture, civil engineering or surveying. They must have had extensive planning experience in both urban and rural areas and in administration, and candidates selected for interview will be asked to submit for inspection positive plans and reports for the preparation of which they have been responsible.

The successful candidate will be required to act generally as Chief Assistant to the County Planning Officer and Deputy, but will be required particularly to supervise the administration of development control.

Candidates for appointment (b) must either be Corporate Members of the Town Planning Institute or possess a recognized qualification in architecture, civil engineering or surveying, and have had experience under a County Council or Joint Planning Committee.

They must have had considerable experience in the preparation of planning schemes and in the administration of interim development control. Candidates selected for interview will be asked to submit for inspection any positive plans and reports in the preparation of which they have assisted materially.

In the case of each appointment the salary will be plus a cost-of-living bonus (at present £59 16s. per annum for male persons and £48 2s. for female persons). Travelling and subsistence allowances in accordance with the scales approved by the County Council from time to time will be payable in addition to the salary.

The appointments, which are terminable by one month's notice on either side, are subject to the Local Government Superannuation Act, 1937, and a candidate to be successful must pass a medical examination to the satisfaction of the County Medical Officer. Canvassing, either directly or indirectly, will disqualify.

Application forms may be obtained from the undersigned, to whom they must be returned not later than the 20th September, 1947. A candidate who is related to a member of, or a Senior Officer under, the Council must disclose the fact in his application.

H. S. MARTIN,
Clerk of the County Council.
County Hall, Lewes.
25th August, 1947. 676

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

Applications are invited for the appointment of a QUANTITY SURVEYOR, at a salary in accordance with Grade V of the National Scales, viz., £460-£510, plus bonus, at present £59 16s. per annum.

Applicants should be experienced in the preparation of Bills of Quantities, the checking of Interim Valuations, and the settling up of Final Accounts. Preference will be given to Fellows or Professional Associates of the Surveyor's Institution, and experience with a Local Authority would be regarded as an advantage.

Conditions of service are those formulated by the National Joint Council, and the appointment is on the established staff and subject to the provisions of the Local Government Superannuation Act, 1937. The successful applicant will be required to pass a medical examination.

Forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall, Burnley, to whom applications should be returned in the envelope provided, not later than noon on Monday, the 22nd September, 1947.

C. V. THORNTLEY,
Town Clerk.

Town Hall, Burnley.
August, 1947. 692

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, one vacancy each in the Housing and Education Sections.

Salary grade, A.P.T., V, commencing at £460 per annum and rising to £510 per annum.

Candidates should be Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications.

It is hoped that accommodation may be made available for a suitable married applicant for the Housing Section vacancy.

(b) ONE SENIOR ASSISTANT QUANTITY SURVEYOR.

Salary grade, A.P.T., V, commencing at £460 per annum and rising to £510 per annum.

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.

The posts are subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act, as amended in regard to annuities to widows by the Coventry Corporation Act, 1936, and a satisfactory certificate will be 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 Wednesday, the 24th September, 1947.

Canvassing, directly or indirectly, will be a disqualification.

D. E. E. GIBSON,
City Architect.

1a, Warwick Row, Coventry.
4th September, 1947. 705

COUNTY BOROUGH OF DONCASTER.
BOROUGH SURVEYOR AND WATER
ENGINEER'S DEPARTMENT.APPOINTMENT OF TOWN PLANNING
ASSISTANTS.

Applications are invited for the following appointments:—

(a) CHIEF TOWN PLANNING ASSISTANT at a salary of £535 per annum rising to £600 per annum plus cost-of-living bonus.

(b) TOWN PLANNING ASSISTANT at a salary of £360 per annum rising to £405 per annum plus cost-of-living bonus.

Candidates for the appointment (a) should be Corporate Members of the Town Planning Institute, or possess equivalent qualifications, and should be fully conversant with the Town and Country Planning Acts, Orders, and Regulations.

Candidates for appointment (b) should have had previous experience in Town Planning, and preference will be given to applicants who are Corporate Members of the Town Planning Institute, or who possess other suitable qualifications.

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

Applications, stating age, qualifications, and experience, accompanied by copies of three recent testimonials, and endorsed "Town Planning Assistant," should be delivered to the Borough Surveyor, 2, Priory Place, Doncaster, not later than Monday, the 29th September, 1947.

H. S. ESSENHIGH,
Town Clerk.

1, Priory Place, Doncaster.
3rd September, 1947. 735

METROPOLITAN BOROUGH OF
HAMPSTEAD.
ARCHITECTURAL ASSISTANT
(TEMPORARY).

Applications are invited for the appointment of an Architectural Assistant on the Temporary Staff of the Housing Architect's Section of the Borough Engineer and Surveyor's Department, at a salary in accordance with Grade V of A.P.T. Division, National Scales of Salaries, £460 to £510 per annum, plus £20 London weighting and bonus, at present £59 16s. per annum. Age limit: 45 years of age on the 1st June, 1947.

Applicants should be suitably qualified, preferably members of the Royal Institute of British Architects, and should have experience in general Architectural work, including house planning and design, adaptations and conversions, and be able to prepare working drawings and specifications.

Applications, stating (a) age, (b) examination qualifications, (c) present and past appointments with dates and salaries, (d) detailed particulars of experience, and accompanied by copies of three recent testimonials, must be delivered to me in a sealed envelope endorsed "Architectural Assistant," not later than 12 noon on Saturday, 20th September, 1947.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937.

The conditions of service are those in the National Scheme for Local Government Officers, and the appointment will be terminable by one calendar month's notice on either side.

Canvassing will disqualify.

P. H. HARROLD,
Town Clerk.

Town Hall, Haverstock Hill, N.W.3.
August, 1947. 694

**BOROUGH OF SWINDON.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.**

Applications are invited for the above permanent appointment on the staff of the Borough Architect, at a salary in accordance with Grade IV of the National Scales (£420 to £465), plus such cost-of-living bonus as may from time to time be paid by the Corporation (at present £59 15s. per annum).

Applicants must have had experience in housing and in the general architectural work of a local authority, and be Associates of the Royal Institute of British Architects.

The Council will assist the successful candidate to secure housing accommodation if required.

Applications must be made on forms obtainable from me, and must be returned in envelopes endorsed "Architectural Assistant" to reach me not later than 20th September, 1947.

Canvassing in any form will be deemed a disqualification.

D. MURRAY JOHN,
Town Clerk.

Civic Offices, Swindon.
25th August, 1947. 699

**OXFORDSHIRE COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.**

- Appointment of—
(a) ONE SENIOR PLANNING ASSISTANT;
(b) TWO PLANNING ASSISTANTS;
(c) ONE JUNIOR ASSISTANT;
(d) TWO DRAUGHTSMEN.

Applications are invited for the above-mentioned appointments in the County Planning Department of the County Council.

For Appointment (a) the salary will be A.P.T. Grade VI, £535-£600 per annum. Applicants must have a thorough knowledge of all aspects of statutory planning and in particular must have had practical experience of the preparation of basic surveys for planning purposes. The successful candidate will be required to take charge of the Survey Sub-Department of the County Planning Department. Applicants should have passed the Final examination of the Town Planning Institute.

For Appointments (b) the salary will be A.P.T. Grade III, £390-£435 per annum. Applicants must have had good general experience in a planning office and should at least be candidates for the Final examination of the Town Planning Institute.

For Appointment (c) the salary will be A.P.T. Grade I, £330-£375 per annum. Applicants should be neat and expeditious draughtsmen and should have had previous experience in a planning office. They must also be capable of accurate surveying and levelling.

For appointments (d) the salary will be General Division, maximum £300 per annum at 30 years of age (£240 per annum for females). Candidates must be experienced draughtsmen capable of producing all types of finished maps and drawings, including work for presentation purposes. Experience in a planning office will be an advantage. A cost-of-living bonus is payable in addition to the above-mentioned salaries.

All these appointments are superannuable and the successful candidates will be required to pass a medical examination. Applicants for Appointments (a) and (b) will be required to provide a car for use in connection with their official duties for which travelling expenses on the Council's scale will be allowed.

Application forms for these Appointments may be obtained from the County Planning Officer, County Hall, Oxford, to whom they should be returned not later than first post on Monday, 6th October, 1947.

F. G. SCOTT,
Clerk of the Council.

County Hall, Oxford.
2nd September, 1947. 734

**COUNTY BOROUGH OF EAST HAM.
APPOINTMENT OF ARCHITECTURAL
ASSISTANTS.**

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

1. ARCHITECTURAL ASSISTANT—GRADE V. Candidates must be Associate Members of the Royal Institute of British Architects or hold an equivalent qualification, and have a general knowledge and experience of architectural work. Salary £480 to £530 per annum.
2. ARCHITECTURAL ASSISTANT—GRADE IV. The qualifications required are as above. Salary £440 to £485 per annum.

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

The salaries quoted above include the London Allowance. War bonus (at present £59 15s. 0d. per annum in the case of men over 21) will be paid in addition.

The appointments will be subject to the Council's Conditions of service in force from time to time for permanent staff, to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination.

Applications on forms obtainable from the undersigned must be delivered to me, together with copies of three recent testimonials, by not later than Monday, the 29th September, 1947. Applicants should state the position for which they desire to apply.

Canvassing will disqualify.
H. A. EDWARDS,
Town Clerk.

Town Hall, East Ham, E.6.
10th September, 1947. 719

**CITY OF BIRMINGHAM EDUCATION
COMMITTEE.
APPOINTMENT OF ARCHITECTURAL
ASSISTANTS.**

Applications are invited for two posts of Architectural Assistants on the staff of the Chief Education Officer, to work under the direction of the Architect to the Education Committee, Mr. W. T. Benslyn, F.R.I.B.A.

Post 1.
Applicants should preferably be members of the Royal Institute of British Architects by examination, with a knowledge of the planning and design of school buildings. Salary—A.P.T. Grade III (£390-£435).

Post 2.
Candidates should have received recognised architectural training and have passed the R.I.B.A. Intermediate or equivalent examination. A sound knowledge of construction is essential and some experience of school building will be an advantage. Salary—A.P.T. Grade I (£330-£375).

(In both cases a bonus, at present amounting to £59 19s. per annum, is payable).

The appointments will be subject to the provisions of the Local Government Superannuation Act and to the passing of a medical examination. Forms of application, which may be obtained from the undersigned on receipt of a stamped addressed envelope, must be returned not later than 26th September, 1947.

E. L. RUSSELL,
Chief Education Officer.
Education Office, Margaret Street,
Birmingham, 3.
1st September, 1947. 725

CITY OF LEEDS.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of Chief Assistant Architect (Health) at a commencing salary of £550 p.a. rising, subject to satisfactory service, to £800 p.a. plus Cost of Living Bonus, at present £59 15s. 0d. p.a.

Candidates must be Registered Architects, competent in Architectural design and administration; have had actual experience in the carrying out of Architectural Works and be familiar with statutory modern building requirements and regulations in connection with Hospitals and similar Institutions.

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

Applications on forms to be obtained from the undersigned, accompanied by copies of not more than three recent testimonials (not returnable) must be received by me in the envelope supplied therefor, not later than 10.0 a.m. on Thursday, 25th September, 1947.

Canvassing in any form, either directly or indirectly, will be a disqualification.

R. A. H. LIVETT, O.B.E., A.R.I.B.A.,
City Architect.

Priestley House, Quarry Hill,
Leeds, 9.
August, 1947. 727

KENT COUNTY COUNCIL.

Clerks of Works are required in connection with the schools and other building programmes.

The inclusive salary will be at the rate of nine guineas a week. A higher salary may be offered to men with exceptional experience.

Candidates must have had previous experience in the erection of public buildings, particularly large schools, and preference will be given to applicants who have had experience in the supervision of large contracts carried out on the basis of prime cost.

Applications, on forms obtainable from the County Architect, Springfield, Maidstone, should be delivered to him as soon as possible.

W. L. PLATTS,
Clerk of the County Council.

County Hall, Maidstone.
1st September, 1947. 730

EAST SUSSEX COUNTY COUNCIL.

Applications are invited from male or female persons for appointment as Draughtsmen in the County Planning Department with salary in accordance with A.P.T. Grade I (£330-£375 per annum) or Grade II (£360-£405 per annum) according to qualifications and experience, plus cost-of-living bonus (at present £59 15s. 0d. per annum for male persons of 21 years of age and upwards, and £48 2s. 0d. for female persons of 21 years of age and upwards).

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and a candidate to be successful must pass a medical examination to the satisfaction of the County Medical Officer of Health. Applications, stating age and full particulars of experience and qualifications, accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than Saturday, the 20th September, 1947.

Candidates for appointment must be neat and expeditious draughtsmen and colourists. Previous experience in a planning office will not be regarded as essential and consideration will be given to applicants with experience in commercial art or similar work.

Candidates must state whether they are related to any member or Senior Officer of the Council. Canvassing, either directly or indirectly, will disqualify.

J. S. MARTIN,
Clerk of the County Council.

County Hall, Lewes.
25th August, 1947. 718

lx

**ANGLESEY JOINT PLANNING COMMITTEE.
APPOINTMENTS OF CHIEF PLANNING
ASSISTANT.**

Applications are invited for the appointment of Chief Planning Assistant to the County Planning Officer of the above-named Committee.

Applicants should have had considerable experience in the preparation of Statutory Planning Maps, both rural and urban; be competent to deal with applications under Interim Development, and in interviewing developers and others.

Preference will be given to applicants who are Students of the Town and Country Planning Institute, and also have had an architectural training.

The salary will be in accordance with Grade IV of the A.P.T. Division of the National Scheme of Conditions of service commencing at £420 per annum and rising to £465 per annum, plus cost of living bonus, at present £59 15s. 0d. per annum. Travelling and subsistence allowance will be paid on the County Scale.

Applications, stating age, experience, etc., and giving the names and addresses of two persons to whom reference can be made, should be sent to the undersigned not later than Saturday, the 20th September, 1947.

WILLIAM JONES,
Clerk of the Joint Committee.
Shire Hall, Llangefni, Anglesey.
28th August, 1947. 729

KENT COUNTY COUNCIL.

Applications are invited for the undermentioned pensionable posts in the Buildings Department:—
(a) Building Maintenance Officer (permanent) at a yearly basic salary of £430×£15-£465, plus war addition, at present £59 15s. 0d.

Candidates must have practical experience of the building trade, be thoroughly competent in the preparation of specifications, detailed estimates and builders' quantities in connection with the maintenance of buildings, and be able to prepare drawings for minor projects. Preference will be given to licentiates of the Institute of Builders (by examination).

(b) Architectural Assistant (unestablished) at a yearly basic salary of not exceeding £360 plus war addition, at present £59 15s. 0d.

The person appointed will be required to assist with the preparation of plans for new buildings and the adaptation and extension of existing buildings.

Forms of application, obtainable from the County Architect, Springfield, Maidstone, should be returned as soon as possible.

W. L. PLATTS,
Clerk of the County Council.

County Hall, Maidstone.
1st September, 1947. 731

**HEPTON RURAL DISTRICT COUNCIL.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.**

Applications are invited for the position of Architectural Assistant to the above Council. The commencing salary will be at the rate of £420 per annum, plus cost-of-living bonus (£59 per annum).

The Council's permanent Architect is expecting to be retiring in the near future, and subject to satisfactory service the person appointed will be promoted to the position.

Applicants should be registered Architects, and should have had experience in the designing of municipal houses, the preparation of specifications and quantities, should be good draughtsmen, and have a sound knowledge of building construction.

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

Applications, endorsed "Architectural Assistant," stating age, qualifications and experience, and accompanied by two recent testimonials, should reach the undersigned not later than noon, on 17th September, 1947. Canvassing, either directly or indirectly, will be deemed a disqualification.

E. H. BLACKBURN,
Clerk to the Council.
District Bank Chambers, Hebden Bridge.
12th August, 1947. 690

**COUNTY BOROUGH OF WEST HAM.
BOROUGH ARCHITECT AND PLANNING
OFFICER'S DEPARTMENT.**

Applications are invited for the following posts:—

- (1) Technical Assistant (Statutory Planning Section).
- (2) Architectural Assistant (Housing Section).
- (3) Male Administrative Assistant (Public Buildings Section).
- (4) Male Administrative Assistant (Construction Section).

The salary for posts (1) and (2) is A.P.T. Grade IV-£420/£465 (plus £20 London weighting and bonus, at present £59 15s. 3d.) per annum. The salary for posts (3) and (4) is A.P.T. Grade I-£330/£375 (plus £20 London weighting and bonus, at present £59 15s. 3d.) per annum.

Full particulars of duties, terms of appointment, and application form (which must be used in making application), may be obtained from the Borough Architect and Planning Officer, 10, West Ham Lane, E.15. Applications to be returned not later than TUESDAY, 30th SEPTEMBER, 1947.

E. E. KING,
Town Clerk.

West Ham Town Hall,
Stratford, London, E.15. 711

**BOROUGH OF COLCHESTER.
BOROUGH ENGINEER'S DEPARTMENT.
ARCHITECTURAL SECTION.**

Applications are invited for the following appointments:—

- (a) Architectural Assistant, Grade 3. Salary £390 p.a.
- (b) Architectural Assistant, Grade 1 or 2. Salary £330 to £360 p.a., according to experience.

In each case plus Cost of Living Bonus, at present £59 16s. 6d. p.a.

Subject to satisfactory service, appointments will be of 2 years' minimum duration.

Applicants should have had good general experience in an Architectural Office, and for

(c) Should, as a minimum, have passed R.I.B.A. Intermediate Examination or be of equivalent standard.

Preference will be given to those with previous experience of Housing Schemes for Local Authorities.

Applications, giving full particulars, should be sent to the undersigned as soon as possible.

HAROLD COLLINS, A.M.Inst.C.E.,
Borough Engineer.

Town Hall, Colchester. 711

**BOROUGH OF HARROGATE.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.**

Applications are invited for the above appointment at a salary in accordance with the A.P.T. Division, Grade II (£360 to £405) plus bonus. Further particulars and conditions may be obtained from the Borough Engineer, to whom applications must be submitted not later than the 24th September, 1947.

J. M. DODDS,
Town Clerk.

Municipal Offices, Harrogate. 728

**CROWN AGENTS FOR THE COLONIES.
ASSISTANT QUANTITY SURVEYOR**

required by Kenya Government Public Works Department for tour 2-3 years in first instance. Salary according to qualifications in scale £480 to £720 plus cost of living allowance up to £140. Outfit allowance £30. Free passages and quarters. Candidates should be Chartered Quantity Surveyors and be experienced in taking off, abstracting and preparing bills of quantities. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/18376 on both letter and envelope.

**COUNTY BOROUGH OF GREAT YARMOUTH.
BOROUGH ENGINEER'S DEPARTMENT.
APPOINTMENT OF SENIOR
ARCHITECTURAL ASSISTANT.**

Applications are invited for the appointment of a permanent SENIOR ARCHITECTURAL ASSISTANT, at a salary in accordance with Grade V of the National Scale of Conditions of Service, commencing at £460 per annum, rising to a maximum of £510 per annum, plus cost-of-living bonus (at present £59 16s. 6d.).

Applicants for the appointment should be Associates of the Royal Institute of British Architects, and must have had experience in design and construction, particularly in relation to housing, schools and public buildings.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, should be enclosed in an envelope endorsed "Senior Architectural Assistant," and must reach the undersigned not later than Friday, 26th September, 1947.

The appointment will be terminable 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 passing of a medical examination.

Canvassing, directly or indirectly, will be deemed a disqualification, and candidates must disclose in writing whether, to their knowledge, they are related to any member of, or holder of any senior office, under the Council. Candidates who fail to do so will be disqualified, and, if appointed, will be liable to dismissal without notice.

FARRA CONWAY,
Town Clerk.

Town Hall, Great Yarmouth.
3rd September, 1947. 742

**MINISTRY OF WORKS.
ARCHITECTURAL ASSISTANTS
(SENIOR GRADE).**

Applications are invited to fill vacancies for Architectural Assistants to supervise Drawing Office Staffs in Leeds, Cardiff, Tunbridge Wells and Cambridge.

Candidates must have had a thorough training in Architecture and a good varied experience of the supervision of drawing office staff.

Salary is up to £640 per annum according to qualifications and experience. The appointments are in the first instance in an unestablished capacity, with a possibility of permanent appointment.

Apply in writing, giving age, details of training, qualifications and experience, stating district preferred, to Chief Architect, Works General 10, Ministry of Works, Abell House, John Islip Street, London, S.W.1. 741

**LEEDS SCHOOL OF ARCHITECTURE.
(LEEDS COLLEGE OF ART).**

Applications are invited for the following posts, duties to commence as soon as possible.

- 1. SENIOR ASSISTANT.
- 2. FULL-TIME LECTURERS and STUDIO INSTRUCTORS.

Candidates should preferably have been trained in a recognised school of architecture and be Associates of the R.I.B.A.

Salary scales: Lecturers: Men, £315-£15-£555. Women: £282-£12-£444. War service and up to 10 years' professional experience may be reckoned as teaching service in fixing the commencing salary. Senior Assistants: Men, £600-£25-£750. Women, £480-£20-£600. Additions in all cases for architectural school training.

Further particulars and application forms may be obtained by sending stamped addressed foolscap envelope to the Director of Education, Education Offices, Leeds, 1. 740

**BOROUGH OF WALTHAMSTOW.
BOROUGH ARCHITECT'S DEPARTMENT.
PLANNING ASSISTANT.**

Applications are invited for the permanent position of PLANNING ASSISTANT, at a salary in accordance with Grade I of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services (£330 rising to £375 by annual increments, plus London Weighting Allowance according to scale, and Cost of Living Bonus at present £59 19s. 3d. per annum.)

Applicants should have had previous experience of Municipal Work and preference will be given to applicants possessing an appropriate planning qualification.

The appointment will be subject to the Local Government Superannuation Act, 1937, to the National Joint Council's Conditions of Service, to the successful candidate passing a medical examination, and to termination by one month's notice on either side.

Applications, stating age, qualifications and experience, accompanied by names and addresses of three referees to whom reference may be made, must reach the undersigned, endorsed "Planning Assistant," not later than 26th September, 1947.

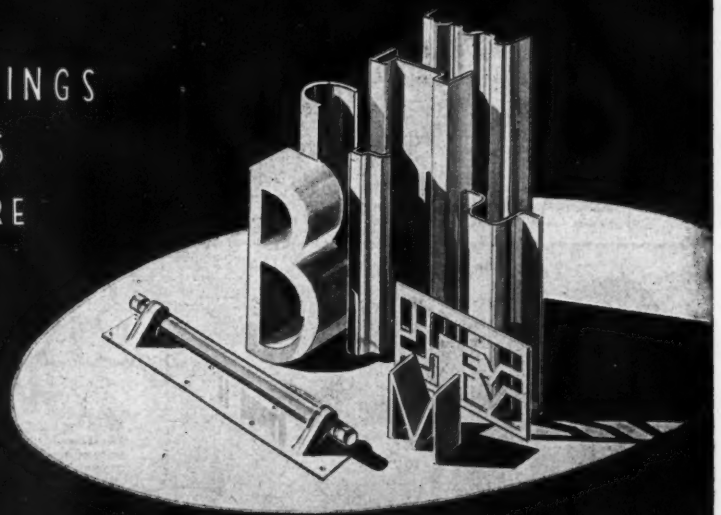
Canvassing in any form will be deemed a disqualification, and applicants must disclose any relationship to any member of the Council or holder of any senior office under the Council.

G. A. BLAKELEY,
Town Clerk.

Town Hall, Walthamstow, E.17. 738

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SURREY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of ASSISTANT QUANTITY SURVEYOR, Grade VI, at a commencing salary of £535, rising by annual increments of £20£25 to a maximum of £600 per annum, plus London weighting of £20 and bonus at the rate of £99 16s. 6d. per annum.

Preference will be given to applicants who are members of the Chartered Surveyors' Institution (Quantities Sub-Division), and who have an adequate experience in the preparation of Bills of Quantities, and in measuring up and in settlement of final accounts.

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

Applications, stating age, qualifications, and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-on-Thames, not later than the 27th September, 1947.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

DUDLEY AUKLAND,

Clerk of the Council.

County Hall, Kingston-on-Thames.

739

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Architectural Appointments Vacant

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LEADING Industrial Design Consultants require Junior Assistant with architectural or engineering experience to prepare working drawings from designers' sketches. Box 745.

JUNIOR ARCHITECTURAL ASSISTANT required, London W.C. district; state age, experience and salary. Box 626.

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THE MIDLAND JOINERY WORKS, LTD., Burton-on-Trent, require a first-class experienced **DRAFTSMAN ESTIMATOR**. Apply in confidence, giving fullest particulars. 636

IMPERIAL CHEMICAL INDUSTRIES, LTD.—Applications from qualified Architects are invited for the appointment of an **ASSISTANT ARCHITECT** in Chief Engineer's Department. The applicant should be an Associate R.I.B.A., and have had experience in the design and construction of Factory Amenities, Laboratories and Offices. The successful applicant will be required to act as Section Leader and take charge of a Section of the Civil Drawing Office under the Architect. The position is of a permanent nature, subject to the Company's Superannuation Fund, and offers good prospects. Applications to be sent to the following address, stating age, married or single, qualifications, experience and salary required. Staff Manager, Imperial Chemical Industries, Ltd., General Chemicals Division, Canard Building, Liverpool. 670

CAPABLE ASSISTANT, for general practice in S.W. coast town. Write, stating age, experience, salary, etc., Box 693.

RELIABLE ARCHITECTURAL ASSISTANT required for general East Riding practice; must be good draughtsman with sound constructional knowledge of handling smaller jobs with minimum supervision; progressive opportunity for right man; ex-Service preferred. State age, qualifications, experience and salary required, Box 713.

IMPERIAL CHEMICAL INDUSTRIES, LTD., Wilton Works, require **DRAFTSMAN** to assist with the design and detailing of a large new works. Successful candidates will be appointed to the established staff. Preference will be given to applicants who hold the Higher National Certificate or higher qualification and have the appropriate experience, as follows:—**DRAFTSMEN—ARCHITECTURAL**: Design of offices, laboratories, houses, welfare and general industrial buildings. **CIVIL**: Design of roads, railways, drains and water services. **STRUCTURAL**: Design of buildings and structures, and design and detailing of reinforced concrete work for industrial buildings. **MECHANICAL**: Design of pipework for steam, gas and water, compressed air stations, lay-out of chemical plant, etc. **POWER STATION**: Design and lay-out of modern H.P. Boiler Plant and Power Plant. **ELECTRICAL**: Lay-out of plant electrical installations, including motors, starters, distribution boards, cables and lighting, and necessary calculations. **INSTRUMENT**: Lay-out of mechanical and electrical instrument installations for Chemical plant. Preference for men experienced in modern automatic control instruments for temperature pressure and flow. Applications, giving full details, should be submitted to the Personnel Manager, Imperial Chemical Industries, Ltd., Wilton Works, P.O. Box 54, Middlesbrough, Yorks., quoting advert. ref. ICI/X/29. 714

CHARTERED ARCHITECT required in old established practice; state salary. Box 722.

ARCHITECTURAL DRAFTSMAN required immediately with good general knowledge of building construction, surveying and levelling. Write, stating experience, age, and salary required, to Box 405, 8, Serle Street, London, W.C.2. 724

WANTED. — ARCHITECT'S ASSISTANT, South Cheshire office; good general draughtsman, capable of taking off quantities for small jobs, measuring up and preparing final accounts and detail drawings. Apply Box 733. State experience and salary required.

ARCHITECTURAL ASSISTANT required, South London office; competent to prepare working drawings, surveys, specifications, for licensed houses, shops and factories. Write, stating age, salary and experience, to Box 963.

QUANTITY SURVEYOR required by Imperial Chemical Industries, Ltd., Wilton Works, Middlesbrough. Experience necessary in Taking Off, Abstracting, Billing and Pricing Works of a Building and Civil Engineering character. The successful candidate will be appointed to the established staff. Applications, giving full particulars, should be submitted to the Personnel Manager, Imperial Chemical Industries, Ltd., Wilton Works, P.O. Box 54, Middlesbrough, Yorks., quoting advert. ref. No. ICI/X/30. 726

Architectural Appointments Wanted

KBBN and capable **ASSISTANT** requires position in Newcastle-upon-Tyne; ex-Service-man; aged 28; passed R.I.B.A. Final Exam, July, 1947. Box 393.

SENIOR ASSISTANT. Fully qualified, Dipl. Arch. (L'pool), requires immediately progressive position with Liverpool firm of Architects; good general experience; capable of carrying through work from sketch plan stage to final working drawings, details, etc., without supervision. Box 403.

CAPABLE DRAFTSWOMAN requires position in progressive London office; 2 years' general drawing office experience. Box 404.

YOUNG LADY requires work in office to gain experience. Willing to accept small salary. Has passed part Inter. R.I.B.A. (History of Structures). In or near Brighton district. Box 405.

Other Appointments Vacant

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WANTED.—DRAFTSMAN, experienced in the preparation of masonry details for pattern-shop, by Cast-Stone manufacturers in Yorkshire. State experience and salary required to Box 715.

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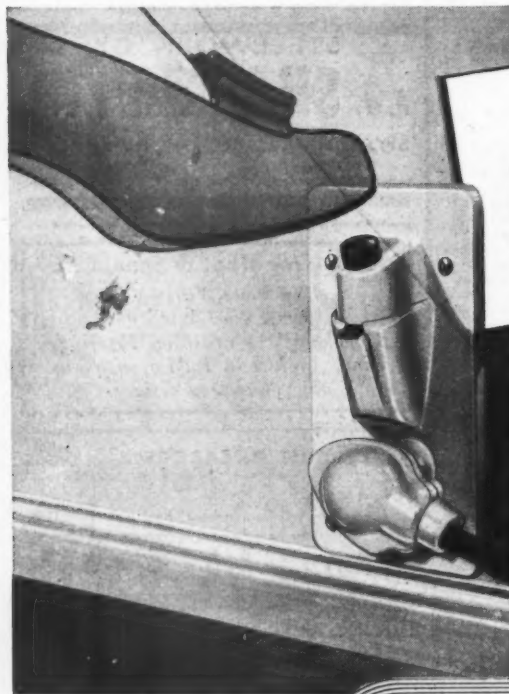
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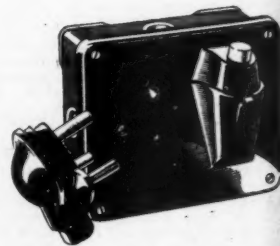
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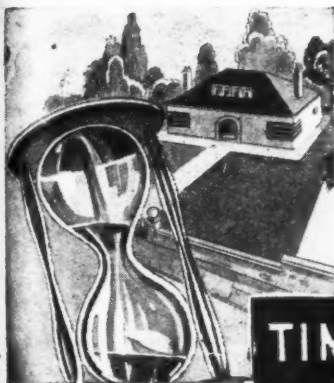
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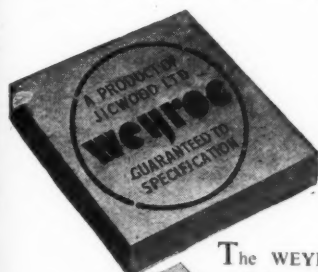
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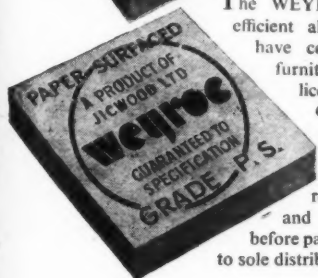
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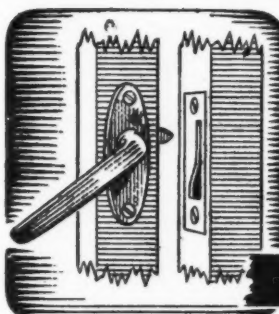
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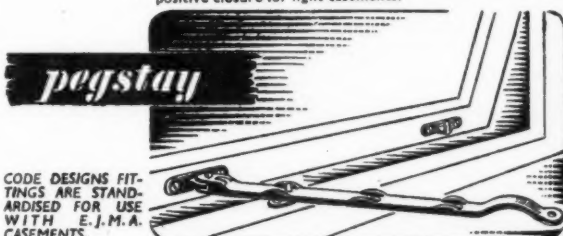
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