

# 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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★ 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 I one week, I to Z the next. In all cases where the town is not mentioned, the word LONDON is implicit in the address.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley," Castle Hill, Avenue, Berkhamstead, Herts.	
ABS	Architects' Benevolent Society, 66, Portland Place, W.1.	Welbeck 5721
ABT	Association of Building Technicians, 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain, 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association, 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction, 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association, Department of Architecture, School of Building, Ferndale Road, Brixton, S.W.4.	Brixton 7048
ARCUK	Architects' Registration Council, 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects, 66, Portland Place, W.1.	Welbeck 5721
AScW	Association of Scientific Workers, 15, Half Moon Street, Piccadilly, W.1.	Grosvenor 4761
BAE	Board of Architectural Education, 66, Portland Place, W.1.	Welbeck 5721
BATC	Building Apprenticeship and Training Council, Lambeth Bridge House, S.E.1.	Reliance 7611, Ext. 1706
BC	Building Centre, 9, Conduit Street, W.1.	Mayfair 8641/6
BCC	British Colour Council, 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation, 17, Amherst Road, Ealing, W.13.	Perivale 6869
BCIRA	British Cast Iron Research Association, Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association, 43, George Street, Croydon.	Croydon 5452
BEDA	British Electrical Development Association, 2, Savoy Hill, W.C.2.	Temple Bar 9434
BGF	British Gas Federation, 1, Grosvenor Place, S.W.1.	Sloane 8266
BIA	British Ironfounders' Association, 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education, 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors, 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council, 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade, Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station, Bucknalls Lane, Watford.	Garston 2246
BSA	Building Societies Association, 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution, 28, Victoria Street, S.W.1.	Abbey 3333
BTE	Building Trades Exhibition, 4, Vernon Place, W.C.1.	Holborn 8146/7
CABAS	City and Borough Architects Society, C/o Johnson Blackett, F.R.I.B.A., Borough Architect, Town Hall, Newport, Mon.	Newport 3111
CAS	County Architects Society, C/o A. Guy Chant, F.R.I.B.A., Salop County Council, 5, Belmont, Shrewsbury.	Shrewsbury 3031
CCA	Cement and Concrete Association, 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CDA	Copper Development Association, Kendals Hall, Radlett, Herts.	Radlett 5616
CIAD	Central Institute of Art and Design, 41, 42, Dover Street, W.1.	Regent 3074
CIAM	Congrès Internationaux d'Architecture Moderne, Dolderal, 7, Zurich, Switzerland.	
CID	Council of Industrial Design, Tilbury House, Petty France, S.W.1.	Whitehall 6322
CPC	Codes of Practice Committee, MOW, 42, Onslow Gardens, S.W.7.	Kensington 8161
CPRE	Council for the Preservation of Rural England, 4, Hobart Place, S.W.	Sloane 4280
CUJC	Coal Utilization Joint Council, 13, Grosvenor Gardens, London, S.W.1.	Victoria 1534
DGW	Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 1761
DIA	Design and Industries Association, 13, Suffolk Street, S.W.1.	Whitehall 0540
DOT	Department of Overseas Trade, 35, Old Queen Street, S.W.1.	Victoria 9040
EC	Electricity Commission, Savoy Court, Strand, W.C.2.	Temple Bar 7565
EJMA	English Joinery Manufacturers' Association (Incorporated), Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society, 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors, 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FB 1951	Festival of Britain 1951, 2, Savoy Court, Strand, W.C.2.	Waterloo 1951
FASSC	Federation of Association of Specialists and Sub Contractors, 21, Tothill Street, S.W.1.	Whitehall 9606
FBI	Federation of British Industries, 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission, 25, Savile Row, W.1.	
FCMI	Federation of Coated Macadam Industries, 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd, Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District, Pennington House, Nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders, 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FRHB	Federation of Registered House Builders, 82, New Cavendish Street, W.1.	Langham 4041
FS (Eng.)	Faculty of Surveyors of England, 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group, 27, Grosvenor Place, S.W.1.	Sloane 2844
HC	Housing Centre, 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors, 75, Eaton Place, S.W.1.	Sloane 5615
ICE	Institution of Civil Engineers, Great George Street, S.W.1.	Whitehall 4577

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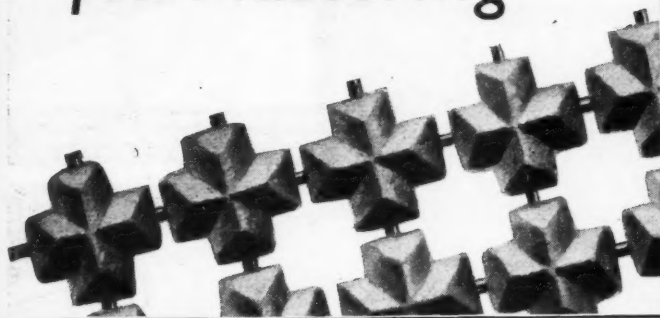
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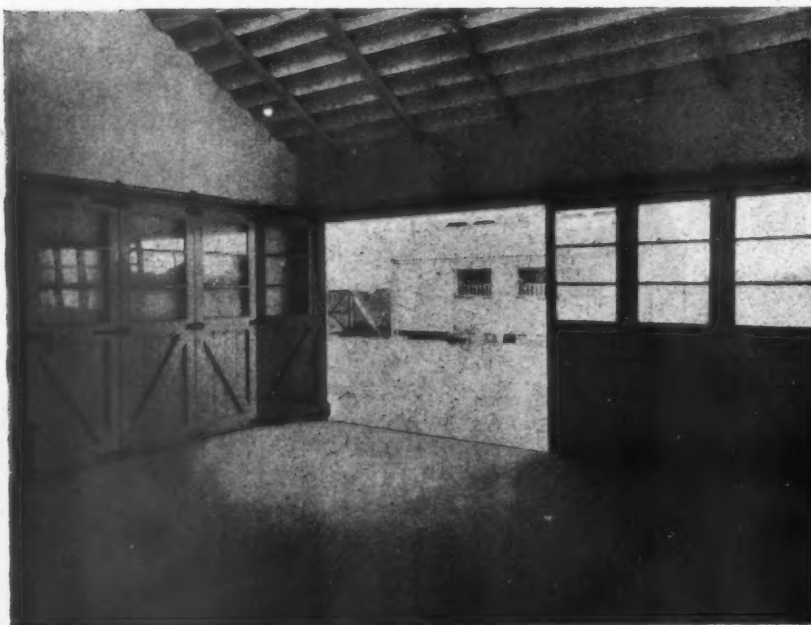
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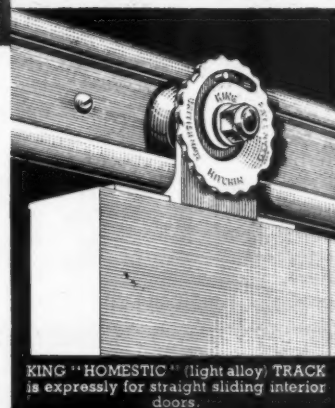
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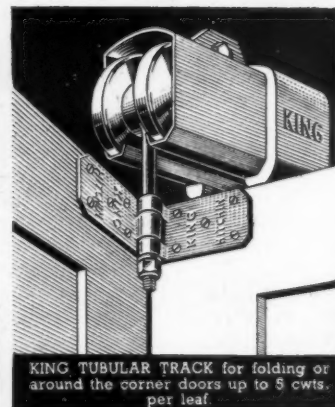
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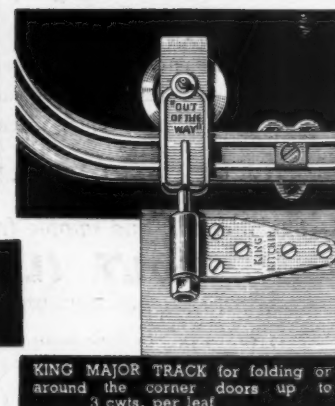
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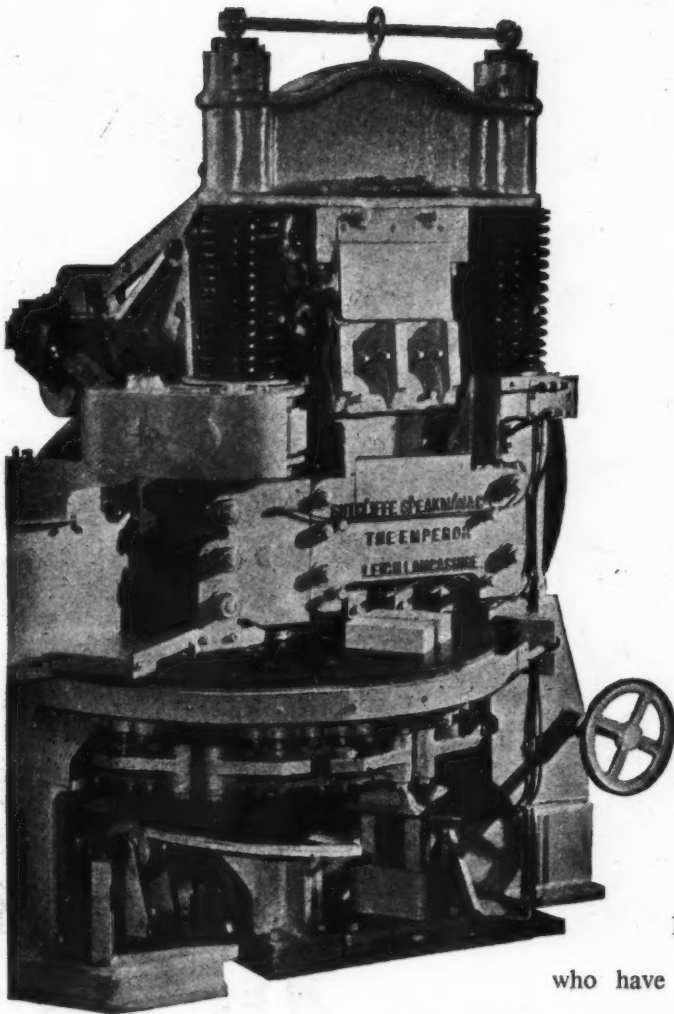
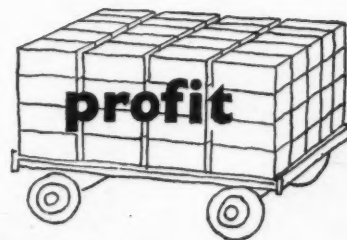
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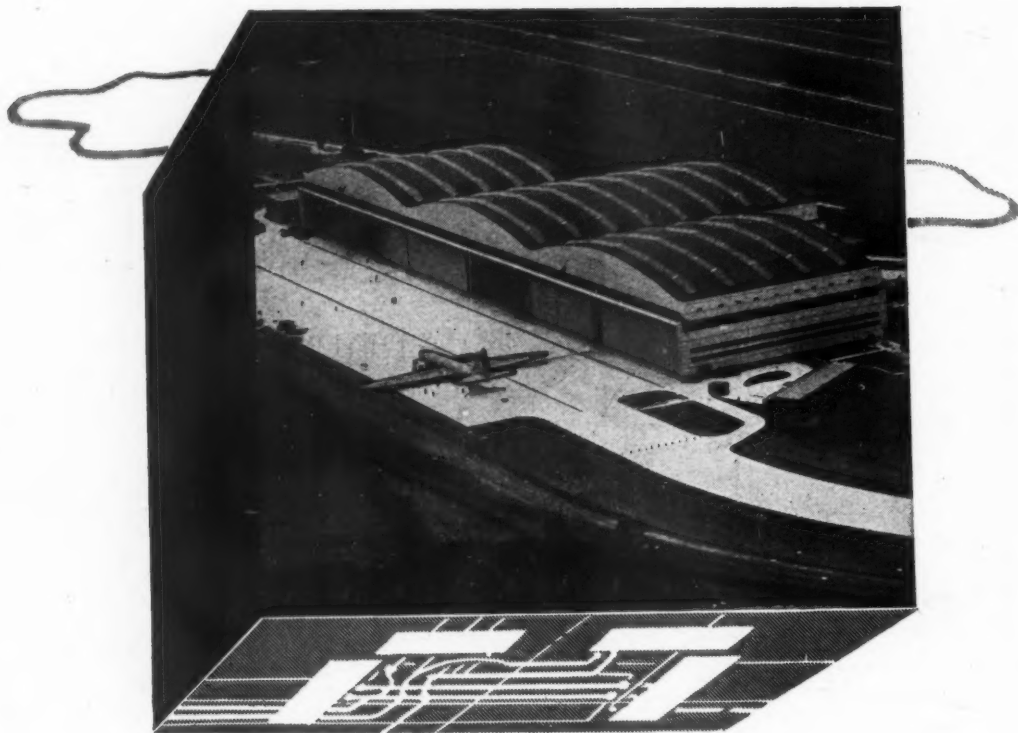
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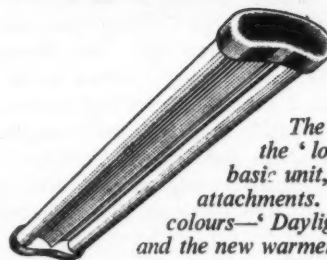
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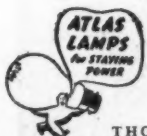
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*The large illustration shows this unit with the 'louvre' attachment. Also is shown the basic unit, which is suitable for various diffusing attachments. Tubes are available in four standard colours—'Daylight', 'Northlight', 'Warm White', and the new warmer colour 'Peach'.*

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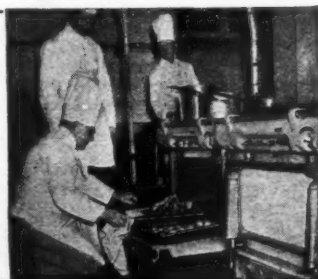


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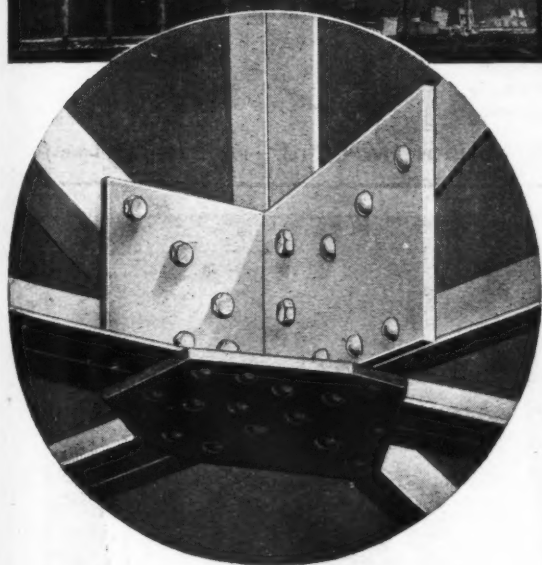


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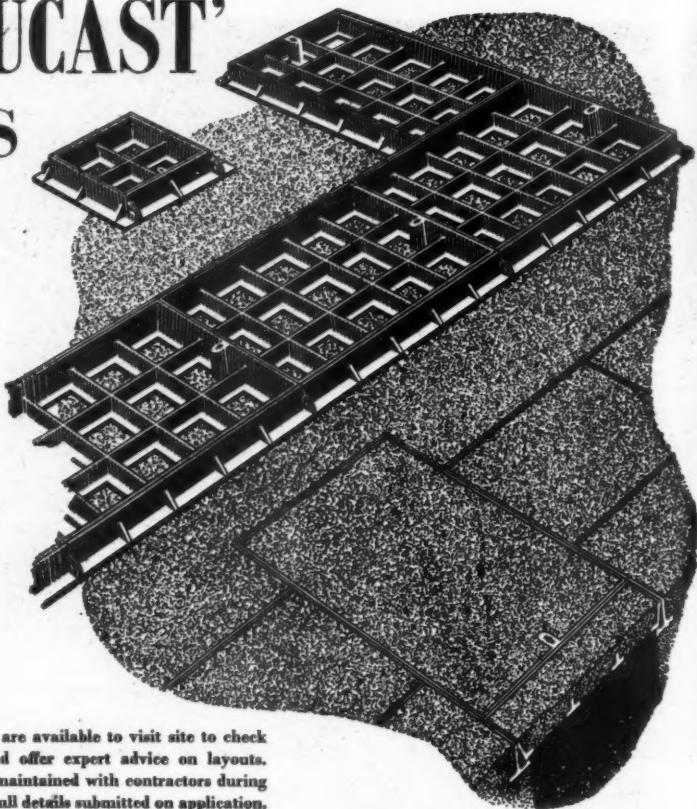
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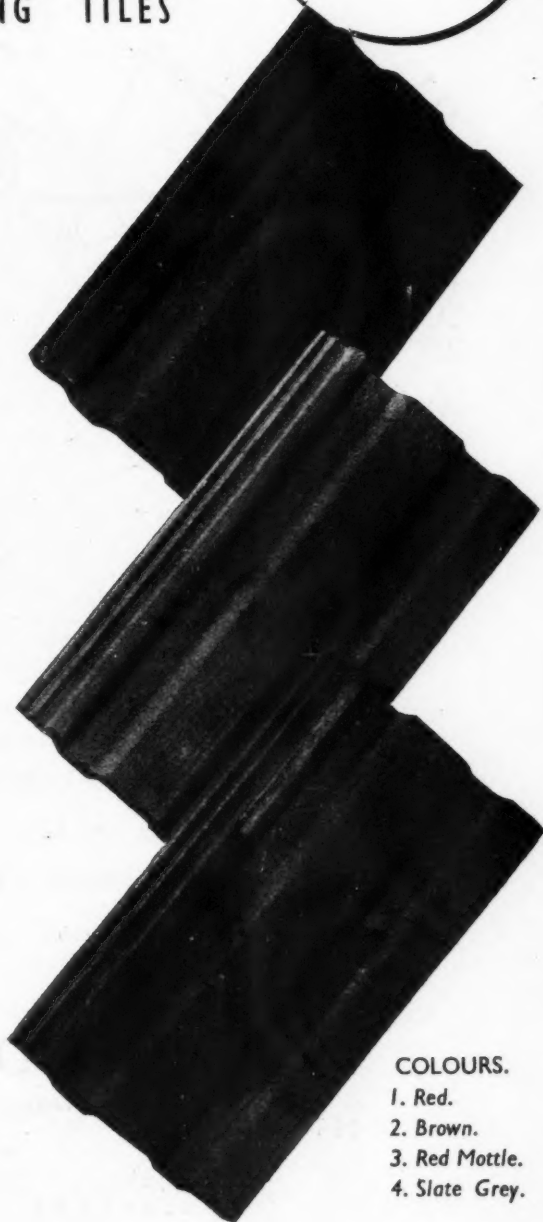
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## COLOURS.

1. Red.
2. Brown.
3. Red Mottle.
4. Slate Grey.

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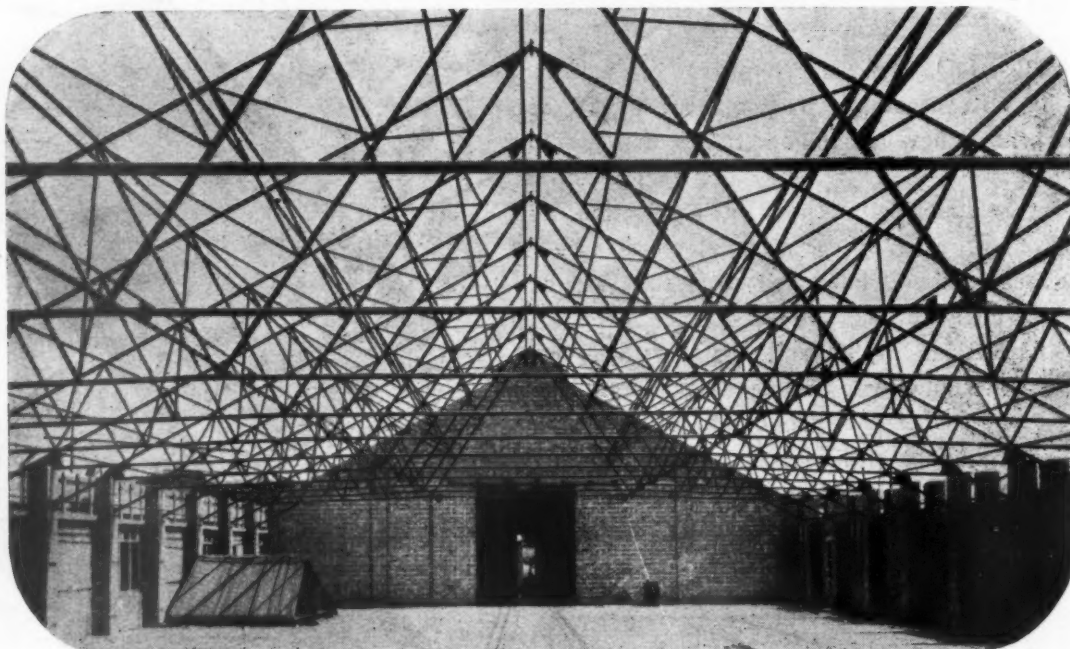
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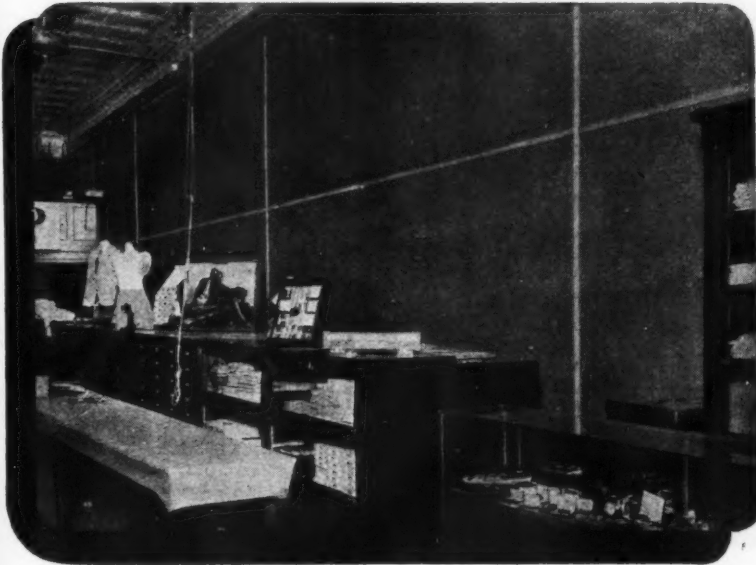
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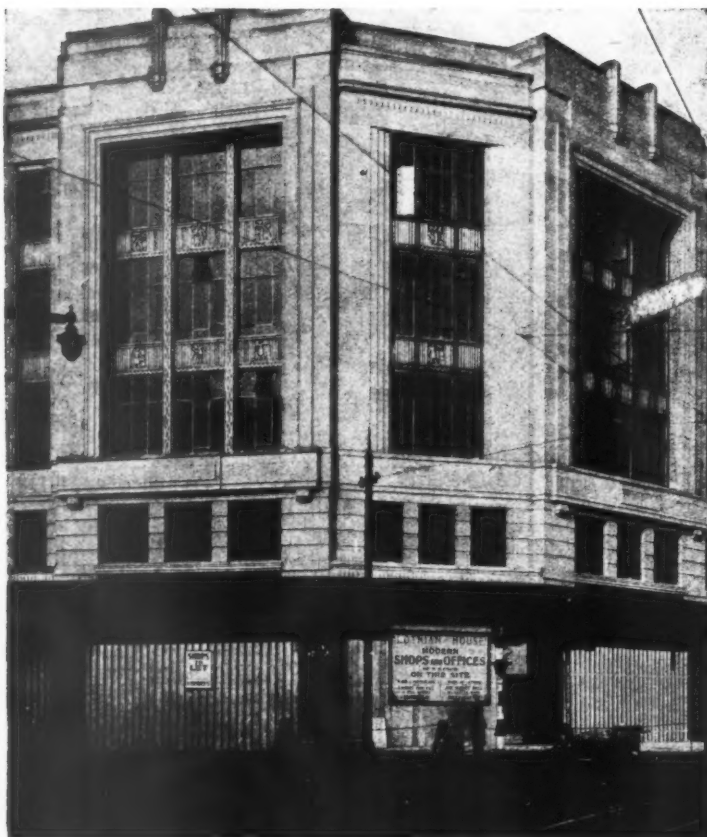
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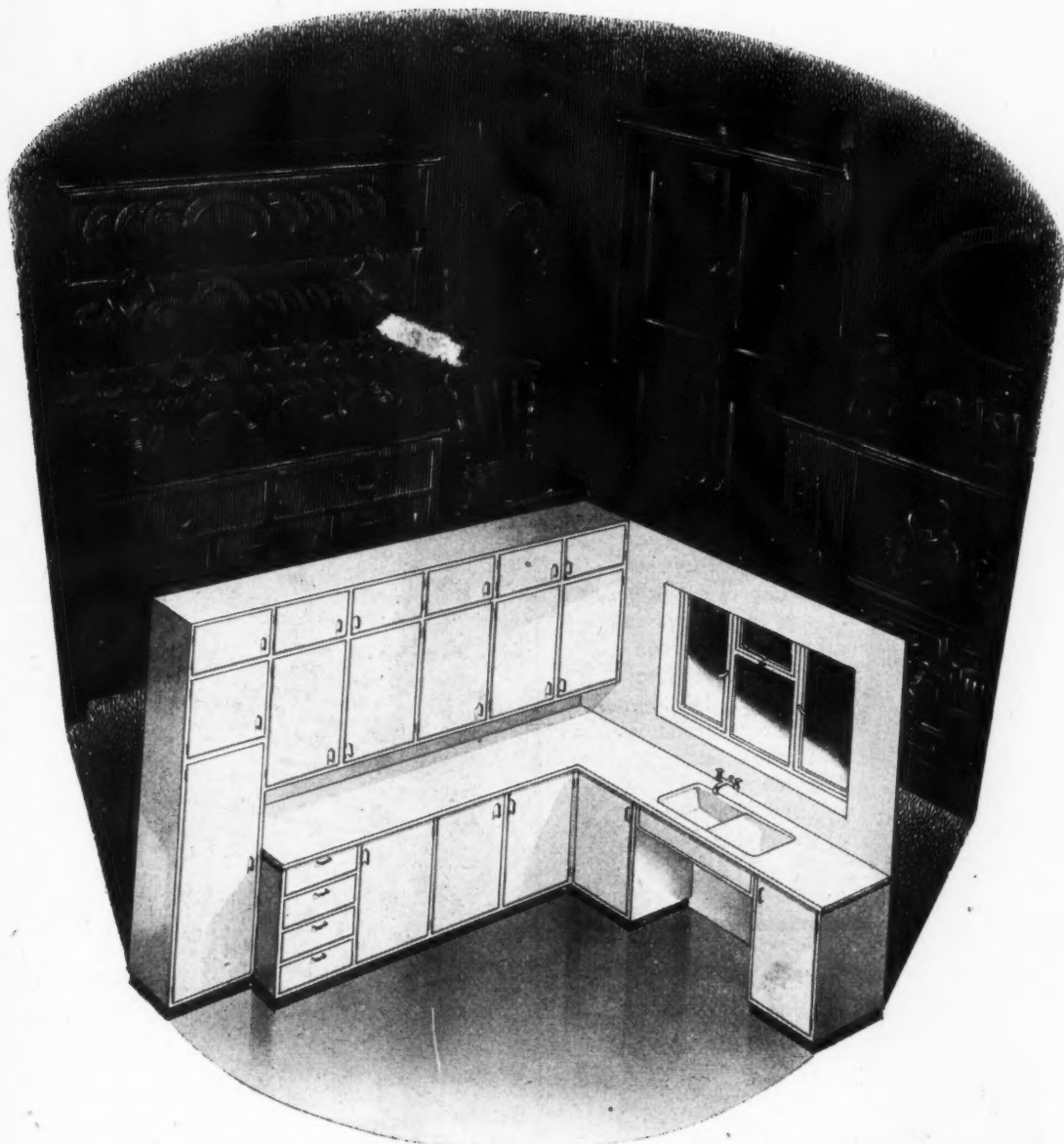
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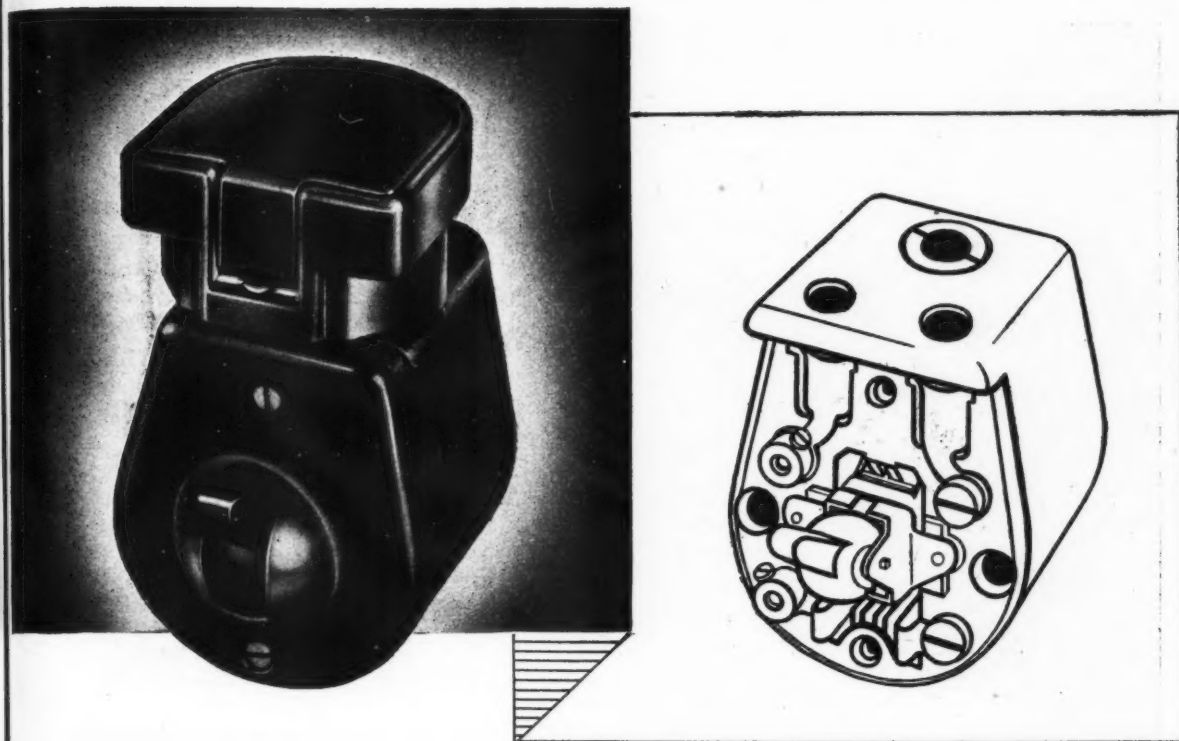
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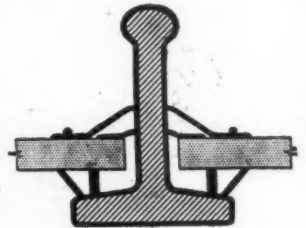
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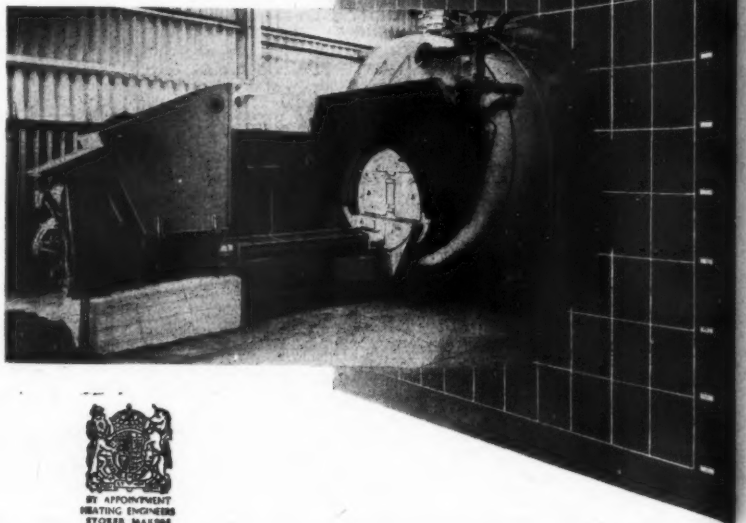
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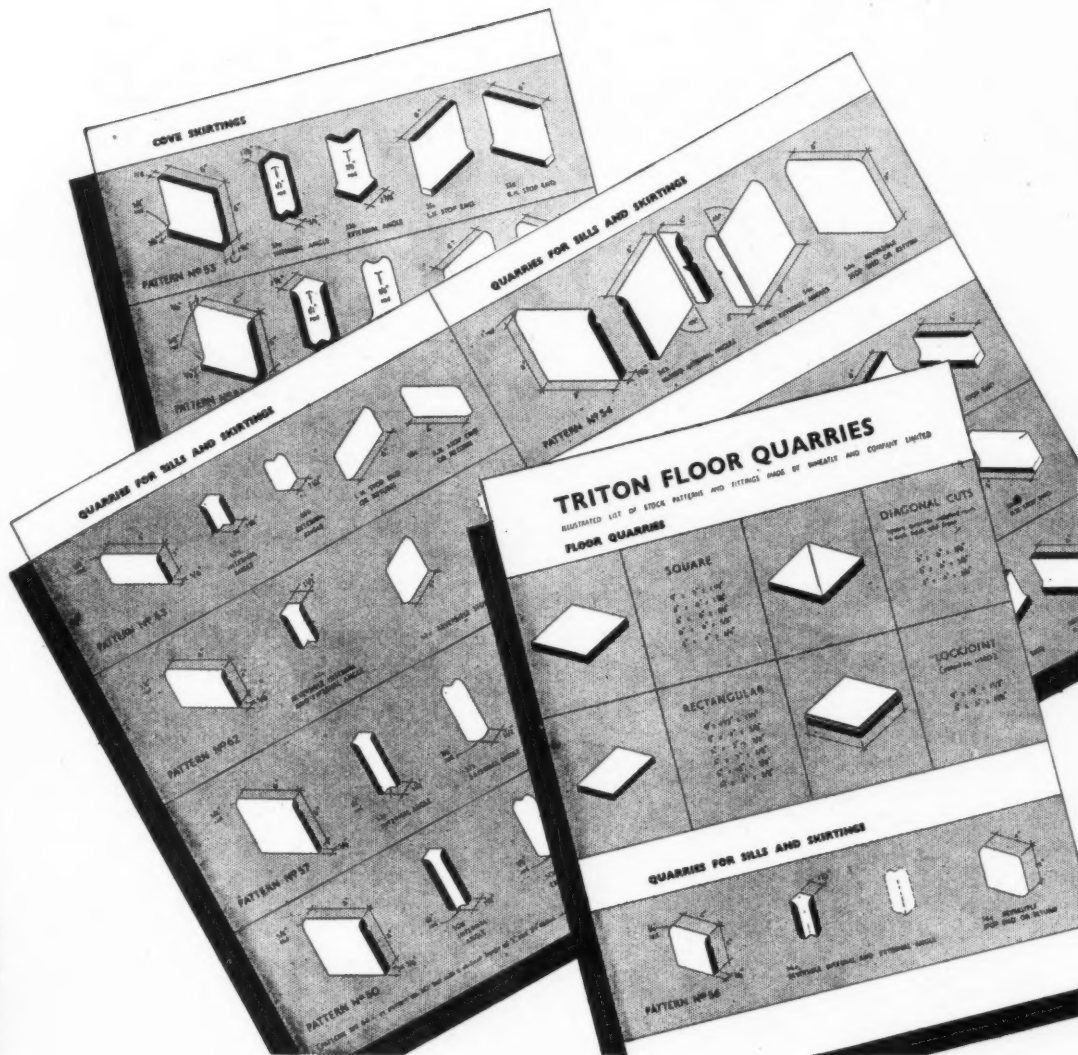
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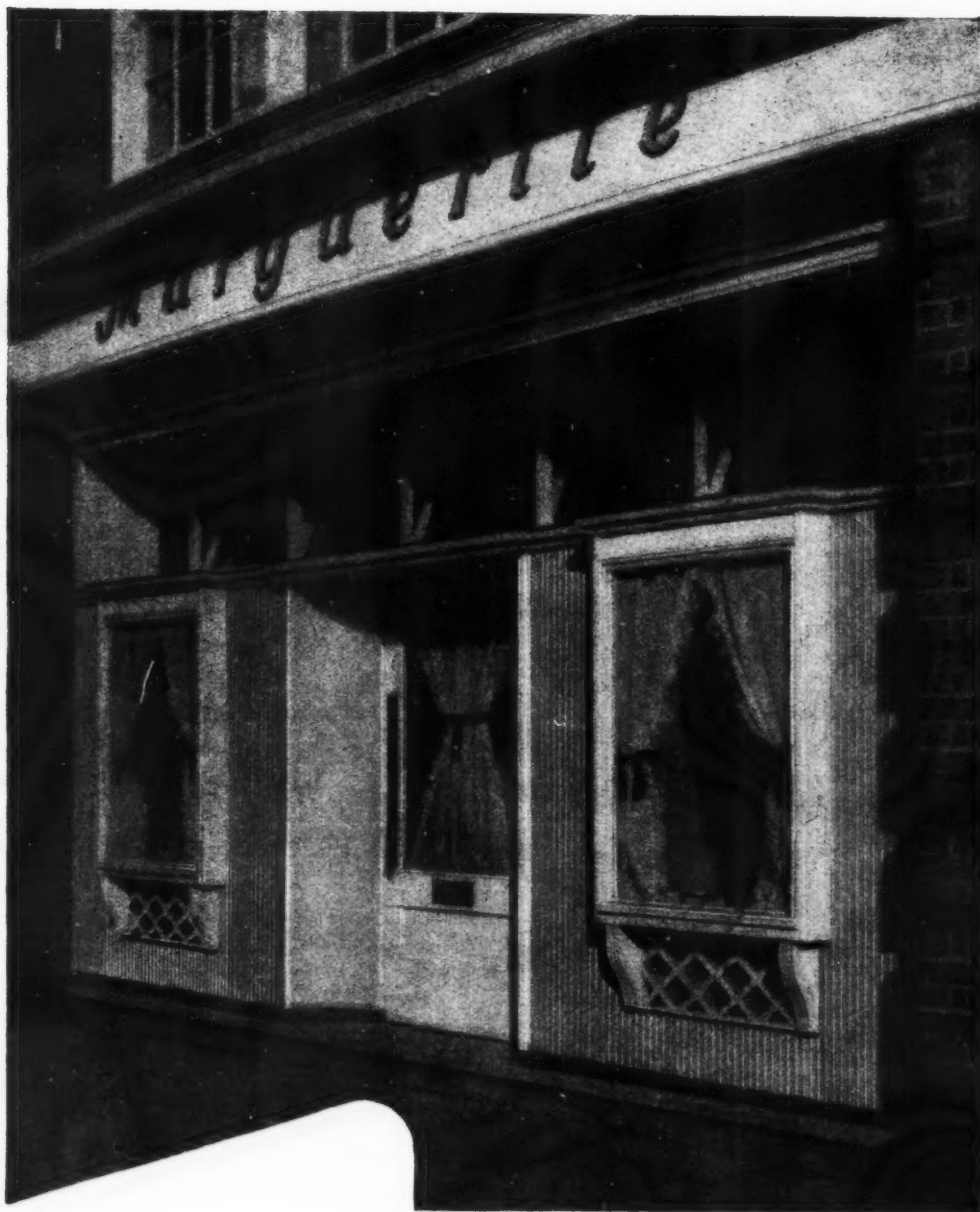
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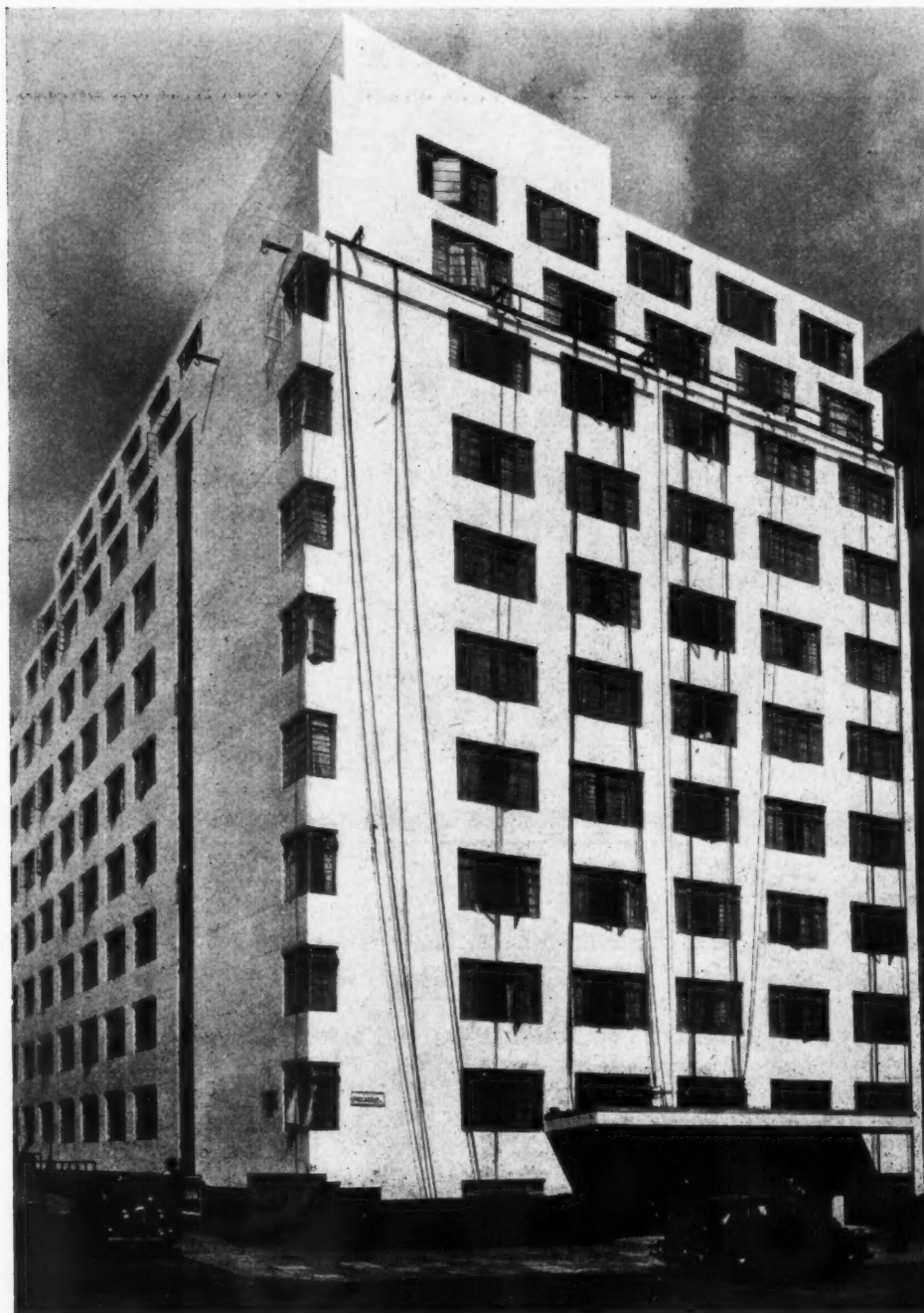
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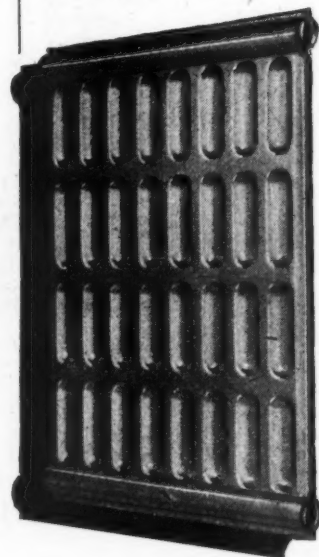
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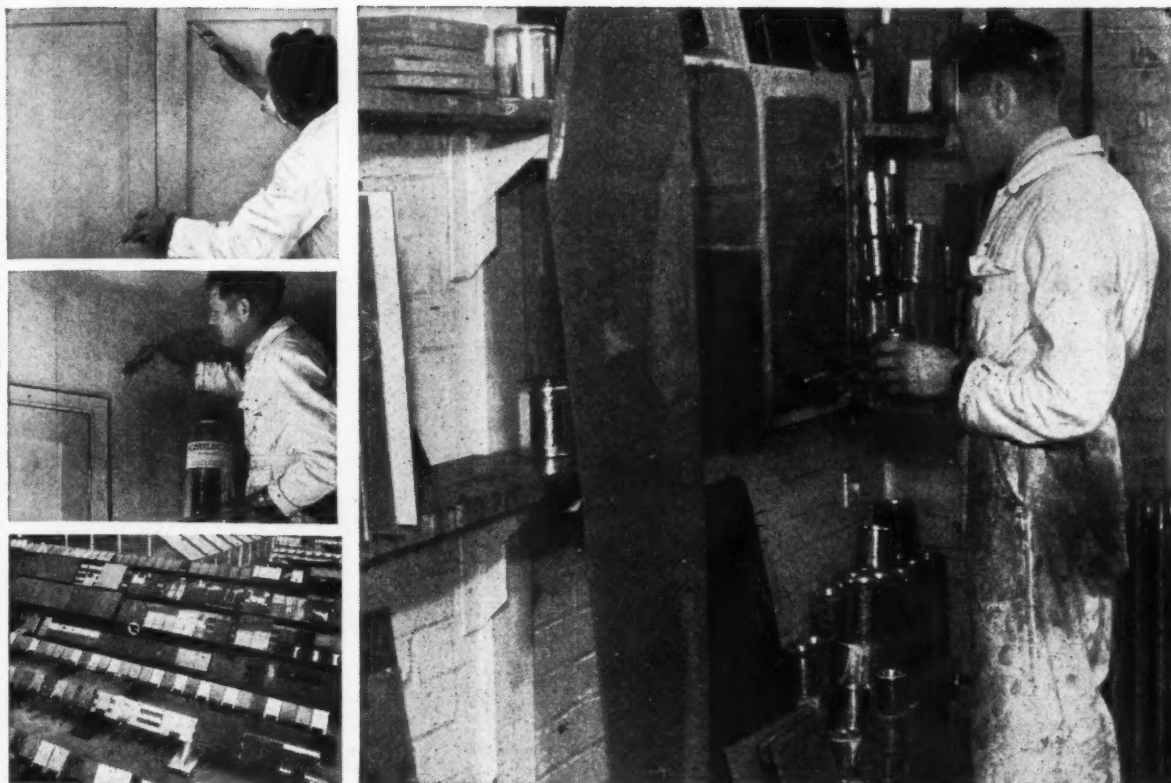
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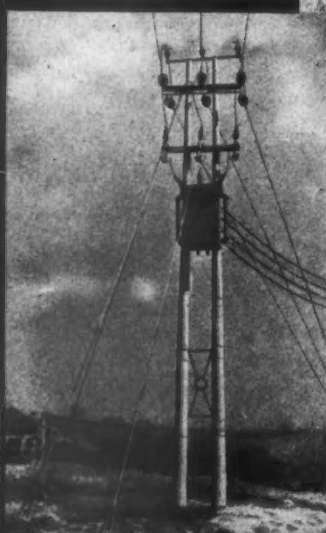
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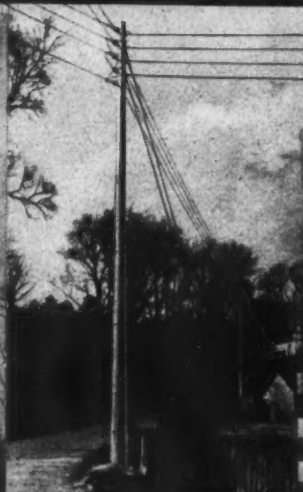


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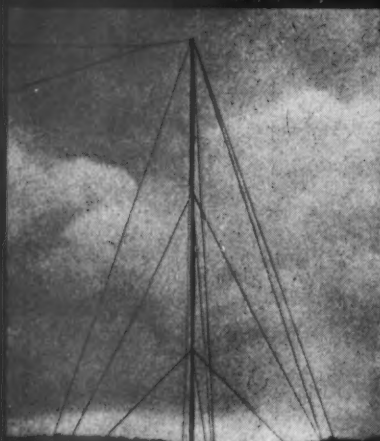
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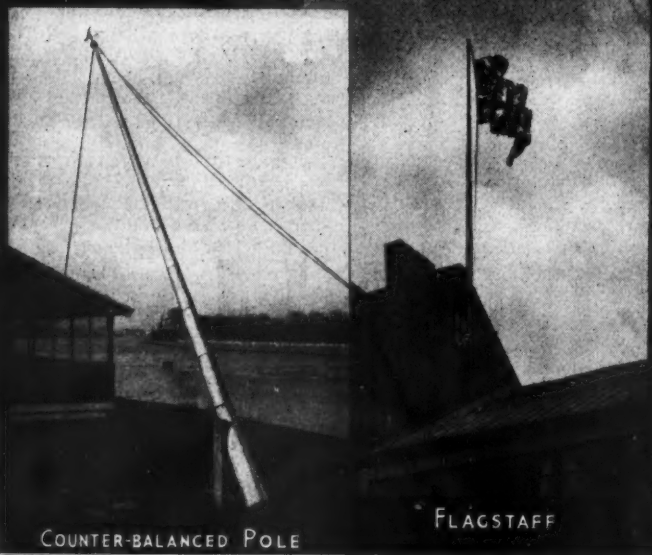
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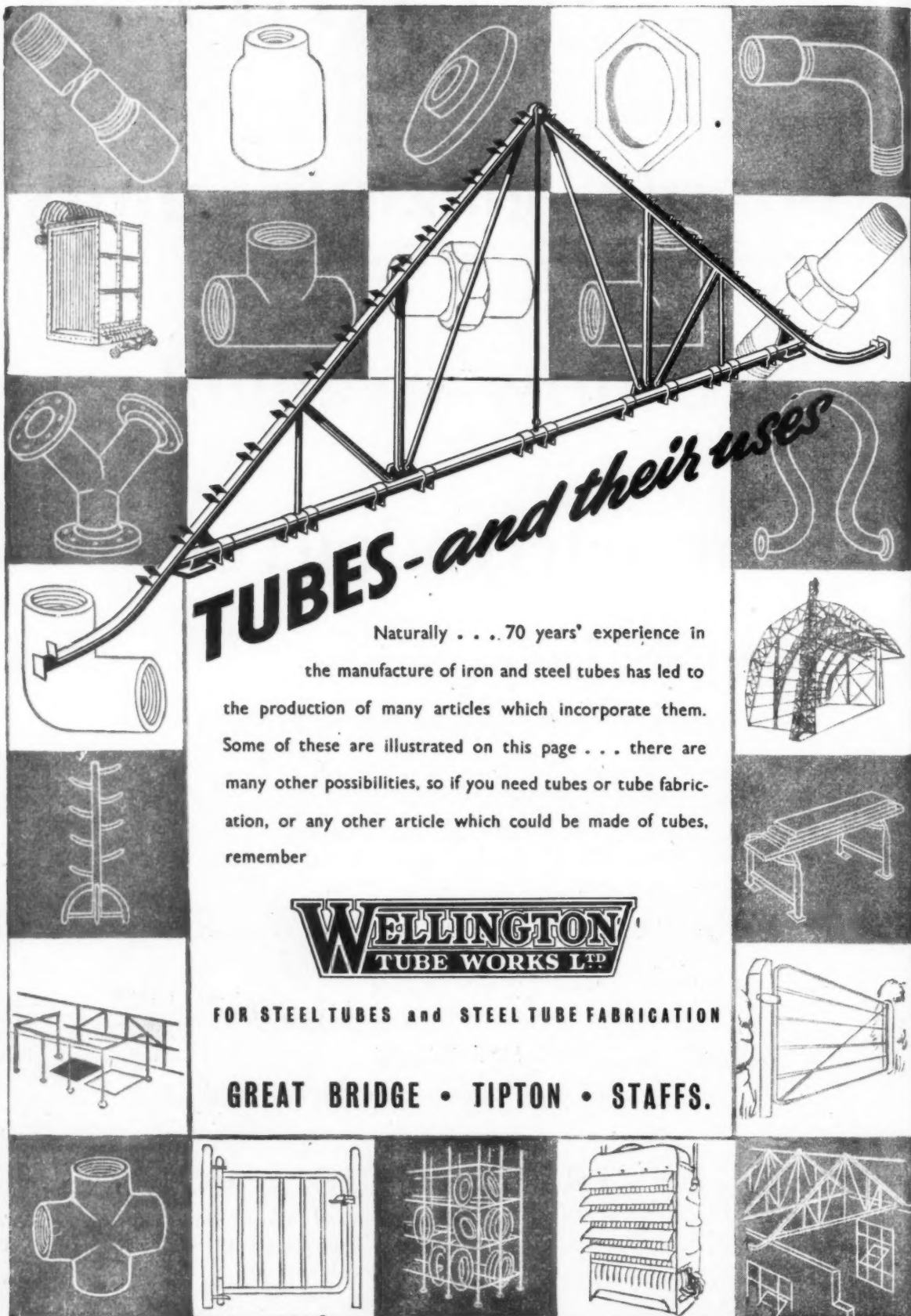
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## DIARY FOR DECEMBER JANUARY AND FEBRUARY

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 given in the glossary of abbreviations on the front cover.

**ABERDEEN.** S. Lister. *Seasoning, Preservation and Diseases of Wood.* Clerk of Works' Offices. (Sponsor, TDA.) 10 a.m. (To be repeated at Clerk of Works' Offices, Glasgow, at 10 a.m., on Dec. 23.) DEC. 16

**GLASGOW.** *Dry Rot Exhibition.* Building Centre. (Sponsor, DSIR.) FROM DEC. 8

**LONDON.** Richard Eve. *BRS Heating Trials and their Effect on House Design.* 66, Portland Place, W.1. (Sponsor, Architectural Science Board.) 6 p.m. DEC. 13

W. Allen. *The Acoustics of Studios and Auditoria.* IEE, Savoy Place, W.C.2. 5.30 p.m. DEC. 19

Professor L. Dudley Stamp. *The Use and Misuse of Land.* 12, Great George Street, S.W.1. (Sponsor, RICS.) 5.30 p.m. JAN. 2

Hope Bagenal. *Concert Halls.* 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. JAN. 3

*The Painting of Buildings.* Colour film by ICI. At Waldorf Hotel, Aldwych, W.C.2. (Sponsor, IRA.) 6.30 p.m. JAN. 6

H. R. Humphreys. *Acoustics and Sound Insulation.* Kent Room, Caxton Hall, S.W.1. (Sponsor, IAAS.) 6 p.m. JAN. 11

W. K. B. Marshall. *The Welding of Light Alloys in Structural and Similar Applications.* ICE, Great George Street, S.W.1. (Sponsor, ICE.) 6 p.m. JAN. 25

E. S. Hodges. *Fire Prevention in Buildings.* Kent Room, Caxton Hall, S.W.1. (Sponsor, IAAS.) 6 p.m. FEB. 8

**REIGATE.** P. L. Money. *The Work of the TDA.* Rotary Club. (Sponsor, TDA.) 1 p.m. DEC. 12

**WALTHAMSTOW.** B. A. Jay. *Structure in Relation to Use.* South West Technical College. (Sponsor, TDA.) 7 p.m. DEC. 14

### COMPETITIONS

Competition for designs for interior treatment of two saloon bars and two public bars. (Sponsor, The Architectural Press Ltd.) Prizes: (1) £500; (2) £250; (3) £100. Assessors: Hugh Casson; J. S. Eagles; R. Furneaux Jordan; E. B. Musman; and

J. M. Richards (representing the editors of *The Architectural Review*). Designs must be received by mid-day, February 28, 1950.

*Art School, Jersey, Channel Islands.* The Association of Old Victorians invite architects of British nationality to submit designs in competition for war memorial buildings proposed to be erected in the Victoria College Grounds, Jersey, Channel Islands. Assessor: A. E. O. Geens. Premiums: £75, £50 and £25. Completed designs should be sent to A. H. Worrall, hon. treasurer, The Association of Old Victorians, 25, Cleveland Road, Jersey, C.I., not later than April 3, 1950. Questions must be received on or before December 31 by Mr. Worrall, who will also provide a copy of the conditions on the deposit of £1 ls. Following are extracts from the conditions:—The elevation should be treated in a restrained and dignified manner, having regard to the existing buildings of the Victoria College, which are mainly built of granite in the Gothic style. The entrance porch should be approximately 14 ft. by 12 ft. It is the intention of the promoters to use this entrance porch as a War Memorial to past students of the College. Adequate space should be provided for a memorial tablet. The main studio should be approximately 34 ft. by 20 ft. by 14 ft. in height. Four smaller studios are also required.

## N E W S

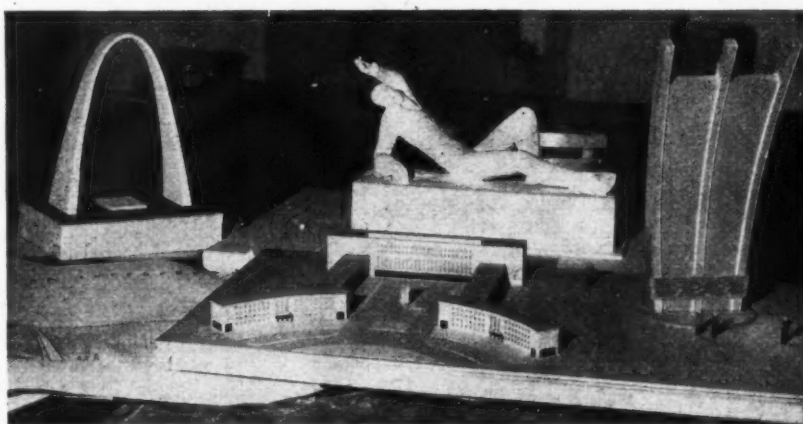
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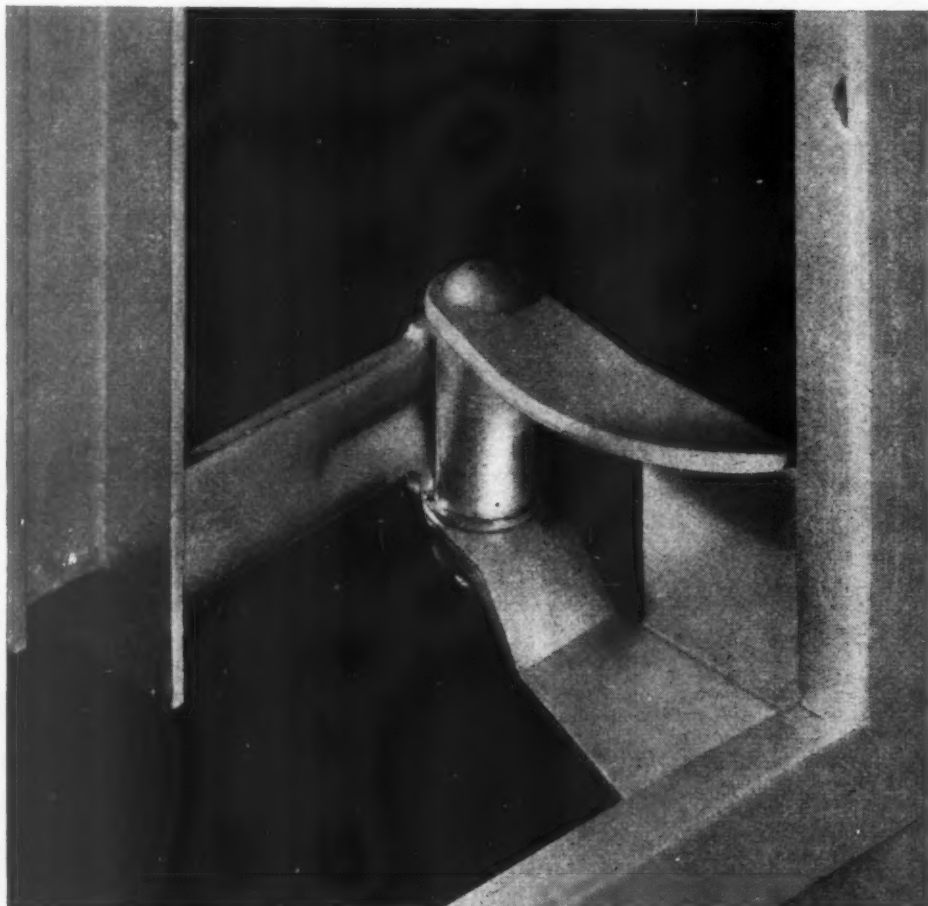
Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis.

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

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



These are prize-winning models for the competition organized by the West Berlin Magistrate for the best air-lift memorial to be erected on "Airlift Square," in front of Tempelhof airfield. In the background is the winning memorial by Erich F. Reuter, a Berlin sculptor. On the left is one of the two Second-prize works, a symbolic representation of the air-lift, and on the right is the other winner, the pier arch of a bridge, standing beside a model of Tempelhof Airfield buildings. The significance of these last two models will, perhaps, be understood, if it is pointed out that the German translation of air-lift is Luftbrücke—"air bridge"



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## From AN ARCHITECT'S Commonplace Book

ADVICE FROM EVELYN. [From A Calendar of British Taste from 1600-1800, by E. F. Carritt (Routledge & Kegan Paul. 21s.).]—After the Irruption, and Swarmes of those Truculent People from the North (Goths and Vandals); the Moors and Arabs from the South and East . . . I dare Report to any Man of Judgment and that has the least Taste of Order and Magnificance; If after he has look'd a while upon *King Henry the VIIth's Chappel at Westminster*; Gazed on its sharp *Angles, Jetties, Narrow Lights, lame Statues, Lace* and other *Cut-work and Crinkle-Crankle*; and shall then turn his Eyes on the *Banqueting-House* built at *White-hall* by *Inego Jones* after the Antient manner, or on what his *Majesties* present *Surveyor Sir Christopher Wren* has lately advance'd at *St. Paul's*; and consider what a *Glorious Object* the design'd *Cupola, Portico, Colonads* and other (yet unfinish'd) Parts, will then present the Beholder: Or compare the *Schools* and *Library at Oxford* with the *Theatre* there, . . . Not, as we said, that there is not something of solid and Odly Artificial too, after a sort. But then the Universal and unreasonable Thickness of the Walls, Clumsy Buttresses, Towers, sharp pointed Arches, . . . Turrets, and Pinacles thick set with *Munkies* and *Chimaeras* . . . that one cannot consider it with any Steadiness where to begin or end; taking off from that Noble *Aier* and *Grandure*, Bold and Graceful manner, which the Antients had so well and judiciously establish'd . . . Witness . . . Westminster, Canterbury, Salisbury, Peterborough, Ely, Wells, Beverly, Lincoln, Gloucester, York, Durham, . . . and compare them (almost numberless as they are) with *One St. Peter's at Rome* only.—[Evelyn, *Account of Architects and Architecture* (2nd ed., cf. 1699).]

### During OCTOBER 16,433 HOUSES WERE COMPLETED in Great Britain.

This figure for permanent houses completed in October shows a drop of 466 compared with the previous month. The total number completed during the year is 163,699.

### ★★ A NEW WAY OF REDUCING SCHOOL BUILDING COSTS is being tried by the MOE.

The first of a series of Building Bulletins has just been published by the MOE with a view to guiding local education authorities on educational building problems.

The first bulletin, which deals with the primary school, is entitled "Building Bulletin No. 1" and may be obtained from HMSO, price 1s. The aim of this bulletin is three-fold:—

To attempt to review the requirements of the primary schools as a whole; to show what is needed educationally, in terms of space, fittings and furniture, and in terms of physical conditions such as heating, lighting and general amenities.

To consider how to translate these requirements into school design.

To encourage simultaneously the raising of standards and the reduction of cost.

The following are points made in the bulletin:—

A very large building programme is under way. New schools are needed quickly, but they must be good ones. Some of the post-war schools are beginning to meet the requirements of new educational thinking, but some are unimaginative and inefficient.

The new conception of education demands a wider variety of space arrangements than now exists in most schools. The problem is how to get this variety, not for a single school but for a whole programme of schools in face often of a shortage of technical manpower and building labour. Traditional methods of construction, however suitable in some areas, cannot provide a general solution, and the need is therefore for new techniques, flexible enough to allow freedom to meet requirements.

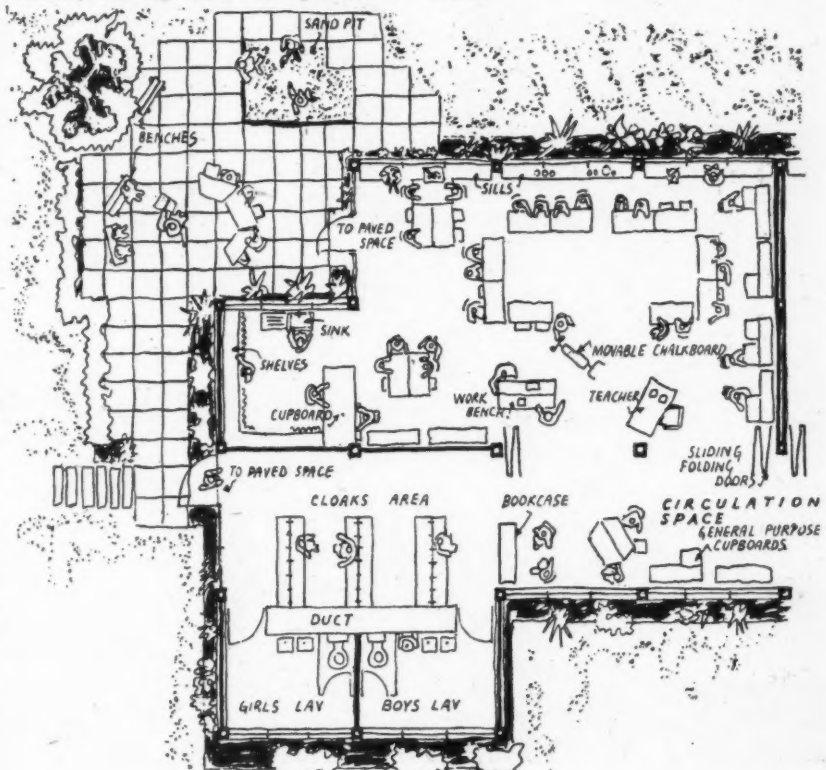
Standardization of structural components, such as beams, wall units and windows, will be necessary. These components will have to be so designed that they can be assembled quickly on the site by a small labour force, but it is emphasised that it

will only be possible to build with greater speed and economy if those concerned with school building are willing to accept new methods of construction, administration and co-operation with manufacturers.

The importance of visualizing the design of the school as a whole and not in isolated parts is stressed, and it is stated that in such a complex undertaking as a school building programme, a team of experts is needed, with an architect to maintain a balance, ensuring that each specialist is

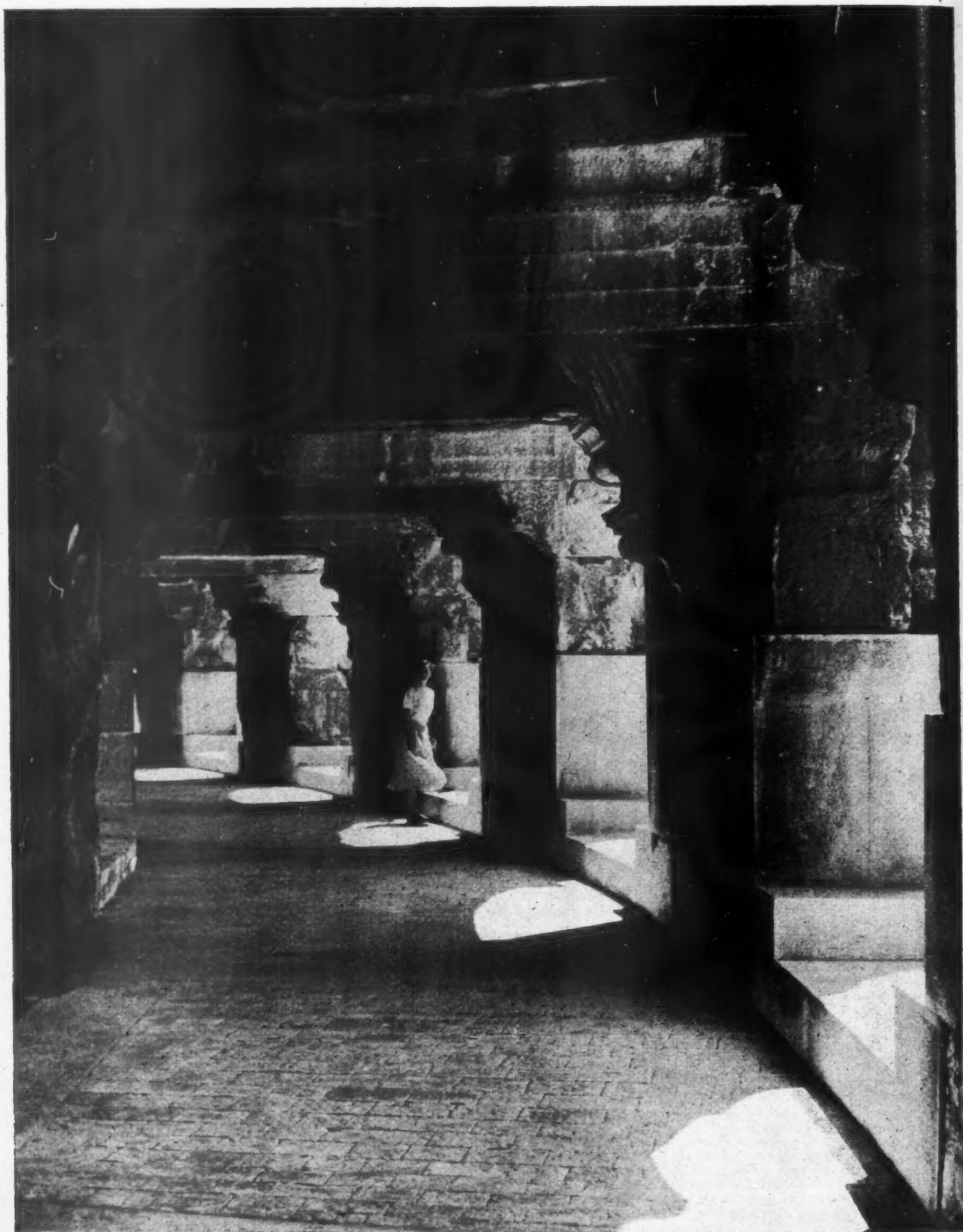
properly related to the whole. It is also recommended that there should be greater co-operation between educational authorities, in order to exchange ideas, information and visits, and the closest possible co-operation between the people who design the schools and those who are responsible for their organization.

Technical guidance, with sketches, is given on many aspects of primary school building. One of these sketches is reproduced below.



This diagram from the first of a series of Building Bulletins, which has just been published by the MOE (see news item above), is designed to illustrate the way in which an infants' classroom with its store, cloakrooms, lavatories, outside paved area and circulation area can be grouped to form a single self-contained unit. The minimum permanent subdivision between the different parts ensures the maximum use of the whole floor area, and facilitates supervision of a wide variety of activities. This unit, which is planned on the 5ft. 9in. grid could either be one of a pair, with central access, or a terminal unit of a short run.





### *Amphitheatre at Nîmes*

This photograph, which shows the first tier of the Amphitheatre at Nîmes, was taken by Jill Hopwood, an AA student, and is one of many displayed recently at Bedford Square by members of the Architectural Association's

Camera Club. It is, perhaps, of interest to note that the greater number of photographs on view, which were the work of students and AA members, were of buildings of historic interest rather than of contemporary work.

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## A COMBINED OPERATION for greater productivity in the building industry was called for by CHARLES KEY, Minister of Works.

The need for efficiency is greater than ever before, said the Minister at the annual lunch of the FASSC last Thursday. Replying to the toast of HM Government, proposed by W. R. Cowen, President of the Federation, Mr. Key said that this efficiency can be obtained by the architect making use of the information released by government research organizations. He was pleased to see signs that architects were at last interested in such matters. The contractor could contribute towards increased efficiency by using modern costing systems and by better site work. The task of the operatives was to increase output.

When proposing the toast, Mr. Cowen commented on the nomination of sub-contractors by the architect. "We in this Federation," he said, "stand by the practice. It must, we think, be open to an architect to say with regard to certain parts of the work which demand particular skill that he requires the services of a given firm. It is no part of our case, but rather the reverse, to deprecate competition to secure the nomination. There may be exceptional cases—and we leave it to the architects' professional organizations to define them—where an architect does not consider competition would be useful; but, generally, we think it useful, and an architect should invite competitive tenders, from amongst which he should select one for nomination. We concede, as a matter of course, that the competition should be open to the participation of any firm, whether primarily a specialist or not, always provided that such a firm puts in its tender at the same time as the other competitors and not subsequently."

## LECTURES at HAMMER- SMITH School of Building.

A special course of eleven weekly lectures on the structural use of steel and reinforced concrete, commencing Tuesday, January 24, at 7 p.m., has been arranged at the LCC Hammersmith School of Building and Arts and Crafts, Lime Grove, Shepherd's Bush, W.12. The lectures, which are intended to deal with the design of structures in accordance with BSS 449 (1948) and CP 113/114, will cover the main changes introduced into these publications, and particular emphasis will be laid on economy in materials.

The lectures will be given by:—Dr. Oscar Faber, Dr. H. Gottfeldt, Mr. L. Scott-White, Mr. L. R. Creasy, Mr. L. Freeborn, Mr. D. T. Williams. Admission to the course will be restricted to corporate members of the appropriate professional institutions, or holders of comparable technical qualifications. The fee for the complete course is £1 10s. Application forms may be obtained from the secretary of the School and should be completed and returned to him not later than January 9, 1950.

## NEWS IN BRIEF

Mr. Herbert S. Jarratt has been awarded the RIBA Diploma in Town Planning.

Mr. R. T. Walters has resigned his position with the Timber Development Association to take up the appointment of assistant architect to the Eastern Region of British Railways, at Kings Cross Station.

# HIGH STANDARDS AT LESS COST

**F**ACED by the fact that the majority of architects concerned with school building are making little progress in satisfying the country's needs, the MOE is publishing a series of informal bulletins\* to give guidance on educational building matters. The first, released last week, deals with primary schools.

Although written before the announcement of the cuts in capital investment for 1950, the bulletin largely anticipates this forced economy. For instance, in the bulletin the figure of £180 per school place is proposed as a reasonable cost for a school. The revised maximum figure, for 1950, of £170 per school place, though sufficiently severe a cut to ensure some revision, is, nevertheless, an economy which can be satisfactorily obtained provided that architects are in sympathy with the design and planning principles advocated by the bulletin. The cost of primary schools since the war has been on an average about £195 per head. The bulletin points out, however, that a number of schools of good standard have been designed for a much lower cost, and when proposing a saving of £15 per head on this figure it goes on to state that the Ministry's aim is to build more cheaply still and to raise standards at the same time. Clearly an eventual reduction in cost of another £10 per head was envisaged at the time of writing, but apart from advocating skilful and economic planning, little is said to indicate how these further reductions in cost are to be made.

The two obvious ways of saving money are by greater efficiency in planning and production, and by reducing standards. The latter method is one all architects shun and the JOURNAL has, in the past, repeatedly advised against it. Today, however, the answer certainly lies in a combination of both methods. Greater economy of time and effort in architect's offices, further standardization of structural components and equipment, bulk ordering, a comprehensive revision of the type of materials required and increased mechanization and technical efficiency on the site; these are the qualities which have already proved their worth. The schools of Hertford are an often quoted example of this method of economizing. Will this be sufficient to reduce cost to £170 per head, when carried out on a nation-wide scale? It is doubtful, the dreaded cuts in standards are inevitable. What is not inevitable, however, is a radical change in amenity. A slight reduction of the sanitary accommodation, and in the size and relationship of the dining, assembly, entrance and circulation areas may be sufficient to tip the economic balance, always provided that the many recommendations of the MOE's bulletin are strictly adhered to.

A far greater danger than the reduction of standards has been rife for some time, and that is the danger of inertia due to the

\* Building Bulletin No. 1. H.M. Stationery Office, Price 1s.

incapacity of some local authorities to overcome the considerable difficulties of starting a large school building programme. Confronted by rising costs and shortages of labour and materials, many authorities have failed to fulfil their obligations. It is to be hoped that the bulletin will be the cause of an awakening of renewed interest by all concerned in the task before them. The main theme in the Ministry's first bulletin is not, however, an economic one, but a restatement of the fundamental requirements of a primary school. The educational needs of children, in terms of space, fittings and furniture, in terms of physical comfort and of visual and mental stimulus are all carefully considered. The translation of these requirements into school design can only be made if architects work in the closest collaboration with the people who are to live in the schools and are responsible for their organization.



*The Architects' Journal*

9, 11, and 13, Queen Anne's Gate, Westminster, S.W.1.

Phone: Whitehall 0611

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

HUGH AND CRY

Architects and designers of the '51 Festival are bracing themselves against inevitable attacks. Already one arrow of criticism has sped out from the babel centred around the Tower and stands quivering in the correspondence columns on the next page. The Festival, to which the temporary preservation of the Shot Tower is entirely due, now stands condemned for vandalism! I have much sympathy with the point of view expressed. The Shot Tower is a building of considerable robustness and dignity, and it would be quite unsuitable to deck it out in exhibition frippery. Whether its value as a completely untreated "foil" would be appreciated by anybody, except fully trained "Sharra-wags," is perhaps open to question,

but there is possibly poetic justice—(or at least the basis of an ironic smile)—in the fact that the architect concerned was one of the earlier protagonists of 19th century architecture, is the author of a book in its defence, and now is accused of not treating one of his beloved monuments with the reverence it deserves. Perhaps Hugh Casson and his colleagues can be prevailed upon to answer this protest?

### AUTHENTIC

By now there are few, even on this side of the Atlantic, for whom the phrase "gracious living" does not conjure up visions of flushed, expectant brides kneeling reverently before a hope chest filled with concomitants of the gracious home-to-be, or tables groaning under highly kodacoloured food in a nimbus of the best silver and table linen. It seems that as much money is spent each year on persuading the American housewife that social disaster can only be averted by changing to "modern," by buying dimity curtains or by placing a hitching post at the front gate, as would have financed an old-fashioned war. I often wonder where it all leads. Is the standard of design in the average American home higher because of it?

\*

An architect-traveller recently returned from "The temple(s) of Mom" tells me that the standard is indeed high. Not only are there almost as many indoor plants as in Denmark, but a surprising amount of the furniture is not only "modern," but clean-limbed, graceful and well-made. Though a

coast-to-coast census might find the colonial style still predominating, there is little doubt it is fighting a rearguard action. Its trump card is Williamsburg, the "educative" influence of which is immense. The victories of "modern" (indoors) have been won mainly through the activities of a group of magazines with a colossal combined circulation. Aimed (as they now so accurately say) at mom—her hopes, fears and cherished desires—some of the weapons in these journals' extensive armoury are beginning to find their mark.

\*

What does the result amount to in terms of design? The most striking feature is symmetry. This is a characteristic that runs through American interiors of all styles. It is not uncommon to find each of the four walls of a room arranged with a symmetrical formality that would do credit to a design for the Prix de Rome—centred round a mirror, curtain, door, fireplace, sofa or *video* (television set); there will be pairs of armchairs, side tables, lamps and pots containing miniature ivy or philodendron. Another point worth noting is that extremely imaginative use of colour, which to Americans is not, as it is to the English, faintly improper unless muted. There is a welcome absence of cream, beige and fawn in favour of rich dark-coloured walls or well-designed wallpapers and bright-coloured fabrics.

\*

Taken all in all, in the average American middle-class home, the standard of taste, if it's taste you want—with all the differences that time and place impose, and with a small number of glaring exceptions—compares not unfavourably with that of the eighteenth century in England. The faults are similar, too, a tendency to monotony and the stereotyped. Whether the achievement is due to discrimination or a mild form of tyranny is something a quite interesting book could be written about, making use of the comparison with the 18th century's "Rule of Taste." But not perhaps, an appropriate subject for this column.

### THE NEW SUMMERSON

Everything John Summerson writes is worth reading; at the same time it is easy to read. No-one has the same



On the left is the latest work by Frank Lloyd Wright, a shop in San Francisco, which was described and illustrated in our issue for November 10. On the right, is Glassner House, Prairie Avenue, Chicago, designed by H. H. Richardson, and built in 1885-7.

capacity to put profound scholarship and serious philosophical argument about buildings into language that gives pleasure in itself. His new book, *Heavenly Mansions*,\* a collection of recent essays and papers, in spite of the miscellaneous subjects dealt with (they range from John Wood, of Bath, to the future of the modern movement) is held together by the level-headed, ironical detachment characteristic both of his way of thinking and his prose.

\*

I can think of no better Christmas present, either for or from an architect. It can safely be read during Christmas dinner, because the publishers have provided it with a new kind of plastic cover, guaranteed proof against gravy, cigar ash and port-type Empire ruby wine. I prophesy, incidentally, that one result of the book will be a revival of interest in, and admiration for, Viollet-le-Duc, Mr. Summerson's new hero.

#### WARWICK

The publication of the Abercrombie-Nixon Plan for Warwick reminds us how valuable such work can and should be to County Planning Officers. There was an idea abroad just after the passing of the 1947 Act that planning studies

of individual towns by private consultants would no longer serve any purpose. We can now see clearly that the reverse is likely to be the case, especially where towns of historical interest are concerned, or those that have a well-defined individuality.

\*

There can be little doubt that the plan for Warwick will be of inestimable value to the County Planning Officer of Warwickshire. It is unlikely that he or any other planning officer will be able to make a careful and sympathetic study of all the towns within his area before the statutory plan has to be submitted to MOTCP. Without such a study, his overall picture is likely to be something less than the best.

\*

The great value of having an architect to give detailed consideration to the visual aspects of planning will be evident to anyone who cares to study this book. In spite of the close connection of the publishers with this Journal, I feel impelled to say that the book is a model of its kind. The maps and plan for once are easy and pleasant to read and, miraculously, the colour registers are accurate. The photographic panorama of High Street and Jury Street makes one wish that many more cities of architectural quality were surveyed in a similar manner.

#### ELECTRIC AFTERTHOUGHT

A thought from Olympia.—Is it still essential, in this day of nationalized power, that every aid to higher output in the building industry must have its own built-in power unit? There is such a thing as electricity. It usually creeps in to a housing estate about the time when the first tenants arrive, and once there it is quite capable of doing the family wash. It is more than probable that if it were introduced into the estate at the time when the first sods were cut, it could also knock hours off the time spent by bricklayers and plasterers, and knock pounds off the cost of the equipment the builder uses—if he can afford it.

ASTRAGAL

## LETTERS

{ Christopher Arnold

{ A. C. Hazel

#### The Shot Tower

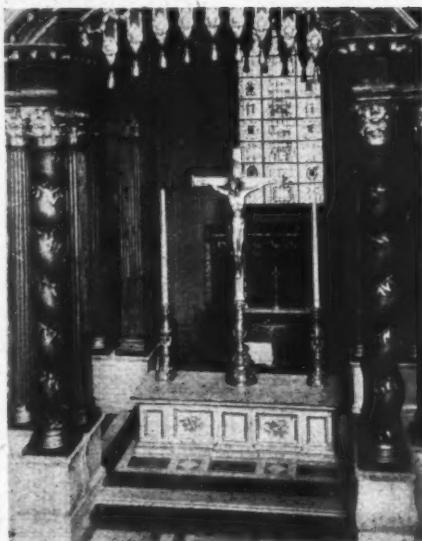
SIR.—The students of this School of Architecture believe that the architectural treatment of the Shot Tower proposed for the 1951 exhibition is both inappropriate and unattractive. We believe that the tower should be preserved in its present exterior form, except for cleaning and restoration, and it would thus serve both as a foil to the contemporary technical achievement of the "vertical feature" nearby, and as a pleasing and characteristic representative of 19th century London.

\*The Crescent Press. 21s. net.



## ST. PAUL'S NEW EAST END

Last week the JOURNAL published photographs of the model that has been put on exhibition at St. Paul's Cathedral to show the proposed reconstruction of the east end. These photographs illustrated the baldachino over the high altar which will replace the existing war-damaged reredos. Behind the altar is the apsidal chapel which is to be rededicated as a memorial to the American soldiers and airmen who lost their lives while based in Britain during the last war. Their names will be inscribed in a book which will rest on a marble lectern at the west end of the chapel, immediately behind the high altar, as shown in the photograph below. It is seen here framed by the twisted columns of the new baldachino. On the right is a view looking through the baldachino, past the high altar and into the American Memorial Chapel. The chapel will have its own altar, seen in the background, which will be flanked by oak stalls and panelling. The architects for the whole reconstruction scheme are W. Godfrey Allen (surveyor to the fabric) and S. E. Dykes Bowser. The model has been made by John B. Thorp.



We believe the treatment proposed to be a major error of taste, and as such unworthy of contemporary English architecture.

CHRISTOPHER ARNOLD,  
Chairman, Bartlett Society,  
Bartlett School of Architecture,

London

## The "Hazel" Domestic Boiler

SIR,—My attention has been drawn to a report made by the JOURNAL'S specialist about the "Hazel" boiler, which I have designed and which is being produced by CSA Industries Ltd. and featured on their stand at the Building Exhibition.

Your specialist merely quotes that the domestic boiler's central heating rating is 18,500 BThUs, which is correct, but he might have added that the hot water supply rating was 45,000 BThUs. In the same way, when mentioning thermostatic control, he omits to point out that there is a temperature indicator on the boiler, and the housewife can thus switch the boiler on or off as required by means of the control provided.

When the boiler is idling, i.e., when the dampers are closed, the water can be maintained at 120/130°, but such is the efficiency of the boiler controls and the air-tightness of the boiler construction that the "rate of recovery" or temperature rise when the dampers are opened is remarkable, and within a few minutes one can draw off water at a temperature of 165°.

Your specialist then goes on to say that "the absence of a thermostatic control makes the claim to efficiency of 75.9 per cent. at 25,000 BThUs surprising." We quite agree, the figures are remarkable, but nevertheless these are the figures supplied to us by the British Coal Utilization Research Association as a result of tests they carried out on this boiler. Your readers might like to know that a thermostatic control can be fitted, but at the moment I consider the present controls adequate for normal requirements. Your readers might also like to know that the boiler's efficiency when operated at 41,920 BThUs was 69.5 per cent., which is also extremely high.

The point we wish to emphasize is that these figures are correct, and we feel that the JOURNAL'S specialist might have so worded his paragraph that it could not be taken to imply that the figures might possibly not be correct.

The boiler has a number of other features which your specialist failed to mention. For example, the use of a large ash pan to seal the base of the boiler, thus ensuring air tightness. The boiler not only has a shaking-in grate, as mentioned by your specialist, but it also has a damping device incorporated. There is provision for a gas poker, and the flue nozzle is so designed that any dust can be removed without difficulty. Finally, your specialist compares the price with that—to quote his own words—"of a boiler only a little less than a magazine boiler of nearly twice the power." I can only assume that he is referring to the 25,000 B.Th.U.s which he mentions earlier in the same paragraph when quoting the efficiency. I would again emphasize that the total rating is 45,000 B.Th.U.s.

The whole trouble with your report, as I see it, is that a stranger reading it would get the impression that we were claiming too much for the boiler, and it could not possibly be as good as we say it is, and I only hope this letter will indicate to your readers that the boiler is everything we claim it to be.

A. C. HAZEL

Chandlers Ford

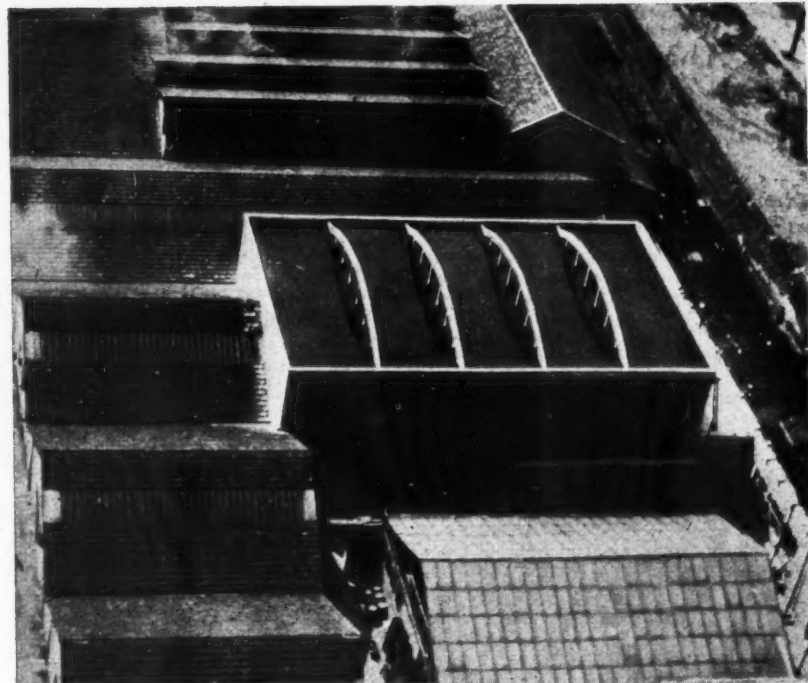


## RECENT EXAMPLES OF WATERPROOFING WITH WATER TANKS

The use of water, in a reinforced concrete tank, as a roof covering, though far from being original, is sufficiently rare to merit attention. These photographs of buildings in France show the latest achievements in this field. The process was evolved by G. Haymann, a French engineer, and he claims that this technique has considerable advantages over more traditional methods. The following is a summary of Mr. Haymann's description of the benefits inherent in this type of roofing.

**TEMPERATURE.**—This is constant, compared with normal roofing. In winter, when the temperature varies between 5 deg. F. and 0 deg. F., it is possible, over a period of three weeks, for ice to form to a depth of eight or nine inches. As the depth of the water in the tank is never less than 12 inches, this leaves three or four inches below the ice where the temperature may well be over, or equal to, 32 deg. F. Under a traditional roof, the temperature will sooner or later attain the same low temperature as outside unless the building is very well heated. Similarly, in summer the roof keeps cool by evaporation when the temperature under an ordinary roof approximates to the temperature in the sun.

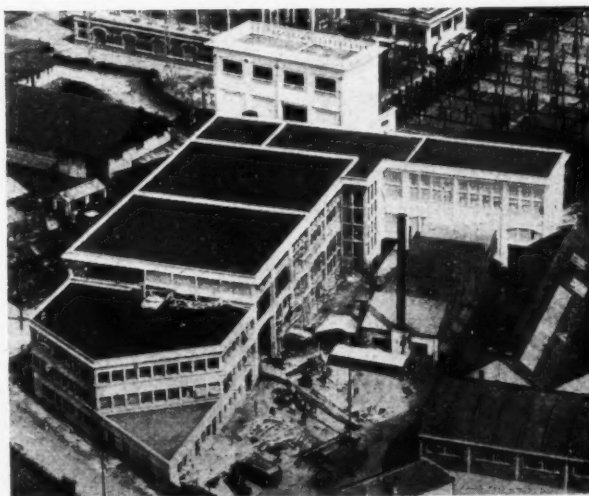
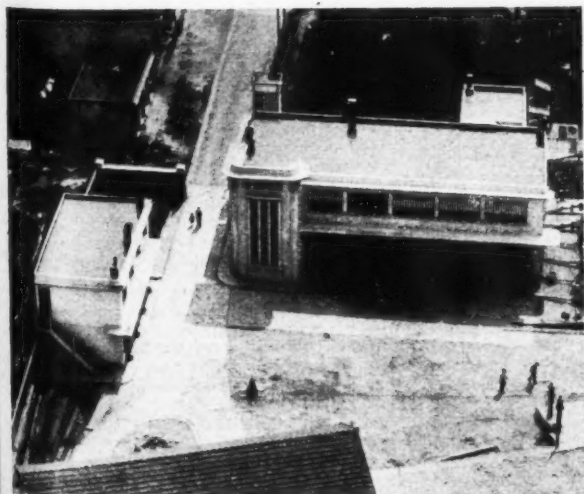
**WATERPROOFING.**—The continuous presence of water on the roof, resulting in constancy of temperature, means that cracks due to rapid expansion and contraction do not appear. When the walls have been adapted for icy conditions, little deterioration can take place. The concreting technique is identical with that used for ordinary water tanks and reservoirs.



**MAINTENANCE.**—For satisfactory use, it is necessary to keep the water at overflow level. Pure water should not be used, because of its dissolving action on the lime in the concrete. Lime should be added to the water to bring it to over 6 hydrometric degrees. The tank should be emptied once a year for cleaning with a broom and clean water. Compared with a traditional fitted roof, the tanked roof has the following advantages. There is no danger of snow penetration. Heavy falls of rain are easily absorbed by a small rise of the water level. There is little maintenance of drains, and none of gutters and flashings. Risk of fire is minimised by the water cover, firstly because there are no inflammable elements and secondly because there is a constant reserve of water at the top of the building.

**COSTS.**—This lessening of fire risks naturally leads to a saving on fire insurance. It is claimed that this, together with the fact that practically no maintenance is necessary, and that the reinforced concrete basin does away with all woodwork, steelwork, zincwork and all forms of roof covering, such as tiles and slates, results in a saving of at least 15 per cent. of the total cost of the building on which the system is used.

The accompanying photographs show some recent applications of the process described. Above, a wine warehouse at Nevers. Below, left, buildings, also at Nevers, for the Société d'Applications Industrielles du Béton et du Béton Armé. Below, right, factory for an industrial electric company at Fourchambault.



## NEW TOWNS AT HATFIELD & WELWYN

A precedent was created in the field of town planning on October 31 when the draft master plans for the new towns of Welwyn Garden City and Hatfield were submitted to Mr. Lewis Silkin. Although these plans were independently prepared by Louis de Soissons and Lionel Brett, they were otherwise dealt with by one development corporation. This was done in order that, although each town would have its own individual identity, the planning of each would be related to the other.

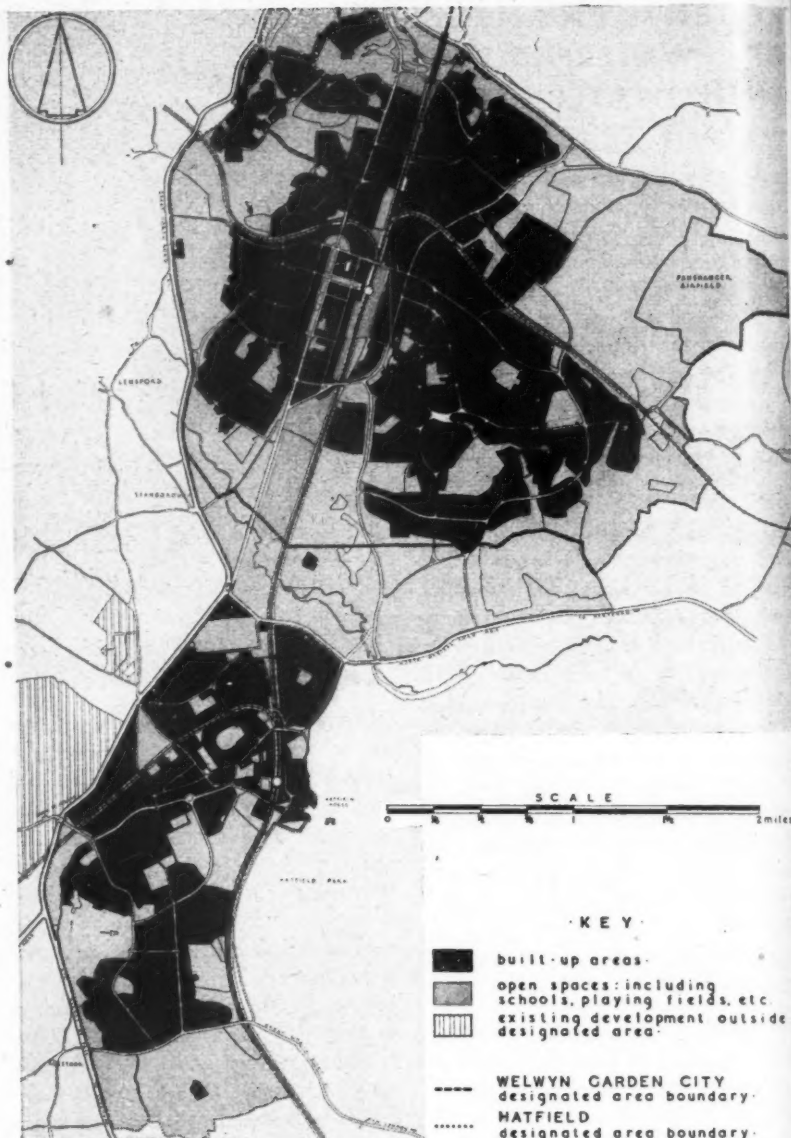
A prefatory memorandum to the planners' reports points out that in one respect the existing towns are similar and differ from the existing development in the other new towns proposed for the Greater London area. In both towns industrial development is far ahead of housing. Large numbers of workers travel to work in Welwyn and Hatfield from outside the towns. But although the towns are similar in this respect, they differ in others. Welwyn Garden City, which is entirely a creation of the last thirty years, was planned from the start, and has a wide variety of industries. Hatfield, on the other hand, consists of a closely knit old town to the east of the railway and a larger development to the west, which is the unplanned development of the last fifty years. The industries of Welwyn are entirely within the designated area, but the majority of those at Hatfield are just outside it. And whereas the Garden City has no continuous urban development adjacent to the designated area, with the exception of a few houses on the Great North Road at Stanborough, development of a substantial kind exists at Hatfield, on the west side of the Barnet by-pass, and must of necessity be considered to form part of the ultimate urban area. For these and other reasons, the planning problems at Hatfield were found to be more difficult to solve than those at Welwyn Garden City.

### WELWYN GARDEN CITY

One of the most interesting points in the Garden City plan was the suggestion that provision should be made for a balanced proportion of people of the various income groups in order to secure a balanced residential development. This suggestion is reported more fully in the following summary of the report by the planner, Louis de Soissons, who has been responsible for the planning of Welwyn Garden City since 1920:—

The designated area for the new town of Welwyn Garden City covers 4,231 acres. This is bounded on the west by the Great North Road and on the north by the Hertford-Welwyn road. The existing railway line pattern virtually quarters the designated area. (The four areas thus formed, which can be clearly seen on the plan on this page, will subsequently be referred to by their geographical location.)

Very broadly, this plan proposes the following: (i) Major extensions to the existing residential development in the NW and SE areas, the rounding off the existing residential development in the SW area and the construction of a new residential unit in the NE area. (ii) Extension of the existing industrial area in the NE and SE areas. (iii) Reservation of an area for gravel extraction. (iv) Completion of the town centre within the boundaries already prescribed by contiguous development. (v)



Amendments to some existing road junctions and improvements and widening to bridges crossing the railway. (vi) Completion of the major north to south industrial traffic route to make connection in the north with the Hertford-Welwyn road and in the south with the North Orbital road. This latter junction to be at a point convenient to the proposed link road to Hatfield. (vii) The provision of a large area for playing fields in the flat ground to the east of the town and immediately to the north of the Hertford branch railway.

### THE FOUR AREAS

The NE area will be a completely new residential unit and will accommodate approximately 4,600 people. Factories adjacent to the residential unit will be of the sectional type and will be separated from the nearest houses by a tree belt. Links from this area to the NW area and the town centre will be provided by a new road crossing over the main railway line, by an improvement of the existing road under the

viaduct and by the existing bridge at Black Fan, which will be for the use of cyclists and pedestrians only.

It is proposed to increase the population of the NW area from 1,100 to approximately 8,200. A unit centre will be placed in the centre of the new development in view of the fact that the existing built-up area is in close proximity to, and is served by, the town centre. In addition, when the central area is more fully developed, its attractions to the existing development will be even further increased, so there would be no occasion for the existing residents to go to the unit centre for their daily shopping.

The SW area is, in the main, fully developed, and it is only proposed to provide accommodation for an additional 1,200 gross. This will be done by infilling and rounding off and tidying up the fringe development, using, in the main, existing estate roads and services. Part of the residential development will take place on the present town football ground, which is not well sited. A space will be reserved here with a view to increasing shopping facilities. A site to



the south of the playing fields has been considered as a possible site for a regional hospital, which, because of its position, could serve Welwyn, Hatfield and the surrounding district.

The existing built-up part of the SE area will be subject to certain clearances in order to free the main north to south industrial traffic route from residential development. These proposals will, in due course, reduce the population of the existing area by about 2,000 persons. Some 10,200 will be accommodated in the new development, thus making a total of approximately 18,000 for the whole of the SE area. Existing development is mainly weekly rented property, and in this area particularly efforts will be made to introduce a fairly high proportion of monthly rented and privately owned dwellings. New development will comprise, in the main, compact groups of housing broken down by the introduction of green wedges running right into the area and providing green ways into the open country. A new unit centre is proposed and shopping facilities will be increased. On the western boundary there will be a small industrial area where, it is suggested, distributive industries which require space for stocking materials might be located.

The residential development of the SW boundary has been planned to keep to a minimum the entrances on to the main industrial road. The maximum of open space has been left between Welwyn Garden City and Hatfield New Town.

#### RESIDENTIAL DEVELOPMENT

It is proposed that the population of the town should be brought up to 39,000. The new residential areas have been planned for a mixed grouping of dwellings, with the number of persons varying from 22 to 38 per acre at an average net residential density of 32.7. In order to provide for a balanced proportion of people of the varying income groups, the existing and proposed dwellings have been divided into three main categories—weekly rented houses, houses of the "monthly rented type" (larger or built at a lower density), and houses which are privately owned or detached. Most, but not all, of the houses of this last type will be detached or semi-detached, though a certain number in particular areas may be in terraces. Generally, they will be larger than the monthly rented type, built at a lower density and, for the most part, will be on sites having special amenity value. These divisions are approximate only.

#### TOWN AND UNIT CENTRES

The plan provides for a town centre, four main unit centres and four minor unit centres.

Part of the town centre has already been built. Investigations made to date indicate that the buildings to be accommodated in the central area will have to be as follows:—Extensions to offices for UDC; divisional offices for the Herts CC police divisional headquarters; court house and offices for branches of government departments; accommodation for a town theatre with rehearsal room for music and drama; halls for permanent and temporary exhibitions and chamber music; a large meeting hall for general purposes; a county college and adult education centre; a central library; swimming bath; billiard saloon; cinema; suites of rooms for hiring; and a group of commercial buildings. The two existing industries, which manufacture paper and silk, will remain on the edge of the Town Centre.

In addition to the four projected main unit centres (one in the NW, one in the NE, and two in the SE), which will accommodate shops, communal buildings, licensed premises, etc., there are four minor centres. These will serve the needs of those people who are some distance from the main units.

#### HATFIELD

While Welwyn Garden City has a long planning tradition which helps the planner to solve his problems, the ancient town of Hatfield provides many difficulties because of its sporadic development. The project here will not, strictly speaking, be a new town. It will, in fact, take the form of a controlled growth of the existing town of 8,500 population to a population of 25,000. Lionel Brett, the town planning consultant to Hatfield, points out that the town is a traffic island and that its possibility of expansion is limited by the projected North Orbital road (beyond which is the green belt separating Hatfield from Welwyn), the Barnet by-pass on the west (beyond which, and outside the designated area, are the de Havilland and other factories), and the railway skirting Hatfield Park on the East. Mr. Brett's solution to this problem is made clear in the following summary of his report:—

The direction in which Hatfield should now expand depends on two main factors: (a) natural and artificial barriers, either existing or imminent; and the view taken of their relative importance; (b) the location of the town centre. The barriers are railways, motor roads, floodlands and airfields, exposed ridges, north slopes, first class agricultural land or scenic areas. Limits of expansion are rigidly set by main motor-ways on the north and west. There is comparative freedom of expansion on a narrow front towards the south, and some limited possibility on the east. Within these limits the decision on the town's precise boundaries is best reached by working not, as hitherto, from the outside inwards, but from the inside outwards. In other words a centre of gravity must be found. Organically, the first nucleus of the town should be its centre. But Old Hatfield cannot be so used, for it is, compared with the rest of the potential building area, on the wrong side of the railway; it lacks space for expansion and is, above all, out of scale with the town it would have to serve.

A northern site was considered for the new centre on a flat hilltop east of the waterworks. But in spite of the advantages of using this site it would be a long uphill climb from Birchwood and from the estates beyond the by-pass, and its buildings might present hazards to the use of the nearby airfield.

The choice was finally made in favour of another site, the straggle of shops, inns and houses which lie on the town's existing bus route on the St. Albans road. Economically, the creation of a new shopping centre in competition with existing ones is always hazardous, particularly if it must for some time remain on the fringe of new development. It is always better in principle to improve what exists than to write it off and start again. Its new status as main shopping centre would give St. Albans road an incentive for redevelopment without which it must remain unworthy of the new town. And then again, the ease of reaching this centre on level roads from nearly all directions has seemed decisive.

A town of 25,000 should be within easy daily reach of its centre. By filling out

to the by-pass on the west, to the North Orbital in the north, and by placing a neighbourhood on the Ryde side to the east, it becomes possible to accommodate the whole town at a moderate density without building too far south. This leaves the north slope clear and retains high ground surrounding Parsonage Farm as a screen between Hatfield and Welham Green. The radius from the centre, in spite of the necessarily elongated shape of the town, is no more than 2,400 yards. The urban area is of approximately 1,650 acres and has an overall urban density of 15.1.

#### ROAD PATTERN

The road pattern of this new town has to be contrived so as to offer no temptation to through traffic to take short cuts across the town, and to enable local traffic to move rapidly about the town. These requirements are to a great extent in conflict. This fact, with the weight of long distance traffic pressing upon the town on all sides, makes Hatfield's road pattern the key to its planning.

Many main road changes are proposed, the most important of which is that the old Great North Road, which now severs Old Hatfield from the rest of the designated area, should be "stopped off" at the junction north of the town and traffic led around the by-pass to rejoin the Great North Road by a new road along the southern fringe of the new town, to which a useful southern entrance would thereby be provided. There would then be no main traffic road separating the new town from Hatfield Park.

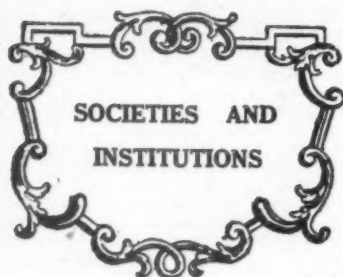
#### THE TOWN CENTRE

The new town starts with the great advantage of having an existing centre. The centre will grow naturally out of what exists and will avoid the suggestion of a "model community." The main buildings which may be allocated in the centre are a town hall, and council offices; petty sessional court; labour exchange; offices for branches of government departments; police station; assembly hall; theatre; hotel; central library; club; cinema; restaurants; health centres; and youth centres. These will fall into two groups, administrative and social, about 100 yards apart, the first with its predominantly daytime use, being close to the station and buses; and the second, with its predominantly evening use, being more closely related with the town park. An existing allotment area will be retained to allow space for unforeseen expansion of either group.

#### INDUSTRIES

Although Hatfield is unique in new towns in that it already possesses, within a mile of the town centre, enough manufacturing industry to support its ultimate population, a lack of balance suggests that efforts should be made to attract small-scale service and craft industries, particularly those requiring female labour. Twenty-one acres close to the two main shopping centres have been reserved for small workshops.

Neither of the reports includes an exact programme for the development of the two towns, because the timetable largely depends on the question, not yet settled, whether they shall be drained to the Lea Valley or the Colne Valley. But at Hatfield work on 200 houses is to begin soon and at Welwyn Garden City a block of 46 flats will be started before Christmas and 126 houses early in the new year.



*Speeches and lectures delivered before societies, as well as reports of their activities are dealt with under this title, which includes professional societies, trade associations and government departments. To save space they are represented by their initials—see front cover. Lectures cannot usually be reported in full, but the extracts given are in the speakers own words.*

TPI

## G. A. Jellicoe

November 28, at Livingstone Hall, Broadway, Westminster. Extract from paper on PLANNING AND THE LANDSCAPE.

**G. A. Jellicoe :** An immediate pre-occupation in town planning is undoubtedly with what lies within the urban fence, and what lies without; and indeed what is the physical nature of the fence itself. It is probable that market gardening, orchards, and allotments will combine with playing fields to fill the green spaces between neighbourhoods, and it is certain that local authorities in the interest of maintenance will restrict small parcels of public open spaces to the minimum. In these areas I hope a haven will be provided for all those individuals who would normally live in the country but who have been inevitably chivvied into the urban fence. How rich and beautiful such a landscape can be is suggested by the works of Stanley Spencer, for whom it had a peculiar fascination.

The Abercrombie and Nickson plan for Warwick is the latest study of the urban fence. The new fence has been thrown round what might be described as excrescences, and the shape has been simplified. There is definition between the urban interior and the country surrounding, and there are the beginnings of a perimeter road curving round the north east. In the Hemel Hempstead Plan of 1947 the urban fence was wholly delineated by a perimeter road; no one approved of this, and I sometimes wish there was a classification of "multiple purpose" roads, in cases where "through" and "local" traffic together justified such a one-sided road, but separately did not.

But if and when there is this intensive agriculture within the sphere of the city, then it may cause the claustrophobia which the green lungs were intended to overcome. Then I think there may be one of those pleasurable outbursts that occasionally happen in English history,

when the planners are thrown over (unless they have sensed the emotion) and the heart of the city torn open as it were by accident by the phenomenon and attraction of a powerful adjoining landscape.

### NATURE AND THE ENGINEER

Here I would like to submit that when the geometry of a city is broken as if by accident, the cause of the accident must satisfy the intellect that it is sufficient to stop and divert the fierce simplification of the engineer. The preservation for its own sake of the original character of a little stream, for instance, is not to me nearly so convincing or splendid as when the stream gives the impression that it had stopped the activities of man; a stream, for instance, that is liable to flood. On a grand scale, one calls to mind London and the wasteful winding Thames, Edinburgh and its rocks, New York contained within its water boundary, and San Francisco laid out on a grid that is hopelessly disrupted to the contours. All these cities have a magic of their own.

I think that the theoretic area of public open space devoted solely to romantic landscape is likely to grow less. The confined central park of the nineteenth century and of the garden city has in recent years tended to give way to amenity strips and large areas of parkway dominated and sterilized by roads. I think there may be a concentration again towards an open space within the city, for this has limitless value as a social centre. I hope, however, that this will not be wholly a gilded cage of landscape, but either physically or subconsciously a part of that wild world beyond the urban fence for which a small part of each one of us still biologically craves.

A precise example of such a plan is that prepared for Wellington in Shropshire in 1947. The phenomenon of the Arkell and the Wrekin is so formidable that it was inevitable that the idea of these hills should penetrate to the centre of the city, where there is to be a rest garden. This force had already been recognized by the location of the public park, and by the natural tendency of the population to stream out in this direction on Sundays and holidays.

Every day we read of a clash in the use of the countryside, a clash between those interested in development and those interested in preservation. The tragedy of the 'forties has been that both parties have seemed to be in the right, and it has fallen to the uneasy lot of the Minister of Town and Country Planning to adjudicate between them. We all of course know the cause of this dilemma, the transformation of a leisurely rural and garden-like England that we have all come to love into a crowded backyard where every inch of ground must be made productive.

The fact is that there are twice as many people in the British Isles as they can comfortably feed; and these same people are each using per head many times more timber, cement and gravel; more water; more power; and indeed more of everything than the natural resources of the country can comfortably provide. So we have had more intensively to exploit our recurring resources, and make a more vigorous attack also upon our capital resources. Hence come changes on all sides, symptoms of enforced production: conifer afforestation, quarrying, open-cast-mining, reservoirs, roads, power stations, and so forth.

It seems to me that these changes are symbolic of the greater change that has come over western civilization during the last hundred and fifty years, a change that has culminated in the release of atomic energy. The physical surroundings with which we have grown up, and which we are individually associated and which we have regarded as constants, are after all

found to be subject to transformation by the mind of man. For centuries after Breughel painted his country scenes, the humanized landscape never changed because all the advances and improvements were those of the hand rather than the mind. Let us consider what transformations we must expect through the activities of this irresistible mind of ours: (i) The rationalization of agriculture. This may mean more geometry in our landscape, but provided the sciences of ecology are understood, this need not disturb us unduly. (ii) Owing to mining and quarrying the old immovable hills may disappear and reappear in new forms. We are accustomed to change of landscape in two dimensions, but not in three. The two studies that are urgently required here are firstly the re-use of so-called waste, and secondly the re-use of worked-out ground. (iii) The landscape will no longer be humanized, but subject to a diversification of scale that is beyond comprehension. Sir Kenneth Clark has drawn attention to the significance of this aspect of the modern world in his book *Landscape into Art*, and has detected a response to it in such painters as Graham Sutherland.

### COMPROMISE IN SCENERY

The arts of landscape to reconcile an industry in a romantic countryside are obviously in their infancy and much can be done in the creation of a compromise scenery. But I am convinced that it is only a revolution in our attitude to landscape that will solve our problem. I feel that the great cycle of the romantic landscape is complete, and once more we are at the beginning when we should look upon our land as they looked upon the hard wood forests of the middle ages or indeed as a farmer looks upon his fields today. All physical matter, whether hill or plain, or river, or vegetation, is potentially a source of wealth to support the English civilization and individual way of life.

AA

## Discussion

November 23. At 34, Bedford Square, W.1. Discussion on PUBLIC ARCHITECTURE broadcasts given by Frederick Gibberd, Percy Marshall, and R. Furneaux Jordan on the Third Programme. The chairman was R. Furneaux Jordan.

**Frederick Gibberd :** I would like to dispose of two remarks made by Jordan: he talked about "beknighted RA's designing Georgian banks in the 'thirties," but nearly twenty years later the Ministry of Works are designing Georgian post offices. He also asked whether it was economical for thirty health centres to be designed by small practices. There is not much in it economically, because if you want creative design, you must have small design units of five or six people; and I am not convinced that it is cheaper to break down a big department rather than go to several private practices. In any case it is a monstrous idea that thirty health centres should be designed by one organization.

The only advantages offered by Marshall in favour of the large official practice, which we all agree is bad, are that it allows consumer research to be done and standard components to be designed, and it can be a good publicity agent. I think that standard components are a job for such bodies as the Building Research Station and the manufacturer himself; consumer research is best done by sociologists, and publicity is the job of the public



relations officer; and all three can work just as well with the man in private practice as with the official architect. If the architect in the large office can have complete freedom of self-expression and direct contact with the client, then I will accept the large office; but I do not think that those conditions can be fulfilled.

**Percy Marshall:** In the past, the proportion of buildings designed by architects has been lamentably low, and most local authorities used to feel that they could employ only one technical officer as a statutory appointment. He was usually a municipal engineer, because municipal work started with drains and slowly worked upwards. We now also have a chance to do the housing which was formerly done by the speculative builder, and, as the local authorities are doing this work, we must see that architects are in a position where they can do it.

Very often the individual architect thinks only of the individual building and, in the past, by considering only the design of his own building and trying to express himself or the commercial needs of his client, he has often contributed to the breakdown of the good appearance of our towns. It is not true that the architect is concerned only with design; his job is very complex. The chief architect may be concerned largely with broad problems of co-ordination, with team leaders as responsible architects in the office.

**G. Goulden:** If you have at the head of a public office a good administrator who is prepared to divide his office up and have good team leaders, I see no reason why the official office should not work admirably, but you will have to pay the leaders of the teams higher salaries than local authorities are usually prepared to offer. In one large town in the north housing has been taken from the architect and given to the engineer, to avoid, it was said, having to pay two people £1,700 a year; and the chairman of the housing committee referred to the RIBA as "that haughty trade union."

**Henry Braddock:** I think that it was wrong to put this discussion on the air. We all, official and private architects, have the same aim—to act as servants to society to the best of our ability. Our ability depends on the excellence of our training, and the training of architects in this country is only now beginning to pay dividends; it started in earnest after the first world war, and the men who were trained then are only now beginning to come into their own.

Since the end of the last war, the general set-up in this country has changed completely, and as a profession we are not keeping pace with it. We have to solve, as Jordan says, the problem of the individual in a collective society. We must make up our minds what we want, and then work as a united body, with faith in ourselves and our purpose, to achieve it, and not argue about it in public. I should like the AA to take the lead in this; we are in a position to discuss these problems and come to definite conclusions. We can influence those who govern us if we know what we want and fight for it.

**K. Campbell:** I disagree with almost all of the earlier part of what Braddock has said. One reason why the RIBA is referred to as "that haughty trade union" is because it tends to take that line. Honest controversy between architects is a good thing to put over the air, because it lets people know that there are architects in the world, and that those architects are alive and are concerned about important things.

I cannot see where the great advantage comes in working in a team in a private office just because your principal has freedom of action. That does not mean that his assistants have that freedom; the leader of a team in his office cannot say, "I don't think this is a job we ought to do; can't we give it back?" I think that there is something basically unsound in any profession where the basis of an office is that the principal lives on the margin between what he gets from his clients and what he pays out to his office.

I changed some years ago from one of the best private offices in the country to a public office, and, having done so, I am convinced that, given an equally good office, the sense of co-operation and teamship in a public office cannot be beaten. In the public office you have the feeling of all working together with a principal who is himself a servant, like those under him. The private office is dying, along with other social forms.

By and large, public authorities have their own architects' offices because they find that they can build more economically that way. They will enable us in the long run to produce the right kind of buildings more economically and more efficiently.

**L. M. de Syllas:** On both sides, official and private, there is still a very serious battle to be fought about the sort of architecture that we are to do, and not only the way we do it. Neither official nor private architecture has a proud record in this field; both have reached "all-time lows." I agree that historically the day of the private architect is over, but public architecture has still a long way to go. The private architect has still a contribution to make, so long as he is prepared to experiment in forms of co-operation with the public office and will help to give it that degree of flexibility which is ultimately attainable but has not yet been attained.

**P. Shepherd:** It is unfair to private architects to say that they are dominated by the profit motive. The true architect is dominated by the desire to design buildings in the way in which he thinks that they should be designed, and most architects who go into private practice do so to give themselves more time for designing buildings and to have to spend less time convincing people how it should be done.

We must focus attention on the technique of architectural design. Architectural education is better than it has ever been before, and is producing people who understand that technique, but sending them into offices not organized to take advantage of it. That is the main reason for going into private practice, where the architect will be part of a team.

**Stirrat Marshall:** Gibberd maintains that the very large public office tends to steam-roller humanity out of its occupants and turn what might be architecture into mere building. The chief problem of any large organization which tries to create anything is to ensure that the units of which it is made up are human in scale, from nuts to new towns; it is one of the big problems of our time.

I do not see why you cannot organize your office how you like, provided you have the confidence of your clients. It is quite unnecessary for the public office to be a gigantic horror; it depends entirely on the quality of the architects in that office, and the manner in which you, the architect, devise its organization.

**Thurston Williams:** Gibberd says that one advantage of being in private practice is that the architect does not have to accept jobs,

and can choose his clients, apparently taking the view that public opinion is not worth considering. Some private architects can choose their clients and their jobs, and this results in bad architecture in many instances, because there is no control over what is put up. In almost all cases, on the other hand, the public architect is responsible to the people who are going to use his buildings, and if they do not like them they can protest.

**Frederick Gibberd:** We are apt to forget that architecture is an individual problem. When all is said and done somebody has to sit down at a drawing-board and design the building; give it aesthetic expression, and that designer cannot keep more than six or seven other people busy. I see no distinction between the official architect and the private practitioner. All I say is that official architecture has a tendency to create bad conditions for creative design. I referred in my broadcast to the large pyramidal structure of the local authority. We are told that it can be broken down, but from what I have seen of local authorities I am not convinced that it can be.

**Percy Marshall:** One reason why we must urge the best of our young architects to go into public service is that there is considerable danger of the public office being regarded merely as a sort of post office, with a bureaucrat sitting there and saying to his committee, "You had better give this to Tom, and this to Dick." That is not the way to get through our big programmes.

As for private architects not necessarily being more expensive, the public office with a planned programme has a continuity of work before it, whereas the private office has to think where the next job is coming from, and the next job may be only a little house.

**R. Furneaux Jordan:** There are two points that I want to make, and both arise out of what Braddock said. He raised the question—and I have sympathy with him—of whether this discussion should have been broadcast. Now, I said at a recent AA meeting that prefabrication and official architecture were two things which I should like to see banned from all future discussion at the AA. But before broadcasts take place there is some conversation with officials of the BBC, and they, more than we, have their fingers on the public pulse. This discussion was put on the air because it is already in the air, and when a controversy is in the air it is possibly healthier to discuss it in public than to pretend that it is not there.

Braddock also said that on this matter the AA should come to some conclusion. I do not quite know what he meant by that. I should like to see the RIBA clarify its ostensible neutrality to a greater extent, but I think that the AA School, through its student body, is continually expressing its opinion on this issue, not through a declared policy but through actual statistics of employment. The division is not between private and official architecture; the division is an architectural division. Many of them are very pleased to work for Frederick Gibberd; they are less pleased to work for Mr. X. Many of them are very pleased to work with Percy Marshall, but not to work in the office of the local authority of X. They express their opinions on this issue on an almost entirely architectural basis. That, on the whole, has been the sense of the discussion to-night, and I do not regret it taking place, either in public or here.



Main elevation  
to Wigmore Street

# SHOWROOM, WIGMORE STREET, W.1

BY ELSOM AND PEARLMAN

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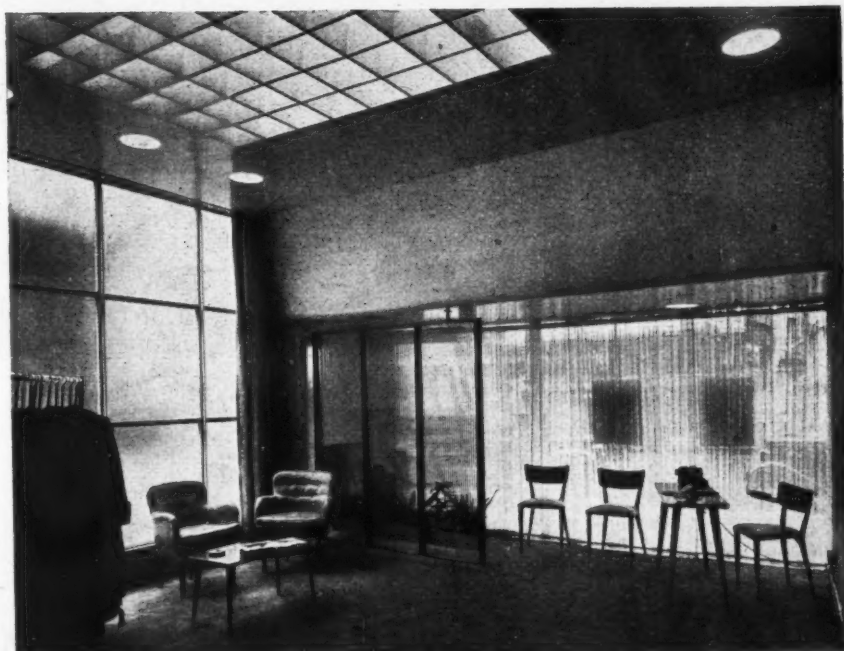
Right, top: the screen of hardwood and fluted glass with flower box, which separates the main entrance from the showroom. Below: the window to Wigmore Street. The glazed area of the side elevation is on the left.



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

**GENERAL.**—This showroom for a coat manufacturer was constructed within the confines of a war-damaged shop which had been temporarily repaired by windows in squares of glass instead of a normal plate glass front. The conditions laid down by the client were that the showroom should be large and have a small entrance lobby. This was done by means of false ceilings of varying heights, and the separation of the entrance from the showroom by the use of a large glass and timber screen. Normal lighting is provided by circular flush fittings in the ceiling, and lighting for the display of coats is supplied from an egg-crate fitting containing fluorescent tubes, suspended from the ceiling.

**FINISHES.**—The whole of the new front is of bronze. False ceilings are of fibrous plaster. Decoration is in pastel colours and wallpaper completely covers one of the walls. The screen behind the entrance is of fluted glass in a hardwood frame. All floors are close carpeted. The general contractors were Messrs. H. N. Barnes, Ltd.







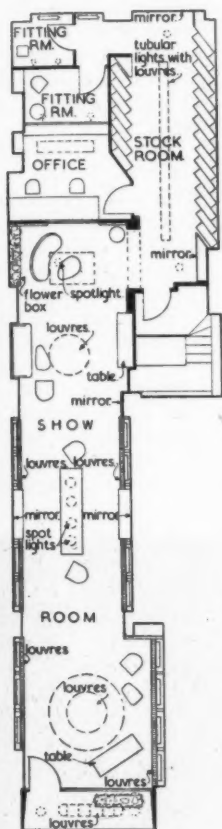
*The shop front.*

# SHOP IN OLD BOND STREET, W.I.

DESIGNED BY MICHAEL RACHLIS



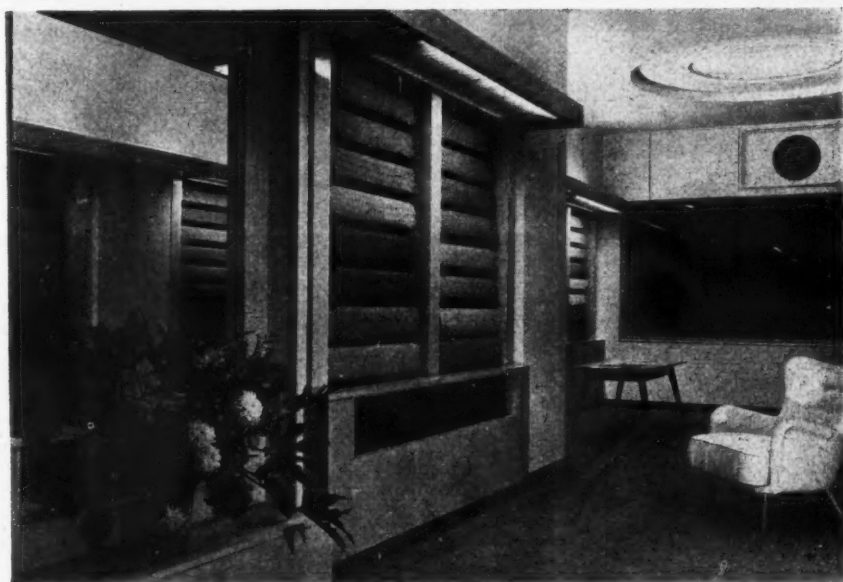
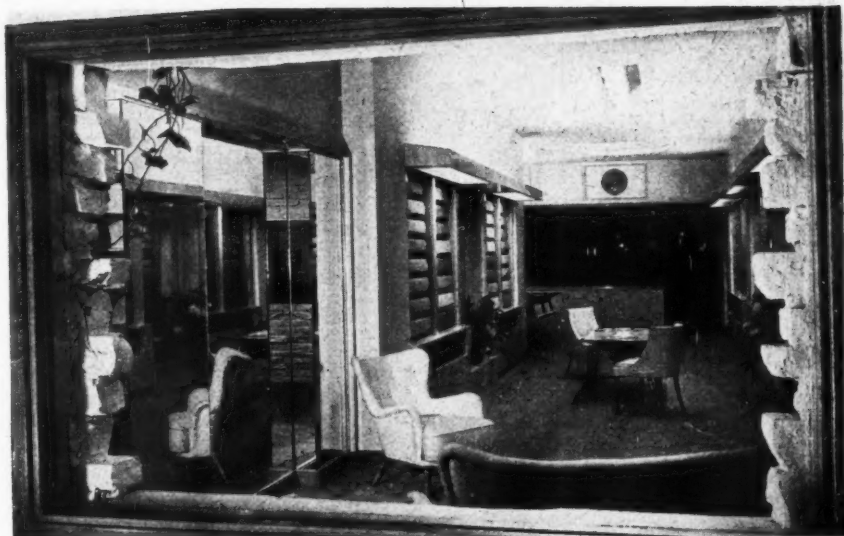
Right: top, the showroom looking towards the street, seen through the office window; centre: the showroom fittings with the materials displayed on 6-in. square dummy rolls placed on shelves of English sycamore; bottom: the entrance to the stock room seen on the right of the office window.



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

**GENERAL.**—This retail shop was constructed for the firm of Hunt and Winterbotham for the display of cloth. The shop comprises a showroom, stockroom, fitting rooms and offices. The front is recessed 4-ft. and no window display is provided as the whole showroom is open to view by the public. The showroom has a standard arrangement of 6-in. square blocks in racks for the display of fabrics. The stock room is accessible to customers, and rolls of material are shown at an angle so that the assistant can see the labels and records, while the customer can view the goods to the best advantage.

**ELEVATIONAL TREATMENT.**—The lower part of the recessed entrance bay consists of a window





*Left, the wall at the end of the showroom which is built of white-washed Cotswold stone and contains the office window. Below, the showroom seen from the entrance. The lighting of the showroom is both direct and indirect.*

in a polished wood frame in front of which stands a tall, portable flower box. Above the recess is the firm's name in free-standing letters lit from behind.

**FINISHES.**—The exterior recess walls and soffit are in teak with paving of travertine. The fascia and letters are plastered. The interior walls and ceiling are plastered, the latter finished pale blue. The fitted carpet is beige. The end wall of the showroom is whitewashed Cotswold stone and has a window into the office. Indoor plants creep up this wall and up wooden poles to the left of it. The shelves are in English sycamore. The chairs are covered with bottle green and yellow material.

The settee under the office window is vermilion. On one side of the showroom, by the office, the wall is of mirrored glass to give an impression of greater spaciousness.

**LIGHTING.**—The interior is evenly lit by direct and indirect lighting. This shows the materials in the nearest possible approach to daylight. The cloth rolls are lit by tubular lights set behind aluminium louvres designed so that each louvre can be removed individually for cleaning. The lighting consultant was Anthony Juer. The general contractors were H. N. Barnes, Ltd. For list of sub-contractors see page 661.



S H O P   I N   O L D   B O N D   S T R E E T



*The main entrance to the Sir William Whitla Hall, from the north-west.*

# HALL IN BELFAST

DESIGNED BY JOHN MACGEAGH  
CONSULTING ARCHITECT: EDWARD MAUFE, R.A.

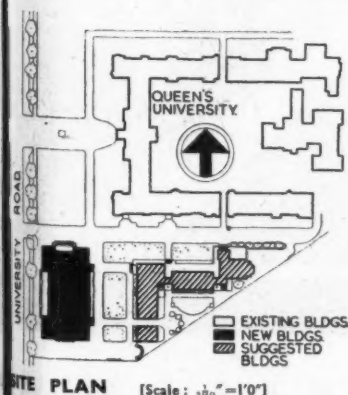
**GENERAL.**—The purpose of the Sir William Whitla Hall for Queen's University of Belfast is to provide accommodation for examinations and public gatherings

associated with the University. The internal arrangements are, therefore, planned to suit several requirements. Building was begun in 1938 and the brick structure remained incomplete from 1939 until materials for finishing became available a few months ago.

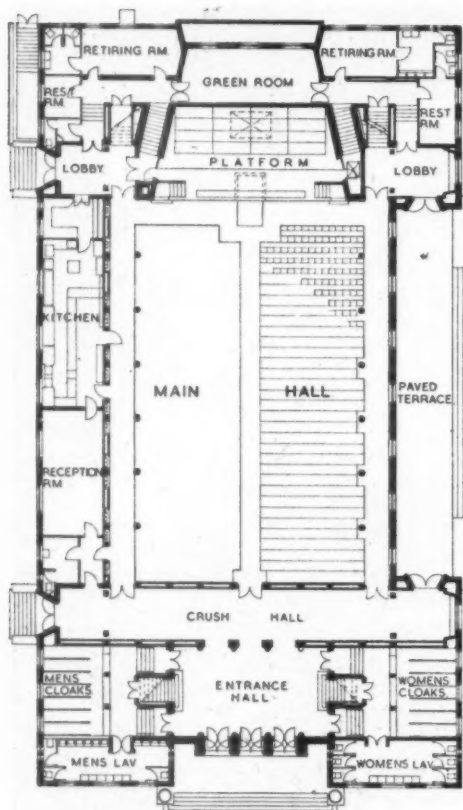
further 100 seats for choir, orchestra or other gatherings. Reception rooms, service kitchens and retiring rooms are adjoining. Rooms are also provided for lantern, film and sound projection with storage accommodation under the platform and in the basement. The enlarged Mitchell organ, which was previously in the old Great Hall has been transferred to the new building. The organ is encased in a chamber behind an oak screen at the rear of the platform, while the console is detached to slide out in front.

**PLAN.**—The position of the hall is in the south-west corner of the precincts. The entrance front overlooks the University forecourt, whilst the west front faces on to University Road. The service entrance and private entrance to the vice-chancellor's reception room are on the east front. The hall has seating accommodation for 1,500 people distributed on the ground and gallery levels. The platform can accommodate a

**CONSTRUCTION.**—The building is of steel frame and reinforced concrete. Brick walling is faced with English hand-made rough-



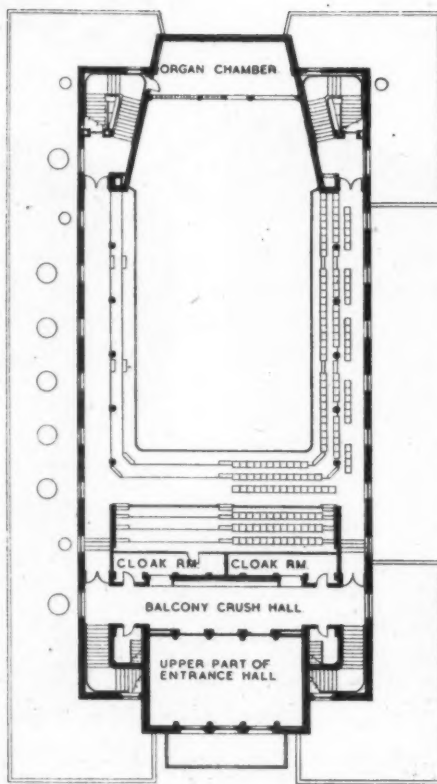




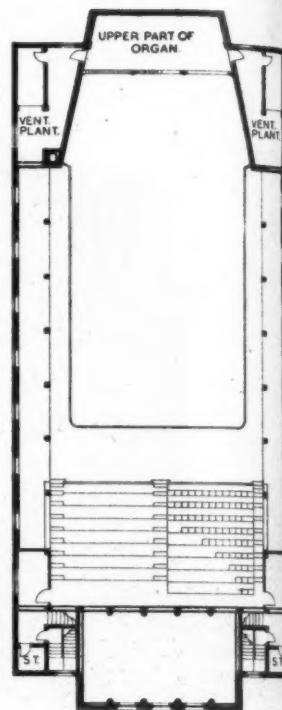
GROUND FLOOR PLAN

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

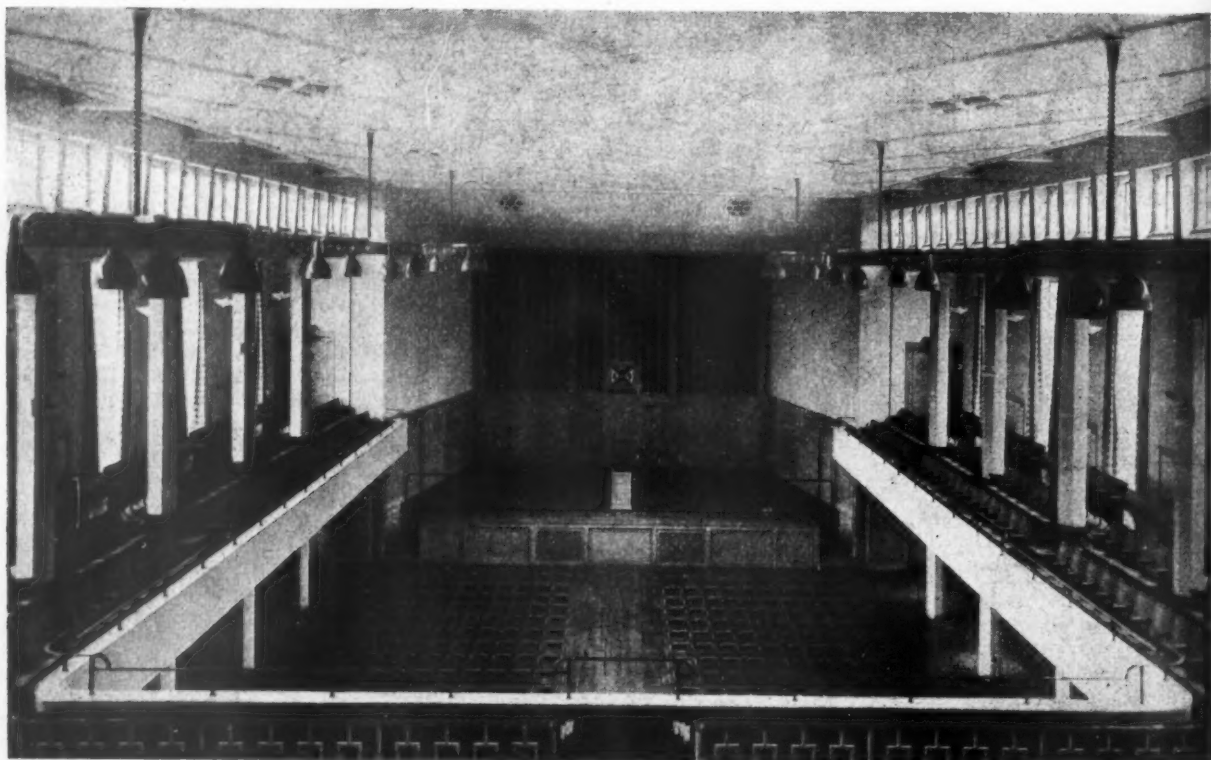
The main hall, looking towards the platform, showing the organ screen.



BALCONY PLAN



UPPER BALCONY PLAN



A S S E M B L Y   H A L L   I N   B E L F A S T



Right: top, the main entrance hall, showing one of the staircases to the balcony crush hall; bottom, the balcony crush hall.

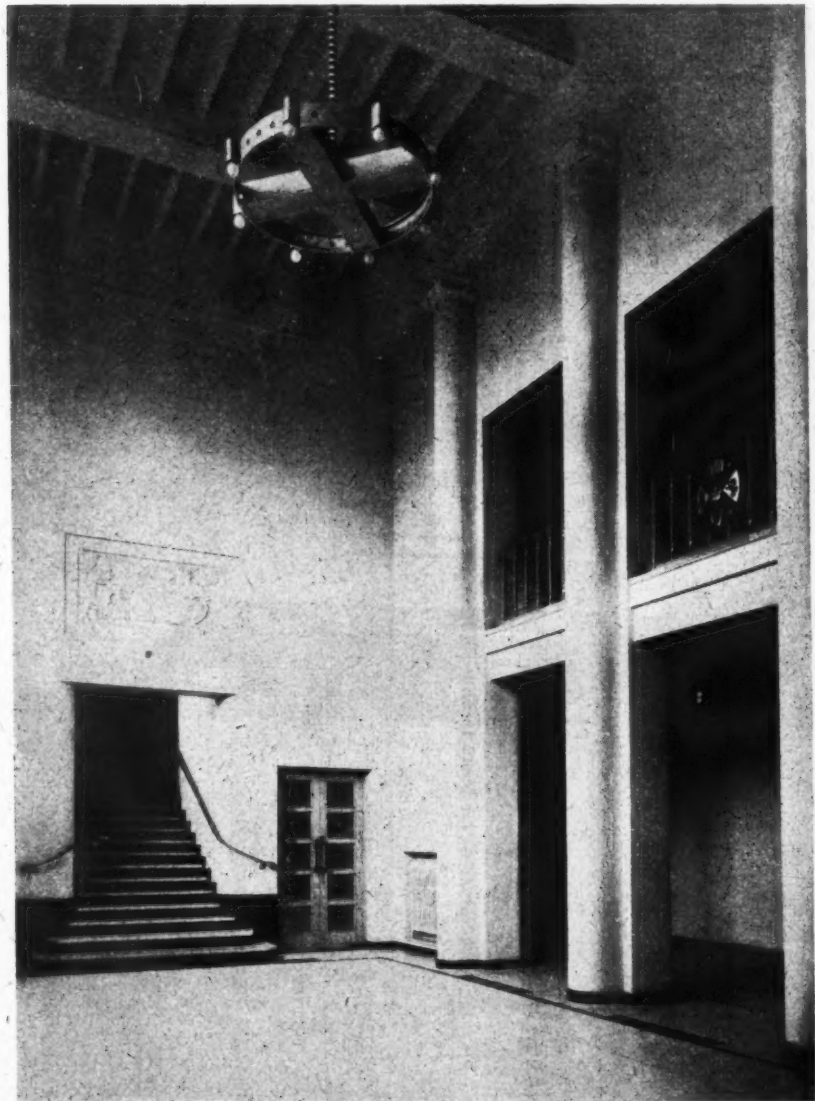
surfaced bricks. Clipsham stone was used for the surrounds of windows and doorways, and for roof copings and plinth walls. York stone was used for pavings.

**FINISHES.**—The plan, form, section and constructional features of the interior are on traditional lines with the walls of plain rough grit plaster, flat painted, together with a certain amount of acoustic tile surface. The ceiling of the entrance hall and the plaster diaper pattern ceiling of the auditorium will have specially designed colour decoration at a later date. The floors of the entrance and exit halls and the staircase are finished with a combination of travertine terrazzo, black Belgium and cream travertine marble. The surrounds of the doors in the entrance hall and the inscription stone are also of travertine marble. The floors in the crush halls, lobbies and the gallery area are covered with mottled beige rubber. The ground floor is of oak boarding. Walls at this level are panelled with English oak, finished silver grey. The panelling terminates as a high dado on the walls of the platform. The organ screen of silvered oak incorporates the carved and painted arms of the University. Floors in the retiring rooms are finished in cork and wood blocks. The auditorium colour scheme includes silver-grey oak, cream plaster walls, and blue chairs, window hangings and electric light fittings.

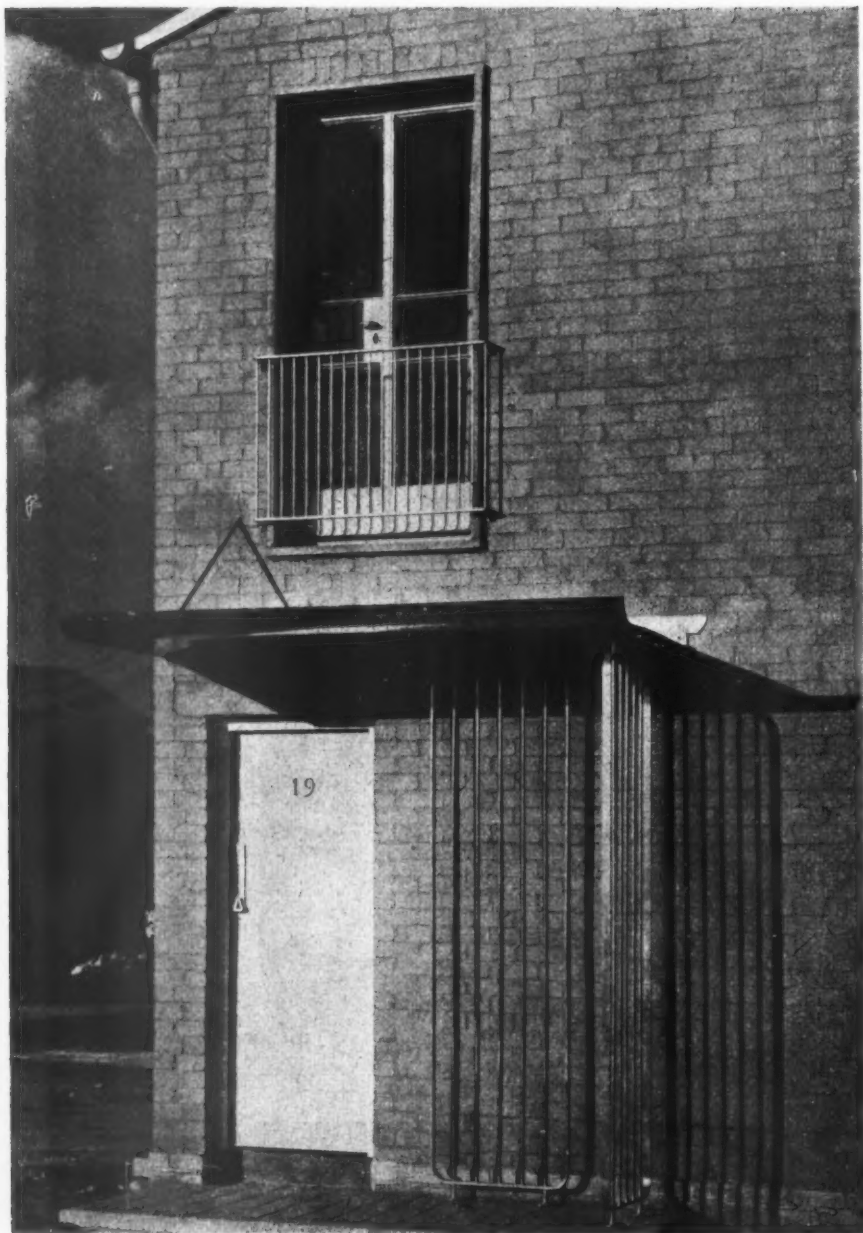
**SERVICES.**—The lighting is a combination of normal and fluorescent lamps and the design embodies the saltire of the University Arms. Concealed lighting is placed in channels in the plaster ceilings. Heating is provided by solid fuel boilers and there is controlled ventilation.

**CONSULTANTS.**—Constructional engineers; E. P. Wells, Cocking and Meston. Electrical engineers; Westlake Parkinson and Partners. Acoustics; Hope Bagenal. Quantity surveyors; W. H. Stevens and Sons. Sculptors; Gilbert Bayes and Morris Harding.

The main contractors were F. B. McKee & Co., Ltd. For list of sub-contractors, see page 661.



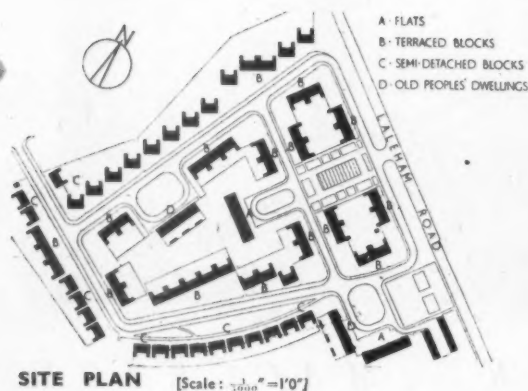
DESIGNED BY JOHN MACGEAGH



Single-type house doorway and balcony, with aluminium canopy, trellises and railings.

# HOUSING AT SUNBURY-ON-THAMES

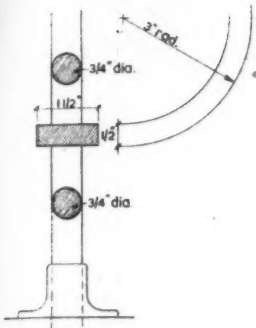
BY BASIL SPENCE AND PARTNERS



**GENERAL.**—This new estate in Laleham Road, Shepperton, Middlesex, is on a flat site of 15½ acres. There are two blocks of flats, houses arranged in pairs and terraces, and old people's dwellings, totalling 164 dwellings in all. The following details are an addition to the short general report on this scheme in our issue for November 3, 1949.

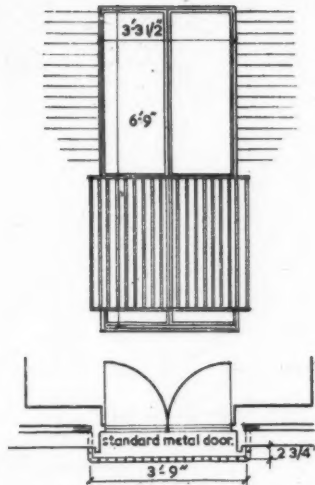
**CONSTRUCTION.**—New features

used include roofs, balcony railings, canopies and trellises of aluminium. The aluminium roofing, which is a patent of the sub-contractors, has a 20-degree pitch and effects a saving of timber and brickwork both at the gable ends and at party walls. The 22 gauge, 2-ft. wide aluminium sheets are laid on ½-in. fibre board, over 2-in. × 1-in. battens at 2-ft. centres, on 5-in. × 2-in. rafters at 3-ft. centres. Window boxes have been

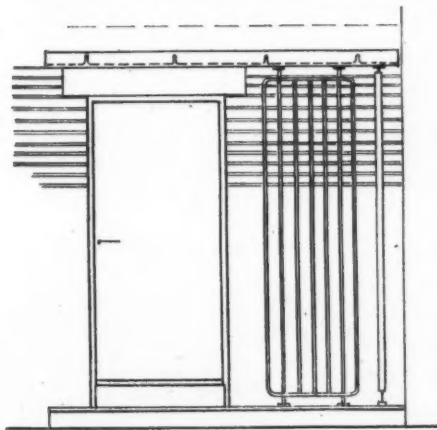


DETAIL OF RAILING TO THE WINDOW

[Scale: 1/2 Full Size]

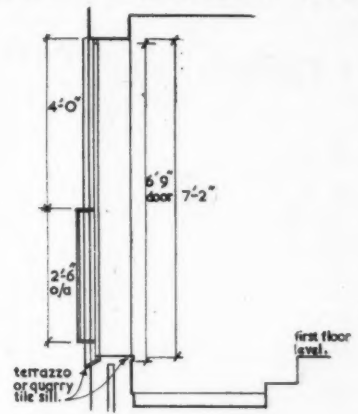


PLAN AND ELEVATION OF WINDOW

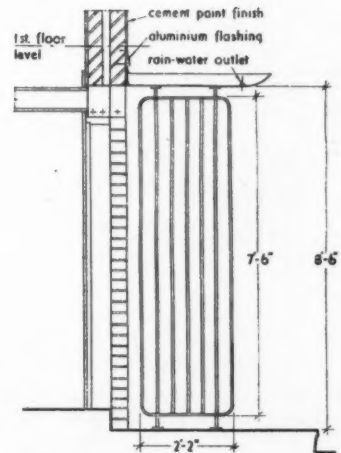


ELEVATION OF DOORWAY TO THE DWELLING HOUSES

[Scale: 1/4\"=1'0\"]



SECTION THROUGH WINDOW

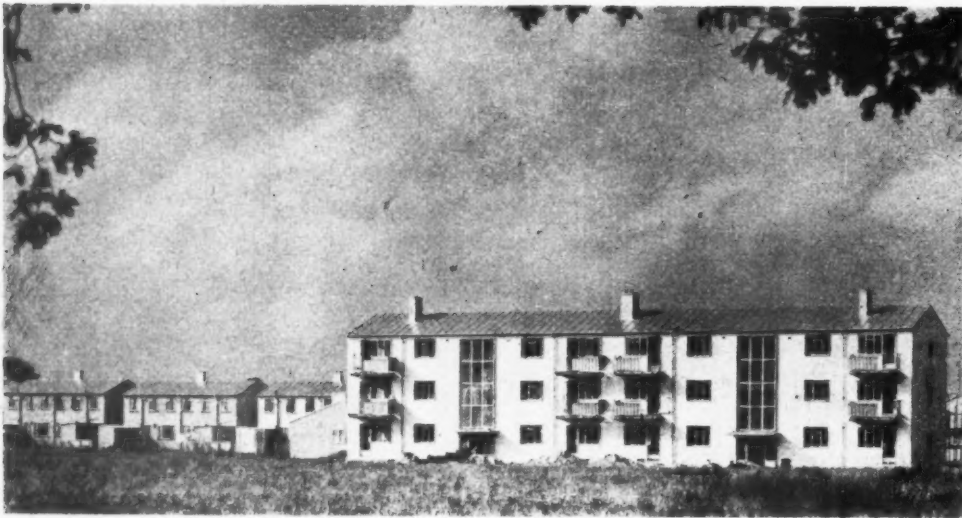


SECTION THROUGH DOOR

Below, the old people's homes on the estate at Sunbury-on-Thames. Details of the aluminium roof construction are shown on the following pages.

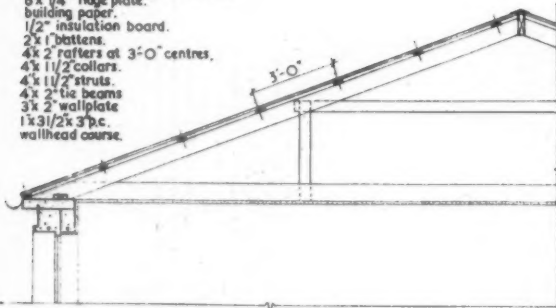




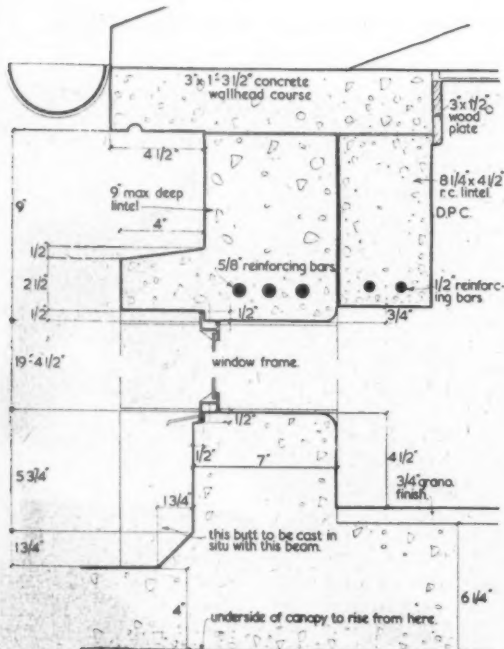


Left: a block of flats from the east.

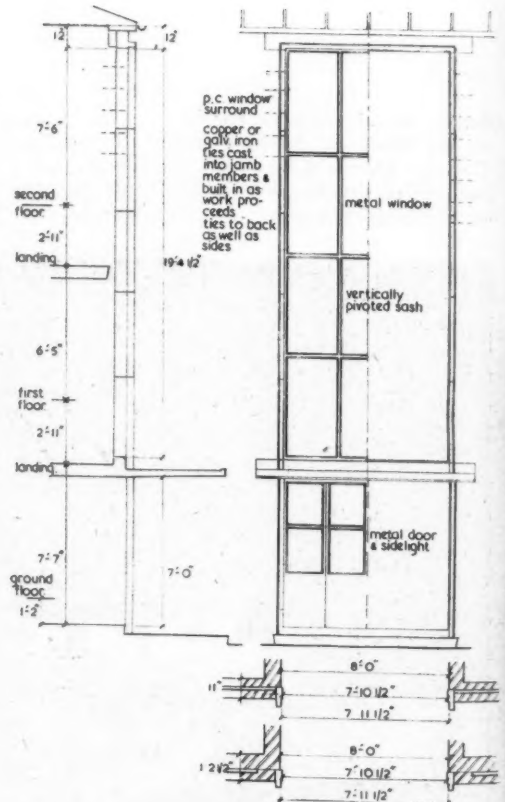
22 s.w.g. aluminium roofing rolls.  
6x 1/4" ridge plate.  
building paper.  
1/2" insulation board.  
2x 1" battens.  
4x 2" rafters at 3'-0" centres.  
4x 1 1/2" collars.  
4x 1 1/2" struts.  
4x 2" tie beams.  
3x 2" wallplate.  
1x 3 1/2x 3" p.c.  
wallhead course.



SECTION OF THE ROOF TRUSS ON THE DWELLINGS [Scale: 1/4"=1'-0"]



DETAIL OF STAIRCASE WINDOW [Scale: 1/2"=1'-0"]

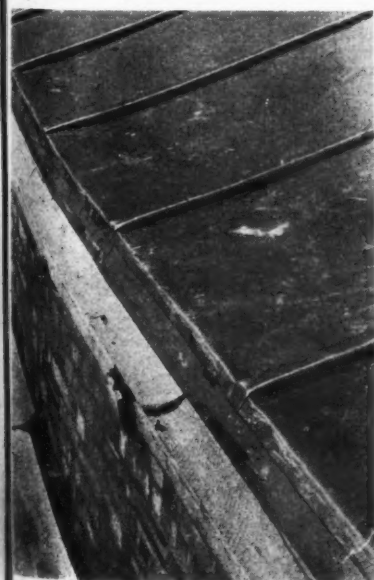
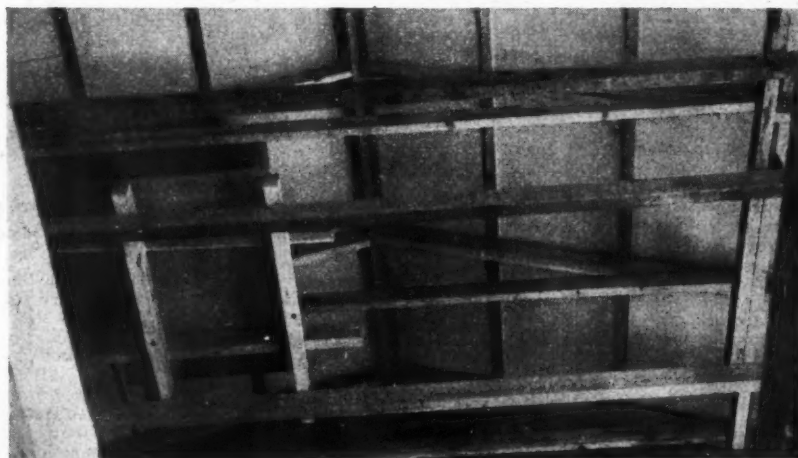
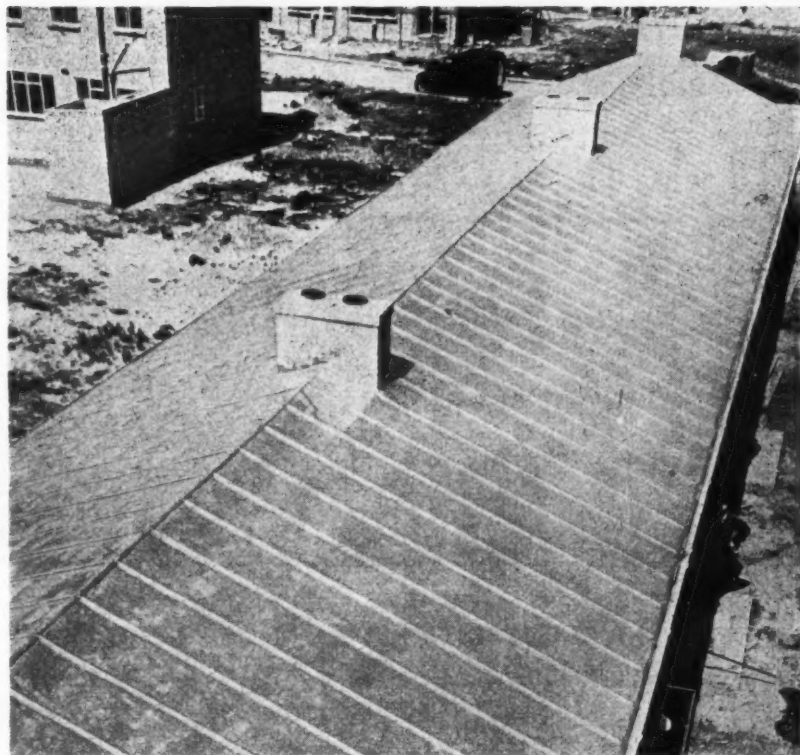


PLAN, ELEVATION AND SECTION OF STAIRCASE WINDOW IN THE BLOCK OF FLATS [Scale: 1/4"=1'-0"]

# HOUSING AT SUNBURY-ON-THAMES



Top: the aluminium roof of the old peoples' dwelling. Centre: detail of typical timber house roof with 20 degree pitch. Bottom, left, detail of eaves and guttering to aluminium house roof; right, fixing the joints of the 22 gauge aluminium roofing sheets.



provided for the balconies of the flats and for the living room windows of the old people's dwellings. The flats have 15-in. cavity walls on the ground floor and 11-in. walls at other levels. Non-load bearing walls are breeze blocks. Link walls screen the house gardens from the street. Timber floors in flats are sound-proofed with bitumen-bonded fibre glass insulation.

**FINISHES.**—The external brickwork of common flettons is colour washed. The doors are painted in a variety of colours. All the interior walls and ceilings are plastered and distempered in light shades and the woodwork is painted to suit the various internal colour schemes used. The living room fireplaces were specially designed by the architect with tiled surrounds and terrazzo mantelpieces. The general contractors were C. & S. Telling, Drinkwater & Partners, Gee & Co. (Contractors), Ltd., Henry Day (Merton), Ltd., John Farmer (Builders), and the Co-Partner Building Operatives, Ltd. For list of sub-contractors see page 661.

BY BASIL SPENCE AND PARTNERS

INFORMATION CENTRE · INFORMATION SHEETS  
QUESTIONS AND ANSWERS · CURRENT TECHNIQUE  
THE INDUSTRY · PRICES · TECHNICAL ARTICLES

## TECHNICAL SECTION



### PRESTRESSED CONCRETE

Report on lecture by E. FREYSSINET

Far from being the exclusive domain of the structural designer, prestressed concrete is of direct concern to the architect. To quote M. Freyssinet: "... there is no field of construction—and I say this after considered thought—to which the idea of prestress does not bring possibilities of solutions often unthought of..." What is the advantage of these solutions? The saving of steel is the basic advantage, but there are quite a few others which affect the architect even more. The reduced cross section, for instance, often means a considerably reduced dead weight of the structure, more headroom and more useful floor area. These indirect effects are, of course, of particular importance where long spans are to be covered. But, even in very small concrete units, prestressing has proved a spectacular success, especially, for instance, in the mass production of floor beams and prestressed concrete sleepers.

The architect may further ask whether this modern method of construction is confined to civil engineering and bridge building. The answer is emphatically no, and readers of the JOURNAL will be aware of a number of buildings and a variety of other structures recently erected in prestressed concrete in this country and abroad. A three-storey building for HM Stationery Office at Edinburgh is at present under construction, perhaps the largest application so far of this method of design in Great Britain.

It measures 220-ft. × 120-ft. and the estimated saving of steel is said to be 60 per cent. compared with a steel framed structure. Photographs of this job were shown by the Ministry of Works at the Building Exhibition.

In addition, in the case of long-span hangars, locomotive sheds, and water reservoirs (see illustration below), the prestressed concrete design has shown itself superior to alternative methods of construction.

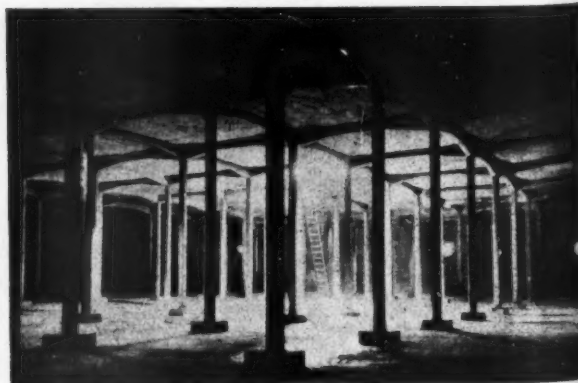
To use non-orthodox methods in any field of construction requires the pioneering spirit which M. Freyssinet obviously possesses to a remarkable degree. Whenever a design attempts to depart from classical ideas or tries to introduce revolutionary

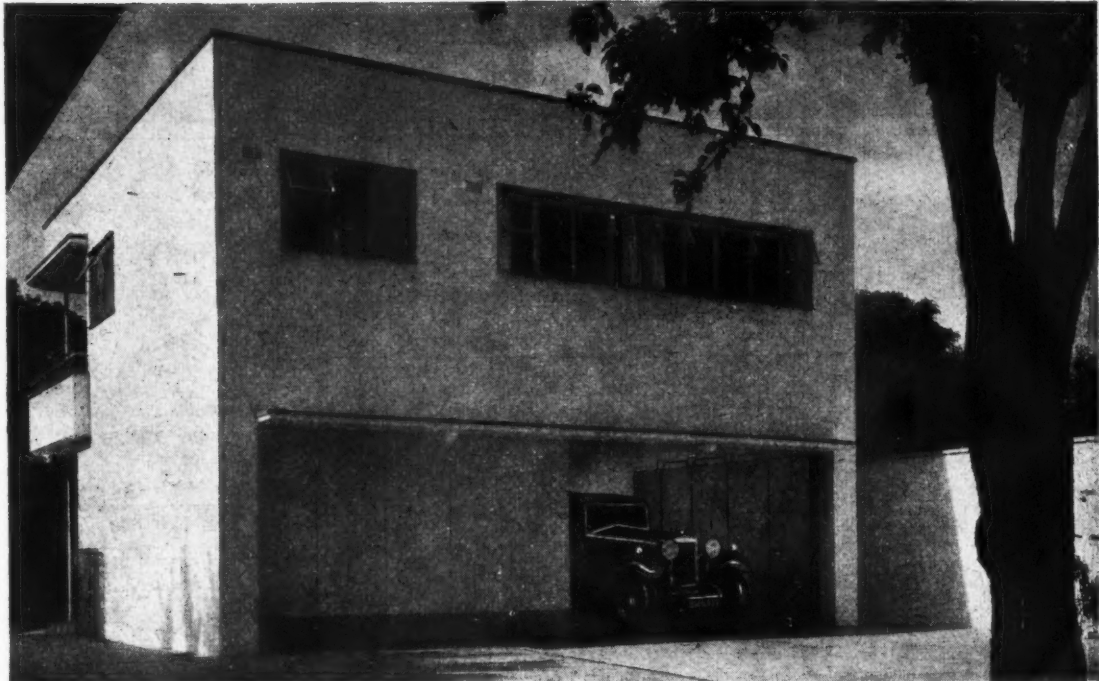
Three bridges over the Marne were recently built by Freyssinet's methods, and the erection of one of these at Esbly was shown in a film at M. Freyssinet's lecture at the ICE.

The illustrations, left and below, give some idea of the method of fabrication and assembly. The precast prestressed concrete units, built in the yard, are loaded into river barges, shipped to the site and lifted into position. Bottom, a reservoir in prestressed concrete at Orleans.



methods the authorities always ask for precedents to show that structures of this kind have been built before. Inventors and pioneers are hopelessly handicapped by this attitude. M. Freyssinet realised how fortunate he was when, in 1934, he submitted his entirely novel scheme for saving the nearly completed large building of the Maritime Railway Station at Le Havre. This seemed doomed to destruction because a mud bed under its foundations gave way and caused rapidly increasing settlement. There was, however, no possible alternative method of saving the building, so M. Freyssinet's scheme of prestressed concrete foundations was accepted, and it was ultimately successful.





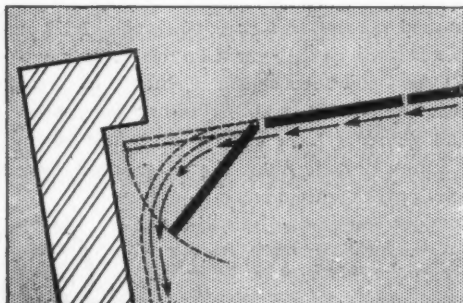
"Miramont," Kingston, Surrey.

Architect: E. Maxwell Fry, F.R.I.B.A.

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*Catalogue No. 48 contains diagrams, photographs and complete specification data.*



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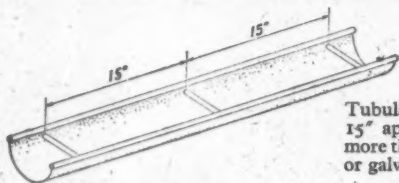
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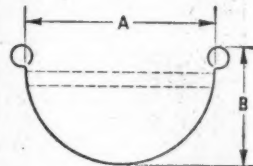
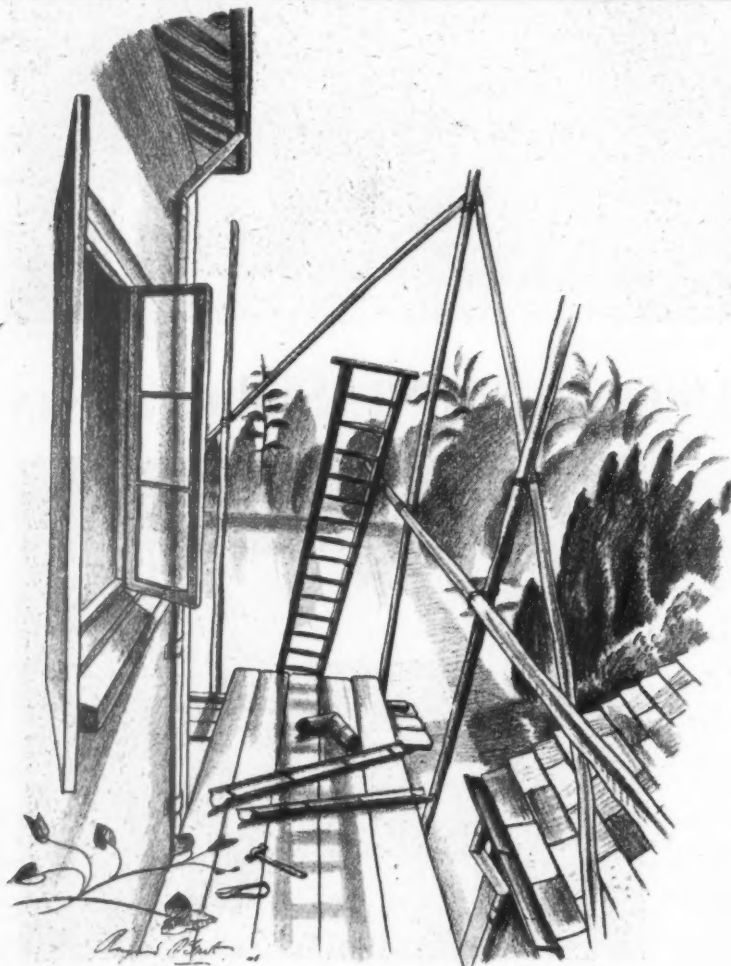
H21



# DATA SHEET FOR ARCHITECTS No. 1 HALF ROUND ZINC GUTTERS



Tubular zinc stays are spaced at not more than 15" apart. Gutters are supported at centres not more than 2' 6" apart by galvanized steel brackets or galvanized screws fixed through stays.

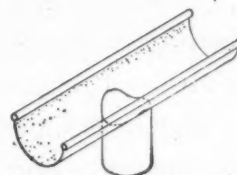


Gutters are made in standard lengths of 6', 7' and 8' and in four sizes as follows:—

A	3"	4"	4½"	5"
B	1½"	2½"	2½"	3"



Alternative beads — half-round gutters are sometimes finished at the back with a simple welt and not a bead.



Outlets — the nozzle should fit at least 2" into the top of the rainwater pipe. At least one outlet is needed for every 30' length of gutter. Gutters should have a fall at least ¼" in 30'.

Zinc gutters are suitable for draining all but copper roofs. They are light and easy to handle; and if made of sheet not thinner than No. 12 zinc gauge (23 I.S.W.G.) they are strong and have a maintenance free life of at least 40 years, or for ever, if painted. Various patterns are used and this sheet shows a half-round gutter of standard dimensions conforming to British Standard 1431:1948. Stop-ends,

outlets, mitred corners, etc., can be bought ready made but are better when specially made on the site or in a workshop. Ogee and rectangular gutters of standard dimensions can also be had. Further information on gutters and rainwater pipes and on other uses of zinc in building can be had from the Association together with a list of publications on request.

## ZINC DEVELOPMENT ASSOCIATION

1 LINCOLN HOUSE, TURL STREET, OXFORD TELEPHONE OXFORD 47988





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

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### 2.103 planning: general

#### MICROCLIMATIC PLANNING

*Klimaplanung der Stadt Stuttgart (Microclimatic Planning of the City of Stuttgart).* K. Schwalb. (Die Neue Stadt, Germany, No. 2, 1949, pp. 68-72. Text in German.)

Informative article. Urban climate in general. Description of microclimatic survey of Stuttgart. Problem of fresh air supply to town. Illustrated by wind diagrams and charts.

The first part of the article contains concise descriptive notes on microclimatology in relation to large urban areas which, as a kind of artificially produced landscape, have a climate of their own. The characteristics of this climate result from a decrease in wind through friction with the mass of buildings and owing to the orographic profile of the town; and from an increase in air temperature due to the production of heat mainly from industrial processes, and during hot summer nights when walls give off the heat which they have absorbed in daytime. Other contributory climatic factors are atmospheric smoke and dust pollution, both of which are accompanied by a considerable absorption of sunlight and in particular of ultra-violet radiation.

In order to improve urban hygiene which largely depends on climatic conditions, investigations should be undertaken to determine the possibilities of local climatic improvements based on a utilization of prevailing winds for the ventilation and air conditioning of appropriately sited urban districts. Before recommending improvements it is, of course, necessary to prepare a relevant survey of the area under consideration. Such a survey is described in the second part of the article with particular reference to Stuttgart, which is a valley town in South-West Germany surrounded by hills. Survey technique as such is only briefly referred to, the main part of the notes being devoted to the types of wind and weather encountered and to the degree of atmospheric pollution observed. It appears that the town's foremost climatic problem is the lack of fresh air supply during the night, and it is suggested to remedy this by means of in-

roducing suitably oriented streets, by thinning out densely built-up areas and by restricting the height of buildings.

### 3.21 planning: regional and national

#### PLANNING JOURNAL: AUSTRALIA

*The Regional Development Journal*, Vol. 1, No. 1, 1949. (Department of Post-War Reconstruction, Regional Planning Division, Canberra ACT, Australia.)

First issue of regional planning journal published in Australia and obtainable on application to Director of Regional Development, Department of Post-War Reconstruction, GPO, Box 10, Canberra.

The current issue of this new planning journal contains very interesting articles on regional planning problems such as land settlement, electricity transmission and hydro-power schemes, the latter in relation to the Snowy River water dispersion proposals which will be the subject of a separate digest. The journal also provides information on current regional developments in Australia, statistical planning, data, and a summary report of the International Congress on Housing and Town Planning, Zürich, Switzerland, 1948.

### 10.63 design: building types

#### CINEMA SITES

*Desirable Locations for Theatre Sites.* E. G. Falude (J. Soc. Motion Picture Engineers [USA], Oct., 1949. p. 396.)

Technical, social, physical factors in choice of site. Interesting, useful; 6 graphs.

This is really two articles, one on the changing popularity of motion pictures and the other on their location.

A survey of European and American countries is quoted to show that television is cutting down many previously popular activities, including visits to the cinema. Another surveyor of Canadian conditions shows that only about  $\frac{1}{4}$  of total seat capacity in cinemas was used in a typical year.

The author then sets out to show how to do one's best for a cinema client. Factors effecting location of urban and suburban cinemas are discussed, and it is surprising at first glance to find that the biggest amounts of seating occur in districts midway between the centre and the edge of town. He mentions the number of people needed per seat to make it profitable, and the sales value of being in a region popular for window-shopping and restaurants.

A list of points is given which can be used to decide if a site is suitable or not.

### 18.33 construction: theory

#### TIMBER STRUCTURES: DESIGN

*An Introduction to the Design of Timber Structures.* Phillip O. Reece. (E. & F. N. Spon, Ltd., 1949, 235 pp., 16s.)

Basic information on structural timber, its properties and behaviour under load. Results of research in this country and in USA. Graphs and tabulated figures for design of timber members and their connections.

This book covers in 12 chapters much of the basic introduction the designer requires before beginning to work on an actual structure, a building or a bridge. Information on the anatomy of trees, the properties of timber and the variation of strength values gives emphasis to the essential difference between timber as a product of natural growth and materials like metals and concrete with their controlled properties. The chapter on statistical analysis illustrates some

of the difficulties facing the designer who endeavours to establish a scientifically sound basis for his calculations: strength values obtained from large numbers of specimens vary so widely that the laws of mathematical statistics and of quality control have to be applied. The control of properties of the material has to be replaced by selection, sorting and grading of timbers. This is discussed in detail, according to British, European and American rules, and BS No. 940 of 1944 on the grading rules for structural timber is quoted. The chapter on loads, design and stresses gives extensive abstracts from the relevant codes of practice and BS, including tables on floor and roof loads and wind pressures, with an interesting discourse on margins of safety, the safety factor and the more modern load factor methods of design.

A good deal of useful though elementary information is given on the design of beams and struts, slenderness ratios and buckling loads, combined compression and bending. An earlier chapter contains a rather elaborate treatise on elastic bodies under load and definitions of the elementary terms in the theory of elasticity, with little specific application to timber. All this may be helpful as an introduction to the subject, going back to first principles, but the busy designer will look in vain for guidance when it comes to the timber structure itself. The requirements for individual components and their connections are very well explained, but the design of a complete structure is not covered. Timber structures such as roof trusses, floors, houses, building arches, bridges of all types may well deserve a separate volume.

With this reservation, the book should be of considerable value to students, research workers and designers who want to study timber as a structural material. Architects and engineers who have to visualize and to design the whole or part of a timber structure will wish to see a companion volume covering the application of this introduction to their practical design problems.

### 18.34 construction: general

#### TIMBER STRUCTURES: REPORT

*L'Etat Actuel et Perspectives des Constructions en Bois Dans Le Domaine du Génie Civil.* (The present situation and future chances of timber structures). By M. Ros. Zürich, 1948.

Report submitted to the congress of the Association Internationale des Instituts de recherches forestières.

The report gives a summary of the characteristics of timber as structural material with particular reference to glued timber. Timber is compared with other structural materials such as steel and concrete. The application of timber in a great variety of remarkable structures is illustrated by many excellent photographs.

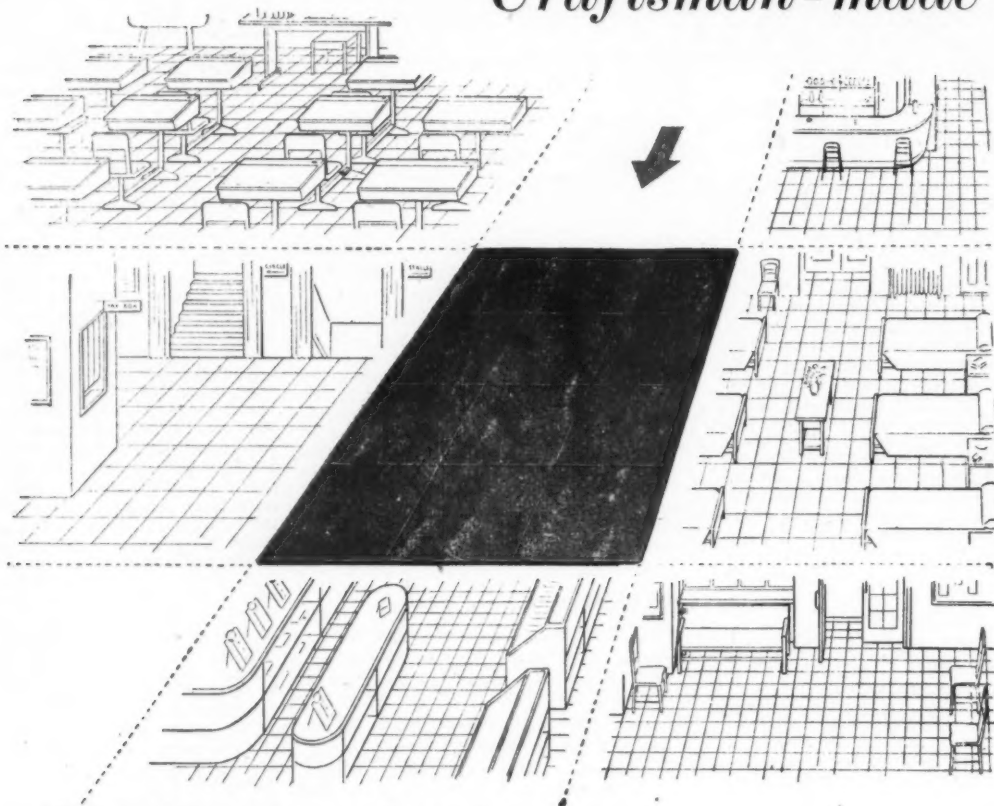
### 19.80 construction: details

#### SOIL SUBSIDENCE

*Sinking Factory Protected from High Water.* (Eng. News Record [USA], July 21, 1949, pp. 39-40.)

At one of the Ford Motor Company's plants, at Long Beach, California, 5-ft. 6-in. subsidence had been observed since 1937. Its cause is probably the pumping of fluids from an underlying oilfield. Thus the floor slab of the factory was exposed to uplift pressure from tidal waters outside. The settlement has continued at an increasing rate, leading to regular flooding of low lying tracks. Preventive measures were taken and

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Swiss north-light roof of 65-ft. span in prefabricated glued timber construction. See 18.34.

a continuous row of steel sheet piling driven around the existing concrete dock. Heavy reinforcing steel frames were concreted in, to resist the impact from docking ships. An 11-ft. high, reinforced concrete wall was built on top of the sheet piling, giving a surplus height of 7-ft. against further increasing subsidence, which is anticipated.

#### 20.149 construction: complete structures RIGID STEEL FRAMES

Indoor Stadium has 222-ft. Rigid Frames. (Eng. News Record [USA], Aug. 11, 1949, pp. 36-37.)

Riveted steel frames of exceptional span, with tie rods taking horizontal thrust.

An indoor stadium at the Oregon State College has 12 rigid steel frames of 222-ft. span between pin centres, with 58-ft. vertical legs, 84-ft. high at the centre, weighing 60 tons each. Although a record size for post-war construction no complications were met with in the design. Maximum size for transport was the limiting factor in locating the joints. For this reason a splice had to be arranged just through the knee where the maximum bending moment occurs. The sloping rafter portions of the frame are 54½-in. deep, with a ½-in. web and 8-in. by 8-in. by ½-in. angles with flange plates. The tapered legs are 2-ft. 6-in. deep at the base and 13-ft. at the knee; 4½-in. diameter steel pins are used at the base plates. Tie rods 24-in. diameter take the horizontal thrust, at floor level, and are concreted into a groove after final adjustment. Roof purlins are 10-in. deep broad flange beams, with 3-in. timber nailing strips for the roof covering. Analysis showed a maximum of 3½-in. vertical deflection at the crown, while a model of brass, of 1/48 size, gave 2½-in.

#### 20.150 construction: complete structures CONCRETE ARCH BRIDGE

A New High-flying Highway. (Eng. News Record [USA], July 21, 1949, p. 56.)

Three arches of 175 ft. span each will support a 980 ft. long highway bridge, with 4 lanes of traffic, at Pittsburgh. After

completion of one concrete rib the steel centering with steel forms, of 30 tons weight, is moved sideways on skids and used for the next rib, without dismantling. Identical arch shapes are thus assured.

#### 20.151 construction: complete structures SUSPENSION BRIDGE

Suspension Bridge Moves Coal to Plant. (Eng. News Record [USA], Aug. 25, 1949, p. 12.)

Unusual type of long-span suspension bridge, conveying 2,000 tons of coal per hour.

With 726-ft. main span, unequal backstay spans of 170-ft. and 251-ft., and fast moving coal as live load, this bridge is rather unusual, also in its details. The cables are clamped at the midpoints of the unloaded backstays to reduce vibration. Eighty per cent. of the lateral horizontal forces are taken by a ½-in. steel floor plate acting as the web of a horizontal wind girder. The remaining 20 per cent. are carried by a K-type bracing between stiffening girder top chords.

*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

### 3009 ESTIMATE WITHOUT DRAWINGS

**Q** On a small extension job where no detailed drawings or specification were considered necessary, the builder has charged extra for maintaining ventilation to an existing hollow floor by means of ducts in a new solid floor. Had he not done this work the new extension would have blocked up two air-brick vents. Has he any right to charge extra for this work when he should perhaps have seen that this would be an integral part of the complete job and have included it in his first estimate?

**A** Where a builder gives an estimate and carries out work without drawings, specification or conditions of contract, he must comply with building acts and byelaws, and his estimate should include for all such work, unless it was not reasonably possible to foresee any requirement until the work was commenced. In London, under the byelaws, a hollow floor must be ventilated to the satisfaction of the District Surveyor who could require ducts in the solid floor for this purpose. Outside London the byelaws require air channels through a solid floor to ventilate a hollow floor where it is not otherwise thoroughly ventilated. The answer here depends on whether or not it was reasonably possible to foresee the complication.

## Correction

In our issues for November 24 and December 1, we wrongly attributed the design of the Bailey Bridge and Restaurant for the 1951 exhibition on the South Bank to Misha Black. It is, in fact, the work of Misha Black and Alexander Gibson, of the Design Research Unit, London.

# Buildings Illustrated

*Shop in Old Bond Street, W.1.* (Pages 648-650.) Architect: Michael Rachlis. General Contractor: Messrs. H. N. Barnes Ltd. Sub-contractors: Alterations, ventilation, door furniture, Messrs. Comyn Ching & Co.; electric wiring, plaster, joinery, stonework, marble, shop fittings, office fittings, cloak-room fittings, Messrs. H. N. Barnes Ltd.; electric light fixtures, Messrs. Tucker & Edgar; textiles, furniture, Messrs. Heal's Ltd. (Race Furniture), Messrs. Fortnum & Mason, Messrs. D. Bianco & Sons.

*Hall in Belfast* (pages 651-653). Architect: John MacGeagh. Consulting Architect: Edward Maufe, R.A. General Contractors: Messrs. F. B. McKee & Co. Ltd. Sub-contractors: Messrs. Harland & Wolff, constructional steelwork; Messrs. William Jamison Cliphsham and York stone; Buckley Brick Co., Belfast Representatives, Messrs. John McNeill, Ltd., Messrs. T. Murphy & Son, stock bricks; Messrs. William Clokey, glazing and mirrors; Messrs. Johnston Bros. & Wilson, heating and ventilation; Messrs. John Dowling & Sons Ltd., internal plumbing and sanitary fittings; Messrs. William Coates & Son Ltd., electrical contractors; Messrs. Troughton & Young, electric lighting fittings; Messrs. Yannidis, door furniture; The Belfast Office Equipment Co., representing The Birmingham Guild, Ltd., bronze heraldic shields, cast lead fascia, handrails and stacking chairs; Messrs. Newells, acoustic tiling; Messrs. Toffolo, Jackson & Co. Ltd., terrazzo flooring and marble work; Messrs. John P. White & Sons, Ltd., oak panelling, doors, organ screen and carved heraldic shield; Messrs. M. Mercer & Sons, Ltd.; painting contractors; Messrs. Purdy & Millard, letter carving; Messrs. John McQuillan, Ltd., Avenues; Messrs. Hill & Smyth, gates; Messrs. H. Lavery & Sons, gate piers; Messrs. Dunlop Rubber Co., rubber flooring; Messrs. "Old Bleach" and Messrs. Campbell Drennan, curtains and blinds; Messrs. E. H. Pearce, cork flooring; Messrs. Compton Organ Co. Ltd., the organ; Messrs. Thomas McGowan, asphalt roofing; Radio Development, loud speaker and public address installation; Messrs. Smith's English Clocks, Ltd., electric clock; Messrs. G. B. Kallee, Ltd., gallery chairs; Messrs. Williams & Watson, windows.

*Housing for Sunbury-on-Thames UDC, Shepperton (Site 7).* (Pages 654-657.) Architects: Basil Spence & Partners. General Contractors: C. & S. Telling, Drinkwater & Partners, Gee & Co. (Contractors) Ltd., Henry Day (Merton) Ltd., John Farmer (Builders), Sunbury, Co-Partners Building Operatives Ltd. Sub-contractors: Aluminium roofs, Hugh Twaddle & Son Ltd.; aluminium balconies, canopies and trellises, Charles Henshaw & Sons Ltd.; exterior paint, Smith & Walton Ltd.; interior paint, Brent Manufacturing Co. Ltd.; joinery and kitchen fittings, Jennings & Meacock; metal windows, Crittall Manufacturing Co. Ltd.; precast concrete surrounds, Conalcrete Ltd.; hot and cold water services, Dent & Hellyer Sanitation Ltd.; electrical work, T. Adams & Co. Ltd.; sanitary fittings, The Norland Services (Builders' Merchants) Ltd. (Fred Hodge Ltd. branch); ironmongery and fireplaces, H. & C. Davies & Co. Ltd.; hot water heaters, Ascot Gas Water Heaters; fires, boilers and cylinders, Ideal Boilers and Radiators Ltd.; fencing, Fencing (Shepperton) Ltd. Aluminium suppliers: Northern Aluminium Company.



# PRICES

This regular feature, prepared by Davis, Belfield and Everest, Chartered Quantity Surveyors, summarises basic prices for materials and gives labour rates for the London District and Grade Classifications outside London. Detail prices of materials are given quarterly.

BASIC MATERIALS	BASIC PRICES AND RATES OF WAGES, 1949					
	June	July	Aug.	Sept.	Oct.	Nov.
Portland cement (6 tons and over) per ton	60/6	60/6	60/6	62/6	62/6	62/6
Paper bags .. .. .	11/-	11/-	11/-	9/-	9/-	9/-
2-in. unscreened ballast .. .. . per yd. cu.	14/5	14/5	15/5	15/5	15/5	15/5
Fletton bricks .. .. . per 1,000	85/-	85/-	85/-	85/-	85/-	85/-
Stoneware drain pipes (British Standard, 2 tons and over). Standard List + ..	42½%	42½%	42½%	42½%	42½%	42½%
Roofing tiles (ex works) .. .. . per 1,000	189/-	189/-	189/-	189/-	189/-	189/-
Steel joists (basic sections ex mills) per ton	£20 3s. 6d.	£20 3s. 6d.	£20 3s. 6d.	£20 3s. 6d.	£20 3s. 6d.	£20 3s. 6d.
Grey or white hydrated lime (inc. bags) ..	89/6	89/6	89/6	89/6	89/6	89/6
Sheet lead (5-cwt.-1 ton lots) .. .. .	£99	£99	£104 15s. 0d.	£142 0s. 0d.	£124 0s. 0d.	£114 15s. 0d.
Iron rainwater goods and soil pipes						
List 3100 A.B. + .. .. .	72½%	72½%	72½%	72½%	72½%	72½%
White lead paint .. .. . per gallon	41/6	41/6	43/6	49/-	46/-	46/-
<b>RATES OF WAGES (LONDON)—</b>						
Within 12 miles radius						
Craftsmen .. .. . per hour	2/11½	2/11½	2/11½	2/11½	2/11½	2/11½
Labourers .. .. .	2/4½	2/4½	2/4½	2/4½	2/5	2/5
From 12 to 15 miles radius						
Craftsmen .. .. .	2/11	2/11	2/11	2/11	2/11	2/11
Labourers .. .. .	2/4	2/4	2/4	2/4	2/4½	2/4½

Prices of materials above include for delivery to site in the Central London Area and the rates of wages are for London only.

Current rates of wages outside London are as follows : Liverpool and District, Craftsmen, 2/11½; Labourers, 2/5.

## GRADE CLASSIFICATIONS

	A	A <sup>1</sup>	A <sup>2</sup>	A <sup>3</sup>
Craftsmen .. .. .	2/10	2/9½	2/9	2/8½
Labourers .. .. .	2/3½	2/3½	2/3	2/2½

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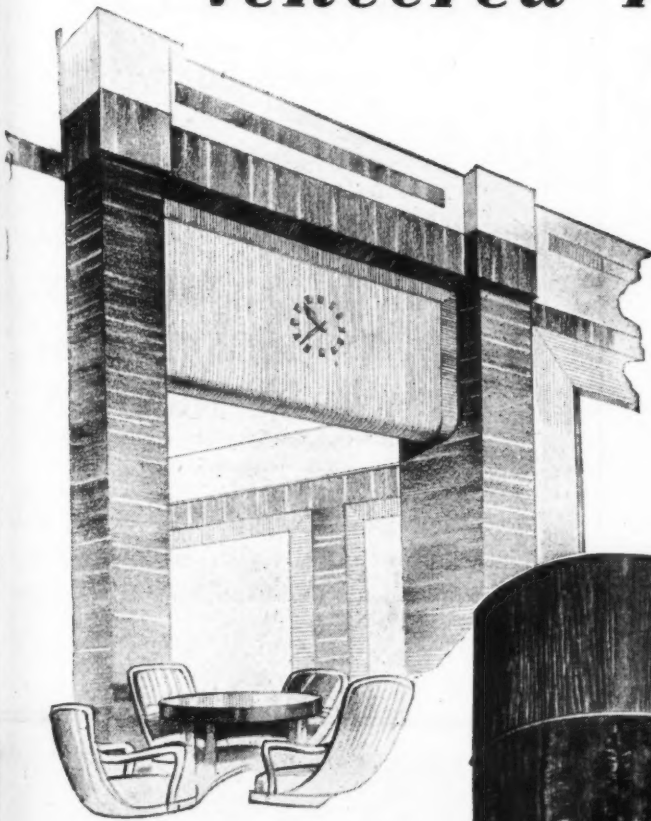


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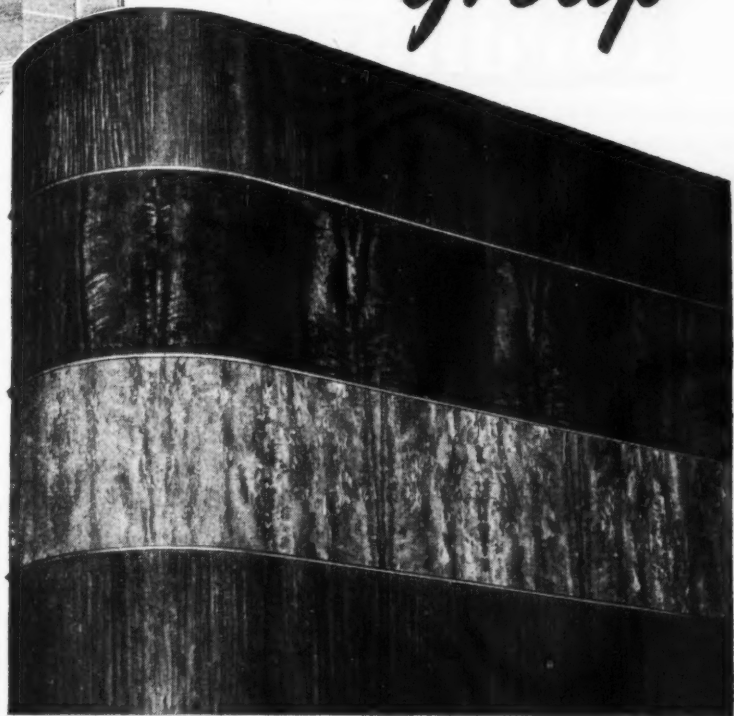
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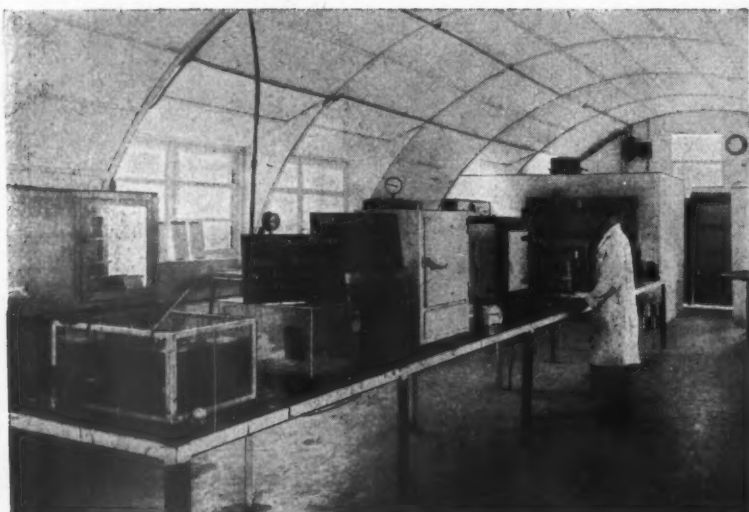
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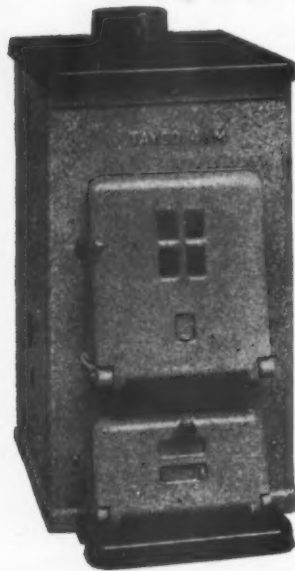
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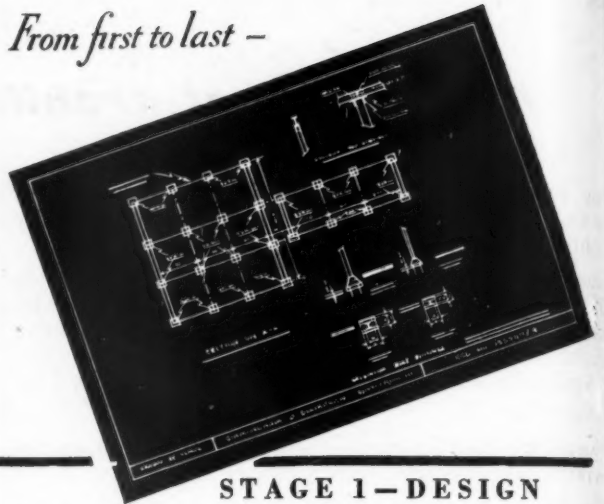
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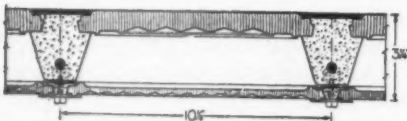
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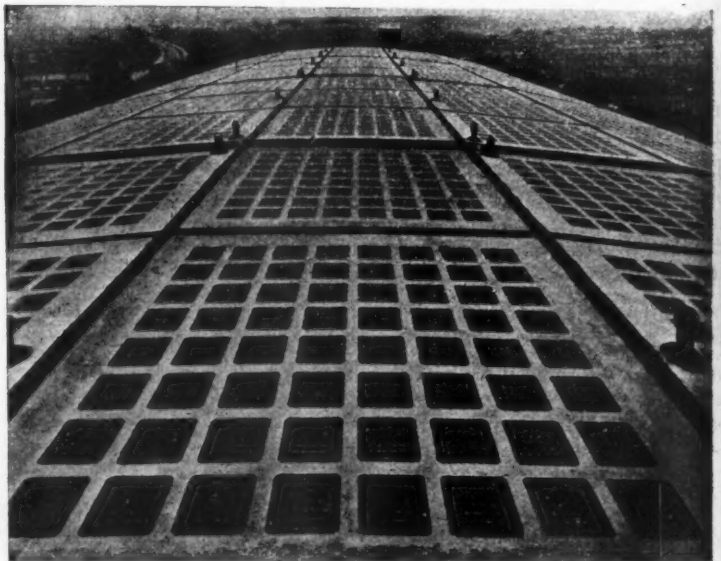
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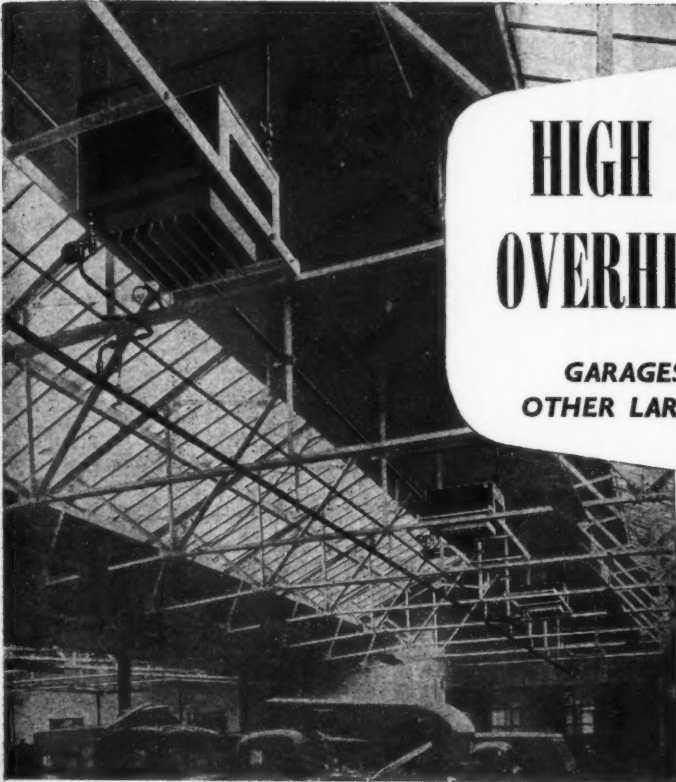
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GARAGES, FACTORIES AND  
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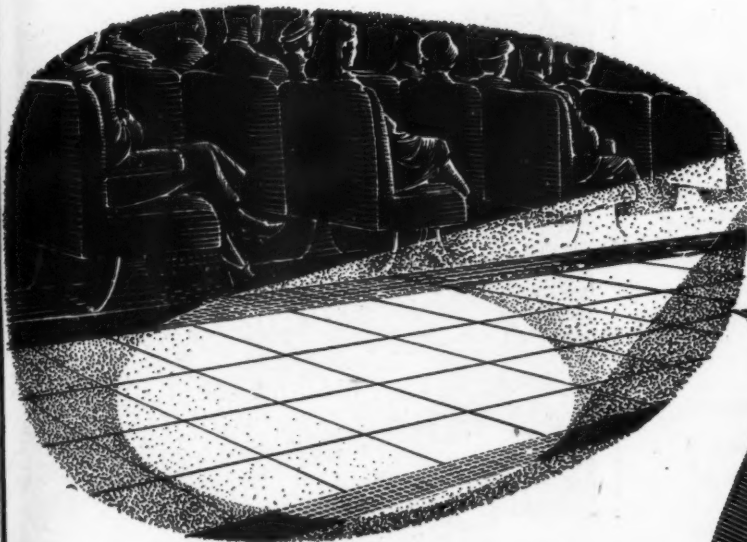
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IOCO Rubber Flooring will outlast cement. This alone makes it a worth-while proposition for any floors which are subjected to constant wear but is by no means all: it can be had to match any scheme of decoration; it eliminates noise and it is hygienic and non-slipping. Available in a wide variety of plain, marbled or inlaid tiled effects for all Public Buildings, Theatres, Restaurants, Hotels, Bathrooms, etc., and laid by IOCO experts anywhere in Great Britain. Full information and illustrated literature on request.

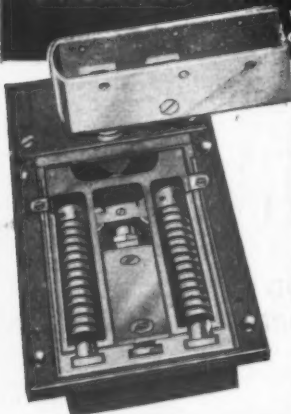
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wear is heaviest  
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Sceptre Victor No. 21

**A GREAT ADVANCE**  
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**No. 21 "Sceptre Victor."**  
Patent double action Floor  
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For medium size doors.  
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The elimination of back pressure  
in this No. 21 "Sceptre Victor"  
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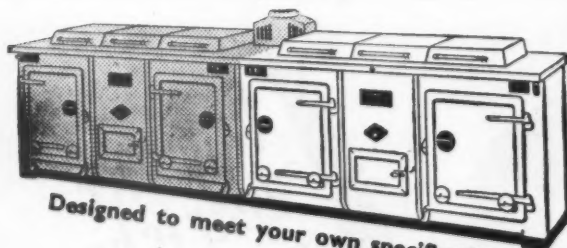


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ROBERT ADAMS (VICTOR) LIMITED

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There's an **ESSE**  
for every purpose  
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| <p><b>1</b> really low fuel cost</p> <p><b>2</b> 24-hour service<br/>(continuous burning)</p> <p><b>3</b> fast-boiling hotplate</p> <p><b>4</b> large fume-free ovens</p> | <p><b>5</b> no oven flue cleaning</p> <p><b>6</b> simple maintenance</p> <p><b>7</b> no fumes, soot in the<br/>kitchen. (Fuel:<br/>COKE, anthracite<br/>or Phurancite)</p> |
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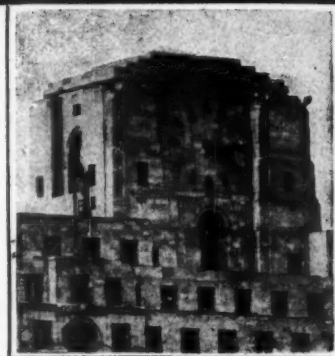
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Dia. of dials 25 ft. Messrs. C. F. Joseph, Archts.

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of all types, with dials from 2 ft. dia. upwards

### RINGING PEALS, CHIMES CARILLONS, SINGLE BELLS

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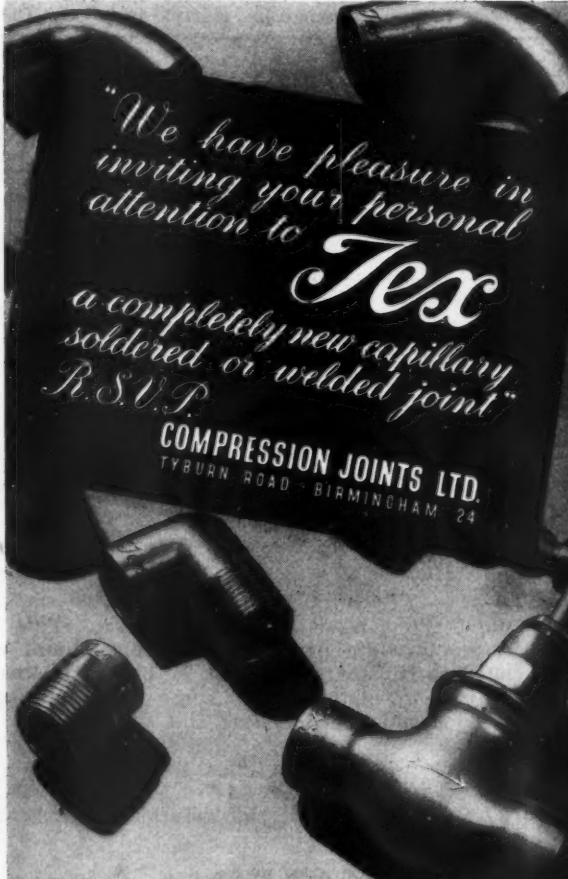
Tel.: Thornton Heath 3221 (5 lines)

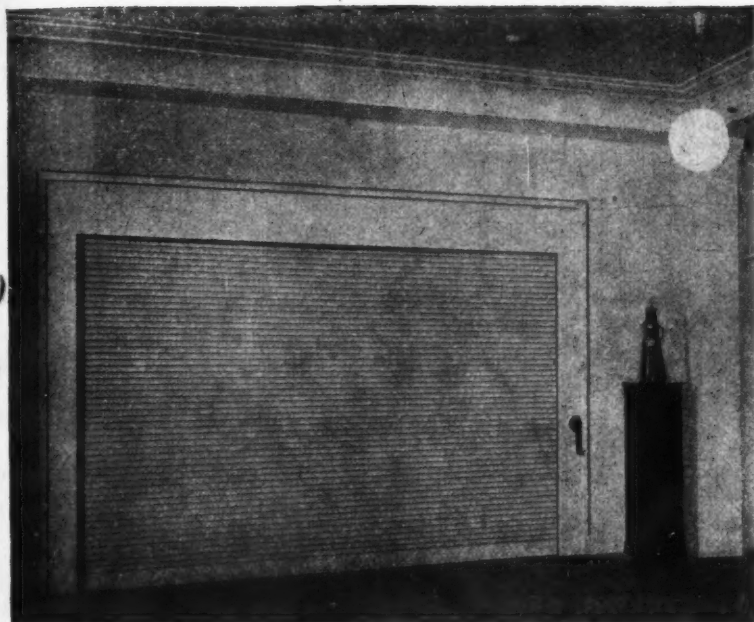
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## FIREPROOF ROLLING SHUTTERS

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Write for full particulars of construction, balancing units, finish, erection and prices of the various types.

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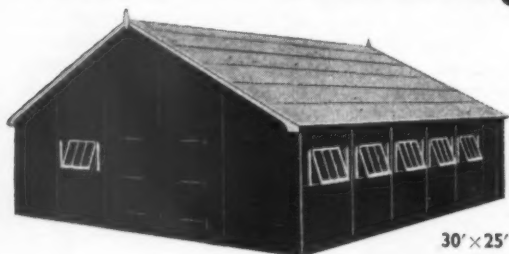
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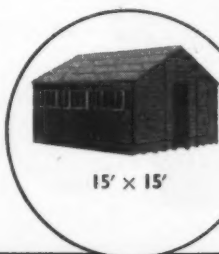
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- Prompt delivery.

Full particulars from:  
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(Dept. H), 72, VICTORIA ST., LONDON, S.W.1.  
 Telephone: VICtoria 8631 (9 lines).



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## CLASSIFIED ADVERTISEMENTS

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 to "The Architects' Journal," at the address given above.

Available only to applicants excepted from the Control of Engagements Order, 1947.

## Public and Official Announcements

21s. per inch; each additional line, 2s.

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: EMPLOYMENT BOARD, WEST PARK, WYTHLEAF, Tel.: Uplands 0935. 991

## LONDON COUNTY COUNCIL

Applications are invited for unestablished positions of (i) ARCHITECT, Grade III (salaries up to £700 a year) and (ii) ARCHITECTURAL ASSISTANTS (salaries up to £580 a year), in the Housing and Valuation Department. Commencing salaries in either grade will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Acts, and successful candidates will be eligible for consideration for appointment to the permanent staff on the occurrence of vacancies.

Successful candidates will be required to undertake the design, layout and preparation of working drawings for housing schemes (cottages and multi-storey flats), and will be employed in the Housing Architect's Division. Preference will be given to candidates holding a recognized professional qualification.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.W.1 (stamped addressed envelope required, and quote Ref. G.R.3). Canvassing disallowed. (2249) 1046

## MINISTRY OF WORKS.

There are vacancies in the Chief Architect's Division for ARCHITECTURAL ASSISTANTS, with recognized training and fair experience. Successful candidates will be employed in London and elsewhere on a wide variety of Public Buildings, including Atomic Energy and other Research Establishments, Telephone Exchanges, and Housing. Similar vacancies also exist for ASSISTANTS, with specialized knowledge and experience in stonemasonry, particularly in detailing and jointing of ashlar and carved stonework.

Salary: Architectural Assistants, £300-£325 per annum; Leading Architectural Assistants, £500-£525, plus overtime. Starting pay will be assessed according to age, qualifications and experience. These rates are for London; a deduction is made in the Provinces.

Although these are not established posts, some of them have long-term possibilities, and competitions are held periodically to fill established vacancies.

Apply in writing, stating age, nationality, full details of experience, and locality preferred, to Chief Architect, W.C.10/T, Ministry of Works, Abell House, London, S.W.1. 2065

## DEVON COUNTY COUNCIL.

Applications are invited for the undermentioned appointments on the established staff:

ASSISTANT ARCHITECTS. A.P.T., VI (salary £595-£660); A.P.T., V (salary £520-£570); A.P.T., IV (salary £480-£525); A.P.T., III (salary £450-£495).

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

Applications, stating age, qualifications and experience, accompanied by not more than three recent testimonials, should be sent to the County Architect, 97, High Street, Road, Exeter, not later than Monday, the 12th December, 1949.

Canvassing, directly or indirectly, will disqualify.

H. A. DAVIS,

Clerk of the County Council.

The Castle, Exeter. 2732

16th November, 1949.

## THE CO-OPERATIVE WHOLESALE SOCIETY, LTD.

invite applications for the following appointments on the staff of the Manchester Architects' Department:

THREE ASSISTANT ARCHITECTS. Salary £510-£625 per annum. Applicants are required to have a sound knowledge of building construction and be able to produce working drawings and details from sketch plans. Experience in design and planning of modern industrial buildings, or shopping emporiums and retail shops will be considered an advantage.

The above appointments are permanent and offer prospects of up-grading to competent Assistants. Successful candidates will be required to undergo a medical examination for entry into compulsory superannuation scheme.

Applications, stating age, experience, and qualifications, to be addressed to the Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester. 2658

## CORPORATION OF GLASGOW.

## HOUSING DEPARTMENT.

## ASSISTANT ARCHITECTS:

Grade II. Salary scales: A.P.T., VI, £595-£660; A.P.T., V, £520-£570; A.P.T., III, £450-£495; A.P.T., II, £420-£465.

Applications are invited for appointments to the Architectural Staff of the Department, at salaries in accordance with the above scales. Placing on these scales will be according to age and experience.

Applicants should have passed the Final Examination of the Royal Institute of British Architects or should hold other equivalent qualifications.

The appointments will be to the Permanent Establishment of the Department, and are subject to the provisions of the Corporation's Superannuation Scheme. Successful applicants will be required to pass a medical examination.

The appointments are terminable on either side by one month's notice in writing.

Applications, stating age, particulars of training, experience and qualifications should be addressed to the undersigned and should be received within 14 days of the publication of this advertisement.

A. G. JURY,

Director of Housing.

Housing Department, 20, Trongate, Glasgow, C.1. 2701

## STAFFORDSHIRE COUNTY COUNCIL.

## COUNTY ARCHITECT'S DEPARTMENT.

## APPOINTMENT OF ARCHITECTURAL STAFF.

Applications are invited for the above on A.P.T. salary Grades I-VIII, ranging from £390-£760 per annum, according to experience and qualifications.

The appointments will be subject to the Scheme of Conditions of Service of the National Joint Council and to the provisions of the Local Government Superannuation Act, 1937.

Applications, giving full details of experience and qualifications, age, etc., together with three recent testimonials, should be delivered to the County Architect, Martin Street, Stafford, not later than Friday, the 9th December, 1949.

Applicants must disclose whether or not they are related to any member or senior officer of the Council. Canvassing will be a disqualification.

T. H. EVANS,

Clerk of the County Council.

County Buildings, Stafford. 2780

22nd November, 1949.

## ANGLESEY COUNTY COUNCIL.

## COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following permanent appointments in the County Architect's Department:

(a) ONE SENIOR ASSISTANT ARCHITECT. Salary Grade VII, commencing at £635 per annum and rising to £710 per annum. Applicants should be Registered Architects and Members of the Royal Institute of British Architects, with considerable experience in the design of Education Buildings, supervision of technical staff, etc.

(b) ONE ASSISTANT ARCHITECT. Salary Grade IV, commencing at £480 per annum and rising to £525 per annum. Applicants should have had good experience in the preparation of working drawings, and preference will be given to applicants who have passed the Intermediate Examination of the R.I.B.A.

(c) ONE ARCHITECTURAL ASSISTANT. Salary Grade III, commencing at £450 per annum and rising to £495 per annum. Applicants should have had good architectural training and be good draughtsmen.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and will be subject to three months' notice on either side for the Grade VII appointment and one month's notice on either side for the Grades III and IV appointments. Candidates called for interview will be required to undergo a medical examination by the County Medical Officer.

Further particulars regarding the appointments may be obtained from the County Architect, N. Sq. Johnson, A.R.I.B.A., A.M.T.P.I., County Architect's Dept., Shire Hall, Llangefni.

Applications, stating age, training, experience, qualifications, past and present appointments, names of two referees, and accompanied by a copy of one recent testimonial, are to be sent so as to reach the undersigned not later than Monday, 12th December, 1949.

WILLIAM JONES,

Clerk of the County Council.

Shire Hall, Llangefni, Anglesey. 2777

21st November, 1949.

## FLINTSHIRE COUNTY COUNCIL.

## COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited from suitably qualified candidates for the appointments of three temporary CLERKS OF WORKS to supervise the construction of the New Technical College at Kelsterton and the New Modern Secondary Schools at Holywell and Buckley. The approximate duration of the work is three years.

The salary will be at the rate of £10 per week. Candidates should have a practical knowledge of all branches of the building trade and be experienced in the supervision of the erection of large buildings, including the setting out, levelling, measuring up and keeping records.

Forms of application are obtainable from the undersigned, to whom applications are to be returned not later than the 19th December, 1949.

W. HUGH JONES,

Clerk of the County Council.

County Buildings, Mold. 2833

## WARWICKSHIRE COUNTY COUNCIL.

## ARCHITECT'S DEPARTMENT.

Applications are invited for the undermentioned appointments on the established staff:

ASSISTANT ARCHITECT. A.P.T., VI, £595-£660 per annum.

ASSISTANT ARCHITECTS. A.P.T., V, £520-£570 per annum.

ASSISTANT ARCHITECT. A.P.T., IV, £480-£525 per annum.

ASSISTANT ARCHITECT. A.P.T., III, £450-£495 per annum.

ASSISTANT ARCHITECT. A.P.T., II, £420-£465 per annum.

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

Application forms can be obtained from C. H. Elkins, F.R.I.B.A., A.R.I.C.S., Shire Hall, Warwick.

L. EDGAR STEPHENS,

Clerk of the Council.

Shire Hall, Warwick. 2864

## COUNTY BOROUGH OF GATESHEAD.

## CLERK OF WORKS.

Applications are invited for the appointment of Clerk of Works in the Chief Architect's Department to supervise the erection of permanent houses.

Applicants must have a sound and practical knowledge of the building trades and be experienced in the supervision and erection of all types of houses and blocks of flats, including setting out, levelling, measuring up and keeping records.

The salary will be in accordance with A.P.T. Grade IV, commencing £480-£525 per annum.

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

Applications to be made on forms obtainable from the Chief Architect should be returned, together with copies of three recent testimonials, to H. J. Cook, A.R.I.B.A., M.I.Struct.E., Chief Architect, Municipal Buildings, Swinburne Street, Gateshead, 8, not later than Monday, the 19th December, 1949.

J. W. PORTER,

Town Clerk.

Town Hall, Gateshead, 8. 2794

24th November, 1949.

## SALOP COUNTY COUNCIL.

## COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments to Established posts in the Department:

(1) SENIOR ASSISTANT ARCHITECT. A.P.T., Grades V-Va. Salary £520 to £640 per annum.

(2) ASSISTANT ARCHITECT. A.P.T., Grades III-IV. Salary £450 to £525 per annum.

(3) ASSISTANT ARCHITECT. A.P.T., Grades II-III. Salary £420 to £495 per annum.

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

Application forms may be obtained from the County Architect, A. G. Chant, F.R.I.B.A., Column House, London Road, Shrewsbury, to whom they must be returned, accompanied by copies of not more than three recent testimonials, not later than Tuesday, 20th December, 1949.

G. C. GODBEE,

Clerk of the Council.

Shrewsbury. 2759

November, 1949.

## BOROUGH OF WILLESDDEN.

## APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

The Council invite applications for the appointment of ONE ARCHITECTURAL ASSISTANT on the Permanent Staff and one on the Temporary Staff of the Borough Engineer and Surveyor's Department.

The salary attaching to the post will be Administrative, Professional and Technical Grade, V, of the National Whitley Council's Scheme for the London area, namely £520 per annum, rising by two annual increments of £15 each and one of £20 to £570 per annum, plus London weighting, according to age.

Candidates must be Associates of the Royal Institute of British Architects or hold an equivalent qualification, and preferably have general knowledge and experience of architectural work in the service of a local authority.

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

Applications, giving age, experience, etc., accompanied by copies of not more than three testimonials, should be addressed to the undersigned, endorsed "Architectural Assistant," not later than 10 a.m. on 19th December, 1949.

It will be necessary for the successful candidate to provide his own housing accommodation as the Council is not in a position to assist.

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

(Sgd.) B. S. FORSTER,

Town Clerk.

Town Hall, Dyne Road, Kilburn, N.W.5. 2753

16th November, 1949.



**COUNTY BOROUGH OF BOURNEMOUTH.  
BOROUGH ARCHITECT'S DEPARTMENT.**  
Applications are invited for the following appointments:—

**ASSISTANT ARCHITECT.** Established post. Salary Grade A.P.T. IV, £480-£525 per annum. Applicants should be Members of the R.I.B.A. and experienced in various types of General Municipal Building Work.

**JUNIOR ASSISTANT QUANTITY SURVEYOR.** Unestablished post. Salary Grade A.P.T. II, £420-£465 per annum. Applicants should be experienced in working up and taking off on minor works.

**QUANTITY SURVEYOR'S ASSISTANT.** Established post. Salary Grade General Division (£135 per annum at 16 years of age, rising, according to age, to £385 per annum at 32).

Applicants should have had experience in a Quantity Surveyor's office.

The successful candidates will be appointed at their present salary if such salary is within the incremental scale of the advertised posts.

The above appointments will be terminable by one month's notice, in writing, on either side, and subject to the provisions of the Local Government Superannuation Act, 1937, also to the conditions of service in accordance with the National Scheme.

The successful candidates will be required to pass a medical examination.

No assistance can be offered regarding housing accommodation.

Applications, on forms to be obtained from the Borough Architect, Town Hall, Bournemouth, accompanied by copies of three recent testimonials, to be returned to the undersigned in envelopes endorsed "Staff Architectural," not later than 9 a.m. Saturday, 24th December, 1949.

A. LINDSAY CLEGG,  
Town Clerk.  
2852

**CROWN AGENTS FOR THE COLONIES.**

**SENIOR DRAUGHTSMAN (ARCHITECTURAL)** required by the East African Railways and Harbours for the Engineering Department for one tour of 40-48 months in the first instance. Salary £710 a year, rising to £810 a year. Outfit allowance £30. Superannuation fund. Free passages. Liberal leave on full salary. Candidates, between 25 and 35 years of age, must be competent draughtsmen, able to work up sketch plans and prepare drawings from rough sketches and notes. They should have a good working knowledge of modern forms of construction and be capable of taking out quantities and preparing estimates. 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/25046(3A) on both letter and envelope. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration. 2859

**CITY OF PLYMOUTH.**

**CITY ARCHITECT'S DEPARTMENT.**

**APPOINTMENT OF QUANTITY SURVEYOR.**

Applications are invited for the appointment of a QUANTITY SURVEYOR, A.P.T. Grade VI (£595-£660), on the established staff, subject to the Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, the Local Government Superannuation Act, 1937, and one month's notice on either side for termination. Applicants must be thoroughly experienced in all branches of the work of a Quantity Surveyor, and should be corporate Members of the Royal Institution of Chartered Surveyors (Sub-division III, Quantities). The successful candidate will be required to pass a medical examination.

Applications, on forms obtainable from the undersigned, accompanied by copies of not more than three recent testimonials and/or names of persons to whom reference may be made, should be received at my office not later than Saturday, 17th December, 1949.

The Corporation may make housing accommodation available to the successful married candidate if required.

E. G. CATCHPOLE, A.R.I.B.A.,  
City Architect.  
3630

**STAFFORDSHIRE COUNTY COUNCIL.**

**SMALL HOLDINGS DEPARTMENT.**

**APPOINTMENT OF ARCHITECTURAL DRAUGHTSMAN.**

Applications are invited for the above appointment at a salary in accordance with A.P.T. Grade V (£520-£570 per annum). Applicants should be registered Architects. The appointment is subject to the National Joint Council's Scheme of Conditions of Service; the successful applicant will be required to pass a medical examination and to contribute under the Local Government Superannuation Act, 1937. The post is terminable by one month's notice. Applications, stating age, experience and qualifications, should be forwarded, together with copies of three recent testimonials, to reach the County Estate Agent, County Buildings, Stafford, within 14 days of the publication of this advertisement. Applicants must state whether or not they are related to any member of the County Council. Canvassing, directly or indirectly, will be a disqualification.

T. H. EVANS,  
Clerk of the County Council.  
2836

County Buildings, Stafford.

**EAST ANGLIAN REGIONAL HOSPITAL BOARD.**

Applications are invited from Members of the R.I.B.A. for the appointment of ARCHITECTURAL ASSISTANT on the Headquarters staff (salary Grade III, A.P.T. Division, £450-£515-£495). Preference will be given to applicants who have had previous experience of hospital work.

The appointment will be subject to the National Health Service (Superannuation) Regulations, 1947-49. Applications, on forms to be obtained from the undersigned, should be completed and returned not later than Saturday, the 31st December, 1949. K. V. F. MORTON, Secretary, 117, Chesterton Road, Cambridge. 2847

**DURHAM COUNTY COUNCIL.**

**ARCHITECT'S DEPARTMENT.**

**APPOINTMENT OF ARCHITECTURAL ASSISTANTS AND QUANTITY SURVEYING ASSISTANTS.**

Applications are invited for the appointments of Architectural Assistants and Quantity Surveying Assistants in the following grades, in accordance with the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services scales and conditions:—  
Grade A.P.T. VII, £635-£710.  
Grade A.P.T. VI, £595-£660.  
Grade A.P.T. V, £520-£570.  
Grade A.P.T. IV, £480-£525.  
Grade A.P.T. III, £450-£495.  
Grade A.P.T. II, £420-£465.  
Grade A.P.T. I, £390-£435.

The persons appointed will be required to pass a medical examination, and the appointments are subject to the Local Government Superannuation Act, 1937, and to the regulations of the County Council relating to sickness for the time being in force.

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

Applications, giving particulars of age, experience and qualifications, previous and present appointments, etc., and giving the names of three persons to whom reference can be made, should be forwarded to Mr. G. R. Clayton, F.R.I.B.A., County Architect, Court Lane, Durham, not later than 16th December, 1949.

J. K. HOPE,  
Clerk of the County Council.

Shire Hall, Durham.  
28th November, 1949. 2844

**EAST RIDING OF YORKSHIRE COUNTY COUNCIL.**

**QUANTITY PLANNING DEPARTMENT.**

**APPOINTMENTS ARE INVITED FOR THE UNDERMENTIONED APPOINTMENTS:—**

(a) SENIOR PLANNING ASSISTANT, A.P.T., Grade VIII. Salary scale, £685-£725-£760. Candidates must be Corporate Members of the Town Planning Institute and should have had considerable practical experience in a County Planning Office. The Officer will be required to provide a car, and travelling allowance will be paid in accordance with the scale adopted by the County Council.

(b) SENIOR PLANNING ASSISTANT, A.P.T., Grades V and Va. Salary scale, £520-£610. Candidates must be Corporate Members of the Town Planning Institute and should have had practical experience in a County Planning Office. Preference will be given to applicants possessing architectural experience. The Officer will be required to provide a car, and travelling allowance will be paid in accordance with the scale adopted by the County Council.

(c) THREE PLANNING ASSISTANTS, A.P.T., Grades I to IV. Salary scale, £390-£525. The commencing salary will be fixed according to experience and qualifications. Candidates should preferably have passed the Intermediate Examination of the Town Planning Institute, or have an equivalent engineering, architectural or surveying qualification, and have had some practical experience. Applications will also be considered from graduates with limited experience on the following basis:—

Less than 1 year: A.P.T., I (£390-£435).

More than 1 but less than 2 years: A.P.T., II (£420-£465).

More than 2 years: A.P.T., IV (£480-£525).

(d) TWO PLANNING ASSISTANTS, A.P.T., Grade I. Salary scale, £390-£435. Candidates must be good draughtsmen and colourists and should be capable of undertaking surveys in connection with Planning. Preference will be given to applicants who have passed the Intermediate Examination of the Town Planning Institute or hold equivalent qualifications, and who have had practical experience in a Planning Office, or in a Surveyor's, Engineer's or Architect's Department.

Appointments will be to the permanent staff and are subject to the National Joint Council's conditions of service as adopted by the County Council. Appointments will be terminable by one month's notice on either side, and will be subject to the Local Government Superannuation Act, 1937. Selected candidates will be required to pass a medical examination to the satisfaction of the County Medical Officer of Health. Applications, stating age, qualifications and experience, should be received by the undersigned not later than 29th December, 1949, and should be accompanied by copies of two recent testimonials. Canvassing, either directly or indirectly, will be a disqualification, and relationship to any member or senior officer of the Council must be disclosed.

T. STEPHENSON,  
Clerk of the Council.  
2845

Ivi

**COUNTY COUNCIL OF THE COUNTY OF LANARK.**

**PROPERTY DEPARTMENT.**

Applications are invited for the post of JUNIOR TECHNICAL ASSISTANT in the Property Department. Salary £480-£525 (A.P.T., Grade IV), with headquarters at Motherwell.

Applicants who should preferably be Graduates of the Institution of Heating and Ventilating Engineers, must not be over 45 years of age, and be fully experienced in the design and preparation of drawings of all types of heating schemes and hot water supply, particularly of Schools, steam, electrical and gas installations for School Meals Service and Cooking Centres.

Applicants must have some knowledge of electrical and plumbing work.

The appointment will be subject to the County Council's Conditions of Service and to the provisions of the Local Government Superannuation (Scotland) Act, 1937, and successful candidate will require to pass a medical examination.

Canvassing, directly or indirectly, will be a disqualification.

Applications, stating age, qualifications, experience, past and present appointments, and accompanied by the names and addresses of three referees, should be sent to Mr. Wm. R. Watt, County Architect, 34, Albert Street, Motherwell, Lanarkshire, not later than 30th December, 1949.

WM. C. BROWNIE,  
County Clerk.

Lanarkshire House.

191, Ingram Street, Glasgow, C.1.

November, 1949. 2819

**EAST RIDING OF YORKSHIRE COUNTY COUNCIL.**

**APPOINTMENTS ARE INVITED FOR THE FOLLOWING APPOINTMENTS ON THE PERMANENT STAFF OF THE COUNTY ARCHITECT'S DEPARTMENT:—**

(a) SENIOR ASSISTANT ARCHITECTS.

A.P.T., Grade VIII, £685-£760 per annum.

Applicants must be fully qualified Architects and have had experience in the design and construction of modern buildings and the administration work in connection with building contracts. The successful applicants will be required to take charge of an architectural section.

(b) ASSISTANT ARCHITECTS.

A.P.T., Grades V to VI. The salary range is £520 to £660, and each suitable applicant will be appointed to the grade appropriate to his qualifications and experience.

Applicants should have had satisfactory experience in the design and construction of modern buildings, and preference will be given to those who have appropriate professional qualifications.

(c) QUANTITY SURVEYOR'S ASSISTANT.

A.P.T., Grade III, £450 to £495 per annum.

Applicants should have had experience in a Quantity Surveyor's or Builder's office, and be capable of preparing Bills of Quantities. Specifications, site measurement, and the settlement of final accounts.

The appointments, which are terminable by one month's notice on either side, are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination.

Applications, stating age, training, qualifications and experience, with particulars of past and present appointments with salaries, and accompanied by copies of three recent testimonials, must be received by the County Architect, County Hall, Beverley, not later than Wednesday, the 14th December, 1949. Applicants should disclose relationship to any member or senior officer of the Council, and canvassing will be a disqualification.

T. STEPHENSON,  
Clerk of the Council.

County Hall, Beverley.

November, 1949. 2825

**MIDDLESEX COUNTY COUNCIL.**

**APPOINTMENTS ARE INVITED FOR REGISTERED OR EXPERIENCED ARCHITECTURAL ASSISTANTS.**

A.P.T. Div., Grade V (£550-£600 p.a. inclusive if 26 years or over). Established, subject to medical fitness. Application forms from the County Architect, Middlesex County Council, 10, St. George Street, Westminster, S.W.1 (stamped addressed foolscap envelope), to be returned within 14 days (quoting G.362 A.J.). Canvassing disqualifies.

C. W. RADCLIFFE,  
Clerk of the County Council.

Middlesex Guildhall, S.W.1. 2826

**BOROUGH OF ROWLEY REGIS.**

**BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.**

**QUANTITY SURVEYOR.**

Applications are invited for the above appointment. Applicants must be capable of preparing Bills of Quantities for Housing and other building works, measuring works in progress for interim and final accounts.

The salary will be in accordance with Grade VI of the A.P.T. Division of the National Scale of Salaries (£595-£660 p.a.).

The appointment will be subject to the National Scheme of Conditions of Service, and will be terminable by one month's notice on either side.

Applications, stating age, qualifications and experience, together with copies of not more than three testimonials, should be addressed to the Borough Engineer and Surveyor, suitably endorsed, so as to reach him not later than Monday, 19th December, 1949.

R. HEGAN,  
Town Clerk.

Municipal Buildings, Old Hill, Staffs.

23rd November, 1949. 2818



STAFFORDSHIRE COUNTY COUNCIL.  
EDUCATION COMMITTEE.

Applications are invited for the following appointments on the permanent establishment of the Architect's Department—

(a) ASSISTANT ARCHITECT (ONE). Grade VIII. A.P.T. Division (£685×£25—£760 per annum).

(b) ASSISTANT ARCHITECTS. Grade VI. A.P.T. Division (£595×£20 (2)×£25—£660 per annum).

(c) ASSISTANT ARCHITECTS. Grade V. A.P.T. Division (£520×£15 (2)×£20—£570 per annum).

(d) JUNIOR ASSISTANTS. Grades II to IV. A.P.T. Division (£420-£525 per annum, according to qualifications and experience).

(e) JUNIOR ASSISTANTS. Grade I. A.P.T. Division (£390×£15—£435 per annum).

(f) MEASURING SURVEYORS. Grade IV. A.P.T. Division (£480×£15—£525 per annum).

(g) SPECIFICATION WRITER (ONE). Grade IV. A.P.T. Division.

Applicants for posts (a) and (b) are required to be Associate Members of the R.I.B.A.

Applicants for (c) are required to be Registered Architects. Preference will be given to candidates having a sound knowledge of and experience in the construction and design of all types of school buildings.

Applicants for (d) must have passed the Intermediate Examination of the R.I.B.A. and have had some experience.

The appointments will be subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1937, and successful candidates will be required to undergo a medical examination. The appointments will also be subject to the Scheme and Conditions of Service of the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services.

Canvassing, either directly or indirectly, will operate as a disqualification, and candidates must disclose in their applications whether to their knowledge they are related to any member or senior officer of this Council.

A lodging allowance of 25s. per week, and return railway fare home every two months, will be paid for a maximum period of six months where the successful candidate is married and has to continue to maintain his home outside the geographical county while seeking housing accommodation.

Applications, endorsed according to the particular post in respect of which consideration is desired, should be addressed to the Director of Education (A), County Education Offices, Earl Street, Stafford, stating age, qualifications and previous experience, and should be accompanied by copies of three recent testimonials.

All applications are required to be received not later than the first post on Friday, the 23rd December, 1949.

T. H. EVANS,

Clerk of the County Council.

War Department invites applications for civilian appointments in Royal Engineer Works Services in North Africa (including Egypt), East Africa, and the Far East (Malaya, Singapore and Hong Kong) for persons with the following minimum qualifications—

CLERKS OF WORKS (Construction). Salary £400-£525 (free of U.K. income tax). Reference No. F.A.14/CB.

Ordinary National Certificate or equivalent qualifications.

Apprenticeship as craftsman, with three years' experience as Foreman of Trade, General Foreman or Clerk of Works.

General office experience in estimating, costing and management.

QUANTITY SURVEYING ASSISTANTS. Salary £400-£525 (free of U.K. income tax). Reference No. F.A.691/CB.

City and Guilds 3rd year Certificate on quantities and building construction, or equivalent qualifications. 5 years' training and experience with a Quantity Surveyor or Building Contractor (or Government Department or Local Authority).

SENIOR CLERKS OF WORKS (Mechanical). Salary £500-£625 (subject to U.K. income tax). Reference No. F.A.692/CB.

Higher National Certificate in Mechanical Engineering or evidence of equivalent standard of Technical Education.

After apprenticeship, at least 3 years with an Engineering firm giving good comprehensive experience, or not less than 3 years as a supervisor of labour, chargehand or technical officer in the industry.

CLERKS OF WORKS (Electrical) or (Mechanical). Salary £400-£525 (free of U.K. income tax). Reference No. F.A.692/CB.

Ordinary National Certificate in Electrical and/or Mechanical Engineering or evidence of an equivalent standard of technical education.

Experience as for Senior Clerk of Works (Mechanical) above.

Starting rates of salary will be fixed in accordance with age, experience and qualifications.

Foreign service allowance (free of U.K. income tax) is payable in addition. Accommodation provided. Passages paid.

Applications in writing, giving full details of age, qualifications and posts held (including dates) should be addressed to London Appointments Office, Ministry of Labour and National Service, 1-6, Tavistock Square, London, W.C.1, quoting appropriate reference number.

Copies only of testimonials to be forwarded. G.B.22.11.7.(20) 2821

## BOROUGH OF SLOUGH.

BOROUGH ENGINEER'S DEPARTMENT.  
APPOINTMENT OF ASSISTANT ARCHITECT.

Applications are invited for the permanent appointment of ASSISTANT ARCHITECT, on Grade A.P.T., V, of the National Scales, at a commencing salary of £520 per annum, rising on satisfactory service, by two annual increments of £15 and one of £20 per annum to a maximum of £570 per annum. Applicants must be Members of the Royal Institute of British Architects, and preference will be given to those who have had experience with a Local Authority.

Applicants must give details of age, marital state, qualifications, present and previous appointments, with dates, technical training and experience; whether related to any member or senior officer of the Council, and the names of two Architects to whom reference can be made.

The appointment will be subject to (i) the provisions of the Local Government Superannuation Act, 1937; (ii) the National Scheme of Conditions of Service; (iii) the satisfactory passing of a medical examination, by the successful candidates, and (iv) termination by one month's notice on either side.

The Corporation is unable to assist the successful candidate with housing accommodation.

Applications in sealed envelopes, endorsed "Assistant Architect, Grade V," must reach the undersigned not later than noon on Monday, 19th December, 1949.

Canvassing, directly or indirectly, will disqualify.

NORMAN T. BERRY.

Town Clerk.

Town Hall, Slough.

1st December, 1949.

2824

## FLINTSHIRE COUNTY COUNCIL.

Applications are invited for the appointment of ASSISTANT ARCHITECT, in the County Architect's Department, at a salary in accordance with Grade A.P.T., V (£520 per annum, rising to £570 per annum). Applicants must be Registered Architects and preferably Associates of the Royal Institute of British Architects; have a good experience in a County Architect's office, and also have a sound knowledge of the design and construction of Schools.

The appointment will be subject to (a) the National Scheme of Conditions of Service, as modified by the County Council; (b) the provisions of the Local Government Superannuation Act, 1937; (c) one month's notice of termination, on either side, and (d) a satisfactory medical examination.

Applications will be considered from registered disabled persons.

Forms of application obtainable from the undersigned.

Closing date 19th December, 1949.

W. HUGH JONES,

Clerk of the County Council.

County Buildings, Mold.

2832

## BOROUGH OF MORLEY.

## HOUSING COMMITTEE.

## APPOINTMENT OF ARCHITECTURAL

## ASSISTANT.

Applications are invited for the permanent appointment of Architectural Assistant, in the Housing Director's Office, at a salary in accordance with Grade III of the National Salary Scales.

Candidates should be suitably qualified, and have an all round experience of housing and general architectural work. The successful candidate will be required to pass a medical examination for the purpose of the Corporation's Superannuation Scheme.

Housing accommodation will be provided if necessary.

Applications, stating age, qualifications, experience, and when at liberty to commence duties, together with copies of two recent testimonials, to reach the undersigned not later than Thursday, 22nd December, 1949.

E. V. FINNIGAN,

Town Clerk.

Town Hall, Morley.

December, 1949.

2872

## COUNTY BOROUGH OF SMETHWICK.

## BOROUGH ENGINEER AND SURVEYOR'S

## DEPARTMENT.

## APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment, at a salary in accordance with A.P.T., Grade VI (£595-£660) per annum.

The post is subject to the provisions of the National Scheme of Conditions of Service, the Standing Orders of the Council, the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination, and will be terminable by one month's notice on either side.

Applicants should have had experience in the design of houses, flats and other municipal buildings, be suitably qualified, and preference will be given to Members of the Royal Institute of British Architects.

Applications, suitably endorsed, stating age, details of education and qualifications, full particulars of experience, past and present appointments and salary, accompanied by copies of two recent testimonials, should be addressed to the Borough Engineer and Surveyor, Council House, Smethwick, to reach him not later than 30th December, 1949.

E. L. TWYECROSS,

Town Clerk.

The Council House, Smethwick.

2nd December, 1949.

2870

BOROUGH OF CROSBY.  
BOROUGH ENGINEER AND SURVEYOR'S

## DEPARTMENT.

Applications are invited for the following appointments on the temporary staff in the Department of the Borough Engineer and Surveyor—

(a) ARCHITECTURAL ASSISTANT, Grade III. Salary £450-£495 per annum. Candidates should possess a recognized architectural qualification and have had experience in general architectural work and housing, including the preparation of working drawings and specifications.

(b) ASSISTANT QUANTITY SURVEYOR, Grade III. Salary £450-£495 per annum. Candidates should have had experience in the preparation of Bills of Quantities and final accounts for housing, and preference will be given to those possessing recognised qualifications.

Appointments will be subject to one month's notice on either side.

Applications, stating age, present and past appointments, qualifications and experience, must be delivered to the undersigned, appropriately endorsed, not later than noon on Monday, the 19th December, 1949.

Testimonials are not required, but applicants are asked to submit the names of two referees.

Canvassing in any form would be a disqualification.

HAROLD O. ROBERTS,

Town Clerk.

Town Hall, Waterloo, Liverpool, 22.

25th November, 1949.

2842

COUNTY BOROUGH OF SOUTHAMPTON.  
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments—

(a) SENIOR ASSISTANT ARCHITECT (Education). Grade VII (£635-£710 p.a.).

(b) SENIOR ASSISTANT ARCHITECTS. Grade VI (£595-£660 p.a.).

(c) ASSISTANT ARCHITECTS. Grade V (£520-£570 p.a.).

(d) ASSISTANT ARCHITECTS. Grade IV (£480-£525 p.a.).

(e) TEMPORARY JUNIOR ARCHITECTURAL ASSISTANT, at a salary equivalent to the General Division (i.e., £135-£385 p.a.).

Applications, on forms obtainable from L. Berger, Dip.Arch., A.R.I.B.A., Borough Architect, Civic Centre, Southampton, should be returned to arrive not later than 19th December, 1949. 2831

## BEESTON AND STAPLEFORD URBAN

## DISTRICT COUNCIL.

Applications are invited from experienced Architectural Assistants for the following appointment in the Engineer and Surveyor's Department—

CHIEF ARCHITECTURAL ASSISTANT. A.P.T. Grade VII (£635×£25—£710), or A.P.T. Grade VIII (£685×£25—£760), according to experience and qualifications.

Applicants should be Registered Architects and/or Associate Members of the Royal Institution of British Architects, and should have practical experience in the design of housing estates and general Municipal buildings.

The successful candidate, if married, will be offered housing accommodation.

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

Applications, stating age, qualifications and experience, accompanied by copies of three recent testimonials, should reach the undersigned not later than 19th December, and should state whether the applicant is related to any member or senior officer of the Council.

Canvassing, directly or indirectly, will disqualify.

C. H. WRAGG,

Clerk of the Council.

Town Hall, Beeston, Notts.

2851

BOROUGH OF ILFORD.  
BOROUGH ENGINEER AND SURVEYOR'S

## DEPARTMENT.

## APPOINTMENT OF ARCHITECTURAL

## ASSISTANT (GRADE VII).

Applications are invited for the above appointment on the permanent staff of the Borough Engineer. Salary Grade VII of the A.P.T. Division, viz., £635×£25—£710 per annum, plus London weighting.

Applicants should be Chartered Architects and Corporate Members of the Royal Institute of British Architects, and have a thorough knowledge of architectural works, with practical experience in design and development of public buildings of all types, housing schemes, particularly multi-storey flats, etc., the preparation of specifications, and be capable of supervising and controlling contracts.

THE COUNCIL IS PREPARED TO CONSIDER, IF NECESSARY, THE QUESTION OF HOUSING ACCOMMODATION IN CONNECTION WITH THIS APPOINTMENT.

The appointment, which is a whole-time one (private practice being prohibited), will be subject to one month's notice on either side, to the provisions of the Local Government Superannuation Act, 1937, the National Conditions of Service, and to medical examination.

Forms of application obtainable from the Borough Engineer, Town Hall, Ilford, should be returned to the undersigned not later than 31st December, 1949.

K. F. B. NICHOLLS,

Town Clerk.

Town Hall, Ilford, Essex.

December, 1949.

2871

# WELSHPOOL BOROUGH COUNCIL.

## APPOINTMENT OF CLERK OF WORKS.

Applications are invited from experienced persons for the above appointment for the Pool Quay (8 houses), and possibly other housing schemes contemplated by the Council.

Applications, with copies of three recent testimonials, stating age, experience and salary required, should reach the undersigned not later than first post on Monday, the 19th December, 1949.

J. BEN DAVIES,

Town Clerk.

Borough Council Offices, Welshpool, Mont.  
1st December, 1949. 2874

## CORPORATION OF THE CITY OF GLASGOW OFFICE OF PUBLIC WORKS.

### VACANCIES FOR ARCHITECTS, CIVIL ENGINEERS, TOWN PLANNING ASSISTANTS, QUANTITY SURVEYORS, AND ASSISTANT DEAN OF GUILD INSPECTOR.

Applications are invited for the appointment of Architects, Civil Engineers, Town Planning Assistants, and Quantity Surveyors on Grades Ia and IIa in the Office of Public Works.

The salary scales applicable are:—  
Grade Ia, £535×£25—£760 p.a. (A.P.T., VII and VIII).

Grade IIa, £420×£15/£20—£660 p.a. (A.P.T., II, III, V and VI).

Placements on the grades will be dependent upon the candidates' age and experience.

Qualifications required for appointment on Grade Ia are: Associate Membership of the Royal Institute of British Architects, B.Sc. Degree in Architecture, Diploma in Architecture of an approved school, Associate Membership of the Institution of Civil Engineers, Associate Membership of the Institution of Municipal Engineers, B.Sc. Degree in Civil Engineering, Associate Membership of the Town Planning Institute or Associate Membership of the Institution of Chartered Surveyors (Quantities Division).

Candidates for appointment on Grade IIa must hold one of the above qualifications or have passed the final examination of the appropriate Institution.

Candidates for appointment on Grade Ia should have at least 5 years' experience in general municipal, architectural, engineering, town planning or quantity surveying work.

Candidates for appointment on Grade IIa should have some experience in such work.

Applications are also invited for the appointment of Assistant Dean of Guild Inspector, Grade A.P.T. II and IV, £420×£15 to £525 per annum.

Candidates should have extensive practical Building Trade experience and have served an apprenticeship to one of the Building Trades and hold the 6th year certificate for Building Construction of the Royal Technical College, Glasgow, or equivalent. Preference will be given to candidates with additional experience as Clerks of Works.

All appointments will be permanent and subject to the provisions of the Glasgow Corporation Superannuation Scheme. Selected candidates will be given a medical examination.

Applications, stating age, qualifications and experience, should be accompanied by the names of two referees, and must be lodged not later than 31st December, 1949, with the

MASTER OF WORKS AND CITY ENGINEER,

City Chambers, Glasgow, C.I. 2873

## CITY OF MANCHESTER.

### CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

#### PERMANENT STAFF:

(a) SENIOR ASSISTANT QUANTITY SURVEYOR. A.P.T., Grade VI. Salary £595 to £660 per annum.

(b) ASSISTANT QUANTITY SURVEYOR. A.P.T., Grade V. Salary £520 to £570 per annum. Candidates for appointments (a) and (b) must be Associates R.I.C.S. (Quantities Division).

(c) QUANTITY SURVEYING ASSISTANT. A.P.T., Grade III. Salary £450 to £495 per annum. Candidates must have passed the R.I.C.S. (Quantities Division) Intermediate Examination.

#### TEMPORARY STAFF:

(d) ASSISTANT ARCHITECT. A.P.T., Grade IV. Salary £480 to £525 per annum. Candidates must have passed the R.I.B.A. Intermediate Examination and have subsequently worked in an Architectural Office for a period of two years.

Successful candidates for the permanent appointments will be required to pass a medical examination before the appointments are confirmed, to contribute to the Corporation's Superannuation Fund, and to execute the Corporation's Deed of Service.

Applications on the official form, which can be obtained from the City Architect's Department, must be returned, together with not more than three recent testimonials, to Leonard C. Howitt, B.Arch., Dip.T.P., D.P.A., F.R.I.B.A., M.T.P.I., City Architect, Town Hall, Manchester, 2, by Tuesday, 3rd January, 1950, endorsed for the appropriate appointment.

All these appointments are subject to the Standing Orders of the Council and the National Joint Council's Scheme of Service Conditions. Canvassing in any form is prohibited and relationship to any member of the Council or senior official must be disclosed to me in writing.

PHILIP B. DINGLE,

Town Clerk.

Town Hall, Manchester.  
December, 1949. 2869

## BOROUGH OF WATFORD.

### APPOINTMENT OF ASSISTANT CLERK OF WORKS.

Applications are invited for the temporary appointment of an Assistant Clerk of Works in the Borough Engineer and Surveyor's Department. The appointment is in connection with the Council's Housing Schemes.

The duties will comprise assisting in the supervision of the erection of houses built for the Corporation, and applicants should have had some experience in supervising building works.

The salary will be an inclusive one of £8 8s. per week.

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

Applications, stating age, qualifications, present and past appointments, and full details of experience, must be made "on the prescribed form, which can be obtained from the undersigned, and must be returned to him not later than Thursday, 15th December, 1949, endorsed "Assistant Clerk of Works."

F. C. SAGE, A.M.Inst.C.E., M.I.Mun.E.,

Borough Engineer and Surveyor.

Town Hall, Watford.  
November, 1949. 2848

## BOROUGH OF NEATH.

### APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the permanent appointment of a Junior Architectural Assistant, in the Borough Engineer's Department. Salary Grade A.P.T. I.

Applicants must have had a sound training in architectural work and should be following a course of study to gain further qualifications. The post offers a wide experience in all branches of Municipal work, including public buildings and housing.

Appointment will be subject to one month's notice on either side and to the Local Government Officers' Superannuation Act, 1937. The person appointed will be required to pass a medical examination.

Applications, stating age, qualifications and experience, and accompanied by copies of not more than three testimonials, should be posted so as to reach me not later than 26th December, 1949.

ALFRED E. I. CURTIS,

Town Clerk.

November, 1949. 2849

## NATIONAL COAL BOARD—EAST MIDLANDS DIVISION.

Applications are invited for the following permanent and supernumerary posts in the DIVISIONAL ARCHITECT'S DEPARTMENT IN NOTTINGHAM.

SENIOR QUANTITY SURVEYOR. Salary scale £850×£35 to £1,150 per annum.

Applicants should be Fellows or Associate Members of the R.I.C.S. (Quantities Section), with considerable experience in the preparation of Bills of Quantities. Specifications, detailed approximate estimates, measuring up, making valuations and settlement of final accounts. Ability to control staff is essential.

ARCHITECTURAL ASSISTANTS (Grade I). Salary £410×£20 to £550 per annum.

Applicants should have passed or be working for Inter. R.I.B.A. Examination and have had at least 5 years' office experience, with considerable experience of Sketch Plans and Working Drawings.

ARCHITECTURAL ASSISTANTS (Grade II). Salary £300×£20 to £440 per annum.

Applicants should have passed, or be working for, the Inter. Examination R.I.B.A. and be able to assist in the preparation of Sketch Plans and Working Drawings.

SENIOR STRUCTURAL ENGINEER. Salary according to experience and qualifications.

Applicants should be qualified Structural Engineers, with considerable practical experience in the design of Structural Steelwork and Reinforced Concrete for Industrial and Welfare Buildings, and Structures of all types. Must be able to control staff and supervise construction through all stages.

STRUCTURAL ENGINEERING ASSISTANTS. Salary according to experience and qualifications.

Applicants should be proficient in the design of Structural Steelwork and/or Reinforced Concrete, and able to prepare detail drawings under supervision. A good general knowledge of Building Construction is essential.

The point of entry into the relevant salary scales will depend on the qualifications and experience of the successful applicants.

Applications, stating age, education, qualifications, experience, present appointment and salary, should be submitted by 31st December, 1949, to the Secretary, National Coal Board, East Midlands Division, Sherwood Lodge, Arnold, near Nottingham.

Applicants should state clearly the appointment for which application is made, both in the letter and on the envelope. 2867

## NORTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD.

### ARCHITECT'S DEPARTMENT.

Applications are invited for the following posts:—

(i) ASSISTANT ARCHITECTS. A.P.T., VI (£595 to £660 p.a., plus London weighting). Applicants should be Members of the R.I.B.A., or about to take final examination; good general experience in design and construction essential.

(ii) ARCHITECTURAL ASSISTANTS. A.P.T., V (£520 to £570 p.a., plus London weighting).

Applicants should have passed Intermediate Examination of the R.I.B.A., and have good general experience in design and construction.

(iii) ASSISTANT QUANTITY SURVEYOR. A.P.T., VI (£595 to £660 p.a., plus London weighting). Applicants should hold an approved qualification of the R.I.C.S., or be about to take final examination; good general experience in the preparation of specifications for public buildings, ability to make structural surveys and reports, and working knowledge of contract procedure essential.

Knowledge of hospital work desirable for posts (i), (ii) and (iii).

(iv) TRAINEE ARCHITECT. A.P.T., I-III (£390-£495 p.a., plus London weighting). Applicants should possess School Certificate and have taken up an approved course of study in preparation for the examination of the R.I.B.A. Experience in an Architect's office is desirable. Commencing salaries will be at the minimum of the grades.

The appointments will be subject to the National Health Service (Superannuation) Regulations, 1947-49, and conditions prescribed by Ministry of Health, and will be terminable by one month's notice.

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Applications, giving details of experience, together with names and addresses of two referees, should be addressed to the Secretary, North West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, not later than 28th December, 1949. 2865

## Tenders for Contracts

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- Group B: Three pairs of Type A Houses.
- " Seven pairs of Type B Houses.
- " One pair of Type C Houses.
- Group C: Eight pairs of Type A Houses.
- " Ten pairs of Type B Houses.
- " Two pairs of Type C Houses.

All of these houses are on adjoining sites, and tenders may be submitted for one or more of the Groups.

Bills of Quantities, Specification and Forms of Tender may be obtained from the undersigned on deposit of £3 3s. (by crossed cheque made payable to Bexley Corporation), which will be refunded on receipt of a bona fide tender not subsequently withdrawn. Drawings and the general conditions of contract (R.I.B.A. Form) may be inspected at the office of the Borough Engineer and Surveyor, West Lodge, Broadway, Bexleyheath, Kent.

Tenders on the form provided must be delivered to the Town Clerk, Council Offices, Broadway, Bexleyheath, in the special envelope provided, and without any name or other distinguishing mark, not later than 7th January, 1950.

The Council do not bind themselves to accept the lowest or any tender, and reserve the right to divide the work as they deem desirable.

W. WOODWARD,

Town Clerk. 2858

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- " Seven pairs of Type B Houses.
- " One pair of Type C Houses.
- Group C: Nine pairs of Type A Houses.
- " Thirteen pairs of Type B Houses.

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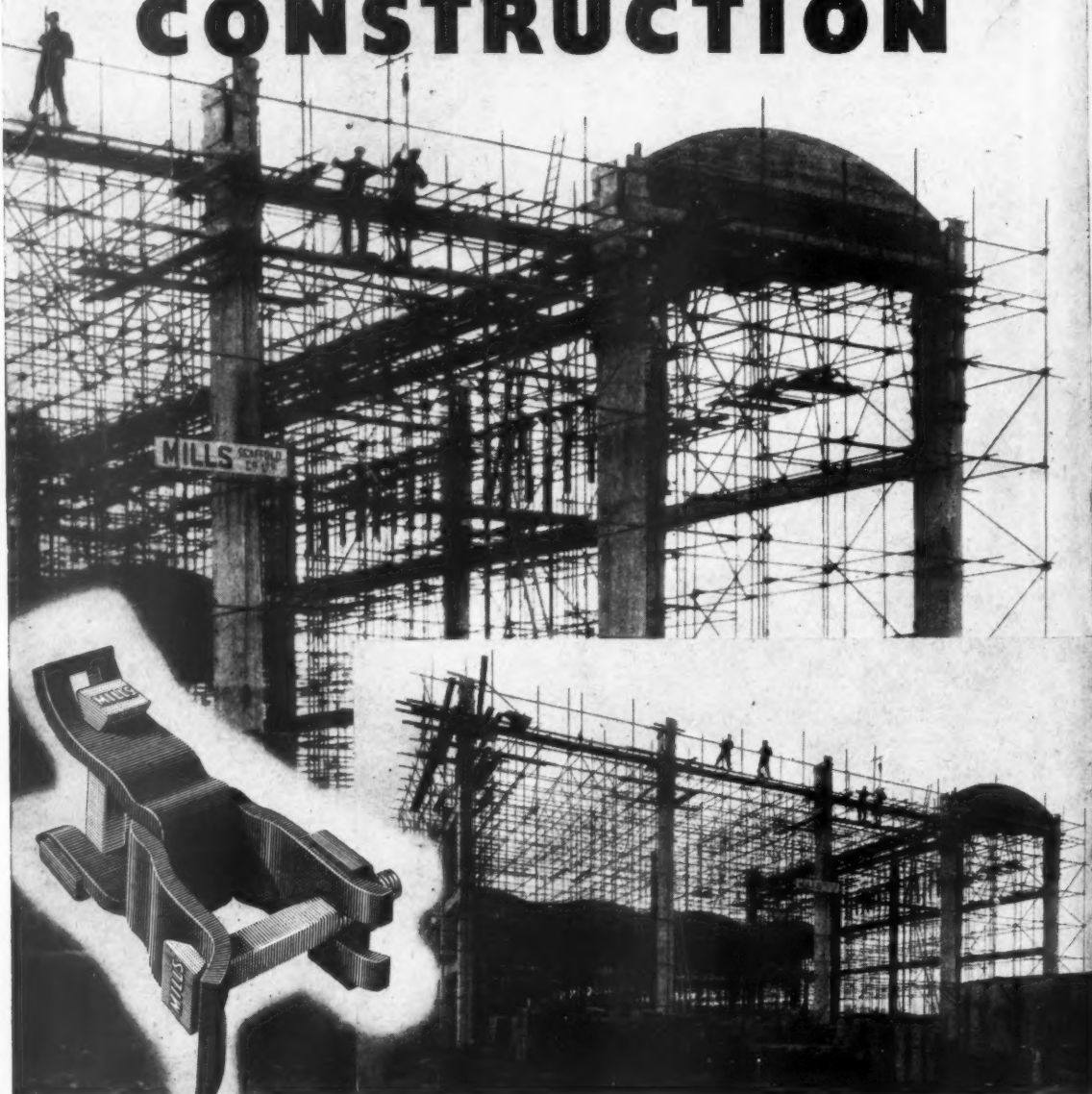
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