

# THE ARCHITECTS' JOURNAL



## standard contents

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

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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to 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. Markborough Whitel, ead, "Dyneley," Castle Hill, Avenue, Berkhamstead, Herts.	"Dyneley,"
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 9727
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. School of Architecture, Manchester Municipal School of Art, All Saints, Manchester, 15.	Ardwick 3480
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
BGC	British Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
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. Dolderhof, 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 5617
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4575

No. 2851]

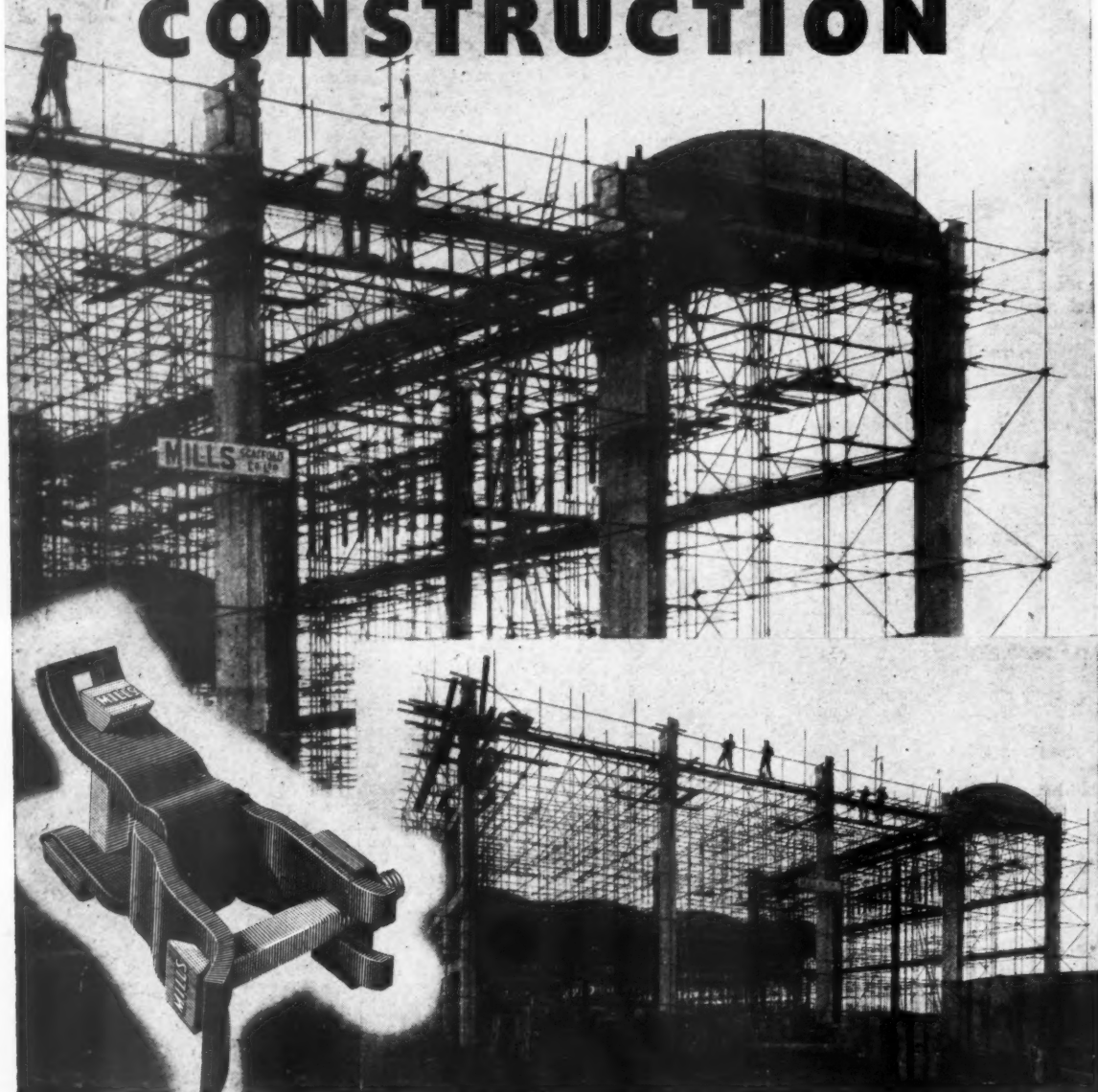
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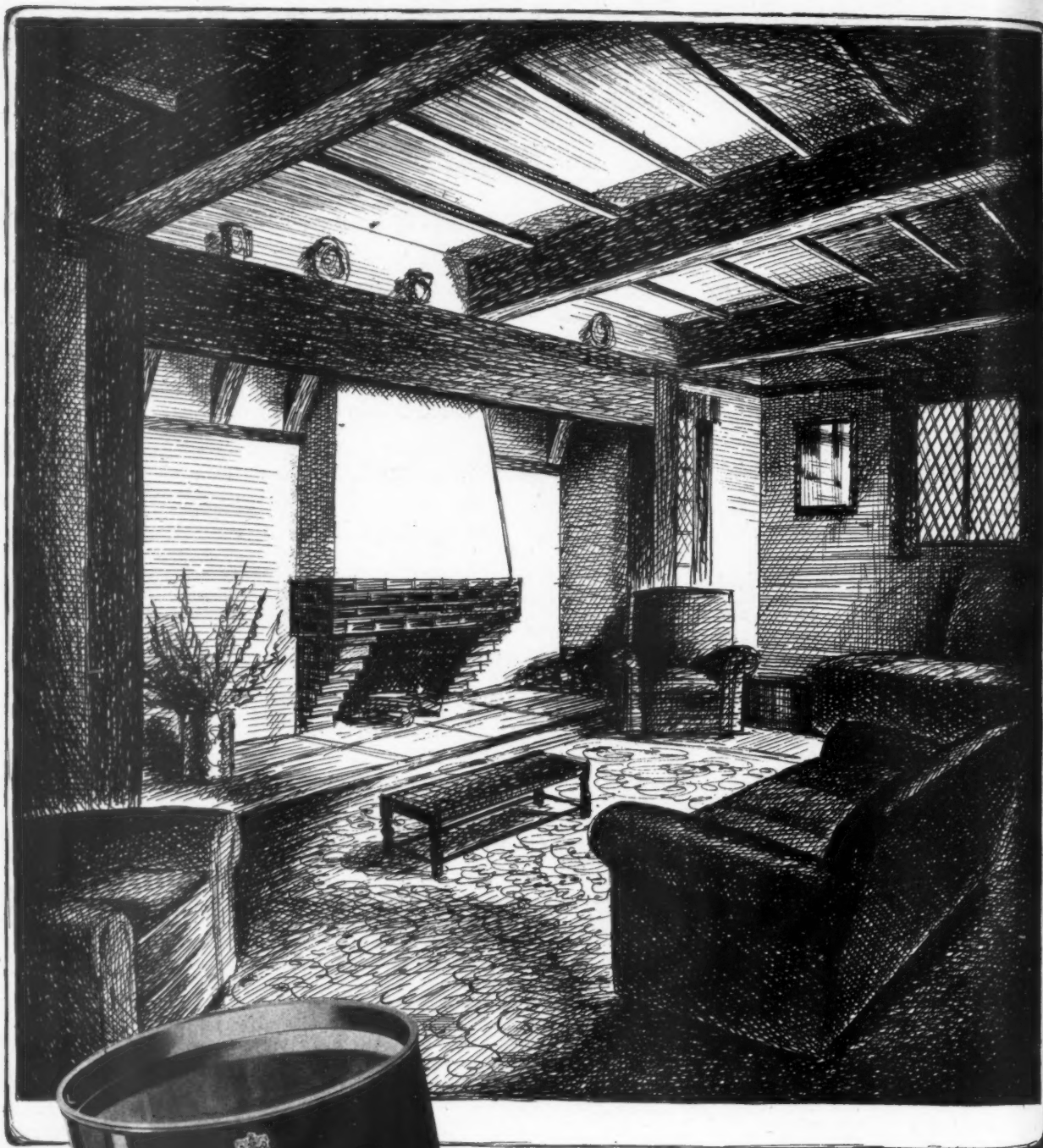
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Lead Works Lane

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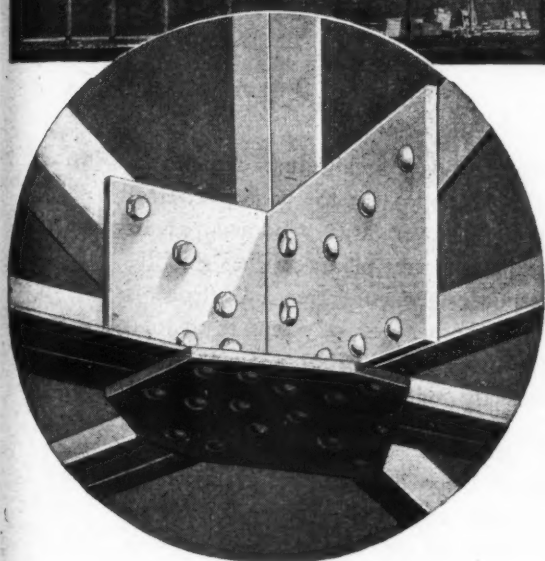
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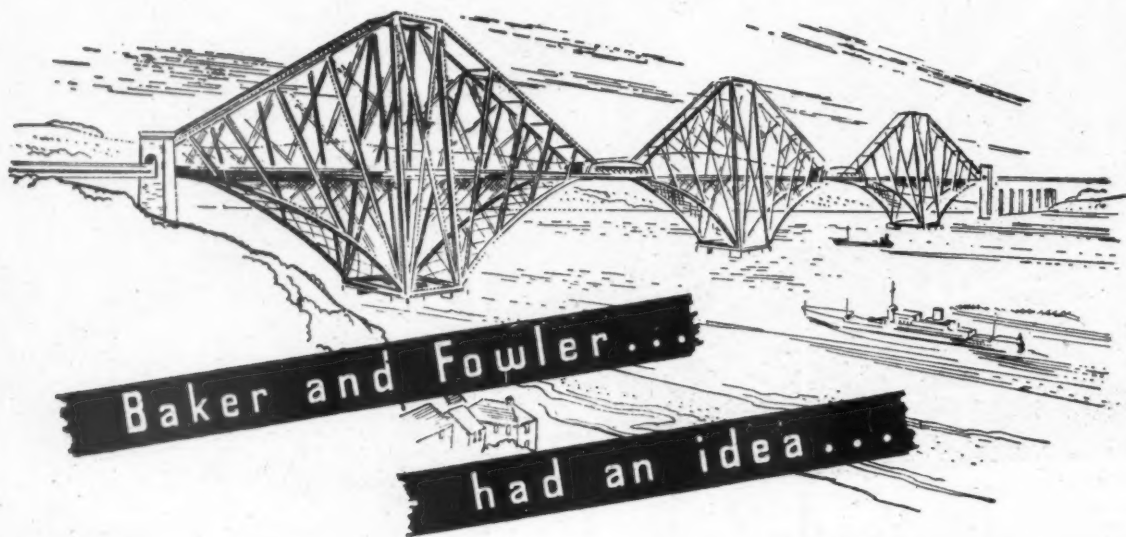
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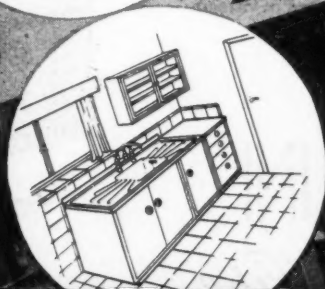
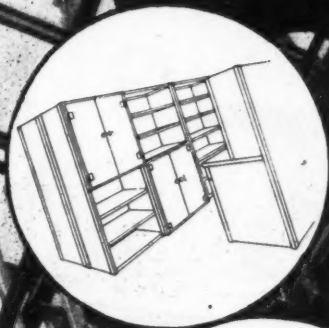
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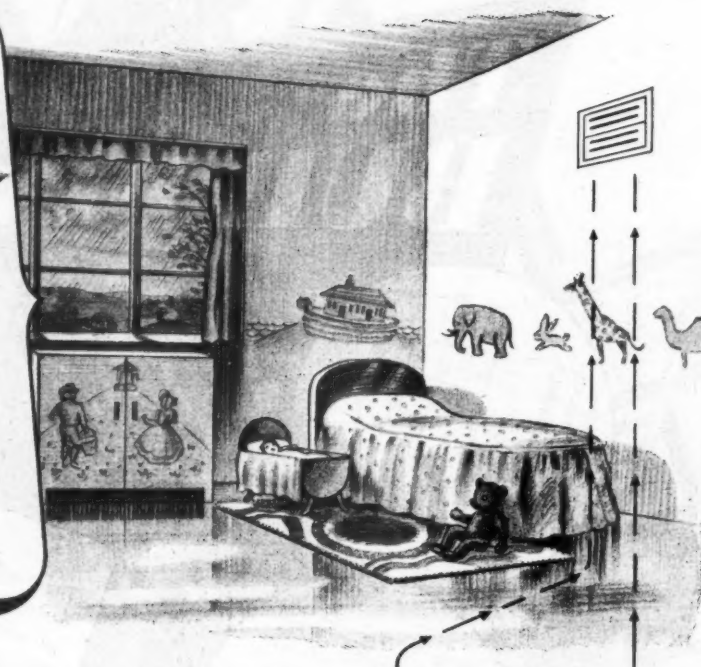
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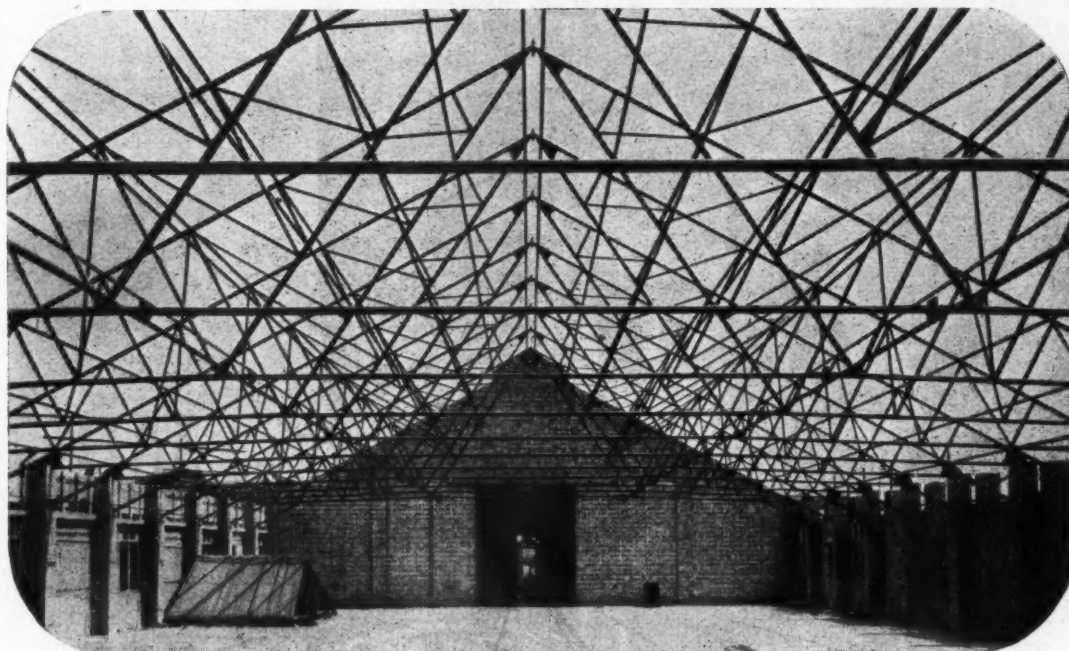
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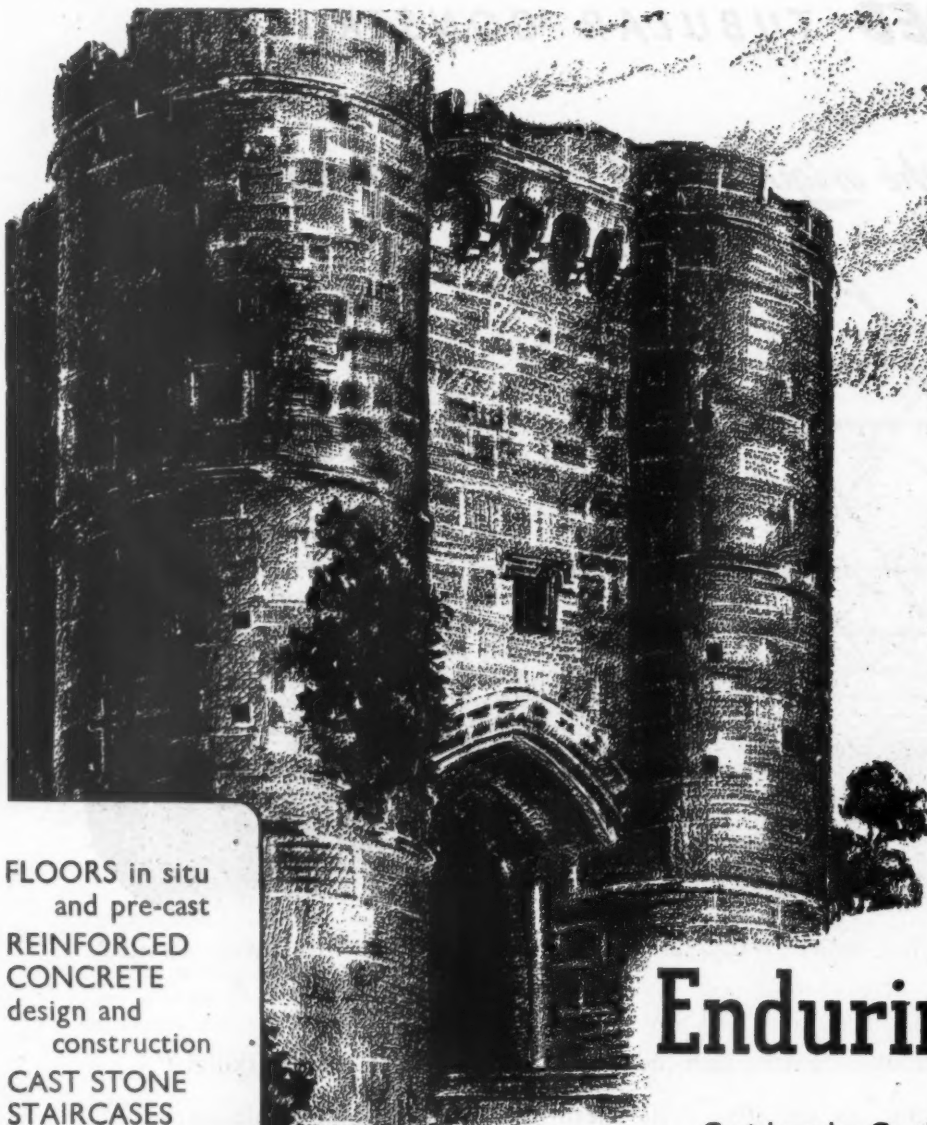
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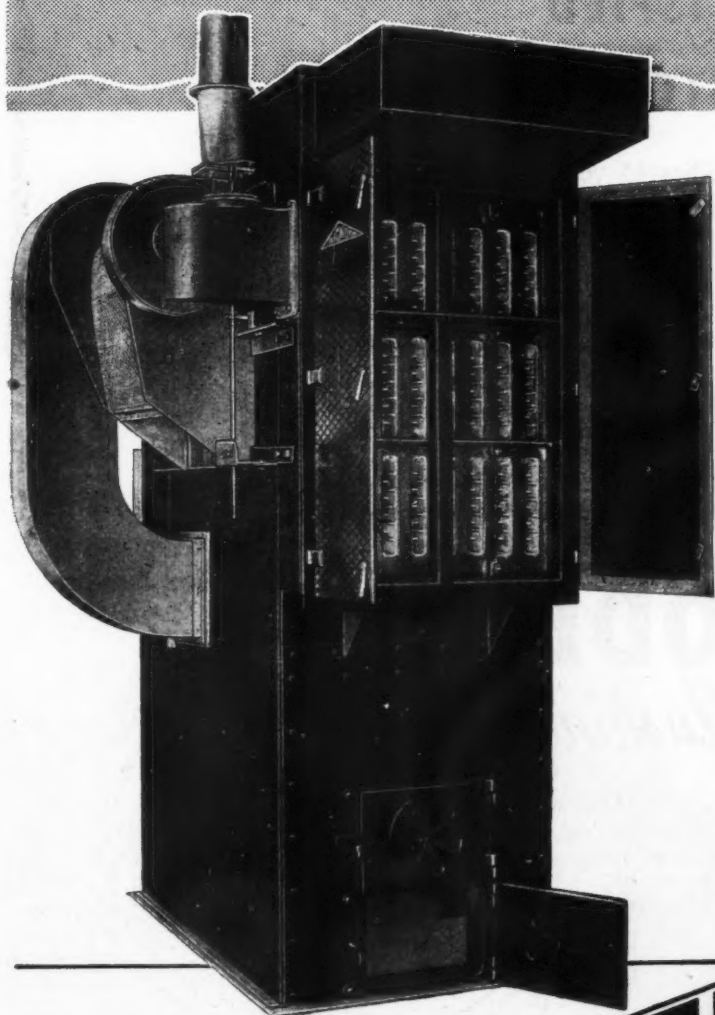
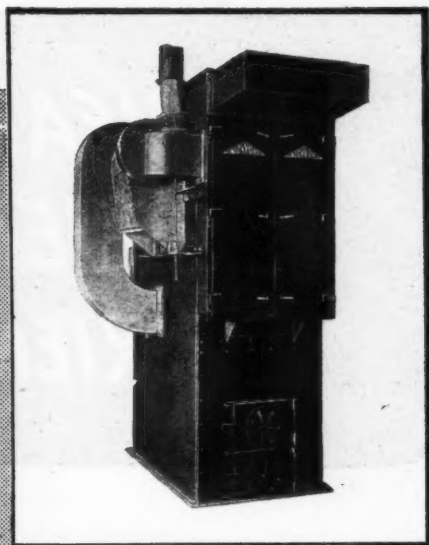
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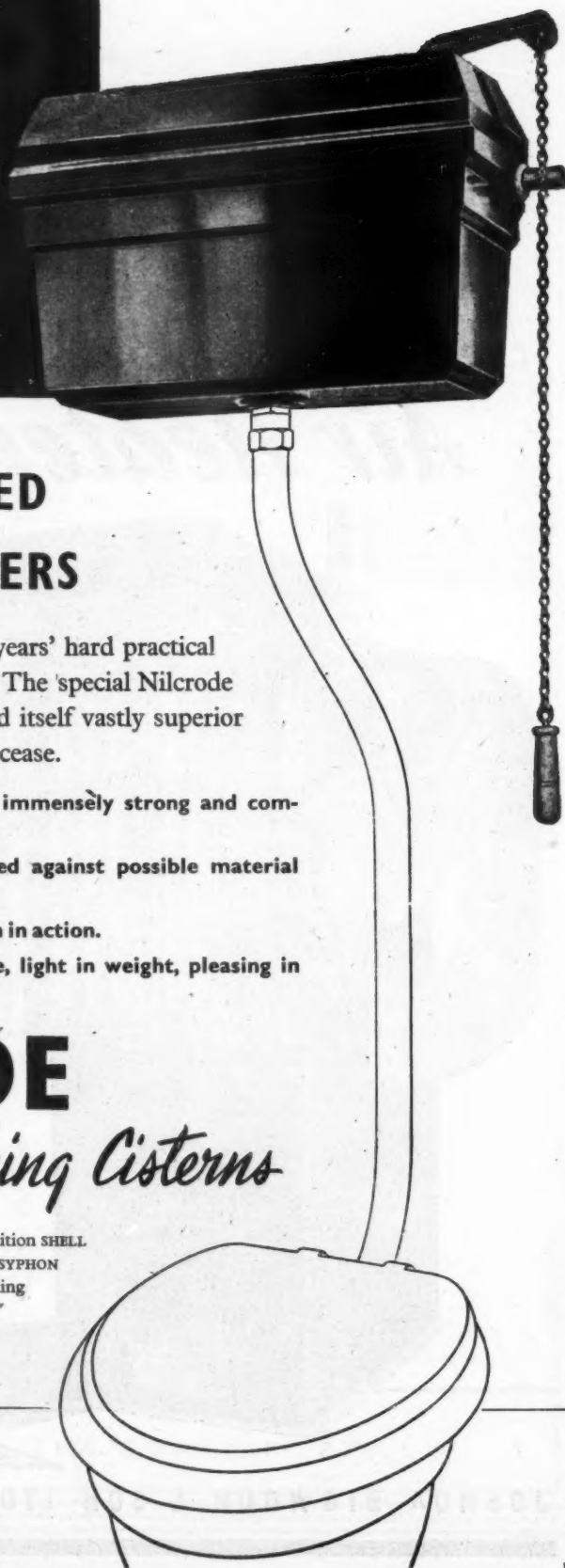
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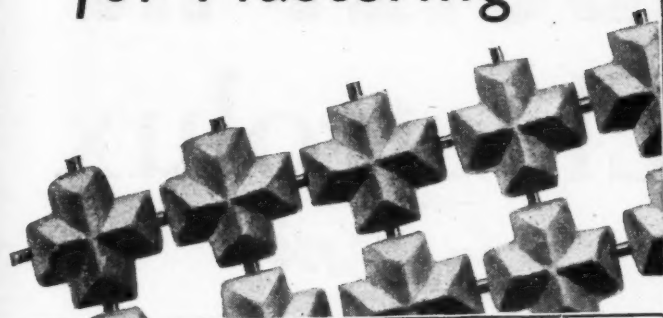
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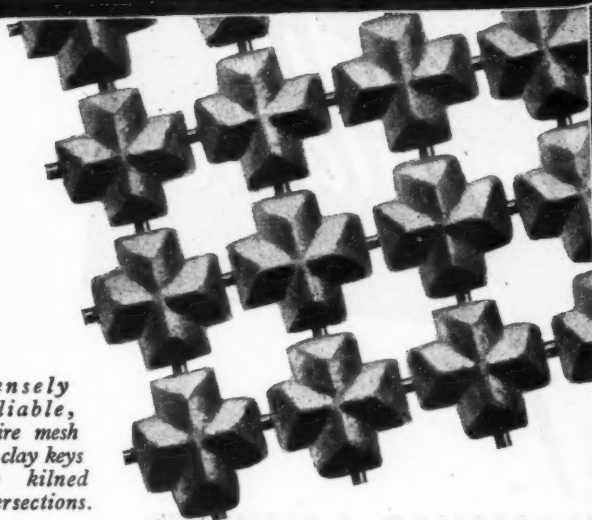
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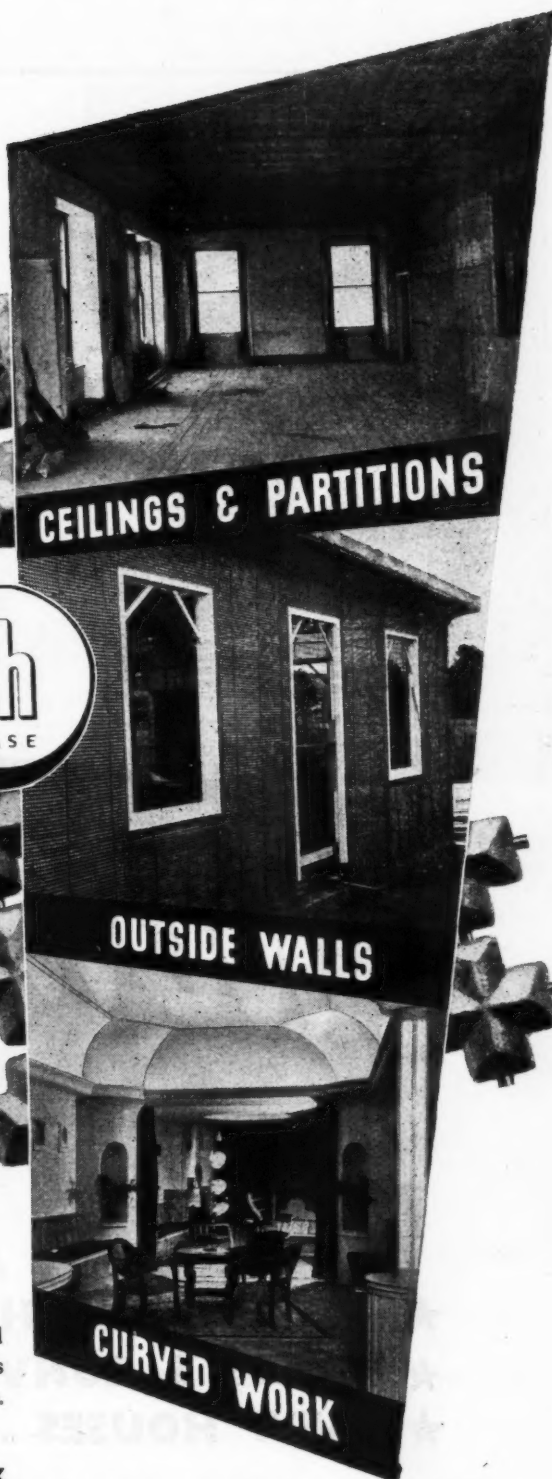
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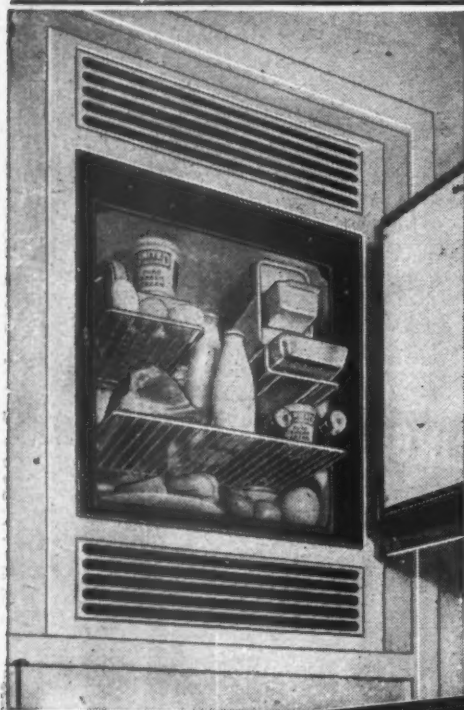
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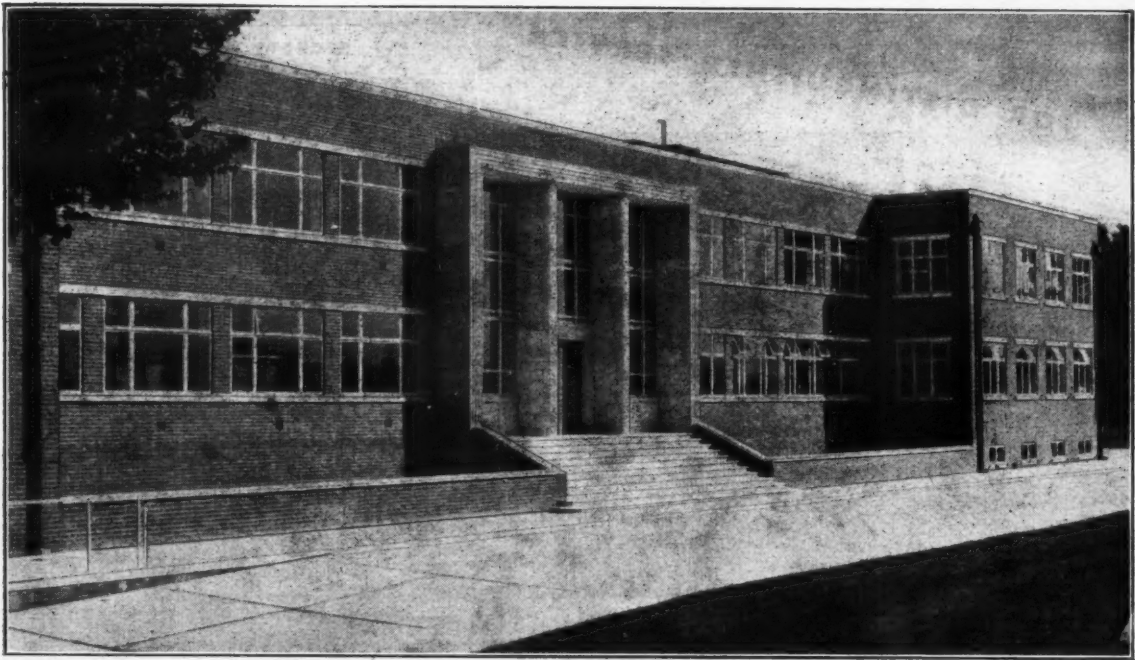
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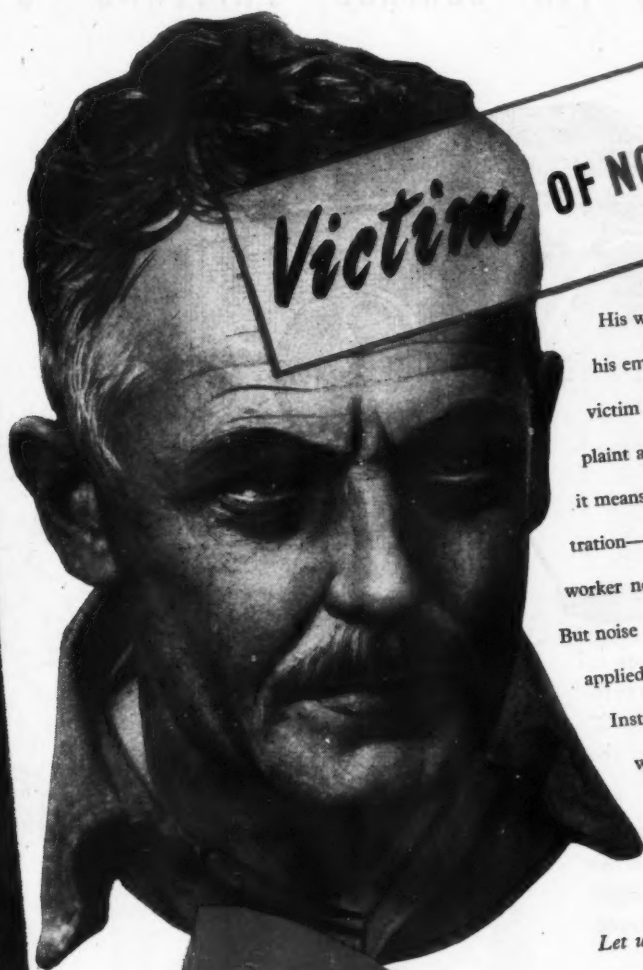
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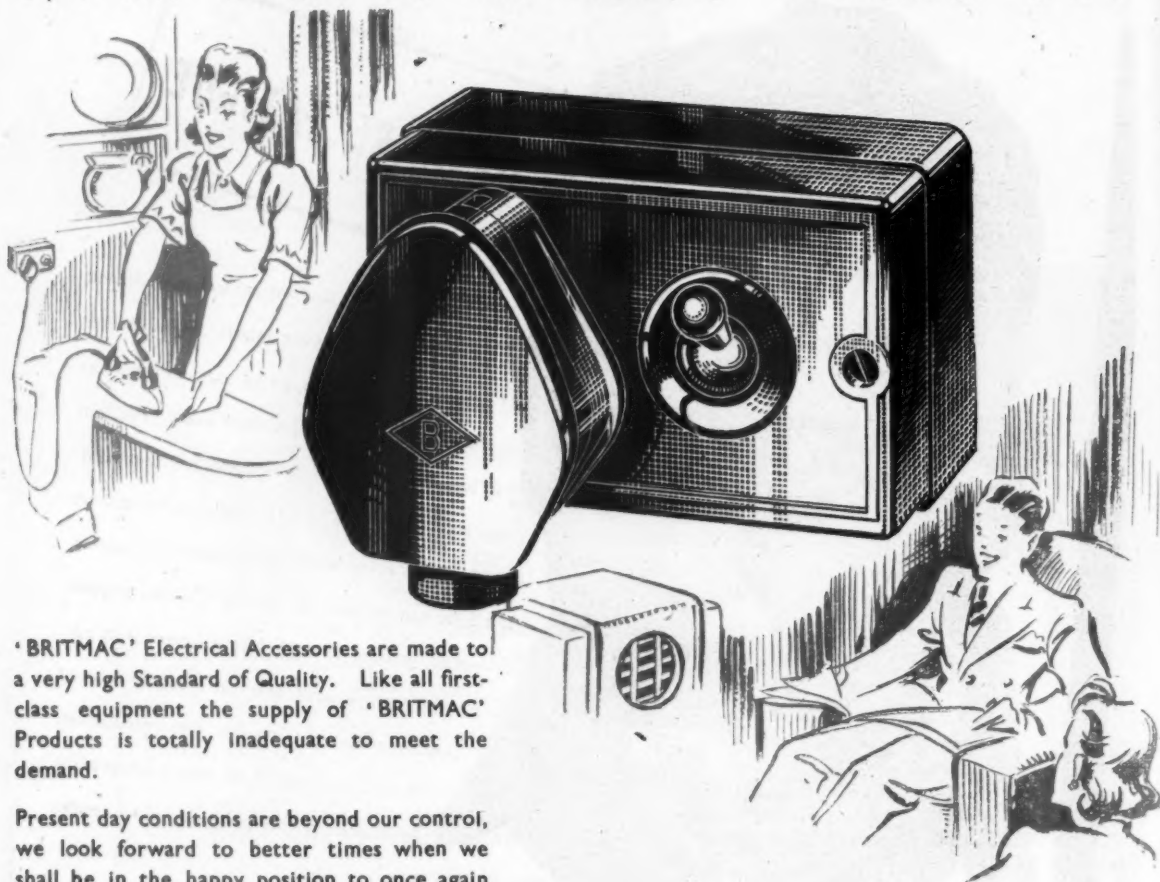
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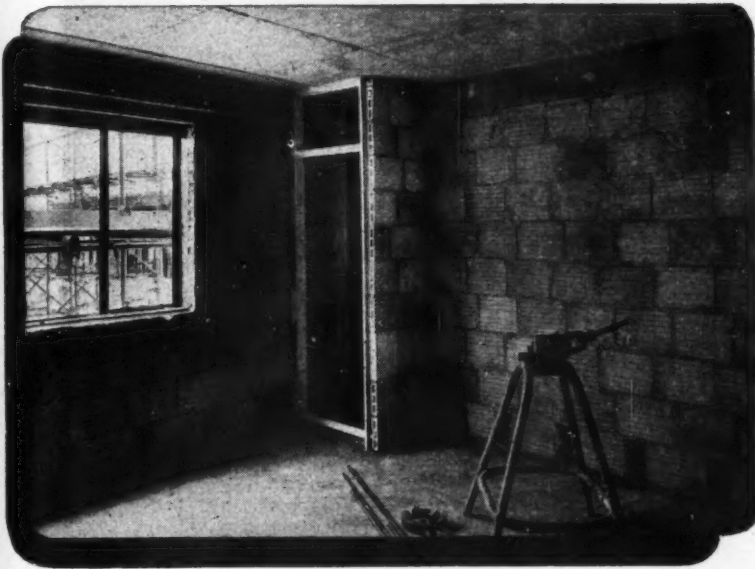
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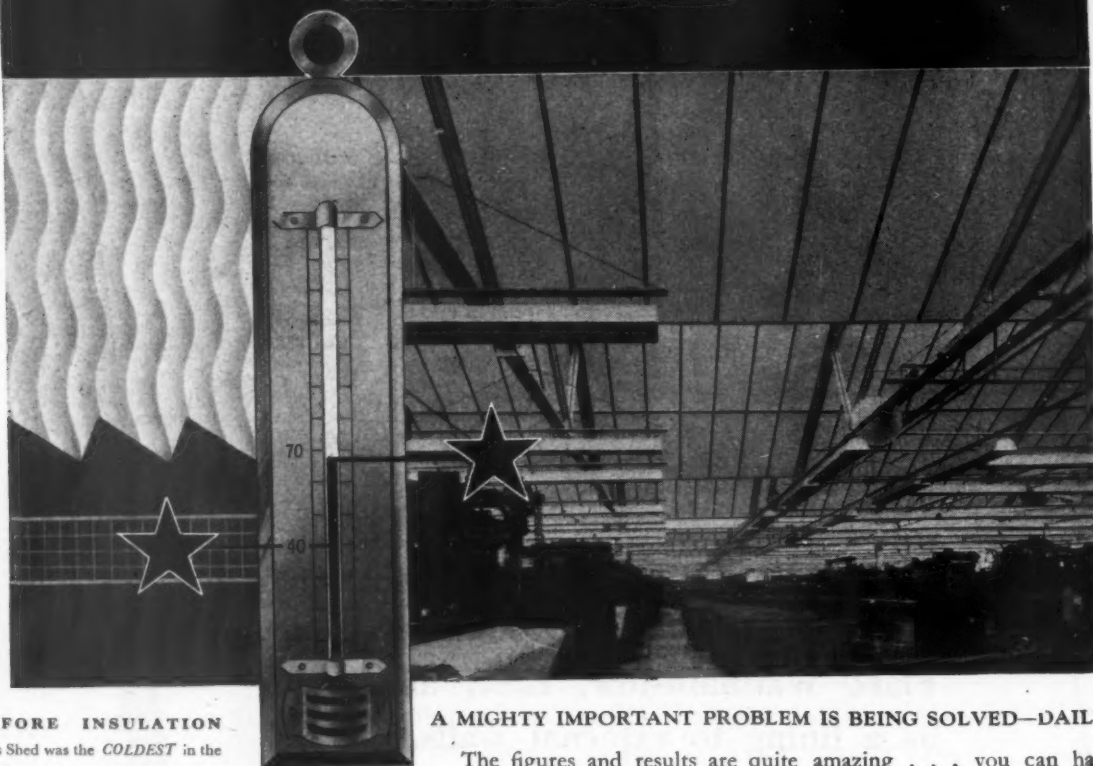
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xxvii



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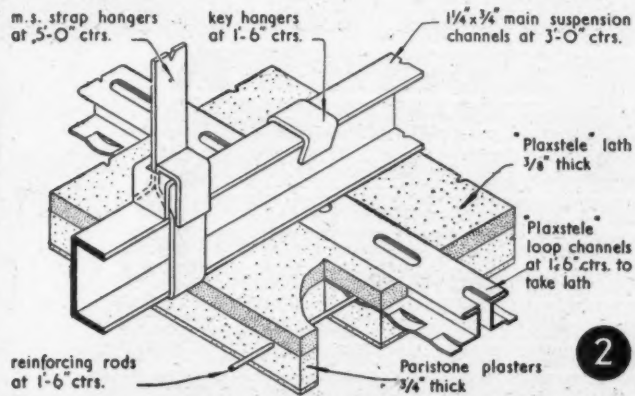
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- 2 General assembly of component parts.
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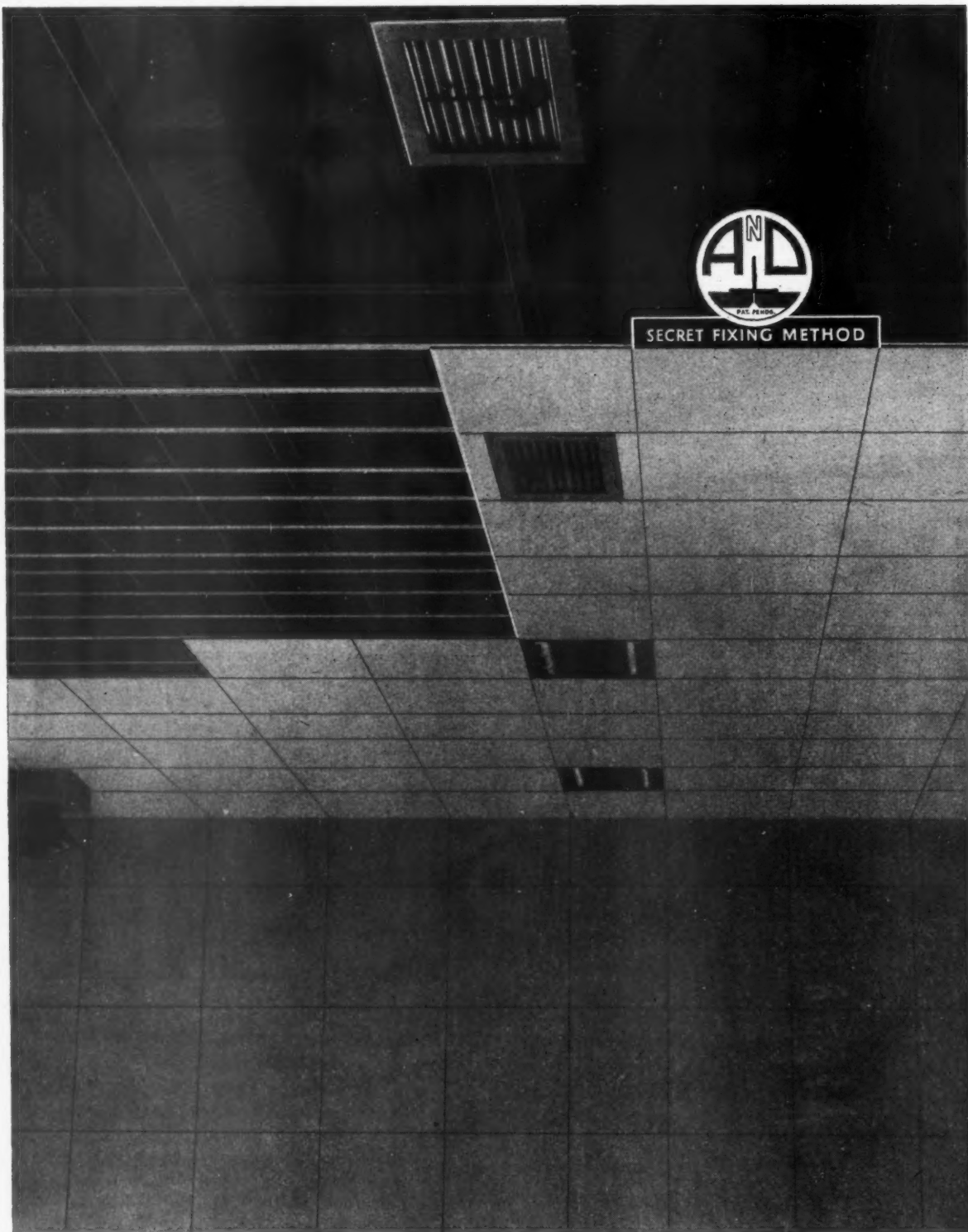
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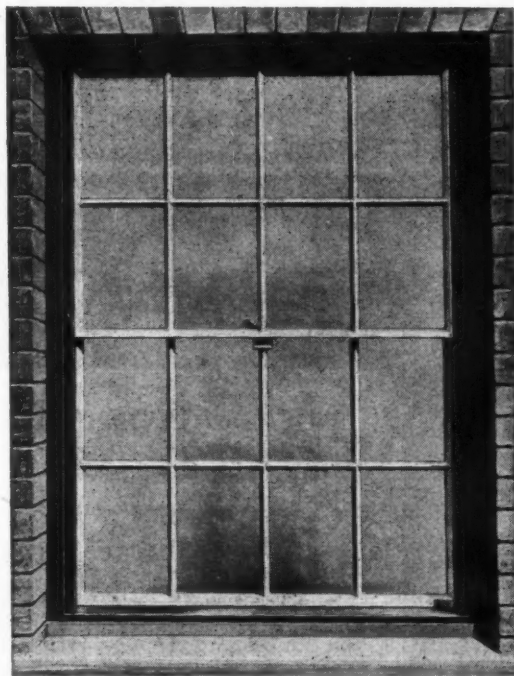
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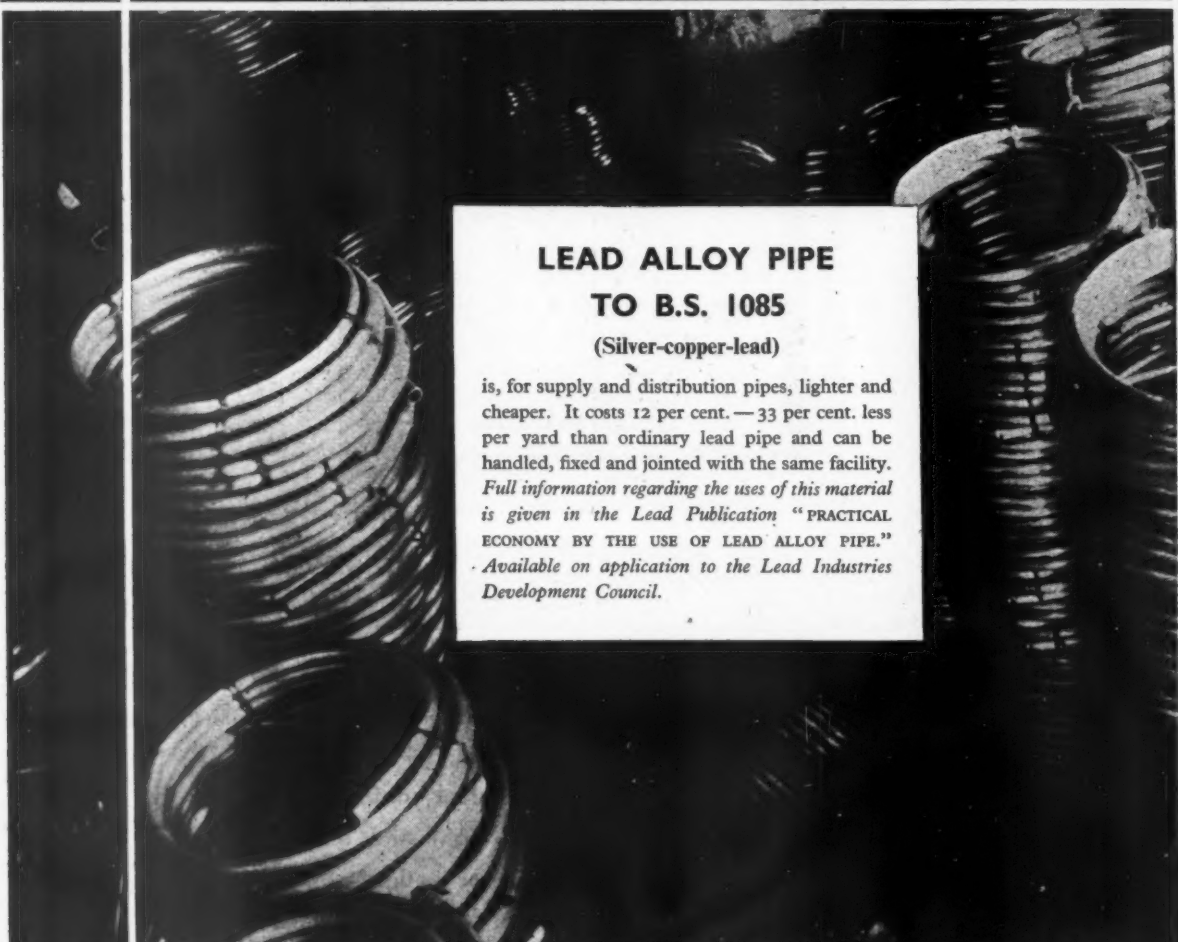
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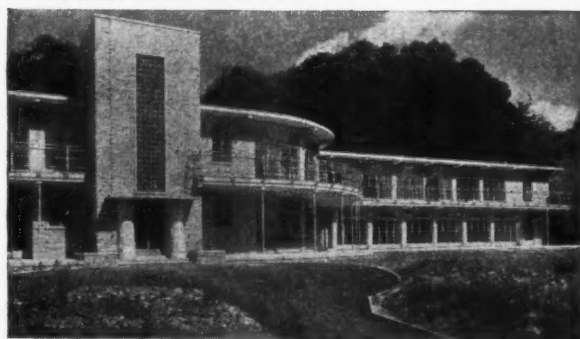
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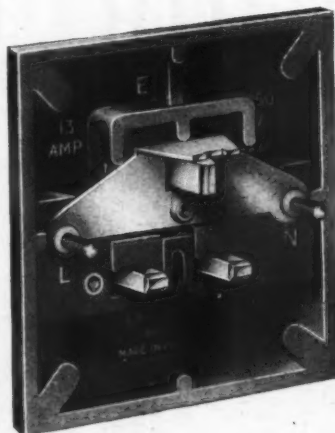
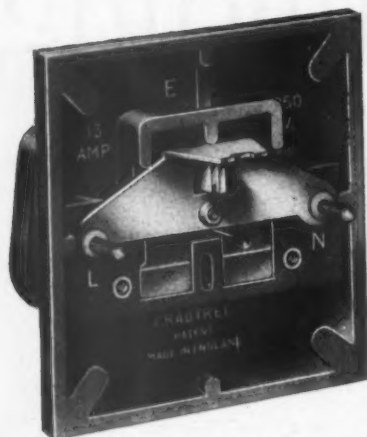
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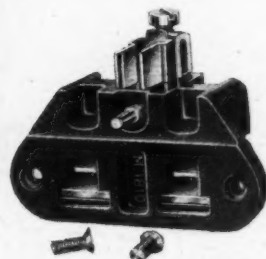
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TO BRITISH STANDARD 1363



These pictures of a dis-assembled socket-outlet, and plug, clearly show how the earth pin of the plug makes contact before the shutters are actuated to admit the current-carrying pins.



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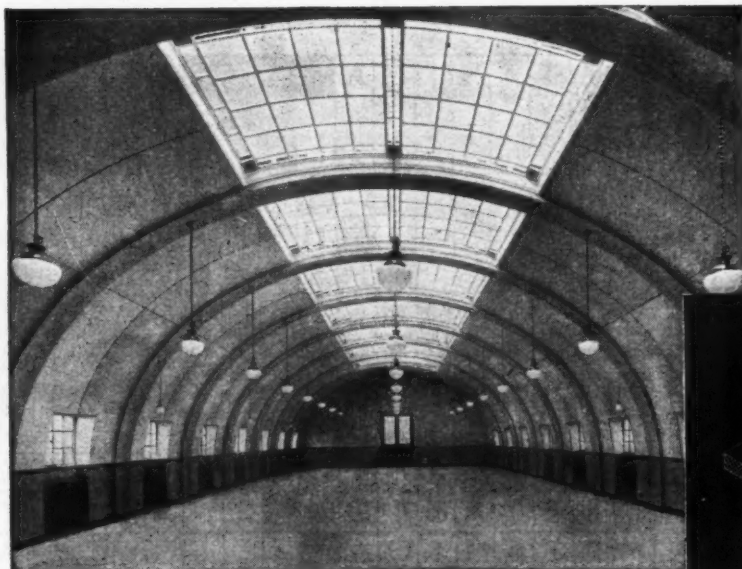
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# Suspended Ceilings by SPECIALISED CONSTRUCTION

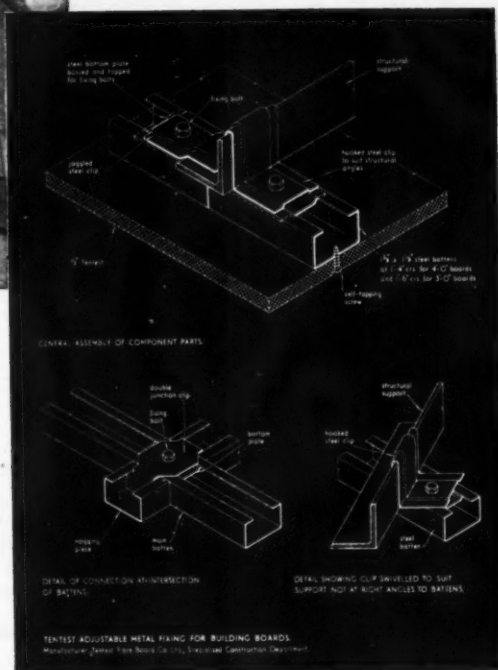
When you entrust a contract for insulating linings or suspended ceilings to our Specialised Construction Department, you ensure a good job at a reasonable price and with a name you can trust behind it. All of our methods of fixing are fully tested for structural sound-

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We illustrate a curved TenTeeT lining fixed by our Specialised Construction Department with TenTeeT Adjustable Metal Fixing. The skill and experience which made this job so successful are at your service for designing and fixing flat or curved ceilings or linings to schools, factories, offices and steel framed buildings of all kinds. Your enquiries will be welcome.

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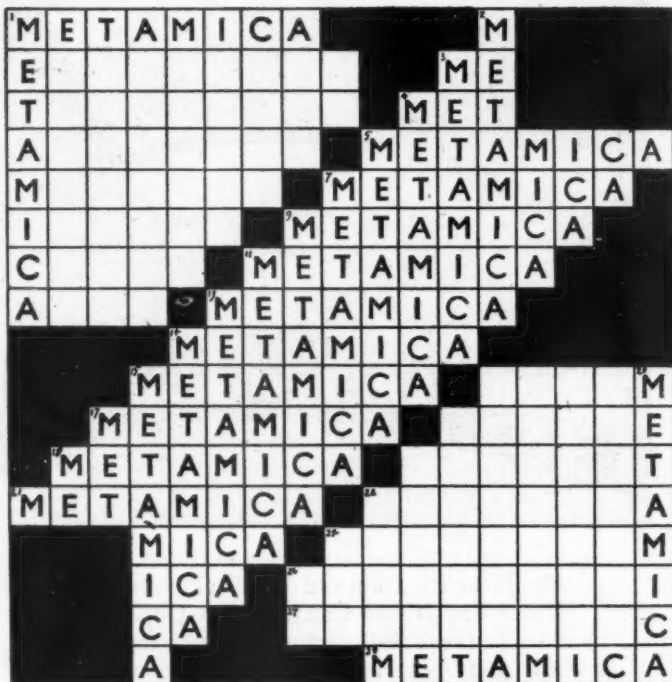
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## DIARY FOR SEPTEMBER OCTOBER AND NOVEMBER

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

**BIRMINGHAM.** S. F. Morice: *The Re-planning of Obsolete City Areas.* R. F. H. Ross: *Acquisition and Administration of Properties in a Central Redevelopment Scheme.* The Council House. (Sponsor, RSI.) Oct. 6

**GLASGOW.** L. W. Hutson. *The Scottish Tradition in Architecture and Building Construction.* Rankine Hall, 39, Elmbank Crescent, Glasgow, C.2. (Sponsor, DSIR.) One-day conference. Oct. 6

**LONDON.** *Background to Design Exhibition.* (Sponsor, CID.) Rayon Design Centre, 1, Upper Grosvenor Street, W.1. Weekdays, except Saturday, 10 a.m. to 4 p.m. Closing date not announced.

*Dry Rot Exhibition.* Building Centre, 9, Conduit Street, W.C.1. (Sponsor, DSIR.) UNTIL OCT. 22

*The Royal Photographic Society's Exhibition.* At 16, Princes Gate, S.W.7. Part 1. Pictorial, Colour and Stereoscopic. UNTIL OCT. 2

*Radiolympia.* Olympia, London. (Sponsor, Radio Industry Council.) Daily, 11 a.m. to 10 p.m. UNTIL OCT. 8

*Textiles and Textures Exhibition.* Murray House, Petty France, S.W.1. (Sponsor, CID.) Daily, 10 a.m. to 5 p.m.; Saturdays, 10 a.m. to 12 noon. UNTIL OCT. 21

### COMPETITIONS

*New Civic Hall at Guildford.* Promoters: Guildford Corporation. Assessor: G. A. Jellicoe, F.R.I.B.A. Premiums: (1) £1,000. (2) £500. (3) £250. Site: Firs Estate, London Road, Guildford. The promoters require a design for (a) a large assembly hall, to seat 1,200 persons, to be used for civic and concert purposes, and (b) a small hall, to seat 500 persons, for lectures with an alternative use as a banqueting hall. The halls are to be designed for use separately or together for one function, with ancillary accommodation which includes refreshment rooms and kitchen; lounges; cloakrooms and lavatories; dressingrooms; offices for officials and the caretaker's flat. Drawings, which must be mounted on stiff board, are to be drawn to the scale of 16 feet to one inch.

Enquiries must be received by the Town Clerk, Municipal Offices, Guildford, Surrey, with a deposit of £2 2s., to be paid by the competitor for conditions of entry. The last day for questions is November 15, 1949. Designs must be received by April 30, 1950.

(a) *Hall of Residence* and (b) *Site Layout* at Nottingham University. Promoters: the Council of the University of Nottingham. Assessor: Sir Percy Thomas. Premiums: (1) £1,000; (2) £750; (3) £500. Section (a) is a design for a hall of residence for 150 women students. The promoters will proceed with the scheme as set out by the winning competitor. Section (b) is a layout of the whole site for four halls of residence. The promoters reserve the right to adopt or modify this scheme, or not to proceed with it. Enquiries must be received by the Registrar, the University, Nottingham, by November 1, 1949. A deposit of £2 2s. must be paid by the competitor for conditions of entry. Designs must be received by March 11, 1950.

## N E W S

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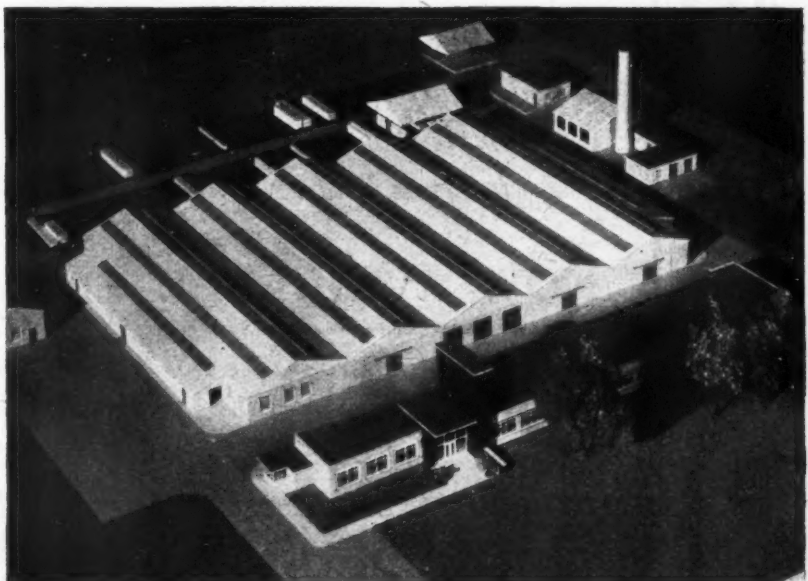
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*Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis.*

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

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



Model of a factory to be built at Crawley New Town. This was on view at the MOTCP on Friday last, when Sir Thomas Bennett, chairman of the Crawley-Three Bridges Development Corporation signed the agreement for its erection.

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## From AN ARCHITECT'S Commonplace Book

**MECHANIZATION OF BUILDINGS.** [*From American Building, by J. M. Fitch (B. T. Batsford Ltd.).*] The multiple use and flexible organization of space are, at the contemporary scale, inconceivable without a high degree of building mechanization. If space is at such a premium that it must be intensively used, then it must be flexibly organized, readily convertible from one use to another. To make conversion easy, or at least tolerable, the process must be mechanized. The municipal auditorium of the average town offers a typical illustration of this problem. To be of maximum effectiveness, it must be adaptable to a wide range of uses. To be economically operated, it must be intensively used. Thus, an auditorium seating five thousand will be desirable for large political rallies, whereas a room seating only seven hundred and fifty might be needed for chamber music. A level floor is essential to basketball, while a sloping one is desirable for stage performances. . . . The complete mechanization of buildings is today quite practical. There is scarcely a situation conceivable which is not technically soluble. Nor is there any question but that the general effect of such mechanization serves to greatly increase the productivity of enclosed space. The social desirability of such measures, must, however, be measured against a larger reference frame. Under short-sighted or selfish controls, such intensively used spaces may lead to needless congestion, wasteful travel, concentration of facilities in a location that is detrimental to the over-all community pattern. Generally, it would seem that such concentrations are desirable only when they cannot otherwise be effectively and economically provided.

### ★ The MOH has issued a GUIDE to the NEW HOUSING ACT.

In this guide, which has been sent to the 1,500 housing authorities in England and Wales, the Minister of Health, Mr. Aneurin Bevan, stated that it was now the duty of the local authority to consider the housing conditions and housing needs of all members of the community within its area when preparing and submitting proposals for the provision of new houses, and that it should provide, on its housing estates, housing accommodation of any kind that was required for the formation of a balanced community. Hitherto local authorities had been hampered in the objective of producing communities of a balanced type by being limited to providing houses for the working classes. A sub-committee of the Central Housing Advisory Committee was considering what advice should be given on the standards to be adopted for the larger types of houses. Meanwhile, the Minister suggested, the superficial area of larger houses generally should range from 980 sq. ft. for a house with three double bedrooms to 1,500 sq. ft. for a house with more than three bedrooms. In a few exceptional cases it might, perhaps, be desirable to provide a somewhat larger house. It would be for the local authority to consider in the light of local circumstances whether provision of houses of this type was required in connection with their building operations on particular sites.

One of the most important provisions of the new Act is Exchequer assistance for the conversion of houses and other buildings and for the improvement of existing houses in both urban and rural areas. Grants will be available to local authorities and also, through them, to private owners. In connection with this, Mr. Bevan stated that although the building of new houses would, in general, be the most satisfactory method of meeting the existing shortage of houses and replacing houses which were unfit for human habitation, an important contribution to both these ends could be made by the improvement or conversion of existing houses or other buildings. With the best possible progress in the building of new houses, the great majority of families in this country must for some considerable time occupy houses which were built many years ago and which, though they might be soundly constructed and in good general repair, lacked the amenities and conveniences which had come to be regarded as essential to a decent and healthy life.

The following points are also made in the Minister's guide:—

As the execution of this work would draw on the resources of the building industry in men and materials, the work to be carried out must be reckoned as a part of the housing programme of the local authority. In calculating the amount of improvement work which could be undertaken in a particular period, the local authority must, therefore, have regard to the effect of this work on their programme for new house building.

The Minister's guide is contained in Circular 90/49 which is being published by HMSO, price 6d.

### SIR MALCOLM TRUSTRAM EVE has resigned from the Central Land Board and the WDC.

The following is an extract from a letter he has written to the president of the RIBA. (Similar letters have been received by the presidents of the RICS, the NFBTC, the Law Society and the Chartered Auc-

tioniers' and Estate Agents' Institute.)

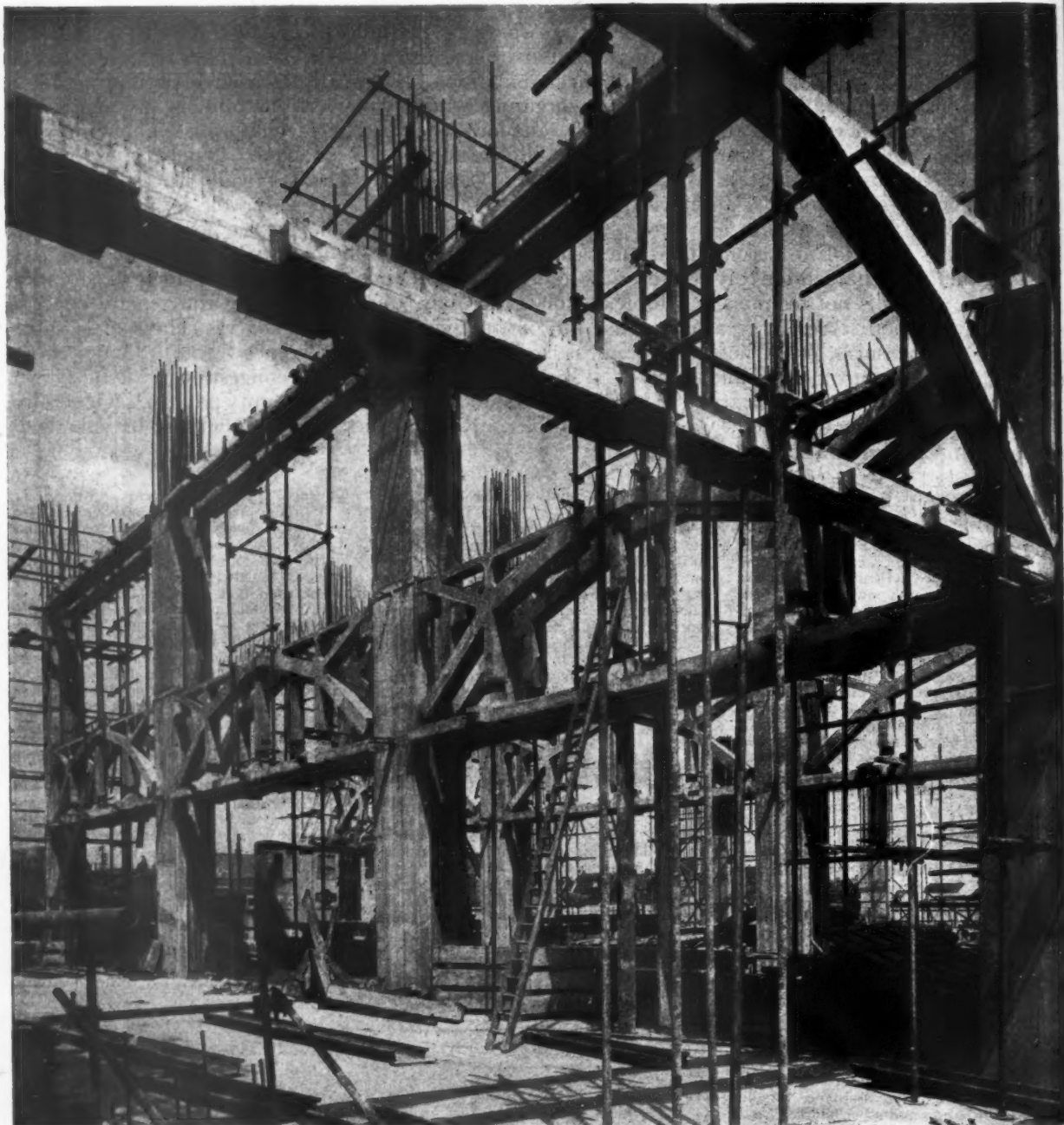
"I have been faced with the alternatives of continuing in public service until I am too old for anything else, or cutting adrift now into another sphere. I have chosen the latter, although I do not as yet know what that other sphere will be.

"I have said publicly more than once in the past that the Town and Country Planning Act could and would be made to work. I like to think that the Central Land Board are now firmly on their feet. We have collected close on a million claims, and we have issued our main policy on development charges in the form of Practice Notes. I hope I may say without undue optimism that we are beginning to gain the public confidence which I have always tried to achieve.

"The written word is often inadequate, but I want to place on record, with all the emphasis at my command, my thanks for the help and goodwill the Board and Commission have received since the beginning of their separate existences from your Institute and from professional men throughout the country."



Mr. Charles Key, Minister of Works, opening the Building Week at Tunbridge Wells, the headquarters of the South-Eastern Region of the Ministry, on September 19. Mr. Michael Waterhouse, president of the RIBA, is second from the left.



## Precast Concrete Factory

An interesting feature of the structure of this multi-storey factory, which is in course of construction at Malago, Bristol, is the fact that with the exception of the columns and the floor topping, which are of vibrated high grade concrete, the whole construction is of pre-cast concrete. The building, which will be used for the converting of cellophane, will consist of ten storeys. Each second storey will be a production floor. Intermediate storeys are to be used to house the necessary services, air conditioning plant, etc. Both main and secondary beams are three-hinged arches, the depth of the service floor, so that the

main production floor is free from all construction, apart from columns, and has a flat ceiling. As the building may, at a later date, be used for other purposes it has been designed for a warehouse superload. The main columns, each designed for a load of over 1,000 tons, are arranged on a grid thirty feet by thirty-three feet, four inches. The precast members have been cast at the site with the exception of the tie members for the arches, which are prestressed on the Hoyer method. The whole construction and system of erection was designed by F. J. Samuely. The architect is E. F. Peat.

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An agreement for a **FACTORY**  
at **CRAWLEY NEW**  
**TOWN** has been signed.

The advantages of transferring industries from overcrowded sites in London to the industrial areas of new towns were emphasized recently by Sir Thomas Bennett, chairman of the Crawley-Three Bridges New Towns Development Corporation.

Speaking at a ceremony at the MOTCP on September 23, in which he signed the first building agreement for a factory to be erected in the new town of Crawley, he said that the standard of living in Britain, and possibly the nation's existence, depended upon the highest possible efficiency in industry. That depended not only on first-class management and maximum production from workpeople, but also on the creation of conditions in which management and workpeople could employ their energies to the best effect.

Mr. Silkin, Minister of Town and Country Planning, described the event as a landmark in the history of the new towns movement.

The new factory is to be built by a firm engaged in the manufacture of builders' and contractors' plant and trucks. It hopes to occupy its new buildings by the end of next year.

**A CODES OF PRACTICE**  
**DISPLAY** is on view at the  
**Building Centre, London.**

A model of a house that is claimed to be perfect from the structural, safety and hygienic viewpoints is a feature of this display organized by the MOW at the Building Centre, Conduit Street, London. W.I. to show how Codes of Practice serve as guides to good building. The display also shows examples of good and bad practice in building, and illustrations of what is likely to happen when building work is done badly.

**AVON CASTLE**  
**may be converted into flats.**

This castle, on the outskirts of Ringwood, Hants, formerly owned by the Earls of Egmont, has been sold privately for about £12,500 and will probably be converted into flats. The building, which stands in 50 acres, is of stone with castellated towers and was built in 1878.



The last tapestry designed by the late Edward Wadsworth is on view at the Textiles and Textures Exhibition organized by the CID at Murray House, Petty France, London, SW.1.

## PUBLIC RELATIONS

THE architectural profession today is trying to establish a reputation for good design, efficiency, economy in construction and planning, and a high standard of professional conduct. The maintenance of these standards is the role of the RIBA, and one of the signs of its awareness of this duty can be seen in the high quality of the public exhibitions and professional discussions held at 66, Portland Place. The Royal Institute's task is not, however, limited to London, and one of its most important functions is to ensure that equal opportunities are provided in the provinces. All last week Tunbridge Wells was the centre for a building conference and exhibition. It was a meeting place for all those living in south-east England who were connected in any way with the building industry. The exhibition, which was sponsored by the MOW, in association with the Ministries of Health, Education, Town and Country Planning, Fuel and Power, and Agriculture, as well as local technical colleges, and industrial and professional organizations, had two aims. The first, and most important, was, in the words of the official programme: "To give the public the opportunity to see how the building industry works; how it is using new, scientific methods of construction; how it recruits and trains its craftsmen, and how it is helping the country on the road to recovery by building the factories, power stations and houses we need." The second aim, and one which more immediately concerns the architectural profession, was to provide a focal point where the planner, architect, engineer, builder, craftsman and scientist could meet.

This was the first Building Week that has ever been held in the country, and it is therefore possible to assess, in part, the success of the RIBA's policy for the provinces. As far as the second part of the Building Week was concerned—that is to say, the discussing problems and the exchange of experience in the industry—the profession was capably represented. The first aim of the Building Week, however, was not achieved. The presentation of the architectural profession to the public was far from adequate, and little was done to impress the public with the importance of the architect's job. In a corner far from the entrance to the exhibition hall was a small stand of about 90 square feet in area. On the floor were three tables supporting models, two of schools and one of a pub. On the two walls behind were 28 photographs and two perspectives presenting about eight designs by architects. A very small notice read as follows: "The Architects' Part. Some examples of post-war buildings designed by architects in South-East England." That, apart from some short captions, was all. The programme clearly stated that this exhibit was produced by the RIBA. It was not the effort of a small, over-worked local chapter of architects, and, as the idea of a building week was broached as long ago as last May, shortage of time to prepare a scheme cannot be used as an excuse.

The exhibit was a failure. What could have been done to



ensure some success? In addition to ensuring that their exhibit showed the public clearly the function of the architect, and the necessity for employing one, the RIBA might well have used their considerable influence to achieve further results consistent with the status of the profession. One step would have been to make certain that all buildings illustrated in the exhibition, for whatever purpose, had the name of the architect responsible clearly shown. Another improvement would have been to place the stand in such a position that the public would immediately realise the function of the architect (and professional consultants) as the vital link between the client, whether official or private, and the builder and manufacturer. The outcome is that one more opportunity to establish the architects' reputation has been lost. It is to be hoped that the RIBA will allow no more opportunities to pass, for they do not often come our way.



*The Architects' Journal*

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

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

## CAPITAL ARRANGEMENTS

One of my spies, just back from a week's trip to Prague and Vienna, writes that he found both cities as beautiful, hard-up, friendly and expensive as ever. Prague has suffered physically much less than Vienna, but the people there seem shabbier (lipstick rare and women in hats never seen), and there seems little attractive in the shops except glass and books. Was there ever a city with so many excellent bookshops? The place is plastered with graphs, cogwheels, lumps of coal and photographs of laughing peasants, while M. Stalin beams benignly over the porter's desk in the premier hotel (where food and service are excellent). "As for M. Gottwald," our spy records, "he may be an estimable fellow, but when you

meet his likeness in every office, shop, restaurant and public place—usually romping with that property tot that photographers seem to keep around for the use of European political leaders—well, too much, in this case, is really enough."

No doubt Vienna is a city in equal straits, but the atmosphere is less earnest, and the occupying powers seem to be on unusually amiable terms. The Russians are in the "Grand" (armed sentry outside); the Americans in the "Bristol" (sentry inside); and the British—the tradition of Brown's and Garland's behind them—at "Sachers" (no sentry). The city's monuments—Hofburg, Schonbrunn, St. Stephen's Cathedral, Belvedere and the Opera House—are all swathed in scaffolding, and half the trees in the Ring are only fifteen feet high. But the copper dome and turrets still wink as brightly and the statues gesticulate as madly as ever across the skyline, and the Wagonburg (the collection of royal coaches and sleighs) at Schonbrunn remains surely one of the most exciting spectacles in the world. As for "Sachers," our spy reports that though Madame has been dead twenty years and the last waiter died in 1945, they have kept the red baize doors and fringed blinds, and even (in a tiny office lined from floor to ceilings with signed photos of Edwardian celebrities) Madame's ivory and silver telephone. At "Sachers," which is now an officer's hotel, full pension—and very full, too—is something under 5s. a day all in, our spy reports that the high whining sound

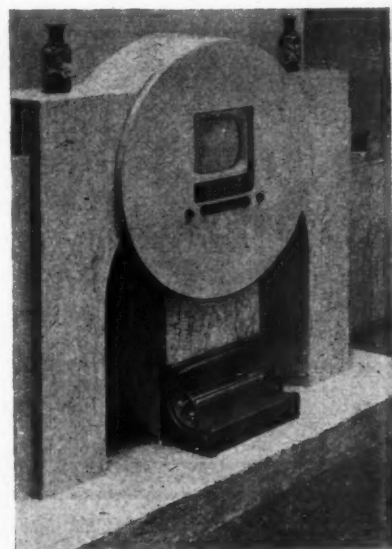
which interrupted his sleep can only have been the noise of Madame spinning in her grave.

Architecture? Well, our spy confesses only to have visited the monuments of the past, but such new building as he couldn't avoid seeing in both places was much as in 1935: flat roof; rendered walls sparkling with mica; large plate-glass windows without sashbars; good door furniture; opal globe light fittings; and tiled sills. No sign yet of Bay Regionalism, the New Humanism, Sharawaggi, or even of Soviet-Classical.

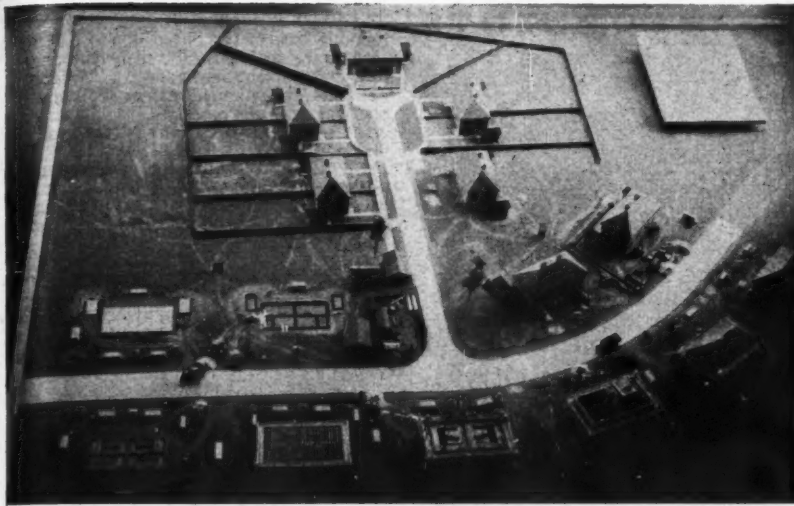
## "TELL-HO!"

Now that Mr. Denis Chapman and his fellow-sociologists have finished with the British Parlour—that family shrine, that injured wife's retreat, that stereotyped container for the piano, the wedding group and the three-piece suite—I suggest the spotlight be directed next upon television. Apart from providing a regular 30 per cent. of all joke subjects published in *The New Yorker* for the last two years, it has ruined my pleasure in visiting the local (where now all is silence instead of friendly conversation) and looks like becoming a major domestic problem sociologically as well as technically.

Do people with television sets have friends in more frequently than before, or less? Is the entertainment more, or



*A new idea for evenings round the fire. (See Astragal's comment above).*



A model purporting to show an example of good site organization at the "Building Today" Exhibition, held at Tunbridge Wells last week. (See Astragal's note below).

less, satisfying than that self-provided? Can homework be done; are books read; does anybody ever speak, in a house with a television set? Will the set, in fact, replace the fireplace as the focus of the living room, and, if so, what new design problems are involved? "None at all," say the mercifully unnamed designers of the contraption illustrated here. "Incorporate the set in the fire surround, and there you are, toasting your toes and feasting your eyes all at the same time." Well, as they so clearly put it, there you are, and I hope you'll excuse me if I don't stay.

#### ANOTHER MENACE LOOMING

Having repeated my earlier grumble about television in pubs, I now feel compelled to warn you of another menace which already appears to be well over the horizon. Auster aircraft have evolved an aerial loud speaker system which, according to the dailies (who I hope are as wrong as usual) can be heard "easily" at three-quarters of a mile.

Now traffic congestion is so acute that the police may have to move us on by shouting from the air, though I'd much rather they didn't. But if they do, it will only be a week or so before the advertising boys try plugging someone's tinned food in the same way, and I'd like it banned before it starts. I seem to remember someone (was it a Major Savage?) who wanted to project searchlight

pictures on to a low cloud base for the same reason, and I believe he was smacked down with some promptitude.

#### TOWN PLANNING? NEXT DOOR, SIR

The photograph above is a perfect example of good intentions gone astray. In the "Building Today" Exhibition, held at Tunbridge Wells last week, the MOW showed two large models demonstrating the difference between good and bad site organization. In one all is topsy-turvy, buildings appear to have been started and then left, and equipment and materials are scattered throughout the site. In the other all is ship-shape and orderly, and the houses, it is obvious, are rapidly and systematically approaching completion.

All this, however, was lost on me. My professional eye boggled before one obvious, elementary and shocking mistake. (I only hope your eye boggles, too, when you study the photograph.) What has happened to the layout of the houses? This sort of planning has surely had its day, even in a Ministry. At any rate, the model-maker responsible for erecting the fences round the houses must have been glad to stop when he did, for how did he propose planning the gardens on the right of the cul-de-sac?

#### THE KNOWLEDGE OF AN ARCHITECT

Unable, as always, to resist the snip-pets with which the evening newspapers

fill that odd, empty inch at the bottom of the column, I found myself reading a parish magazine quote in which the Vicar had set out the qualifications of the successful priest. He needs, I gathered, amongst other things, the bedside manner of the doctor, the financial wizardry of a chancellor, and then, to my astonishment, "the knowledge of the architect." Can it be, I wondered, that we are at last recognized as the fountainhead—the Socrates-cum-Leonardo—from whom no secrets remain hid? Alas, I fear it means no more than that the Vicar must be able to look pathetic when the vestry needs another lick of distemper and be familiar with the current patter about dry rot and death-watch beetles.

ASTRAGAL

## LETTERS

Pembroke Wicks

P. G. Elphick, Dip.Arch., A.R.I.B.A.,  
Dip.T.P.

C. M. Walker, Dip.Arch.

### Architects' Registration Act, 1938

SIR,—I agree with the view expressed by Mr. Sydney Redfern that an unregistered person who accepts a commission under articles of agreement between client and builder, being aware that he is named therein as the architect, and proceeds to carry out the duties of the architect under the agreement is, in fact, carrying on business under the title of architect contrary to Section 1 of the Architects Registration Act, 1938. If as the architect under agreement he makes his arrangements with the builder and with the local authority, how can it be said that he is not carrying on business under the title of architect?

Incidentally, the definition of "architect" in the full Oxford Dictionary opens with the words "a skilled professor in the art of building," these words being omitted in the shorter dictionary from which Mr. Meyer quoted in his letter.

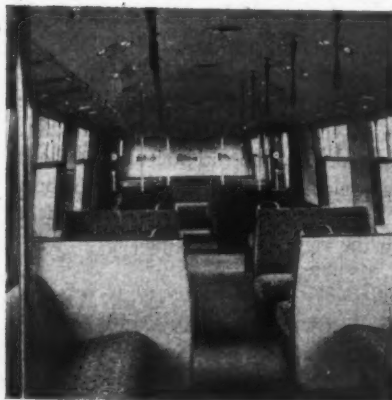
PEMBROKE WICKS

Registrar,  
Architects Registration Council of the  
United Kingdom

### Edinburgh's Future

SIR,—We do not know whether you are in possession of the publication "A Civic Survey and Plan for Edinburgh," the advisory plan produced by Professor Abercrombie and Mr. Plumstead, but we suggest that if you read this book you would see

# BRITISH RAILWAY DEVELOPMENTS



Electric train services were brought into operation on the Liverpool Street to Shenfield line last Monday. A considerable amount of reconstruction and building work has been carried out in connection with this scheme. Above is the interior of an electric control room at Chadwell Heath. On the left is a photograph of the reconstructed exterior of Maryland Station, and below this, the canteen built for those employed in the new Ilford car sheds. Bottom, left, is a repair shop comprised in the shed buildings which consist of steel roof trusses, supported on columns, with brick panel walls. One of the new trailer coaches is shown below. Messrs. H. H. Swift and J. I. Campbell, who hold the respective positions of Electrical Engineer and Civil Engineer for the Region, were responsible for the work carried out on the control room and the sheds and collaborated with the Hotels Executive in building the canteen. Maryland Station was designed by the consulting architects, Messrs. T. P. Bennett and Son in co-operation with Mr. Campbell. Mr. A. H. Peppercorn, Chief Mechanical Engineer, was responsible for the coach design.

at once that a great deal of constructive thinking has, in fact, been done.

We agree that possibly the right answer to every problem may not have been found, but we trust you realise that the statutory plan has yet to be produced (*i.e.*, an advisory plan is not the "be all and end all of planning").

You recommend that Edinburgh needs a "Festspiel Haus." We would point out that two large concert hall and theatre groups have been envisaged in the plan—one at the west end of Princes Street and the other in St. James' Square area. You are of the opinion, perhaps, that these two large festival centres would not meet your suggested "Festspiel Haus" requirements?

We feel that it would be very shortsighted and selfish if the planners carried out your suggestion that they should plan for visitors using the city for three weeks out of every fifty-two and disregard the needs of the residents who use the city the whole year round.

We dare to suggest that the success of the maintenance of equilibrium in Edinburgh's tram-car service was never, even at its worst, to be compared with the chaotic condition of public transport in the London metropolis.

We did not think it worth while to visit the teashop to view the plan for Edinburgh which Astragal sketched on a tablecloth. If you read the advisory plan you will discover that the problem of dirt and noise caused by the railway in the gardens has been adequately and excellently provided for.

Why shouldn't privately sponsored exhibitions be held while the Festival is in progress? We will be interested to see the London shopkeepers failing to take advantage of the 1951 Exhibition when it comes.

Need the planners take a few lessons from the baroque town of Salzburg? Surely the two towns are completely different in character. Perhaps you may have heard of the functional differentiation of towns? Have you considered the question of Edinburgh's industry, its geographical position, its population and its work and compared your results with Salzburg? In suggesting that the Edinburgh planners should copy Salzburg, you are asking them to do what architects of the nineteenth century did when they copied mediæval architecture and used it in any and every type of environment.

P. G. ELPHICK  
C. M. WALKER

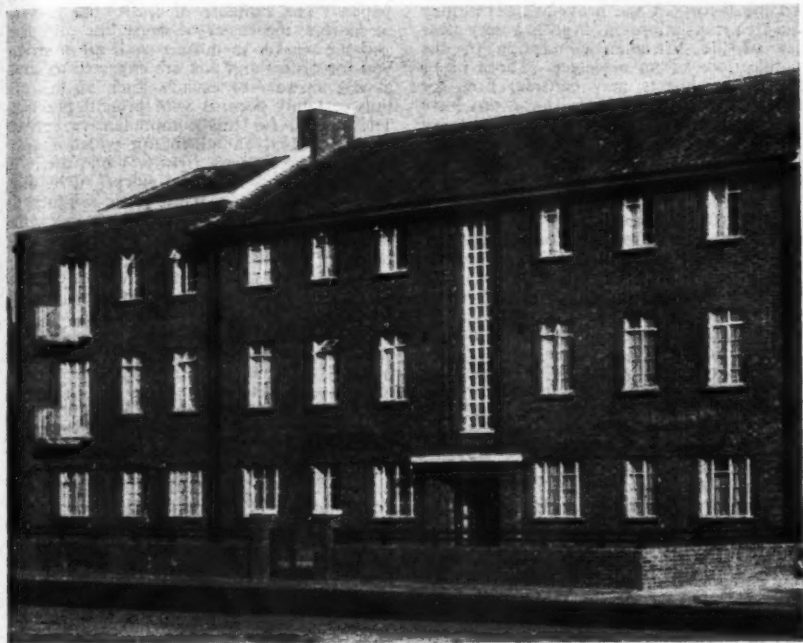
City Chambers,  
Edinburgh

[The Abercrombie-Plumstead Plan has not escaped our attention. In fact, it is referred to in the leading article of September 15 which inspired the above letter. This article contained the suggestion that, as the Abercrombie-Plumstead Plan could not be put into practice for some time, it might be possible for those concerned with the future of Edinburgh to turn their attention to the comparatively small changes which would help the city to develop a reputation as the Festival city of the world. This plan would not be selfish or shortsighted. The amenities provided could be enjoyed by residents during the forty-nine weeks between each Festival.

Other points referred to in this letter were made by Astragal, who was aware of the proposal to cover the railway in Princes Street gardens and merely suggested that it should be done as quickly as possible. He did not imply that privately sponsored exhibitions should be banned while the Festival was in progress. Indeed, he suggested that they should receive guidance and financial aid. Finally, we would certainly not recommend the Edinburgh planners to imitate the architecture of Salzburg, but we still maintain that very few changes would be needed to give Edinburgh a little of the intimate atmosphere of the Bavarian festival town.—Ed.]



## FLATS AT WYNDHAM ROAD, CAMBERWELL



These flats in Wyndham Road, Camberwell, which were designed for E. R. Wood Estates by D. E. Harrington, are divided into two blocks because a single property between them is not owned by the clients. This fact might well have spoiled the natural cohesion of a terrace grouping, but fortunately the architect to the owner of the smaller property was able to secure a licence to proceed with development soon after the second block of flats had been commenced. The architects for both schemes arranged that the elevations of the two properties should synchronise, and, apart from a shop frontage, the elevation of the central building is a repetition of the façade of the flats.

The flats were built on a blitzed site which had originally been developed with terrace shops and living units above. The plan form follows the building lines of the old premises and entrances are provided in Redcar Street and Wyndham Road. Each block has a central staircase with a flat on each side. The first block contains twelve three-room flats and the second six two-roomed flats. Kitchens are roomy and planned for meals.

The blocks were planned so that the maximum number of flats could be included with the minimum of circulation area. Formerly the buildings on this site housed nine families; this number has now been increased to eighteen.

The buildings have load-bearing brick walls with steel stanchions and beams. Floors were constructed with clay pots with reinforced concrete topping. The roof is constructed of timber, felted and covered with antique clay pantiles. Internal partitions are of breeze.

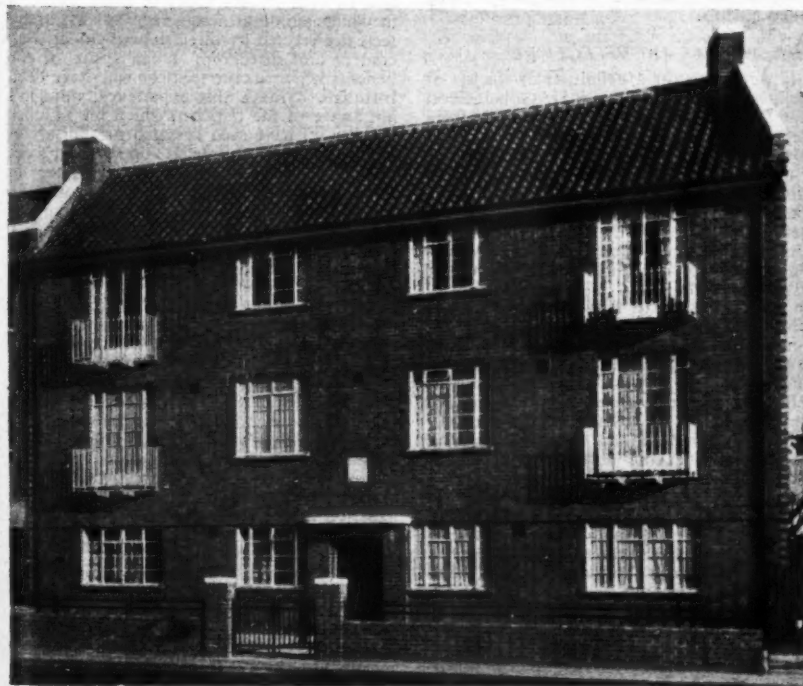
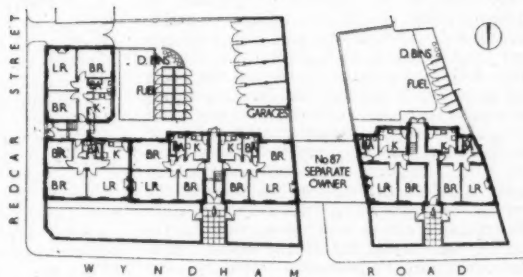
In view of the need to reduce capital costs to a minimum, a sand-faced Fletton brick was used in Flemish Bond. Staircase windows in the first block were designed as a continuous panel. The stone plaque over the entrance door has a carved monogram of the clients' name and the date of completion.

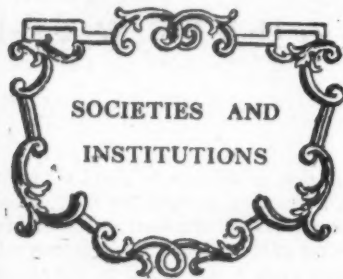
Floor finishes throughout the flat are in 9 in. by 9 in. floor tiles  $\frac{1}{2}$  in. thick, laid in bitumen, straight-jointed and dark brown in colour. Staircases and entrance halls are in granolithic. Staircase walls are cream distempered. Walls in the flats are distempered in colours chosen by the tenants. Kitchen and bathrooms are painted and all walls and ceilings are plastered.

Domestic hot water supply is provided by gas multi-point water heaters. There is no provision for central heating. An open fireplace is provided in each living room and built-in electric panels in bedrooms.

The general contractors were R. H. Lynn and Co., Ltd. For list of sub-contractors see page 358.

Above, the block containing twelve three-room flats. This is separated from the second block, below, which contains six two-room flats, by another property. Collaboration between the architects engaged on the two properties has resulted in a harmonious treatment of the façades.





*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.*

## MOW

### Sir Lancelot Keay

September 19. Lecture on THE ARCHITECT AND THE BUILDING INDUSTRY given at the opening of Building Week, organized by the MOW, at the Assembly Hall, Tunbridge Wells.

### Sir Lancelot Keay :

There is today a very real desire for the closer co-operation of art and industry, but, when moving in the circles of those associated with the Building Industry, one is conscious that there are in existence misconceptions of the function of the architect and attempts to saddle him with some of the responsibility for low production. Criticism is also voiced of his apparent reluctance to depart from existing practice and of failure to make the fullest use of all that science has to offer to the industry.

Caution must of necessity be one of the many attributes of the architect. The buildings he designs must, in the interest of his client, and for the safety of the general public, conform to certain established codes of practice. Architecture must of necessity be a conservative art. I have referred to misconceptions as to the functions of the architect. What is expected of him? With some the idea prevails that he is simply called in to express by drawings and specifications the wishes of his client, to watch the progress of the work—holding the scales impartially between client and builder—until the task is completed satisfactorily and the final reckoning agreed upon. But so narrow a definition of the architect's responsibilities reflects but a limited appreciation of his ability and versatility.

Let us look back for a moment before considering whether any radical change of function would be to the advantage of the industry as a whole. Vitruvius, in his book on architecture, says of the architect:—"Let him be educated, skilful with the pencil, instructed in geometry, know much of history,

have followed the philosophers with attention, understand music, have some knowledge of medicine, know the opinions of jurists and be acquainted with astronomy and the theory of the heavens." This may be a free translation, but it gives a very clear idea of the Vitruvian conception of the qualifications of an architect. Those of us who are architects may consider how far short of this standard we fall or if any have ever attained it. Possibly the best known name of an architect so nearly equipped, which comes quickly to mind, is that of Wren. At the age of 24 he was appointed Gresham Professor of Astronomy and his name appears in the Charter of the Royal Society as "Christopher Wren, Doctor in Medicine and Saville Professor of Astronomy." Though we know him best for his great cathedral, his many churches and other buildings and his clear directives for the re-building of London, he could have been found in 1656 injecting wine and ale into the blood of a living dog in the hope that his experiment would give "great light to the theory and practice of Physick." It has been said of Wren that "there was scarce ever met in one man so great a perfection, such a mechanical hand and so philosophical a mind." So varied were his achievements that doubts have been cast upon the adequacy of his training as an architect.

Despite the high standard suggested by Vitruvius, not all the architects of his day were paragons of perfection. He had caustic comments to make on the subject of extras and complained that "many people were led into limitless expenditure and some were compelled to stop building, broken in fortune and in spirit." Vitruvius commends a law, stated to have been operated in Ephesus, under which if an architect's extras exceeded the contract by more than 25 per cent., he was liable to pay for these personally. I do not propose to discuss the question as to when the architect became an independent directing authority in association with, rather than a constituent member of the Building Industry, but I would suggest that for "architects' extras" we might also read "builders' extras," and assume that the penalty was imposed on those responsible for the excessive extras which were not the result of the vacillations of the client. It is also interesting to note that "touting" for work was discountenanced by Vitruvius, for he intimated that "it is only proper for an architect to undertake a charge on being asked to do so."

### THE ART OF ARCHITECTURE

If we search for a definition of the art of architecture, we learn from Sir Gilbert Scott that "architecture as distinguished from mere building is the decoration of construction." Ruskin tells us that "architecture is the art which so disposes and adorns the edifices raised by man that the sight of them contributes to his mental health, power and pleasure." He also said, however, that "no person who is not a great sculptor or painter can be an architect. If he is not a sculptor or a painter, he can only be a builder." Though this supplies us with a very clear definition of the difference between an architect and a builder, it is not one which is likely to meet with general approval.

There are some who, accepting the first definition I have just quoted, would restrict the function of the architect to that of designing the internal and external clothing of buildings, leaving constructional details to the engineer and the assembly of the component parts to constructional experts. In support of this it is argued that the architect cannot possess a sufficiently intimate knowledge of all the crafts in the industry to warrant his control and direction of them. Such a change would be a departure from early and present practice and there is no reason to suppose that the head of a building firm is better informed in the intricacies of all the various crafts than the architect.

In the instructions of King Theodine to the Palace Architect at Ravenna we read:—"When we are thinking of building a city we shall rely on you to express our ideas on paper. The builders of walls, the carvers of marble, the caster of brass, the plasterer and the worker in mosaic shall all come to you for orders and you are expected to have a wise answer for each." Such an instruction certainly accords with present practice. The reward for this comprehensive service is disclosed in an addendum which reads: "If you direct them rightly, while theirs is the work, yours is all the glory." It is also interesting to note that the place assigned to the architect amongst the Palace servants was to walk first before the Royal footsteps, carrying a golden wand of office.

I know the fate reputed to await architects steeped in antiquarianism, but I ask you to forgive this little excursion into the past, for it has always been impressed upon me that a continuing and lasting progress is easiest obtained by building on the sure foundations of past experience. If there are problems facing the building industry, or deficiencies in its organization, they will be best resolved by the one remedy likely to remove the difficulties in all walks of life today, that is by the free discussion of these problems and the determination of all interested in their solution to co-operate to the fullest extent.

### THE CO-OPERATIVE SPIRIT

Looking back over the last half-century, I wonder whether the co-operative spirit, so necessary for the success of any industry, has strengthened or weakened. As a youth I learned much from the problems I heard discussed amongst craftsmen on the building sites. Today this keen interest in craftsmanship seems to be crowded out by other interests, and for this and other reasons the opportunities of acquiring knowledge in craftsmanship are reduced.

Realizing that the present position is not satisfactory, it is necessary to accept or find an answer to proposals put forward by those who seek to remedy it. For instance, it is sometimes suggested that we should return to the conditions obtaining when architect, builder and master craftsman were one and the same person. Many examples are known from the middle ages onwards in which the architect acted as the builder and undertook the contract for the design, supervision and erection of a building. This practice, in fact, obtains today in those instances in which buildings designed by official architects are erected by direct labour under their control and direction. I can speak of the benefits which accrue to those who have been fortunate to have this experience, though I am aware of the criticism which the practice invokes. I have seen it stated that an architect who accepts an official appointment loses his art, and I have noticed a reluctance on the part of the industry to accept any claim for the success—financial or otherwise—of any scheme of the architect-cum-builder.

But the contention of many today is, not that the architect should revert to this earlier practice of leadership, but that he should become a member of a team operating under the control of the builder or master craftsman. There is a tendency in the industry today for control to pass into the hands of those whose interest is mainly financial. They have little, if any, knowledge of any of the crafts and no conception of the place of the creative artist. From these strong support may be forthcoming for a change in the organization of the industry which would place them in control. This would lead to a negation of the functions of the architect as I know them, and would operate against the best interests of the industry. Such a system would be open to the same objection as that of speculative building. We may safely assume that any attempt to revive the architect-cum-builder would be as strenuously opposed by the building side of the industry as any attempt to place the architect in a



position subservient to a purely financial head of a contracting firm would be by the profession.

In expressing the opinion that no change in present methods is necessary and that the general control and supervision of building operations must, in the interest of the building owner, remain in the hands of the architect, I am at least supporting a very long established practice. If it is to remain, I realize that the industry has the right to ask that those who accept the responsibility for this control and supervision must be competent to discharge the important duties involved. Up to the beginning of the century, young men entered the architectural profession by pupillage or apprenticeship. The system was that under which many of those who have given us our finest buildings were trained. It was a system, however, under which a pupil could become merely the copyist of his master, thereby suffering from some limitation in the evolution of his own powers of design. Throughout his training he had many opportunities of visiting work in progress and of seeing for himself how craftsmen solved their difficulties. The practical experience gained in this way gave him confidence when he was called upon to design for himself.

But towards the end of the last century the number of practising architects increased rapidly to cope with the great building activity of the latter part of the Victorian period. Speed, so often the enemy of sound progress, undermined the thoroughness of architectural training. It was for this reason that a change in the method of training became necessary and architectural schools were founded in London and in certain provincial cities. Today most of the architects of the future are being trained, not in the offices of practising architects, but in the less restrictive and more catholic environment of schools of architecture. Here the field of opportunity widens. Relevant subjects are discussed and taught with thoroughness and there is greater scope for individual expression. If there is a criticism of this method of acquiring knowledge of the art, it is that it may tend to become too academic, there being less opportunity for constant contact with actual building operations, which is so valuable a feature of the training of a pupil who is able to follow the physical interpretation of his master's designs into brick, stone or steel.

#### ART AND BUSINESS

Great responsibility rests with those called upon to advise on the best method of training. I am expressing a purely personal opinion when I say I doubt whether we have yet found the final or best solution to this important and difficult problem. It is of the utmost importance that we should do so if we are to continue to occupy our present place in the building industry. I have referred to Ruskin's dictum that "no one who is not a great sculptor or painter can be an architect," but I do not subscribe to it. Today it is far more essential that in addition to being competent to practise his art backed with a sound knowledge of construction, the architect should possess powers of organization and supervision and a keen appreciation of all aspects of finance. Present conditions demand that he is something more than a creative artist or that he should face the busy business world in company with, and having the fullest assistance of, a partner capable of dealing with the more mundane matters.

I have already referred to the need for closer co-operation. I shall refer to it again. It is essential in all stages of our great building undertakings, though it may be delayed if competition is the method of selecting a contractor. I know from experience how much time can be saved, how much more smoothly a project can be carried through, if early discussions take place between archi-

tect, contractor, sub-contractors and foremen, and some form of time and progress schedule is agreed before work actually commences. With a programme to work to and an assurance of adequate supplies of materials and the proper timing for the delivery of components, one of the factors contributing to low production would be eliminated.

It is our responsibility as architects to see that those who practise our art are sufficiently equipped to retain our status as the designers of our buildings and the supervisors of their erection. I should like to feel that the benefits of experience obtained in building operations are made widely known. I betray no secrets when I say that most of us at some time have referred to books on building construction and typical specifications. Both may have been a little out of date and we might have been better informed had we been in possession of a "Builders' Digest" compiled from the fruits of practical experience of builder and operative.

#### ANSWERS TO CRITICISM

Now let me try to answer certain criticisms I have already referred to. As architects we are often blamed for the present low output, on the grounds of our failure to keep pace with the demands of the builder. As soon as a decision to build is taken, operations are expected to commence at once. I suggest that architects and builders alike do a disservice to the industry by encouraging their clients, whoever they may be, to believe that this is possible, or that it makes for any saving in time in the long run. It results in living from hand to mouth with consequent low production and in such cases it is unfair that either architect or builder should be held responsible. I have no defence for the dilatory or the incompetent. The world has no use for such today and has its own way of dealing with them. I only ask that all who complain of delay in others should make quite certain that the responsibility does not rest with themselves.

I also referred to the criticism that architects are reluctant to embark on new methods of construction or to apply to the fullest extent the results of scientific research. It is not every architect's lot to serve wealthy and adventurous clients, willing to take some risk and stimulated by novelty. It is, I think, unfair to suggest that there is any general reluctance to make use of the results of scientific research, for, after all, there are adventurous architects as well as clients. Many of the results of research can be put into immediate use, but for some the test of time must be applied. The architect has a duty to study the interests of his clients, and it is understandable that he should show caution in recommending new methods or new materials, in the use of which neither he nor his confreres have had any practical experience. I should like to take this opportunity of saying how indebted I am personally to the Building Research Station for their help and co-operation and I am confident that my expression of thanks will be echoed by many in this hall today. I should like to think that the Research Station Digests were read by every architect and craftsman, however young or old they may be. It is never too soon or too late to learn.

You may have expected me to make reference to some of the problems receiving the consideration of the industry today in which we architects are directly or indirectly concerned, such as:—The increasing tendency towards specialization and the employment of specialist sub-contractors; the greater use of mechanical appliances; output; the effect and desirability of bonus payments; the elimination of competition and all that implies. Because I hold no brief to speak for the main body of architects, and because of my association with the Building Industry Working Party, I have felt it better to re-

frain from discussing these matters, not all of which are free from political implications. If I may refer once more to Wren, you may recall that he allowed himself to become a member of Parliament. Possibly it was an unfortunate act. Though, I believe, there is no record of his having spoken, there is little doubt that his resignation at the age of 86 after serving as Surveyor-General for 49 years was due to political intrigue. I always feel that architects, especially those who serve as officials, are wise not to become too actively involved in political controversy.

Looking at the industry today, I would suggest that its greatest need is for a more evident demand for co-operation among all the interests included in it, and for the elimination of an apparently growing tendency of suspicion amongst the members of it. We are faced with an insistent demand for higher standards, for greater efficiency and speed in output. But there are fewer opportunities for training those who will follow us, we hope, in the days when controls are removed and a greater freedom of action will be possible. The field of work upon which the industry is engaged is a very limited one and the few opportunities it offers for variety are often curtailed by increasing standardisation.

As you move about the country you find evidence of the great achievements of the industry in which architect, master craftsman and workman have given of their best. This happy trinity of interest must be encouraged afresh. We are moving so fast in the hurly-burly of today that individualism is being stifled and we face a totalitarianism in architecture which is influenced by materialism. It is our duty as architects, constituent members of this industry, to draw attention to the spiritual value of our art, well practised, and to preach the need for beauty and to tell of the joy that may be given to many when beauty is attained. This beauty can be attained in buildings, not by any excess of individualism, but by the quiet dignity which comes from designing in truth and in perfect proportion. Few vocations in life can excite greater satisfaction than that of those who are called upon to play a prominent part in the designing of buildings of great perfection. I speak for all architects when I express our willingness to meet and discuss how best the progress of the building industry may be ensured.

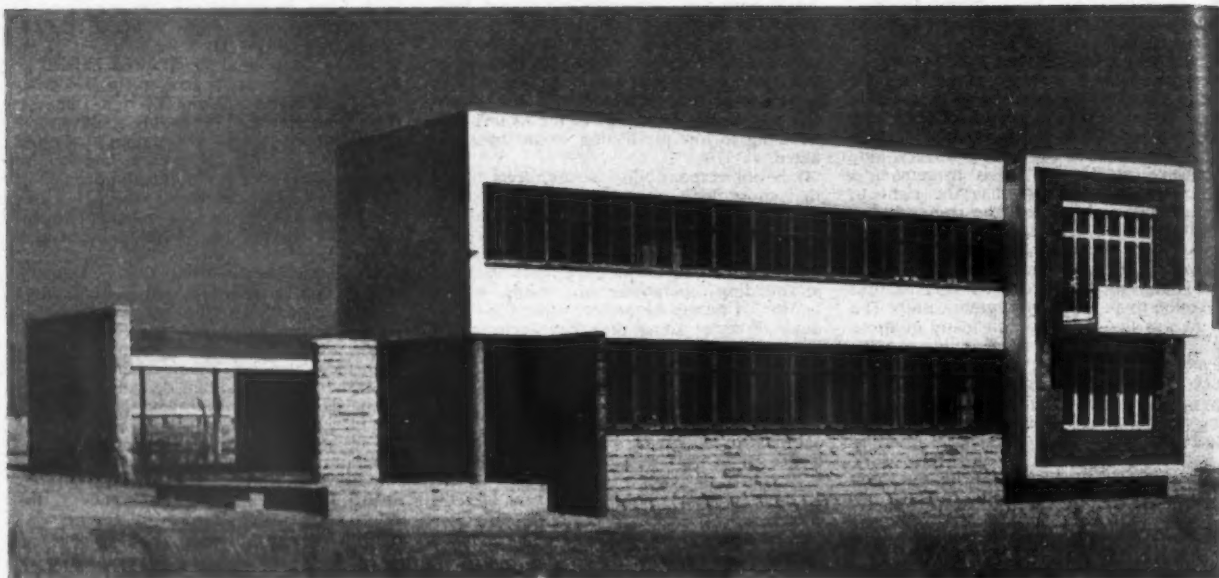
## BUILDING WEEK

The Tunbridge Wells Building Week was an occasion of real importance for all connected with the building industry, said Mr. Charles Key, Minister of Works, at the opening ceremony on September 19. It gave an opportunity to demonstrate that they were all united in the common task of service to the community.

When so large a proportion of our national resources were being spent on building and civil engineering work it would be realized why this Government took so great an interest in the manner in which the money was being spent, and why it was essential that the building industry should be as efficient as possible.

The Minister went on to say that he hoped and believed that the Building Week would impress the country with the importance and achievements of the industry, not least in this South-Eastern Region, where there was so much visible evidence of building activity. It was also his hope that the events of the week would be a clear indication of how seriously all those who were engaged in these industries took their responsibilities towards the community, and at the same time would encourage those who were actively engaged in the industries—whether professional men, employers or operatives—to still greater efforts.

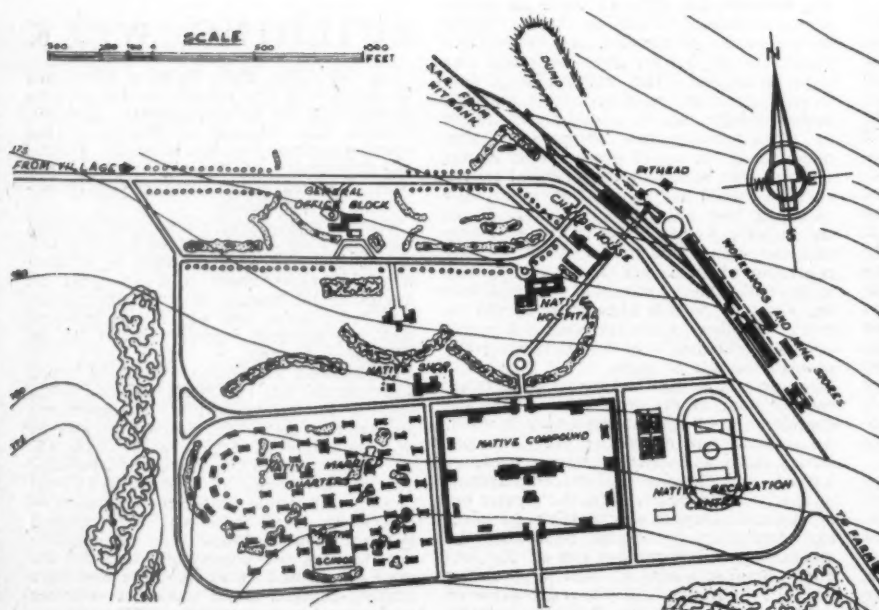




*Administration block  
from the north-east.*

# COLLIERY BUILDINGS, TRANSVAAL

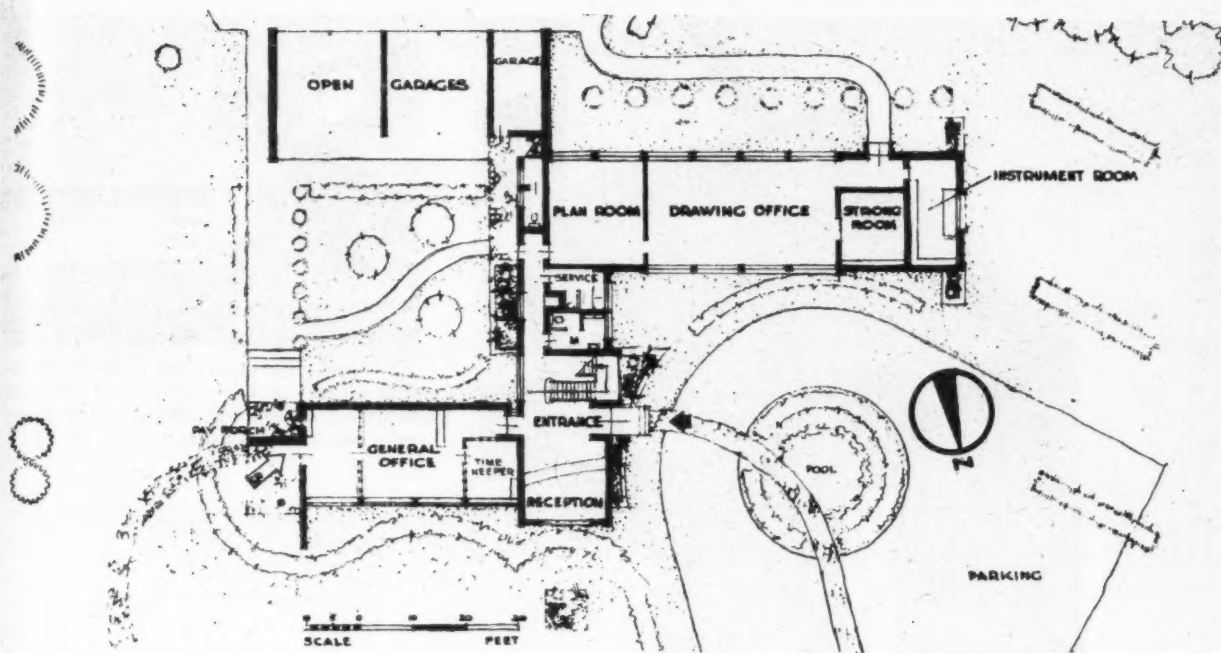
BY HAROLD PORTER AND PARTNERS



LAYOUT PLAN OF COLLIERY BUILDINGS

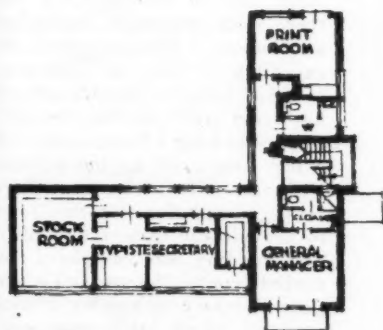
**SITE.**—Douglas colliery, which is twenty miles from Witbank, the nearest town, and more than ninety miles from Johannesburg, stands on the veldt of northern Transvaal. On the site there is a village for European officials, miners and their families; a native village and compound; and a pithead plant, offices and baths. There are also separate recreation centres for both races and a golf course for the Europeans.

**ADMINISTRATION BLOCK.**—This building acts as a reception point for all visitors and officials, and contains the general manager's office and offices for typists, administrative personnel, surveyors and engineers. It has a reinforced concrete frame with external walls of local stone and dark blue or brown facing bricks. The concrete frame and the stucco finish is covered with ivory colour-wash. The flat roof is finished with ash-



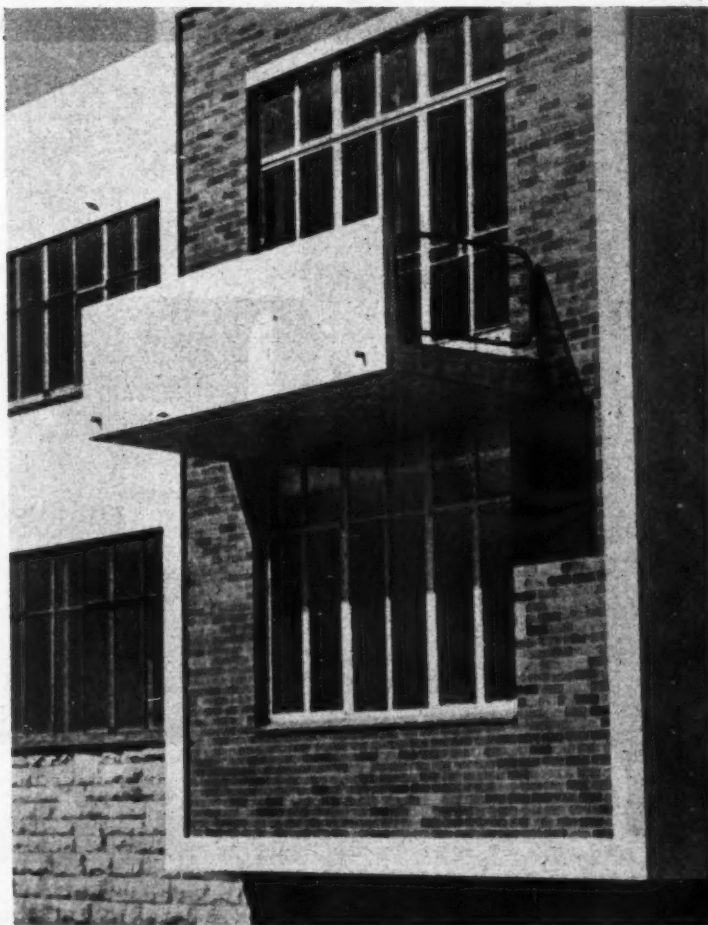
GROUND FLOOR PLAN OF ADMINISTRATION BLOCK

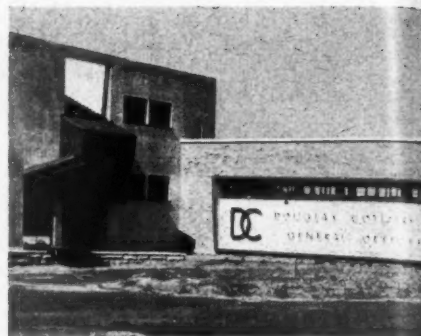
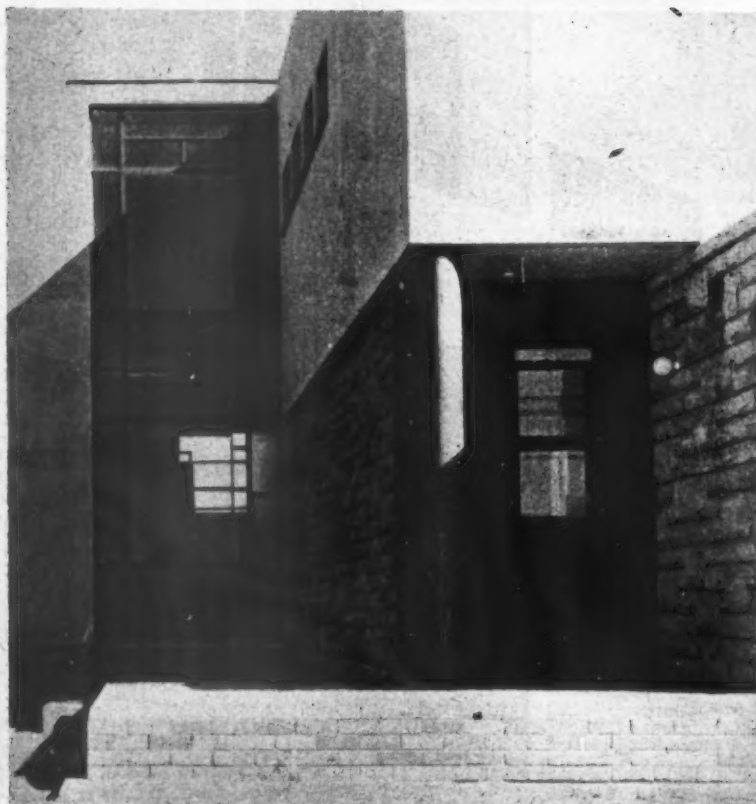
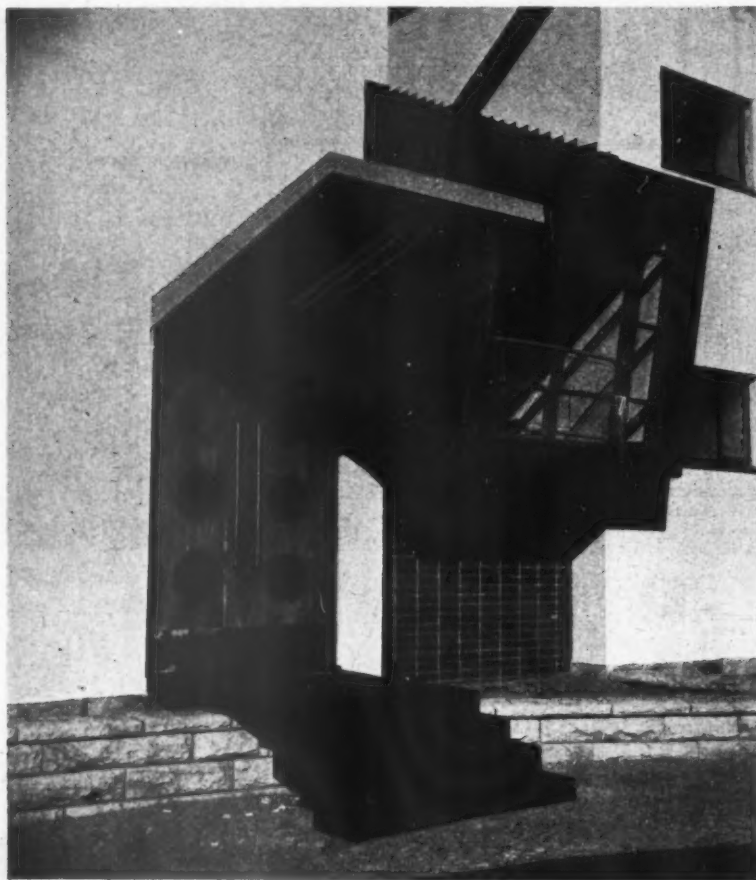
*Detail of balcony to general manager's office in administration block.*



FIRST FLOOR PLAN

breeze screed (to keep the offices below cool in hot weather) and three layers of insulation material covered by hollow tiles laid loosely 2 in. apart. All flashings are of copper. All offices have plaster finish on the walls and built-in fittings. The floor finishes are wood block and linoleum. The staircase has metal treads set in a granolithic finish. Metal lettering on the exterior of the building is set projecting from a corrugated plaster surface which is painted sky blue. A central pipe duct contains all vertical plumbing. All other pipes are concealed. The building is heated by dull emission electrical heaters set flush with the walls and controlled thermostatically.





*Above, administration block from the north-west. Left, main entrance and staircase window. Bottom, left, staircase window and pay porch on south-east side of block.*

#### FLATS FOR PERSONNEL.—

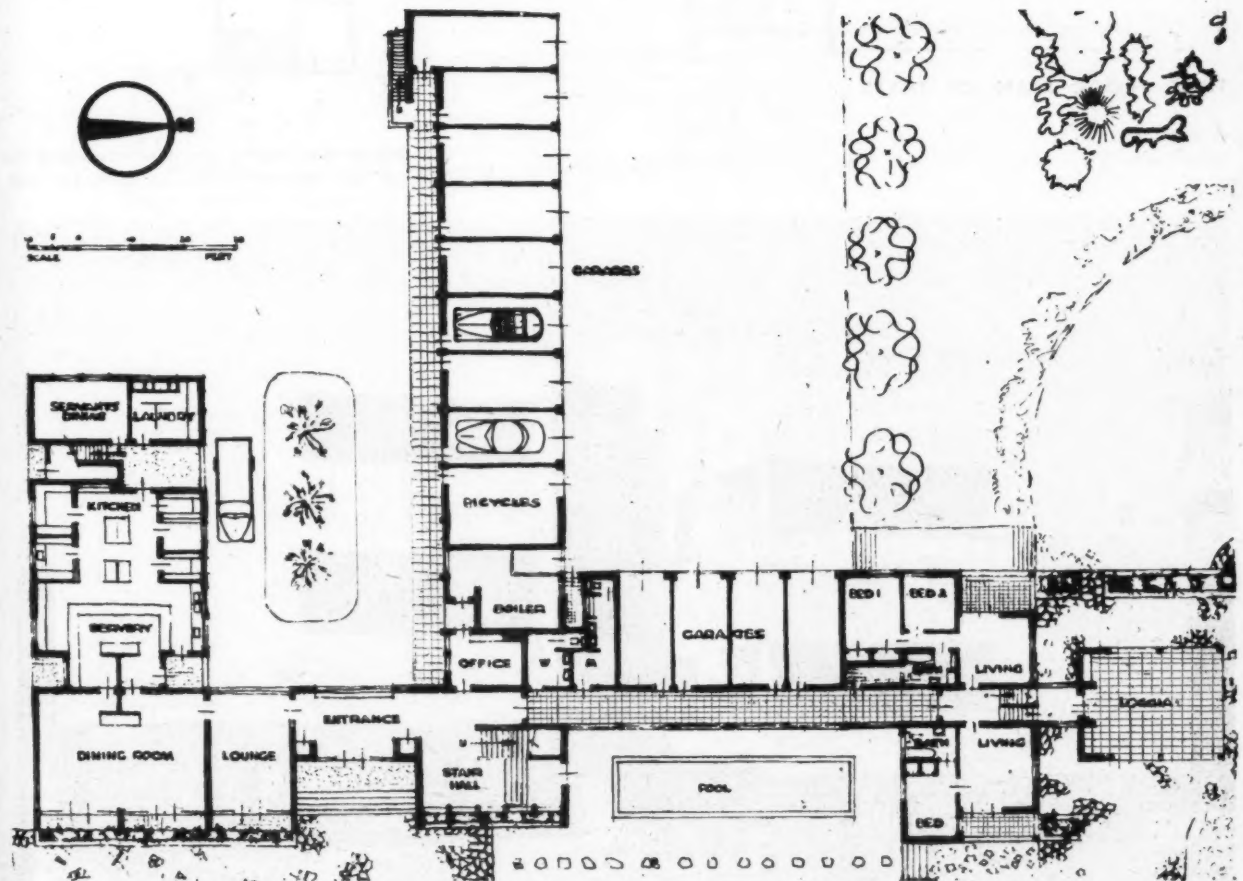
Accommodation is provided in a block of flats for single and married personnel employed at the colliery. Each unit is self-contained but there is a communal dining-hall and lounge. The flats, with the exception of those for caretakers, comprise living room, bedroom and bathroom, while the flats for single employees have a living room with a bed recess and an independent bathroom. It is also possible to couple certain flats together so as to provide the utmost flexibility. The building was completed immediately after the war and it was then necessary to employ a minimum of faced brick and other materials in short supply. The flats have wood block floors, plastered walls and ceiling and flush panelled doors. Bathrooms are tiled to a height of 5 ft. and have grano floors and quarry tiled skirting. The main corridors have grano floors and painted dado. Stock-sized doors lead from these to the various pipe-ducts. The entrance and stair hall have linoleum floors and painted plaster walls. The staircase has metal treads set in granolithic with mild-steel pipe handrails. Tiled floors are laid in the kitchen and store.

**SERVICES.**—The building is served by means of a coal-fired central boiler plant, the heating being by means of convectional radiators set in recessed panels.

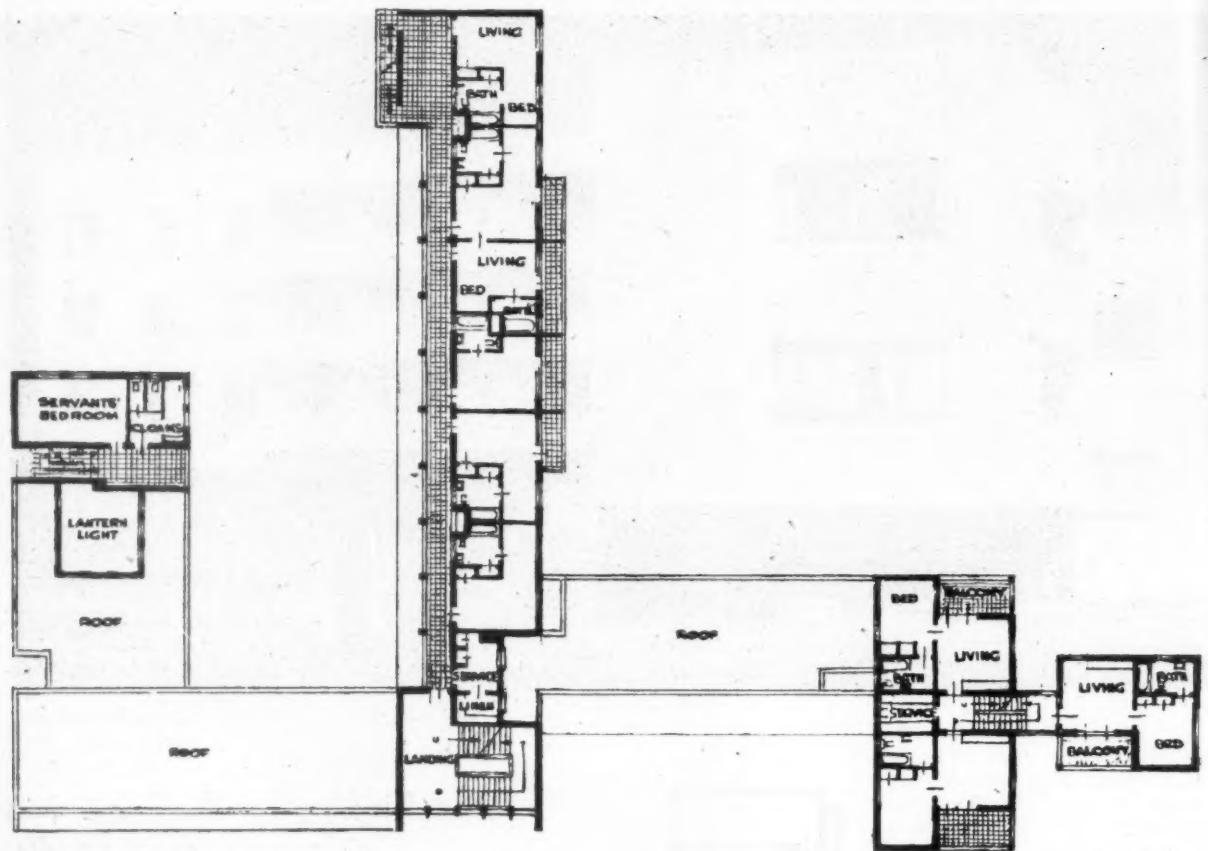




Flats for staff seen from the east.

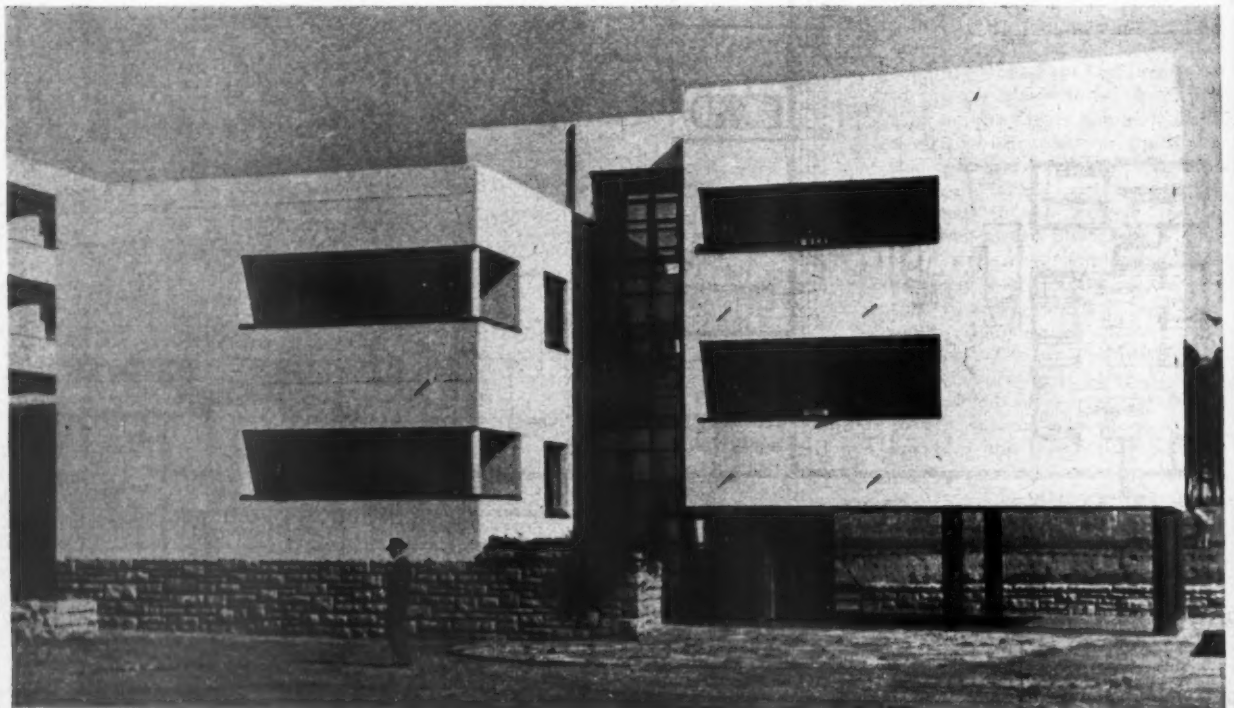


BY HAROLD PORTER AND PARTNERS

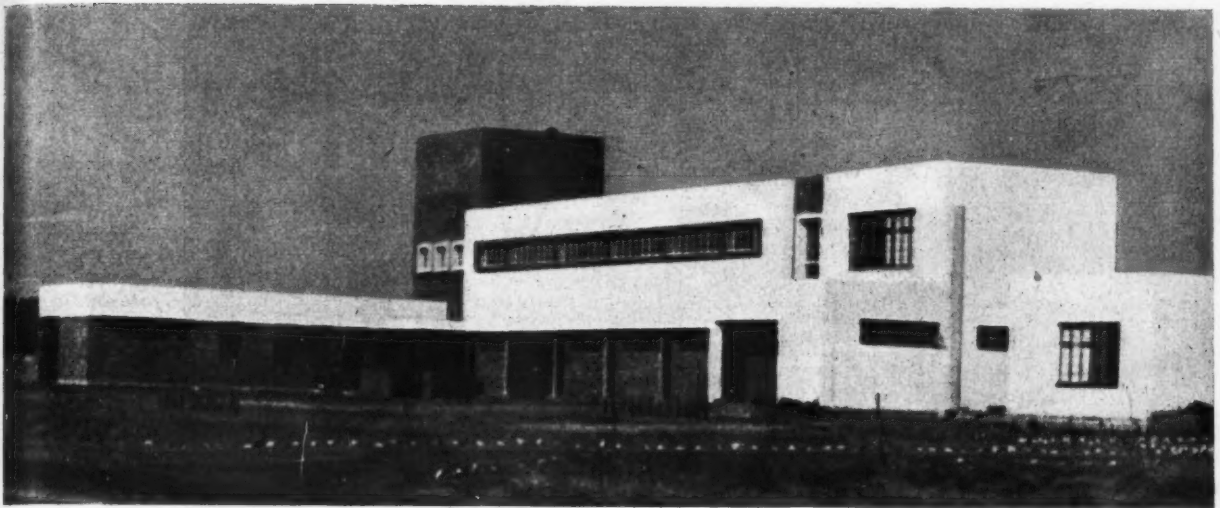


FIRST FLOOR PLAN OF FLATS

*The loggia and central staircase window of the flats for the married staff seen from the east.*



COLLIERY BUILDINGS, TRANSVAAL



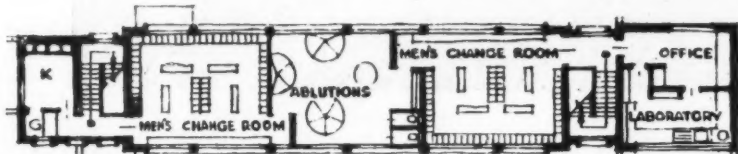
*The lamp and changing room from the north.*

#### CHANGING ROOM BLOCK.—

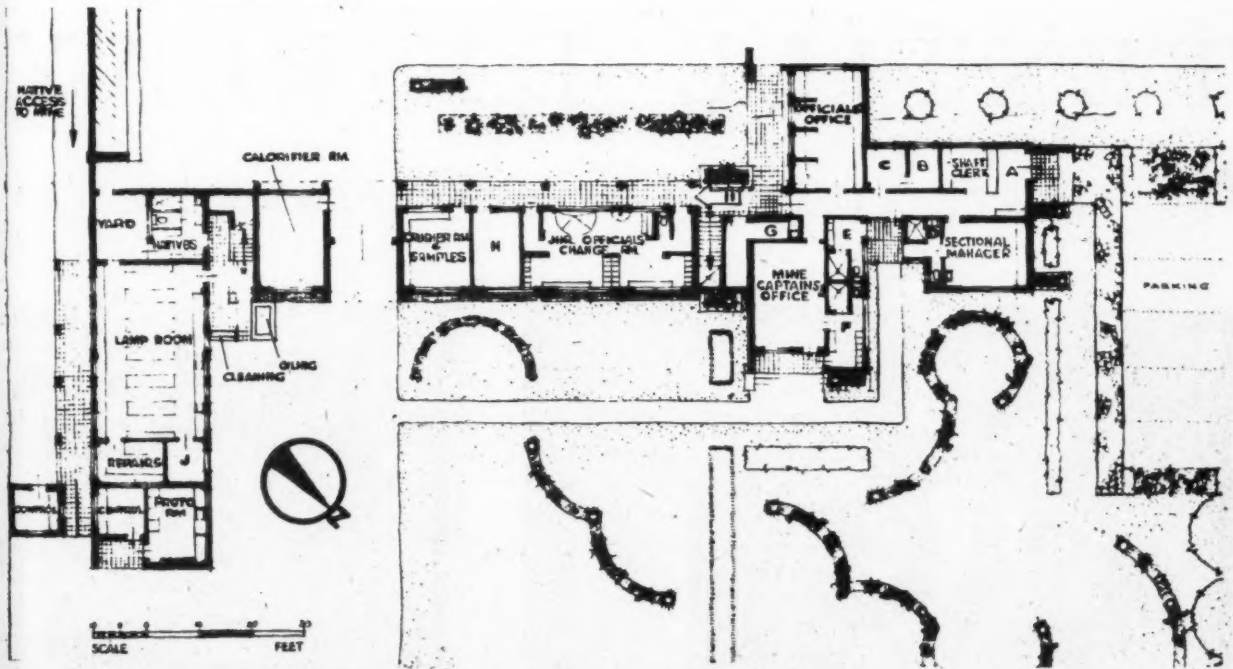
This building houses baths, changing rooms, offices for mine officials, and rooms for cleaning, repairing and storing lamps. It has a reinforced concrete frame and the finishes have been selected for durability and ease of maintenance. Faced brick, local stone, and tiles have been used externally

at those points where heavy traffic occurs. Wall surfaces inside are protected by the use of faced brick, quarry tiling, glazed tiling, terrazzo and slate. The floor finishes are linoleum in the corridors and entrance hall; wood block in all offices; granolithic in changing rooms, the lamp room and on external floors. The staircases

have a terrazzo finish. A steam supply is received from a boiler house located 100 yards away from the building and all changing rooms are heated by means of thermostatically controlled floor coils. Offices are heated by means of radiant vector panels in the walls. The junior officials' and the miners' ablutions are served with hot and cold water controlled by pre-set mixing valves, the remainder having normal equipment. All lockers are standardized and made of pressed steel. No piping is visible and special pipe ducts take all the plumbing.



FIRST FLOOR PLAN



GROUND FLOOR PLAN OF CHANGING ROOM BLOCK

BY HAROLD PORTER AND PARTNERS

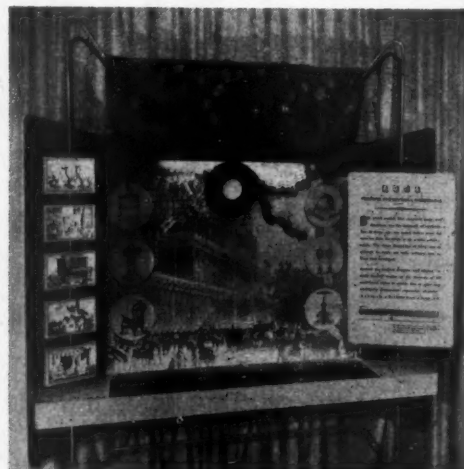




*The exhibition, showing the entrance and reception desk on the right. Below, two units showing Victorian design.*

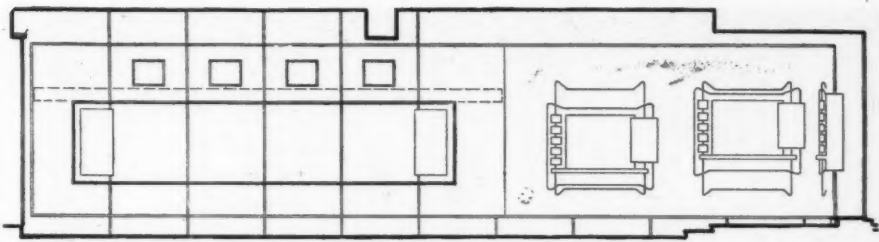
# TEXTILE DISPLAY

BY NEVILLE WARD AND FRANK AUSTIN

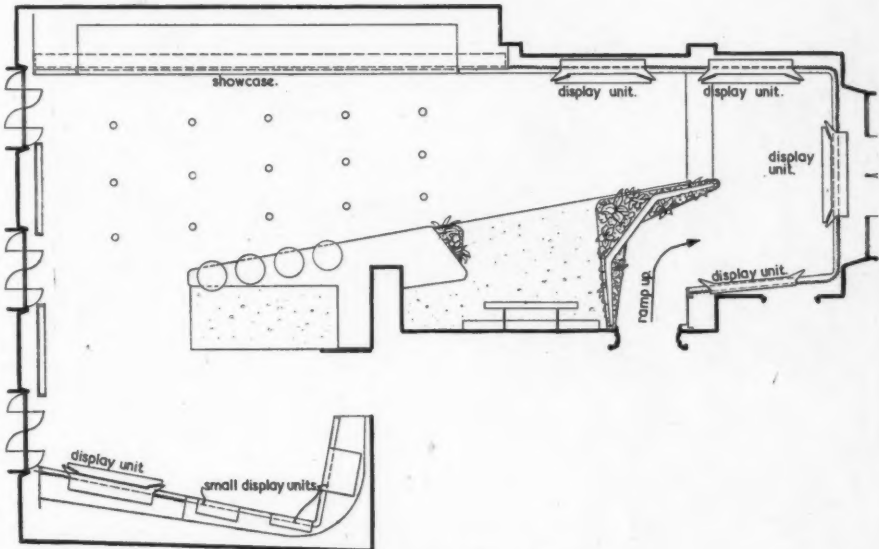


**GENERAL.**—The exhibition, which is being held at the Rayon Design Centre in London, reviews English design from the eighteenth century to the present day. Stands had to be erected in a small space and it was necessary for them to be designed in such a way that they could be erected and dismantled without damaging the rooms in which they were housed. In addition, the designers had to take into account the fact that the exhibition would be needed again for display purposes overseas.

**CONSTRUCTION.**—The main features, curtain walls and partitions are constructed of timber studding and of fibreboard. Flower boxes at the entrance are constructed of  $\frac{3}{4}$ -in. thick timber and lined with waterproof paper. The boxes have woven raffia external coverings, with painted wooden beading top and bottom, and  $1\frac{1}{2}$ -in. wooden top trimmers. The handrails attached to the flower boxes are constructed of  $\frac{3}{4}$ -in. diameter brass rods, with a 1-in. by  $\frac{1}{4}$ -in. black cellulosed metal handrail at the top. The reception desk and counter are constructed of painted timber with a hardboard top. The adjacent hatbox display unit is of  $1\frac{1}{4}$ -in. brass tubes supporting  $\frac{3}{4}$ -in. brass cross rods, from which perspex hat boxes are suspended by white plastic-covered



SECTION THROUGH THE EXHIBITION

PLAN OF THE MAIN EXHIBITION ROOM [Scale:  $\frac{1}{4}$ " = 1'0"]

*The exhibition from the entrance ramp.*





*Left, detail of the light fittings in the main exhibition room. Below, left, the living room of 1950, one of the two furnished rooms shown in the exhibition.*

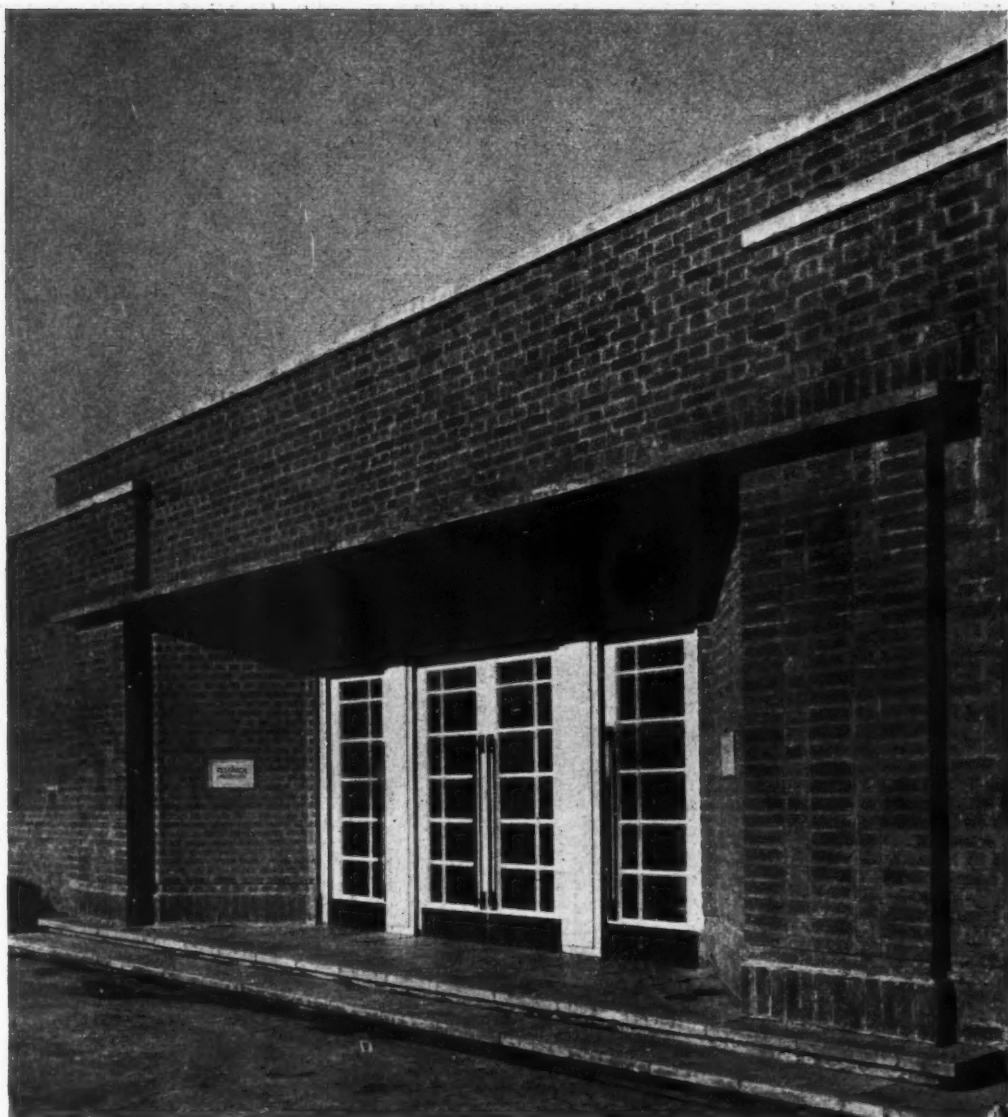


cord. These boxes contain hats typical of the various periods covered by the exhibition. Throughout the exhibition are 1½-in. brass tube columns wedged between the floor and a removable 3-in. by 2-in. timber ceiling plate. These tubes support five cross tubes, each of which carries three flexible spotlights equally spaced between the columns. The standard display units are constructed of plywood, or hardwood, with a vendura veneer, fixed with glass-headed screws at 6 in. centres. The units are supported on ½-in. brass rods with a satin finish. Attached to the side of the units are transparent photos, in white wooden frames, lit from the back by lighting strips. Rayon fabrics are used to form a background for the units.

**CONSULTANTS.**—Alec Heath, display; Charles Hasler, typography. The contemporary room and special furniture was designed in collaboration with Dennis Lennon, and Adams Acton was the consultant for the furnishing of an eighteenth century room. The general contractors were Messrs. Frank Batty and Smith, and the display contractors, B. & S. Displays, Ltd.

TEXTILE DISPLAY BY N. WARD & F. AUSTIN

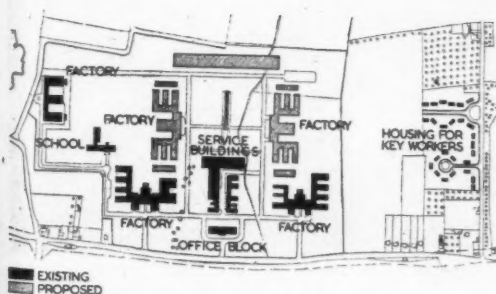




Main entrance to office and research laboratory block.

# FACTORY AT CHELTENHAM

BY T. P. BENNETT AND SON



SITE PLAN

**GENERAL.**—S. Smith & Sons (England), Ltd., commissioned the architects to design a series of new factory buildings for the manufacture of clocks and precision instruments. The clients required buildings in which dust could be kept down to a minimum. They also asked for a maximum amount of natural lighting in all workshops and assembly and testing rooms, where very fine engineering work would be carried out. In addition, separate bays were required for the production of each separate

component and covered connections were needed for the production bays.

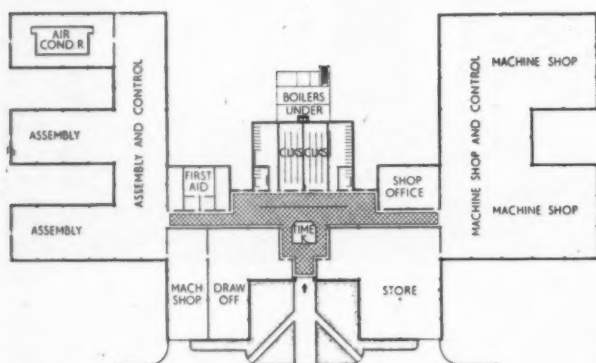
**SITE.**—The site is situated in a belt of agricultural land outside Cheltenham Spa, Gloucestershire. It was selected because it is in an area in which humidity is comparatively static over the whole year, and there is maximum freedom from dust percolation.

**PLAN.**—The factories and ancillary buildings on the site include a

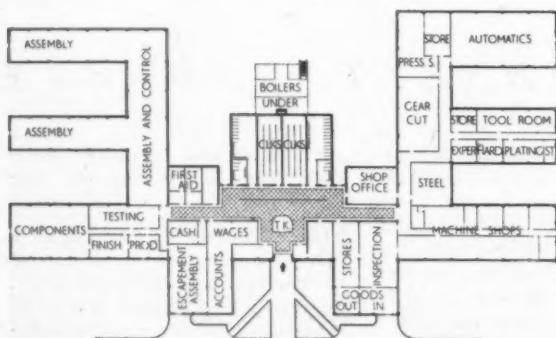
[Text continued on page 352]



*Typical assembly shop bay. Below, aerial view showing site on which three of five proposed factory blocks have been completed.*



**GROUND FLOOR PLAN OF BUILDING No. 1**



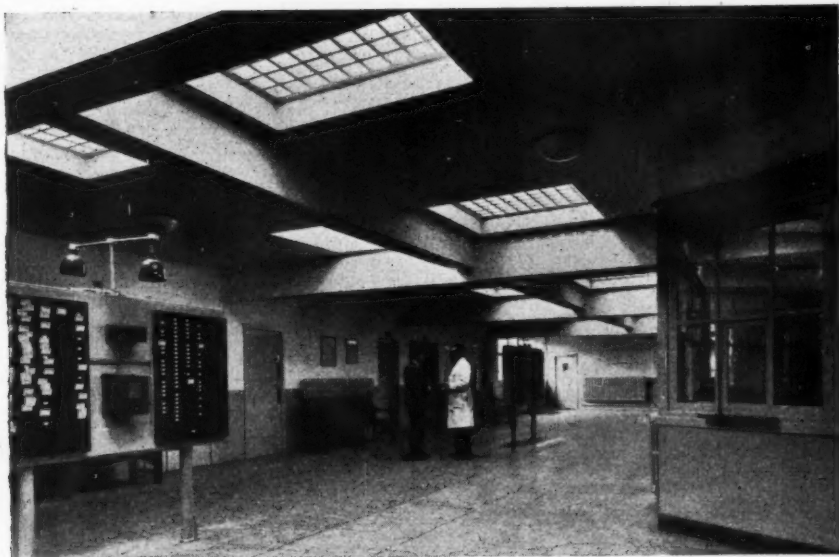
**GROUND FLOOR PLAN OF BUILDING No. 2**

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



# FACTORY AT CHELTENHAM

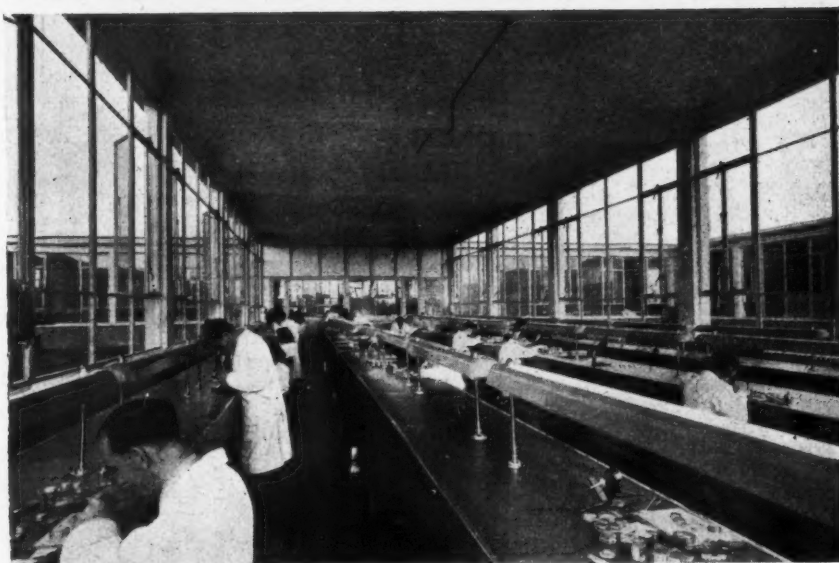
*Entrance hall in building No. 1, with time-keeper's office on right.*



*A typical machine shop showing provision for maximum of natural light.*



*An assembly shop where natural light is also needed for fine work.*





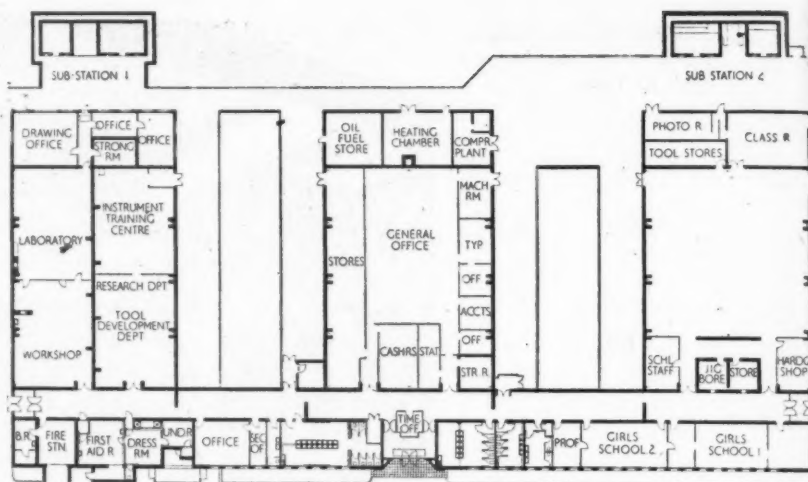
school for training skilled workers and a village for housing key workers. At the present time, three of the five proposed factory blocks have been constructed. Internal road access to these is provided by carriage-ways, 20 ft. in width, with garden treatment bordering the factories and roadways. Controlled access from the factory roads is provided on to the main road.

**CONSTRUCTION.** — Factory buildings are of steel frame or reinforced concrete construction, with external walls of facing bricks. The reinforced concrete roof slab is covered with cork and three layers of bitumen felt with granite chippings on the top. The external treatment was designed to obtain the maximum amount of daylight. The windows have bronze metal frames with fixed bottom and side lights and opening top and centre lights.

**INTERNAL FINISHES.** — The floor finish is granolithic laid on concrete floor slab. The administration block, laboratories and

canteen floors have wood block finish. The walls, which are painted with a flat oil paint, have a plaster finish, as have the distempered ceilings. The floors of the kitchen and stores are finished with quarry tiles. Walls in lavatories and cloak-rooms are finished with glazed tiles.

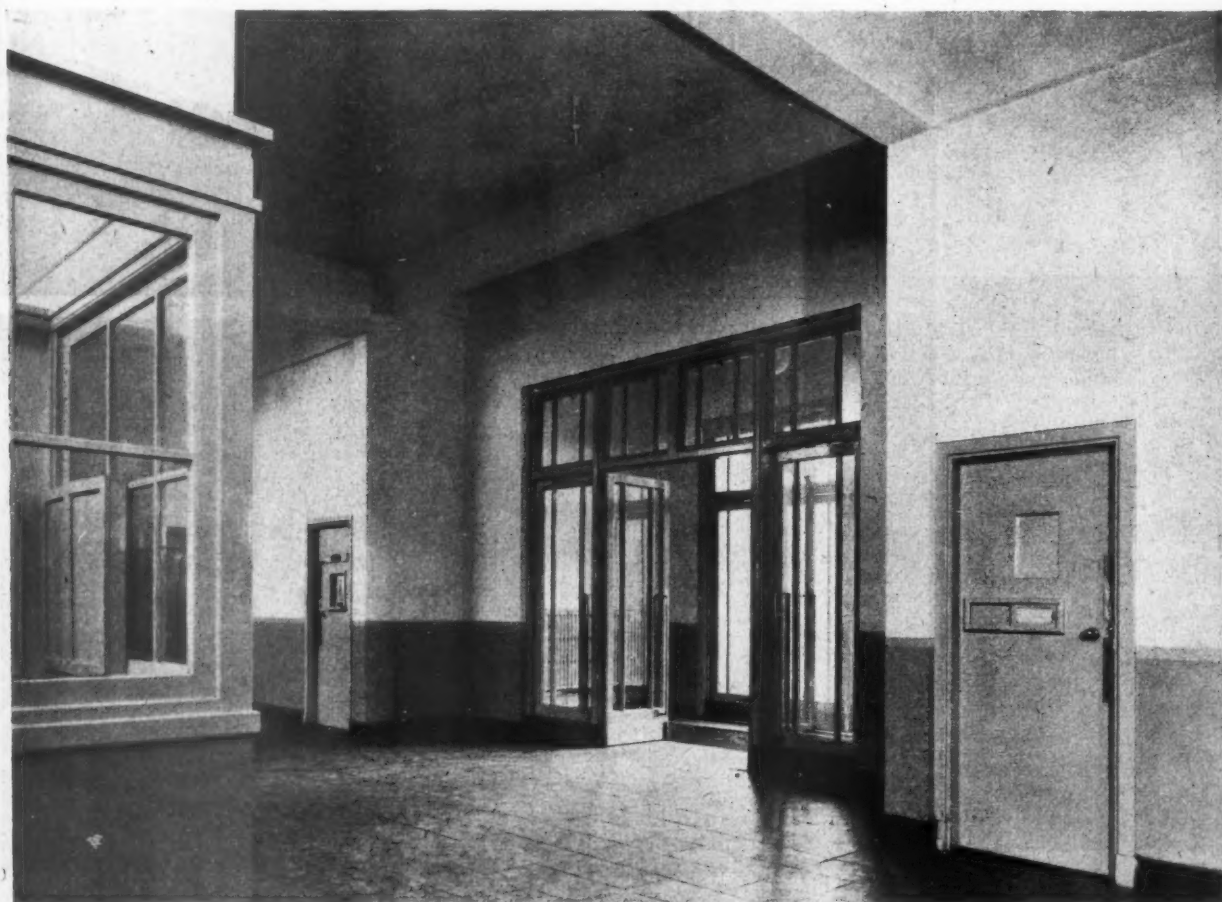
**SERVICES.**—One bay of the building No. 1 is fitted with an air-conditioned room to obtain a dust free atmosphere for assembly and testing purposes. Heating in each factory block is by steam supplied by an oil-fired boiler. For list of contractors and sub-contractors see page 358.



**GROUND FLOOR PLAN OF BUILDING NO. 3.**

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

*Entrance to building No. 1*



F A C T O R Y   A T   C H E L T E N H A M

h

R

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M

M

ARDG

HOP

33

33

o. 1

M

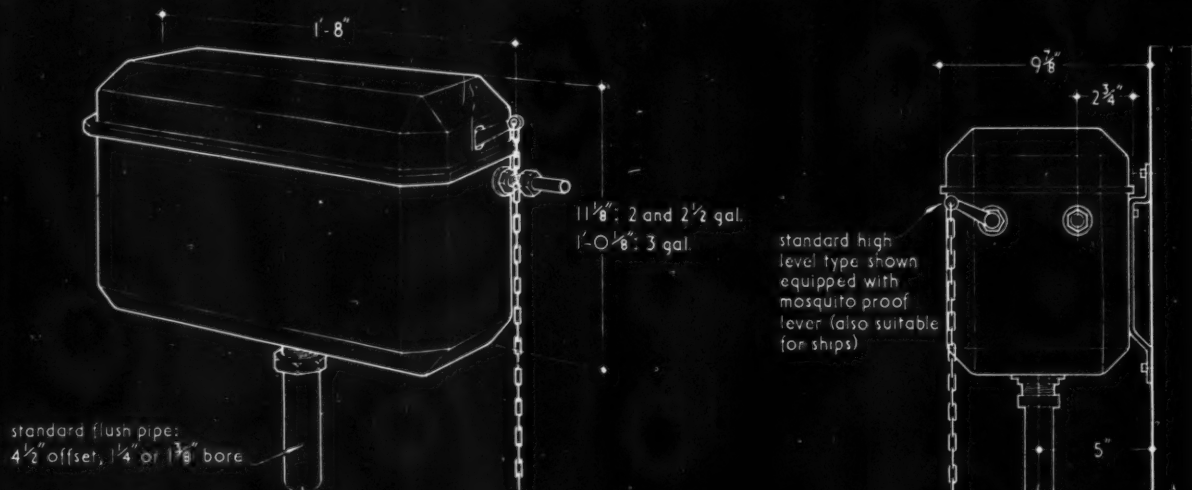




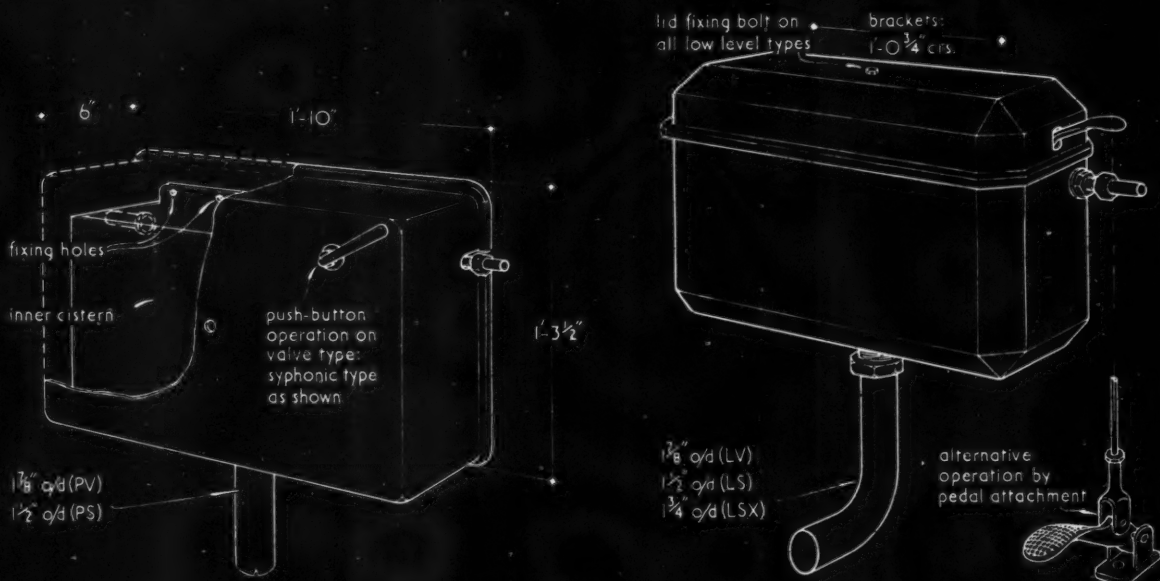
## SANITATION | EQUIPMENT | FLUSHING CISTERNS

33. Q2

The Architects' Journal Library of Information Sheets 2 9. Editor: Cotterell Butler, A.R.I.B.A.

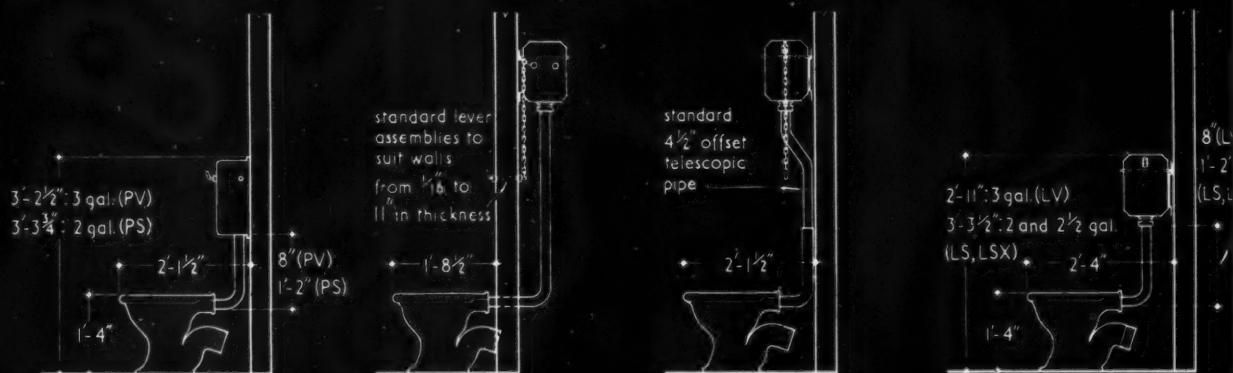


HIGH LEVEL VALVE AND SYPHONIC TYPES (HV, HS, HVM AND HSM).



LOW LEVEL PANEL VALVE AND SYPHONIC TYPES (PV AND PS).

LOW LEVEL VALVE AND SYPHONIC TYPES (LV, LS AND LSX)



PANEL TYPES.

HIGH LEVEL (CONCEALED).

HIGH LEVEL (STANDARD).

LOW LEVEL.

STANDARD ARRANGEMENTS.

### 33.Q2 FLUSHING CISTERNS FOR W.C.'s.

This Sheet describes a range of types of high and low level flushing cisterns for W.C.'s.

#### General Construction of High and Low Level Valve and Syphonic Types

**Shell and cover:** These are seamless steel pressings 1/16 in. thick hot-galvanised or vitreous-enamelled in white or colour. They are also available in copper, self-colour or plated.

**Ballvalve:** A  $\frac{1}{2}$  in. high pressure or low pressure ballvalve is supplied fitted with a silence pipe and a solderless copper ball.

**Fixing brackets:** These are supplied as standard and are concealed behind the cistern.

#### High Level Cistern : Valve and Syphonic Types

These are available in 2, 2½ and 3 gallon capacities.

**Valve type:** The valve is a patented flushing disc type having a very positive action. It is a hot brass stamping with a 1½ in. gas thread outlet and a combined  $\frac{3}{4}$  in. overflow. The rubber clack is removable by hand.

**Syphonic type:** The patented syphon is of 1½ in. diameter tube and is silent in operation. It is of solid drawn copper and brass throughout and has no soldered, brazed or screwed joints.

**Operating lever:** The lever is chromium plated and the trunnion and fulcrum brackets have large bearing surfaces.

**Valve type overflow:**  $\frac{3}{4}$  in. internal overflow is supplied but an external overflow may be fitted to comply with the Glasgow water regulations.

**Syphonic type overflow:**  $\frac{3}{4}$  in. overflow is supplied suitable for connection to lead or copper pipe.

#### Low Level Cistern : Valve Type

This is available in 2, 2½ and 3 gallon capacities.

**Valve:** Patented flushing disc valve having a very positive action. It is a hot brass stamping with a 2 in. gas thread outlet and a combined  $\frac{3}{4}$  in. overflow. The rubber clack is removable by hand.

**Operating lever:** The lever is chromium plated and is fitted with suction release link when required to comply with the Glasgow water regulations.

**Overflow:**  $\frac{3}{4}$  in. internal overflow is supplied but an external overflow may be fitted to comply with the Glasgow water regulations.

#### Low Level Cistern : Syphonic Type

This is available in 2, 2½ and 3 gallon capacities.

**Syphon:** The patented syphon is of 1½ in. or 1½ in. diameter tube and is silent in operation. It is of solid drawn copper and brass throughout and has no soldered, brazed or screwed joints.

**Operating lever:** The lever is chromium plated and the trunnion and fulcrum brackets have large bearing surfaces.

**Overflow:**  $\frac{3}{4}$  in. overflow is supplied suitable for connection to lead or copper pipe.

#### General Construction of Panel Type

**Inner cistern:** This is of 14 gauge welded steel heavily galvanised and coated internally with bituminous paint.

**Outer cover:** This is a seamless steel pressing vitreous-enamelled in a wide range of colours. It is fixed to the cistern with a centrally positioned screw.

**Ball valve:** A  $\frac{1}{2}$  in. high pressure or low pressure ballvalve is supplied fitted with a silence pipe and a solderless copper ball.

**Fixing:** The inner cistern is screwed direct to the wall face.

#### Low Level Cistern : Panel Types

These are available in 2, 2½ and 3 gallon capacities and with supply and overflow pipes fitted at the bottom or at the side.

**Valve type (PV):** The valve is a patented flushing disc type having a very positive action. It is a hot brass stamping with a 2 in. gas thread outlet and a combined  $\frac{3}{4}$  in. overflow. The rubber clack is removable by hand.

**Syphonic type (PS):** The syphon is of 1½ in. diameter tube and is silent in operation. It is of solid drawn copper and brass throughout and has no soldered, brazed or screwed joints.

**Push button (type PV):** This is the same size and shape as an electric bell push and requires about the same effort for operation. It is finished in chromium plate.

**Operating lever (type PS):** The operating lever handle is chromium plated and is so designed that the panel cover can be removed without disturbing it.

**Overflow:**  $\frac{3}{4}$  in. side or bottom connection for lead or copper pipe.

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Fordham Pressings Limited.

Address : Melbourne Works, Dudley Road, Wolverhampton.

Telephone : 23861/2.

Telegrams : Fordham, Wolverhampton.



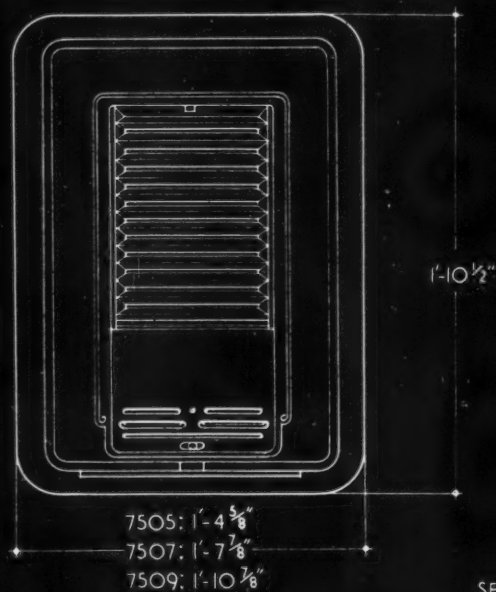




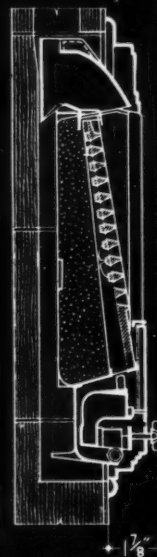
## SPACE HEATING | UNITS | GAS

29.C1

The Architects' Journal Library of Information Sheets 210. Editor: Cotterell Butler, A.R.I.B.A.

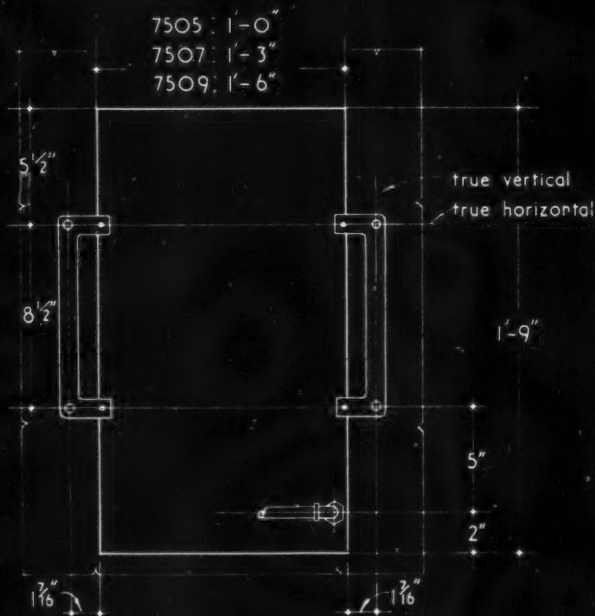


ELEVATION OF FIRE.



SECTION THRO' STANDARD FLUE NOZZLE FOR USE WITH BRICK FLUE (ALL MODELS).

SECTION THRO' FIRE SHOWING SPECIAL FLUE NOZZLE FOR USE WITH NAUTILUS FLUE (MODEL 7505 ONLY).

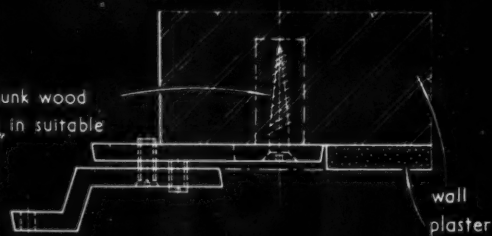


ELEVATION AND SECTION OF RECESS WITH WALL BRACKETS IN POSITION.



PLAN OF RECESS.

no. 10 countersunk wood screw 1 1/4" long in suitable wall plug or 4" grouted-in tee-headed bolt



DETAIL OF ADJUSTMENT FOR PLASTER THICKNESS.

## 29.C1 NEW WORLD · WENLOCK · SILENT BEAM BUILD-IN GAS FIRE NOS. 7505, 7507 AND 7509

This Sheet describes the New World Wenlock Silent Beam Build-in gas fire. The fire is of the panel type and is available in three sizes for installing direct to a wall or prefabricated structure prior to the plaster being applied. An alternative design, the New World High Beam Build-in gas fire, is described on Sheet 29.C2. The method of fixing precludes its use where there is a tiled or other surround. The standard form of flue nozzle supplied is suitable for brick or prefabricated structures. For this last-named construction arrangements must be made for connecting a flue pipe to the nozzle. A special flue nozzle with a protecting plate to avoid a "hot spot" on the back wall of the flue for use with precast concrete (Nautilus flues) is available for the 7505 size only. This special nozzle is supplied unless otherwise specified and is interchangeable with the standard nozzle.

## Components

**Front:** This is of cast or sheet iron resting against a sheet iron plaque and is adjustable forwards to compensate for unevenness of wall plaster. The plaque serves to mask the edge of the opening and the gas connection.

**Rado-Panels:** These are of horizontal bar design and buff in colour. They are in two sections, one resting on the other on key platforms and are held at the top by a retaining clip.

**Burner:** There are four alternative burners giving luminous flames and with jets of appropriate size to cover the range of calorific values from 375 to 575 in four steps. The size of jet supplied is indicated by the letter A, B, C or D, stencilled on the back of the fire and on the burner.

**Taps:** Three alternatives are possible for the No. 7505 fire:—

1. Centre control tap. This houses a pressure control in its spindle, covered by the tap handle and tap handle fixing screw, and is standard for housing contracts.

2. Three-position tap and 60 D governor.

3. The combined governor/tap/igniter.

For the No. 7507/7509 fires alternatives 2 and 3 only are admissible.

**Back Brick:** This is highly refractory and of low thermal conductivity, the surface being covered with a white refractory coating.

**Dress guard:** A guard of the open mesh type is available, as an extra, if required.

**Finish:** The fire may be obtained finished gold, copper, pewter, gunmetal, autumn brown, parchment or pastel green.

## Rating

Fire No.	7505	7507	7509
Gas consumption, B.Th.U./hr. (hot)	12,000	16,000	24,000
" " cu.ft. 500 c.v. gas	24	32	48
" " B.Th.U./hr. (cold)	13,500	18,000	27,000
" " cu.ft. 500 c.v. gas	27	36	54
Burner pressure (cold) (in. w.g. 500 c.v. gas, 0.45 sp. gr.)	21/10	24/10	24/10
Hours' use per therm	8½	6½	4½

## Fixing

**Recess:** This may be located at any convenient height above floor level. The opening may be formed in the brick wall itself or (in the case of fire No. 7505) by means of a Nautilus flue building-in set, an appropriate flue-way being provided. The minimum flue area should be 20 sq. in. for fires Nos. 7505 and 7507 and 30 sq. in. for fire No. 7509.

**Brackets:** These should be fixed direct to the wall as shown on the face of this Sheet.

**Gas connection:** This must be made to the ½-in. B.S.P. elbow union provided. Connection may be made from left or right as required.

## Ventilation

The gaps in the return edges of the front casting at either side provide means for carrying ventilated air to the flue and should not be obstructed.

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Radiation Ltd.

Address: 7, Stratford Place, London, W.1.  
Telephone: Mayfair 6462.

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# CAPITAL CUTS AND PRODUCTIVITY

by Ian Bowen

## DECLINE IN PRODUCTIVITY

The Girdwood Committee on house-building costs gave its opinion that since 1939 there had been a 31 per cent. decline in labour output, which meant that there was an increase of 45 per cent. in the number of man-hours required to build a house. But labour output, or productivity, as the committee pointed out, is affected by many factors other than the willingness to work. One of the most important is the supply of materials, although there are others such as the existence or absence of incentive schemes, or managerial skill in progressing work or in foremanship.

Low labour productivity in 1946 and the early part of 1947 was largely due to the shortages of materials and to the delays caused thereby, as well as to the bad weather. This was well recognized at the time and the subsequent improvement in labour output has correspondingly been attributed partly to the improvement in the flow of materials.

## MATERIALS DELIVERIES

The statement recently issued from the Building Productivity Team which has just visited America, made an interesting point—one that re-echoed the findings of the Bossom Committee. It was found that builders in America, faced with the problem of paying very high hourly rates of wages, planned their targets and delivery dates for materials with far greater pains than are customarily taken over here. This practice, in conjunction with the greater abundance of building materials available, may be one of the main reasons for the relative efficiency of the American building—in those sections in which it is relatively efficient.

Thus, planning by the builder, the supply of materials and the speed of work of the operative are closely interconnected, and a full report from the Productivity Team will be awaited with interest on the details of American practice. The point here is that materials supply is a serious problem in Great Britain. It is not necessary merely to get back to the pre-1939 position, but to improve on that position, if the tentative conclusions of the Productivity Team are borne out by the evidence that they have collected. But who is to make the start—the operative, the builder or the materials supplier?

Each of these different sections of the industry has a good alibi for a slow tempo of work as long as the practices of the other two are unchanged. Yet some post-war experiments have amply shown that a steady flow of materials to carefully planned sites can result in a substantial reduction in the man-hours needed for completion. This is, of course, common knowledge among the larger building firms, and more efficient smaller firms.

As far as the long-term problem is concerned the industry as a whole evidently requires substantially to improve its regard for the sanctity of delivery dates; indeed, there is something to be said for the view that more expensive building labour (and a lot less of it) would provide a filip to efficiency, if the American analogy is at all correct. Bonus schemes which automatically make the best labour more costly are thus a step in the right direction.

One of the most unfortunate materials in this regard has been timber. The supply is still more uncertain and irregular than before the war, and the efficiency of wood-

working shops has suffered severely in consequence. The bottlenecks in the supply of other materials have been attacked administratively one by one, and priority schemes combined with a deliberate policy of furnishing labour to those industries where it was most needed gradually alleviated the position until the second half of 1947. The capital cuts then begun unfortunately lost a great deal of the ground already won.

Thus, in particular, between December, 1947, and December, 1948, the brick industry lost 3,000 men. This loss, together with the mild winter weather, sufficed to cause some local difficulties in the supply of bricks. Metal windows and doors lost 20 per cent. of their labour force in 1948, although this loss has since been made good. Although there have been few complaints of outright shortages of any other materials, there is not much doubt that the violent effect of the capital cuts offset improvements in efficiency that might otherwise have occurred as a result of the easier supply of materials.

	Labour in the Building and Civil Engineering Industry (1) 000's	Labour in the Main Building Materials' Industries (2) 000's	Ratio (1) ÷ (2) (3)
Dec., 1946 ..	953	143.8	6.63
" 1947 ..	1,002	148.3	6.76
" 1948 ..	995	146.2	6.85
Sept., 1949 (est.)	(1,004)	(147.0)	(6.83)

As the table shows there are just under seven workers in the building and civil engineering industries to every worker employed in the (main) building materials industries, exclusive of distribution. Even since the capital cuts of 1947 the ratio has tended to remain fairly stable.

## CAPITAL CUTS IN 1949

What will the new policy of capital cuts require? Above all things, it is to be hoped that it will be so selective as not to impair the efficiency of the building labour force. A general slash in the labour of materials industries might again cause those bottlenecks and delays that, at the other end of the production chain, cost the country an unaccounted tax in time wasted on the building sites. A selective policy means that some industries may have to suffer greater reductions than others. But the main object of any cut should be to remove all materials shortages entirely. This could be accomplished by appropriate timing. If the constructional industries are to be cut (almost a foregone conclusion) should not the building industry suffer first, and then, selectively, each materials industry in turn as sufficient stocks become visible? Stocks in this case should not be judged on over-all statistics alone, but on the basis of progress reports from sites as to how delivery dates were being honoured. The marketing side of the materials industries has adequate storage facilities, and it is now time, four years from the end of the war, that delays and bottlenecks were removed from the list of respectable excuses for inefficiency.

The economic crisis, in its latest form, can hardly fail to be alarming to the building industry, and perhaps still more to the building materials' industries. The brick industry, for example, is trying once again to step up production, and if another sudden reversal in "capital formation policy" occurs it will not be surprising if confidence in planning is rather severely shaken.

A sober review of the orders of magnitude involved does not, however, confirm that policy needs for the dollar crisis alone justify a disastrously sudden reduction in construction. If British prices remain unchanged, the quantity of exports now needed to earn \$4.03 is 44 per cent. more than it was before "devaluation"; thus, on this somewhat simple-minded assumption, we should need to step up the quantity of exports to hard currency areas by at least

44 per cent. Evidently the whole object of the revision is, however, to close the dollar gap, and we should expect to accomplish this partly by selling more goods than before, aiming at say increased quantities sold to hard currency areas of 50 per cent. or 60 per cent. at least. Now, says the pessimist, where are these extra exports coming from? There are no big pockets of unemployed resources. Is it not evident that the home market must somehow be starved? Consumer goods are in short enough supply already; why not slash the housing and building programme? Or, rather, is it not inevitable that it must be slashed?

This is a sound argument in that it draws attention, in a rough and ready way, to the immediate problem ahead. But exports to the dollar areas amounted only to some £10 millions a month; to double them would mean finding resources amounting to some £120 millions a year. More than this would probably be impossible for market reasons, even allowing for the highest powered salesmanship. Some of the increased exports will represent diversion of resources from soft currency destinations. In relation to building output the figure remaining is significant, but not overwhelmingly large.

On probing the problem in terms of manpower, let us say that dollar exports require a labour force of 200,000 more workers; some of these will come from "diverted exports," only a few from building or building materials.

The building materials' industries are already contributing to the export drive, and more may be expected from them. A slowing down in the building programme can release man-power for metals, engineering and shipbuilding, and building machinery for export. But the order of magnitude of this particular contribution cannot constitute a large fraction of the present building potential; a cut of 5-10 per cent. might be allowed, but not enforced too rapidly, since there is no sense in driving men from the industry faster than they can be absorbed elsewhere. And for the reasons outlined above there is an even stronger case for not reducing materials' output until stocks are replenished.

The materials' industries are averse to providing "stockpiles." A time may come when, for the sake of stability of materials' output, on the one hand, and of building efficiency, some official encouragement will be needed to smooth out the fluctuations in output caused by the slowing-down in an officially-sponsored policy of expansion. But that raises even wider problems; it is most desirable that in the immediate future the cuts should be undertaken, and the remaining programme should be firm.

## ANTI-INFLATIONARY POLICY

Thus, as far as the immediate dollar crisis is concerned, the order of magnitude of the cuts to be feared does not seem large. An attempt to increase exports will, however, add to the inflationary pressures in the British economy. So too will the rise in import prices. So too will any increases in wages, whether due to changes in rates (some must be conceded), or to longer hours or overtime. A cut in the capital programme may be advocated for its anti-inflationary effect. But neither this Government nor any other is likely to push such a policy to extremes by means of direct restrictions. Industrial building is needed for its contribution to efficiency; some office building may be postponed, and a slowing-down in the expansion of the educational programmes may be accepted. That the axe may fall more frequently than this is of course possible; but more direct fiscal means of averting inflation are likely to appeal to the Government than severe and necessarily somewhat arbitrary controls on building activity.

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*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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#### 2.98 planning: general

##### TRAINING PLANNERS, USA

*The Planning Schools: (1) Massachusetts Institute of Technology. F. J. Adams. (Town Planning Review, July, 1949, pp. 144-149.)*

First of a series of articles on planning schools written by Professor of City Planning at MIT and describing development of Institute's undergraduate and post-graduate training in city and regional planning. Note on advantages and disadvantages of undergraduate professional course. Aim of both graduate and undergraduate studies to cultivate general practitioners in planning rather than planning specialists.

#### 10.62 design: building types HOUSING STANDARDS

*The Designer's Dilemma: An Interim Report on Local Authority Housing and the Architect. T. Mellor. (Town Planning Review, July, 1949, pp. 150-161.)*

Article discussing problem of local authority house building costs in relation to tenants' income and architect's contribution to design. Suggestions for lower space standards in order to cut expenditure. Illustrated.

The first and larger part of this comprehensive article refers to the various aspects of the problem of local authority housing costs. Today it becomes more and more obvious that the capital cost of houses is so high that, in spite of subsidies, the rents are, in many cases, such that the average worker cannot afford them. With rents varying between 15s. and £1 7s. 6d. per

week, depending on details of planning and equipment and on local conditions, tenants' waiting lists, particularly in small urban and rural districts, are greatly reduced. The reason being that in areas with few pre-war houses and with inadequate surplus accommodation to counter the effects of high building costs the lower-paid workers prefer to remain in their overcrowded and often insanitary dwellings because of a rent within their means, while the new houses are being occupied by lower middle-class families or the more prosperous manual workers.

Official consideration of the problem of high building costs and its social and economic consequences has led to the report of the MOH Girdwood Committee, *The Cost of House Building* (HMSO, 1948, 1s. 3d.). Among its recommendations is one that the standards of floor space and equipment as laid down in both the 1944 Dudley Report and the MOH Housing Manual of that year should be reconsidered. The author states that this reduction in standards is primarily a problem of design, and as such of vital importance to architects and planners, who have set the present standards and maintained them. He then gives an analysis of the architect's contribution to post-war housing and house

design in relation to the economic situation, and refers to what seems to him the evolution of a contemporary English housing style based on the grouping of houses in terraces. While he considers this style, with its various layout possibilities, a satisfactory and attractive solution, he notes that it is, on the other hand, expensive in cost and in the time and patience of the designer when he has to convince the local councillor of the advantages of his design. This style has not as yet gone much beyond the drawing board stage for various reasons which concern the private as well as the local authority architect. An important factor contributing to high costs is that the size of houses has risen steadily above the recommended minimum of 900 sq. ft., a fact noted by the Girdwood Committee.

While it is an essential part of any sound housing policy to provide adequate and pleasant dwellings for the lower-paid worker at a rent which he can afford, it is apparent by now "that with present standards and prices this objective cannot be obtained without a considerable additional subsidy. It should, however, be possible, assuming a really high standard of design, to reduce space standards and duplication of equipment."

Tentative suggestions for such reduced standards are put forward in the second part of the article. They concern the more economic open-plan type of ground floor as opposed to the universal plan, with its wasteful separate access to all rooms; the utilization of bedrooms as bed-sitting rooms, with adequate heating, in place of the parlour; a reduction of height in first-floor rooms; and other suggestions, some of which are of a controversial nature. Apart from these reductions in actual space, the author also discusses possible means of reducing layout costs, and investigates advan-



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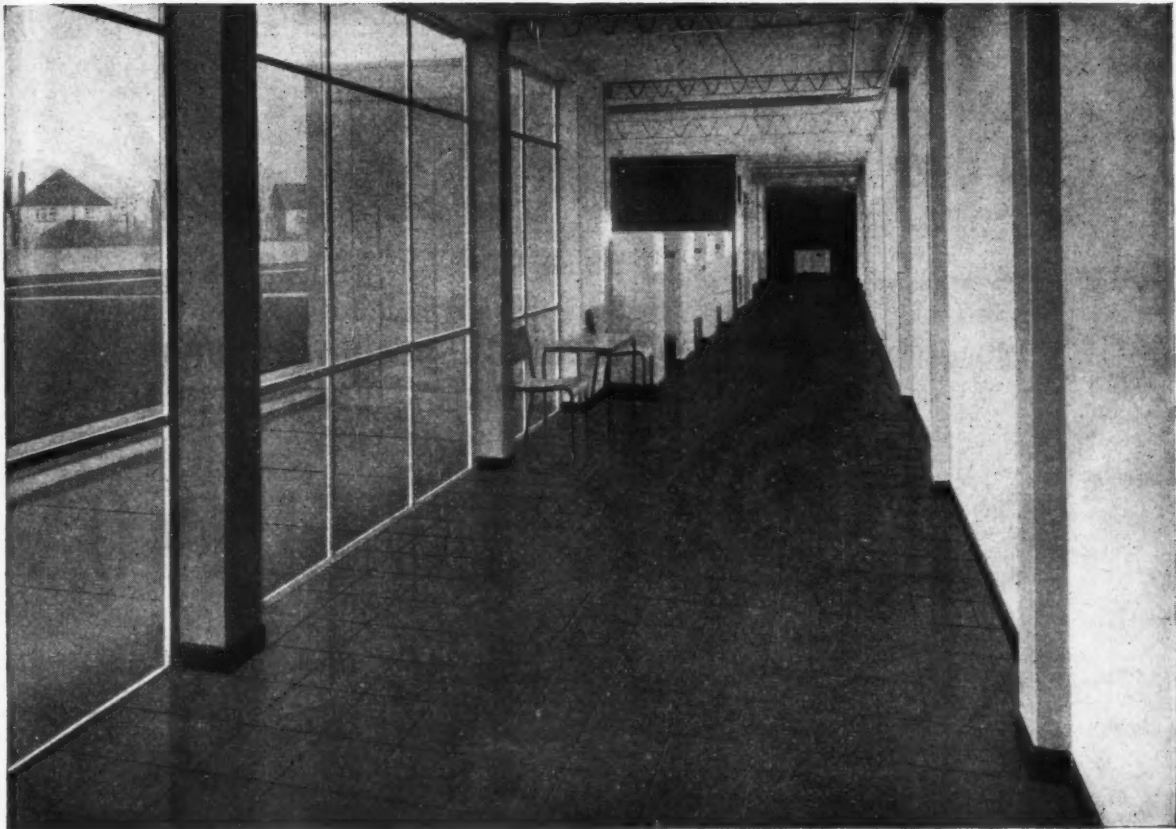
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E S S E N T I A L S I N C O A L M I N I N G

# Bath Cubicles

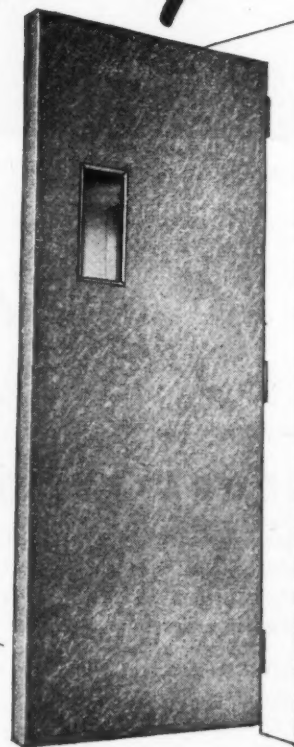
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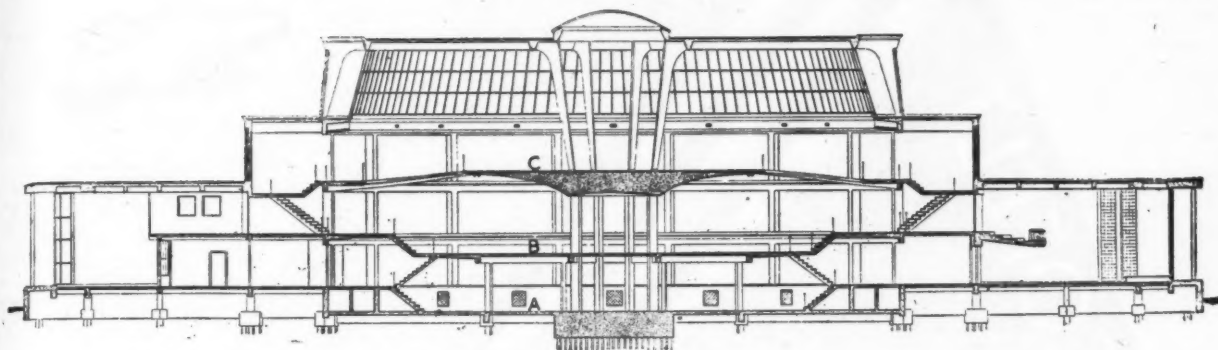
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Sectional view of Netherlands Building Centre. See 20.144.

tages resulting from standardization of equipment and from an extensive system of bulk ordering and allocation.

### 12.38 materials: metal ALUMINIUM CONDUIT

*Light-Metal Conduit.* Aluminium-alloy tubing and zinc-alloy fittings. (Electrical Review, Aug. 12, 1949.)

Short article dealing with resistance to corrosion of aluminium alloy tubing and zinc-alloy fittings. Table showing short term results of exposure tests. General conclusion that these alloys are satisfactory.

### 16.54 materials: miscellaneous REINFORCED BRICKWORK

*American Developments in Reinforced Brickwork.* Norman X. Kelch. (The British Clayworker, July, 1949. pp. 102-104.)

A short illustrated account of the increased use of reinforced brickwork in America, for complete structures, replacing reinforced concrete frames.

It is claimed that this form of construction has almost the same structural strength as reinforced concrete and is 20 per cent.

cheaper. It also retains the advantages of brickwork—low maintenance and good appearance. It is conceded, however, that "it is most advantageous in the erection of buildings which are no more than a dozen storeys in height." An additional advantage as compared with reinforced concrete is its need for much less form-work. It is interesting to note that the economy is attributed to the fact that most of the work including setting the reinforcement is done by bricklayers, each laying about 800 bricks a day.

Unfortunately no clear information is given as to how the system is applied and it would appear from the illustrations that this is an extension of the load-bearing wall principle rather than that of the structural frame.

### 19.75 construction: details NEW DOME FOR THE ALBERT HALL

*A New Dome for the Albert Hall.* (Building, Aug., 1949, pp. 298-9.)

New aluminium inner dome for the Albert Hall.

The new aluminium dome replaces the old glass dome. It is a fluted ceiling comprising a main frame and two skins, the lower perforated and backed with a sound-damping

layer of rock wool. The total weight of timber and glass removed is 37 tons, the weight of the new structure, including insulation, is only 35 tons. The total area covered is 20,000 sq. ft. and the fabrication took 9 months.

### 19.76 construction: details "EARTH CONCRETE" WALLS

*"Earth Concrete" Houses in Denmark.* (Building Digest, Aug., 1949.)

Short abstract note of "Geotek" house in which a stabilized earth mixture is used for walls. Abstract taken from Bygmesteren No. 7, 1949.

### 19.77 construction: details ROOF DECKING

*Light Weight Roof Decking.* (The National Builder, Aug., 1949.)

Brief article on aluminium roof decking covered with  $\frac{1}{2}$  in. insulation board and multi-layer flexible roofing. Illustrated, 3 photographs.

### 20.143 construction: complete structures CONCRETE STADIUM, RIO

*Reinforced Concrete Stadium. First Unit of Rio's New Sports Centre.* (Arch. Record [USA], Aug., 1949, pp. 86-93.)

General arrangement and structural details of stadium.

The rough construction of the municipal stadium of Rio is now substantially complete. It will seat 150,000 people. Visibility from all stands has been mathematically calculated; all steps have varying heights, so that the stadium's internal profiles are curves. It is remarkable that so large an audience can be accommodated in a structure which has a maximum height of 75 ft. 6 in. Noteworthy are large cantilevers, that of the main roof is over 98 ft.

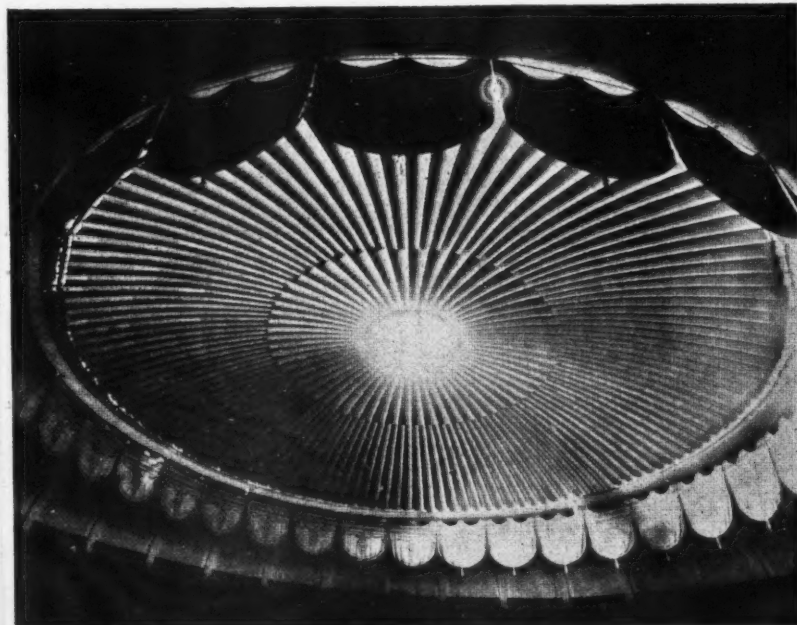
Within the stadium itself there are sleeping quarters for 880 athletes.

### 20.144 construction: complete structures NETHERLANDS BUILDING CENTRE

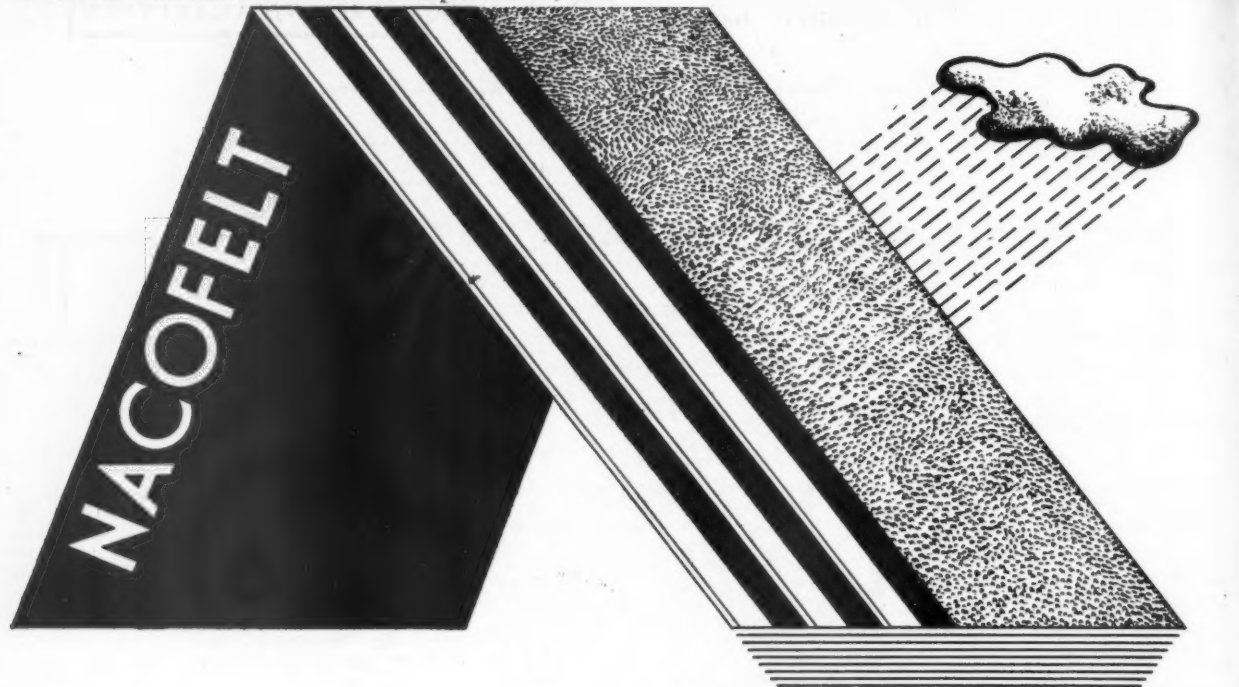
*Netherlands Building Centre.* H. J. Spiwak. (Building, June, 1949, pp. 192-8.)

Main building of polygonal shape about 130 ft. in diameter, 60 ft. high, with low protruding square annexe flanked by two double-storeyed wings.

The main building consists of three storeys. An interesting experiment in space design is the cantilevering of the central



New aluminium inner dome for the Albert Hall. See 19.75.



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sections of both upper floors from a central group of reinforced concrete columns. The floor platforms are linked with the outer galleries by flights of concrete stairs, the whole resembling bridges thrown between ships' decks. The eight central columns, supporting the circular flat roof, are outwardly inclined.

Glass is, in general, very generously used. The inclined glass band around the upper storey is particularly impressive when lit at night.

The whole structure rests on 176 reinforced concrete piles about 50 ft. high.

## 22.36 sound insulation and acoustics

### SOUND INSULATION AND ACOUSTICS

*The Practical Application of Acoustic Principles.* D. J. W. Cullum. (E. & F. N. Spon Ltd. 16s.)

Nature of noise, acoustic defects, insulation of structures, doors and windows; acoustics of cinemas and small rooms; absorption; isolation of machinery; the legal aspect; the fatigue aspect in industry. Useful book. 187 pp. 104 figures.

Mr. Cullum has been generous with the fruits of his experience, and this book contains many very useful details and ideas which he has developed in the course of his work. It also contains clear descriptions of many technical aspects of acoustics which will make the book serve the needs of teachers. Its chief weakness is an inadequate description of the insulation of ordinary

buildings (though floors are discussed) and of acoustical treatment for theatres, concert halls and other buildings which have a major place in architecture. These, fortunately, are matters covered by other publications (though mostly out of print).

After an opening chapter on the nature of noise, some common defects, such as flutter echoes and multiple decay rates, are mentioned, and transmission is discussed. Walls, floors, doors and windows then have a chapter each. These show both the strength and the weakness of the book, for they cover adequately the many special cases which Mr. Cullum has often had to deal with, but less adequately the more standard details which architects so often need. A chapter on ventilation systems gives much-needed guidance.

The next two chapters deal with cinemas and small rooms (talks studios and rooms for cinema work). These are the only building types discussed in detail. A later chapter gives short notes on a variety of other buildings.

Somewhat oddly, there then comes a chapter which, though very useful in general ways, says nothing about the important new field of panel absorption.

The isolation of machinery and the tiredness caused in industry by noise occupy two short final chapters.

## 23.111 heating and ventilation

### ULTRAVIOLET AIR SANITATION

*Ultraviolet Air Sanitation.* E. J. Buttolph. (Arch. Record [USA], July, 1949, p. 139.)

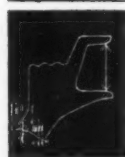
Comparison ventilation and UV disinfection; effectiveness; technique and fittings. Interesting; illustrated.

It is claimed that UV disinfection can bring air purity in winter to parity with summer conditions, which would by ordinary ventilation require 60-120 changes per hour. The usefulness of disinfected air in winter depends a good deal on whether people have it most of the time they are indoors. (In naval barracks it is said to have cut infection of respiratory diseases by 25-30 per cent.) In schools, where part of the effect is swamped by home infection, it is said, nevertheless, to be capable of limiting epidemic effects with respiratory diseases such as measles.

Two techniques are described, one for artificial ventilation, where the air is forced along ducts with UV sources playing in the air, and the other for natural ventilation. The latter is called "upper air disinfection," because the upper air is irradiated, and reliance is placed on internal air movement to bring bacteria up.

The reflection factors of various paints and plasters for UV light is discussed. Plasters have too little absorption, and dangerous reflection can occur.

Fittings for ducts and upper air treatment are described.



## THE LIBRARY OF INFORMATION SHEETS

### 43.Z2 REFERENCE BACK

Readers should note that Sheet 43.Z2 (revised 15.9.49) supersedes Sheet 43.Z2 published 24.6.48. This original edition should be withdrawn from the Library.

*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

### 3003 WORKING STRESS: STEEL

**Q** What is the relation between the working stress, yield point, ultimate strength, and factor of safety of building materials in structures?

**A** The question is far too complex in this general form and should be confined to one specific material such as steel. In earlier years it was usual to base the design on the ultimate strength of steel, e.g., the tensile stress at which a bar is fractured if pulled by an axial force. The "ultimate" strength is obtained by dividing the maximum force developed during a tensile test by the original cross-sectional area of the test specimen (i.e., tons per sq. in.), although the cross-section is considerably reduced before failure, and the "true" strength of the material much higher.

It was realized many years ago that in a structure the ultimate strength of steel cannot be utilized, since failure generally occurs when the stress reaches the so-called yield point i.e., a stress at which a sudden increase of elongation occurs without any increase of stress. The ratio yield point: ultimate strength varies considerably in ordinary mild steel; it may be as low as .56 or as high as .700. The minimum yield point of mild steel is specified in B.S. 15 (1948).

The working stress, i.e., the maximum stress that may occur under the most unfavourable conditions for which a structure has to be designed, must allow a safe margin against failure. The traditional definition of the factor of safety is the ratio stress at failure: maximum working stress. Since failure depends on the yield point and not on the ultimate strength, it is misleading to relate the working stress to the ultimate strength, e.g., if the working stress is one-third of the ultimate strength, it is a fallacy to say that the structure is designed for a factor of safety of 3. With a yield point of two-thirds of the ultimate strength, the actual factor of safety is only 2.

In the Code of Practice CP.113 (1948) for the Structural Use of Steel in Buildings and in B.S.449:1948, all working stresses are based on the guaranteed minimum yield point of the material. The factor of safety specified for structural steel is approximately 1.7.

Conditions are more complicated in members subjected to compression, which fail by buckling, and in statically indeterminate structures where the yield point may be reached in certain parts of the structure yet the load may be still further increased before failure occurs, since a redistribution of bending moments takes place.

The "classical" theory of structures is based on the assumption that the materials are "elastic." Actually, most building materials are "plastic." A skilful design can take advantage of the plasticity of materials, which in many cases allows an increase of loading beyond the stage at which the structure would fail if the material were elastic.

The modern conception of design abandons the idea of working stresses which are only applicable to elastic materials. Instead of calculating stresses, the maximum load at which failure would occur is determined and the factor of safety is defined as the ratio of this load to the maximum working load.

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

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## Announcements

The BOT announce that, following discussions between the Secretary for Overseas Trade, Mr. A. G. Bottomley, and the acting head of the Soviet Trade Delegation, contracts have now been concluded for the supply of about 100,000 standards of softwood, comprising 17,000 standards of Kara Sea redwood, 52,500 standards of redwood and 2,000 standards of whitewood from the White Sea, 5,000 standards of redwood and 5,000 standards of whitewood from the Baltic ports of Riga and Windau, and 12,500 standards of redwood and 6,000 standards of whitewood from the Russian Zone of Germany. The Kara Sea and White Sea goods are all of joinery quality, the balance being suitable for building purposes. Shipping will commence almost immediately, and it is hoped that the total quantity will be lifted before the close of navigation this year. In line with other purchases made by the BOT to date this season, the prices paid are lower than those paid last year.

Mr. W. Ashley Bartlam, Dip. Arch. (Birm.), has set up office at 106, High Street, Elgin, Morayshire, and would be pleased to receive trade catalogues and technical literature at that address.

Messrs. Parker, Winder & Achurch Ltd. have acquired the business of J. W. Rains Ltd., Builders' and Plumbers' Merchants, of Summer Row and Coventry Road, Birmingham. The business of J. W. Rains Ltd. will continue as before.

Mr. S. V. W. McCready, A.R.I.B.A., registered and chartered architect, has commenced practice at 2, Antrim Street, Lisburn, Co. Antrim, and will be pleased to receive trade catalogues, etc.

Mr. A. J. R. Potter, M.INST.R.A., registered architect and surveyor, would be pleased to receive trade catalogues at 48, Morehall Avenue, Folkestone, Kent.

Mr. F. G. Lees, A.R.I.B.A., of 74, Warwick Square, S.W.1, would be pleased to receive trade catalogues at that address.

Miss Rachel Caro, A.R.I.B.A., DIP. ARCH., A.M.T.P.I., has started practice at 15, Woodfall Street, S.W.3, under her own name, and would be pleased to receive trade catalogues.

The first Industrial Finishes Exhibition to be held in this country will take place at Earl's Court, London, from August 23 to September 5, 1950. The exhibition will cover a wide range of finishes and finished products.

The MOTCP have issued Circular No. 75 to local authorities in England and Wales. It is designed to assist authorities in the discharge of their advertisement control functions by drawing attention to the main factors which should be taken into account in assessing the effect of advertisements on public safety. Particulars are also given of the appropriate points of consultation in respect of railways and inland waterways, including docks and harbours.

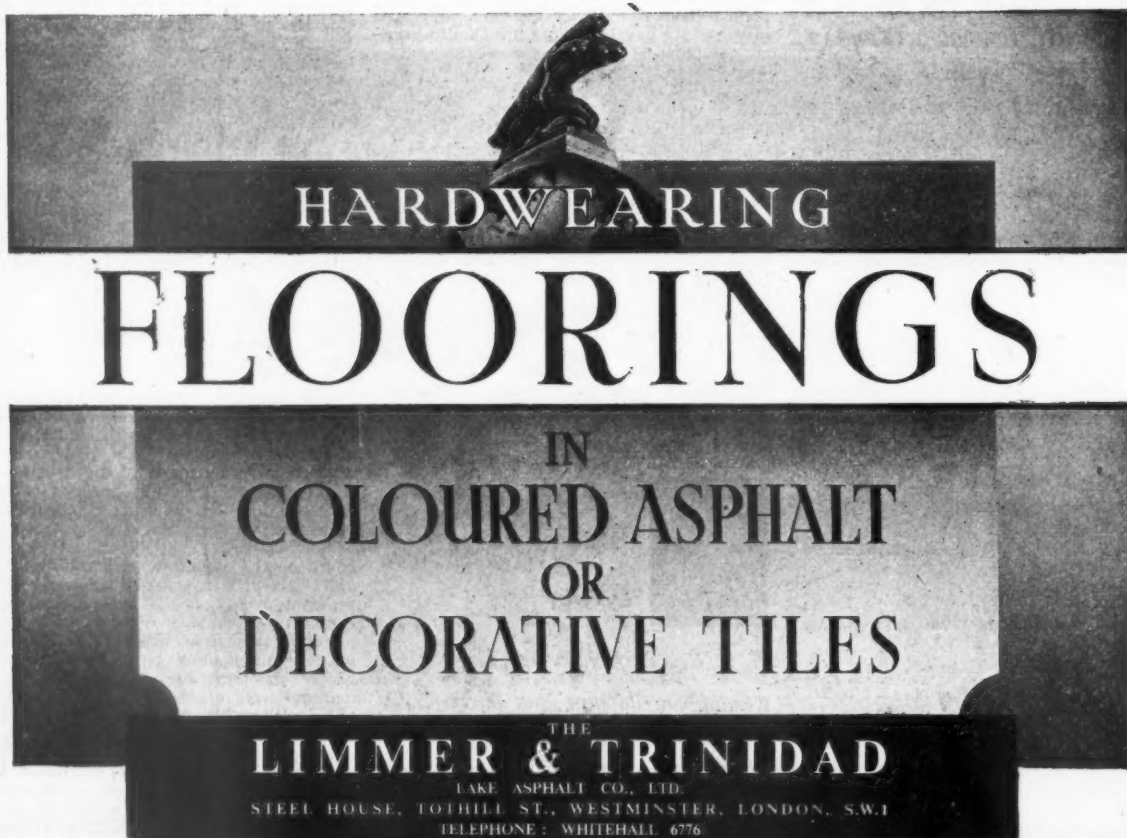
Mr. B. Ivor Day, F.R.I.B.A., chartered architect, and surveyor, of 39, Broad Street, Bristol, 1, has moved to offices in Atlas Buildings, 9, Clare Street, Bristol, 1 (tel.: 23395).

The Board of Trade Journal, dated September 24, contains details of the revised import licensing policy of the Indian Government. The great majority of goods will in future be subject to licence and for many licences will not normally be issued. Special licences will however be issued in respect of goods complying with certain conditions (including being covered by irrevocable letters of credit valid beyond September 15) provided applications are made on or before September 30, 1949. Full details of these conditions for special licences may be obtained from the Board of Trade Regional Export Officers or the Commercial Relations and Export Department, Board of Trade, Millbank, London S.W.1.

## Buildings Illustrated

*Flats at Camberwell.* (Page 337.) Architect: D. E. Harrington, General Contractors: R. H. Lynn & Co. Ltd., Copthall House, E.C.2. Sub-contractors: demolition, reinforced concrete, plumbing, joinery, tiling, general contractor; asphalt, Brights Asphalt Co. Ltd.; concrete blocks, artificial stone, Wadcrete Ltd.; terra-cotta, Hall & Co. Ltd.; structural steel, Redpath Brown & Co.; tiles, roofing felt, Roberts Adlard; partitions, breeze, glass, Aygee Ltd.; patent flooring, "Semastic" floor tiles, Horsley Smith & Co.; waterproofing materials, R.I.W. Products; grates, sanitary fittings, door furniture, B. Finch & Co.; gas fixtures and fittings, South Met. Gas Co.; electric wiring, Raymond Meyrick; stair treads, Granolith Surface Co.; casements, Senlac Metal Casements Ltd.; plaster, R. Knight & Sons; metalwork, Potter Rex Gate Co.; stonework, carved plaque by Harvey Bros.; signs, William Pickford Ltd.

*Factory at Cheltenham.* (Pages 349-352.) Architect: Messrs. T. P. Bennett & Son, General Contractors for service buildings, No. 1 and No. 2: Sir Robert McAlpine and Sons. General Contractors for service building No. 3, and canteen and extension: Messrs. William Moss & Sons Ltd. Sub-contractors: electrical installation, Messrs. John Hearson & Co. Ltd.; heating installation and ventilation, Messrs. Norris Warming Co. Ltd.; roofing, Everseal Products Ltd.; windows, Messrs. Williams & Williams Ltd.; wall tiling, Messrs. Carter & Co. (London) Ltd.; electrical fittings, Messrs. Troughton & Young Ltd.; canteen equipment, Messrs. Benham & Sons Ltd.; generating plant, Messrs. Associated British Oil Engines Ltd.; sanitary fittings, Messrs. John Bolding & Sons Ltd.; structural steel, Messrs. Redpath Brown & Co. Ltd.; plumbing, Messrs. W. H. Earley Ltd.; gas installation, Cheltenham District Gas Co.



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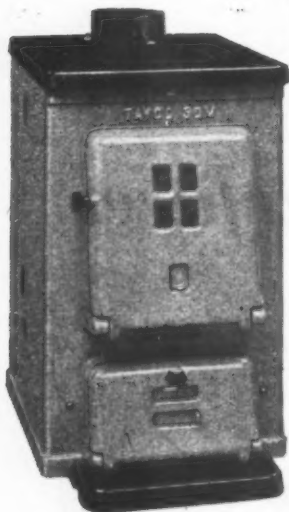
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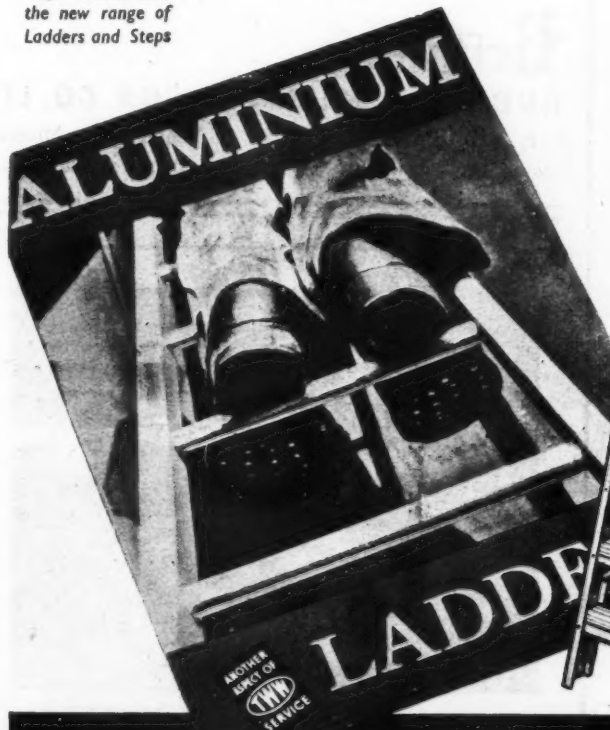
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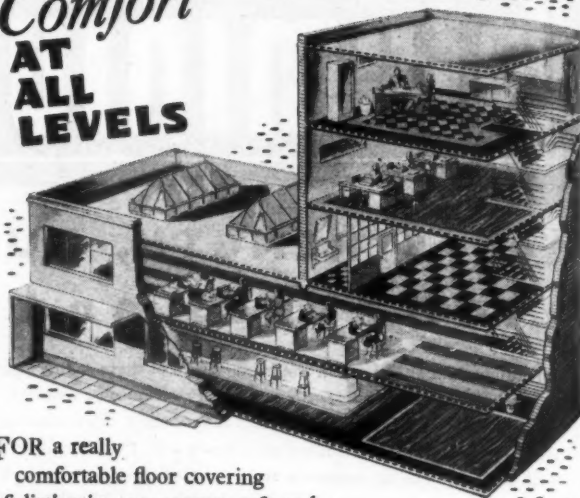
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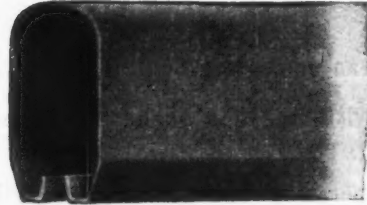


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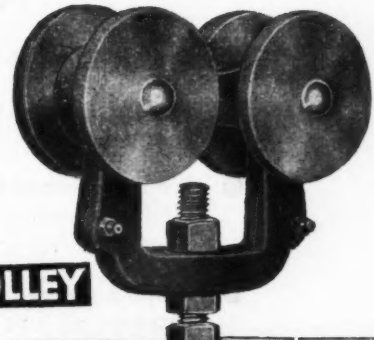
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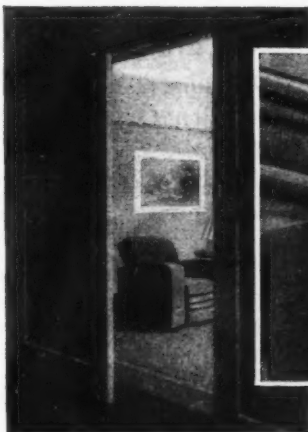


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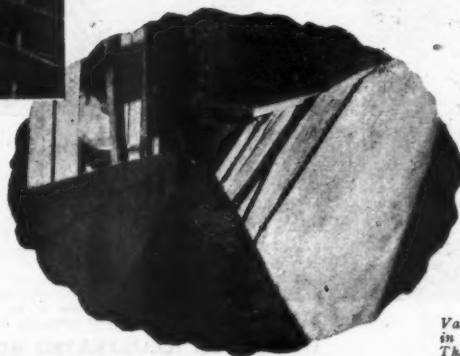
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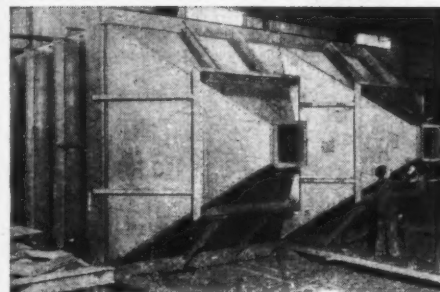
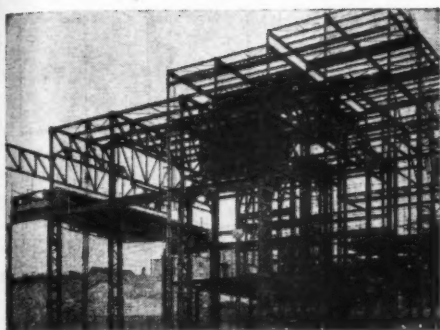


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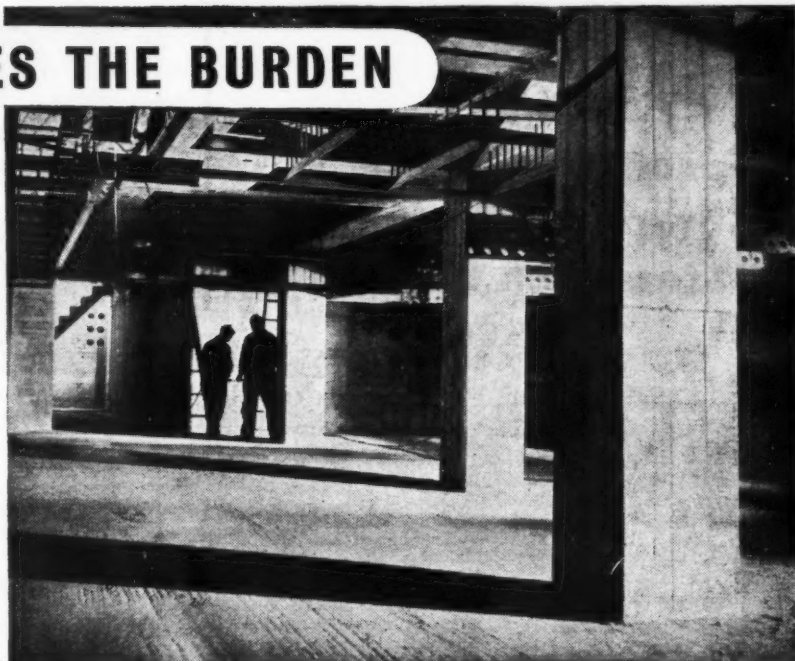
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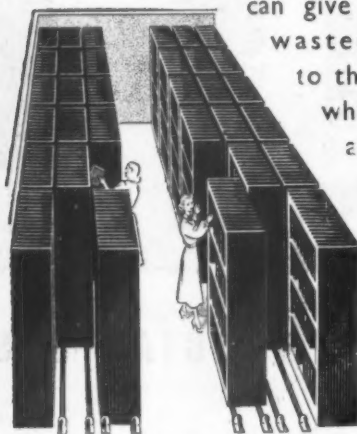


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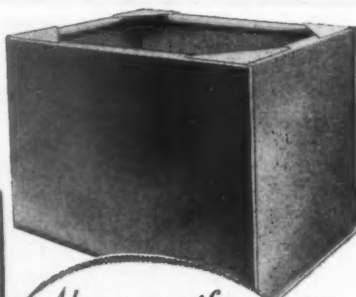
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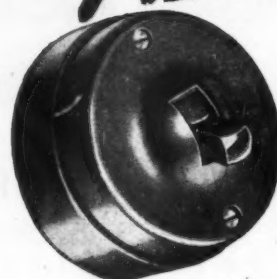
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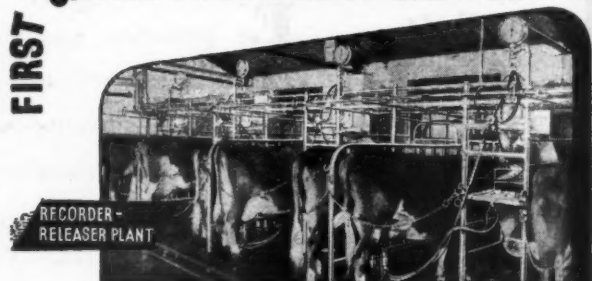
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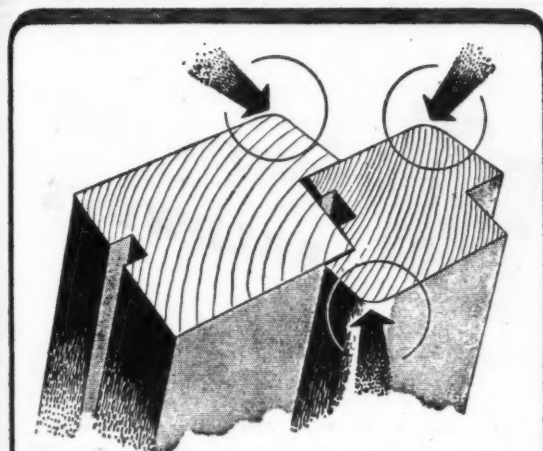
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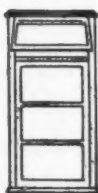


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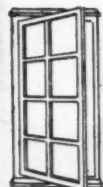


IP46  
lay bars.

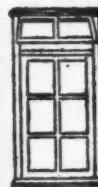
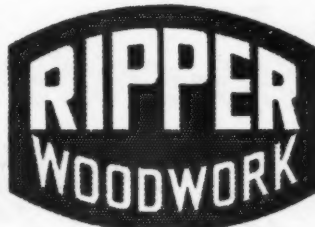
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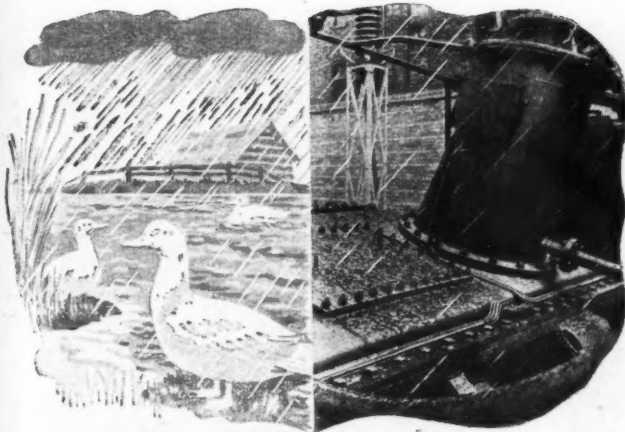


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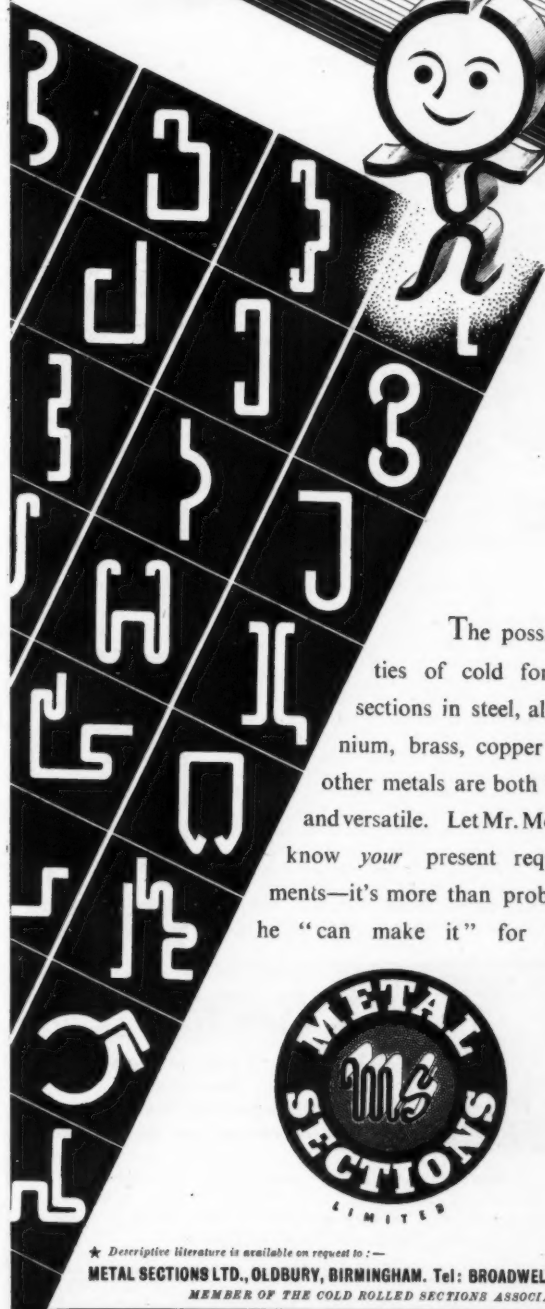
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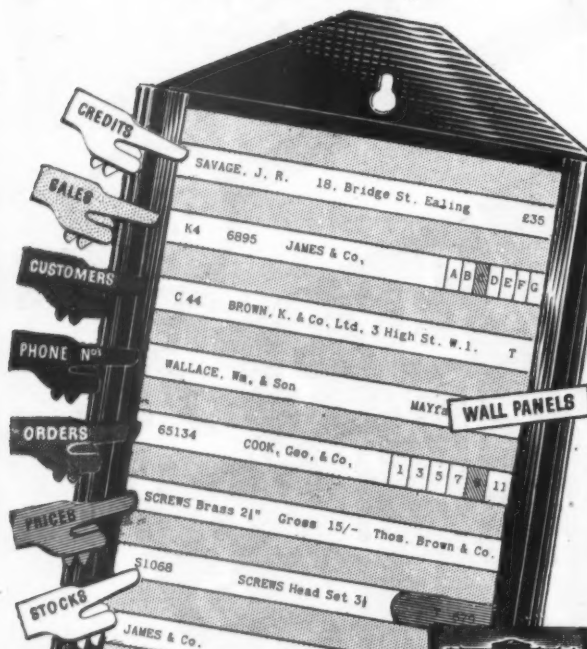


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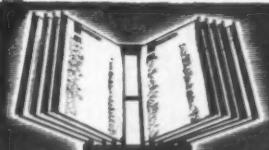


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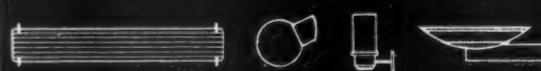
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Applications should be made on a form to be obtained from, and returned to, the Borough Education Officer, Education Offices, Town Hall, Ilford, together with copies of not more than three recent testimonials, within 14 days of the appearance of this advertisement. 2075

## WARWICKSHIRE COUNTY COUNCIL.

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

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Applicants should have considerable experience in the design of new schools and general municipal work, and should preferably have passed the final examination of the Royal Institute of British Architects.

Housing accommodation, upon a service tenancy, will be available for the successful candidate if required, and full particulars may be obtained from the Borough Surveyor, Lancaster Building, High Street, Newcastle.

The appointment is subject to the National Scheme of Conditions of Service and to the provisions of the Local Government Superannuation Act, 1937, the successful applicant being required to pass a medical examination to the satisfaction of the Council's Medical Officer of Health. The appointment is terminable by one month's notice on either side.

Applicants must disclose whether to their knowledge they are related to any member of or the holder of any senior office under the Council. Canvassing in any form will be a disqualification.

Applications, on forms to be obtained from the Borough Engineer and Surveyor, Lancaster Building, High Street, Newcastle, Staffs., should be forwarded to me not later than Monday, 3rd October, 1949.

C. J. MORTON,

Town Clerk.

District Bank House, Penkhull Street,  
Newcastle, Staffs.

2122

## 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 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 one month's notice on either side. 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 Department, Shire Hall, Llangefni.

Applications, stating age, training, experience, qualification, 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, the 3rd October, 1949.

WILLIAM JONES,

Clerk of the County Council.

Shire Hall, Llangefni.

9th September, 1949.

2123

## CAERNARVONSHIRE COUNTY COUNCIL.

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Applicants for (b) and (c) must be Corporate Members of the Town Planning Institute, and preference will be given to those who possess an additional professional qualification. They must be fully conversant with current planning practice, including survey work and the control of development.

Applications should be delivered to the undersigned (from whom forms of application may be obtained) not later than 15th October, 1949.

GWILYM T. JONES,

Clerk of the County Council.

County Offices, Caernarvon.

19th September, 1949.

2187

URBAN DISTRICT OF FELTHAM.  
APPOINTMENT OF ARCHITECTURAL  
ASSISTANT.

Applications are invited for the temporary appointment of Architectural Assistant in the Engineer and Surveyor's Department, at a salary in accordance with the recent decisions of the National Joint Council for Local Authorities' Administrative, Professional, Technical, and Clerical Assistants regarding the grading of Architectural Assistants (Grades III, IV or V of the National Scales), plus the appropriate London "weighting." Preference will be given to candidates who have had previous experience in the department of an Engineer and Surveyor to a local authority. The appointment will be subject to the National Scheme of Conditions of Service and to one month's notice in writing on either side.

Forms of application may be obtained from the undersigned, to whom they should be returned, accompanied by copies of two recent testimonials not later than the 3rd October, 1949.

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

M. W. COUPE,

Clerk of the Council.

Council Offices, Feltham, Middlesex.

10th September, 1949.

2108

AMENDED ADVERTISEMENT.  
WILLENHALL URBAN DISTRICT COUNCIL.  
APPOINTMENT OF HOUSING ARCHITECT.

The Council invite applications for the appointment of Housing Architect.

Candidates must be at least Associates of the Royal Institute of British Architects, and have had wide experience in architectural design and construction, particularly in relation to the building of houses.

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

The Council will be prepared to consider the provision of housing accommodation for the successful applicant.

Applications, stating age, qualifications, present and previous appointments, grade or salary required, particulars of experience, the names of three persons to whom reference can be made, and whether the candidate is to his knowledge related to any member or senior officer of the Council, must reach me not later than Monday, 10th October, 1949.

Canvassing will disqualify.

JOHN R. RIDING,

Clerk of the Council.

Town Hall, Willenhall, Staffs.

2127

WARWICKSHIRE COUNTY COUNCIL.  
COUNTY PLANNING DEPARTMENT.

Applications are invited for the following appointments:-

(a) THREE PLANNING ASSISTANTS. A.P.T., Grade IV (£480-£525 per annum).

(b) THREE PLANNING ASSISTANTS. A.P.T., Grade II (£420-£465 per annum).

The successful candidates will be engaged on the preparation of the County Development Plan and will be stationed at Warwick.

Applicants should have had experience in a Planning Office, and preference will be given to those candidates who have passed the Intermediate Examination of the Town Planning Institute.

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.

Applications, together with one recent testimonial and giving the names and addresses of two persons to whom reference may be made, should be forwarded to J. J. Brooks, M.T.P.I., M.I.Mun.E., County Planning Officer, Northgate, Warwick, not later than Saturday, 8th October, 1949.

Canvassing, directly or indirectly, will be a disqualification.

L. EDGAR STEPHENS,

Clerk of the Council.

Shire Hall, Warwick.

13th September, 1949.

2157

## LIVERPOOL REGIONAL HOSPITAL BOARD.

Applications are invited for the following permanent appointments in the Regional Architect's Department of the Headquarters staff of the Board:-

(a) ASSISTANT ARCHITECT, Grade A.P.T., VI, £595-£660 per annum. Applicants should be Associates of the Royal Institute of British Architects, and must have a good general experience, and ability in design and construction.

(b) DRAUGHTSMAN, Grade A.P.T., I, £390×£15-£435 per annum. Applicants must be competent Draughtsmen, with a knowledge of building construction, and must have had previous experience in an Architect's office.

The appointments are pensionable and the successful candidates may be required to pass a medical examination.

Applications, stating age, education, qualifications, experience, present and previous appointments, salary, war service, together with the names and addresses of three referees, should be sent to the undersigned at Alexandra Building, 19, James Street, Liverpool, 2, to be received not later than 20th October, 1949.

VINCENT COLLINGS,

Secretary to the Board.

2221

**CORPORATION OF LONDON.  
APPOINTMENT OF ARCHITECTURAL AND  
SURVEYING ASSISTANTS.**

Applications are invited for the appointment of Architectural and Surveying Assistants, in the City Surveyor's Office. Salaries will be within the range Higher Grade 1, £400-£525, and General Grade Assistants up to a maximum of £275 per annum. Commencing salaries in each case will be arranged according to qualifications and experience.

Applicants for Higher Grade 1 positions should be between the ages of 25 and 35 years and be Associate Members of the Royal Institute of British Architects or the Royal Institution of Chartered Surveyors (Building Sub-section). Applicants without these qualifications and who have passed the Intermediate Examinations of the R.I.B.A. or R.I.C.S. (Building Sub-section) will be considered for the Higher Grade 1 positions. The appointments call for good draughtsmanship and a sound knowledge of building construction, specification writing, contract management, and general administrative ability.

Applicants for General Grade appointments should be between the ages of 21 and 30 years, and should be preparing for the Intermediate Examination of the R.I.B.A. or R.I.C.S. (Building Sub-section), and they should have a good knowledge of drawing, building construction, specifications and general routine work.

The appointments are on a temporary basis, but candidates will be considered for transfer to the permanent staff as and when vacancies occur. Temporary service counts for superannuation.

The appointment will be subject to the provisions of the Corporation's Superannuation Scheme, and candidates will be required to pass a medical examination.

Applications, giving full personal details, particulars of qualifications, experience, age, past and present appointments, and the names of two persons to whom reference may be made, should be forwarded to George Holliday, F.R.I.C.S., City Surveyor, Corporation of London, 55-61, Moorgate, E.C.2. 2196

**STEVENAGE NEW TOWN.**

The Stevenage Development Corporation invite applications for appointments in the Department of Architecture and Planning in the following grades:—

- (1) Grade III SENIOR ARCHITECTS and/or PLANNERS. Salary £750-£1,000.
- (2) Grade IV ARCHITECTS and/or PLANNERS. Salary £550-£750.
- (3) Grade IV ASSISTANT QUANTITY SURVEYORS. Salary £550-£750.
- (4) Grade Va WORKERS-UP. Salary £400-£465.
- (5) Grade Vb ASSISTANT ARCHITECTS and/or PLANNERS. Salary £465-£525.
- (6) ARCHITECTURAL MODEL MAKER. Salary £400.

The initial salary will be fixed according to qualifications and experience.

Applicants for Grade III (Architects) posts must have had experience in the design and construction of large-scale building operations, preferably pre-war.

Successful applicants will be required to contribute to a Local Government Superannuation Fund or an insurance scheme.

Housing accommodation for married applicants will be made available at a later date.

Relationship to any member of the Corporation or staff must be disclosed by applicants.

Canvassing, directly or indirectly, of members or staff of the Corporation will disqualify.

Forms of application may be obtained from the Chief Administrative Officer, Stevenage Development Corporation, Aston House, Aston, near Stevenage, Herts., to whom completed forms should be returned not later than Monday, 17th October, 1949. 2229

**METROPOLITAN BOROUGH OF LEWISHAM.  
APPOINTMENT OF DEPUTY BOROUGH  
ARCHITECT.**

Applications are invited from qualified and experienced Architects for the appointment of Deputy Borough Architect on the Council's permanent establishment.

The salary scale applicable to the appointment will be £900 per annum, rising by annual increments of £50 to £1,050 per annum inclusive.

Preference will be given to persons who have had experience in the design and construction of municipal flats, housing schemes and public buildings.

The appointment will be subject to the rules and regulations of the Council from time to time in force relating to officers; to the National Scheme of Conditions of Service; to the provisions of the Local Government Superannuation Act, 1937; to termination by one month's notice on either side, and to the successful candidate passing satisfactorily a medical examination by the Council's Medical Officer of Health.

The person appointed will be required to devote his whole time to the duties of the office and will not be permitted to engage in private practice.

Forms of application may be obtained from me, and should be returned accompanied by copies of not more than three testimonials addressed to me in an envelope endorsed "Deputy Borough Architect," so as to be received not later than Saturday, 15th October, 1949.

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

ALAN MILNER SMITH, Town Clerk.  
Lewisham Town Hall, Catford, S.E.6. 2217

**COUNTY COUNCIL OF DURHAM.  
COUNTY PLANNING DEPARTMENT.**

Applications are invited for the following permanent appointments in the County Planning Department:—

(a) TWO PLANNING ASSISTANTS. Grade VI A.P.T., of the National Scheme of Conditions of Service (£595-£660), for work in connection with the development plan.

(b) TWO ASSISTANT AREA PLANNING OFFICERS. Grade Va, A.P.T. (£550-£610).

(c) THREE PLANNING ASSISTANTS. Grade III, A.P.T. (£450-£495).

(d) TWO JUNIOR PLANNING ASSISTANTS. Grade I, Miscellaneous Division (£315-£360).

Applicants for:—  
(a) Must be suitably qualified, and preference will be given to candidates with architectural experience;

(b) must be suitably qualified by examination;

(c) must be suitably qualified by examination and/or experience;

(d) must show aptitude for the work by experience and/or training.

The appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination by the Council's Medical Officer. The appointments will be terminable by one calendar month's notice in writing on either side. Canvassing, either directly or indirectly, will disqualify. Applicants must disclose in writing whether to their knowledge they are related to any member or to the holder of any senior office under the Council.

Applications, stating age, married or single, and giving full particulars of qualifications and experience, and the names of three persons to whom reference may be made, must be delivered to the County Planning Officer, 10, Church Street, Durham, by 13th October, 1949.

J. K. HOPE, Clerk of the County Council.  
Shire Hall, Durham. 20th September, 1949. 2216

**SURREY COUNTY COUNCIL.  
COUNTY ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments:—

ASSISTANT ARCHITECT, Grade VI. Salary £595 to £660 per annum, plus London allowance of £30 per annum.

Applicants must be Associate Members of the Royal Institute of British Architects, and should have had a good training and an adequate experience in the design and construction of modern buildings.

ASSISTANT QUANTITY SURVEYOR, Grade VI. Salary £595 to £660 per annum, plus London allowance of £30 per annum.

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

Full details of past and present appointments should be given.

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

Applications, stating age, qualifications, full details of experience, salary required, and accompanied by copies of three testimonials, should be addressed to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, to reach him not later than 15th October, 1949.

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

The Council will be unable to provide any housing accommodation, and the successful applicants will be required to make their own arrangements in this direction.

DUDLEY AUKLAND, Clerk of the Council.  
County Hall, Kingston-upon-Thames. 2215

**AMENDED ADVERTISEMENT.  
COUNTY BOROUGH OF DONCASTER.  
ESTATES AND HOUSING DEPARTMENT.  
APPOINTMENT OF CHIEF ARCHITECTURAL  
ASSISTANT.**

Applications are invited for the appointment of Chief Architectural Assistant, in the Estates and Housing Department of the Council, at a salary in accordance with Grade VII of the Administrative, Professional and Technical Division of the National Scale of Salaries, i.e., £635 per annum, rising by three annual increments of £25 to £710 per annum.

Applicants should be Associates of the Royal Institute of British Architects, and have experience in housing, design and layout.

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

Housing accommodation will be made available if required.

Applications, stating age, qualifications, and previous experience, together with copies of three recent testimonials, should be forwarded to the undersigned not later than Monday, the 17th October, 1949.

Canvassing, directly or indirectly, will be a disqualification.

H. S. ESSENHIGH, Town Clerk.  
1, Priory Place, Doncaster. 22nd September, 1949. 2222

**COUNTY BOROUGH OF NORTHAMPTON.  
BOROUGH ARCHITECT'S DEPARTMENT.  
APPOINTMENT OF ASSISTANT CLERK OF  
WORKS.**

Applications for the above post, stating age, qualifications and experience, past and present appointments and salary, whether related to any member or senior officer of the Council, and giving names of two persons to whom reference may be made, should be delivered to J. L. Womersley, A.R.I.B.A., A.M.T.P.I., Borough Architect and Town Planning Officer, not later than 5th October, 1949.

The salary will be 7 guineas weekly, and candidates should have a sound knowledge of the building trade and must be thoroughly conversant with Bills of Quantities, Specifications and Drawings, and be able to draft normal building reports.

Canvassing will disqualify.  
C. E. VIVIAN ROWE, Town Clerk.  
Guildhall, Northampton. 2154

**CITY AND COUNTY OF THE CITY OF  
EXETER.  
PRIORY SECONDARY MODERN SCHOOL FOR  
GIRLS, PRIORY ESTATE, TOPSHAM ROAD,  
EXETER.**

**BUILDING WORKS.**

Contractors desirous of tendering for carrying out this Contract are requested to forward a deposit cheque for three guineas, made payable to "The Exeter City Council," and crossed "account payee," to the City Treasurer, Municipal Offices, Exeter, not later than 10 a.m. on the 7th October, 1949.

Bills of Quantities, etc., together with instructions for tendering, will then be supplied, and plans will be available for inspection at the office of the undersigned or will be forwarded on application.

The deposit will be refunded on receipt of a bona fide tender which is not subsequently withdrawn and on the return of the documents.

Canvassing of members of the Council will disqualify.

The Council do not bind themselves to accept the lowest or any tender.

HAROLD B. ROWE, F.R.I.B.A., A.M.I.Struct.E., City Architect.  
Municipal Offices, Exeter. 21st September, 1949. 2218

**CHESTERFIELD RURAL DISTRICT  
COUNCIL.  
ENGINEER AND SURVEYOR'S  
DEPARTMENT.**

**APPOINTMENT OF ARCHITECTURAL  
ASSISTANT.**

Applications are invited for the appointment of Architectural Assistant, in the Engineer and Surveyor's Department, at a salary of £450 per annum, rising by annual increments of £15 to £495 (Grade A.P.T., III).

Applicants should have either:—

(a) Attended a full-time course of Architecture and have passed the R.I.B.A. Intermediate Examination, or its equivalent at one of the recognized Schools of Architecture, and have subsequently worked for a minimum period of one year in an architectural office; or

(b) served their articles of pupillage with an Architect, or have worked in an architectural office for a minimum period of three years, and have passed the R.I.B.A. Intermediate Examination, or its equivalent at one of the recognized Schools of Architecture.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination. The Council will give assistance in obtaining housing accommodation to the successful applicant.

Applications, giving details of age, general experience, and the names and addresses of two referees, should be sent to the undersigned endorsed "Architectural Assistant," not later than Friday, the 14th October, 1949.

J. B. WKELEY, M.Eng., A.M.Inst.C.E., Barrister-at-Law,  
Engineer and Surveyor to the Council.  
Rural Council House, Saltergate, Chesterfield. 19th September, 1949. 2159

**BOROUGH OF COLCHESTER.  
TEMPORARY SENIOR ARCHITECTURAL  
ASSISTANT.**

Applications are invited for the above appointment in the Borough Engineer's Department, at a salary in accordance with A.P.T. Grade V (£520 to £570 per annum) of the National Scales of Salaries.

Applicants should have had a thorough architectural training, with considerable experience in design and construction, and be familiar with architectural work in connection with Local Authorities post-war housing schemes. The appointment is subject to one month's notice on either side.

Applications, stating age, qualifications and experience, accompanied by copies of not more than two recent testimonials, must be delivered to the Borough Engineer at the address given below, not later than 20th October, 1949, endorsed "Temporary Architectural Assistant."

Canvassing will disqualify and applicants must state whether they are related to any member or senior officer of the Council.

N. CATCHPOLE, Town Clerk.  
Town Hall, Colchester. 27th September, 1949. 2230



## ESSEX COUNTY COUNCIL.

## COUNTY PLANNING DEPARTMENT.

The Essex County Council invite applications for the following appointments on the established staff of the County Planning Department:—

(a) TWO PLANNING ASSISTANTS, at a salary not exceeding the maximum for Grade VI, A.P.T.D. (£660 per annum), at Leytonstone.

(b) THREE PLANNING ASSISTANTS, at a salary not exceeding the maximum for Grade V, A.P.T.D. (£570 per annum), at Leytonstone, Romford and Colchester.

(c) PLANNING ASSISTANT, at a salary not exceeding the maximum for Grade IV, A.P.T.D. (£525 per annum), at Braintree.

(d) TWO PLANNING ASSISTANTS, at a salary not exceeding the maximum for Grade III, A.P.T.D. (£495 per annum), at Broomfield and Leytonstone.

(e) TWO PLANNING ASSISTANTS, at a salary not exceeding the maximum for Grade II, A.P.T.D. (£465 per annum), at Braintree and Colchester.

The salary in each case will be fixed in accordance with the qualifications and experience of the applicant appointed, but will not exceed the maximum salary for the post concerned as stated above.

Candidates for post (a) must be Corporate Members of the Town Planning Institute, and preference will be given to those persons who possess an additional professional qualification in that stipulated. Previous planning experience in a County Planning Department will be an advantage.

Candidates for post (b) must have passed the Intermediate Examination of the Town Planning Institute or an equivalent planning examination. Preference will be given to applicants who are Corporate Members of the Town Planning Institute or who possess an additional professional qualification to that stipulated. Previous planning experience in a County Planning Department will be an advantage.

Candidates for posts (c) and (d) should have had good general experience in a planning office with regard to development control and basic survey. Preference will be given to candidates who have passed the Intermediate Examination of the Town Planning Institute or some other recognized professional institution.

Candidates for post (e) should have had good general experience in a planning office with regard to development control and basic survey, or should have passed the Intermediate Examination of the Town Planning Institute or some other recognized professional institution.

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

The Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, as from time to time amended, and as adopted by the County Council, is at present applicable to persons appointed on the established staff.

Canvassing, directly or indirectly, will disqualify.

Applications must be made on a form to be obtained from the County Planning Adviser, Broomfield Place, Broomfield, Chelmsford, to whom they should be returned as soon as possible.

JOHN E. LIGHTBURN,

Clerk of the County Council.

2214

## CITY OF PORTSMOUTH.

## CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) SENIOR ARCHITECT, Grade IX (£750-£900).

The person appointed will be required to lead a team engaged on a major civic rebuilding scheme. Applicants should have had considerable experience of large building schemes, preferably civic buildings and assembly halls.

(b) ASSISTANT SENIOR ARCHITECT, Grade VII (£635-£710).

Considerable experience in general Municipal building work essential, some health work experience an advantage.

(c) ASSISTANT ARCHITECT, Grade V (£520-£570).

Good experience in housing and educational work essential.

Applicants for the above posts should be Associates of the R.I.B.A.

(d) ASSISTANT ARCHITECT, Grade IV (£480-£525).

Candidates should be of Intermediate R.I.B.A. standard with adequate office experience.

A special subsistence allowance may be paid to a married applicant for a period of six months after taking up the appointment if he is unable to secure housing accommodation immediately.

Applications, setting out in tabular form, name, age, qualifications, present post and salary, previous posts with dates, details of experience, with names of three referees, must be delivered to the undersigned not later than 10 a.m. on Friday, 14th October, 1949.

Canvassing will disqualify.

V. BLANCHARD,

Town Clerk.

City Council Chambers,

1, Clarence Parade, Southsea.

16th September, 1949

2202

## BOROUGH OF BARNES.

## APPOINTMENT OF PERMANENT ARCHITECTURAL ASSISTANT (GRADE III).

Applications are invited for the above appointment, in the Borough Engineer and Surveyor's Department, at a commencing salary of £450, rising by annual increments to a maximum of £495 per annum, plus London weighting. Applicants should be good draughtsmen and be capable of preparing plans and details for general architectural work.

Preference will be given to applicants having an architectural qualification. The Council are unable to make any provision of housing accommodation for the successful applicant. Applications, together with the names of three persons to whom reference can be made, should be submitted to the undersigned not later than Friday, 21st October, 1949.

W. R. SHEPHERD, A.M.I.C.E.,

A.R.I.C.S.

Borough Engineer and Surveyor.

Municipal Offices, Sheen Lane, S.W.14.

19th September, 1949.

2210

THE CRAWLEY DEVELOPMENT CORPORATION invites application for the post of SENIOR ARCHITECT, within the range £1,000-£1,200 p.a., with contributory superannuation. The commencing salary will be determined by the qualifications and experience of the applicant, who should be fully qualified in Architecture and Planning and have had wide general experience.

Form of application and further particulars should be obtained from the Chief Architect, A. G. Sheppard Fidler, M.A., B.Arch., A.R.I.B.A., A.M.T.P.I., Broadfield, Crawley, Sussex, to whom applications must be submitted not later than 15th October, 1949.

C. A. C. TURNER,

Chief Executive.

2199

## CITY OF PORTSMOUTH.

## CITY PLANNING DEPARTMENT.

Applications are invited for the following appointments:—

(a) TWO ASSISTANT PLANNING OFFICERS, Grade VIII (£685-£760 per annum). Commencing salary according to qualifications and experience.

Applicants must be Corporate Members of the Town Planning Institute. Successful applicants will be required to be responsible for the work of sections of the Department concerned primarily with reconstruction proposals and the preparation of Development Plans.

(b) TWO PLANNING ASSISTANTS, Grades III-V (£450-£570 per annum). Commencing salary according to experience.

A special subsistence allowance may be paid to a married applicant for a period of six months after taking up the appointment if he is unable to secure housing accommodation immediately.

Applications, stating age, present position, qualifications and experience, together with names of three responsible persons to whom reference may be made, must be delivered to the undersigned marked "City Planning Appointment," not later than 19th October, 1949.

Canvassing will disqualify.

V. BLANCHARD,

Town Clerk.

City Council Chambers, Southsea.

19th September, 1949.

2201

## BRIERLEY HILL URBAN DISTRICT

## COUNCIL.

## APPOINTMENT OF SECOND ASSISTANT

## ARCHITECT.

Applications are invited from suitably qualified persons for the appointment of Second Assistant Architect, in the Architect and Housing Director's Department, at a salary in accordance with Grade VA of the A.P.T. Division (£550×£220 to £610 per annum) of the National Scales of Salaries.

Candidates should be experienced in general Municipal work, including housing, be capable of preparing plans and specifications, etc., and supervising construction.

Applications, endorsed "Second Assistant Architect," stating age, full details of qualifications and experience, and accompanied by copies of not more than three recent testimonials, must reach the undersigned as soon as possible.

HERBERT HEX,

Clerk of the Council.

Council Offices, Moor Street, Brierley Hill.

20th September, 1949.

2203

## COUNTY OF DORSET.

## COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of TWO ASSISTANT ARCHITECTS on the permanent staff. The appointment will be made within the Grades II-V (salary £420-£570), according to qualifications and experience. The minimum qualification required is the Intermediate examination of the Royal Institute of British Architects.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination. The Council make a grant of a moiety of the cost of removal.

Applications, on forms to be obtained from the undersigned, should be sent not later than Saturday, the 15th October, 1949, to the Clerk of the County Council, County Hall, Dorchester.

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

C. P. BRUTTON,

Clerk of the County Council.

County Hall, Dorchester.

2228

FIFE COUNTY COUNCIL.  
ASSISTANT PLANNING OFFICER  
(DEVELOPMENT PLAN).

Applications are invited for appointment of Assistant Planning Officer (Development Plan). Preference will be given to candidates holding the Associate Membership of the Town Planning Institute and who have had previous experience in a planning office. Salary £570 by £25 and £30 to £710 per annum. A car is desirable, but not essential. Medical examination under Superannuation Scheme. Applications, stating age and experience, together with copies of testimonials, should be lodged with the undersigned by 12th October, 1949. No canvassing.

J. M. MITCHELL,

County Clerk.

County Buildings, Cupar.

22nd September, 1949.

2238

## CITY OF CARDIFF.

## ARCHITECTURAL ASSISTANTS (HOUSING).

Applications are invited from experienced Architectural Assistants for the following appointments:—

(a) ARCHITECTURAL ASSISTANT, A.P.T., Grade VI. Salary £595 per annum, rising by two annual increments of £20 and one of £25 to a maximum of £660.

(b) ARCHITECTURAL ASSISTANT, A.P.T., Grade IV. Salary £480 per annum, rising by three annual increments of £15 to a maximum of £525 per annum.

The Council will assist in finding housing accommodation for successful applicants who are married and have children.

Details of the Conditions and Duties may be obtained from the City Surveyor, City Hall, Cardiff.

Applications, endorsed "Architectural Assistant, Grade — (Housing)," accompanied by the names and addresses of three persons to whom reference can be made, should be delivered to the undersigned not later than Friday, the 14th October, 1949.

S. TAPPER JONES,

Town Clerk.

City Hall, Cardiff.

22nd September, 1949.

2253

## CITY OF CARDIFF.

## ARCHITECTURAL ASSISTANT (GENERAL).

Applications are invited from experienced Architectural Assistants for the following appointments:—

(a) ARCHITECTURAL ASSISTANT, A.P.T., Grade VII. Salary £635 per annum, rising by three annual increments of £25 to a maximum of £710 per annum.

(b) ARCHITECTURAL ASSISTANT, A.P.T., Grade IV. Salary £480 per annum, rising by three annual increments of £15 to a maximum of £525 per annum.

The Council will assist in finding housing accommodation for successful applicants who are married and have children.

Details of Conditions and Duties may be obtained from the City Surveyor, City Hall, Cardiff.

Applications, endorsed "Architectural Assistant, Grade — (General)," as the case may be, accompanied by the names and addresses of three persons to whom reference can be made, should be delivered to the undersigned not later than Friday, the 14th October, 1949.

S. TAPPER-JONES,

Town Clerk.

City Hall, Cardiff.

22nd September, 1949.

2252

## CITY OF CARDIFF.

## QUANTITY SURVEYING ASSISTANTS.

Applications are invited from experienced Quantity Surveying Assistants for the following appointments:—

(1) Two No. QUANTITY SURVEYING ASSISTANTS, A.P.T., Grade 5a. Salary £550 per annum, rising by three annual increments of £20 to £610 per annum.

Preference will be given to candidates who are Corporate Members of the Royal Institute of Chartered Surveyors.

The Council will assist in finding housing accommodation for successful applicants who are married and have children.

Details of the Conditions and Duties may be obtained from the City Surveyor, City Hall, Cardiff.

Applications, endorsed "Quantity Surveying Assistant, Grade 5a," accompanied by the names and addresses of three persons to whom reference can be made, should be delivered to the undersigned not later than Friday, the 14th October, 1949.

S. TAPPER-JONES,

Town Clerk.

City Hall, Cardiff.

22nd September, 1949.

2251

## URBAN DISTRICT COUNCIL OF

## BILLERICAY.

ARCHITECTURAL ASSISTANT.

Qualifications: Intermediate R.I.B.A. or its equivalent.

Salary: A.P.T. Division, Grade II, III or IV (£420×£15 to £465 per annum, £450×£15 to £495 per annum, or £480×£15 to £525 per annum), according to experience.

Applications, on forms to be obtained from the Surveyor, Council Offices, Billericay, should be forwarded to the undersigned not later than Saturday, the 8th October, 1949.

A. HATT,

Clerk of the Council.

Council Offices, Billericay, Essex.

2190



**BOROUGH OF FINCHLEY.  
HOUSING AND TOWN PLANNING  
DEPARTMENT.**

Applications are invited for the appointment of **TEMPORARY JUNIOR ARCHITECTURAL ASSISTANT**, in the above Department, at a salary in accordance with Grade II. A.P. and T. Division (£420-£435 to £465, plus £50 per annum London weighting).

Candidates must be suitably qualified and have had practical experience in housing or general architectural work.

The appointment is subject to the provisions of the National Scheme of Conditions of Service.

Applications, giving full particulars of qualifications and experience, and accompanied by copies of two testimonials (of which one at least should be recent), should be sent to the Borough Housing and Town Planning Officer, The Avenue, Finchley, N.3, by not later than first post on Friday, the 7th October, 1949.

R. M. FRANKLIN,

Town Clerk.

Municipal Offices, Finchley, N.3. 2191

**CITY OF COVENTRY.**

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

(a) **ONE ASSISTANT ARCHITECT.** Salary on Grade A.P.T., VII, commencing at £635 per annum and rising to £710 per annum.

(b) **ONE ASSISTANT ARCHITECT.** Salary on Grade A.P.T., V, commencing at £520 per annum and rising to £570 per annum.

Applicants for (a) and (b) should be Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications.

(c) **ONE ARCHITECTURAL ASSISTANT.** Salary on Grade A.P.T., III, commencing at £450 per annum and rising to £495 per annum.

Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects.

(d) **ONE ARCHITECTURAL ASSISTANT.** Salary on Grade A.P.T., II, commencing at £420 per annum and rising to £465 per annum.

(e) **ONE ASSISTANT QUANTITY SURVEYOR.** Salary on Grade A.P.T., VII, commencing at £635 per annum and rising to £710 per annum.

Applicants should be Members of the Royal Institute of Chartered Surveyors (Quantities Division), and should have a wide experience of all branches of Quantity Surveying appertaining to the work of a Local Authority.

(f) **ONE HEATING AND VENTILATING ENGINEERING ASSISTANT.** Salary on Grade A.P.T., III, commencing at £450 per annum and rising to £495 per annum.

Applicants should preferably be graduate members of the Institute of Heating and Ventilating Engineers.

In certain circumstances, housing accommodation may be made available for the successful applicants in the cases of (a), (b) and (e).

Salary increments are subject to satisfactory service.

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

Applications for all the above appointments must be made on the forms obtainable from the undersigned, and should be returned completed, together with copies of not more than two recent testimonials, or names of two persons to whom reference may be made, not later than ten days after the publication of this advertisement.

Canvassing, directly or indirectly, will be a disqualification.

D. E. E. GIBSON,

City Architect.

1a, Warwick Row, Coventry.  
29th September, 1949.

2231

**CITY OF SALFORD.**

Applications are invited for the appointment of **SENIOR ARCHITECTURAL ASSISTANT**, on the permanent staff (salary A.P.T., Grade VI, £595 to £660), in accordance with the Conditions of the National Joint Council.

Candidates should be Associates of the Royal Institute of British Architects or hold an equivalent qualification, and should possess a sound experience in design and construction and also be experienced in the management of building contracts.

The appointment will be subject to:—

(a) the provisions of the Local Government Superannuation Act, 1937;

(b) the passing of a medical examination;

(c) the Standing Orders of the Council.

Applications, stating age, qualifications and experience, together with particulars of past and present employment—accompanied by copies of two recent testimonials—should be forwarded in envelopes endorsed "Senior Architectural Assistant," addressed to the City Engineer, Town Hall, Salford, 3, Lancs., so as to be received not later than 14th October, 1949.

Applicants must disclose, in writing, whether or not they are related to any member of the Council or an officer of the Authority.

H. H. TOMSON,

Town Clerk.

2173

**LOCAL APPOINTMENTS COMMISSION.  
POSITION VACANT: HOUSING ARCHITECT,  
DUBLIN CORPORATION.**

Application forms and particulars from the Secretary, 45, Upper O'Connell Street, Dublin. Salary: £1,050-£1,400-£1,250.

Essential qualifications include (a) degree in Architecture or M.R.I.A.I. or A.R.I.B.A. or F.R.I.B.A.; (b) considerable practical experience in the layout, design, construction and maintenance of large-scale housing schemes, including multiple flat and cottage dwellings, and (c) a satisfactory knowledge of the design and construction of dwellings by non-traditional methods. Latest time for receiving completed application forms: 5 p.m. on 21st October, 1949.

**CITY OF BIRMINGHAM EDUCATION  
COMMITTEE.**

Applications are invited for permanent appointment to the following vacancies in the Architect's Branch of the Birmingham Education Department (Architect to the Committee: Mr. Alex. Steele, A.R.I.B.A.).

**SENIOR ASSISTANT ARCHITECT.** Salary £635-£725-£710.

Applicants should be Architects, preferably qualified by examination, having good experience in the control of major contracts.

**ARCHITECTURAL ASSISTANTS.** Salary £450-£495.

Applicants should have obtained an equivalent standard to that of the Intermediate Examination of the R.I.B.A., and have had experience in the preparation of details and working drawings.

**TECHNICAL ASSISTANTS.** Salary £135-£385.

Applicants should be good draughtsmen, with some experience in the preparation of drawings in an architect's office.

Application forms, which may be obtained from the undersigned on receipt of a stamped, addressed envelope, must be returned not later than a fortnight after the appearance of this advertisement.

E. L. RUSSELL,

Chief Education Officer.

Education Office, Margaret Street,

Birmingham, 3. 2248

**CITY OF WESTMINSTER.  
HOUSING DEPARTMENT.**

**FIRST ARCHITECTURAL ASSISTANT** (Permanent Appointment). A.P.T., Grade VI, of the National Scales. Salary £595-£720-£660 per annum, plus London "weighting" of £30 per annum.

Applicants to be Registered Architects (or otherwise entitled to describe themselves as Architects), not over 50 years, with good architectural experience, including housing, and to have wide general experience in administration.

The appointment is subject to a satisfactory medical report, and to the provisions of the Council's Standing Orders, General Regulations and Superannuation Scheme, and to the Scheme of Conditions of Service. Canvassing will disqualify.

Applications, marked "Housing Department—First Architectural Assistant," stating full name address, age, war service, examination qualifications, present and past appointments, experience, whether related to any member or chief officer of the Council, with copies of three recent testimonials, must be received by 9 a.m. on Monday, 17th October, 1949.

PARKER MORRIS,

Town Clerk.

Westminster City Hall,  
Charing Cross Road, London, W.C.2.  
September, 1949. 2246

**COUNTY BOROUGH OF GREAT YARMOUTH.  
BOROUGH ENGINEER'S DEPARTMENT.**

**APPOINTMENT OF ASSISTANT ARCHITECTS.** Applications are invited for the following appointments:—

(a) **TWO SENIOR ASSISTANT ARCHITECTS** for:—

(1) Housing and General Work.

(2) Schools.

The salaries will be in accordance with A.P.T., Grade VI (£595-£660), of the National Conditions of Service.

(b) **GENERAL ASSISTANT ARCHITECT.** Salary A.P.T., Grade IV (£480-£525).

Applicants should be Associates of the Royal Institute of British Architects for appointments (a), and in the case of the Assistant Architect (Schools), applicants should have had previous experience in Modern School Design.

For appointment (b) applicants should have passed the Intermediate Examination of the R.I.B.A.

Previous Local Government experience is not essential. The appointments will be terminable by one month's notice on either side, and will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination.

Applications, stating age, qualifications, experience, together with the names of three persons to whom reference can be made, should be enclosed in an envelope endorsed with the title of the appropriate appointment, and must reach me not later than Monday, 17th October, 1949.

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

FARRA CONWAY,

Town Clerk.

Town Hall, Great Yarmouth.  
24th September, 1949. 2239

**CITY OF MANCHESTER.**

**CITY ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments on the permanent staff:—

(a) **SENIOR ASSISTANT ARCHITECT.** A.P.T., Grade VII. Salary £635 to £710 per annum.

Candidates must have high ability in design, wide experience of school buildings, and be capable of taking charge of large contracts and controlling a group of Assistant Architects.

(b) **ASSISTANT ARCHITECT.** A.P.T., Grade V. Salary £520 to £570 per annum.

Preference will be given for appointments (a) and (b) to candidates who hold a Degree or Diploma in Architecture and/or are Associates R.I.B.A.

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

Preference will be given to candidates who are Associates R.I.C.S. (Quantities Division).

(d) **SENIOR HEATING, VENTILATING AND MECHANICAL ENGINEER.** A.P.T., Grade VI. Salary £595 to £660 per annum.

Candidates should be Members or Associate Members of the Institution of Heating and Ventilating Engineers or of the Institution of Mechanical Engineers, be capable draughtsmen, fully experienced in the design and supervision of modern heating, hot water and ventilation systems of all types for local authority buildings of every description. Candidates should also possess a sound knowledge of all mechanical equipment connected therewith, and be capable of controlling a group of assistant engineers.

(e) **ASSISTANT HEATING, VENTILATING AND MECHANICAL ENGINEER.** A.P.T., Grade IV. Salary £480 to £525 per annum.

Candidates must be experienced in the design and detailing of all types of heating and hot water installations.

(f) **STRUCTURAL ENGINEERING ASSISTANT.** A.P.T., Grade III. Salary £450 to £495 per annum.

Candidates must possess the Higher National Certificate or equivalent qualification, and be experienced in the design of structural steel-work and reinforced concrete.

The successful candidates 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, by Saturday, 29th October, 1949, 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.  
September, 1949. 2245

**COUNTY BOROUGH OF BURNLEY.**

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

Applications are invited for the appointment of **CHIEF PLANNING ASSISTANT**, at a salary in accordance with Grade VII of the National Scales (£635, rising to £710 per annum).

Candidates must have had considerable experience in all aspects of Statutory Planning, Interim Development Control, and Planning procedure in general. Candidates should be Associate Members of the Town Planning Institute, and in addition be qualified Civil Engineers or Architects. Administrative experience will be an advantage.

Conditions of service are those formulated by the National Joint Council, and the appointment is on the established staff and subject to the provisions of the Local Government Superannuation Act, 1937, the successful applicant being required to pass a medical examination. The appointment is terminable by one month's notice on either side.

Canvassing, either directly or indirectly, will disqualify the candidate, and any relationship to a member or senior officer of the Council, must be clearly stated in the application.

Forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall, Burnley, to whom applications should be returned in the envelope provided, not later than 9 a.m. on Saturday, the 15th October, 1949.

C. V. THORNLEY,

Town Clerk.

Town Hall, Burnley.  
September, 1949. 2242

**COUNTY BOROUGH OF WEST HARTLEPOOL.**

**APPOINTMENT OF QUANTITY SURVEYOR.**

**GRADE A.P.T., VI, and ASSISTANT ARCHITECT, GRADE A.P.T., IV.** Applications are invited for the following appointments in the Borough Architectural Department:—

(1) Quantity Surveyor, Grade A.P.T., VI (£595-£660).

(2) Assistant Architect, Grade A.P.T., IV (£480-£525).

The appointments are subject to the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services

(with the exception of paragraph 39), and the provisions of the Local Government Superannuation Act, 1937. The successful applicants will be required to pass a medical examination. Applications, stating age, qualifications, previous and present appointments, details of experience, together with copies of recent testimonials, are to be sent to S. M. Richmond, F.R.I.B.A., A.M.T.P.I., Borough Architect, Municipal Buildings, West Hartlepool, not later than Wednesday, 12th October, 1949. The Council are prepared to consider the allocation of housing accommodation to the successful applicants if required.

ERIC J. WAGGOTT,  
Town Clerk.  
Municipal Buildings, West Hartlepool.  
September, 1949. 2241

#### CITY OF SHEFFIELD. APPOINTMENT OF TEMPORARY CLERK OF WORKS.

Applications are invited by the 17th October, 1949, for the above appointment in Grade III (£450-£495), at a commencing salary according to experience, to supervise the erection of an Omnibus Garage. Duration of the contract approximately two years.

Candidates must have knowledge of all branches of the Building Trade, and it is essential that applicants have experience in the supervision of Reinforced Concrete Construction. Applications, stating age, qualifications, and experience, together with copies of two recent testimonials, must be sent to the City Architect, Town Hall, Sheffield, 1.

W. G. DAVIES, F.R.I.B.A.,  
City Architect.  
City Architect's Dept.,  
Town Hall, Sheffield, 1.  
24th September, 1949. 2250

#### Financial

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

A GROUP OF ARCHITECTS, just forming, consisting of University trained men, having considerable experience behind them, are anxious to open an office in a locality where there is scope for initiative and development and would be glad to hear of any Architects' practices for sale. Replies in confidence to Box 2233.

#### Tenders for Contracts

##### DURHAM COUNTY COUNCIL. EDUCATION COMMITTEE.

The Education Committee are prepared to receive sole tenders from Contractors and Builders for the following works:

East Hetton Proposed New County Primary School—Erection.  
Applications for the Forms of Tender and Bills of Quantities are to be sent to the County Architect's Office, Court Lane, Durham, by not later than the 10th October, 1949.

No pledge is given to accept the lowest or any tender.

G. R. CLAYTON, F.R.I.B.A.,  
County Architect.  
Court Lane, Durham.  
21st September, 1949. 2224

#### Competitions

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

##### YORK FESTIVAL, 1951.

ARCHITECTURAL COMPETITION.  
The York Festival Society, Limited, invites Architects residing in Great Britain and Eire to submit designs in competition for a block of flats in Paragon Street, York, to be built by the Corporation of the City of York as part of the City's housing programme.

The Competition is organized in connection with the York Festival of 1951 (June 2nd-16th), and the building is to be completed by then and open for public inspection during the period of the Festival.

1st Premium, £250.  
2nd Premium, £150.  
3rd Premium, £75.

The Assessor is Mr. W. A. Eden, M.A., F.S.A., A.R.I.B.A., of Leeds.  
Conditions may be obtained, on the payment of a deposit of two guineas, from  
KEITH THOMSON, ESQ.,  
Artistic Director,  
York Festival, 1951,  
1, Museum Street, York.

Cheques should be made payable to York Festival Society, Limited.  
Designs to be received by 18th January, 1950.  
Last day for questions: 12th November, 1949. 2205

#### Architectural Appointments Vacant

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

ARCHITECTURAL ASSISTANTS required immediately for interesting and varied work on Schools, Hospitals, University Buildings, Housing, etc.; salary dependent on experience and qualifications. Apply personally by telephone or in writing: Pile Son & Fairweather, Chartered Architects, 6, Queen Anne's Gate, Westminster, S.W.1. Whitehall 8576. 1862

ARCHITECTURAL ASSISTANT, with some office experience, Intermediate or equivalent. Full particulars to Tayler & Green, 10, North Parade, Lowestoft. 2133

SENIOR ASSISTANT ARCHITECT, A.R.I.B.A. standard, required in busy London office; able to take complete charge of jobs from first stage; also Junior Assistant up to intermediate standard. Write, with particulars of experience, age, qualifications and salary required, to B. Bates and Wm. G. Sinning, 89, Chancery Lane, W.C.2. 2009

ARCHITECTURAL ASSISTANT wanted for Midlands office; accurate draughtsman, with experience in industrial buildings; good prospects. Reply with full particulars, salary required, etc., to Box 2085.

ARCHITECT requires JUNIOR ASSISTANT for general practice; salary in accordance with experience. Write in first instance, giving details, J. Roland Sidwell, A.R.I.B.A., 27, Union Street, Coventry. 2095

ASSISTANT required, with industrial and domestic experience. Reply, stating particulars and salary required, to E. William Palmer & Partners, 8, The Town, Enfield, Middx. 2102

ASSISTANT required by West End Architect specialising in property maintenance, alterations, Council housing, etc.; salary £500 p.a.; this is a post with considerable interest and some responsibility. Please reply with particulars of experience, age, etc., to Box 2110.

SENIOR AND INTERMEDIATE ARCHITECTURAL ASSISTANTS required; knowledge of general practice, industrial work, war damage, etc.; salary according to capabilities. Applications to Mackintosh, Beecroft & Partners, 11, Orchard Street, Bristol, 1. 2111

ARCHITECTURAL ASSISTANT required in the Office of National Brewers; maintenance and improvement of licensed properties; superannuation scheme; commencing salary about £500 p.a. Write in first instance to Whitbread & Co., Ltd., 27, Britannia Street, London, W.C.1. 2134

TWO QUALIFIED ARCHITECTURAL ASSISTANTS, with experience of design and working drawings, required in private practitioner's office, Glasgow; salary £500 to £700, according to qualifications. Box 2136.

INTERMEDIATE ASSISTANT wanted in commercial Architect's office in Guildford, for preparing working and detail drawings; good draughtsmanship and knowledge of construction essential; interesting and varied work in many parts of the country; salary £450-£500, according to experience and ability. Box 2137.

COMPETENT ASSISTANT required by Architect to Multiple Company in the Midlands. Box 2160.

ARCHITECTURAL ASSISTANTS required in busy office, with wide variety of work; salary according to qualifications and experience. Apply Carpenter & Beresford Smith, 27, Queen Square, Bath. 2162

SENIOR AND JUNIOR ARCHITECTURAL ASSISTANTS required in office of Architect having extensive work in connection with Passenger Transport undertakings.

Juniors up to Intermediate standard. Salary £250 to £400.

Seniors over Intermediate standard. Salary £400 to £700, according to qualifications and experience. Apply Alan A. Briggs, F.R.I.B.A., 15, Curzon Street, London, W.1. 2146

SENIOR ARCHITECTURAL ASSISTANT required by large Building and Civil Engineering Contractors in West London; experience in general design work, including housing, essential; salary from £500 to £600 per annum, according to experience and qualification. Write fully to Box No. 710, Dorland Advertising, 18/20, Regent Street, S.W.1. 2172

AN opening exists for a QUALIFIED ASSISTANT in a Provincial Architect's office in Essex; experienced in Hospital, School and domestic work, with a possibility of Partnership after probation. Apply Box 2232, stating experience and salary suggested.

SENIOR ARCHITECTURAL ASSISTANT required for a progressive appointment in Company Architect's office in London, with good salary to a really capable man; also JUNIOR DRAUGHTSMAN required, of Intermediate standard. Applicants should state age, experience and qualifications to Box 2226.

IMPERIAL CHEMICAL INDUSTRIES, LTD., Alkali Division, have vacancies on their Engineering Staff at Northwich, Cheshire, for ARCHITECTURAL ASSISTANTS, who are fully qualified and experienced; conditions of service, salary, etc., will be discussed at interview. Applications, stating age, details of experience, qualifications and salary expected, should be forwarded to Staff Manager, Imperial Chemical Industries, Ltd., Alkali Division, Winnington, Northwich, Cheshire. 2225

COMPETENT ASSISTANT, experienced in licensed premises, required for country office; flat can be provided at end of year. Reply, with full details of experience and salary required, to Box 2223.

ASSISTANT, with previous experience, required immediately; emphasis on technical ability; scope for a man with initiative; A.R.I.B.A. or near standard; salary £400-£500 p.a. David Jenkin, 49, Welbeck Street, W.1. 2212

SENIOR ARCHITECTURAL ASSISTANT, with good experience, preferable in industrial or commercial work, required in City office; salary up to £750, according to experience and age. ASSISTANT also required, at salary up to £600. Apply with full details to Box 2213.

SENIOR ARCHITECTURAL ASSISTANT for busy West of England practice urgently required; fully qualified, accustomed to good class work, capable and efficient draughtsman, etc., or would consider position leading to partnership. Reply Box 2211.

ARCHITECTURAL ASSISTANT (SENIOR) required for permanent and progressive appointment with firm in private practice; fully qualified or Finals standard; good salary to suitable applicant. Full particulars to W. S. Hattrell & Partners, 1, Queen's Road, Coventry.

ARCHITECTURAL ASSISTANT (R.I.B.A. Final standard) required by firm having wide and varied practice; permanent position, with excellent prospects. Apply, giving particulars of experience, age, qualifications, and salary required, to Box 2220.

JUNIOR ASSISTANT required by F.R.I.B.A., F.R.I.C.S., in South-West London, for medium size practice; 40-hr., 5-day week; permanent situation; salary according to age and qualifications. Box 2219.

ARCHITECTURAL ASSISTANT required in busy Architect's practice in Streatham; maximum salary £450; experience in architect's offices essential; must be able to prepare working drawings; very good prospects. Write Messrs. Douglas White & Furniss, Bank Chambers, 211, High Road, Streatham, S.W.16. 2188

THE SOUTHWELL DIOCESAN DILAPIDATIONS BOARD. Applications are invited from Architects and Surveyors for the post of DIOCESAN SURVEYOR, with an office in either Nottingham, Mansfield, Newark, Retford or Worksop. For particulars apply Secretary, Church House, Park Row, Nottingham. 2193

ARCHITECTURAL ASSISTANT and also ARCHITECTURAL DRAUGHTSMAN required in established practice, mainly business premises over whole country; pleasant conditions; permanent and good prospects. Apply with all particulars to North & Partners, Queen Street Chambers, Maidenhead. 2192

ARCHITECTURAL ASSISTANT required by very large Textile Company in Manchester; applicants must have a sound knowledge of construction, building surveys and layouts for machinery. Particulars of experience and salary required, etc., to Box 2240.

ESTIMATOR required for taking off and tendering for Fibrous and Solid Plastering and Decorative Painting. Full details of previous experience and salary required to Dejonghs, 84, Albert Street, London, N.W.1. 2237

#### ARCHITECTURAL ASSISTANTS.

WEST OF ENGLAND Architect requires for General Practice:

- (1) SUPERVISOR for work in progress, preferably young Quantity Surveyor, able to measure and check work and Contractors' accounts; car owner preferred, but must be able to drive car.
- (2) ARCHITECTURAL ASSISTANT, in Grade £350-£450; good Draughtsman, with experience. Five-day week; country town.

Full particulars of age, training, experience, and salary required, to Box 2243.

CITY Architects require capable JUNIOR ASSISTANT; passed R.I.B.A. Intermediate Examination; some previous experience in housing or licensed premises desirable, but not essential; 5-day week; profit sharing bonus scheme; salary £350-£400, according to experience and qualifications; good prospects. Apply by letter, Stewart & Hendry, F/A/F.R.I.B.A., A.M.T.P.I., 90, Fenchurch Street, E.C.3. 2244

SCOTTISH SPECIAL HOUSING ASSOCIATION LIMITED invite applications for the appointment of Architect, Grade I, £700 x £25-£900. The post is superannuable. No bonus is payable in addition to the salary stated. Housing accommodation may be available if necessary. Forms of application with full particulars can be obtained from the Secretary, 15/21, Palmerston Place, Edinburgh, 12. Canvassing will be a disqualification. 2235

ARCHITECTURAL ASSISTANT required by large Transport Company. Progressive post with varied experience. Superannuation Scheme. Send details of education and work history with salary required to Box 2254.

ASSISTANT BUILDING SURVEYOR required by large Transport Company. Progressive post with varied experience. Superannuation Scheme. Send details of education and work history with salary required to Box 2255.

SENIOR ASSISTANT (age 30-40) required by F.R.I.B.A., F.R.I.C.S., in South-West London, for medium size practice; 40-hr., 5-day week; permanent situation; salary according to qualifications. Box 2200.



**CROWN AGENTS FOR THE COLONIES.**  
**B**UILDING SURVEYOR required by the Hong Kong Government Public Works Department for three years, with prospect of permanency. Commencing salary, including expatriation pay, according to qualifications and experience in the scale \$1,048 a month, rising to \$1,820 a month, plus cost-of-living allowance of up to \$775 a month. (The Government rate of exchange is at present 16 dollars to the £, but is liable to alteration.) Free passages. Candidates not over 45 years of age, must be Chartered Surveyors, and have had at least five years' experience in a City Engineer's or similar office dealing with the approval of plans for the construction of building, including reinforced concrete framed structures. 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 23704/3D, on both letter and envelope. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration. 2136

**CORNWALL.—SENIOR ASSISTANT ARCHITECT** required for busy general practice; should be capable taking charge of office, and preferably have experience in school work; opportunity for man with modern outlook, personality and initiative; salary by arrangement. Apply, stating age, experience, and salary required, to Geoffrey Bazeley & Barbary, 15/16, Alverton, Penzance. 2186

**JUNIOR ARCHITECTURAL ASSISTANT;** must be keen, have passed School Cert. or equivalent, and be prepared to attend evening school; some experience an advantage; salary A.P.T. scale. Write, giving age and all details, Oliver E. Steer, A.R.I.B.A., A.M.T.P.I., 16, Clarence Road, Sidcup, Kent. 2198

**NORTH THAMES GAS BOARD.—ARCHITECTURAL ASSISTANTS** required, preferably experienced in the design, alteration and maintenance of industrial buildings, and capable of preparing surveys, working drawings, details and specifications; starting salary range £480-£560 per annum, according to age and qualifications; the appointment is of a permanent nature, and pension arrangements will be discussed with short list candidates. Applications, stating age and full particulars of training and experience, should be sent to the Staff Controller, North Thames Gas Board, 30, Kensington Church Street, London, W.8. 2197

**THE GRENFELL BAINES GROUP** require ARCHITECTURAL assistance in their Rugby Office; experience in Housing and/or Factory work would be an advantage, but not essential; a flat will be available if required. Applications should be made in writing, stating age, qualifications, and give a statement of previous experience, and address to the Grenfell Baines Group, Architects and Town Planning Consultants, 10, St. Matthew's Street, Rugby. 2189

### Architectural Appointments Wanted

**ASSOCIATE, Dip.Arch.(Cardiff), 28,** surveys, working drawings, desires position, S. Devon, Dorset, under Principal, with contemporary outlook. Box 373.

**ARCHITECTURAL ASSISTANT** seeks post in Architect's office in Sussex; 18 years' experience in all classes of architecture, surveys, specifications and quantities; used to taking charge of office; references available; salary by arrangement. Box 378.

**COUNTRY ARCHITECT** urgently requires Small Room, furnished or unfurnished, with share of telephone and typing service, at £100 per annum; W.I. or S.W.I. Box 2208.

**CHARTERED and qualified ARCHITECT,** at present studying for degree in Town and Country Planning, with 20 years' experience, including industrial, housing, agricultural and hospital work, good knowledge surveying, levelling and quantities, desires position which would lead to Partnership or permanent position; car owner. Box 377.

**ASSISTANT ARCHITECT,** final standard. A seeks responsible and progressive position in private organization with contemporary outlook. Qualifications include full-time school training, first class diplomas in Building Construction, Inter-R.I.B.A. and excellent general experience. Capable of handling work from first stages. Oxford, Kent or Surrey preferred. Box 379.

### Other Appointments Vacant

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

**ARCHITECTURAL** Journal requires EDITORIAL ASSISTANT; knowledge of architecture essential; some journalistic experience and knowledge of magazine production useful. Box 348.

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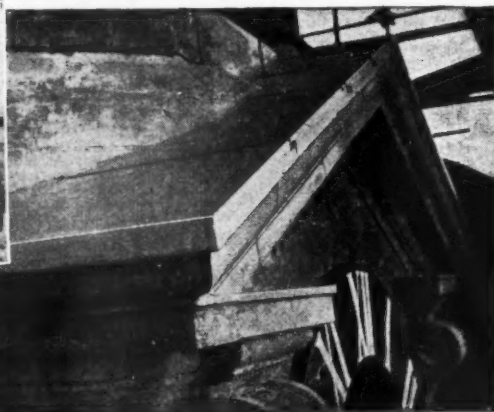
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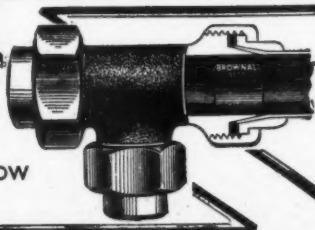
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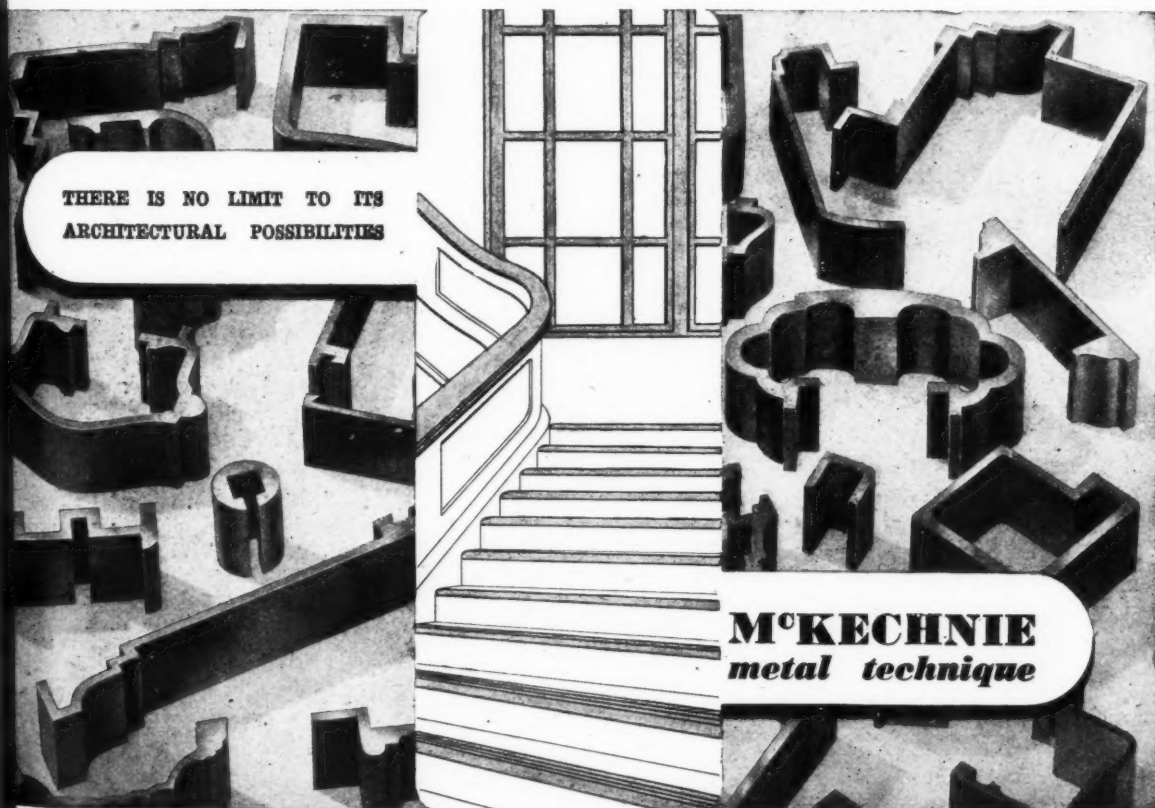
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