

Vol 106. No. 2754. The Architects' Journal for November 20, 1947. Registered as a Newspaper.

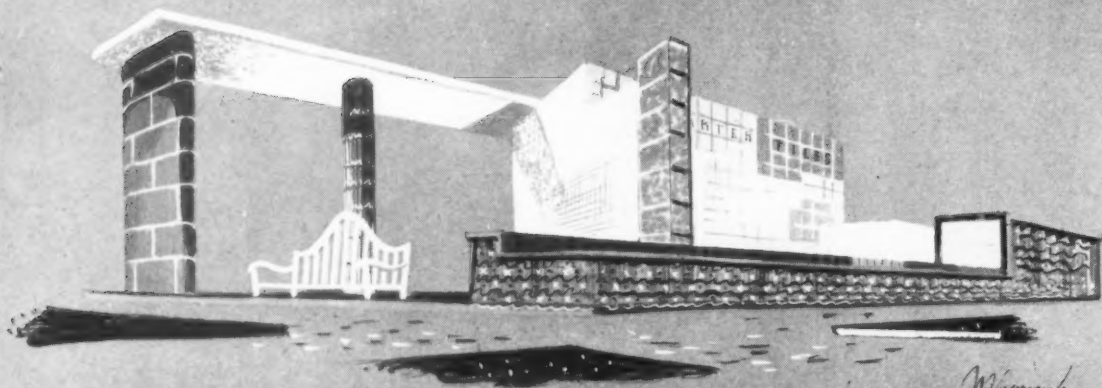
The Architectural Press, 9-13, Queen Anne's Gate, Westminster, SW1. PRICE 9d

# THE ARCHITECTS' JOURNAL

*Building Exhibition Number*

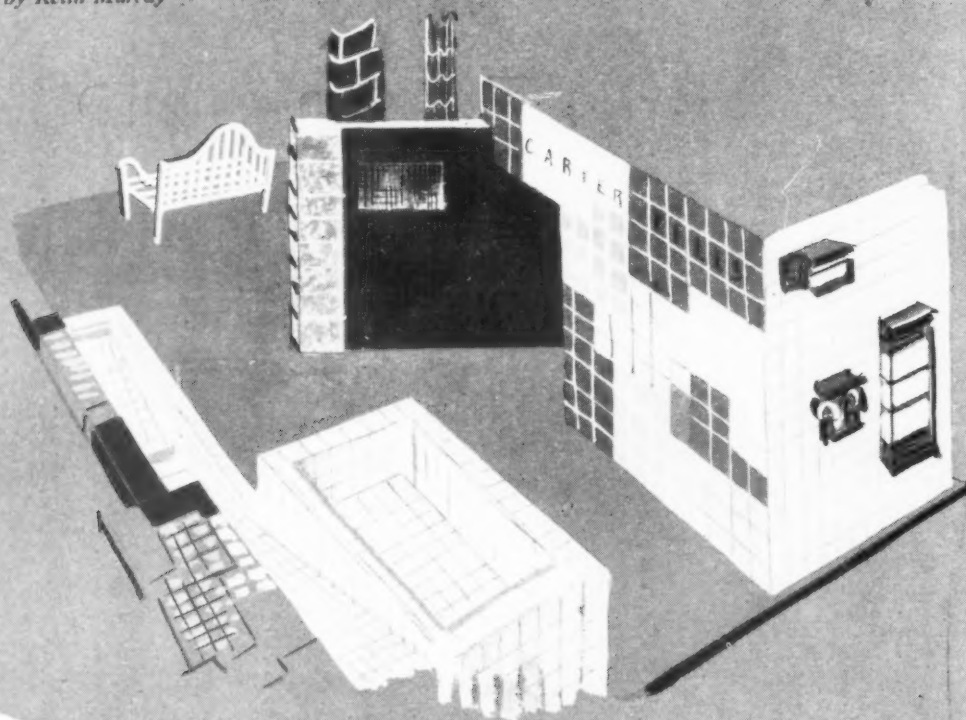


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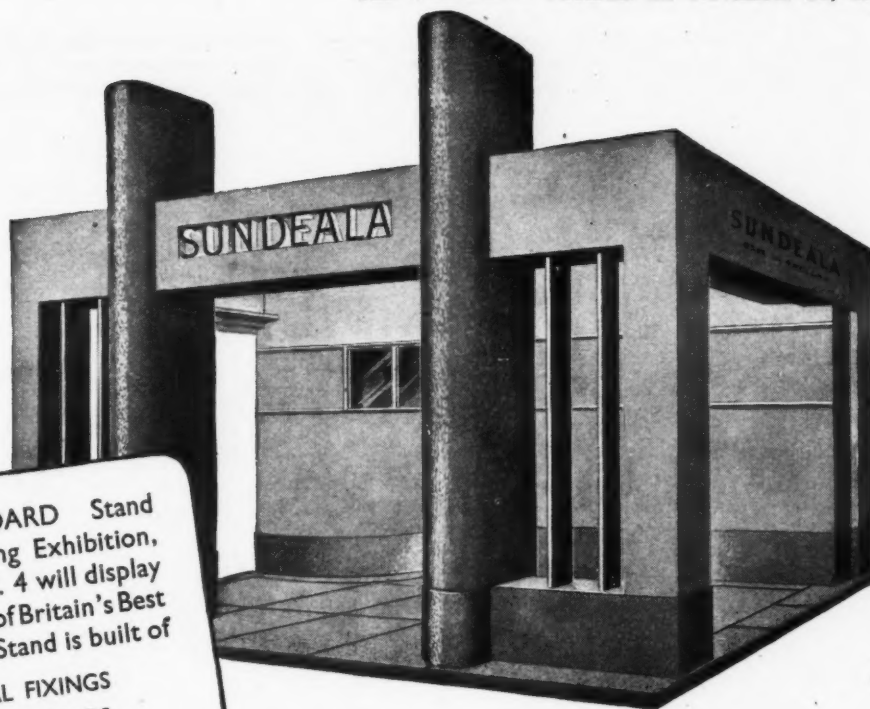
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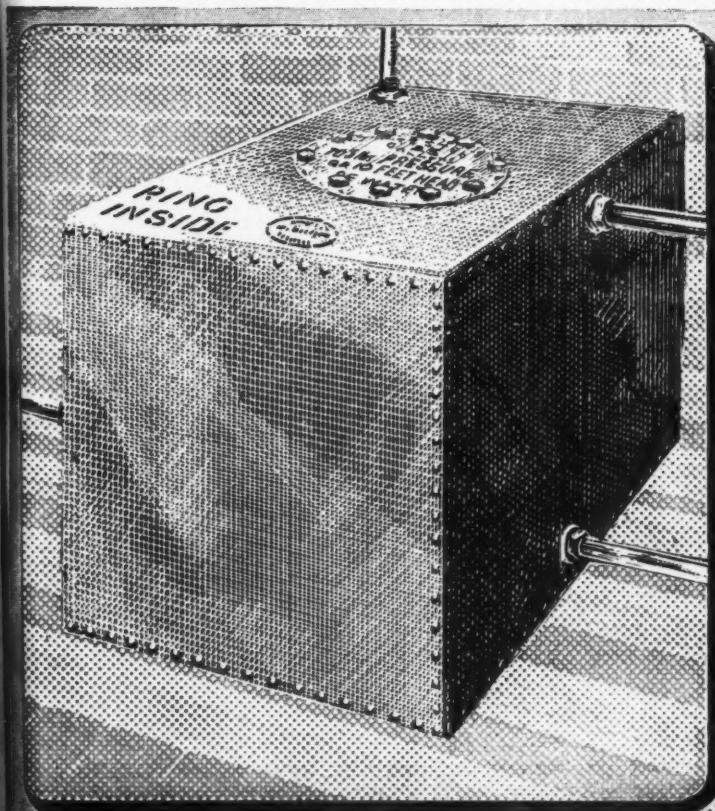




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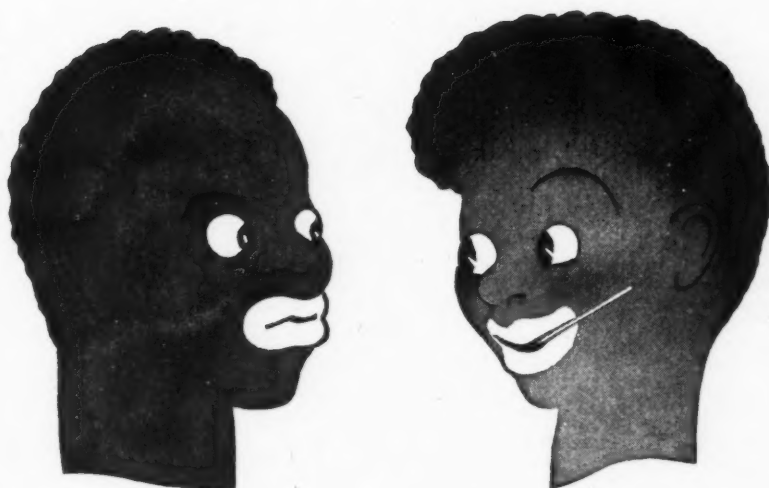
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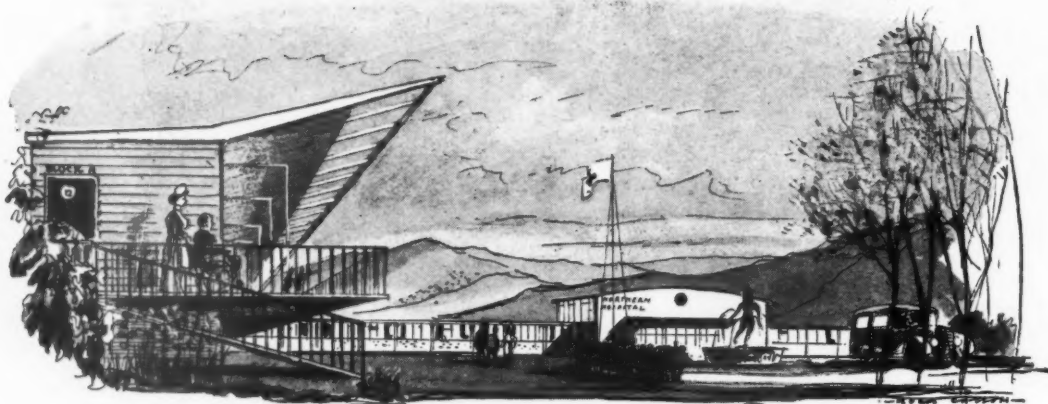
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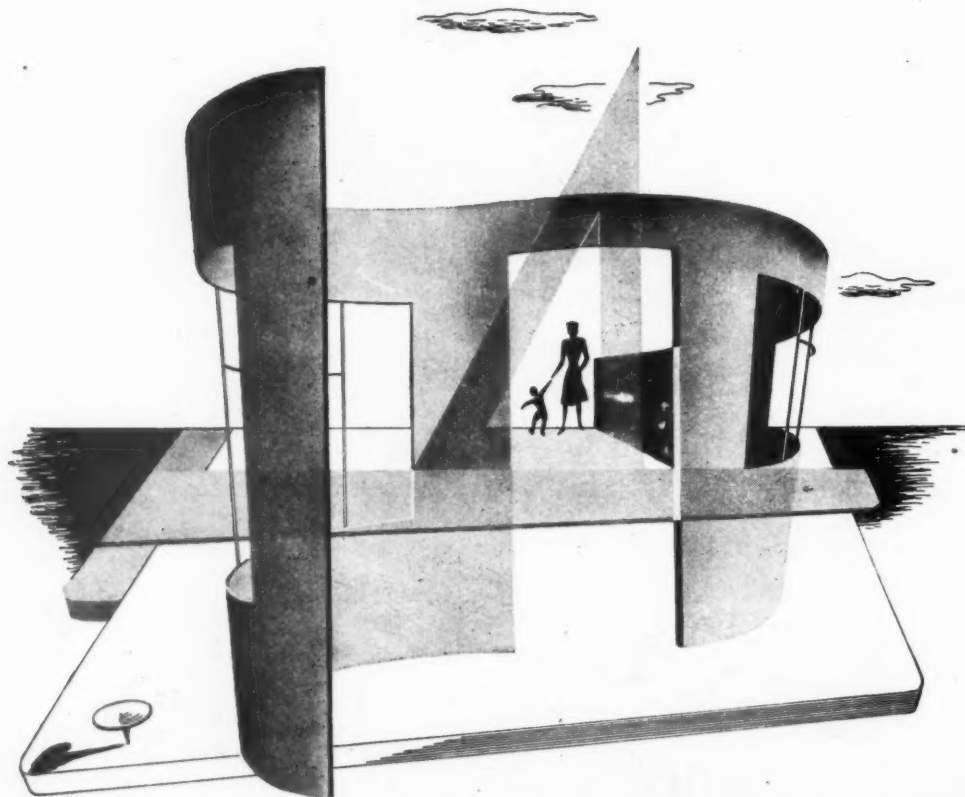
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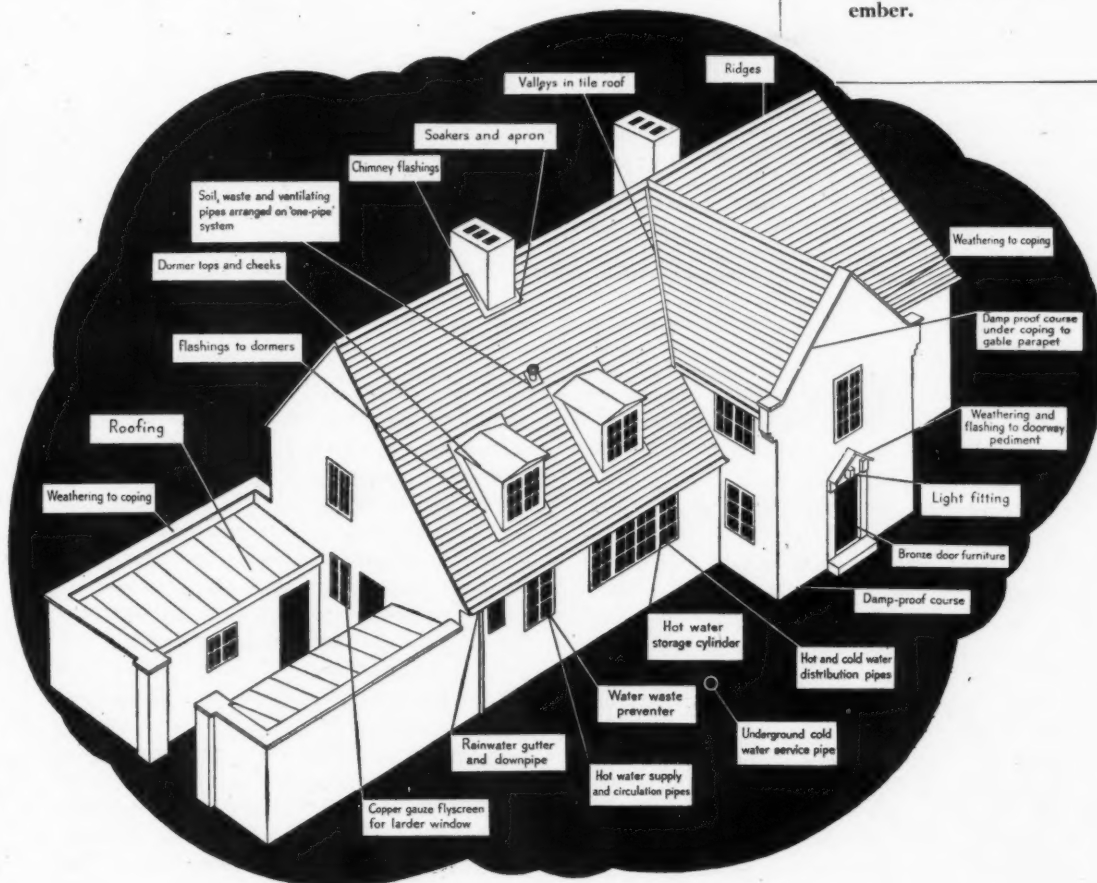
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The Copper Development Association is a non-trading organisation maintained by the British copper industry to supply publications, information and advice, free of charge or other obligation, to all actual or potential users of copper. Enquiries at the Exhibition or to Kendals Hall, Radlett, Herts. (Radlett 5616)

**COPPER DEVELOPMENT ASSOCIATION**





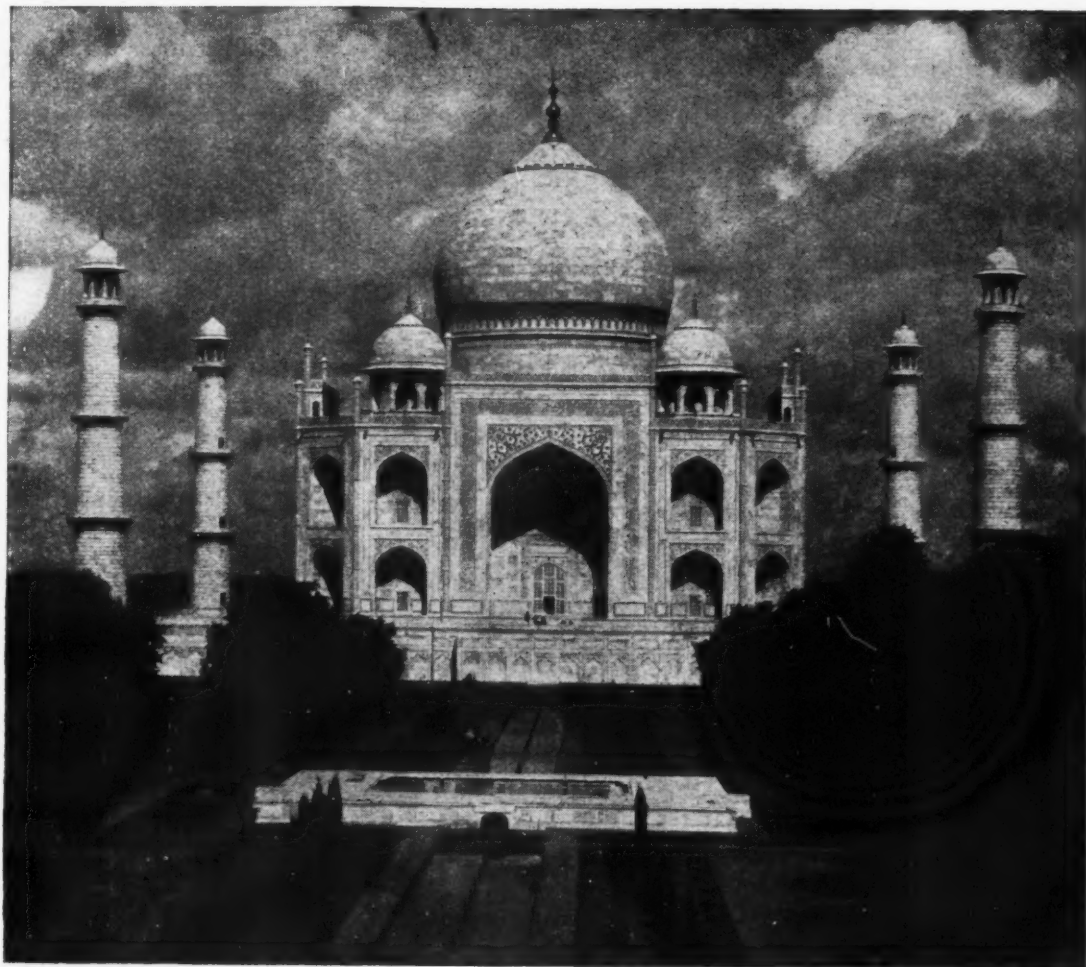
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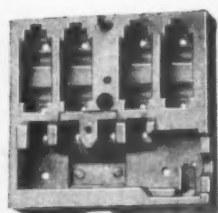
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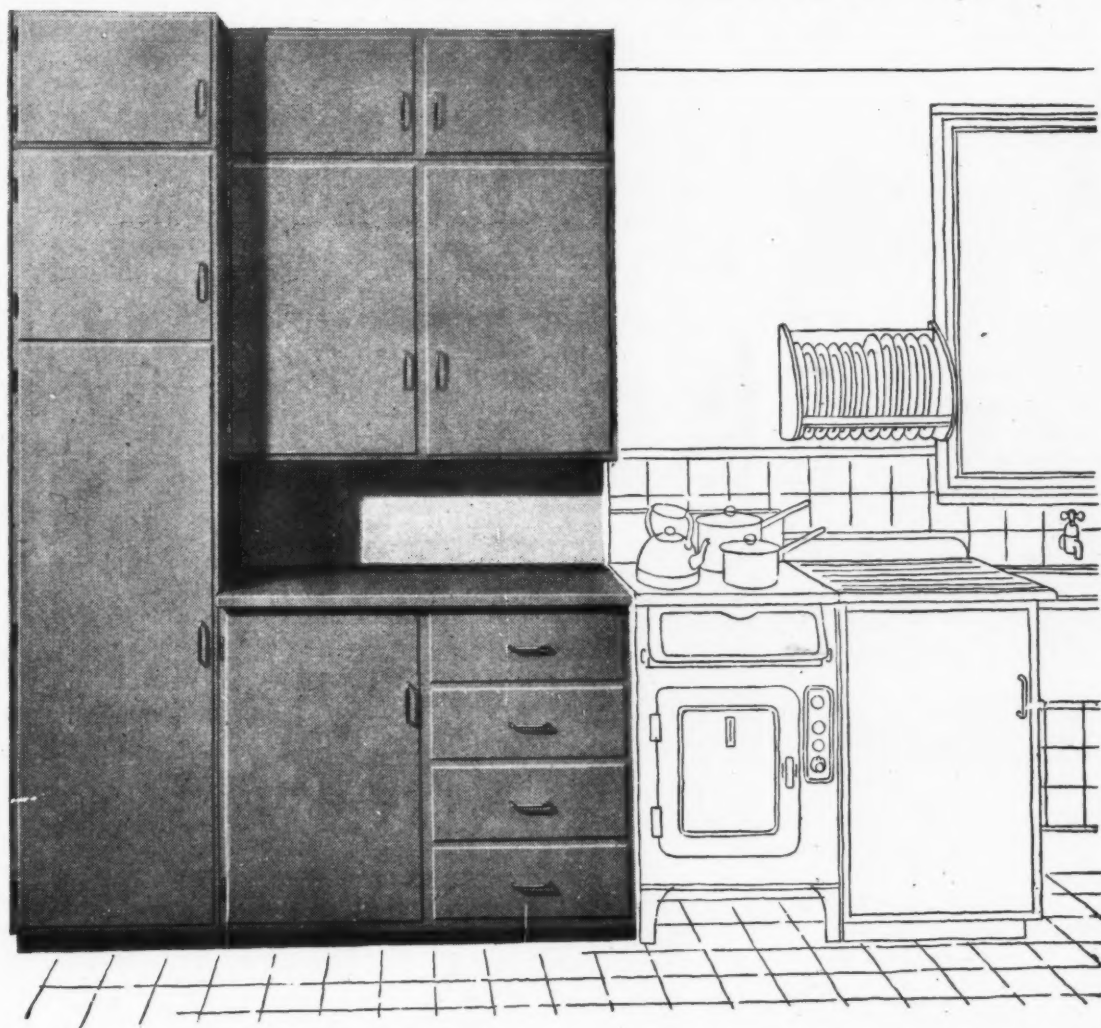
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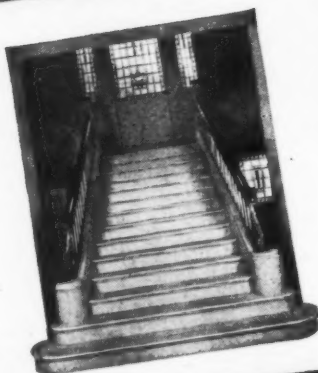
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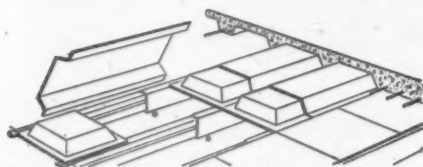
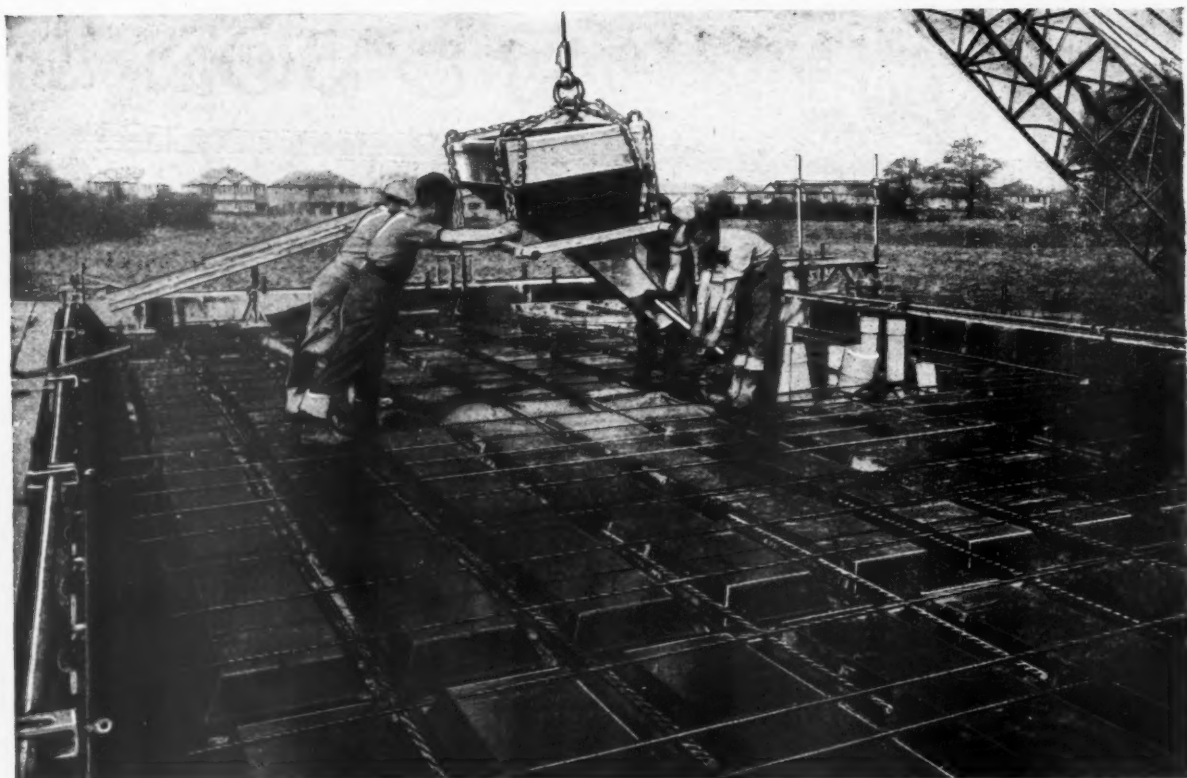
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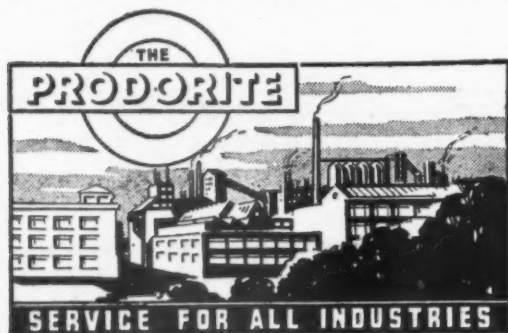
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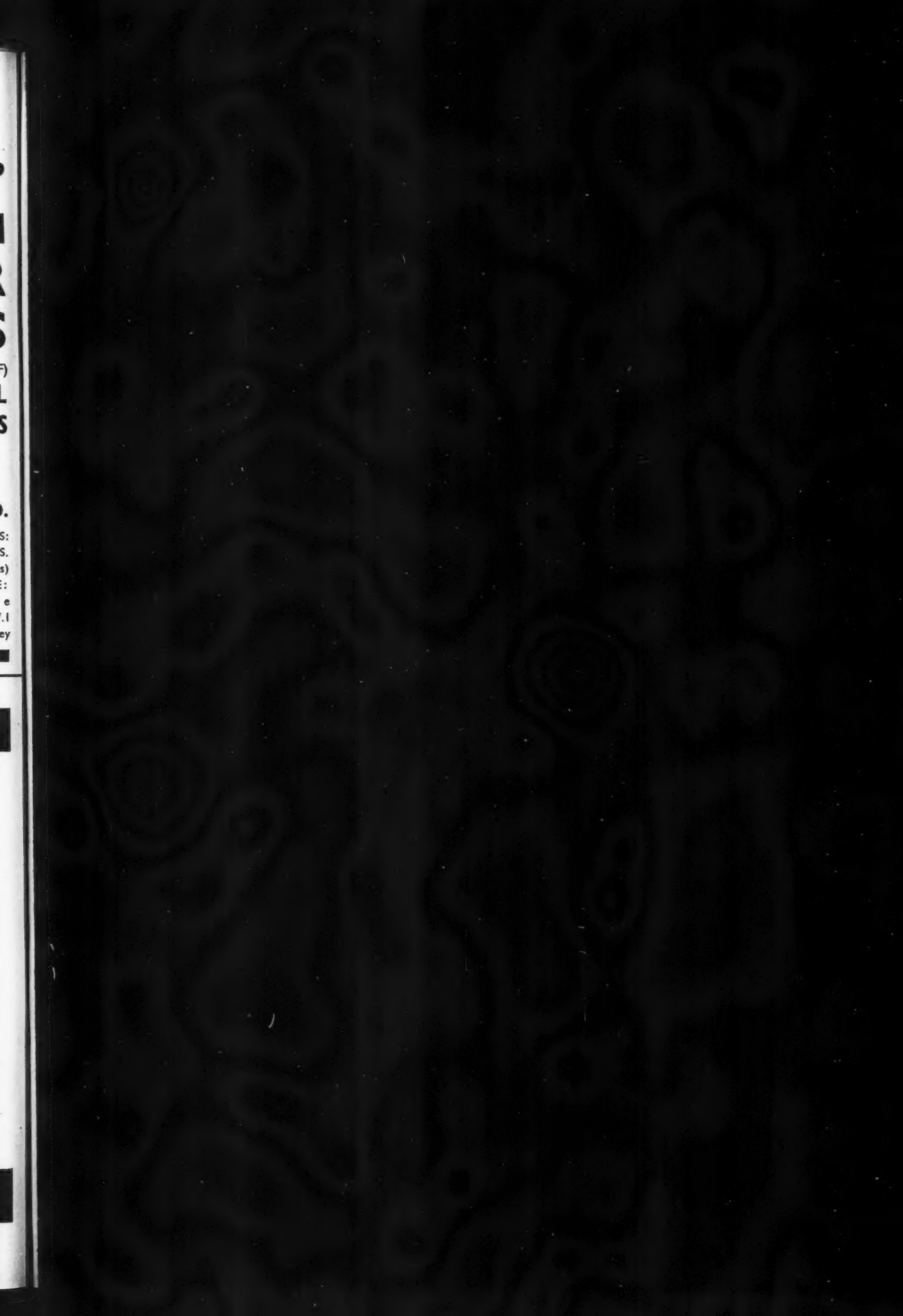
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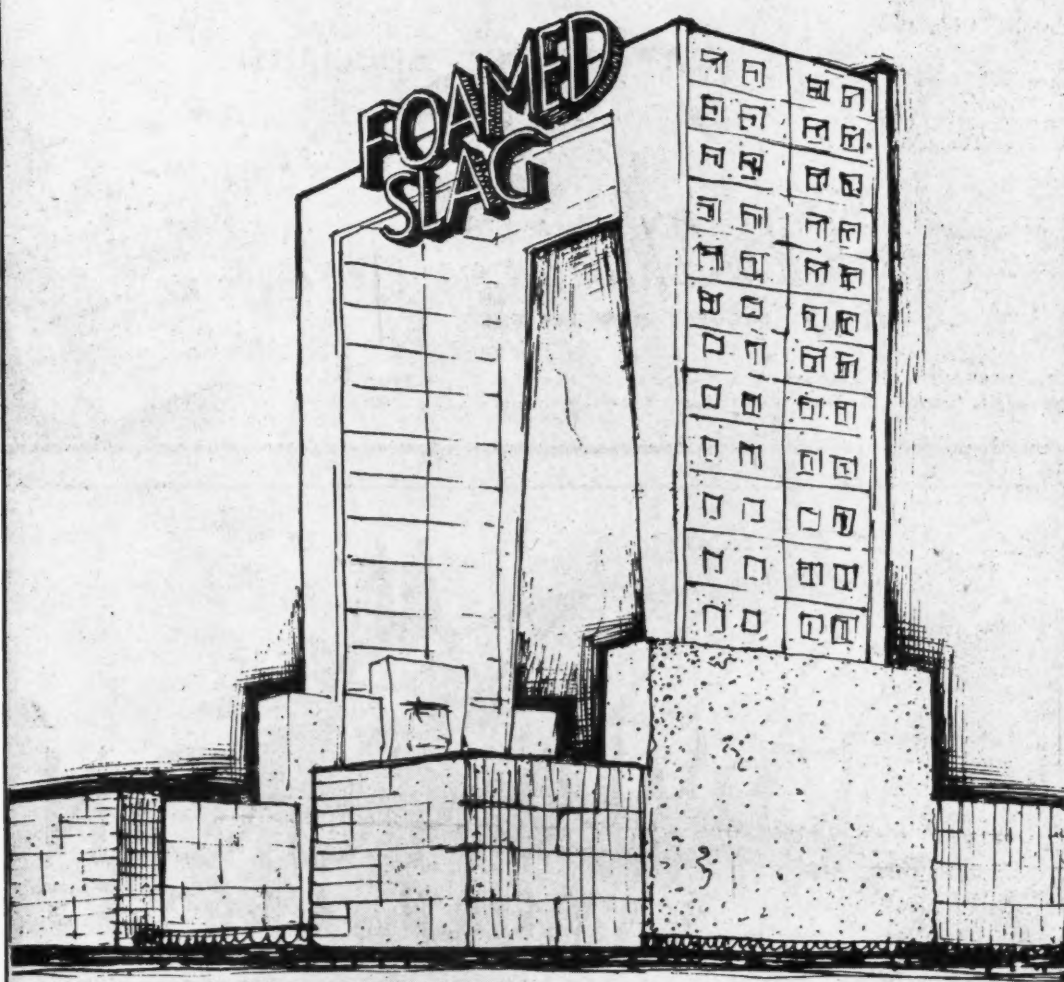


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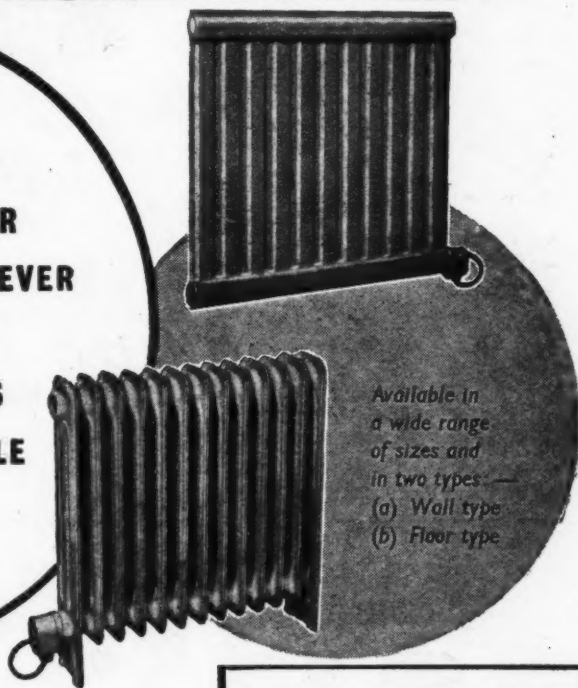
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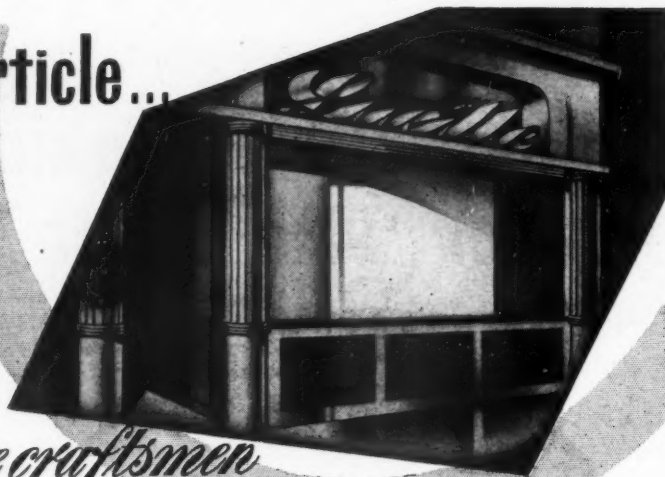
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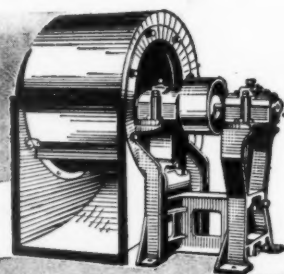
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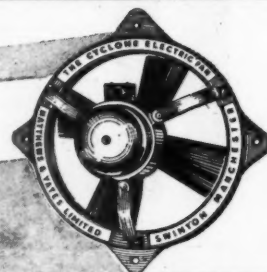
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## SUNG AND MING POTTERS

The Sung Dynasty (960 to 1280 A.D.) has been called "the Golden Age of Chinese Pottery". The high-fired Sung stonewares and porcelains show an unprecedented mastery of materials and rare sensitiveness to formal values. Many pieces appeal to the sense of touch almost as much as to that of sight. Some achieve their satisfying beauty by shape and glaze effects alone without added decoration; in others, expressive brushwork, incised designs, carved relief, moulded relief, or a combination of techniques are used with exquisite harmony and sureness of touch.

The secrets of certain Sung glazes—their colours varying from the tint of hoary lichen on old thorn trees to the rainbow tints of a soap-bubble, glowing with coloured fire—baffled European potters for generations until rediscovered

by the Royal Doulton Potteries. The crackled surface effect of some types of Sung ware was first, no doubt, the accidental result of unequal shrinkage of body and glaze; later it was controlled to produce deliberate patterns.

During the Sung and subsequent Dynasties, pottery was exported to the Near East, Egypt, India, Japan, Korea and Siam, influencing the work of native potters. Persian and Syrian pottery in their turn gave new ideas to Chinese artists and craftsmen.

The Ming Dynasty (1368 to 1644 A.D.) is another famous period of Chinese ceramic history. Before earlier wares became well-known in Western Europe, Ming porcelains were considered the finest expression of the art of the Chinese potter; many collectors, indeed, hold the same opinion today. Painted designs,

sometimes copied from old paintings on silk and paper, are characteristic of many Ming wares. Painting in cobalt—or "Mohammedan blue" as the Chinese called it—was introduced, probably from the Near East, in the 14th century and, although Ming potters used a wide range of glazes and enamels, the "underglaze blue" remained most consistently popular, especially for export. It was widely copied in later times by Delft and other European potters. A fine yellow enamel was introduced about 1500 and the dark tomato and chestnut reds of later Ming wares are very famous.

Unlike the more reposeful and sometimes even austere Sung wares, the Ming were usually more expressive of movement and energy and their emphasis was on painted decoration rather than on shapes, textures and glazes.



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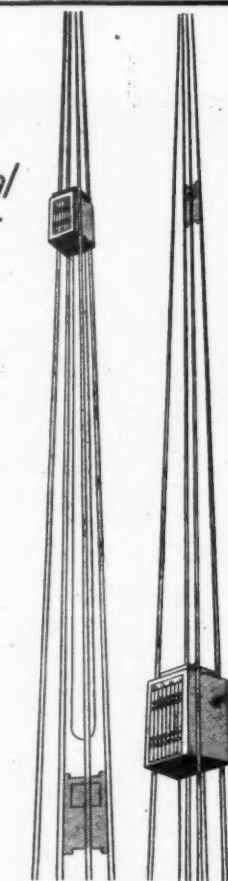
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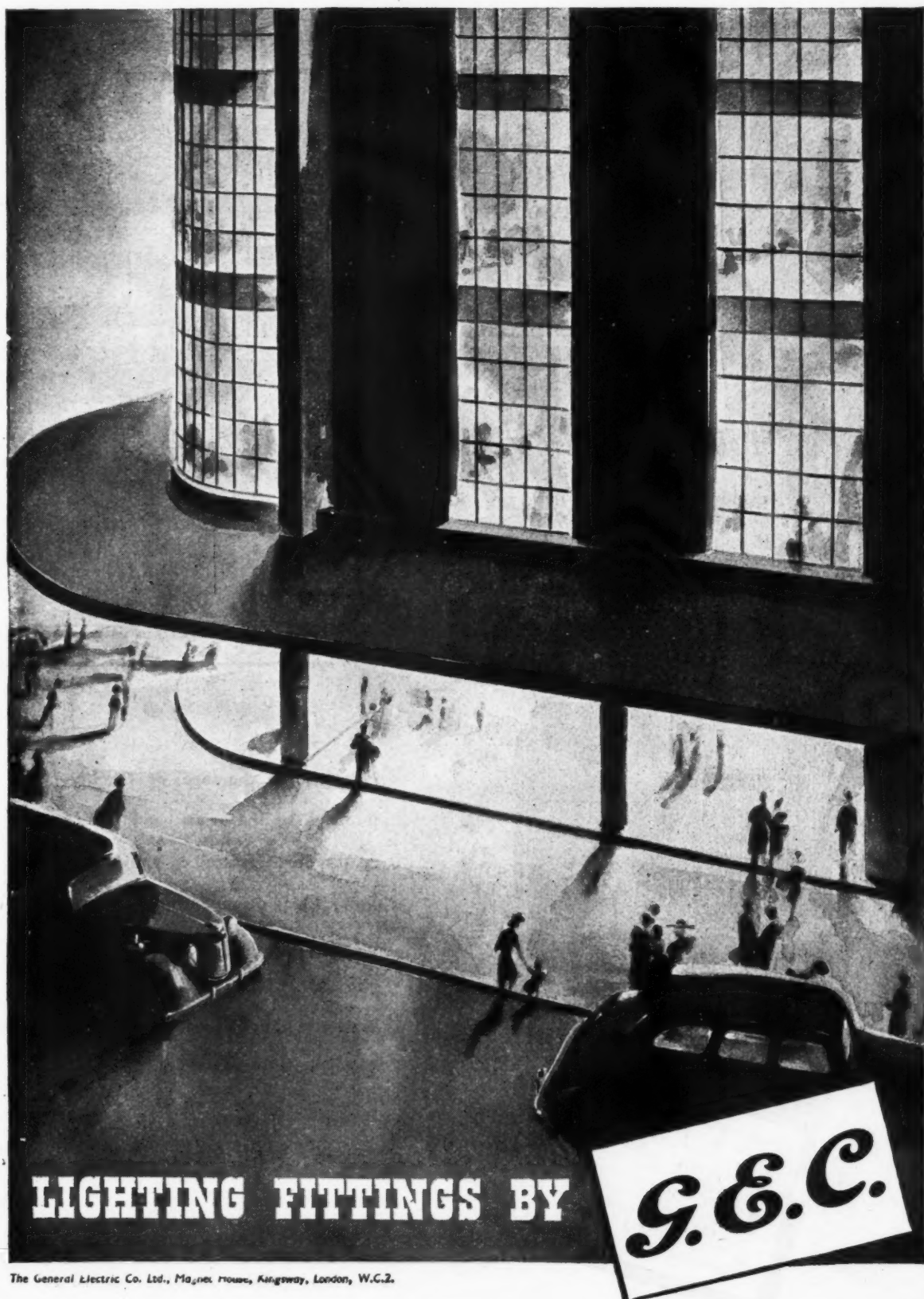
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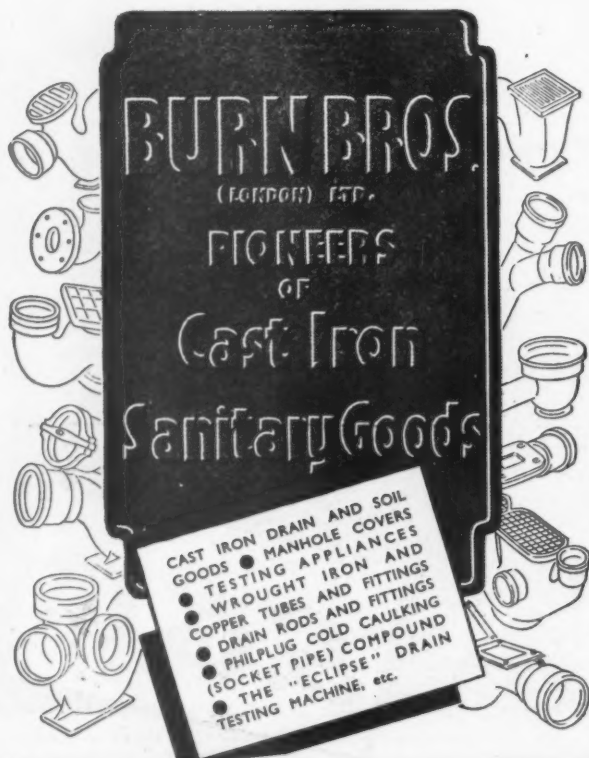
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Photograph, by courtesy of L.M.S. Railway, shows the concourse at Leeds City station.

## AT A RAILWAY STATION

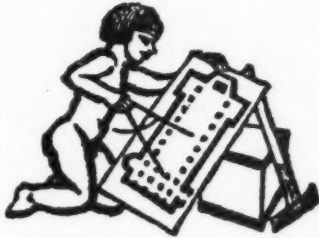
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## DIARY FOR NOVEMBER DECEMBER AND JANUARY

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first.

**HENLEY.** *Ideas on Design in the Home.* At the Wessex Electricity Showrooms. Guide lecturer: Miss Kapp. (Sponsor, ACCB.) UNTIL Nov. 22

**LONDON.** *Woman's Fair Exhibition.* At Dorland Hall, Regent Street, S.W.1. (Sponsor, "Woman.") UNTIL Nov. 22

*Exhibition of Members' Sketches.* At the Architectural Association, 36, Bedford Square, W.C.1. (Sponsor, AA.) UNTIL Nov. 21

*Inland Waterways Exhibition.* At Heal's, 196, Tottenham Court Road, W.1. (Sponsor, Inland Waterways Association.) UNTIL Nov. 22

*Twenty-Second Building Exhibition,* at Olympia. (Sponsors, H. Greville Montgomery, A.R.I.B.A. (HON.) and Hugh R. C. Montgomery, M.C.) UNTIL DEC. 4

H. Edward Newman. *The Internal Planning of the Home.* At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) Buffet lunch, 12.45 p.m. Talk, 1.15 p.m. Nov. 20

James Gardner. *Exhibition Display.* At the Royal Society of Arts, John Adam Street, W.C.2. (Sponsor, RSA.) 4.30 p.m. Nov. 24

Professor W. G. Holford. *Planning and Building in the near future in Britain and the U.S.A.* In the Community Centre Hall, Eltham House, Cornwall Road, S.E.1. (Sponsor, ABT.) 5.30 p.m. Nov. 24

Dr. Nikolaus Pevsner. *The Picturesque in Architecture.* At 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. Nov. 25

**NFBTE Reception and LMBA Dinner.** The President of the National Federation of Building Trades Employers, Mr. E. J. Smith, and Mrs. Smith, are to be at Home to members of the National Federation and their friends in the National Federation-LMBA Club Room at the Building Exhibition on the afternoon of November 25. In the evening the President of the London Master Builders' Association and Mrs. Smallwood are entertaining the President and Officers of the National Federation and the Presidents and Officers of the Regional Federations to dinner in the Dorchester Hotel. Nov. 25

R. A. Cordingley, Professor of Architecture, Manchester University. *Originality in Italian Renaissance Architecture.* At the Royal Society of Arts, John Adam Street, W.C.2. (Sponsor, RSA.) 2.30 p.m. Nov. 26

E. J. Smith, President of the NFBTE, *Present-day Problems of the Builder.* At 12, Great George Street, S.W.1. (Sponsor, RICS.) 5.30 p.m. Nov. 26

*The Countryside Today and Tomorrow.* Joint conference with the CPRE, at the ICE, Great George Street, London, S.W.1. M. V. Osmond, Assistant Secretary, CPRE. *Services—land requirements and the public.* R. L. Reiss, Vice-Chairman, Country Towns Committee, TCPA. *Location of Industry in Rural Areas.* Speakers to be announced for *Planning a Rural Country and National Parks and the Hobhouse Report.* (Sponsors, TCPA and CPRE.) Nov. 26 AND 27

T. F. Thomson. *Planning Developments Abroad—Sweden.* At the Planning Centre, 28, King Street, W.C.2. (Sponsor, TCPA.) 6.15 p.m. Nov. 26

E. Bainbridge Copnall: *Sculpture in Relation to Architecture.* At the AA, 36, Bedford Square, W.C.1, 7.45 p.m. Nov. 26

John Summerson. *Stuart London.* At Highgate Literary and Scientific Institution, South Grove, N.6. (Sponsor, DIA.) 8 p.m. Nov. 27

F. T. Bunclark. *Constructional Features of Meaford Power Station.* At the Institution of Structural Engineers, 11, Upper Belgrave Street, S.W.1. (Sponsor, ISE.) 6 p.m. Nov. 27

**T.U.C. Memorial Building Competition.** Site: Great Russell Street. Assessor: Sir Percy Thomas. Premiums: £2,000, £1,000, £500. Conditions and plan of site from General Secretary, Trades Union Congress, Transport House, Smith Square, S.W.1, on payment of deposit, two guineas, to be refunded on receipt of a design or return of the Conditions within one month after the receipt of Answers to Questions. Last day for Questions, December 1. Last day for receiving designs, May 31, 1948. Dec. 1

W. A. Knutton. *Airey House Production—Facts and Figures.* At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) Buffet lunch, 12.45 p.m., 2s. 6d. Talk, 1.15 p.m., 6d. DEC. 2

**MANCHESTER.** *Exhibition of Designs and Textiles.* By the SIA. At the Colour, Design and Style Centre of the Cotton Board, 19, York Street. Exhibits include printed and woven furnishing fabrics and designs on paper. (Sponsor, Cotton Board.) UNTIL Nov. 29

## N E W S

THURSDAY, November 20, 1947  
No. 2754 Vol. 106

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

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

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

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



An early Georgian mahogany dressing chest with fitted top drawer, column corners and shaped feet, which the Council and Members of the RIBA have sent to H.R.H. Princess Elizabeth as a wedding present.



## HOUSING SCHEMES

Rehousing Scheme (1938),  
Broadwall, Lambeth, for the  
Ecclesiastical Commissioners  
for England.

Architect:  
Edward Armstrong, F.R.I.B.A.

### Other Contracts, past and present, include:

|                  |                           |  |
|------------------|---------------------------|--|
| Bethnal Green    | — artisan dwellings       | — for the London County Council                    |
| Brixton          | — cottages                | — for the Ecclesiastical Commissioners for England |
| Cardington, Beds | — housing scheme          | — for Messrs. Short & Co. Ltd.                     |
| Chelsea          | — rehousing               | — for the Metropolitan Borough of Chelsea          |
| Greenwich        | — cottages                | — for the London County Council                    |
| Harrow           | — houses                  | — for the London County Council                    |
| Hendon           | — cottages                | — for Messrs. Schweppe & Co.                       |
| Lowton St.       | — hostels, etc.           | — for the Ministry of Supply                       |
| Mary's, Lancs    |                           |  |
| Millbank         | — flats                   | — for the London County Council                    |
| Roe Green, Herts | — housing scheme          | — for H.M. Office of Works                         |
| Rosyth           | — housing scheme          | — for the Scottish Housing Co.                     |
| Stafford         | — housing scheme          | — for Messrs. Siemens Bros. & Co. Ltd.             |
| Wandsworth       | — various housing schemes | — for the Wandsworth Borough Council               |
| Westminster      | — housing scheme          | — for the Ecclesiastical Commissioners for England |
| Winchester       | — housing scheme          | — for the Winchester Corporation                   |

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## From AN ARCHITECT'S Commonplace Book

**THE TURNING OF THE TIDE.** [From *The Architecture of H. H. Richardson and His Times*, by Henry-Russell Hitchcock, Junr. (New York: The Museum of Modern Art).] In retrospect, the modern student has great difficulty in distinguishing Richardson's earliest work from the work around it. His work of the 'sixties, like that of most of his compatriots, is full of things which may be described either as original or corrupt in terms of the architecture of the past or of his European contemporaries. What is interesting is to see how the quirks of style in his early buildings, each in itself apparently negligible, led gradually to an originality, positive and not negative, which could never be described as corruption. In other words, he turned the tide of stylistic disintegration, at that time only a little less sweeping than in the 'fifties, and began the process of reclaiming the solid architectural land which had been so largely frittered away by the wavelets of late Romantic exoticism and pure vagary.

### *The Housing Committee of the LCC has proposed the compulsory purchase for housing development of the site of a large GEORGIAN HOUSE IN WANDSWORTH.*

The estate is "Downshire" in Roehampton Lane and totals 29 acres. The house is to be used for Council purposes as yet unspecified. The estimated cost of acquisition, clearance and partial re-development is £50,000.

★★

### *The Association of Building Technicians has issued a STATEMENT CRITICISING THE CUTS in the national building programme.*

The statement says: By the end of 1949 we can expect at the most not more than 754,000 dwellings completed, compared with the 4,000,000 estimated in 1945 as required within 10 years—in other words over 1,000,000 short 4½ years after the end of the war. No work is to be started on the new towns in 1948 except the "provision of basic services." In effect, the whole vast scheme is being shelved. Failing the provision of new premises the new health services will have to be carried on from existing surgeries as an extension of the old panel system. The reduced allocation of steel for large buildings will affect hospital construction, and the slow down of building materials production is bound to retard all hospital and clinic construction severely. The effect of slowing down our inadequate present building operations on industry will be serious. It is likely that operators and technicians will become unemployed, with a drift of labourers away from building. With decreasing construction there is the danger that the labour force will become unbalanced and the progression of trades on remaining jobs much more time-wasting and uncertain. Whatever the level of construction the country needs an efficient building industry; at present it is one of our most chaotic and out-of-date, with some 170,000 registered firms averaging 4½ men to every employer. If ever an enquiry and reorganisation were needed it is now. The changing priorities in our production programme make it all the more essential for the building needs of the country to be expeditiously and economically fulfilled. The number and organisation of firms, the best means of agreeing and carrying out contracts, site organisation and progressing, prices and profits, should be the subject of enquiry. It is incredible that one of the basic industries on which all others depend, and on which our health, education and family life depend, has so far completely escaped examination. The supply of materials is obviously a crucial determining factor in the building programme. No statement has yet been made except that other materials would be "matched up to timber" which is in shortest supply. Sir Stafford Cripps stated that the

number of houses to be built could be reconsidered in the light of available timber supplies, especially if we succeed in obtaining it from non-dollar sources. Before the war large quantities came from the Scandinavian countries, Finland and the USSR which still wish to export it. The adjustment of the level of production of other materials to timber means that there can be no progressive increase of supplies; instead a decrease in production which for all materials except plasterboard and cement is still below pre-war level. Planned production of all materials for increased rather than decreased output is essential. To assume that the shortage of any one material, such as timber, necessarily means reduction in total output is a negative attitude of despair. It is difficult but not impossible to construct houses without timber and with very little steel. Alternative materials and types of construction such as aerated concrete blocks, reinforced concrete floors, beams and staircases, flat roofs, can be used. The Government should publicise the results of valuable research and experiment already made, and insist on the use of methods and materials suited to our present supply position. The recent work carried out by the Building Research Station in collaboration with the Ministry of Works is outstanding, and its application would undoubtedly enable the industry to provide the houses needed with the present labour force—houses that are warmer, more sound-proof and better equipped than any to which we are accustomed. A re-deployment of resources on a basis which would improve our basic capital equipment for a rising standard of living in the near future would be understood and accepted. But slashing cuts which will lower the standard of living, impair the social services and lower the efficiency of our industry will lead to progressive worsening of our general conditions without at the same time laying the basis for a sound future economy. Full production of houses, schools and hospitals must be maintained to provide for the health and well being of all and to give the incentives necessary for an all out production drive. Continued and speeded up construction of electricity generating stations, gas works and factories for all except luxury goods is essential to lay the basis for a prosperous future Britain. Cutting the basis of our economy will mean disaster.

★

### *The Architects' Registration Council is offering for award in June, 1948, certain MAINTENANCE SCHOLARSHIPS IN ARCHITECTURE.*

The Scholarships will consist of a grant for the payment, in whole or in part, of the School fees and necessary subscriptions, instruments books, etc., and, when necessary a maintenance allowance not to exceed as a rule £100 a year. The Scholarships will be renewable from year to year until the

student has finished his or her School training. They will be available for students of British nationality who could not otherwise afford such training to enable them to attend Architectural Schools approved by the Council. The Scholarships will be available both for students who have already begun their training and for students wishing to begin their training. Scholarship will not be granted to students who will be less than 17 years of age on October 1 of the year in which the examination is taken. Particulars and forms of application may be obtained from: The Secretary to the Board of Architectural Education, Architects' Registration Council of the United Kingdom, 68, Portland Place, London, W.1. Copies of previous years' examination papers may be obtained on payment of 6d. The closing date for the receipt of applications, duly completed, is January 31, 1948.

### *The Ministry of Health has sanctioned the following LOANS TO LOCAL AUTHORITIES during the quarter ended September 30, 1947.*

Housing, £48,035,849. Municipal Services (including clinics, sanatoria and mental hospitals), £526,032. Gas Works, £1,078,957. Public Walks and Pleasure Grounds (swimming pools, playing fields, recreation grounds, open spaces, etc.), £209,456. Water Supply, £989,952. Sewerage and Sewage Disposal, £1,046,395. Refuse destruction, £75,416. Roads and Bridges (including Private Street Works), £834,902. Town and Country Planning, £140,017.

★★

### *The Minister of Town and Country Planning, has designated 2,350 acres at Easington, Co. Durham, as the site of the FIRST PROPOSED NEW TOWN FOR MINERS. A population of some 30,000 people is envisaged.*

The new town will be the first clean, well laid-out and fully provided town for miners and their families which this country has ever known. Adequate employment opportunities for miners' wives and daughters would be provided for the first time. A statement by the Minister accompanying the draft designation Order says that the new town will provide for the first time the recreational and shopping centre needed to give the district as a whole a greater degree of cohesion and efficiency. While facilities will, as far as possible, be made available for all the community activities associated with a town of substantial size, special care will be taken to preserve and enhance the natural amenities of the neighbourhood, in particular the existing open space at Castle Eden Dene.





## *The Fish Market, Folkestone*

In a memorable volume of *Contact*, Elizabeth Bowen described Folkestone's architecture as dating "between 1870 and 1900; the older buildings being along the Leas, from which developments moved inland. The Leas crescents and terraces are all high and of a gritty grey; some have a boxlike starkness, others are of the ornate mansard type. Behind is a strata of late Victorian gothic and baroque, dark red brick, lighter-patterned or with terra-cotta mouldings. All are set off by gardens. Closing the west end of the Leas, mammoth twin brick hotels

record the high-water mark of opulence. Down the avenues other hotels run to a pleasing, sugary, brittle white, and put out awnings and sling geraniums." Fish-market and portside Folkestone, lying in the valley, has its roots, of course, in an older order of things and claims corporate membership of the Cinque Port of Dover under the 1330 Charter. Against such a setting as this, delegates who attended the Fourth Building Congress at Leas Cliff Hall on Tuesday and Wednesday last perambulated the town between sessions. See also pages 457 and 458.

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*Sir Edward Cadogan has presented the National Trust with a second GIFT OF WOODLAND at Aston Wood, Oxfordshire.*

The new property, 39 acres in extent, lies on the north side of the Oxford-High Wycombe road at Stokenchurch. The part of Aston Wood already held by the Trust consists of about 70 acres of beautiful beech wood on the edge of the Chilterns on the south side of the road. It was acquired in 1937 with funds provided by Lord Nuffield, the Pilgrim and Manor Charitable Trusts, and by Sir Edward Cadogan, whose latest gift completes the acquisition for the nation of this important stretch of country. Sir Edward Cadogan has agreed with the Trust to be responsible during his lifetime for the upkeep of the new property and has made provision for the cost of maintenance thereafter.

★

*Plans for a NATIONAL THEATRE FOR SCOTLAND have been discussed in Ayr between representatives of the Burns Federation and the Butlin holiday camp organization.*

The representatives of the federation provisionally accepted Mr. W. E. Butlin's gift of £10,000 towards the project and a site for the theatre, which will be a memorial to Burns. The site provisionally selected overlooks Ayr Bay, a few miles from the poet's birthplace, Alloway. The formation of a Burns memorial trust was proposed to launch an appeal for £100,000, the sum needed to carry out the scheme.

*The Joint Council for the Building and Civil Engineering Industry (Northern Ireland) has adopted a scheme which is now in operation providing for a guaranteed weekly minimum payment to workers in the Industry.*

Under the scheme a worker who has performed actual work in any pay-week and has held himself available for work throughout the normal working hours of that week, is entitled to payment at his current hourly rate for half the time lost by him by reason of inclement weather during his normal working hours. The total payments to the operative in respect of the normal working hours worked in that week and any payments made under the scheme must together be not less than 32 times the hourly wage rate applicable to him in that week. Where a pay-week, during which an operative actually works on a job, is immediately followed by a complete pay-week during which he is prevented by inclement weather from performing actual work, he is entitled to payment of the guaranteed weekly minimum in respect of the latter week. During the next succeeding pay-week, or pay-weeks, however, if he is similarly prevented by inclement weather from working, he is not entitled to any payment under the scheme. In such circumstances he is to register at the Employment Exchange. Certain changes have also been made by the Council in the rule governing the termination of employment. This now provides that two hours' notice shall be given by either employer or workman, terminating at the end of the normal working day, during the first six days of employment; thereafter termination of employment shall be at two hours' notice on either side, expiring on Friday.

## THE BUILDING EXHIBITION AGAIN

THE twenty-second Building Exhibition was opened yesterday by Mr. Charles Key, the Minister of Works.

Bearing in mind the recent cuts in expenditure on building, a few people have wondered, though not very audibly, whether the Exhibition should have been held at all, and have suggested that it might have been postponed until building in reasonable quantity becomes possible once more. THE JOURNAL, however, does not subscribe to this view. It has maintained firmly that planning should go on, and that building schemes should be prepared *now*, so that work can be started as soon as the balance of trade makes it possible to do so.

It is nine years since the last Exhibition was held in the shadow of the Munich crisis. During that time much has happened to the technique of building, and there are still many architects who have been unable to keep abreast of current developments in structural methods and the details of equipment, and who are not fully aware of the considerable amount of research which has been carried out since September, 1939.

For six years, save for factories and a little essential housing, building was abandoned, but this hiatus was not altogether a disadvantage, since it has enabled us to re-start, if not with a clean slate, at least with a great deal of undergrowth cut and cleared, for we have had time to work out new standards of construction, and to develop new types of more efficient equipment.

In the midst of shortages and priority forms we must not lose sight of the fact that the output of a number of components is nearly as high as it was in 1939, a result which has been achieved largely as a result of the standardisation work carried out by the Ministry of Works in collaboration with the British Standards Institution. To these revised standards must be added the whole series of *Post War Building Studies*, the *Burt Report*, the *Housing Manual*, various *Codes of Practice*, and many other publications.

Dimensional standards apart, all these requirements may be interpreted by various manufacturers in different ways, and it is essential for the architect to be familiar with products as well as practice if he is to be ready to start building when the time comes. Many manufacturers have spent the war years in the production of such diverse things as aircraft turrets, motor torpedo boats, aircraft sub-assemblies and weapons of all kinds. Many of them have applied their new skills and their knowledge of new materials to their peace-time products. There are also a number of newcomers, more usually associated with other industries, who have a surplus of factory space, acquired during the war and now converted to the manufacture of housing and other equipment.

THE JOURNAL recommends every architect to make an effort to see the Exhibition. Technical papers do what they can

to keep their readers informed of new developments, but there can be no adequate substitute for seeing and discussing details with technicians on the spot. But manufacturers must co-operate as well, and realize that architects are not victims to be hoodwinked with salesmanship, but genuine inquirers who need accurate information. Technicians, then, to the fore please, or the architects will be wasting their time.



*The Architects' Journal*

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

Phone: Whitehall 0611

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

### OLYMPIA AGAIN

After a lapse of nine years, with most of our manufacturers learning to do new jobs in new ways, the Building Exhibition ought to be more than usually worth seeing. I have heard rumours of several interesting developments, but some have been no more than tentative, for the magic word prototype no longer seems to mean what it did, and material allocations are becoming increasingly difficult.

But I shall do my best to start at one corner of Olympia and work right through, so that for once I may manage at least one quick look at everything. And when I am dying of exhaustion I can always recuperate in the RIBA'S clubroom and even buy a ticket at the Architects' Benevolent tombola. As I *never* win anything in a sweepstake or raffle, I have a distinct leaning for an idea where everyone is certain of a prize.

### THE MOH MOVES FORWARD

One thinks of Local Authority housing

as consisting exclusively of two-storey houses, generally semi-detached, of a more or less standardized type and—in large towns—of blocks of multi-storey flats. The new-type plans that the Ministry of Health is showing at the Building Exhibition\* therefore represent an important departure. The designs for three-storey terrace houses are particularly welcome as an encouragement to Local Authorities to aim at a compact urban character in urban situations, even when the demand is for the one-family house.

\*

The other type-design—for a combined flat and maisonette block of four storeys—is the Ministry's first venture in a different direction: that of flat development designed for non-traditional methods of construction. This plan (in which private architects have had a hand) will interest the profession enormously. The use of different shapes of opening to give pattern to the façades strikes me as very successful, but Local Authorities will have to use imagination over siting to prevent the somewhat uncompromising outline of the block from producing an effect of bleakness.

### PLEASE, SIR, MAY I LEAVE THE LOOM?

Quality is a subject popular these days with Presidents. Sir Lancelot Keay returned to it last week in his inaugural address at the RIBA, when he reminded us that the AA seemed to have taken his words of last year to heart, and might even do so again.

\*

Whether the AA, sitting at its loom like some industrious Lady of Shalott, will hearken again to Sir Lancelot's beguiling and instructive song remains to be seen—or will they, perhaps, remember the fate of the lady who was so bedazzled by the brazen greaves, the helmet and the plume that she left her loom only to meet disaster?

\* See pages 454-456 of this issue.

### WESTMINSTER REGAINED

On page 448 you will find extracts from the feature in the current issue of the *Architectural Review*, which deals with the replanning of the Westminster precinct. There are two particularly interesting points about this plan, which follows, you may remember, a similar project prepared last autumn for the St. Paul's area. The first is the novel and completely successful technique of line blocks and mechanical tints used by Gordon Cullen in illustrating the plan. The second is the Canaletto, used as a frontispiece to the *Review*, which shows that the *Review* plan is merely regaining what once in fact existed. I am assured, however, that, though Presidents may be accused of plagiarism, the Canaletto was not actually discovered until after the *Review* plan was made, and the fact that Cullen and Canaletto think alike is—as Alexander "Sursum" Korda says—purely coincidental.

### VISION OF DORSET

*Dorset* is the latest volume in the Vision of England series\* edited by Clough and Amabel Williams-Ellis. The author, Mr. Aubrey de Selincourt, claims for his letterpress no more than that it is a personal vision, and if you don't like it you can do the other thing. He doesn't think much of the Cerne Giant, and nearly five pages headed Blue Vinney refers to the cheese in less than half a line. But it is always too easy to find personal faults with a personal vision, and, anyway, the book has 28 pages of good photographs and a number of drawings (some in colour) by Miss Barbara Jones. One can't expect much more for 9s. 6d., though, if memory serves me, the reproduction of the wall painting in Cranborne church is not the "Misery of the Doomed" but "Woman as the Root of All Evil."

### TALKING ABOUT BATHS

Our Swedish spy, last heard of in Gothenburg, reports now from Stockholm. "Talking about baths," he writes, "as you probably are, either because the coke hasn't arrived or because you have just read Dr. Giedion's fascinating article on *The*

\* *Dorset* by Aubrey de Selincourt Elek. 9s. 6d.

*Mechanization of the Bath* in the October *Architectural Review*, I have to tell you some local news."

The big porcelain works of Gustavsberg, outside Stockholm, he says, which now belong to the *Kö-operativa Förbundet*, are about to go into large-scale production of vitreous enamel pressed-steel bath-tubs. This may seem strange to foreigners, who associate the name Gustavsberg with the fine luxury pottery of Wilhelm Käge and Stig Lindberg. In fact, since the Co-op. took the old works over some ten years ago, when it was almost on its last legs, Gustavsberg has become a very large concern, making mostly cheap porcelain ware and mass-produced sanitary fittings. The beautiful special stuff is merely a luxury sideline which the directorate has been intelligent enough to maintain, not only for the sake of prestige, but because the chief designers can influence the look of the cheaper, money-making products for the good.

Now a large new factory is nearing completion at Gustavsberg, and it will not be long before the new baths are in production. The need is very urgent in Sweden, for there is a tight bottleneck in bath-tubs. The pressed-steel tub, by the way, is a big advance in the mechanization of the bath, and the invention comes from the USA. Hitherto, pressing out the awkward curves of bath-tubs has been an insoluble problem, in spite of the great advance made in the pressing of steel for car bodies. But now the right kind of steel has been found, and tubs can be banged out by the billion.

But, continues our spy, Sweden does not necessarily advance culturally

because of its new factory. Dr. Giedion intimates that the bath-tub and culture are not synonymous, for he writes: "The seventeenth and eighteenth centuries . . . were acquainted with the refinements of living. But they stopped short of caring for the vessel that holds all these—the body." He imputes the decline of cleanliness in the post-Reformation period to the regarding of nakedness as a sin.

Is this the real reason? Surely these centuries were no more inhibited than the Middle Ages, when bathing was often communal and lechery was a deadly sin. More plausible reasons are given in a book on *The Bath* recently published in Stockholm, sponsored by Gustavsberg and written by its public relations officer and by the Co-op's chief architect.\* The authors maintain that the decline of cleanliness after the Reformation was due to two causes. Whereas bathing in the Middle Ages was stimulated by the belief that it was a prophylactic against leprosy, it died out in the Renaissance because bathing establishments were thought to bring disease rather than civilization. A second cause was the difficulty of providing enough water as the towns grew in size.

Many Swedes have adopted the Finnish steam bath, he says, and in this he sees some sense. The steam bath not only effectively removes poisonous waste juices from the body but makes a pleasant social occasion and provides that psycho-physical regeneration which Dr. Giedion believes cannot arise in the isolation of the private bathroom.

ASTRAGAL

\* *Bad i Hemmet Förr och Nu* by Gösta Sandström and Olof Thunström (A.B. Gustavsbergs Fabriker, Stockholm, 12 Kronor).

## LETTERS

J. C. Pritchard

D. L. Bridgwater,

B.Arch., F.R.I.B.A.,  
(Architectural Consultant to the British  
Cast Iron Research Association.)

### Astragal and Smoke Abatement

SIR,—Astragal is not correct in assuming that bituminous coal cannot be burnt in the house without making smoke, and therefore coal should not be used in the home at all.

The only way of converting coal into heat and saving the by-products is by carbonisation and using the gas for heating.

The utilization efficiency by this means could be 50 per cent. to 60 per cent. if an up-to-date gas furnace was used (carbonisation 70 per cent., gas furnace, say, 80 per cent.). This method could also have the additional advantage of providing the housewife with conditions in winter that would be similar to those on a warm summer evening. This could be provided without any drudgery but at rather a high cost. It should be pointed out, however, that it is quite possible to have these summer conditions in the winter with only a little extra work by use of a thermostatically controlled smokeless coal furnace, which could have a utilisation efficiency of, say, 70 per cent., i.e., 10 per cent. to 20 per cent. more than with gas, and still avoid smoke. By-products would then have to be obtained by other means.

In St. Louis, once one of the dirtiest cities in the USA, and now one of the cleanest, the burning of bituminous coal for domestic purposes is allowed when it is burnt in a controlled furnace of the type referred to above, so that the elimination of coal from the home is not necessary from the point of view of elimination of smoke.

London

J. C. PRITCHARD

### When Were Cast Iron Lavatory Pans Supplied?

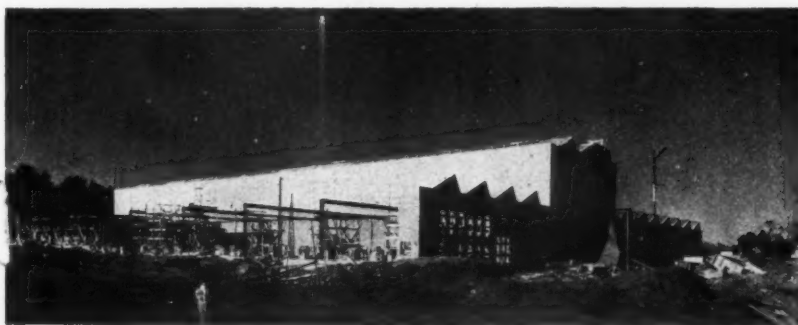
SIR,—In answer to the interesting letter from Mr. N. C. Stoneham, it is by no means uncommon to come across cast iron lavatory pans in old Victorian buildings, and in fact, in some cases they are unrecognised, being vitreous enamelled, and, unless they have deteriorated badly, look very like an old-fashioned earthenware pan.

There seems to be very little literature on the history of the water closet, and one has to rely for information on the catalogues and trade journals of the period and on patent specifications. Between 1775 and 1800 there are numerous patents relating to water cisterns from which water can flush the lavatory pan or receptacle by handle action or seat action, or a tipping cistern. The earliest patent dealing with the cast iron pan seems to be one in the name of Walter MacFarlane dated 1852, where reference is made to a "system or mode of constructing a vase water duct of cast iron either in one piece or with the bottom trap discharge pipe separately and with the basin lined with porcelain."

There are earlier patents referring to parts of the pan being in cast iron. A patent of 1858 relates to improvements in the moulding process for "casting water closet pans and cisterns." The trade literature of the period advertises this sort of ware right up to the end of the century.

London

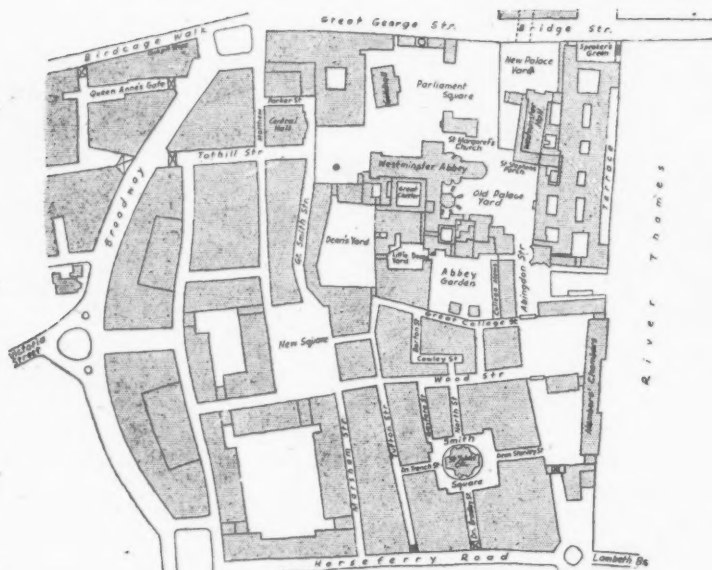
D. L. BRIDGWATER



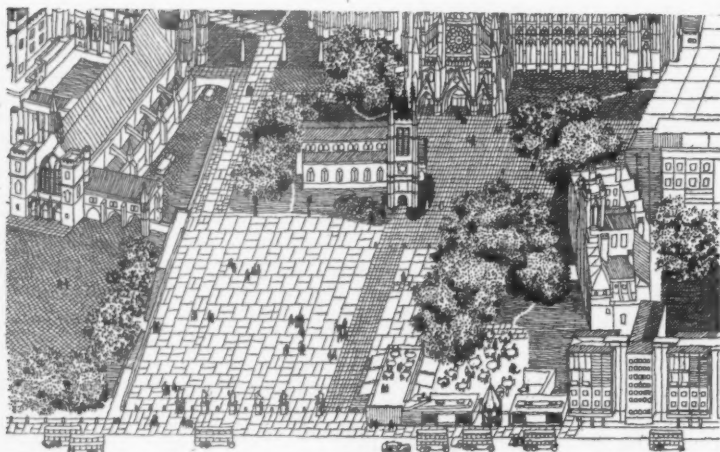
Above, the new Gustavsberg pressed steel bath-tub factory under construction.



## WESTMINSTER REGAINED



The Architectural Review has devised its own plan for Westminster (published in its November issue). The plan embraces an area bounded roughly by the Thames, Horseferry Road, Strutton Ground and Great George Street. In this area fall such important architectural elements as Westminster Abbey, and School, Dean's Yard, Old Palace Yard, St. Margaret's Church, the Houses of Parliament, Parliament Square and Smith Square, whilst as a natural extension are Queen Anne's Gate and the Government centre of Whitehall. Primarily the plan seeks to re-establish the former precinctual character of Westminster Palace. Victorian traffic engineers opened a route through Old Palace Yard to Abingdon Street and Millbank and through Broad Sanctuary to Victoria Street. Bent only on providing the shortest distance between two points, they destroyed the integral character of the precinct and rendered sterile that sense of enclosure which certainly once belonged to Westminster. Now traffic roaring round Parliament Square robs the Abbey and the Houses of Parliament of both dignity and quietude. Nor is it possible any more to stand and stare in comfort at this piece of urban landscape which "can hold its own with the most illustrious examples in the world." With so much circulating traffic always a feeling of peril disturbs the visual experience. The plan is conceived within the broad framework of the Abercrombie-Forsshaw Plan and would re-establish the functional needs of the area "suggested by itself, but also strictly in accordance with the proposals of the County of London Plan." The road system would be: traffic coming from Westminster Bridge and Whitehall is taken down Great George Street, then cuts across to Broadway and so into Victoria Street. The section of Victoria Street between this junction and Broad Sanctuary is dismantled. These changes make it possible to take up the roadways in Parliament Square, Old Palace Yard, Abingdon Street and the Embankment, and to replace them with grass paving and pedestrian ways. Vehicle access to the Houses of Parliament is by a tunnel under Bridge Street from a new roundabout near Scotland Yard. Other proposals are: Victoria Tower Gardens to be made into two courts round which are grouped chambers and cafés for M.P.s. Here a quay is provided for entry by water. Whereas the Embankment tends by its very nature to divorce the rich life of the river from the everyday urban pattern, such a quay in common use would help express the functional character of the riverside. The statues of the Prime Ministers are re-sited along the boundary of Great George Street and there is a café in Parliament Square which would be paved over to form a war memorial—the flagstones engraved with the names of those who fell in the two world wars. The scheme in all its particulars would once again worthily express the significance of a magnificent piece of London.



Top, left, plan of the area: right, Parliament Square under present-day traffic conditions. Centre, Parliament Square as it might be, with café, paved memorial and lawns. Bottom, Old Palace Yard with the green lawns of a cathedral close.



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# BUILDING EXHIBITION GUIDE

## AN ALPHABETICAL LIST OF EXHIBITORS

[The numbers and letters in brackets indicate the number of the stand and the row. Where there is no letter the stand is in the gallery.]

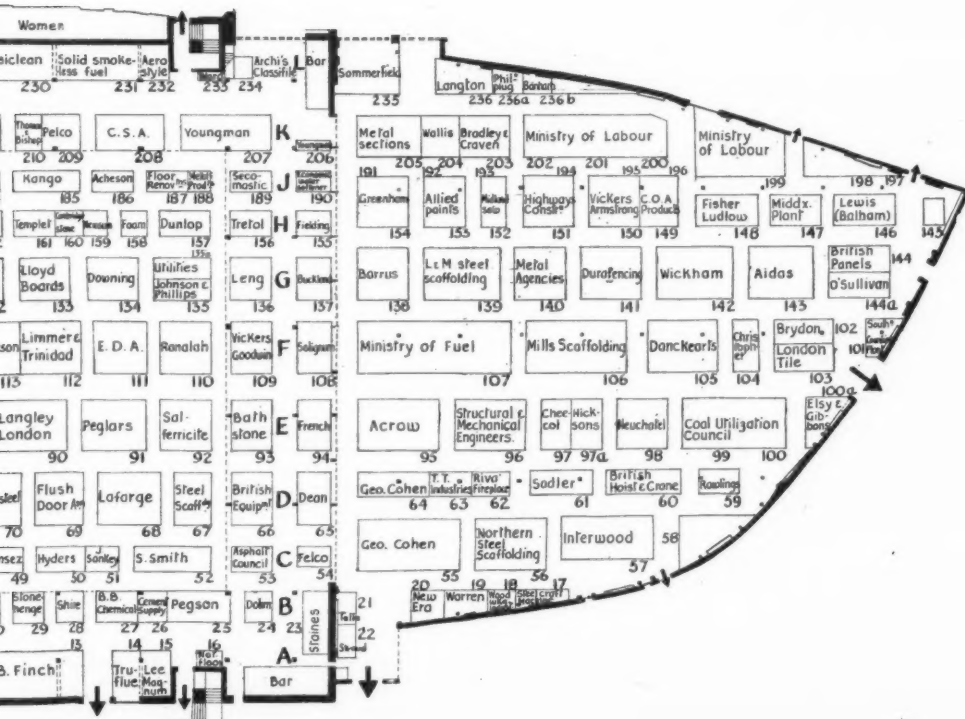
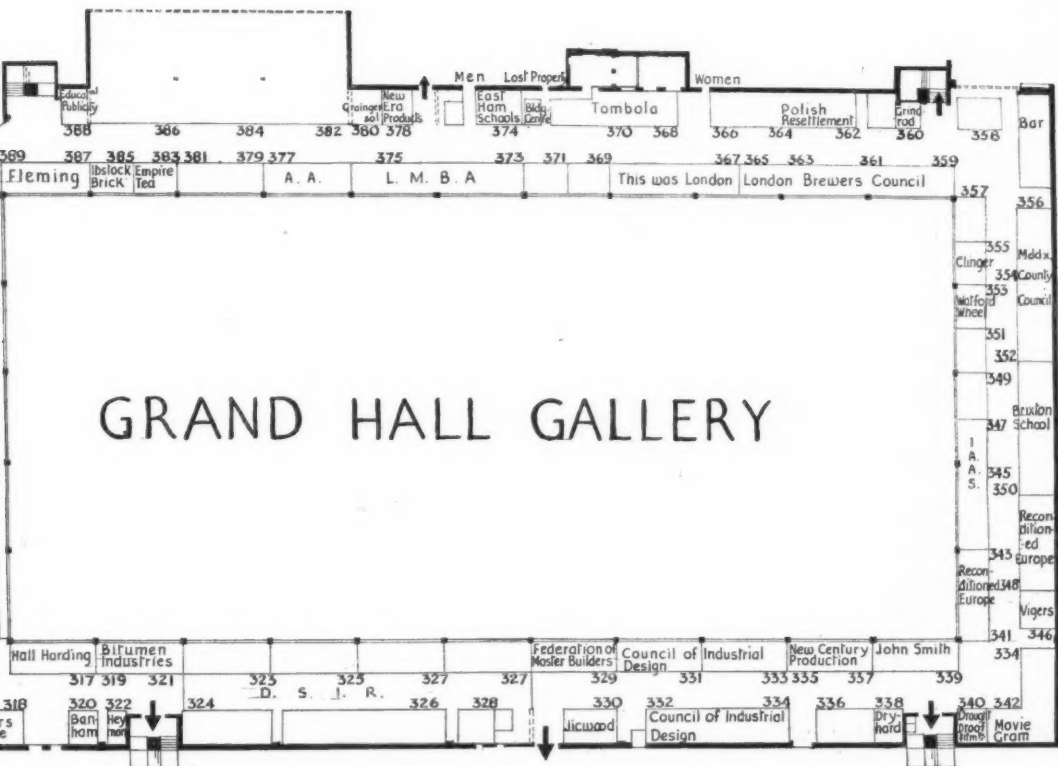
- A**  
 Abbey Tile Co., Ltd., Abbey Tile Works, River Rd., Barking, Essex. [243.M]  
 A.C.E. Machinery, Ltd., Porden Road, Brixton. S.W.2. [259.A]  
 Acheson, M. B., Ltd., No. 8 Wharf, South Wharf Rd., W.2. [186.J]  
 Acrow Engineers, Ltd., 33, Catherine Place, S.W.1. [95.E]  
 Activarc, 403, Stockport Rd., Timperley, Cheshire. [305.S]  
 Adamite Co., Ltd., The, Manfield House, Strand, W.C.2. [85.E]  
 Adamsez, Ltd., Scotswood, Newcastle-on-Tyne. [49.C]  
 Agrostyle, Ltd., 174/6, St. John's St., Clerkenwell, E.C.1. [232.L]  
 Affined Basic Chemicals, Ltd., Empire Works, Desborough Road, High Wycombe. [313.T]  
 Aidas Electric, Ltd., Sadia Works, Rowdell Rd., Northolt, Middx. [145.G]  
 Allam, E. P., & Co., Ltd., Gt. Peter St., S.W.1. [281.Q]  
 Allied Paints & Chemicals, Ltd., Wharfedale Rd., Tyseley, Birmingham, 11. [153.H]  
 Aluminium Development Association, 33, Grosvenor Street, W.1. [282.Q]  
 Aluminium Window Co., The, Oxford Street, Birmingham. [267.P]  
 Anderson, C. F., & Son, Ltd., Harris Wharf, Graham Street, N.1. [222.L]  
 Anderson, D., & Son, Ltd., Stretford, Manchester. [113.F]  
 Andrews Bros. (Bristol), Ltd., Sales Division, Walcot Street, Bath. [284.Q]  
 Anselm Odling & Sons, 132, New North Road, N.1. [120.F]  
 Architect & Building News, The, Dorset House, Stamford Street, S.W.1. [127.G]  
 Architects Classifie, Ltd., Standbrook House, Old Bond Street, W.1. [234.L]  
 Architectural Association, The, 34/6, Bedford Square, W.C.1. [377]  
 Armstrong Cork Co., Ltd., The, Kingsbury, N.W.9. [173.J]  
 Artex Products (Decorations), Ltd., Worthing Road, Rustington, Sussex. [197.K]  
 Ascot Gas Water Heaters, Ltd., Ascot Works, North Circular Road, N.W.10. [252.N]  
 Associated Clay Industries, 3, Princes Street, Hanover Square, W.1. [178.J]  
 Austins of East Ham, Ltd., E.6. [292.R]
- B**  
 Baker, W. F., Premier Works, High Wycombe, Bucks. [136.T]  
 Banham's, 185, Kensington High Street, W.8. [236b.L]  
 Barrus, E. P., Ltd., Brunel Road, Acton, W.3. [138.G]  
 Bath & Portland Stone Firms, Bath. [93.E]  
 B. B. Chemical Co., The, Ulverscroft Road, Leicester. [27.B]  
 Benford, Ltd., The Cape, Warwick. [249.N]  
 Berger, Lewis, & Sons, Ltd., 35, Berkeley Square, W.1. [272.P]  
 Birmingham Steel Co., Ltd., 202, Fazeley Street, Birmingham, 5. [286.R]  
 Bitumen Industries, Ltd., Farnham Road, Trading Estate, Slough. [319.321]  
 Blaw Knox, Ltd., Clifton House, Euston Road, N.W.1. [288.R]  
 Boulton & Paul, Ltd., Upper King Street, Norwich. [287.R]  
 Boydell, E., & Co., Ltd., Ellsmore Road, Old Trafford, Manchester, 16. [253.N]  
 Braby, F., & Co., Ltd., 352, Euston Road, N.W.1. [214.K]  
 Bradley & Craven, Ltd., Wakefield. [203.K]  
 Bridgewater Brick & Tile Association, 7, Castle Street, Bridgewater. [73.D]  
 Briggs & Sons, Ltd., East Camperdown Street, Dundee. [32.B]  
 British Electrical Development Association, 2, Savoy Hill, W.C.2. [111.F]  
 British Equipment Co., Ltd., Ixworth Place, S.W.3. [66.D]  
 British Gas Council, 1, Grosvenor Place, S.W.1. [273.P]  
 British Hermesal, Ltd., 15, George Street, Croydon. [41.C]  
 British Hoist & Crane Co., Slough, Bucks. [60.D]  
 British Pressed Panels, Ltd., Alwll Works, Quinton Road, Coventry. [145.G]  
 British Standards Institute, 28, Victoria Street, S.W.1. [311.T]  
 British Steel Work Association, Eggington House, Buckingham Gate, S.W.1. [44.C]  
 Brixton School of Building, Ferndale Road, S.W.4. [350]  
 Broad & Co., 4, South Wharf, Paddington, W.2. [216.K]  
 Brockhouse, J., & Co., Ltd., Victoria Works, Hill Top, West Bromwich. [12]  
 Bryce White & Co., Ltd., Deseronto Wharf, Langley, Slough. [82.E]  
 Brydon Construction Co., Ltd., 26, Blythwood Sq., Glasgow, C.2. [102.F]  
 Buckland Sand & Silica, Reigate Heath, Reigate. [137.G]  
 Builder, The, Ltd., Catherine Street, Aldwych, W.C.2. [125.G]  
 Building Centre, 9, Conduit St., W.1. [372a]
- C**  
 Building (St. Margaret's Technical Press), 33, Tothill Street, S.W.1. [225.L]  
 Building Industries, 63, John Street, Glasgow, C.1. [169.H]  
 Cambridge Artificial Stone Co., Ltd., Mill Road, Cambridge. [160.H]  
 Candy & Co., Ltd., Heathfield Station, Newton Abbot, Devon. [122.F]  
 Carter & Co., Ltd., East Quay Road, Poole, Dorset. [74.D]  
 Cellon, Ltd., Kingston-on-Thames. [166.H]  
 Celotex, Ltd., North Circular Road, N.W.10. [172.H]  
 Cementation Co., Ltd., Thermoconst Dept., 39, Victoria Street, S.W.1. [78.D]  
 Cement Marketing Co., The, 192, Ashley Gardens, S.W.1. [114.F]  
 Cement Supply Co., Ltd., Grosvenor House, 82, Victoria Street, S.W.1. [26.B]  
 Central Distributing Co., The, 341, Regent's Park Road, N.3. [315.T]  
 Century Wallboards, Ltd., Greenacres Mill, Oldham. [256.Q]  
 Chadwick & Shapcott, Ltd., Waltham Cross, Herts. [121.F]  
 Chasidese Engineering Co., Ltd., Station Works East, Hertford, Herts. [58.C]  
 Checcol Processes, Ltd., 40, Broadway, S.W.1. [97.E]  
 Christopher, J., & Sons, 172, St. John's Street, Clerkenwell, S.E. [104.F]  
 Cimex, Ltd., 69, Victoria Street, S.W.1. [182.J]  
 Clark, J., & Eatop, Ltd., Scoresby House, Glasshill Street, S.E.1. [224.L]  
 Clabey Armstrong, Danarm, J., Abford House, Wilton Road, S.W.1. [255a.N]  
 Coal Utilisation Joint Council, 54, Victoria Street, S.W.1. [99-100.E]  
 Code Lock, Ltd., 415, Oldfield Lane, Greenford, Middx. [33.B]  
 Cohen, G., & Sons, Ltd., Cunard Works, Chase Road, N.W.10. [55.C]  
 Cole, E. R., Ltd., Coombe Road, Neasden Lane, N.W.19. [170.H]  
 Colt, W. H. (London), Ltd., Surbiton, Surrey. [223.L]  
 Copperad, Ltd., Poyle Road, Colnbrook, Bucks. [7.A]  
 Copper Development Association, Grand Buildings, Trafalgar Square, W.C.2. [278.Q]  
 Council of Industrial Design, Tilbury House, Petty France, S.W.1. [331-334]  
 Crawley Tools, Ltd., Precision Works, London Road, Crawley, Sussex. [257.O]  
 Crittall Manufacturing Co., Ltd., The, 210, High Holborn, W.C.1. [86.E]  
 Crittall, R., & Co., Ltd., 156, Great Portland Street, W.1. [5.A]  
 C.S.A. Industries, Ltd., Commercial Division, Warwick. [208.K]  
 Cunliffe Owen Aircraft, Ltd., Swaythling, Southampton. [149.H]  
 Cuprinol, Ltd., Jensen House, Carpenters Road, Stratford, E.15. [302.S]
- D**  
 Danckaerts Woodworking Machinery, Ltd., 24, East Road, City Road, N.1. [105.F]  
 Davis, H. & Co., Ltd., 1, The Pavement, Clapham Common, S.W. [298.S]  
 De La Rue Gas. [277.Q]  
 De La Rue Insulation, Ltd., Imperial House, 84/6, Regent Street, W.1. [162.H]  
 Dean, J., 329, Putney Bridge Road, S.W.15. [65.D]  
 Denton & Jutsum, Ltd., Bow Common, E.3. [265.O]  
 Department of Scientific & Industrial Research, Montagu Mansions (Block 5), Crawford Street, Baker Street, W.1. [323-8]  
 Dixon, R. G., & Co., Ltd., Capital Works, Empire Way, Wembley. [24.B]  
 Dohm, Ltd., 167, Victoria Street, S.W.1. [283.Q]  
 Downing, G. H., & Co., Ltd., Audley Road, Cherterton, Staffs. [134.G]  
 Draught Proof Fitment Co., Ltd., 349, Harrow Road, W.9. [340]  
 Drew Clark & Co., Ltd., Lea Bridge Road, Leyton, E.10. [34.B]  
 Dryhard Paint & Varnish Co., 155a, Cherry Orchard Rd., Croydon, Surrey. [338]  
 Dunlop Rubber Co., Ltd., St. James's House, St. James's, S.W.1. [157.H]  
 Durafencing, Ltd., 72, Victoria Street, S.W.1. [141.G]  
 Dunstall Roofs, Ltd., Oldfield Lane, Greenford, Middx. [45.C]
- E**  
 Easicle Enamel (1938), Ltd., Palace of Engineering, Wembley, Middx. [230.L]  
 Easiwork, Ltd., 242, Tottenham Court Road, W.1. [10.A]  
 East Ham Technical College, Barking Road, E.6. [374]  
 Eastwoods, Ltd., 47, Belvedere Road, S.E.1. [163.H]  
 Eclipse Rail-Track Ladder Co., Ltd., Staple Hill, Bristol. [274.P]  
 Economic Water Softeners, Ltd., Agna Road, Tyseley, Birmingham, 11. [190.J]  
 Educational Publicity, Ltd., 17, Denbigh Street, S.W.1. [388]
- F**  
 Electrolux, Ltd., 153/155, Regent Street, W.1. [291.R]  
 Elsy & Gibbons, Ltd., Havelock St., South Shields, Co. Durham. [100a.E]  
 Empire Tea Bureau, 22, Regent Street, S.W.1. [383]  
 English Clock System, Ltd., Setric House, Cricklewood, N.W.10. [217.K]  
 English Joinery Manufacturers Association, Sackville House, 40, Piccadilly, W.1. [279-300.S]  
 Everburne Sales & Service, 17, East Parade, Harrogate. [6.A]  
 Evos, Ltd., 11, Grosvenor Gardens, S.W.1. [36.B]  
 Ewart & Sons, Ltd., 169, Regent Street, W.1. [276.Q]  
 Expanded Metal Co., Ltd., Burwood House, Caxton Street, S.W.1. [84.E]  
 Expandite, Ltd., Cunard Road, N.W.10. [1.A]
- F**  
 Federated Employers' Press, Ltd., 82, New Cavendish Street, W.1. [237.M]  
 Federation of Master Builders, 26, Great Ormond Street, W.C.1. [329]  
 Felco Hoists, Ltd., 117, Victoria Street, S.W.1. [54.C]  
 Ferguson Edwards, Ltd., St. George's Mills, Hoxton Square, N.1. [250.N]  
 Fibreglass, Ltd., St. Helen's Lanes, [229.L]  
 Fielding & Son (Werneth), Ltd., Roscoe Works, Roscoe Street, Oldham. [155.H]  
 Finch, B., & Co., Ltd., Belvedere Works, Barkingside, Essex. [13.A]  
 Fisher & Ludlow, Ltd., Albion Works, Kingsbury Road, Birmingham, 24. [148.H]  
 Fisons, Ltd., Harvest House, Ipswich. [184.J]  
 Fleming Electrical Corporation (Great Britain), Ltd., 92, Buckingham Palace Road, S.W.1. [387-389]  
 Flexible Non-Metallic Conduits, Ltd., 208, Tottenham Court Road, W.1. [179.J]  
 Flexo Plywood Industries, Ltd., "Flexo" Works, South Chingford, E.4. [245-246.N]  
 Flextol Engineering Co., Ltd., Flextol Works, The Green, W.5. [46.C]  
 Floor Renovations, Ltd., 36, Lauriston Road, E.9. [187.J]  
 Flush Door Manufacturers Association, Stanford Road, Trovel, Notts. [69.D]  
 Foamed Slag Producers Federation, Grosvenor Gardens House, S.W.1. [158.H]  
 Forsters Machine Co., Ltd., 55, Whitton Road, Hounslow, Middx. [318]  
 Freeman, J., & Sons, Cementone Works, Wandsworth, S.W.18. [39.C]  
 French, Thos., & Sons, Ltd., Chester Road, Manchester, 15. [94.E]
- G**  
 Gascoigne, G. H., Co., Ltd., The, Berkeley Avenue, Reading. [180.J]  
 George Bros. (Paints), Ltd., "Lutidine," London Road, Slough. [296.R]  
 Gerver, H., 6/10, Mare Street, Hackney, E.8. [308.T]  
 Gibbs Construction, Ltd., Second Avenue, Montague Road, Edmonton, N.18. [309.T]  
 Gliksten Doors, Ltd., Carpenters Road, Stratford, E.15. [125.G]  
 Goodwin Barsby & Co., Ltd., St. Margaret's Ironworks, Leicester. [241.M]  
 Grangersol, Ltd., Loates Lane, Watford, Herts. [380]  
 Grant & West, Ltd., 3, Furlong Road, N.7. [11.A]  
 Greenham (Plant Hire), Ltd., 671, London Road, Isleworth, Middx. [154.H]  
 Grindrod, P. W., 40, Chiswick Common Road, W.4. [360]
- H**  
 Hall, R., 89, Culvers Avenue, Carshalton, Surrey. [174.J]  
 Hall Harding, Ltd., Stourton House, Dacre Street, S.W.1. [317]  
 Halliday Boilers, Ltd., Saxon Road, Selhurst, S.E.25. [3.A]  
 Harvey, G. A., & Co. (London), Ltd., Greenwiche Metal Works, S.E.7. [131.G]  
 Hesketh, Gordon, 2 & 3, Middle Street, E.C.1. [255.N]  
 Heyman, B., 122, Bethune Road, Stamford Hill, N.15. [322]  
 Hickson's Timber Impregnation Co. (G.B.), Ltd., Castleford, Yorks. [97a.E]  
 Highways Construction, Ltd., Idlesleigh House, Caxton Street, S.W.1. [151.H]  
 Hills, F., & Sons, Ltd., Horton Road, Stockton-on-Tees. [290.R]  
 Hitchens Flush Woodwork, Ltd., 76/8, High Street South, East Ham, E.6. [238.M]  
 Holcon, Ltd., 4, Drapers Gardens, E.C.2. [242.M]  
 Holden Frost Protector Co., The, 12, Marlborough Place, Brighton, 1. [391]  
 Hope, Henry, & Sons, Ltd., Smethwick, Birmingham. [79.D]  
 Housing Centre, The, 17, Suffolk St., S.W.1. [1402]  
 Hurcal Engineering Co., Ltd., 3, Ferry Buildings, Woodside, Birkenhead. [393]  
 Hurry Water Heater, Ltd., Town Hall Chambers, 86, New St., Birmingham, 2. [35.B]  
 Hursel, Ltd., 106, Regent Street, W.1. [254.N]

# PLAN OF THE BUILD





# LDING EXHIBITION



Hyders, Ltd., The Ironworks, Plaxtol, near Sevenoaks, Kent. [50.C]  
Hyspecon, Ltd., 122, Foresters Drive, Wallington, Surrey. [399]

I  
Ibstock Brick & Tile Co., Ltd., L.M.S. Bly. Goods Depot, High Street, Kensington, W.14. [383]  
Ide, T. & W., Ltd., Glasshouse Fields, Raichiff, E. [262.D]  
Ideal Boilers & Radiators, Ltd., Ideal House, Great Marlborough Street, W.1. [280.Q]  
Illustrated Carpenter & Builder, Pioneer House, Wicklow Street, W.C.1. [312.T]  
Imperial Chemical Industries, Ltd., Nobel House, 2, Buckingham Gate, S.W.1. [76.D]  
Inc. Association of Architects & Surveyors, 75, Eaton Place, Belgrave Square, S.W.1. [345, 347]  
Insulation Building & Hard Board Assoc'n., Bevis Marks House, E.C.3. [83.E]  
Interwood, Ltd., 326, Old Street, E.C.1. [57.C]

J  
Jenson & Nicholson, Ltd., Jenson House, Carpenters Road, Stratford, E.15. [301.S]  
Jicwood, Ltd., Weybridge, Surrey. [330]  
Johnson & Phillips, Ltd., Charlton, S.E.7. [135.G]  
Joinery & Builders Supply, Ltd., Hayes Bridge, Hayes, Middx. [295.R]  
Joyce, W. N., & Sons, Ltd., 145/166, High Road, Whetstone, N.20. [183.J]

K  
Kango Electric Hammers, Ltd., Morden Factory Estate, Lombard Road, South Wimbledon, S.W.19. [185.J]  
Kennedy, W., Station Works, West Drayton, Middx. [218.K]  
King, G. W., Hartford Works, Hitchin, Herts. [215.K]  
King, J. A., & Co., Ltd., 181, Queen Victoria Street, E.C.4. [118.F]  
King's Langley Engineering Co., King's Langley, Herts. [398]  
Klinger, Richard, Ltd., Klingerit Works, Sidcup, Kent. [355]  
Konquest Products, Ltd., 31, Beethoven Street, W.10. [219.K]

L  
Lafarge Aluminous Cement Co., 75, Brook Street, W.1. [68.D]  
Langley (London), Ltd., 161, Borough High Street, S.E.1. [90.E]  
Langton, H. S., Ace Ladder Works, 172, Bitterne Road, Bitterne, Southampton. [236.L]  
Lead Industries Development Council, Eagle House, Jermyn Street, S.W.1. [175.J]  
Lee Magnus Engineering Works, Stevenston, near Abingdon, Berks. [15.A]  
Leng, C., & Sons, Ltd., Hazelweel Brush Works, Birmingham, 30. [136.G]  
Lewis & Co., 10, Balham New Road, S.W.12. [146.H]  
Lillingdon, G. & Co., Ltd., 5/7, London Bridge Street, S.E.1. [37.B]  
Limmer & Trinidad Lake Asphalt Co., Ltd., Steel House, Tothill Street, S.W.1. [112.F]  
Liner Concrete Machinery Co., Park Rd., head, 8. [240.M]  
Lloyd Boards, Ltd., 15, Portman Street, W.1. [133.G]  
Lloyds Bank, Ltd., Lombard Street, E.C.3. [244.M]  
Logical Coal Bankers, Tavu Works, Waterloo, Huddersfield. [401]  
London Brewers' Council, Chiswell Street, E.C.1. [359, 361, 363, 365]  
London Brick Co., Ltd., Africa House, Kingsway, W.C.2. [67.C]  
London Master Builders' Association, 47, Bedford Square, W.C.1. [373-375]  
London and Midland Steel Scaffolding Co., Ltd., Idlersleigh House, Caxton Street, S.W.1. [139.G]  
London Sand Blast & Decorative Glass Works, Ltd., Seager Place, Burdett Road, E.3. [130.G]  
London Tile Products, Ltd., 49/57, Green Lanes, N.16. [103.F]

M  
Magnet Timber, Ltd., London Road, West Thurrock, Grays, Essex. [258.O]  
Mallinson, Wm. & Sons, Ltd., 130/150, Hackney Road, E.2. [89.E]  
Marley Tile (Holding) Co., Ltd., Riverhead, Sevenoaks, Kent. [164.H]  
Mechanical Equipment, Ltd., Helidon, near Daventry. [4.A]  
M.E. Engineering, Ltd., 457, Finchley Road, N.W.3. [275.Q]  
Metal Agencies Co., Ltd., Colston Street, Bristol, 1. [140.G]  
Metallic Products, Ltd., 81, London Road, S.E.1. [188.J]  
Metal Sections, Ltd., Oldbury, Birmingham. [205.K]  
Meyer, M., Ltd., 14, Buckingham Street, Adelphi, W.C.2. [40.C]  
Middlesex Contractors Plant, Ltd., 53, Victoria Street, S.W.1. [147.H]  
Middlesex County Council Education Committee, 10, Great George Street, S.W.1. [352, 354, 356]  
Middlesex Publishing Co., Ltd., 194/200, Bishopsgate, E.C.2. [221.L]  
Midland Bank, Ltd., Poultry, E.C.2. [8 and 9.A]  
Midland Saw and Tool Co., Ltd., Midsaw Works, Pope Street, Birmingham, 1. [152.H] [193.J]  
Millars Machinery Co., Ltd., Thorley Works, Bishops Stortford, Herts. [239.M]  
Mills Scaffold Co., Ltd., Trussley Works, Hammersmith Grove, W.6. [106.F]  
Ministry of Fuel and Power, 7, Millbank, S.W.1. [107.F]  
Ministry of Labour and National Service, 12, St. James's Square, S.W.1. [199-202.K]

Moviegram (Equipments), Ltd., 3, Albemarle St., Piccadilly, W.1. [342-344]  
Murray and Jones, Ltd., Meredith Street, Plaistow, E.13. [248.M]

N  
National Federation of Clay Industries, 30, Gordon St., W.C.1. [42.C]  
National Flooring Co., The, 183, Hammersmith Road, W.6. [16.A]  
National Trust, 42, Queen Anne's Gate, S.W.1. [336]  
Natural Asphalt Mine Owners and Manufacturers Council, 94, Petty France, S.W.1. [53.C]  
Neal, R. H., Ltd., Plant House, Ealing, W.5. [294.R]  
Nettlefold and Sons, Ltd., Nettlefold House, 165, Euston Road, N.W.1. [77.D]  
Neuchatel Asphalt Co., Ltd., 19, Grosvenor Place, S.W.1. [98.E]  
New Era Domestic Products, Ltd., 105, Baker St., W.1. [378]  
"New Century" Products, Ltd., 4, Old Road, Enfield Highway, Middx. [335, 337]  
New Era Publishing Co., Ltd., Pitman House, Parker Street, W.C.2. [20.B]  
Newsome, H., Sons and Co., Ltd., Lincoln. [159.H]  
Noelle, Ltd., Borough Green, Kent. [168.H]  
Northern Steel Scaffolding Co., Ltd., Southport. [56.C]

O  
"Official Architect," 28, Essex Street, Strand, W.C.2. [310.T]  
Oliver, Wm., and Sons, Ltd., 12/13, Bow Lane, E.C.4. [81.E] [123.C]  
O'Sullivan, E. (Kenley), Ltd., Cray Avenue, St. Mary Cray, Kent. [144.G]

P  
Paint Removers, Ltd., 24, Ryder St., St. James's, S.W.1. [384.B]  
Parker, Frederick, Ltd., Viaduct Works, Catherine Street, Leicester. [270.P]  
Parsons, Thos., and Sons, Ltd., 70, Grosvenor Street, W.1. [117.F]  
Peerless Built-in Furniture, Ltd., Weston House, Perivale, Middx. [260.O]  
Peglers, Ltd., 58, Southwark Street, S.E.1. [91.E]  
Pegson, Ltd., Coalville, Leics. [25.B]  
Pesture, Ltd., Dacre House, Victoria Street, S.W.1. [394]  
Philplug Products, Ltd., Lancelot Road, Wembley, Middx. [236a.L]  
Pilkington Bros., Ltd., St. Helens, Lancs. [129.G]  
Pioneer Mixers, Ltd., 31, Front St., Monkseaton, near Newcastle-on-Tyne. [306.S]  
Prodorite, Ltd., Artillery House, Artillery Row, S.W.1. [228.L]

R  
Ranalah Sales Corporation, Ltd., Queen Anne's Gate, S.W.1. [110.F]  
Ransomes and Rapier, Ltd., Waterside Works, Ipswich. [212-213.K]  
Rawplug Co., Ltd., Rawplug House, Cromwell Road, S.W.7. [227.L]  
Rawlings Bros., Ltd., 85, Gloucester Road, S.W.7. [59.D]  
Redhill Tile Co., Ltd., Kingsfield, Redhill. [88.E]  
Rentokil, Ltd., School Lane, Fetcham, Surrey. [392]  
Rippers, Ltd., Castle Hedingham, Halstead, Essex. [167.H]  
Riva Fireplaces Co., Ltd., Duke Street, Fenton, Stoke-on-Trent. [62.D]  
Romac Industries, Ltd., The Hyde, Hendon, N.W.9. [390]  
Roneo, Ltd., 17, Southampton Row, W.C.1. [132] [396]  
Ronuk, Ltd., Portslade, Sussex. [115.F]  
Ruberoide Co., Ltd., Commonwealth House, 1/19, New Oxford Street, W.C. [279.Q]  
Runcollite, Ltd., 3, Vere Street, Oxford Street, W.1. [80.D]  
Russell, Macdonald and Co., Ltd., 7/8, Great Sutton Street, Goswell Road, E.C.1. [48.C]

S  
Sadler, T., Sons & Co., 68, High Street, Croydon. [61.D]  
Sal Ferricite & Trading Co., Ltd., 748, Fulham Road, S.W.6. [92.E]  
Sankey, J., & Sons, Ltd., 168, Regent Street, W.1. [51.C]  
Scaffolding (Great Britain), Ltd., 53, Plough Lane, S.W.17. [124.G]  
Scotney, T.M., London Road, Saint Ives, Hunts. [303.S]  
Sealcrete Products, Ltd., Atlantic Works, Macbeth Street, Hammersmith, W.6. [181.J]  
Scottish Metal Furnishings, Ltd., 134, St. Vincent St., Glasgow. [359-371]  
Secomast, Ltd., 25, Upper Brook Street, W.1. [159.J]  
Semet, M., & Co., 2, Caxton Street, S.W.1. [31.B]  
Sementex, Ltd., St. James's House, St. James's Street, S.W.1. [43.C]  
Sharp Bros. & Knight, Ltd., Burton-on-Trent. [268.P]  
Sherwoods Paints, Ltd., Barking, Essex. [47.C]  
Shetack Tool Works, Ltd., Tunstall Rd., Brixton, S.W.9. [304.S]  
Shires & Co. (London), Ltd., 2/12, Norman Buildings, Central Street, E.C.1. [28.B]  
Silexine Paints, Ltd., Richmond Street, Goldhawk Road, W.6. [165.H]  
Silicaseal, Ltd., Westgate Hill Grange, Newcastle-on-Tyne, 4. [400]  
Slingsby, H. C., 89/97, Kingsway, W.C.2. [220.K]

Smith, J., & Co., Ltd., 169, Shaftesbury Avenue, W.1. [339]  
Smith, Sydney, (Industries), Ltd., 261a, High Road, Chiswick, W.4. [52.C]  
Solid Smokeless Fuels Federation, 1, Grosvenor Place, S.W.1. [231.L]  
Solignum, Ltd., Donington House, Norfolk Street, Strand, W.C.2. [108.F]  
Sommerfeld, K. J. & A., Ltd., Trench Works, Wellington, Salop. [235.L]  
Southern Counties Plant Hire, Ltd., Epsom, Surrey. [101.F]  
Staines Kitchen Equipment Co., Ltd., 94, Victoria Street, S.W.1. [23.B]  
Standard Catalogue Co., Ltd., 26, Bloomsbury Way, W.C.1. [211.K]  
Steelcraft Machine Co. (London), Ltd., 288, Station Road, Harrow, Middx. [17.B]  
Steel Scaffolding Co., Ltd., 82, Victoria Street, S.W.1. [67.D]  
Stephens & Carter, Ltd., 731/61, Harrow Road, N.W.10. [293.R]  
Stonehenge Bricks, Ltd., Mile Tree Road, Leighton Buzzard, Beds. [29.B]  
Stothert & Pitt, Ltd., 166, Lower Bristol Road, Bath. [263-264.O]  
Strand Bros., Ltd., 160, Church Walk, N.16. [22.B]  
Structural & Mechanical Engineers, Ltd., 2, Buckingham Avenue, Trading Estate, Slough. [96.E]  
Sundeala Board Co., Ltd., Aldwych House, W.C.2. [226.L]  
Sussex & Dorking United Brick Co.'s, 14, Market Square, Horsham, Sussex. [119.F]

T  
Templar, C. G., & Co., 109, Bollo Bridge Road, W.3. [161.H]  
Tentest Fibre Board Co., Ltd., 75, Crescent Works, Hadley Wood, Barnet. [116.F]  
Thomas & Bishop, Ltd., 39, Arthur Road, S.W.19. [210.K]  
Thompson, Beacon Windows, J., Ltd., Beacon Works, Wolverhampton. [271.P]  
Timber Development Association, 75, Cannon Street, E.C.4. [261.O]  
Torrance & Sons, Ltd., Bitton, near Bristol. [264.O]  
Trade Chronicles, Ltd., 6, Carmelite Street, E.C.4. [18.B]  
Tretol, Ltd., 12, North End Road, N.W.11. [156.H]  
Trianco, Ltd., Imber Court, East Molesey, Surrey. [266.P] [269.P]  
True Flue, Ltd., Carlisle House, 8, Southampton Row, W.C.1. [14.A]  
T. T. Industries, Duke Street, Fenton, Stoke-on-Trent. [63.D]  
Tungum Sales Co., Ltd., Brandon House, Paiswick Road, Cheltenham. [307.T]  
Turner, C., & Sons, Ltd., Bloomsbury House, 165, High Holborn, W.C.1. [75.D]  
Twistell Reinforcements, Ltd., 8, Buckingham Palace Gardens, S.W.1. [70.D]

U  
Union Glue & Gelatine Co., Ltd., Cransley Works, Garrett St., E.C.1. [34a.B]  
Universal Cleaning & Restoration Co., Ltd., Richard St., Goldhawk Rd., W.6. [177.J]  
Utilities (London), Ltd., 435/7, Brixton Road, S.W.9. [135a.G]  
Uva Products, Ltd., Hinckley Road, Burbage, Leics. [30.B]

V  
Vent Axia, Ltd., 9, Victoria St., S.W.1. [2.A]  
Vickers Armstrongs, Ltd., Vickers House, Broadway, S.W.1. [150.H] [195.J]  
Vickers Goodwin, Ltd., Albion Works, Kidsgrove, Staffs. [109.F]  
Vigers, A., Sons & Co., Ltd., 59, Poland Street, W.1. [346]  
Vitreflex, Ltd., Dafen, Llanelly, South Wales. [285.Q]  
Vulcan Products, Ltd., 24, Ryder Street, St. James's, S.W.1. [38.B]

W  
W.B. Hollow Blocks, 32, Ludgate Hill, Birmingham, 3. [176.J]  
Wallis & Co., Ltd., Nottingham Rd., Long Eaton, Notts. [204.K]  
Ward's Flexible Rod Co., Ltd., 81, High St., Farnborough, Kent. [233.L]  
Warerite, Ltd., 18, Grosvenor Gardens, S.W.1. [77.D]  
Warren Marketing, Ltd., 72, Victoria St., S.W.1. [19.B]  
Watford Wheel & Truck Works, 173, Queen's Road, Watford, Herts. [353]  
Weldall & Assembly, Ltd., Eyre St., Birmingham, 18. [247.N]  
Whitfill Corp'n., Ltd., 24, Hammersmith Bridge Road, W.6. [314.T]  
Wickham Engineering Co., Ltd., 34, Victoria St., S.W.1. [142.C]  
Williams & Williams, Ltd., Reliance Works, Chester. [72.D]  
Wilsons of Enfield, Ltd., 191/3, Ordnance Road, Enfield, Middx. [289.R]  
Winget, Ltd., Rochester, Kent. [251.N]

Y  
Yorkshire Copper Works, Ltd., Leeds. [128.G]  
Youngman, W. C., Ltd., Wandsworth Works, Wandsworth Rd., S.W.8. [206-207.K]

Z  
Zinc Alloy Rust Proofing Co., Ltd., Shakespeare St., Wolverhampton. [357]  
Zinc Development Assoc'n., Lincoln House, Tud St., Oxford. [171.H]



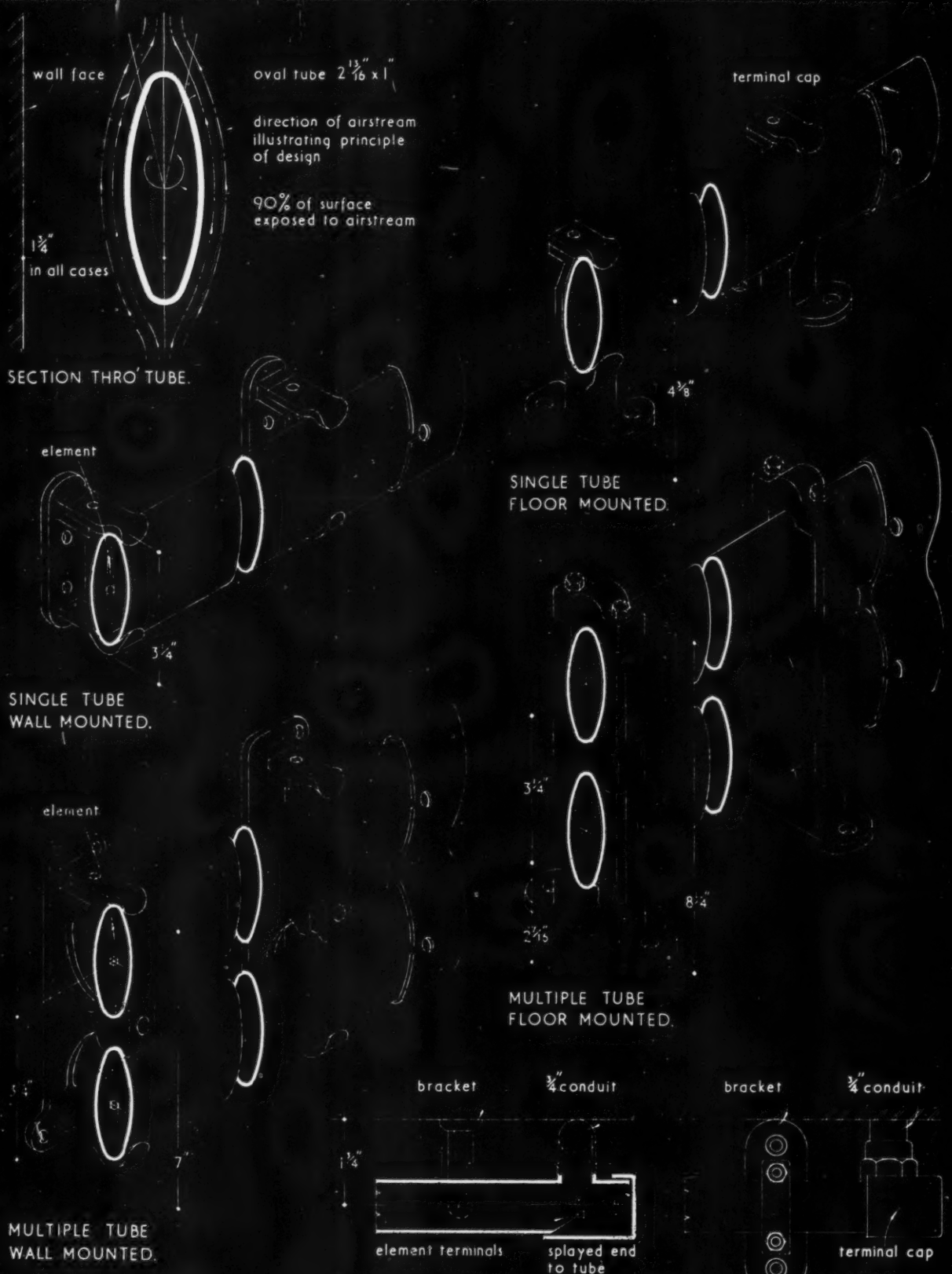




# SPACE HEATING | SYSTEMS | ELECTRIC

29.G I

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## 29.G1 • MAXHEAT • TUBULAR ELECTRIC HEATER

## General

This Sheet describes an electric heater the basic component of which is an oval steel tube containing throughout its length an electric heating element operating at a low temperature. The section of the tube ensures that at least 90 per cent. of the surface is exposed to the air current caused by the heat. An installation may consist of a single tube or a series of tubes arranged in vertical tiers and mounted on floor or wall brackets. The tubes are sealed at each end with terminal caps, fixed at one end and removable at the other for conduit connection. They are available with a loading of 60 to 80 watts per foot run.

## Sizes

The lengths of tube obtainable are from 2 ft. to 17 ft. in rises of 1 ft. and the projection from wall to face of tube is  $2\frac{1}{4}$  in. Overall heights for different tiers are given in the following table.

| WALL MOUNTED |              | FLOOR MOUNTED |              |
|--------------|--------------|---------------|--------------|
| No. of tubes | o/a height   | No. of tubes  | o/a height   |
| 1            | 3½ in.       | 1             | 4½ in.       |
| 2            | 7 in.        | 2             | 8½ in.       |
| 3            | 10½ in.      | 3             | 11½ in.      |
| 4            | 1 ft. 1 in.  | 4             | 1 ft. 2½ in. |
| 5            | 1 ft. 4½ in. | 5             | 1 ft. 6 in.  |
| 6            | 1 ft. 7½ in. | 6             | 1 ft. 9½ in. |

## Fixing Brackets

These are of two types, wall mounted and floor mounted and may be fixed with wood screws into plugs. Two brackets are supplied with lengths up to 8 ft., three for lengths from 9 ft. to 12 ft., and four for lengths from 13 ft. to 17 ft.

## Connection

The connection to the heater is provided at the back of one end of the lowest tube. The conduit outlet

is for  $\frac{3}{4}$  in. screwed conduit, but a universal angle outlet is also available. Bushed outlets can also be supplied or provision made for  $\frac{9}{16}$  in. internal bore C.T.S. cable gland. Outlets may be provided to each tube of a multiple-tiered heater when individual tube control is required.

## Finish

The standard finish of the heater as supplied is heat resisting brown.

## Applications

*Schools* : Heaters should be installed round the walls ; in the hall, which is usually lofty, additional tubes should be placed at high level to obviate draught. In cloakrooms the tubes should be mounted below each rack. To ensure an even temperature throughout the day the complete installation should be thermostatically controlled.

*Cinemas and Theatres* : Tubes should be placed under the seats to afford an even distribution of heat over the floor area. As the auditorium fills sections of the installation may be switched off.

*Churches* : To obtain an even distribution of heat the tubes should be installed under the pews. Draughts, which are usually common below the clerestory windows, should be countered by additional tubes at high level.

*Greenhouses* : Tubes rated at 80 watts per foot run and thermostatically controlled provide the most suitable installations.

Compiled from information supplied by :

The Wardle Engineering Co. Ltd.

Head Office : Old Trafford, Manchester 16.

Telephone : Trafford 1801-3.

London Office : 34, Victoria Street, S.W.1.

Telephone : Abbey 4072.



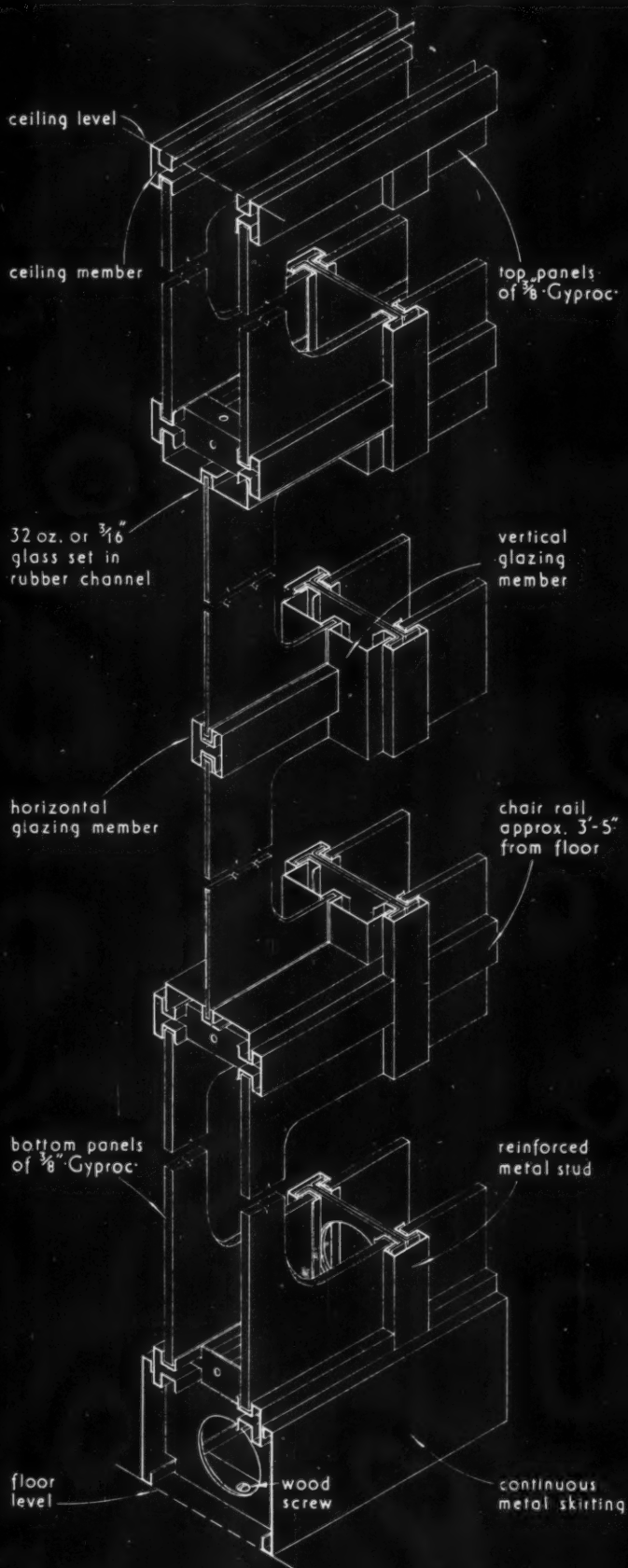




# PARTITIONS | PLASTER BOARD

21.G1

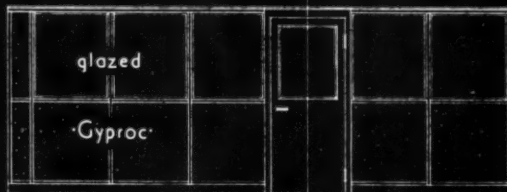
The Architects' Journal Library of Information Sheets 16. Editor: Cotterell Butler, A.R.I.B.A.



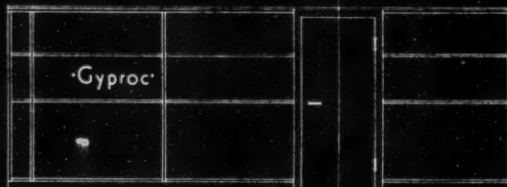
TYPE D.V.42. approx. height 4'-0"



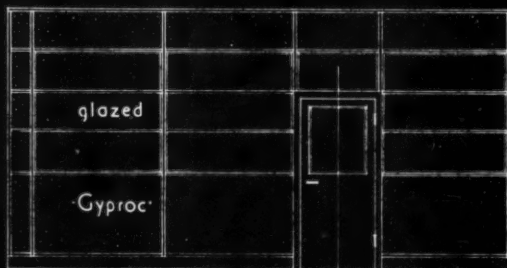
TYPE C.V.S. approx. height 7'-0"



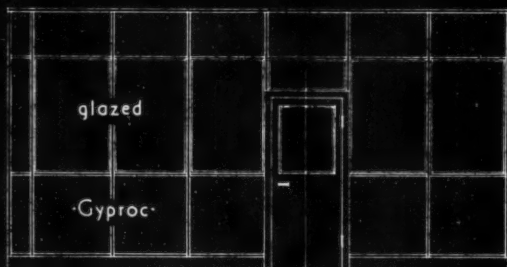
TYPE C.V.G.36.



TYPE C.H.S.42.



TYPE G.H.123. (typical horizontal construction)



TYPE G.54. (typical vertical construction)

CONSTRUCTIONAL DETAILS AND TYPICAL STANDARD ARRANGEMENTS:  
GYPSTEEL PARTITIONS.

Manufacturer: Gyproc Products Limited.

## 21.G1 'GYPSTELE' PARTITIONS

### General

This Sheet describes partitions combining the use of 'Gyproc' fire-resisting plasterboard as panels, with metal structural members, panel strips and fittings forming light-weight, structurally strong partitions for sub-dividing large floor areas. The technique is dry throughout so that damage to hardwood floors or wall and ceiling surfaces is negligible. Glazing and doors may be fitted in the original design or added later as required. All glass is set in heavy rubber channelling. The components may be re-erected after demounting and moving even when ceiling heights differ.

### Sizes

The overall thickness, including the air space between two sheets of 'Gyproc', is 4 in. Long runs of free standing partitions require vertical supports at not more than 12 ft. centres.

### Finish

The protective finish of the metal components and the standard treatment of the 'Gyproc' panels allows the choice of any painted or enamelled finish to suit the surrounding decoration.

### Sound Resistance

The method of glazing and the exclusion of metal panels in the partitions minimises the transmission of sound waves by reducing vibration.

### Trade Name

This is a proprietary system manufactured under the registered trade mark 'Gypstele'.

*Compiled from information supplied by :*

#### Gyproc Products Ltd.

Head Office : Westfield, Upper Singewell Road

Gravesend, Kent.

Telephone : Gravesend 4251-2-3-4.

Telegrams : Gyproc, Gravesend.

London Office : Morris House, Jermyn Street, London, S.W.1.

Telephone : Whitehall 9821-5.

Glasgow Office : Gyproc Wharf, Shieldhall, Glasgow S.W.1.

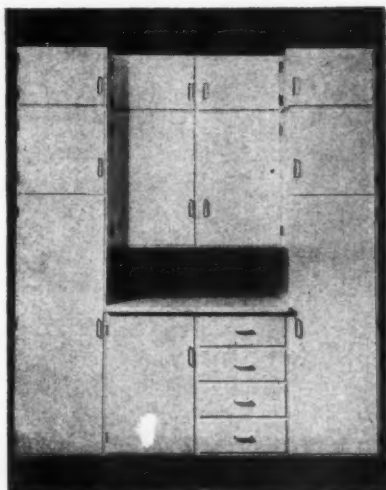
Telephone : Govan 614-5-6.

Telegrams : Gyproc, Glasgow.

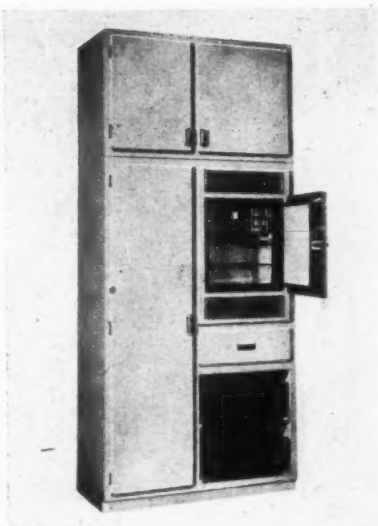
*After a gap of nine years, the Building Exhibition opened yesterday at Olympia. In spite of current difficulties there are more than 370 exhibitors. In the following pages is a preliminary survey of some features of the exhibition.*

## BUILDING EXHIBITION

In this general note on some of the goods to be found at the Building Exhibition it is convenient to consider the problem of housing first, and to take note of the very considerable developments which have been made since 1939. In this field there have been two major departures from accepted practice: first of all, an attempt has been made to define house construction in terms of actual performance rather than in specifications of materials and thicknesses, while at the other end of the scale the majority of the essential items of house equipment have been provided with dimensional standards, to which nearly all manufacturers now adhere.

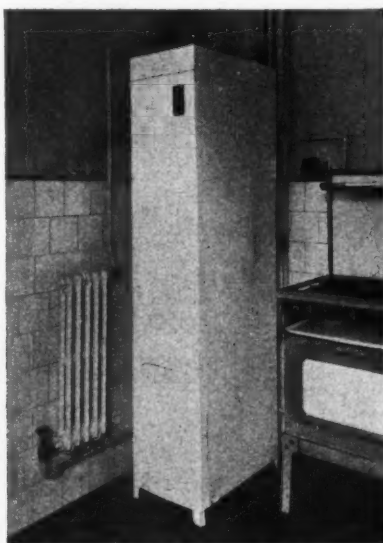


*Standardised kitchen cabinets made by members of E.J.M.A. Planned in units 21 in. square with a worktop height of 36 in., they may be arranged to suit almost any kitchen plan.*



*The Electrolux M151 gas-operated refrigerator arranged for building in, and shown in standardized kitchen cabinets.*

This new approach to housebuilding structure may be said to date from the publication of the Burt Report, which made specific recommendations for, among other things, the thermal conductivities desirable in walls, floors and roofs, and then went on to suggest the various forms of construction by which these figures might be achieved. The point may seem to be a small one, but it is a fundamental departure from the by-law approach which defines structure in terms of



*Gas-fired thermal storage hot-water system by Thomas Potterton.*

stability and weather resistance, and thereafter assumes that the resultant house will automatically be quite suited to human habitation. The Burt Report was the first, or almost the first, to attack the problem from the point of view of comfort and of long-term economy in actual use, as against the more usual criterion of minimum first cost. We still may not fully know the conditions in which people would really like to live; this aspect is being further pursued by Professor Bernal's Scientific Committee; but in the meantime designs are being based on the

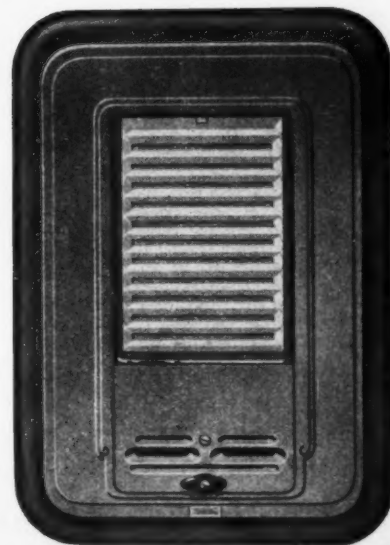
obvious savings which can be made on our present living habits, so that tenants may be able to have a house which they can afford to maintain.

Parallel with house structure the fuel burning appliances have been completely revised, and show considerably increased efficiencies, coupled with greater ease of operation. Two main types, the "openable stove" and the "closeable fire" (regrettable but at least explanatory classifications) are now used to provide hot water, space heating for the room in which they are installed, and con-



*Closeable open fire developed by the Coal Utilization Research Association. The air to be warmed and fed to the upper floors is fed to the fire through the hearth or from outside the house, and the hopper holds a full week's production of ash.*

ducted warm air background heating on the floor above. Some firms provide a stove and boiler which will feed radiators on the upper floor, the radiators forming part of the normal fireplace and having inset gas or electric fires for topping up. Heavily insulated solid fuel cookers of the type first



*Silent Beam luminous flame gas-fire arranged for building in. (Radiation.)*

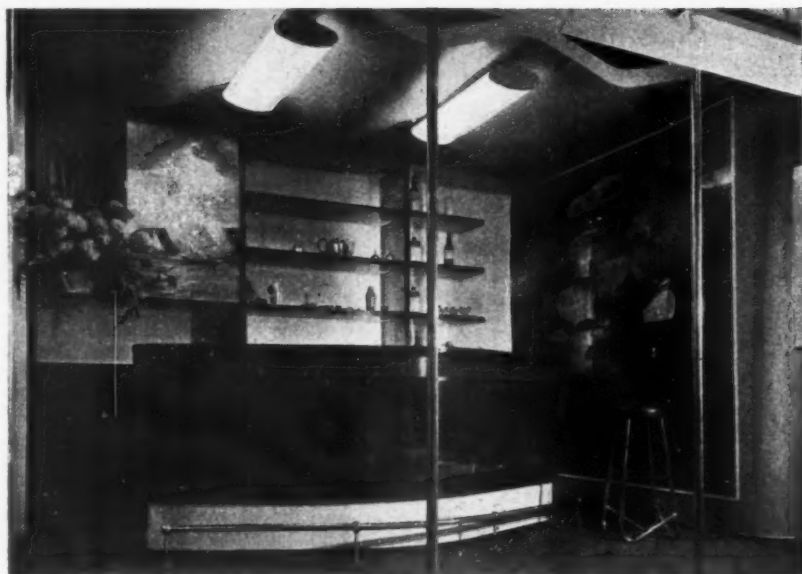
popularized by Aga and Esse are now made by a number of other firms, sometimes as a single back-to-back unit combined with the living-room fire, while there is a further type of combined solid fuel and gas cooker.

In the immediate post-war period there were a number of prefabricated plumbing units which contained nearly all the services required for the whole house. They are still used in a number of the permanent prefabricated houses, but their use in traditional building is decreasing, perhaps because the small builder is not properly organized for them, and also partly because the large savings produced by factory assembly may be almost nullified by heavy transport costs.

So far as the equipment of the house is concerned, a full series of standards has been evolved by the Ministry of Works in conjunction with the British Standards Institution. Kitchen cupboards and fittings, for instance, have been worked out on a unit plan 21 inches square with a work top height of 36 inches, and cookers, sinks, refrigerators and water heaters are all made to this standard. The members of the English Joinery Manufacturers' Association, for instance, produce a full range of kitchen cupboards and drawers, with a further series of wall cupboards 12 inches deep, all of which may be fitted into a kitchen of almost any plan. Standard dimensions are also adhered to by nearly all the other firms making kitchen equipment.

Similar standards have been agreed for wood and steel windows, for baths, lavatory basins, rainwater goods and plumbing fittings of all types.

In considering the newer materials it is always necessary to remember that the familiar timber, steel and cast iron are in extremely short supply, and the wide use of alternatives is often due to the fact that they are more readily available, and therefore have to be used even if they are not truly economic. Most of the new materials when used as substitutes have yet to prove themselves in free competition, and at the moment tend to be high in first cost. It is necessary, however, to remember that plastics and light alloys have virtues of their own such as light weight, high strength



*Decorated Formica plastic sheeting used as wall panelling, bar top and bar front.*

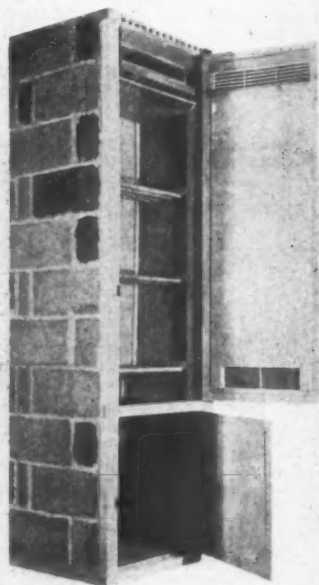
or resistance to wear or corrosion, which may make the final product very much better, so that a strict cost comparison may not be altogether valid.

Among the older and better known materials there have been considerable developments. Asbestos-cement sheeting, for instance, is now made in new shapes for roof decking and light partition work, and there are a number of composite sheetings made up with a core of some insulating material and faced with a weatherproof skin. Insulating wall linings are also produced in increasing quantity, perhaps partly

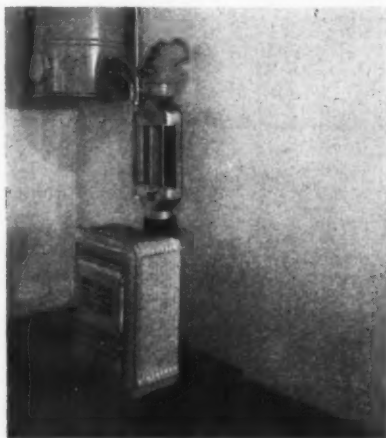
costs are necessarily high. This form of lighting does not yet seem really suitable for the small house, though it is rapidly becoming almost standard practice in shops, factories and offices, where the problems of maintenance and re-lamping are more under control. Wiring regulations have been brought up to date to allow for the increasing use of plastic insulated cables, and a new range of British Standard plugs and sockets is now in production for use with the ring main systems which are now allowed in domestic work.

So far as decoration is concerned, the shortage of good quality paints has stimulated the already growing demand for panel materials, which provide their own finish. Laminated plaster boards are now made by several different firms, and can be used for such things as counter and table tops, as well as panelling in the more expensive buildings.

But with all these very considerable developments, research continues, not only by private firms, but by Government Departments. Both the Ministry of Fuel and Power and the DSIR are represented at the Exhibition, and give some outline of the work which still remains to be done.



*Prototype gas-heated drying cupboard to be built in breeze block with a plastered internal finish. A flue is not necessary if the room is well ventilated.*



*The Aidas aircoil, a supplementary water-heating device fitted in the flue of a slow combustion stove and used with the normal electric water heater.*

as a result of the wide war time use of plaster board, but the problem of making a really neat joint is not yet properly solved.

Electrical equipment shows no very startling developments, though here again standardisation and the reduction in the number of different types of cooker and heater has allowed manufacturers to produce at rather more than their pre-war rate. Fluorescent lighting has been widely publicised, and shows a very marked saving in current consumption, though installation

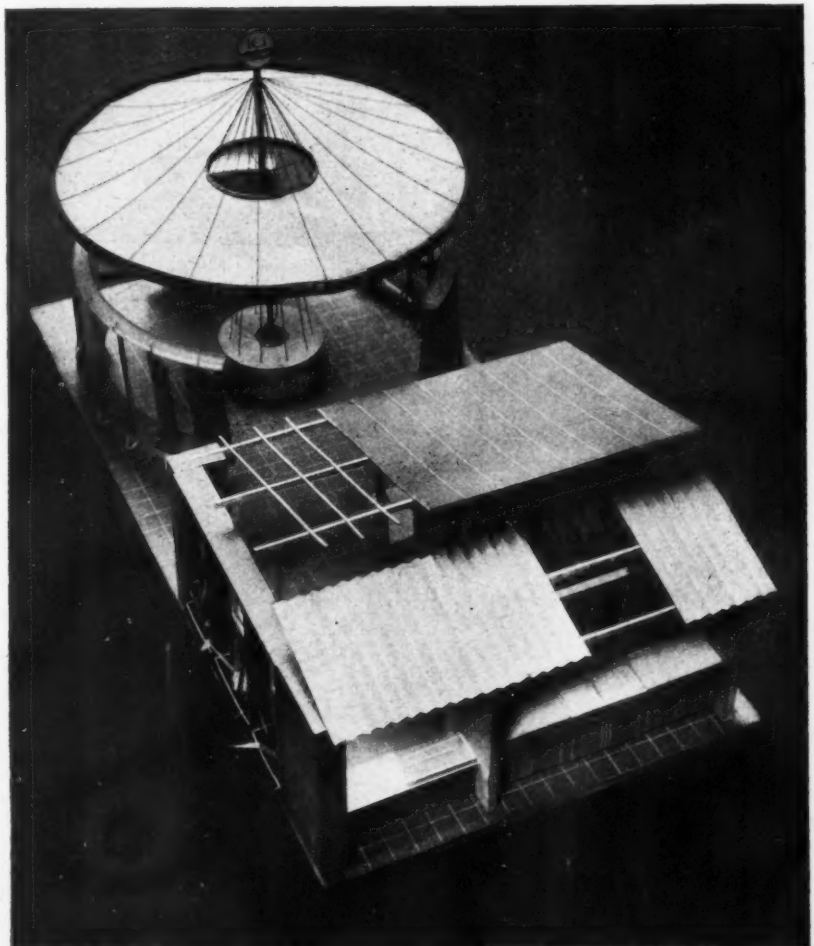
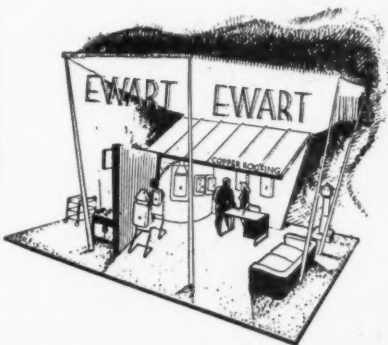
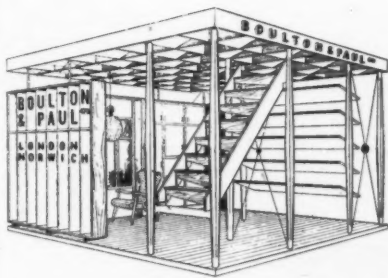
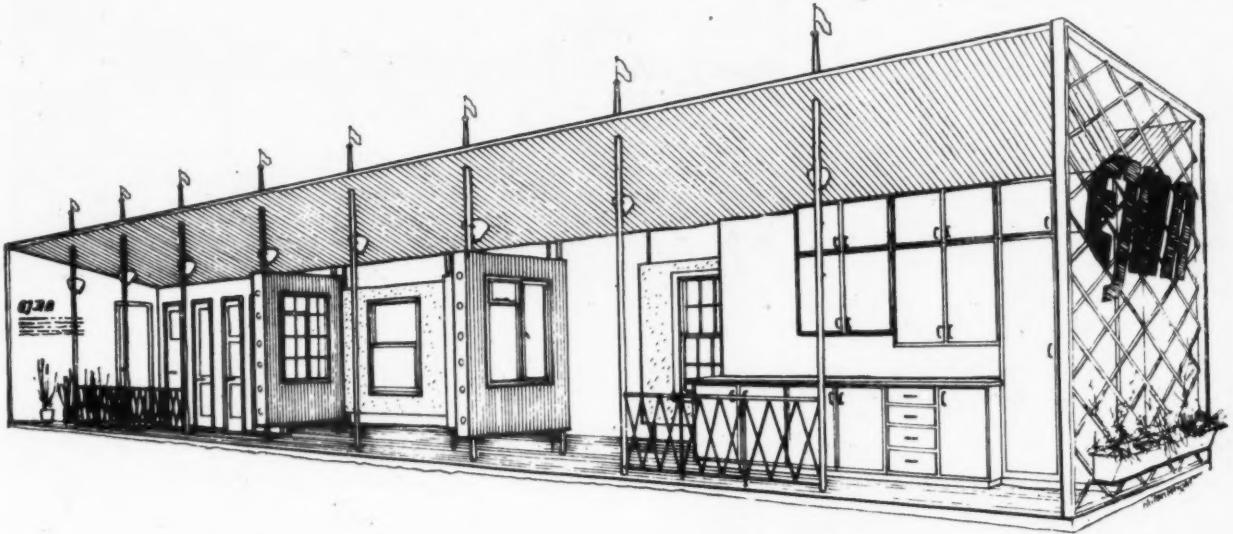


*The new Radiation type 1430 cooker, to British Standard dimensions.*

Stand  
Manu  
MacM  
Ltd.,  
Co-op  
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om r  
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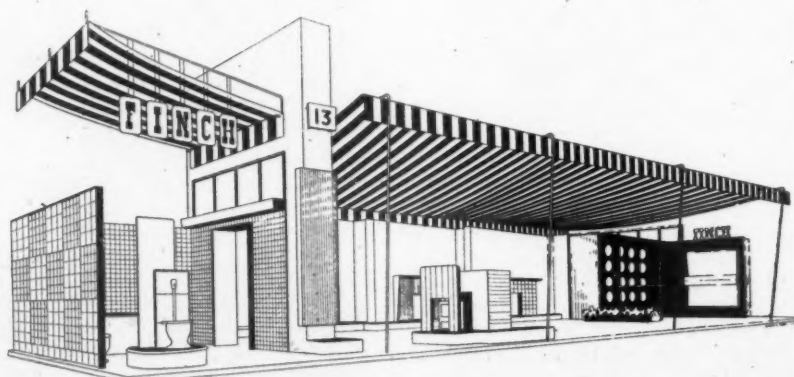
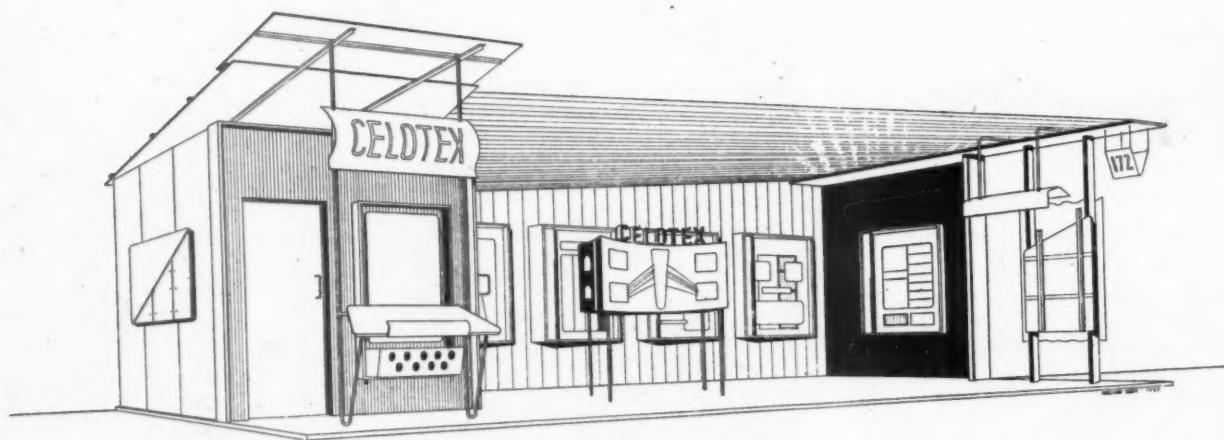
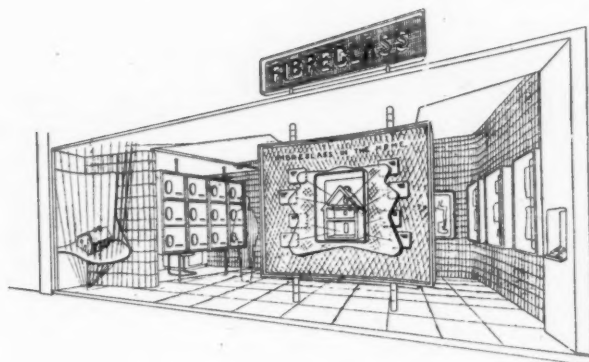


# STANDS AT THE BUILDING EXHIBITION



Stands for: top, The English Joinery Manufacturers' Association, by Frederick MacManus; centre, Boulton and Paul Ltd., by A. W. Cox of the Architects' Co-operative Partnership; bottom left, Ewart and Son, by C. Roy Fowkes; bottom right, Imperial Chemical Industries Ltd., by Arcon.

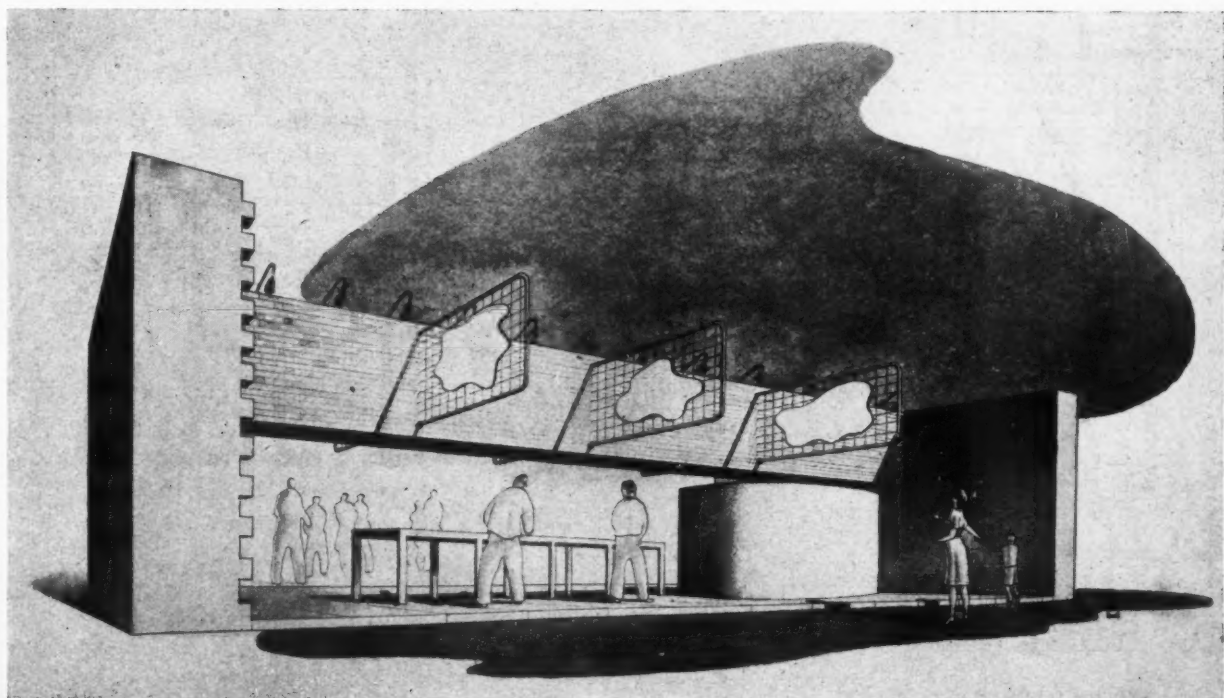
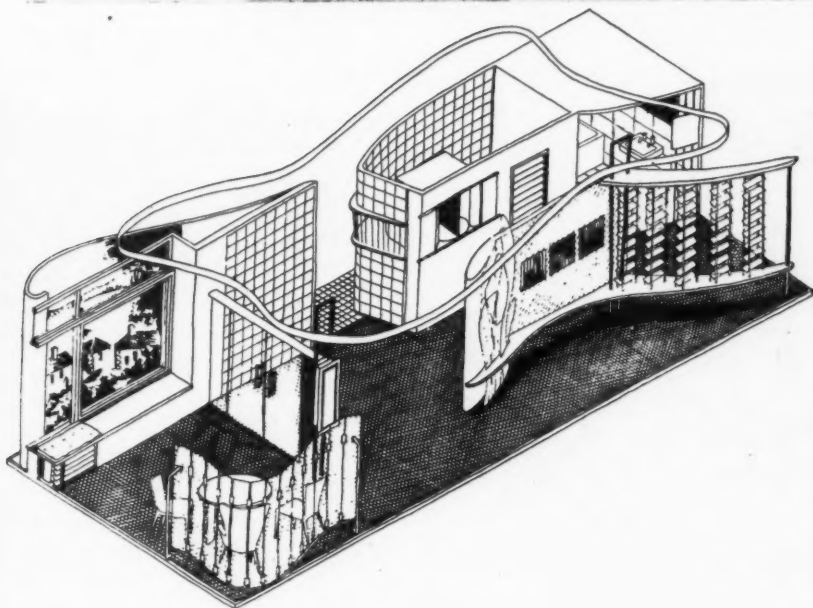
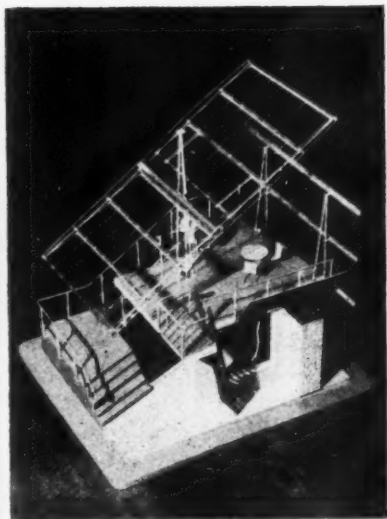
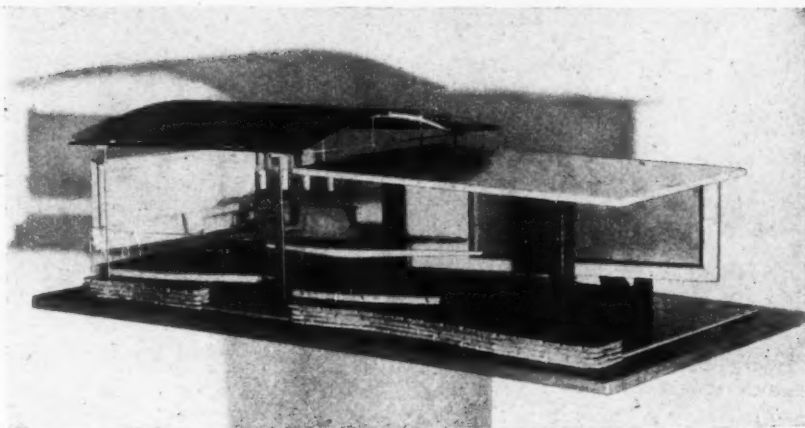
# STANDS AT THE BUILDING EXHIBITION

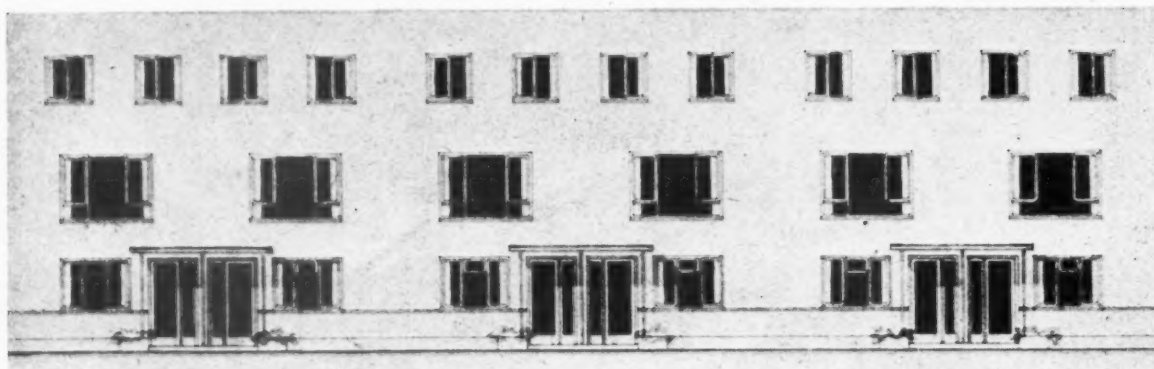


Stands for: top, De La Rue Insulation Ltd., by S. P. Jordan; centre left, Cementone (Joseph Freeman Sons and Co., Ltd.); right, Fibre-glass Ltd., by Brian Peake; bottom, Celotex Ltd., and B. Finch and Co., Ltd., both by Arcon.

Stand  
Ltd.;  
Ltd.,  
Bros.,  
bottom  
Richa

*Stands for: top, Ascot Gas Water Heaters Ltd.; centre left, Williams and Williams Ltd., both by Arcon; right, Pilkington Bros., Ltd., by Kenneth Cheesman; bottom, London Brick Co., Ltd., by Richard Nickson.*



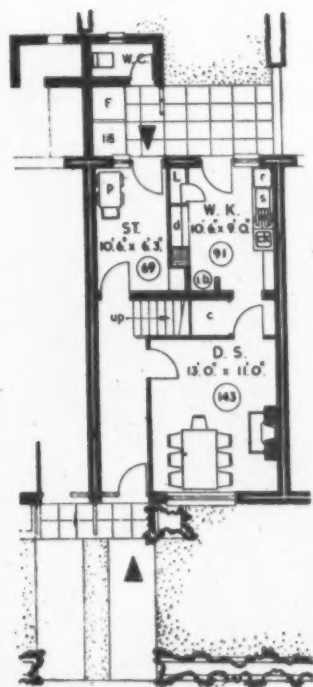


ELEVATION TO ROAD

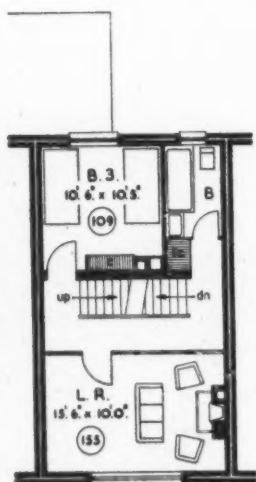


# MINISTRY OF HEALTH THREE-STOREY TERRACE HOUSING

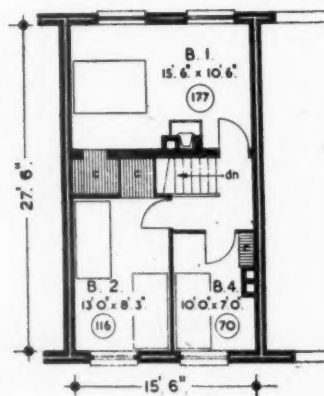
7 persons—working kitchen, south aspect, 15' 6" frontage, floor area 1,210 sq. ft.



GROUND FLOOR



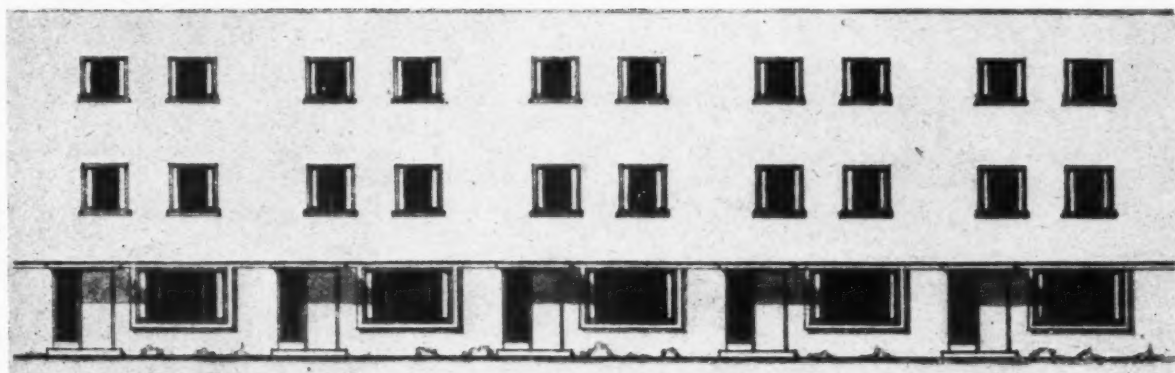
FIRST FLOOR



SECOND FLOOR

SCALE 0 5 10 15 20 25 FEET

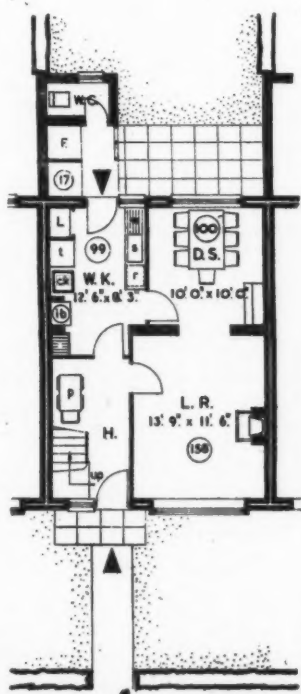
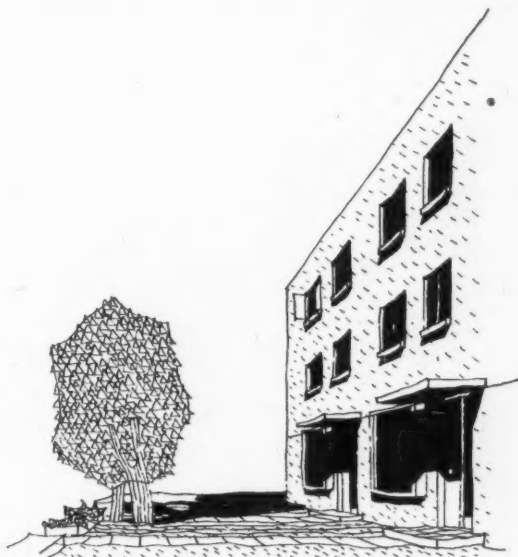




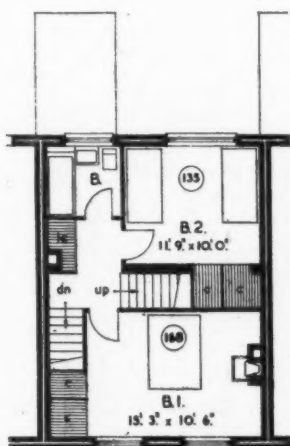
ELEVATION TO ROAD

The Ministry of Health is making the Building Exhibition the occasion for displaying for the first time to the public and the architectural profession some new type plans which represent an important development of their housing policy. These type plans are for three-storey housing and for four-storey combined flats and maisonettes. They have been devised by the Ministry's architects and are for the guidance of local authorities concerned with urban development. Plans, elevations, models and other data are displayed on a stand organized jointly by the Ministry of Health, the Ministry of Works and the DSIR. The three-storey houses are illustrated on these pages; the maisonettes will be illustrated next week. The Ministry's purpose in experimenting for the first time in three-storey housing is to reconcile high-density development with the advantages of the individual house with its private garden, and these plans are based on very narrow frontages, the additional storey making up for the smaller area. Three types have been worked out for different frontages and accommodation requirements, all intended for use in the form of terraces or squares. One type follows fairly closely the normal planning of Georgian and Regency terrace housing, but the other two represent a radical departure in that the stairs are placed parallel with the front instead of at right-angles to it.

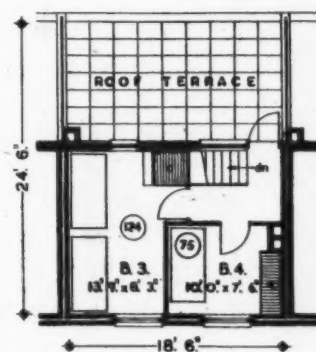
2 7 persons—working kitchen, east-west aspect 18' 6" frontage, floor area, 1,161 sq. ft.



GROUND FLOOR

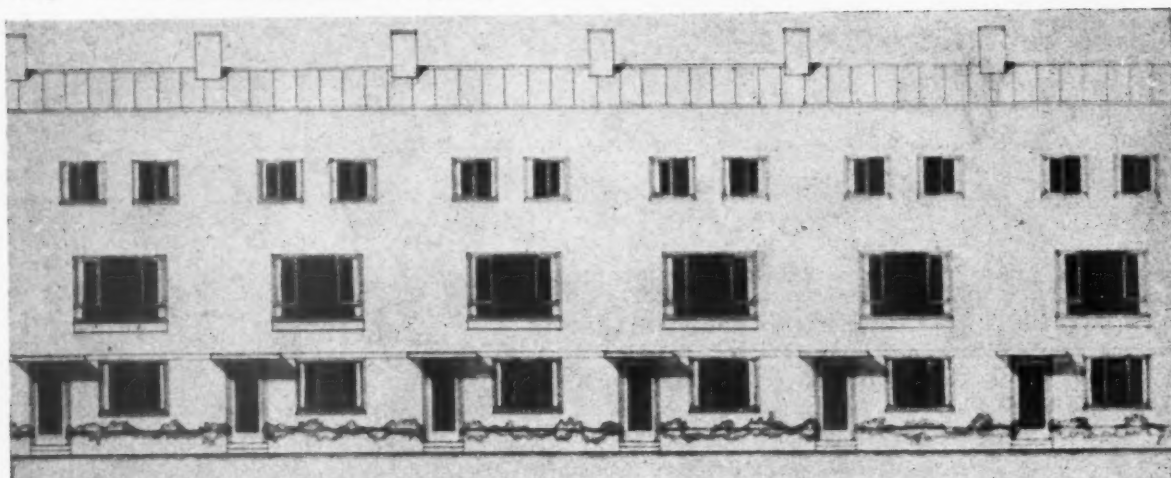


FIRST FLOOR



SECOND FLOOR

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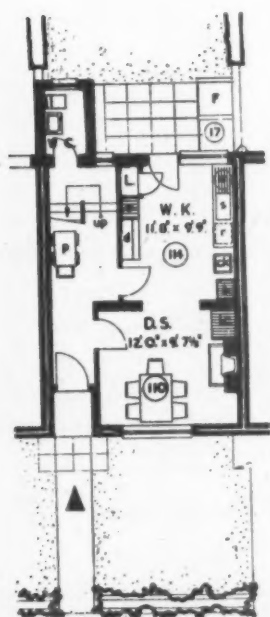


ELEVATION TO ROAD

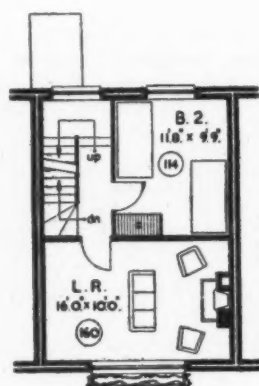


# THREE-STOREY TERRACE HOUSING

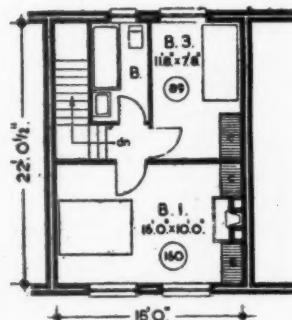
**3** 5 persons—working kitchen, south aspect 16' 0" frontage, floor area 1,058 sq. ft.



GROUND FLOOR

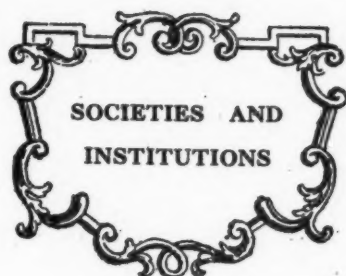


FIRST FLOOR



SECOND FLOOR

SCALE 0 5 10 15 20 25 FEET



*Speeches and lectures delivered before societies as well as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. Except where inverted commas are used, the reports are summaries, and not verbatim.*

## BINC

### Fourth Building Conference

Nov. 18 and 19. At Leas Cliff Hall, Folkestone. Fourth Building Congress. Among papers read were SCHOOLS, by C. G. Stillman; RESEARCH, by Professor C. A. Mace; THE ARCHITECT, by Sir Thomas P. Bennett.

#### Schools

**C. G. Stillman :** It will be remembered that in 1944 the Board of Education produced a report on Standard Construction for Schools (Post-war Building Studies No. 2) in which two positive recommendations were made: (1) On the desirability of adopting some system of standardization for school construction; and (2) that the necessary research should be undertaken, "with a view to issuing, for the information of Local Authorities' Architects, as well as of industry, the more technical detail required for the production of suitable structural elements, etc."

The task has not been an easy one. It is easy enough to propound a theory for standardization, but it is exceedingly difficult to apply the theory to practice in such a way that will make its adoption of real practical value. At the same time, the need for every possible economy in labour and material is self evident, and the study the Ministry of Education is making of this subject will prove most useful. Local Education Authorities will be encouraged to adopt some system of standard unit construction, preferably one which can be kept as flexible as possible.

A number of systems for standardized construction are now being examined as part of the efforts being made in providing additional classroom accommodation for the raising of the school leaving age. Approval to the erection of some permanent schools has been granted under a special "Operational" programme introduced at the beginning of the year. These are of one-storey construction, steel framed and designed to use RSJ sections. A small number of these schools are now in the early stages of being built. Altogether, proposals for work amounting to something over £20 million have been approved and are ready to start. This "bank" of approvals is steadily mounting and the need for speeding up plan procedure is not now a matter of urgency. It has established a satisfactory position in placing the drawing office work in advance of actual building, and drastic steps for cutting down drawing office time are no longer necessary.

#### A SLOW START

The slow start and the fact that much of the accommodation needed for raising the compulsory leaving age, and in connection with new housing estates may not be available when required, is not a matter for blame on the part of Education Authorities. The Local Authorities have done everything possible. The delay has been due to the non-supply of building labour and material. The complete uncertainty surrounding the issue of building licences; the fact that the WBA priority granted for schools is practically worthless; the ban on bricks and light steel; the negligible allowance of timber (1 standard per 200 children) and continual changing about have been the cause of delays and additional work in the drawing office and on the job. All attempts to obtain a reasonable semblance of job organization have broken down due to failure in the supply position.

Whilst we realize that schools must take second place to housing as a matter of general policy, it is senseless to apply second rate measures to the operation of individual jobs. If a job is of sufficient importance to be granted a licence and be allowed to start, it should be given its full quota of labour and materials. In the particular case of new schools required to serve new housing estates, the highest degree of priority must be given if these schools are to be ready for occupation at the same time as the houses.

It is, of course, well known that about 90 per cent. of the children now entitled to a secondary education attend elementary schools, none of which has the accommodation and equipment to offer a full course in secondary education. Many of these elementary schools are obsolete and unsuited to present-day requirements, even for primary education.

#### ECONOMIES IN CONSTRUCTION

The subjects which cannot be taught without costly equipment and additional buildings are Science and Engineering, practical work, Art, Music and Physical Education, and the standard of floor space required for these subjects is fixed beyond discussion by statutory order and regulation. We cannot, therefore, effect economies on the chief factor in the cost of school building, i.e., the cubic contents, since no reductions can be made in the number and sizes of rooms. We have already shed all suggestion of enrichment, and in some cases refinement, in our efforts to cheapen the building fabric. If we continue to make cuts in fabric cost we shall be merely adding to the ever-increasing burden of maintenance. On the other hand, British Standard Specifications and Codes of Practice tend to increase fabric cost, but a higher standard of performance is obtained which reduces cost of upkeep. Mass-produced pre-fabrication is a means by which we hope to reduce the demands to be made on building labour and material,

but here again the economies likely to be effected cannot be sufficient to make a substantial difference to the programme as a whole. The principal obstacle to progress will be our inability to build according to the stated requirements of the 1944 Act: that the magnitude of these requirements cannot be reduced appreciably by design technique, and that the immediate means for expediting progress would be to modify the stated requirements. If this diagnosis is correct, the possibility of effecting such modifications should be examined without delay, and full advantage taken of the present enforced lull in building operations to do this. Any such modifications should, however, be of a temporary character and made the subject of review later in the light of prevailing economic conditions.

#### Research

**Professor C. A. Mace :** The right approach to this question of research is not, in the first instance, a technical approach, but the approach of practical good sense. Building research, simply and rightly viewed, is nothing but the attempt to solve building problems. Building is not a routine operation. Everyone has to think about the best way in which his particular job can best be done.

This is the point where organized research can come in. Some problems are so important that it is worth while to get someone to look into all the promising possibilities, to make experiments and then to come back to the site with the results. This gives us a guiding principle in all the varied problems with which a research organization for the building industry would be called upon to deal. The principle is thus: Research begins, and it ends, on the building site.

But the principle points another moral which is not less important. Not only must the man on the job be research-minded; it is not less important that the experts should be men with practical, realistic minds, and acquainted with the actual conditions under which the problem arises and under which the results of research have to be applied. It is here that a difficulty arises from the high degree of specialization in the sciences, and the long-training required for a man to obtain a mastery even of a particular field in any one science. But there is hardly a problem arising in an industrial setting which does not depend for its solution upon a combined contribution from several sciences. War experience has produced some new ideas and among these is the idea of "operational research." This type of organization affords a workable basis of co-operation not only between the scientists themselves, but also between the scientists and those with long practical experience in the industry. If building research begins and ends on the site, it is for those who meet the problem in a practical setting, and who have in the last resort to apply the results of research, to take their place as not less than equal partners in the team of those engaged in operational research.

#### THE TECHNICAL APPROACH

To see how this idea works out in practice, take any representative problem. Take the first that comes to mind: what is the best size and shape for a brick? And of what material should the brick be made?

There are two ways in which you could make this a matter for research. The first is this: You could hand it over straight away to the scientists. Maybe one of them would say: Why make bricks of clay? Why not aluminium? This may be a sensible suggestion. But once you change one thing, you never know where the effects will end. If you change the material, you will change the shape and size. "Bricks" of aluminium can be three or four feet square and a



quarter of an inch in thickness. Then you have got to think of a substitute for mortar for joining them together. Clearly, physicists, chemists and engineers will have to work as a team. Suppose they do, and that they come back and say: We have found a way of building houses of aluminium bricks, four or five feet square, screwed to a frame. And in this way you can build double the number of houses in less than half the time. This would be important, but, clearly, they will have created about as many new problems as the old ones they have solved.

You have now to ask: Where do I get the labour? How do I organize the job? And, by the way, what will the architects say? And, last but not least, the people who are going to live in the houses, what are they going to say? You switch from clay to aluminium and you turn the building industry completely upside down. The problem is not solved until you have heard the evidence of those who are concerned with the recruitment and the training of the men who are going to do the job, the men whose hands will get sore, and whose backs will ache in shifting the bricks about, the men who are going to plan and organize, and the men whose job it is to see to the human needs of those who live in houses when the houses are built. In short, you can't leave it to the physicists, the chemists and the engineers to do the job alone. You will have to bring in the economists, the specialists in management and industrial techniques, and the representatives of the human and the social sciences. You have got to bring in the architects and you will have to bring in the industry as a whole. And if you have to bring them in at the end, why not have them in at the outset?

This is the second approach. Building research began and it ends on the site, wherever it may go in between. Innovation must be grafted on to tradition. New discoveries must be an addition to what is already known. The research team must include those who have this knowledge at their finger tips. It must contain representatives of those who actually do the job. They have some of the essential data from which the experts must work.

#### THE INDUSTRIAL APPROACH

These two lines of approach are not incompatible. We need both. There is a case for letting the experts go to work from first principles. They will make important contributions, but they will not solve the problem. We also need the larger team in which the specialists are working side by side with those who actually do the job. It is, I think, mainly because it has adopted this second line of approach that the building industry has laid the foundation for a research organization greatly in advance of what most other industries enjoy. It has included in its research teams, side by side with the physicists and chemists, economists, physiologists, and representatives of all the human and the social sciences, each of whom brings to bear specialised techniques of investigations appropriate to the extremely varied problem which the industry presents. It might claim, in fact, to offer the first example of the application to the cause of reconstruction, the type of research organization developed in the cause of total war.

## The Architect

*Sir Thomas P. Bennett:*

There is a widespread feeling in the country that the building industry is producing less than it might be expected to produce with a million and a quarter operatives. It is, therefore, important to examine the conditions under which it is working to see whether there is any foundation for such an opinion.

The industry is faced with a large measure of Government control operated through a number of different Ministries. The Ministry of Works, the Ministry of Health, the Ministry of Town and Country Planning, the Sponsoring Ministries with approvals for the buildings for which they are responsible, e.g., Board of Trade—commercial premises and factories, Ministry of Health—hospitals, Ministry of Transport—roads, and so on. In addition the building industry in its early stages of site planning is faced with the views of War Agricultural Committees and the Ministry of Agriculture.

Overriding the Ministries, or rather working parallel with them, many building contracts encounter:—

(a) The War Damage Commission;

(b) The Local Authority.

It must be realised that in order to operate these controls it is necessary to employ technicians, i.e., architects, engineers, and surveyors. In the nature of things every technician approaches the problem with his own ideas of the solution, and these solutions are liable to vary substantially. In the case of men of capacity, and with the right mental approach, differences can be adjusted. In other cases the adjustment is a prolonged operation. It is, therefore, clear that multiplication of control, operated by different technicians, leads to a great deal of delay and a great deal of waste of labour in the preparation of the drawings. It is quite likely that this is so serious that it is causing the number of non-producers in the profession to far exceed the producers. When the contract is finally let, the drawings, which should be completed in every detail, are found to be lacking in important respects, sub-contracts are not complete, and delays and disorganisation tend to creep in. It is essential that in some way or other this complicated machine should be simplified.

#### HOUSING

The Ministry of Health is the right Department to control Local Authorities and decide upon the size of permitted programme. The Ministry of Works should deal with all physical details of building, approve the schemes, the cost and the construction. Much greater freedom to decide detail should be entrusted to the Local Authorities. Greater responsibility should be placed on the architects, surveyors, and engineers, who are preparing the drawings and supervising the work. I would considerably limit the control of the Ministry of Health on the technical side of house and flat building, and give very much greater freedom of action to the Local Authority and the technicians employed. Financial control on a budgetary basis should still remain with the Ministry of Health.

#### WAR DAMAGE COMMISSION

If the examination of the costs of works, which now takes place with the Surveyors of the War Damage Commission, were placed under the control of the Ministry of Works, a great deal of the work which is necessary in approving a licence would be done by officers of the same department; this would take less time and would reduce the total staff which would be employed. At present there is a very considerable delay in securing agreement between:—

- (a) the tender submitted by the contractors;
- (b) the amount to be allowed by the War Damage Commission for replacement of bomb damage;
- (c) the licence value approved by the Ministry of Works.

At present delay in securing approval means that the builder who has sent in a tender with the firm idea that he can employ plant and labour coming from a particular contract, loses the labour and has a time lag on the plant.

#### LICENSING

It is clear that a highly complicated industry, like building, suffers seriously when geared to a £10 limit. The time lag to the small builder precludes him from making any attempt to organise his labour and materials to coincide with the date of the issue of licences, while wholesale evasion makes the £10 licensing limit extremely undesirable from the point of view of national morality. Moreover, the price factor is already beginning to operate as reimbursement from public funds comes to an end, and it will not be long before the price factor becomes a brake on small expenditure on buildings.

Within limits, expenditure on buildings is a better outlet for surplus money than football pools, dog racing, and betting.

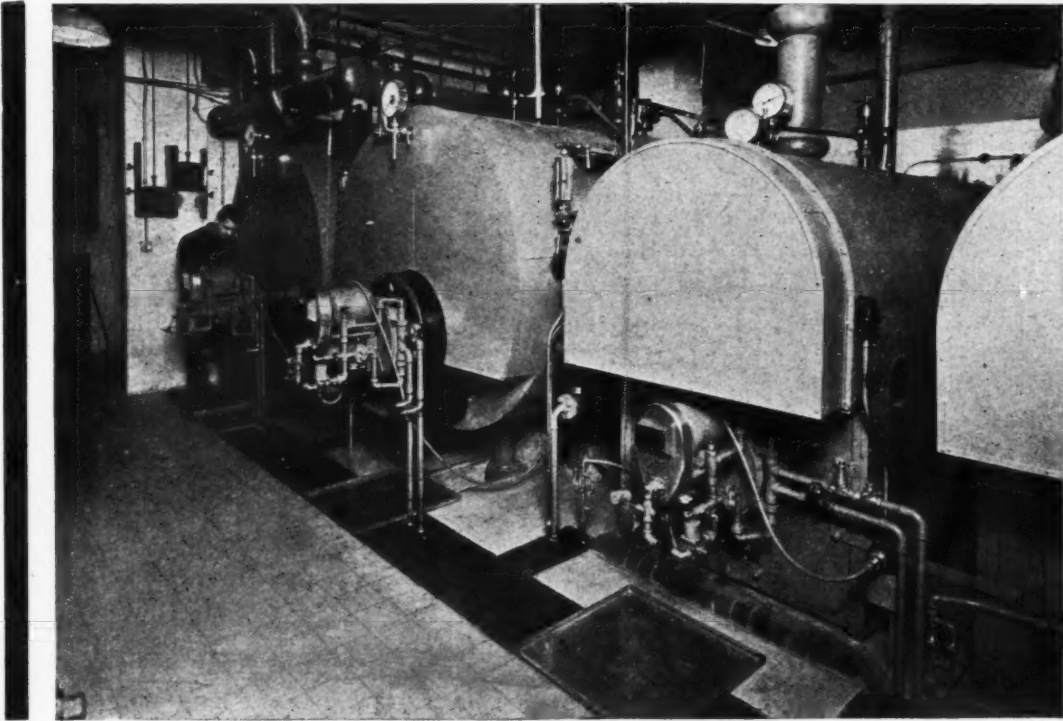
Britain has suffered six or seven years of suspension or retardation of its normal yearly maintenance programme, and of necessity a considerable amount of arrears has to be made up. Pre-war it was estimated that about 300,000 or 350,000 men in the country were employed in maintaining the country's buildings. With arrears of maintenance and bomb damage, it is hardly possible to do essential work with less than 400,000 or 450,000 men. It would be better to accept this fact and raise the licensing limit to £50, although this might temporarily cause a difficulty. The use of scarce materials should be prohibited except under licence. If the £50 limit had been in existence when the war finished, I am convinced that most of this small work would now be completed. There is an actual and continuing loss in the form of under-employment amongst small builders who can with the use of the licensing control charge a high price for such works as are licensed, thereby enabling them to cover the cost of men for the period of under-employment. With the pressure of unlicensed work up to £50, it would be possible to keep the men more continuously employed. By reducing the staff engaged in issuing these small and trivial licences, the number of staff dealing with larger licences could be increased, and they could deal with them more expeditiously. The prosecution of evaders of the bigger order would become more general and complete.

#### THE PROFESSION

In spite of all the difficulties of working to-day, it is possible in the professional office to complete the drawings before the contract is started. This means a longer gap between the time at which the project is envisaged, and the time at which the contract is let. It means more staff and it means harder work in endeavouring to co-ordinate all the many controls with which the architect, the engineer, and the surveyor are faced, but if the building industry is to function properly, it must be a cardinal factor in the whole machinery that the professional work is done as faultlessly and as thoroughly as possible before the building is started. I would like to add to the bills of quantities a completed schedule of materials ready for ordering by the builder. At the date at which the contract is let, or soon after, the whole of the sub-contracts should be let, tenders having been obtained by the architect, in the course of the preparation of his drawings.

One of the things that mitigate against efficiency of professional work is that many applications for licences remain for a long time in suspense, and when granted have a time limit of two months before they lapse. This tends to make the professional office carry a number of contracts which are partially complete, and to be caught rather on the wrong foot when the licence is suddenly issued. The period between the application of licence and granting should be materially shortened by more efficient work on the part of the Ministries, and the period before it lapses should be longer.





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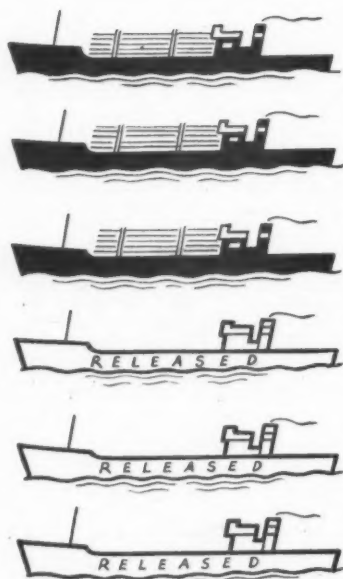
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## TECHNICAL SECTION

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

## INFORMATION CENTRE

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

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

### 4.26 planning: urban and rural PLANNING IN PALESTINE

*Urban Development in Tel Aviv: New Phase.* Y. Ben-Sina. (Palestine and Middle East, Vol. XIX, No. 1, 1947, pp. 5-7.)

Informative article on planned future development of Tel Aviv. Illustrated.

Since its foundation in 1909 as a dormitory suburb of Jaffa the city's population has grown from 3,600 in 1919 to over 200,000 to-day, but its area never extended in proportion to this population increase. One of the major difficulties in this respect was the fact that the town grew up on countless small plots (the result of the antiquated Turkish system of land tenure), which had to be acquired at exorbitant prices from their former owners. This, together with the Government's negative financial policy regarding long term loans, prevented the administrative authorities from providing an adequate area for open spaces and public buildings. However, permission granted for minor loans in recent years has enabled the municipality to make more progress with the acquisition of land for these specific purposes.

Newly incorporated land to the north and east of the city covers an area as big as the whole of the present built-up area, and the article describes the plans for these new parts of Tel Aviv, which include the provision of wider roads, tree-lined avenues, the allocation of adequate sites for public buildings and parks, including an ambitious civic centre, and large-scale municipal housing schemes. Information is also provided on the amazing extent of resumed building activities since 1945 and on the city's ultimate town planning target.

### 6.13 planning: social and recreational NATIONAL PARKS

*Report of the National Parks Committee (England and Wales).* Ministry of Town

and Country Planning. (HMSO, Cmd. 7121, 1947, 4s. 6d.)

Comprehensive and important document, prepared by Hobhouse Committee, appointed in July, 1945, containing far-reaching recommendations for establishment, administration and finance of national parks and conservation areas in England and Wales. Maps.

The Report begins with a survey of the history and purpose of national parks here and abroad and then goes on to examine the selection and delimitation of suitable areas in England and Wales. It recommends that twelve national parks should be declared by annual instalments of four over a period of three years immediately following the passage of legislation. The twelve areas suggested comprise the Lake District, North Wales, the Peak District, Dartmoor, the Yorkshire Dales, the Pembrokeshire Coast, Exmoor, the South Downs, the Roman Wall, the North York Moors, the Brecon Beacons and Black Mountains, and the Broads.

The Committee's national park scheme is based on the definition of a national park as contained in the *Dower Report (National Parks in England and Wales)*. John Dower. HMSO, Cmd. 6628, 1945, 1s.) Among the great many recommendations put forward the following are of particular importance.

The central administration of the areas should be in the hands of a National Parks Commission, consisting of a chairman and eight other members appointed by the Minister of Town and Country Planning. Locally each area should be administered by a Park Committee of 25 members, again set up by order of the Minister of Town and Country Planning.

National park areas should not be exempted from planning control. All proposals by private persons and bodies or by statutory undertakers and local authorities to build or otherwise develop land in a national park should be subject to permission from the Park Committee.

The highest standards should be set upon the siting, design and construction of new buildings, which should, wherever possible, fit into existing towns and villages. Planning powers should be applied to the gradual modification or removal of the worst disfigurements in national parks.

Co-operation between the central authority and farmers, landowners and agricultural authorities should be aimed at in order to achieve integration of landscape, recreational and access requirements with agricultural policy.

In addition to the suggested national park areas, the proposals for which are based on planning control rather than on widespread public acquisition of land, the Minister of Town and Country Planning should designate areas of high landscape quality, scientific interest and recreational value as

conservation areas. These areas should be administered by an Advisory Committee set up by the local planning authority. The Report recommends 62 conservation areas varying in size from 11 to 653 square miles.

A Coastal Planning Advisory Committee should be set up under the responsibility of the Minister of Town and Country Planning to consider the overall co-ordinated planning of the coast of England and Wales.

Regarding financial provisions, it is recommended that capital grants should be provided from the National Land Fund set aside by the Chancellor of the Exchequer, on a ten year programme, amounting to £9,250,000, and covering (1) construction or adaptation of national park buildings and centres; (2) acquisition and improvement of land; (3) removal or modification of disfigurements in national park and conservation areas; (4) provision of holiday accommodation.

Appendix D contains a useful table showing all urban centres with a population of over 100,000 (1939 estimate) within 75 miles of the boundary of each national park, together with the distance from the nearest point on the boundary to London. Appendix E gives the areas of counties and county boroughs falling within the proposed national parks.

### 7.9 practice BUILDING LICENSING

*Notes for the Guidance of Applicants for Building Licences.* Ministry of Works. (2nd Edition, Revised, September, 1947.)

Until January, 1948, the limit placed upon work carried out without licence remains at £10, plus £2 a month on a non-cumulative basis, and the cost must include materials and fittings already the property of the owner and also all fees for technical and professional services. Only urgent emergency work, e.g., to prevent flooding, may be started without a licence, and even so the authority must be informed as soon as possible.

Continuing work of day to day maintenance is the subject of an annual maintenance licence, but a licence for "Definite Operations" is required for all other work, including repairs of a permanent or temporary character. Application forms CL1136B (for a dwelling house) and CL1136C (for rebuilding a destroyed house) may be obtained from the Local Authority. Application form CL1136A (for all other "Definite Operations") may be obtained either from the Regional Licensing Officer of M.O.W. or from the Local Authority.

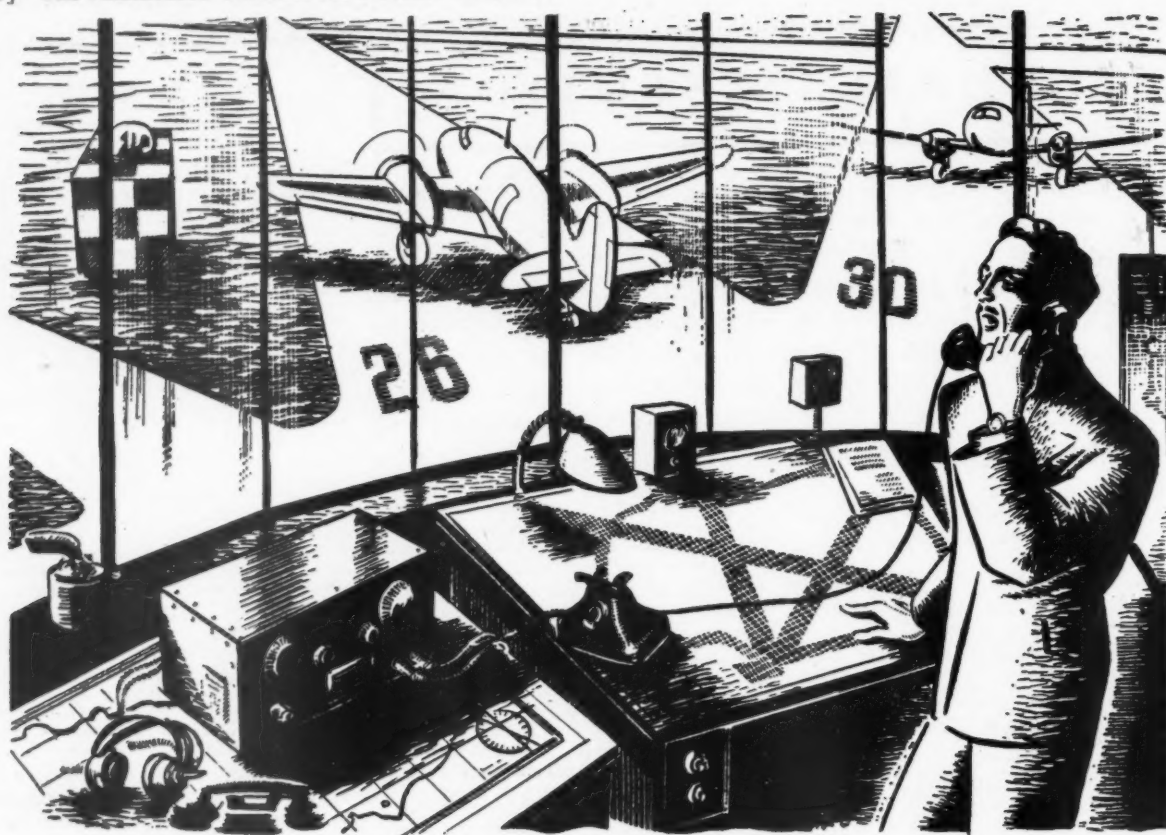
Applications for work on a house or flat or for other work not exceeding £100 should be made to the Local Authority. Applications for work exceeding £100, sponsored by the Admiralty, Ministry of Supply, or Board of Trade, should be submitted to the Regional Controller or Headquarters of the Department concerned. All other applications should be made to the Regional Licensing Officer of M.O.W. In the event of work costing more than was expected an application for a supplementary licence must be made immediately. If this is sent by registered post, work may continue until the applicant hears to the contrary.

In addition to other particulars, the Notes give a list of the penalties that may be incurred if the conditions are not observed, and also the addresses of the Licensing Officers of M.O.W.

### 17.16 construction: general TIMBER FOR HOUSES

*Timber Can Make It.* (The Timber Development Association Ltd. and the Industry, Architects' Journal, October 16, 1947.)





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#### 20.44 construction: complete structures PREFABS: TIMBER FACTORY

*Prefabricated Factory.* Ervay Baker. (The Architectural Forum [USA], September, 1947, pp. 117-118.)

Hammondsport (NY) plant for Mercury Aircraft, Inc., composed of site-prefabricated timber units. Main features of factory are composite hinged arches of laminated timber of 60-ft. span and webbed trusses of 36-ft. span.

#### 20.45 construction: complete structures ARCHED ROAD BRIDGE

*Die Neue Rhonebrücke Bei Vienne (Isère). New Bridge Across the River Rhone at Vienne.* J. Trüb (Schweizerische Bauzeitung, September 27, 1947, pp. 536-7).

Multiple arched road bridge in reinforced concrete with a maximum span of 354 ft., erected by a special method.

The new road bridge across the river Rhone at Vienne consists of three arches of elliptical shape of 153, 354 and 85 ft. span respectively. Of particular interest is the method of erection of the largest span. In order to keep the river completely free from obstacles, the formwork for the reinforced concrete arch was suspended from a steel arch, the rise of which was about twice that of the concrete arch. The steel arch was erected by cables from both sides of the river. Only half of the total width of 39 ft. 5 in. of the concrete arch was carried out at a time; the steel arch was shifted for pouring the second half of the bridge.

Concrete was placed in 12 portions symmetrically arranged so as to avoid excessive bending moments in the light steel structure. Ten hydraulic jacks were inserted at the crown of the concrete arch. Before it was closed, the jacks developed a thrust in both halves of the arch until the structure was lifted from the formwork. Then the gaps between the jacks were filled with concrete so that after hardening of this concrete the concrete arch became self-supporting.

#### 20.46 construction: complete structures ARCHED ROAD BRIDGE

*Le Pont Sur L'Artuby Aux Gorges Du Verdon (Var).* L. Roset. (La Technique des Travaux [Belgium] May-June, 1947, pp. 180-186.)

Arched road bridge in reinforced concrete of 360 ft. span.

The new road bridge across the gorge of the River Artuby shows many interesting features from the structural point of view. It was erected as a three-hinged parabolic arch, the hinges at the abutments however were only temporary and on completion of the structure, were transformed into rigid supports. Thus in its final stage, the bridge is a one-hinged arch. The cross section is an inverted channel, with bulbs at the bottom ends of the flanges. The tall piers at the abutments are of cellular cross section.

The span between the abutments is 360 ft., the rise to the hinge at the crown 78 ft. 9 in. The width of the roadway between the curbs is 20 ft. On either side there is a cantilevered sidewalk, giving an overall clear width of 32 ft. 10 in. between the parapets. The road level is 590 ft. above the bottom of the gorge. It was therefore not possible to build a scaffolding, and a self-supporting centring had to be erected. This was built in timber in two halves at the abutments. Each half was then lowered by cables until contact at the crown was established.

#### REFERENCE BACK

21.41 and 21.42 published 23.10.47 should read 21.12 and 21.13 respectively.

#### 21.14 construction: miscellaneous WIDENING AND STIFFENING BRIDGE

*Widening and Stiffening Whitestone Bridge.* E. L. Pavlo. (Engineering News-Record [USA], October 2, 1947, pp. 466-469.)

Widening each of the two separated roadways by 3.3 feet has changed them from two-lane to three-lane arteries at small expense. Addition of a 14-ft. high truss to the 11-ft. original stiffening girder has very substantially increased the stiffness of the structure against aerodynamic movement.

The Bronx-Whitestone Bridge was built in 1938-9. It has a main span between towers of 2,300 ft., the fourth longest span in the world. Originally the width of each of the separated roadways was 27.5 ft. Experience has shown that this is more than ample for two lanes of traffic but insufficient for three lanes of mixed traffic that increased peak-hour use demands. The practical way to increase the width was to take over the space occupied by pedestrian sidewalks, which have been little used. This required numerous structural alterations, but every effort was made to re-use the existing steel and to arrange the new connections so as to utilize existing rivet holes. Also a number of improvements were introduced to facilitate future maintenance.

Construction was divided into two parts: widening of the roadways and installation of the stiffening trusses. The work was carried out symmetrically on both sides to avoid unbalanced loading. Two lanes of traffic were maintained all the time.

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## QUESTIONS AND ANSWERS

### 2920 WAR DAMAGE

**Q** I am dealing with a war damage claim in which agreement has been reached with the War Damage Commission upon almost all the repairs. Although temporary repairs were carried out during the war to the building in question, rain has since penetrated the roof and caused the walls to become damp, thus affecting the electric wiring; and the Local Authority has cut off the light and power, and stated that the building must be re-wired before the electricity service can be resumed. This will have to be done by the owner. Can this item, which is a result of war damage, be included in the war damage claim?

**A** The Third Schedule of the War Damage Act, 1943, provides that if war damage to premises is increased by failure to take reasonable steps to preserve the property, then a deduction is made from the proper cost of the executed works of the amount by which that cost is increased owing to the failure. Each case is dealt with on its facts and merits, and the Commission should be consulted so as to reach agreement in respect of the claim.

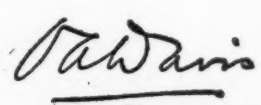


360-ft. reinforced concrete bridge. See No. 20.46.

# PRICES

*This regular feature, prepared by Davis, Belfield and Everest, Chartered Quantity Surveyors, summarises basic prices for materials and gives labour rates for the London District and Grade Classifications outside*

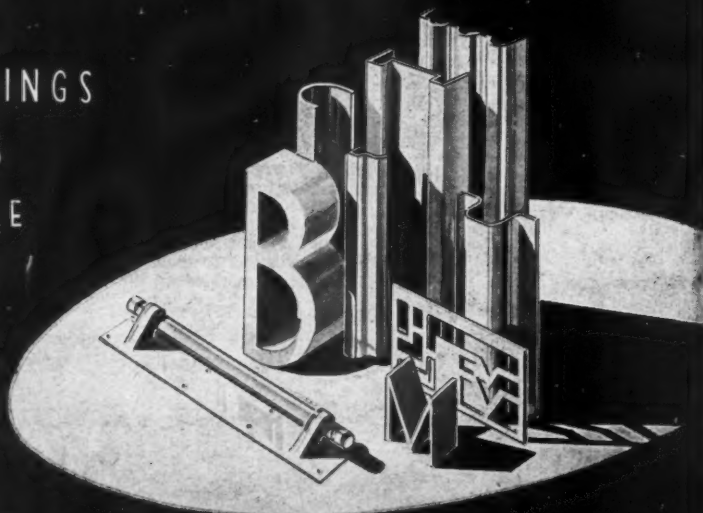
*London. In the past, prices for materials have been expressed as a percentage over pre-war rates. This practice is no longer being continued as it is felt that pricing by references to pre-war standards can now be considered obsolete. Detail prices of materials are given quarterly.*

| BASIC MATERIALS   | BASIC PRICES AND RATES OF WAGES, 1947 |          |          |           |  |           |           |           |           |            |
|---|---------------------------------------|----------|----------|-----------|--|-----------|-----------|-----------|-----------|------------|
|   | Jan.                                  | Feb.     | March    | April     | May  | June      | July      | August    | Sept.     | Oct.       |
| Portland cement (6 tons and over) per ton   | 55/-                                  | 55/-     | 55/-     | 55/-      | 55/-   | 55/-      | 56/-      | 56/-      | 59/6      | 59/6       |
| Paper bags " "  | 7/-                                   | 7/-      | 7/-      | 7/-       | 7/-  | 7/-       | 9/-       | 10/-      | 10/-      | 10/-       |
| 2-in unscreened ballast per yd. cu.   | 14/-                                  | 14/-     | 14/-     | 14/-      | 14/5   | 14/5      | 14/5      | 14/5      | 14/5      | 14/5       |
| Fletton bricks (at station) per 1,000   | 70/-                                  | 70/-     | 70/-     | 70/-      | 70/-   | 70/-      | 70/-      | 69/-      | 69/-      | 73/-       |
| Stoneware drain pipes (British standard, 2 tons and over). Standard list +  | 37½%                                  | 37½%     | 37½%     | 37½%      | 37½%   | 37½%      | 37½%      | 37½%      | 37½%      | 37½%       |
| Roofing tiles " " per 1,000   | 90/-+                                 | 90/-+    | 90/-+    | 90/-+     | 90/-+  | 90/-+     | 90/-+     | 90/-+     | 90/-+     | 90/-+      |
| Steel joists (basic sections ex mills) per ton  | £16 12s.                              | £16 12s. | £16 12s. | £16 12s.  | £16 12s.   | £16 12s.  | £16 12s.  | £16 12s.  | £16 12s.  | £17 10s.6d |
| Lime greystone " "  | 74/9                                  | 74/9     | 74/9     | 79/9      | 79/9   | 79/9      | 79/9      | 82/3      | 82/3      | 84/9       |
| Sheet lead (5 cwt.-1 ton lots) " "  | £85                                   | £85      | £85      | £106 15s. | £106 15s.  | £106 15s. | £106 15s. | £106 15s. | £106 15s. | £109 10s.  |
| Iron rainwater goods and soil pipes List 3100 AB+   | 54%                                   | 54%      | 54%      | 54%       | 54%  | 54%       | 54%       | 54%       | 65%       | 70%        |
| White lead paint " " per gallon   | 36/3                                  | 38/9     | 38/9     | 42/9      | 42/9   | 42/9      | 42/9      | 42/9      | 42/9      | 42/9       |
| RATES OF WAGES (LONDON)—  | Jan.                                  | Feb.     | March    | April     | May  | June      | July      | August    | Sept.     | Oct.       |
| Within 12 miles radius  |                                       |          |          |           |  |           |           |           |           |            |
| Craftsmen " " per hour  | 2/7½                                  | 2/7½     | 2/7½     | 2/7½      | 2/7½   | 2/7½      | 2/7½      | 2/7½      | 2/7½      | 2/7½       |
| Labourers " " "   | 2/1½                                  | 2/1½     | 2/1½     | 2/1½      | 2/1½   | 2/1½      | 2/1½      | 2/1½      | 2/1½      | 2/1½       |
| From 12 to 15 miles radius  |                                       |          |          |           |  |           |           |           |           |            |
| Craftsmen " " "   | 2/7                                   | 2/7      | 2/7      | 2/7       | 2/7  | 2/7       | 2/7       | 2/7       | 2/7       | 2/7        |
| Labourers " " "   | 2/1                                   | 2/1      | 2/1      | 2/1       | 2/1  | 2/1       | 2/1       | 2/1       | 2/1       | 2/1        |
| Prices of materials above include for delivery to site in the Central London Area, and the rate of wages are for London only. |                                       |          |          |           |  |           |           |           |           |            |
| Current rates of wages outside London are as follows : Liverpool and District, Craftsmen 2/7½; Labourers 2/1½.                |                                       |          |          |           |  |           |           |           |           |            |
| GRADE CLASSIFICATIONS   | A                                     | A¹       | A²       | A³        |  |           |           |           |           |            |
| Craftsmen " " " " " "   | 2/6                                   | 2/5½     | 2/5      | 2/4½      |  |           |           |           |           |            |
| Labourers " " " " " "   | 2/-                                   | 1/11½    | 1/11     | 1/11      |  |           |           |           |           |            |

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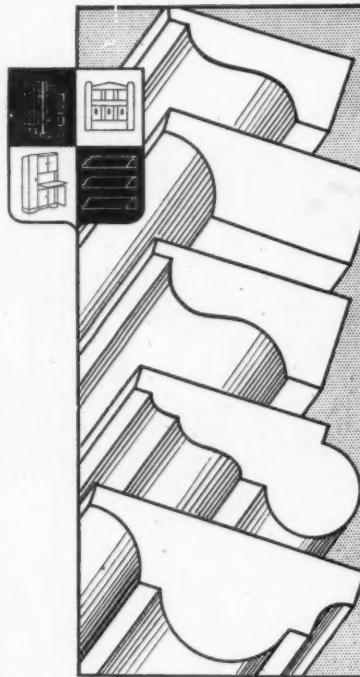
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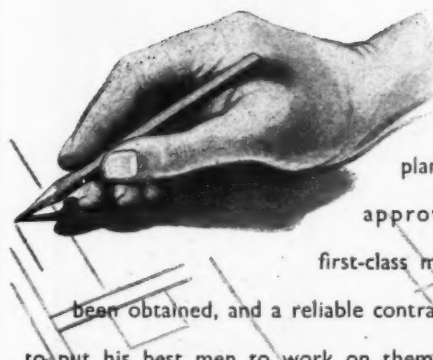
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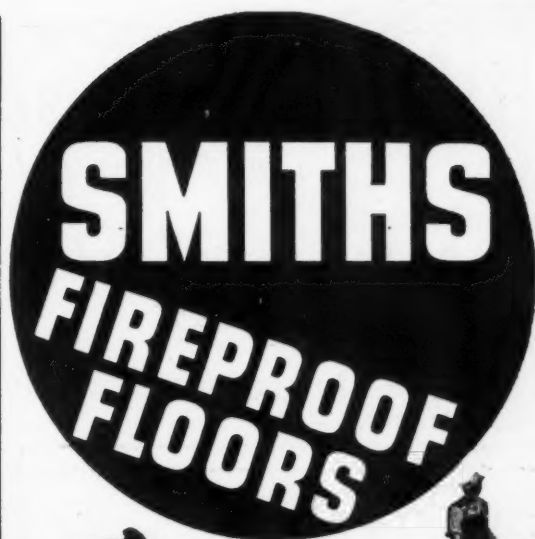
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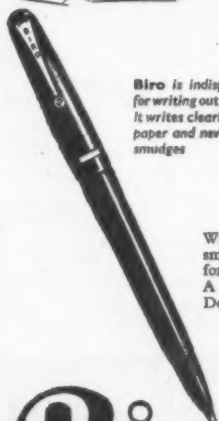
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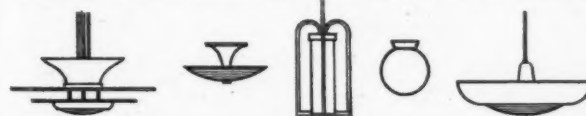
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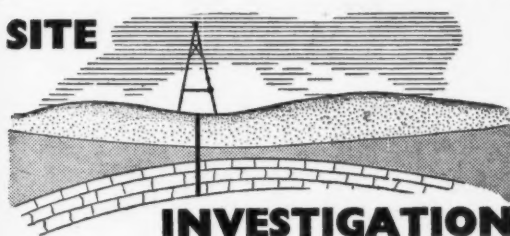


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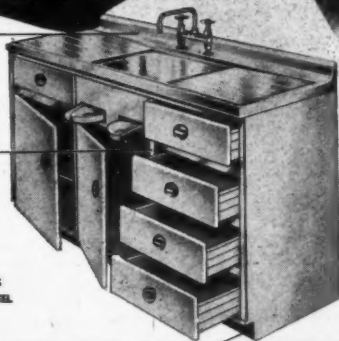
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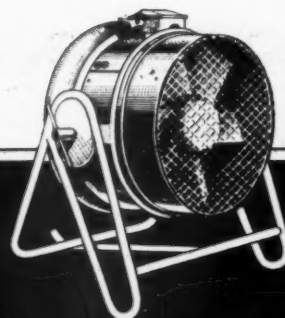


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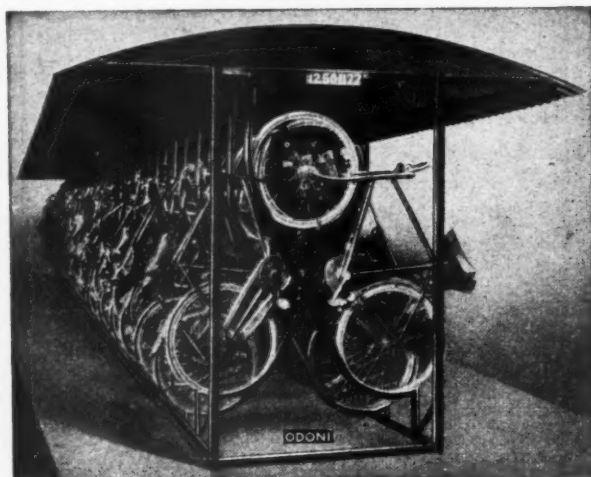


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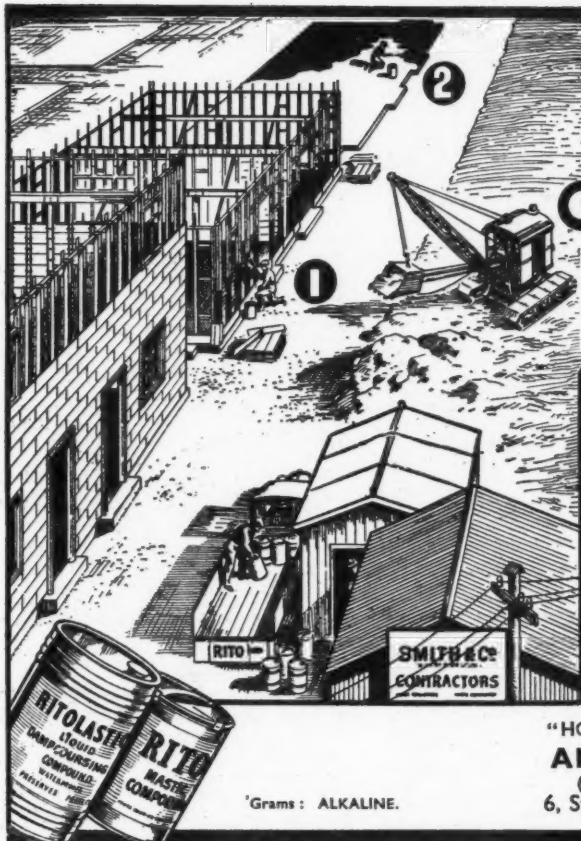
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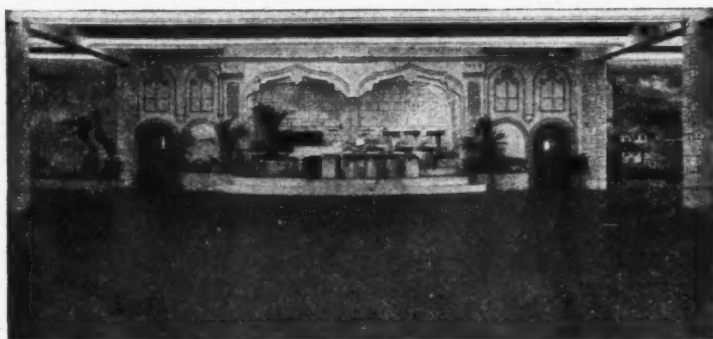
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Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

None of the vacancies in these columns relates to a man between the age of 18 and 56, inclusive, or a woman between the age of 18 and 40, inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

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

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

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

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

Canvassing disqualifies. (1680) 535

DEPARTMENT OF HEALTH FOR SCOTLAND invite applications for the following temporary Planning and Architectural appointments. The work covers town and country planning, housing and design of hospitals, health centres, schools, and other community buildings.

(a) Planning Appointments (covering regional planning work, planning technique, and studies for survey and development plans):

(1) ASSISTANT PLANNING OFFICERS. Candidates should be qualified as architects, engineers or surveyors, and should have passed the Final examination of the T.P.I. Preferably they should have had at least three years' experience in a planning office. Minimum age: 26. Commencing salary: £485 at age 26, with additions of £25 for each year up to age 32.

(2) PLANNING ASSISTANTS. Candidates should have reached the Intermediate examination stage as architects, engineers, surveyors or planners, and should preferably have had some experience in a planning office. Minimum age: 22. Commencing salary: £320 at age 22, with additions of £20 for each year up to age 25.

(3) ASSISTANT ARCHITECTS. To assist on research work on special building types and on design and layout of housing and other building schemes for redevelopment areas and new towns. Candidates should be fully qualified architects, preferably with at least four years' practical experience. Minimum age: 24. Commencing salary: £435 at age 24, with additions of £25 for each year up to age 30.

Successful candidates over the higher ages mentioned may be given further additions to the salaries indicated. Salaries for women in respect of all the above-mentioned appointments will be somewhat lower than those for men. Forms of application may be obtained from the Establishment Officer (Room 31), Department of Health for Scotland, St. Andrew's House, Edinburgh, 1. No application can be considered unless received by the Department on the prescribed form not later than 1st December. 861

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

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT in the above Department.

Salary, Grade V, £460-£510, plus cost-of-living bonus. Candidate must be an Associate of the R.I.B.A. and possess experience in the planning and design of all types of school buildings. Previous experience in another local authority would be deemed an advantage.

The appointment would be for a minimum period of two years in the first instance.

Applications, giving full particulars of qualifications, experience and age, together with the addresses of two persons to whom reference may be made, should be sent to the Town Clerk, The Council House, Dudley, to be received not later than the 5th December, 1947. 1033

## COUNTY BOROUGH OF HALIFAX. BOROUGH ENGINEER'S DEPARTMENT. APPOINTMENT OF DEPUTY BOROUGH ARCHITECT.

Applications are invited for the above position, at a salary in accordance with Grade VII (A.P.T.) of the National Scales, but commencing at a salary of £600 and rising to £650 per annum, plus cost-of-living bonus.

The successful candidate will be expected to take control, under the Borough Engineer, of that section of the department which is responsible for Architectural works, including housing. Applicants must be A.R.I.B.A. or hold equivalent qualifications, and must have had considerable experience in Architectural design and construction.

The appointment is a superannuated one, and the successful candidate will be required to undergo a medical examination.

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

Applications, stating age, qualifications, present position and salary and experience, accompanied by copies of three recent testimonials, and endorsed "Deputy Borough Architect," should be delivered to the undersigned not later than Saturday, 29th November, 1947.

W. USHER, Town Clerk. 1057  
Town Hall, Halifax.  
3rd November, 1947.

## BOROUGH OF WILLESDEN. APPOINTMENT OF TOWN PLANNING ASSISTANTS.

The Council invite applications for the following appointments on the temporary staff of the Borough Engineer and Surveyor's Department, in connection with the preparation of Town Planning and Redevelopment Schemes.

(a) ONE FIRST CLASS TOWN PLANNING ASSISTANT.

(b) ONE SECOND CLASS TOWN PLANNING ASSISTANT.

Candidates for both appointments must possess one or more of the following qualifications:—  
Associateship of the Royal Institute of British Architects, an Associate Membership of the Town Planning Institute, Professional Associateship of the Royal Institution of Chartered Surveyors, the Testamur of the Institution of Municipal Engineers or an equivalent qualification, and preferably have had experience in the preparation of Town Planning Schemes.

The salaries attaching to these appointments will be in the Administrative, Professional and Technical Division of the National Council's Scale for the London Area, namely for appointment (a), Grade VI, i.e., £555 per annum, rising by two annual increments of £20 and one annual increment of £25 to a maximum of £680 per annum, plus cost-of-living bonus, which at present is £59 16s., and for appointment (b), Grade V, i.e., £480 per annum, rising by two annual increments of £15 and one annual increment of £20 to a maximum of £530 per annum, plus cost-of-living bonus, which is at present £59 16s. per annum.

The appointments will be terminable by one month's notice on either side, and subject to the Local Government Superannuation Act, 1937, as regards temporary appointments.

Applications, together with not more than three recent testimonials, should be forwarded to the undersigned, endorsed "Town Planning Assistant," not later than 10 a.m. on 28th November, 1947.

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

(Sgd.) R. S. FORSTER, Town Clerk. 1056  
Town Hall, Dyne Road, Kilburn, N.W.5.  
1st October, 1947.

## DORSET COUNTY COUNCIL. APPOINTMENT OF TOWN PLANNING OFFICER.

Applications are invited for the appointment of County Planning Officer, at an annual salary of £1,000, rising by annual increments of £50 to £1,200, plus cost-of-living bonus, in accordance with the Council's scale from time to time in force.

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

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

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

Forms of application and any further particulars required may be obtained from the undersigned, to whom applications, with the names and addresses of three persons to whom reference may be made, should be sent to the undersigned not later than the 6th day of December, 1947.

Canvassing, directly or indirectly, will be a disqualification.

C. P. BRUTTON, Clerk of the County Council. 1086  
County Hall, Dorchester.  
8th November, 1947.

## SOMERSET COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

Notice.—The closing date for the receipt of applications in respect of all appointments advertised in the "Architects' Journal" of 6th November, is 27th December, 1947, not 17th as previously announced. 1099

## BOROUGH OF LUTON. BOROUGH ENGINEER'S DEPARTMENT. JUNIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Junior Architectural Assistant, at a commencing salary of £330, in accordance with A.P.T., Grade I (£330-£375-£375) per annum, plus cost-of-living bonus, the present rate being £59 16s. per annum.

Applicants must hold appropriate professional qualifications, and have some experience in Municipal housing and schools development.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the National Scheme of Conditions of Service. Applications, giving details of age, qualifications, experience, present appointment and salary, accompanied by not more than three recent testimonials, should be delivered to: The Borough Engineer, Town Hall, Luton, not later than Monday, 1st December, 1947. Canvassing will disqualify.

W. H. ROBINSON, Town Clerk. 1079  
Town Hall, Luton.  
6th November, 1947.

## THE COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE. COUNTY PLANNING DEPARTMENT. APPOINTMENT OF DEPUTY PLANNING OFFICER.

Applications are invited for the appointment of Deputy County Planning Officer, at an annual salary of £1,000, rising by annual increments of £50 to £1,250, plus cost-of-living bonus of £59 16s.

Applicants must be Corporate Members of the Royal Institute of British Architects and of the Town Planning Institute, and preference will be given to those who have had considerable planning experience either in a County Planning Office or elsewhere.

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

Applications in writing, stating age, qualifications, and experience, accompanied by copies of three recent testimonials, must be lodged with the undersigned in sealed envelopes and marked in the top left-hand corner "Deputy County Planning Officer," not later than the 11th day of December, 1947.

ARTHUR BATES, County Planning Officer. 1092  
19, King Street, Wakefield.

## COUNTY OF LINCOLN—PARTS OF LINDSAY. COUNTY ARCHITECT'S DEPARTMENT.

A vacancy has occurred on the permanent staff for a CHIEF ASSISTANT ARCHITECT (Education), and applications are invited from Associates of the Royal Institute of British Architects who have had experience in the design and construction of Schools.

The salary is in accordance with the National Scale of Salaries on Grade A.P.T., VII, £575, rising to £650, plus cost-of-living bonus of £59 16s.

Applicants should state age, present salary and appointment, past appointments and experience, and send their applications, together with two testimonials, to the County Architect, County Office, Lincoln, not later than a fortnight from the date of the issue of this advertisement.

The successful candidate will be required to provide a car, and will be granted an allowance of a 10 h.p. car in accordance with the County Council's scale. The appointment is subject to a satisfactory medical examination.

H. COPLAND, Clerk of the County Council. 1052  
County Offices, Lincoln.

## COUNTY BOROUGH OF ROTHERHAM. ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, in the office of the Borough Engineer, at a commencing salary of £420 per annum, rising by annual increments to a maximum of £465 per annum, plus cost-of-living bonus (at present £59 16s. per annum).

Applicants must be Associate Members of the Royal Institute of British Architects, and preferably with experience in the service of a Local Authority.

The post is superannuable, and the candidate selected for appointment will be required to pass a medical examination. The appointment will be subject to the conditions of service adopted by the Council and based on the National Scheme of Conditions of Service. It will be determinable by one month's notice on either side.

Applicants must state whether they are related to any member or officer of the Rotherham County Borough Council. Deliberate omission to disclose any such relationship will disqualify any candidate.

Canvassing of members of the Council, whether direct or indirect, will disqualify.

Applications, endorsed "Architectural Assistant," stating age, qualifications and experience, accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than Saturday, 6th December, 1947.

JOHN S. WALL, Town Clerk. 1063  
Municipal Offices, Rotherham, Yorks.



## LONDON COUNTY COUNCIL.

Required at Brixton School of Building, Fernside Road, S.W.4, as soon as possible, two full-time **TEACHERS OF CONSTRUCTION—Lectures and Studio.** Applicants should hold Higher National Certificate, or diploma, in Building, or be Corporate Members of an appropriate professional institution, and have had responsible industrial or professional experience in connection with building. Teaching experience a recommendation. Commencing salary: £300, plus a London allowance of £36 or £48, according to age or teaching experience. An additional £15 p.a. allowed for each year of approved industrial experience up to a maximum of 10 years, together with an increment for each year of previous full-time teaching service. The maximum of the scale is £525, plus the London allowance. Application forms (stamped addressed foolscap envelope necessary) from the Principal at the School, returnable by 31st December, 1947. (3581) 1089

COUNTY BOROUGH OF NORTHAMPTON.  
BOROUGH ARCHITECT'S DEPARTMENT.  
SENIOR ASSISTANT ARCHITECT (TOWN PLANNING).

**GRADE VI, A.P.T.**  
The appointment offers considerable scope for a person having design ability and a sound training, the successful applicant being expected to take charge of staff working on the comprehensive Town Planning Scheme and on the detailed replanning of the Central Area of the Town, including the Civic Centre. At a later stage, there will be opportunity to engage upon the architectural projects embodied in the schemes. Previous experience with a Local Authority is not essential.  
Applicants, who should be Members of the Royal Institute of British Architects, and preferably hold a qualification or have experience in Town Planning, are invited to send for further particulars of the above permanent appointment and form of application. Closing date 28th November, 1947.

C. E. VIVIAN ROWE,

Town Clerk.  
1036

Guildhall, Northampton.

THE COUNTY COUNCIL OF THE WEST  
RIDING OF YORKSHIRE.

## COUNTY PLANNING DEPARTMENT.

## APPOINTMENT OF PLANNING ASSISTANT.

Applications are invited for the appointment of a Planning Assistant, at an annual salary of £390, rising (subject to satisfactory service) by annual increments of £20 to £510, plus cost-of-living bonus of £16s.

Applicants should have had experience in a Planning Office, and preference will be given to those who have passed the examinations of the Town Planning Institute or the equivalent thereof.

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

Applications in writing, stating age, qualifications and experience, accompanied by copies of three recent testimonials, must be lodged with the undersigned in sealed envelopes marked, in the top left-hand corner, "Planning Assistant," not later than the 11th December, 1947.

ARTHUR BATES,

County Planning Officer.  
1093

19, King Street, Wakefield.

CITY OF CARDIFF EDUCATION  
COMMITTEE.

## THE TECHNICAL COLLEGE.

Principal: A. HARVEY, Ph.D., B.Sc., F.Inst.P.

## THE WELSH SCHOOL OF ARCHITECTURE.

Applications are invited for a full-time post as

## LECTURER AND STUDIO INSTRUCTOR in the

School of Architecture. Candidates should have

been trained in a Recognised School of Archi-

tecture and be Associates of the R.I.B.A.

Salary in accordance with the Burnham

(Technical) Scale. War service and professional

experience will be counted towards teaching

service in fixing a commencing salary.

Application forms, together with further par-

ticulars, may be obtained from the undersigned

on receipt of a stamped addressed foolscap

envelope, and should be returned within a

fortnight of the appearance of this advertise-

ment.

W. J. WILLIAMS,

Director of Education.

City Hall, Cardiff.

November, 1947. 1095

## LONDON COUNTY COUNCIL.

## ARCHITECTURAL ASSISTANTS.

Applications are invited for positions of Archi-

tectural Assistants, in the Housing and Valuation

Department, at consolidated salaries of up to

£580 a year. Commencing salaries will be deter-

mined according to qualifications and experi-

ence, and qualified candidates will be eligible for

appointment to the permanent staff of the de-

partment on the occurrence of vacancies.

Engagement will involve contribution to the

Council's Superannuation and Provident Fund.

Successful candidates will be required to under-

take work in connection with the design and

development of housing schemes (cottages and

multi-storey flats).

Forms of application may be obtained from

the Director of Housing and Valuer, The County

Hall, Westminster Bridge, S.E.1 (stamped

addressed foolscap envelope required).

Canvassing disqualifies. (1050) 741

## PONTYPRIDD URBAN DISTRICT COUNCIL.

Applications are invited for the appointment of an **ARCHITECTURAL ASSISTANT**, at a salary of £435 per annum—the maximum of A.P.T., Grade III, of the National Scales of Salaries—plus bonus, at present £59 16s. per annum.

Preference will be given to candidates who have passed either the Intermediate or Final Examinations of the R.I.B.A.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination.

The person appointed will be required to devote the whole of his time to the service of the Council, and the appointment will be subject to one month's notice on either side.

Applications, stating age, present and previous positions, technical training and qualifications (with dates) and concise particulars of experience, together with copies of three recent testimonials, must be delivered, endorsed "Architectural Assistant," to the undersigned, to arrive not later than Monday, the 8th day of December, 1947.

Canvassing will be a disqualification, and candidates must disclose any relationship to Members of the Council.

H. LEONARD PORCHER,

Clerk of the Council.

Municipal Buildings, Pontypridd.

14th November, 1947. 506

## DENBIGH COUNTY COUNCIL.

## COUNTY ARCHITECT'S DEPARTMENT.

The above County Council invite applications for the under-mentioned appointments, in the County Architect's Department, viz.:

(a) **ASSISTANT ARCHITECTS.** Grade V, A.P.T. Division. Salary £460-£510.

Preference will be given to Members of the R.I.B.A. and Registered Architects. Applicants must have sound experience in architectural design and in the preparation of working drawings, with full understanding of modern school construction.

(b) **ASSISTANT ARCHITECTS.** Grade IV, A.P.T. Division. Salary £420-£465.

Preference will be given to members of the R.I.B.A. and Registered Architects. Applicants must have sound experience in architectural design and in the preparation of working drawings.

(c) **ONE JUNIOR ASSISTANT ARCHITECT.**

Grade III, A.P.T. Division. Salary £390-£435.

Preference will be given to those who have passed the Intermediate R.I.B.A. examination.

Applicants must be capable of preparing working drawings for modern buildings.

The salaries specified for the respective appointments are subject to the addition of temporary cost-of-living bonus, at present £59 16s. per annum, and the appointments will be subject to the provisions of the Local Government Superannuation Act, 1937.

The successful applicants will be required to pass a medical examination and to reside in such place in the County as the County Council may from time to time direct.

The appointments will be subject to termination by one month's notice on either side.

Applications, giving age, qualifications, and par-

ticulars of present and previous appointments, and accompanied by copies of three recent testimonials, to be sent to me, the undersigned, in a sealed envelope, endorsed with a description of the post applied for, by not later than the 19th day of December, 1947.

WILLIAM JONES,

Clerk of the County Council.

County Offices, Ruthin.

12th November, 1947. 503

## BOROUGH OF CHELMSFORD.

## ENGINEER AND SURVEYOR'S DEPART-

## MENT.

Applications are invited for the following permanent appointments within the scale stated, plus cost-of-living bonus, at present £59 16s.

(a) **QUANTITY SURVEYOR.** Grade V. Salary £460-£510.

(b) **ARCHITECTURAL ASSISTANT.** Grade IV (special maximum £480). Salary £420-£480.

Applicants must have the recognised qualifications and experience for the various appointments, which are subject to the provisions and conditions of service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, and will be terminable by one month's notice on either side.

Applications, stating age, qualifications, present and previous appointments and general experience, together with copies of three recent testimonials, should be forwarded to reach the undersigned by not later than Tuesday, 2nd December, 1947. Canvassing in any form will disqualify.

VINCENT J. WILLIS, M.I.Mun.E.,

Borough Engineer, Surveyor and Architect.

Municipal Offices, Duke Street, Chelmsford.

14th November, 1947. 504

## BOROUGH OF BEXLEY.

## BOROUGH ENGINEER AND SURVEYOR'S

## DEPARTMENT.

## ARCHITECTS' SECTION.

Applications are invited for the under-mentioned appointments:—

(1) **ASSISTANT ARCHITECT.** Salary in accordance with Grade V of the National Scale of Salaries (£460×£15×£15×£20-£510 per annum).

(2) **TWO ARCHITECTURAL ASSISTANTS.** Salary in accordance with Grade III or IV of the National Scale of Salaries (£390×£15-£435 and £470×£15-£465 per annum).

The above scales are subject to the addition of £20 a year London weighting and a cost-of-living bonus which for persons of 21 years and over is £59 16s. per annum (males) and £48 2s. per annum (females).

Form of application, with conditions of appointment, may be obtained from the Borough Engineer, West Lodge, Broadway, Beckenham, to whom completed applications must be returned by the 12th December, 1947. Canvassing, directly or indirectly, will disqualify.

W. WOODWARD,

Town Clerk.

505

## Partnership

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

**A**N opportunity for qualified Architect seeking Partnership in well-established London firm (mainly industrial); capital relatively small, and possibly not required during probationary period on salary. Write in confidence, stating age, particulars of education, training and experience, to Box 1088.

## Architectural Appointments Vacant

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

**A** RCHITECTURAL ASSISTANT required immediately in London office; must be good draughtsman of intermediate standard; some experience of industrial buildings an advantage. Box 963.

**I** NTERNATIONAL CORRESPONDENCE SCHOOLS require, for immediate full-time employment, an **ARCHITECT** (Male), A.R.I.B.A.; also a **JUNIOR ARCHITECTURAL ASSISTANT**, qualified by examination. Write or 'phone, stating age, experience, and salary required, to Director of Instructors, International Correspondence Schools, Kingsway, W.C.2. 1010

**T**WO SENIOR AND THREE JUNIOR ARCHITECTURAL ASSISTANTS required for busy West End office, with interesting work in progress. Box 1064.

**L**ONDON PASSENGER TRANSPORT BOARD.—Applications are invited for appointments on the temporary staff of the Architect as follows: Assistant Architects, Architectural Assistants, Structural Engineering Designers; commencing salary from £300 to £600 per annum, according to ability, qualifications and experience. Applications, which should give a brief outline of training and experience, to be sent to the Staff Officer, ER/E451, London Passenger Transport Board, 55, Broadway, S.W.1. 923

**JUNIOR ARCHITECTURAL ASSISTANT** required in large industrial concern in mid-Kent area; probationer R.I.B.A. preferred. Box 1070.

**IMPERIAL CHEMICAL INDUSTRIES, LTD.**, Wilton Works, near Redcar, Yorks, require **DRAUGHTSMEN** to assist with the design and detailing of a large new works; successful candidates will be appointed to the established staff. Preference will be given to applicants who hold the Higher National Certificate or higher qualification, and have the appropriate experience as follows:—

**Draughtsmen—Architectural:** Design of offices, laboratories, houses, welfare and general industrial buildings. Order No. D.31.

**Civil:** Design of railways, drains and water services. Order No. D.27.

**Structural:** Design of buildings and structures, and design and detailing of reinforced concrete work for industrial buildings. Order No. D.28.

**Mechanical:** Design of pipework for steam, gas and water, compressed air stations, layout of chemical plant, etc. Order No. D.29.

**Power Station:** Design and layout of modern H.P. Boiler Plant and Power Plant. Order No. D.27.

**Electrical:** Layout of plant electrical installations, including motors, starters, distribution boards, cables and lighting, and necessary calculations. Order No. D.30.

**Instrument:** Layout of mechanical and electrical instrument installations for Chemical Plant. Preference for men experienced in modern automatic control and measurement instruments for temperature pressure and flow. Order No. D.239.

Applications, giving full details and quoting advertisement reference ICI/X/34, and the Order No., should be addressed to the Manager, Employment Exchange, South Bank, Yorks.

I.M/RH.  
4th November, 1947.

1060

**ARCHITECTS** in W.I. area require a **SENIOR ASSISTANT**, preferably qualified, capable of taking charge of drawing office. Send full particulars of experience, salary required, and date available, to Box 1087.

**VACANCY for SENIOR ASSISTANT ARCHITECT** in Architect's Department of London Company; applicants should have the ability to control drawing office staff and take charge in the absence of the architect; industrial and commercial experience an advantage. Applications should state, in confidence, age, training, experience, war service, salary required, and position now held, to Box 1082.

**JUNIOR ASSISTANT** required; state age, experience and salary required, to Frederick Gibberd, 35, Gordon Square, W.C.1. 1081

**IF** you intend to emigrate to Canada and have following qualifications, good draftsman with architectural experience, supervisory experience in building trades, knowledge of shop fitting and layout, training in design and adaptation to needs of modern department store, please apply, giving full particulars, to Box 1080.

**BUILDING DRAUGHTSMAN** required; experienced in factory maintenance and general building construction. Apply by letter, stating age and full details of experience, to Personnel Dept., E.M.I. Factories, Ltd., Blyth Road, Hayes, Middx. 1096

**QUALIFIED ARCHITECT** urgently required for Dublin office; knowledge of housing and prefabrication necessary; state salary required. Box 509.

**IMPERIAL CHEMICAL INDUSTRIES, LTD.**, General Chemicals Division, invite application for posts as **ARCHITECTURAL ASSISTANTS** in Chief Engineer's Department. Applicants required for work in the Architectural Section on Works Amenities, Laboratories, Offices, and must have sound knowledge of architectural design and experience in the preparation of working drawings; preference will be given to members of the R.I.B.A. and Registered Architects. N.B.—These positions have been excepted from the Control of Engagement Order. Write, giving particulars of age, qualifications and experience, and quoting E/7, to Staff Manager, Imperial Chemical Industries, Ltd., General Chemicals Division, Cunard Building, Liverpool, 3. 507

**THE MILK MARKETING BOARD** have a vacancy for an **ARCHITECTURAL ASSISTANT**, preferably Student R.I.B.A., capable of preparing contract and details drawings, and able to carry out surveys; the appointment must be regarded as temporary, with a twelve-month minimum period of engagement; commencing salary £400 per annum. Apply in writing, giving full details and the earliest date on which employment could be commenced, to the Establishment Officer, Milk Marketing Board, Thames Ditton, Surrey. 501

## Architectural Appointments Wanted

**ARCHITECTURAL ASSISTANT**; 6 years' experience, including surveying, war damage rehousing, adaptation plans, L.C.C. schools and general office routine; 3rd year building construction; studying for R.I.B.A. special final. Box 444.

**ASSISTANT** (28) requires position in W. or N.W. area; only interested industrial and civil engineering work; initial salary, £416 p.a. Box 448.

**ARCHITECTURAL ASSISTANT** (30), ex-Polish Air Force, requires post in a progressive firm; able to prepare sketch and working drawings, specifications, etc.; familiar with current procedure and administration; English fluent; London. Particulars to Box 452.

**ARCHITECTURAL ASSISTANT**, aged 25, desires post in country (home counties preferred), with progressive firm. Box 451.

**QUALIFIED ARCHITECT** (27), widely varied experience, seeks post as Senior Assistant; London preferred. Box 453.

**ARCHITECTURAL ASSISTANT** (28), requires position; 7 years' experience Council housing schemes, domestic work, some experience schools and industrial work, neat draughtsman, working drawings and details, surveys, and supervision of work on site; studying for R.I.B.A. Special Final; married; willing to go anywhere, but accommodation strictly essential. Box 454

## Other Appointments Vacant

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

**SHORTHAND TYPIST** required for Solicitor's office near Gray's Inn; hours, 9.30 to 5, no Saturdays. State age, experience, and salary required, to Box "S," c/o S.L.S.S., Ltd., 49, Bedford Row, W.C.1. 1085

## Services Offered

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

**ARCHITECTURAL ASSISTANT**, 12 years' experience (N.E. Coast), desires part-time work at home; tracings, working drawings, etc; neat and accurate draughtsman. Box 1084.

**CHARTERED ARCHITECTS**, situated in London, are willing to undertake the preparation of perspectives in line or full colour. Box 1097.

**YOUNG** free lance **DRAUGHTSMAN** in London offers his services for Exhibition Stand detailing and industrial styling work. Box 510.

**LADY** SECRETARY STENOGRAPHER (outside controlled age limit) is shortly available for engagement; interesting and responsible post required; highest experience and testimonials; salary from £350 to £400 p.a. Box 502.

**RELIABLE SECRETARY - SHORTHAND TYPIST** (exempt) seeks re-engagement with Architect. Box 508.

**YOUNG LADY** requires post in an Architect's office; had 2 years' architectural training and 4 months' office experience. Box 3000.

## For Sale

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

**FOR SALE**.—Lettering Set (by Leroy) for sale, with automatic scribe and pens, ivoryine guides; all in wooden case; unused. Also 300 ft. Steel tape. Accept £10, or would sell separately. Write "K," 3, Romanes, Cookham, Berks. 1046

**FOR SALE**.—Following Architectural Books for Sale, all in excellent condition:—"Architectural Building Construction" (Vols. 1, 2 and 3), Jaggard and Drury; "The Orders of Architecture," by Stratton; "Elements in Form and Design in Classical Architecture," by Stratton; "Rules for Drawing," by James Gibb. Apply to D. N. Heath, "Claremont," Barlaston Old Road, Trentham, Stoke-on-Trent. 1091

## Miscellaneous

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

**A. J. BINNS, LTD.**, Specialists in the supply and fixing of all types of fencing, guard rail, factory partitions and gates. Harvest Works, 99-107, St. Pauls Road, N.I. Canonbury 2061.

**WANTED**.—One set of "Arts Et Manners Graphiques." Please reply to Box. 5.

**WANTED**.—Complete set of "Typography." Box 487.

**NEWER HEAT DISPLAY**, Building Centre Conduit Street, W.1. New solid-fuel appliances. New heating methods. New standard of home comfort. Open 10-5. Organised by the Coal Utilisation Joint Council. 734

**PRINCIPAL** of City Firm of Architects, making business trip to South Africa in three months, would undertake to make contacts on behalf of established British firms. Box 1044.

**NO MORE DAMP WALLS**, etc., if you use "STET," the foolproof Decorative Waterproof, as used extensively by the Admiralty and other Government Departments; send for free leaflet. Devon Commercial Arts (Dept. 3), Barnstaple. 1065

**CENTRAL HEATING OIL BURNERS**.—Insist on the British-made Parwinge—no stoking, clean, trouble free; no waiting for coal or coke deliveries; no embargo now. Write at once to Parker, Winder & Achurch, Ltd., Makers, 80, Broad Street, Birmingham, 2.

**EVENING STUDENT** (20) seeks reasonable furnished Accommodation; meals unnecessary; cooking facility welcomed. Box 1098.

**TO BE LET** (Furnished) Country Cottage, near village; newly decorated; two reception, three bedrooms, kitchen bathroom (h. and c.), telephone, flower and kitchen gardens, orchard; London 40 miles. Box 1090.

## Educational Announcements

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

**R.I.B.A. QUALIFYING EXAMINATIONS**. Mr. C. W. Box, F.R.I.B.A., M.R.San.I. Courses of Correspondence and Personal to Studio, 115, Gower St., London, W.C.1. (Tel.: Euston 3506)

**R. I.B.A. and T.P. INST. EXAMS**. Private Courses of Tuition by correspondence arranged by Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I. Tutor, 212, Euston Road, N.W.1. Tel.: EUS. 776

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## CORRESPONDENCE COURSES

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