THE ARCHITECTS' JOURNAL

standard contents

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

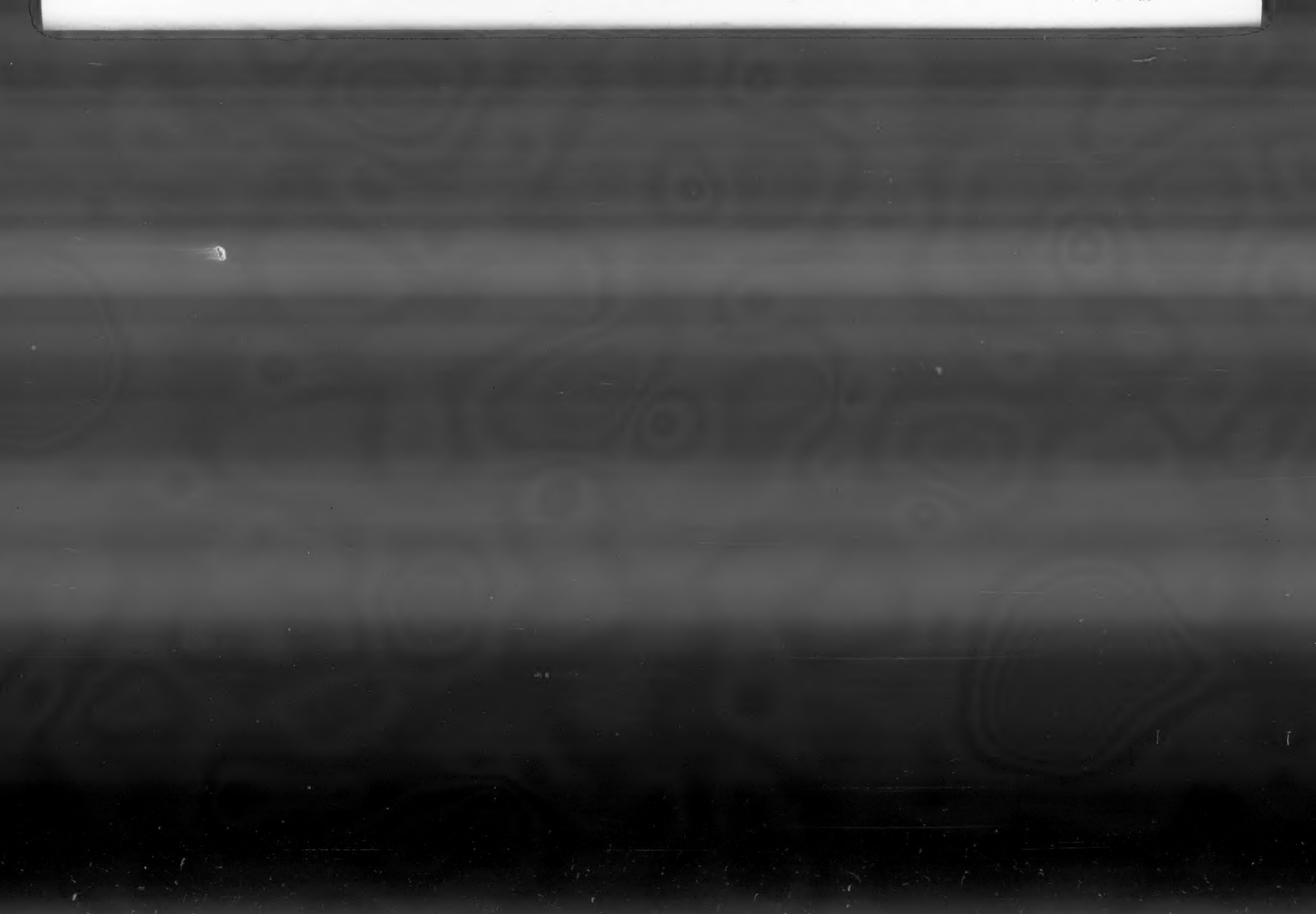
No. 2593] [VOL. 100
THE ARCHITECTURAL PRESS
War Address: Forty-five The Avenue, Cheam, Surrey. Phone: Vigilant 0087-9

Price 9d.

Registered as a Newspaper

★ The war has both multiplied the number of Official Departments and encouraged Societies and Committees of all kinds to become more vocal. The result is a growing output of official and group propaganda. A glossary of abbreviations is now provided below, together with the full address and telephone number of the organizations concerned. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA	Architectural Association. 34/6, Bedford Square, W.C.1.	Museum 0974
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
APRR	Association for Planning and Regional Reconstruction. 32, Gordon Square, W.C.1.	Euston 2158-9
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
BC	Building Centre. 23, Maddox Street, W.1.	Mayfair 2128
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. Shobnall Road, Burton-on-Trent.	Burton-on-Trent 3350
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOE	Board of Education. Belgrave Square, S.W.1.	Sloane 4522
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246
BSA	British Steelwork Association. 11, Tothill Street, S.W.1.	Whitehall 5073
BSI.	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CEMA	Council for the Encouragement of Music and the Arts. 9, Belgrave Square, S.W.1.	Sloane 0421
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.	Sloane 4280
CSI	Chartered Surveyors' Institution. 12, Great George Street, S.W.1.	Whitehall 5322
DIA	Design and Industries Association. Central Institute of Art and Design, National Gallery, W.C.2.	Whitehall 7618
DOT	Department of Overseas Trade. Dolphin Square, S.W.1.	Victoria 4477
EJMA	English Joinery Manufacturers Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FMB	Federation of Master Builders. 23, Compton Terrace, Upper Street, N.1.	Canonbury 2041
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group. 55, Great Ormond Street, W.C.1.	Holborn 2664
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
HPS	Housing Production Society. 1, Old Burlington Street, W.1.	Regent 3380
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 3158
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, W.C.2.	Temple Bar 7676
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128-29
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3767
MARS	Modern Architectural Research. 46, Sheffield Terrace, W.8.	Park 7678
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300
MOI	Ministry of Information. Malet Street, W.C.1.	Euston 4321
MOLNS	Ministry of Labour and National Service, St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Abbey 7711
MOTCP	Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1.	Whitehall 8411
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94, Petty France, S.W.1.	Abbey 1010
NBR	National Buildings Record. 66, Portland Place, W.1.	Welbeck 1881
	All Souls' College, Oxford.	Oxford 48809
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041
NFBTO	National Federation of Building Trades Operatives. 9, Rugby Chambers, Rugby Street, W.C.1.	Holborn 2770
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 2881/2/3
NT	National Trust for Places of Historic Interest or Natural Beauty. 7, Buckingham Palace Gardens, S.W.1.	Sloane 5808
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
PWB	Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
RCA	Reinforced Concrete Association. 91, Petty France, S.W.1.	Whitehall 9936
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Temple Bar 8274
SFMA	School Furniture Manufacturers' Association. 13, New Square, Lincoln's Inn, W.C.	Chancery 5313
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	City 6147
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815



A Perfumery Shop

DESIGNED BY MR. HUGH CASSON, M.A., A.R.I.B.A.

A feeling of freshness and spotlessness. . . . A sense of space and harmony. . . . An atmosphere of quiet sophistication. These, considered Mr. Casson, were the significant things in a modern perfumery shop, and he set out to achieve them with Warerite Laminated Plastics.

If his design does nothing else it at least demonstrates the scope and versatility of these new materials in modern interior decoration. From the purely practical viewpoint, Warerite veneers and wall panels have much to recommend them. They are almost indestructible and highly resistant to the action of heat, water, alcohol and acids. 'Warerite' is a name to bear in mind in connection with building plans for after the war, when veneers and wall panels will be available in a wide range of colours.

A curved display wall of lemon yellow Warerite panels sweeps inwards from the entrance lobby. The interior walls and ceiling all have Warerite linings; the side walls pale blue-grey, the end wall black and the ceiling air blue. The low display table in the window has a white Warerite top and the fluorescent lighting panel over the counter is of the same material. The yellow note is echoed in the counter and display fitting behind it, both of Warerite laminated sheet.

W.3 Trade Mark **WARERITE**

LAMINATED PLASTICS MADE BY **WARERITE LIMITED** · UNIT OF BAKELITE LIMITED · WARE, HERTS

July 19th 1919

Not flying bombs, rocket guns, nor tracer bullets, but the largest firework display ever fired—the Official Peace Display in Hyde Park to celebrate the end of the first Great War, the display in which Brock surpassed himself. We look forward to the not too distant future when the sky will again blaze with the lights of gaiety.

The story of our company during that first 19 years of the present century is a reflection of the times. It is true that we had been responsible for the erection of Victoria Station, The Royal Britannia Naval College at Dartmouth, The Board of Agriculture, Apothecaries' Hall, and many other important buildings unconnected with the war, but much of our energy was spent upon Filling Factories, Munition Works, Aerodromes, the good old Nissen Hut,—and even Air Raid Shelters! Then, as now, we contributed our quota in full to the builders' share in victory.

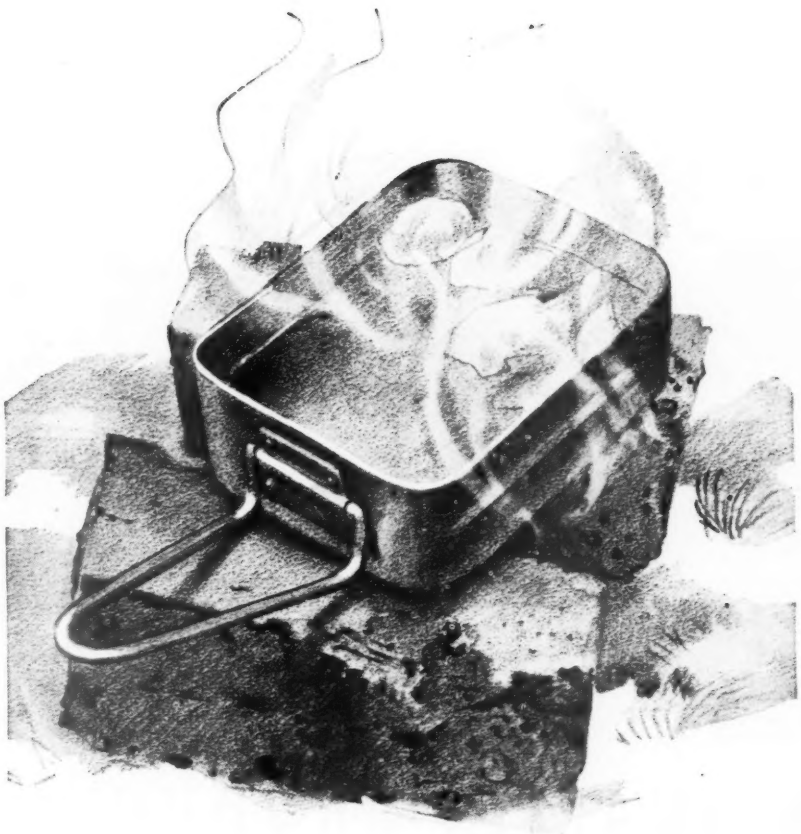
HIGGS AND HILL LIMITED

BUILDING AND CIVIL ENGINEERING CONTRACTORS

COVENTRY
WARWICK ROAD

CROWN WORKS
LONDON, S.W.8

LEEDS
ST. PAUL'S STREET



Season to taste . . and serve immediately

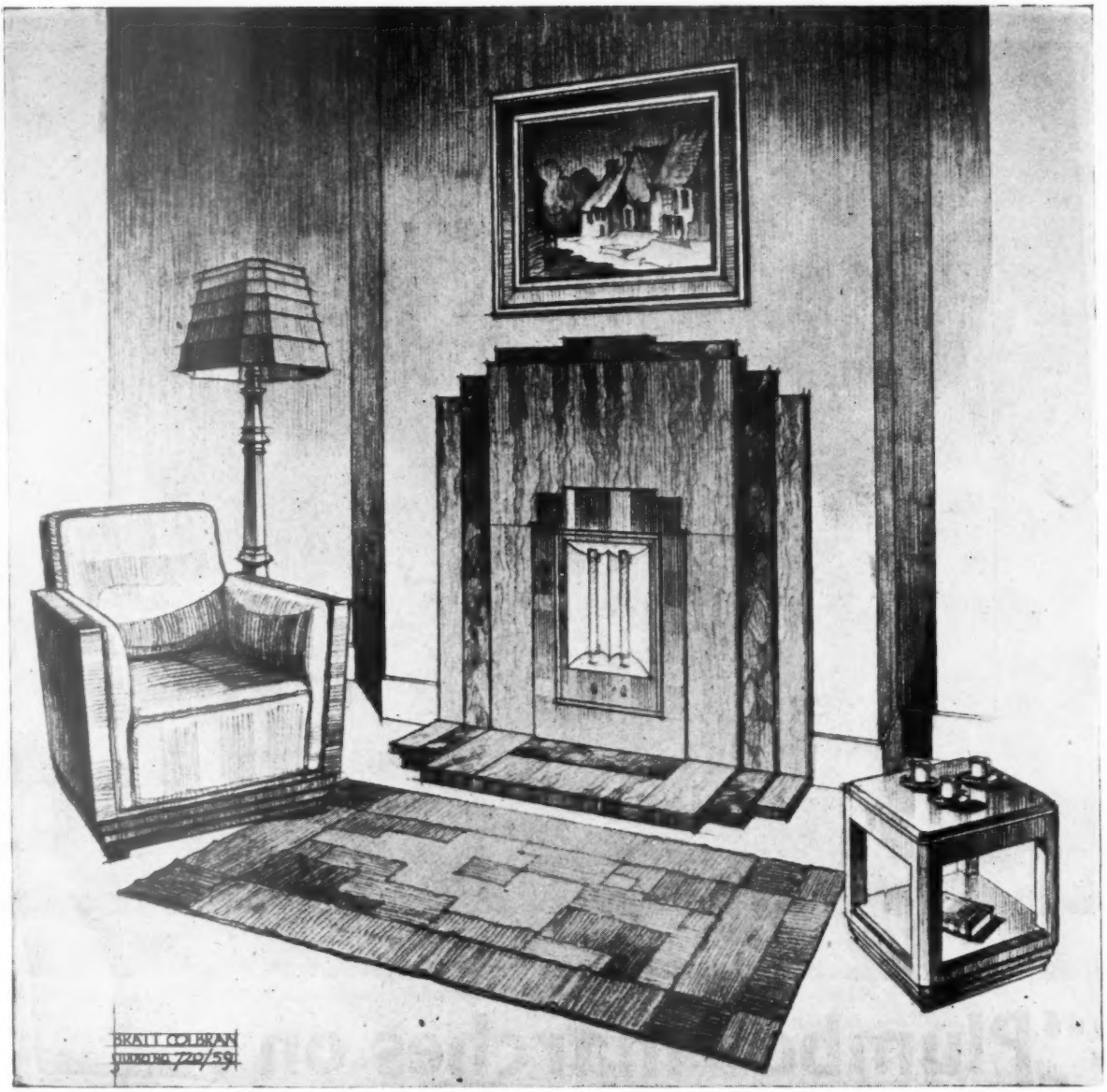
You bet, Mrs. Beeton . . and there'll be a voice from the garden door . . "Come on, John, it's ready! " . . a spotless tablecloth . . knife right . . fork left . . a glass of ale sparkling in its crystal glass . . and "it" will have been cooked by gas. Perfectly cooked, of course. Edgars are ready now to place their long experience and service at the disposal of those whose job it is to plan and prepare installations for the use of gas in the future.

WM. EDGAR & SON, LTD.

Gas Apparatus Manufacturers and Contractors

BLENHEIM WORKS · HAMMERSMITH · LONDON, W.6

Telephone: RIV. 3486



A PRE-WAR EXAMPLE OF FIREPLACE CRAFTSMANSHIP

When the time comes to turn again to the tasks of peace, we look forward to making renewed progress in a tradition of craftsmanship we have made essentially our own.

BRATT COLBRAN LIMITED

10, MORTIMER STREET, LONDON, W.1.

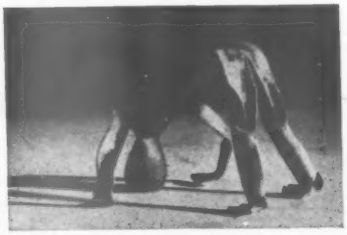
SPECIALISTS IN SOLID FUEL, GAS AND ELECTRICAL HEATING

"Plumbo" marches on . . .

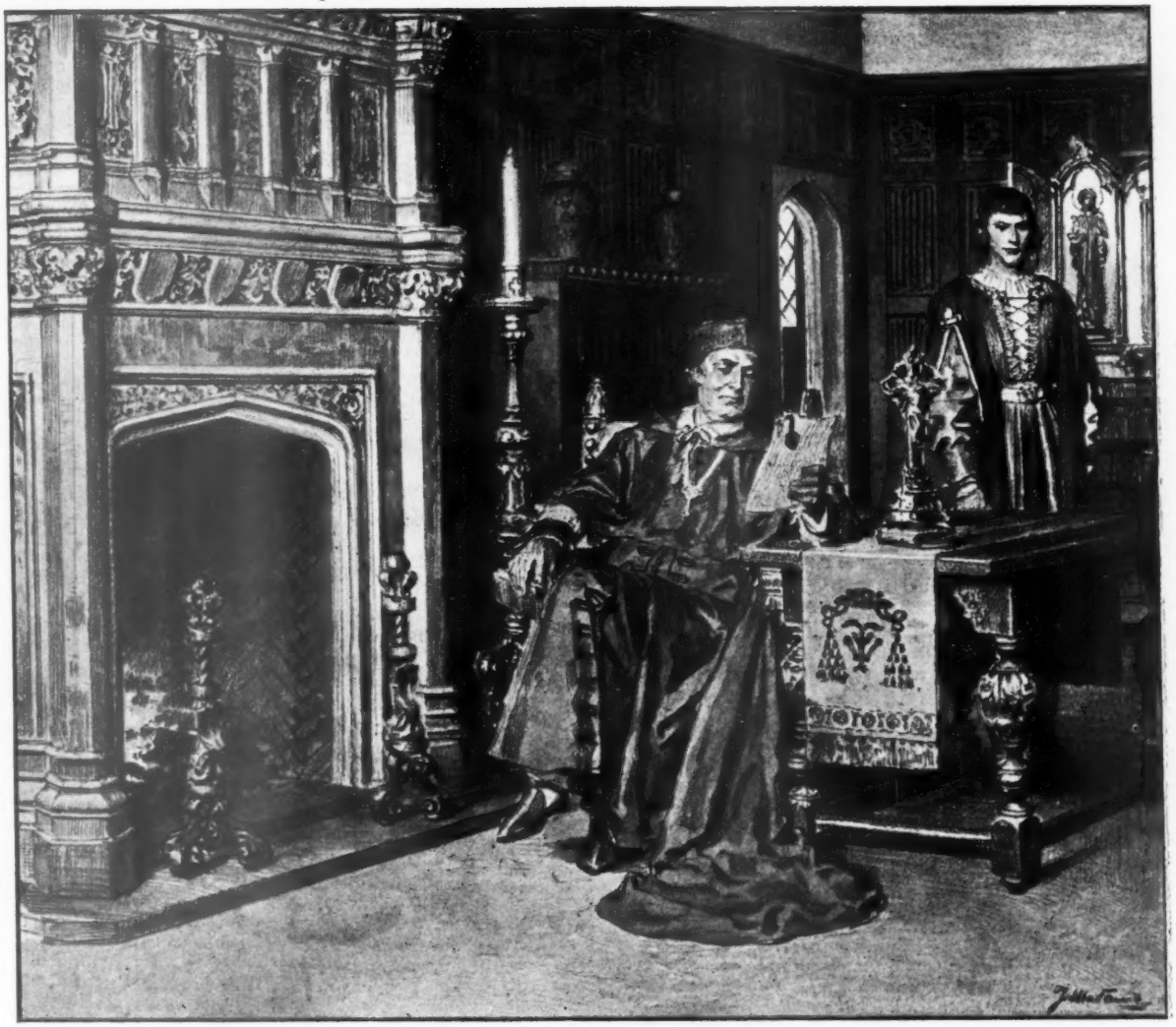
This little figure was devised, and given the nickname "Plumbo," in July, 1939 — with the object of typifying the flexibility of Lead. Much has happened since then, and the service that Lead has given the nation has been largely in other fields than was visualised even at that critical time. The time may not now be far distant, when the full value of Lead may once more be applied to building work. When large-scale re-building is commenced the summary of sound practice in Lead work, which is collected in the Technical Bulletins and Information Sheets issued by this Council, will assist in the efficient tackling of post-war building problems.

LEAD

For the latest details concerning the permitted use of Sheet Lead and Lead Pipe at the present time, consult your usual supplier or the revised Economy Memorandum issued by the Ministry of Works.
Copies of Technical Bulletins and Information Sheets are available on request.



LEAD INDUSTRIES DEVELOPMENT COUNCIL
EAGLE HOUSE • JERMYN STREET • LONDON, S.W.1



STATE CHAMBER AT HAMPTON COURT—AT THE TIME OF CARDINAL WOLSEY

During a thousand years of barbarism in Europe much of the fruit of early civilisation decayed or was destroyed. Then, in the Renaissance, culture was revived in Italy. There, in company with Galilei, Leonardo da Vinci and Michaelangelo, architects, engineers and scientists paved the path for progress with their discoveries.

Their architectural developments included an efficient chimney fireplace which, though seemingly unspectacular today, has since proved to be the period's most powerful contribution to the extension of civilisation. Its use provided a new degree of year-round indoor comfort in the more substantial buildings, which gradually and increasingly appeared in the colder European countries.

Here in abbey, university and school men read and taught the new learning from Italy. Once again man's progress moved in step with his ability to protect himself from extremes of climate.

The modern analogy to the Renaissance fireplace is the Carrier Air Conditioning installation producing in any climate — in any enclosed space, the atmosphere in which we may live and work with maximum comfort and efficiency.

CARRIER ENGINEERING COMPANY LIMITED

24 BUCKINGHAM GATE, LONDON

IS THE ESTIMATED COST OF FIRES DURING THE WAR NOT CAUSED BY ENEMY ACTION . . .

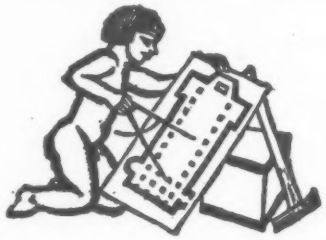
FOR THE PROTECTION OF RE-CONSTRUCTED BRITAIN'S NEW BUILDINGS AGAINST FIRE RISKS, ARCHITECTS ARE INVITED TO CONSULT

DREADNOUGHT

FIREPROOF DOORS (1930) LTD.

22 VICTORIA STREET, WESTMINSTER, S.W.1

In common with every other periodical this JOURNAL *is rationed to a small part of its peace-time needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the* JOURNAL. *Newsagents now cannot supply the* JOURNAL *except to a "firm order." Subscription rates: by post in the U.K. or abroad, £1 15s. 0d. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the* JOURNAL *and made of raw materials now in short supply, are not necessarily available for export.*



DIARY FOR OCTOBER NOVEMBER AND DECEMBER

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

BILSTON. *Civic Survey Exhibition.* At Bilston Art Gallery. (Sponsor, Bilston Corporation). OCT. 5-7

BUXTON. *When We Build Again.* Exhibition and Film. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.) OCT. 14-21

DONCASTER. *Homes to Live In.* Exhibition. At the School of Art. (Sponsor, BIAE). OCT. 5-8

DURHAM. *The English Town: Its Continuity and Development.* Exhibition. (Sponsor, TCPA). OCT. 5-18

When We Build Again. Exhibition and film. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.) NOV. 11-18

HERTFORD. *Homes to Live In.* Exhibition. Land Army Tour. (Sponsor, BIAE). OCT.-NOV.

LONDON. *Water Colour Drawings of H. S. Merritt.* Exhibition. At the Batsford Gallery, 15, North Audley Street, W.1. (Sponsor, Batsford, Ltd.). Monday to Friday, 10 a.m. to 4 p.m. OCT. 5-NOV. 3

Plan for Plymouth. Exhibition. At the Institution of Civil Engineers, Great George Street, S.W. The *Plan for Plymouth* is the work of Mr. J. Paton Watson, the engineer and surveyor of the city, and Professor Patrick Abercrombie. The exhibition is arranged under six main headings:—Historic Plymouth, pre-war Plymouth, the region, communications, the city plan, and the park system, and there is a large map showing the zoning proposals for the city and region. OCT. 5-7

Kensington To-day and To-morrow. An Exhibition prepared by the Housing Centre for the Kensington Borough Council. At 13, Suffolk Street, S.W.1. (Sponsor, HC). 9.30 a.m. to 5.30 p.m. Saturdays, 9.30 a.m. to 12 noon. OCT. 5-14

PEP Club. Annual general meeting. At 16, Queen Anne's Gate, S.W.1. 2 p.m. OCT. 11

Terrace Housing Competition. The National Housing and Town Planning Council invite architects and students of architecture to submit in competition designs for houses suitable for State-aided schemes in urban areas to be erected in terraces. Assessor: Louis de Soissons. Premiums: £125, £75, and a further £75 to be awarded at the discretion of the Assessor. Last day for submitting designs: October 12, 1944. No questions will be answered. Conditions may be obtained on application to the Secretary, National Housing and Town Planning Council, 41, Russell Square, London, W.C.1. OCT. 12

Presentation to Sir Ian and Lady MacAlister. At the RIBA, 66, Portland Place, W.1. All those who have contributed to the presentation fund are invited by the RIBA to attend. The proceedings will be informal, and it is anticipated that they will not last more than 45 minutes to an hour. 2.15 p.m. OCT. 18

Sir Albert Howard. *Fresh Food and Town Planning.* At 2, Savoy Hill, W.C.2. Chairman, Lord Portsmouth. (Sponsor, TCPA.) 1.15 p.m. OCT. 19

F. L. Barrow, of the Building Research Station. *Prefabricated Plumbing.* At the Royal Sanitary Institute, 90, Buckingham Palace Road, S.W.1. Chairman, Percival T. Harrison, Vice-President of the Institute. 2.30 p.m. OCT. 25

MANCHESTER. *Town and Country Planning Association Conference.* At the Gas Board Showrooms, Stretford, Manchester. Speakers, R. L. Reiss and Miss Judith Ledeboer. (Sponsor, TCPA). 11 a.m. OCT. 7

NEWPORT. *Monmouthshire Industrial Exhibition.* At the Technical College, Newport. The exhibition is designed to show not only the wide range of the County's products, but also the resources and potentialities of Monmouthshire as a site for new post-war industries and for the expansion of existing undertakings. The opening ceremony will be performed by the Minister of Reconstruction, Lord Woolton. Enquiries concerning the exhibition to:—The Hon. Organiser, Monmouthshire Industrial Exhibition, County Hall, Newport, Mon. (Sponsor, Monmouthshire County Council, in association with the Newport Borough Council and local industrialists). OCT. 7-14

STAMFORD, LINCS. *When We Build Again.* Exhibition. A conference will be held by the Town and Country Association on the first day of the exhibition. Speaker, R. L. Reiss. (Sponsor, TCPA). OCT. 21-28

STRETFORD, MANCHESTER. *When We Build Again.* Exhibition and film. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.). OCT. 5-7

NEWS

THURSDAY, OCTOBER 5, 1944
No. 2593. VOL. 100

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.

Avon Tyrrell, Hampshire, has been GIVEN BY LORD MANNERS to the National Association of Girls' Clubs and Mixed Clubs for use as a training school, holiday and conference house.

An appeal for Funds to extend the work of the Association, published in a letter in *The Times*, states: Lord Manners has made a truly generous and imaginative gift to the NAGC and MC in presenting his house, Avon Tyrrell, in Hampshire, for use as a training school, holiday and conference house. The gift includes sufficient land for camping sites, games grounds, and two small lakes for bathing. In two minutes the New Forest can be reached, with the possibility of walking for miles over some of the loveliest and most historic country in England. The association has already secured three houses in Devonshire Street, W.1, to provide a permanent headquarters and a London club house with residential accommodation for country members. We are now not only asking for funds to furnish and equip Avon Tyrrell and the London club house, but also for finance to enable many more clubs to be started in all parts of England, Scotland, and Wales. All donations should be sent to Mrs. Anthony Eden, 29, Devonshire Street, London, W.1. The letter is signed by Beatrice Eden, Chairman, Appeals Committee; Edward Holland Martin, Treasurer, Appeals Committee; Katharine Elliot, Chairman, National Association of Girls' Clubs and Mixed Clubs; McGowan, Chairman, ICI.

From AN ARCHITECT'S *Commonplace Book*

TEUTONIC TECHNICS AND ROMANCE AT BREST (*From a news item in* The Daily Telegraph *September 23, by F. W. Perfect, Special Correspondent*). Although Brest is a ruin, the famous U-boat pens —the first to fall into the hands of the Allies—are relatively little damaged. . . . The fort was a gigantic piece of work, but the U-boat pens are staggering. Passing through a nine-foot thick concrete doorway, I found myself in an enormous corridor, with the submarine berths on my right and on my left machine-shops, stores and administrative buildings piled in storeys up to the roof, far overhead. There are 15 berths. The first ten have gates for dry-docking. The other five have no locks but are wider, housing two submarines each. So 20 U-boats could shelter simultaneously under the massive roof, which varies in thickness from 15 to 30 ft. . . . Each pen is 375 ft. long and about 42 ft. wide. Round the massive walls runs a ledge which serves as a quay and overhead are travelling cranes, several of which are still in position. Enormously thick steel gates close the pens from the harbour. The strength of the whole colossal structure—even the internal dividing walls are from five to eight feet thick—defied demolition. Like the fort, the pens were packed with stores of every kind, containing not only extensive workshops, but also living quarters for the 1,000 people employed in them.

The Common Council of the City of London has decided TO PAY SIR GILES GILBERT SCOTT £6,300, FEES for services in connection with the post-war reconstruction of the Guildhall.

At the meeting of the Common Council Captain Alfred Instone complained of the delay in making available copies of the report on the City rebuilding proposals. The matter arose on a recommendation to pay Sir Giles Gilbert Scott fees amounting to £6,300 for services in connection with the post-war reconstruction of the Guildhall. Captain Instone said that, while large outside owners could not get on with plans owing to the delay in placing on sale the report on replanning, the Corporation was being asked to assent to proposals to go ahead with its own rebuilding. The Council agreed to pay the fees.

★

In war-damaged towns bombed sites could be converted into beautiful oases in otherwise characterless deserts of brick and mortar; disused churchyards and the gardens of city squares, often neglected, might be made things of beauty; and the ruins of certain BOMBED CHURCHES, PRESERVED IN A GARDEN SETTING, would be a permanent reminder of the suffering and loss inflicted by war.

These are among the suggestions, in a survey designed primarily to guide public opinion so that the memorials of the present war should reach a higher standard of artistic merit and social value than those of the last war, made by a committee of the Royal Society of Arts and published by the War Memorials Advisory Council. It is mainly directed to committees which will be acting for towns and villages, for schools and other institutions, and for service units and commercial undertakings. The council, which comprises representatives of a large number of societies and men and women of individual distinction in public affairs and in the arts, has approved the recommendations of the committee. Its chairman is Dr. E. F. Armstrong, president and chairman of the Royal Society of Arts.

Other suggestions of the committee are: The creation of parks and open spaces, where the individual dead could be commemorated by the gift of an artistically designed seat or some other feature, the planting of memorial trees for a like purpose, and the acquisition of hill tops or view points, heaths and commons and nature preserves, playing fields and children's playgrounds, and the acquisition and preservation of buildings of historic interest or architectural importance. It is urged that where monuments are erected they must not be mere standardized products of commerce, as so many were after the last war. They must be the creation of individual artists well acquainted with or prepared to study the sentiments of the community concerned and the place chosen for the memorial. Where memorials take the form of socially valuable projects, they must meet permanent needs, and should not be facilities which government, national or local, will in any case provide. Each record of names should contain a reference to any other form that the local memorial takes; to make clear its memorial purpose, any land or building dedicated as a war memorial should contain a group of sculpture or a relief panel in stone or gunmetal or inscribed doors or gates; and at least once a year there should be on the site a public act of recognition of the sacrifice the memorial commemorates. While the council submits no detailed recommendations for a national war memorial, it supports in principle the suggestion made by Admiral of the Fleet Lord Chatfield, its president, at a public conference earlier in the year that London should have a special memorial of its own—a shrine that will include in itself memorials to the dead of the fighting services, the Civil Defence services, and all those who have taken part in this war and deserve to be remembered.

In Cornwall controversy is raging over THE OLD FOWEY HOME OF Q.

If a plan drawn up by The East Cornwall Planning Officer is carried out, says the *Evening Standard*, the old house of Sir Arthur Quiller-Couch will be demolished to build a new esplanade along the sea front. Opposing the scheme vigorously is the St. Austell Old Cornwall Society. It was at The Haven that most of Q's books were written. The society is anxious to preserve the house as an historic Cornish spot. The Old Cornubians intend to press their case with the utmost vigour.

★

Answering criticisms of THE CITY OF LONDON PLAN at a discussion at the Housing Centre, Mr. F. J. Forty, the City Engineer, made the following points:

Proposals for major traffic routes to link up with those of the LCC were evolved in co-operation with officers of that authority. The definite aim of the Town Planning Committee is to retain the wharves between the Tower and London Bridge. Under no consideration whatever will the committee contemplate a reduction in the railway facilities in the City. Liverpool Street Station should not be moved out of the City, but it is hoped that this and other railway stations will look far better in the course of a few years. The principle of establishing some small open spaces is well to the fore in the plan, but it is not likely that, apart from the great clearance around St. Paul's, anything in the nature of a park will ever be introduced. The land is primarily for the use of commerce.

Mr. Willink, the Minister of Health, and Sir Malcolm Trustram Eve, K.C., who last week was appointed to co-ordinate plans for dealing with LONDON'S HOUSING PROBLEM, held a conference at the Ministry in London.

They met representatives of the London County Council, the Metropolitan Boroughs' Standing Joint Committee, the Association of Municipal Corporations, and the Urban District Councils Association within the London region, to discuss all possible lines of attack on emergency housing problems in London this winter.

Vehicular and passenger ferries plying to Harwich and Bawdsey are among the POST-WAR PLANS FOR FELIXSTOWE.

Other post-war plans include a new road to the coast, and a double railway track from Ipswich to provide frequent train services throughout the summer months. The Urban District Council is making representation to the county authorities. Other schemes are for many car parks and a big programme of buildings.

Demonstration Houses at Northolt

The entrance porch of one of the thirteen Ministry of Works houses at Northolt built to show alternative types of materials, plans, and construction. Two of these houses, of which the photograph above illustrates details, have been built by the British Iron and Steel Federation of steel frame and cladding to designs by Mr. Frederick Gibberd. Astragal comments this week on the houses, which will be fully covered in the next issue of the JOURNAL.

★

In a housing manual just published the Ministries of Health and Works state: THE MOST CONVENIENT BASIS FOR A COMMUNITY is a population of between 5,000 *and* 10,000. *New estates should be near existing social and educational facilities.*

The Housing Manual (price 2s., H.M. Stationery Office) gives official guidance on the lay-out, planning, construction and equipment of the 300,000 permanent houses to be built under the Government's two-year post-war programme. Suggested overall figures for persons per acre are: Open development, 30-40; outer ring of town, 50-60; inner ring, 75; central areas, 100; central areas in large towns, 120. In neighbourhoods with a density of 100 an acre the overall figure in some housing groups might be 50 and in blocks of flats 200 per acre. Among the main points made by the Ministries are: Most of the new homes built by local authorities will be two-storeyed houses or blocks of flats. Semi-detached houses are likely to be preferred, but architects are reminded that broad-fronted terrace houses are worth considering. These permanent houses should be designed for larger families, as the Government's emergency factory-made houses are designed primarily for young married couples with small families. In general the standards recommended are those proposed in the Dudley Report. The Manual proposes that the floor area of a three-bedroom house for five people should be between 800 and 900 sq. ft. A hedge or wall not more than 2 ft. high is suggested in place of fencing. Three main types are suggested: The kitchen-living room house; the working-kitchen house; and the dining-kitchen house. This, the Manual says, will cater for the three main ways of living. Areas suggested for all types of bedroom are: First bedroom, 135-150 sq. ft.; other double bedrooms, 110-120 sq. ft.; single bedrooms, 70-80 sq. ft.

We will refashion and rebuild the towns, get rid of the dirt, squalor, congestion, muddle and ugliness. We will build noble and beautiful towns and cities. WE CAN DO ALL THAT.

So said Mr. H. J. Adams in his presidential address to the annual conference of the Amalgamated Union of Building Trade Workers at Morecambe. But before doing so, he went on, certain conditions must be established. We must have our charter in operation. This includes higher wages, the guaranteed week and full employment, the 40-hour working week, improved welfare conditions, better lodging and travelling allowances, and the more efficient organization of the industry. To-morrow we set out on the biggest job of our lives. Nothing less than the whole country is our site. Houses claim first priority. But folk do not just live in houses. They require shops, schools and cultural institutions, hospitals and health centres, factories and workshops, theatres and cinemas and other places of recreation and amusement. Immediate temporary sheltering of the homeless should present no great difficulty if the Government showed as much concern for the people's welfare as it had for the troops of our own and Allied nations. This could be disposed of in a matter of months. But, he added, no real home is conceivable as a temporary structur:.

MODULAR CO-ORDINATION

"LOOK up ASA, Project A62—you may not like it at first glance but *don't be ignorant of it—its coming.*" This is taken from *Octagon*, journal of the American Institute of Architects. Project A62 is a proposal for co-ordinating the dimensions of building products, prepared by the American Standards Association in collaboration with the AIA.

In this country the idea of dimensional co-ordination is new and awareness of the need not very widespread. Dimensional co-ordination goes hand in hand with prefabrication, two lusty striplings that will have a decided impact on our future activities. Standardization, as such, is now above controversy. It is recognized that standards, once achieved and providing they are efficient and flexible, free the mind for other tasks—we do not need to redesign electric plug sockets every time we wire a house, these things are part of our accepted planning and designing vocabulary. But standardization can take place at several levels—within the individual organization, within an industry, within a country, or internationally and to date, in building, we are still at the second of these levels. The national standard eludes us.

We say this despite the new standards being issued from time to time from the Ministry of Works, for these standards are still isolated standards related to individual industries. For instance, we still lack a standard window. We can envisage the perplexity of the prefabricator who bases his design on steel casements and finds, to his distress, that he cannot subsequently change over to timber casements because they are founded upon an entirely different series of dimensions. Multiply this dilemma through the range of building products and the chaos of our standards position is manifest. America is suffering in the same way and the following quotation from Neutra is apt in both countries: "Although engineering inventiveness may be applied successfully to the design and economical production of elements the standards developed rarely interlock. Standard unit dimensions of wall-forming or covering slabs and panels, stock sizes of steel sash, stock widths of insulation board, sheet glass, glass bricks, flooring materials, etc., are strangely lacking in inter-relation."

The building industry has long suffered under the gibe that it was the only outstanding craft industry in an age of mass production and standardization but, indeed, it could hardly help itself, for building is the process of bringing together a host of manufactured and raw goods, piecing them up and cutting them about until they fit each other. So long as the matrix was bricks and mortar the process worked tolerably well and, to quote Neutra again, "manufacturers still seem to fit their brand new products, not to each other but to an obsolete species of wood frame or masonry shell."

It is when products are required to come together without the aid of an accommodating matrix which can be cut about that the real trouble begins, when, in other words, the building is prefabricated.

It is then that products must fit accurately without cutting about on the site. As more and more finished building products are produced in the factory, so will it be increasingly important that they interlock because the likelihood of an adjustable fixing medium being available will diminish. It is clear that such products must be related to each other in the earliest stages of production. There is only one way to achieve this relation, by laying down a common dimensional sequence to which all might adhere—a module. That is what is meant by the co-ordination of dimensions and that is the whole argument for it.

Industrialists seem to be apathetic about the matter. Their argument, however discreditable and shortsighted, is that their products will be in greater demand than they can supply for some years, so why worry about design? The industrialist does not care whether or not his product dovetails with that of his rival. He may even derive quiet satisfaction from the fact that it does *not*. Clearly, the lead can only come from architects, for they have the irksome task of trying to fit together the miscellaneous pottage of manufactured articles. They will find support from the merchants, who will see in the idea a simpler stocking problem for themselves. The RIBA, like its counterpart the AIA, should forthwith set up a standing committee to effect this co-ordination

The Architects' Journal
War Address: 45, The Avenue, Cheam, Surrey
Telephone: Vigilant 0087-9

NOTES & TOPICS

NORTHOLT HOUSES

It is difficult to understand exactly why MOW's demonstration houses at Northolt have been erected. Half the houses show, of course, building methods alternative to traditional ones such as foam slag and steel frame. But these methods have already passed the experimental stage, so presumably the houses are not trial models.

*

The key word is perhaps Demonstration, the houses being there to give ideas to local authorities on construction. But here again, when the houses are completed, little construction is visible, and much more could be learned from good detail drawings.

*

Are the houses there, then, mainly to show planning? A few cases certainly do so in a useful way, as in the houses based on the Dudley recommendations. However, five of the thirteen types have identical plans, so that planning demonstration cannot be the principal object. If the plans prove anything it is that an additional 50 sq. ft. floor area can make a surprising improvement in the feel of a house, quite apart from giving more convenience. One wonders if some of the buildings are meant to be awful warnings of how not to do the job, as in the case of the four terrace houses with their 45 degree staircases, their prison-cell bedrooms and first-floor windows whose cills are nearly level with the chin.

*

If the houses are there to give a general comprehensive indication to local authorities of how they should set about designing the future permanent homes of England, the outlook threatens to be bleak. These official plans and elevations may be a slight improvement on what has gone before under the opprobrious term Council House, the fittings and accommodation may be a step forward, the appearance —that of those horrible little tiled fireplaces excepted—may be in Good Taste. But they are sad, dead looking things with plans which, if just about adequate on an 850 to 900 square feet minimum basis, lack any sort of character, even bad. Do people really like their houses that way, or are we once more up against, not so much official devitalization, as the old money nonsense?

*

Two bright and coloured spots in the otherwise melancholy Northolt scene are the steel houses designed by Frederick Gibberd. They have been carried out by the British Iron and Steel Federation and are therefore not strictly speaking official. Let's hope that that is not the real reason why they are structurally so much more adventurous than the others and why they make, with planning and design that is at least human and alive, so striking a contrast.

TELEVISION

Soon after reading Julian Trevelyan's warning, in a recent *Architectural Review*, about " that faculty for visual awareness which it is now recognized our society has lost to such a dangerous degree," I was talking to John L. Baird, genius and pioneer of television, who conjures up exciting ideas about how television is going to help restore that visual awareness.

*

The possibilities for visual education offered by television are not only immense but also long overdue. Sound, through gramophone and radio, has played too large a part for too long a time. The cinema, with public entertainment, could do little to help. But television at home, handled with common sense and imagination, can right the balance. For the first time news and information about architecture and the related arts will reach actually, vividly, and personally, into millions of homes. A vast new public consciousness, not of the ear this time but of the eye, is about to be created.

*

One of the devices which will help to achieve this visual revolution is Mr. Baird's latest and most astounding development, stereoscopic colour television, by which not only colour, line

and texture, but solid form itself, appears on the screen. Will these fantastic possibilities for tele-architecture be rightly used, or will the television programmes fall into the pitfall of a kind of visual "swing"? What provision will be made, on the educative side of the policy, for the co-operation of town planners, architects, painters, sculptors, and industrial designers? Has the BBC a plan? There seems ground for hope that the Corporation is aware of the issues? Mr. Robert Foot, recently Chairman, is said to have had strong views on the positive and enlightened uses of television, both for the public generally, and also for schools. Architects are among those who await the Television Council's findings with intense interest. As Mr. Baird confessed to me with his wry Scotch smile, "I don't want to see too many pin-up girls on my screens."

*

Mr. Baird could not so far say much about cost, size, and availability of private sets, except that these should be of reasonable dimensions, on the market under five years after the war, and well within the means of all but the very lowest incomes. Some of the sets he hopes to manufacture himself. But it is chiefly in the sphere of built-in television that architects, in their professional capacity, are most likely to be interested, and here Mr. Baird was more revealing. Built-in television will tend to be used in public buildings rather than in private ones; not only in cinemas and theatres—successful television shows were given in London cinemas before the war—but also, sometimes, in foyers and waiting rooms, and in such places as hotel suites where free-standing fitments must be kept to a minimum. Smaller sets should have the usual access panels; external facings and surrounds should be as unobtrusive and as dark in tone as possible. The larger screen for public performance is best planned at the end of a long and narrow hall, without oblique sight lines, and with an apparatus chamber behind the screen. A screen 5 ft. 0 in. square needs a 5 ft. 0 in. cubic casing for apparatus, apart from operator's space. Mr. Baird insists on the utmost simplicity of treatment, both architecturally, in halls for public television, and also in the design of free-standing sets. Attention must be riveted on the screen, and decorations which distract the eye and contribute to light loss must be eliminated.

*

What of Baird himself? It is probable that he remains the most original and distinctive mind in television to-day. His discoveries, of profound and direct significance to all who love architecture and the visual arts, are soon to benefit everyone. Yet he is still obliged to carry on endless experiments at his own expense. If Government hints of public assistance to private research should ever materialize, the name of Baird should stand high on the list.

ASTRAGAL

Living-room in one of the BISF houses at Northolt. See Astragal's note on the facing page.

LETTERS

G. B. J. Athoe,
(Secretary, IAAS)

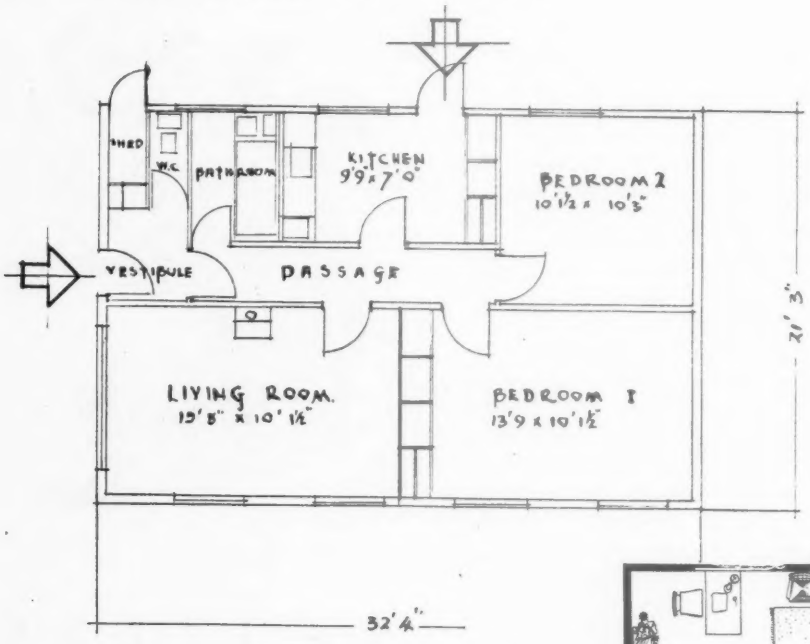
M. E. Askwith
(Student at the Northern Polytechnic School of Architecture)

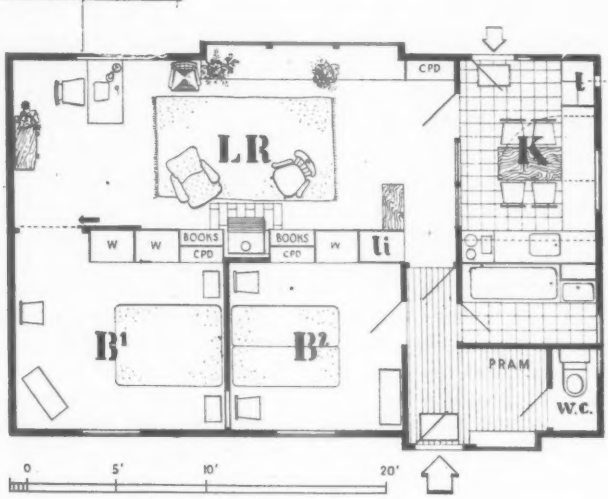
The Churchill House

SIR,—The actual experience of one who has lived in a Portal house, if only for a month, should certainly be of value; but the tenant who has recently expressed his complete satisfaction with the accommodation afforded also expresses what, to my mind, is one of the most serious objections to temporary housing. He is very pleased with the place, so much so that he "will be very sorry when the time comes to leave." Just so, and it does indeed seem a thousand pities that, having found a house which, to him, is so eminently satisfactory and having taken root so to speak in the locality, made friends and connections, and having in ten years got a well established garden, he should have to relinquish all or most of this and begin all over again.

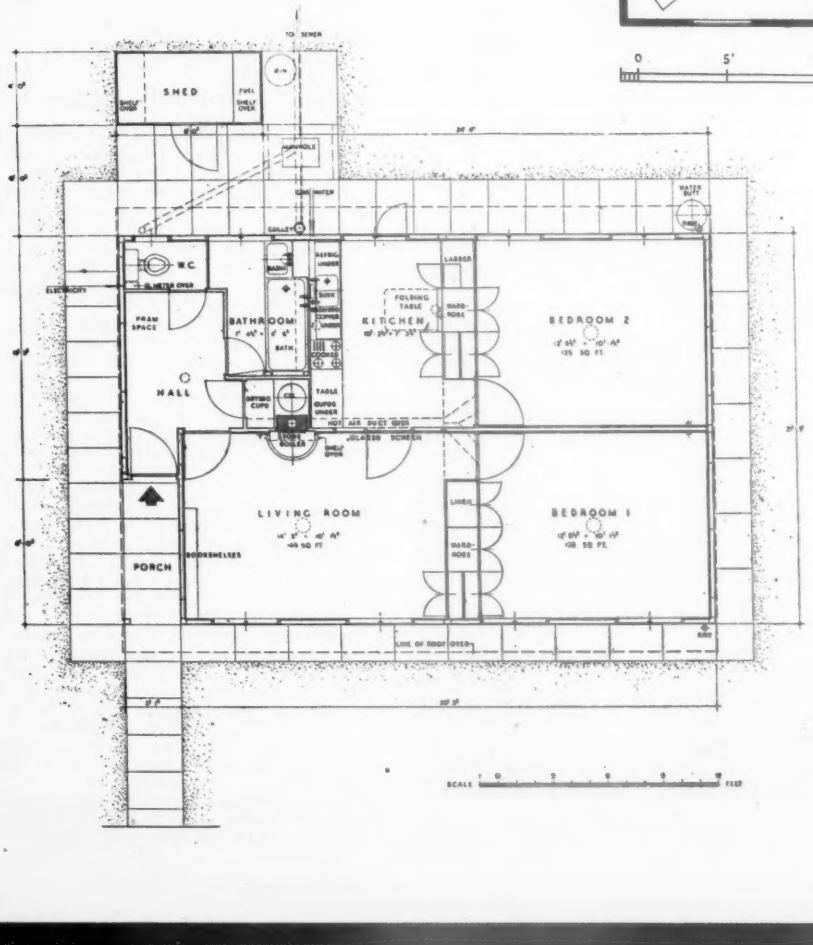
The fact that the temporary house may prove to be so satisfactory to many people adds much point to the contention of Mr. Manzoni, City Engineer of Birmingham, in his recent statement that, although these temporary houses may meet an immediate need, yet, at the end of ten years, there would still exist in Birmingham (and doubtless elsewhere) many thousands of slum houses which would be infinitely worse than these temporary houses, and therefore the latter could not be demolished—in fact, this position might continue for a very long time, giving rise to greater dissatisfaction. On the other hand, there is also the extremely likely risk that the temporary houses themselves would contribute to the slum evil.

If we really must have these temporary structures—and in view of the many types





Suggested plans by Walker and Clark (above) and Astragal (right). Below, the amended plan of the Ministry of Works—see letter from M. E. Askwith.



of permanent houses which can be erected as quickly as the proposed temporary type at little or no greater cost the case is not proven—then it seems to me that the Birmingham scheme of so designing the temporary house that it can be ultimately converted into a permanent type, is one of the best solutions. Similar ideas I believe have been adopted or are under consideration by other large cities. If only the same sites could be utilised that would be something, but Birmingham is showing the way to do much better than this. To erect several hundred thousand of these temporary things for demolition at the end of ten years or thereabouts will surely mean a very great waste or misapplication of labour and material at a time when these are most needed, to say nothing of the difficulties connected with roads and services, or of the æsthetic aspect.

G. B. J. ATHOE.
Secretary, Incorporated Association
London of Architects and Surveyors

SIR,—I read Messrs. Walker and Clark's letter with considerable interest, but I would like to make the following criticisms of their plan :—

(1) Carrying forward the external walls, while admittedly increasing the living-room area, automatically cancels out the protective porch provided in the MOW plan.

(2) Considerable cross-circulation is inevitable in the passage, the presence of which reduces the area available for the rooms. One cannot help feeling, also, that this passage would be rather gloomy and cramped.

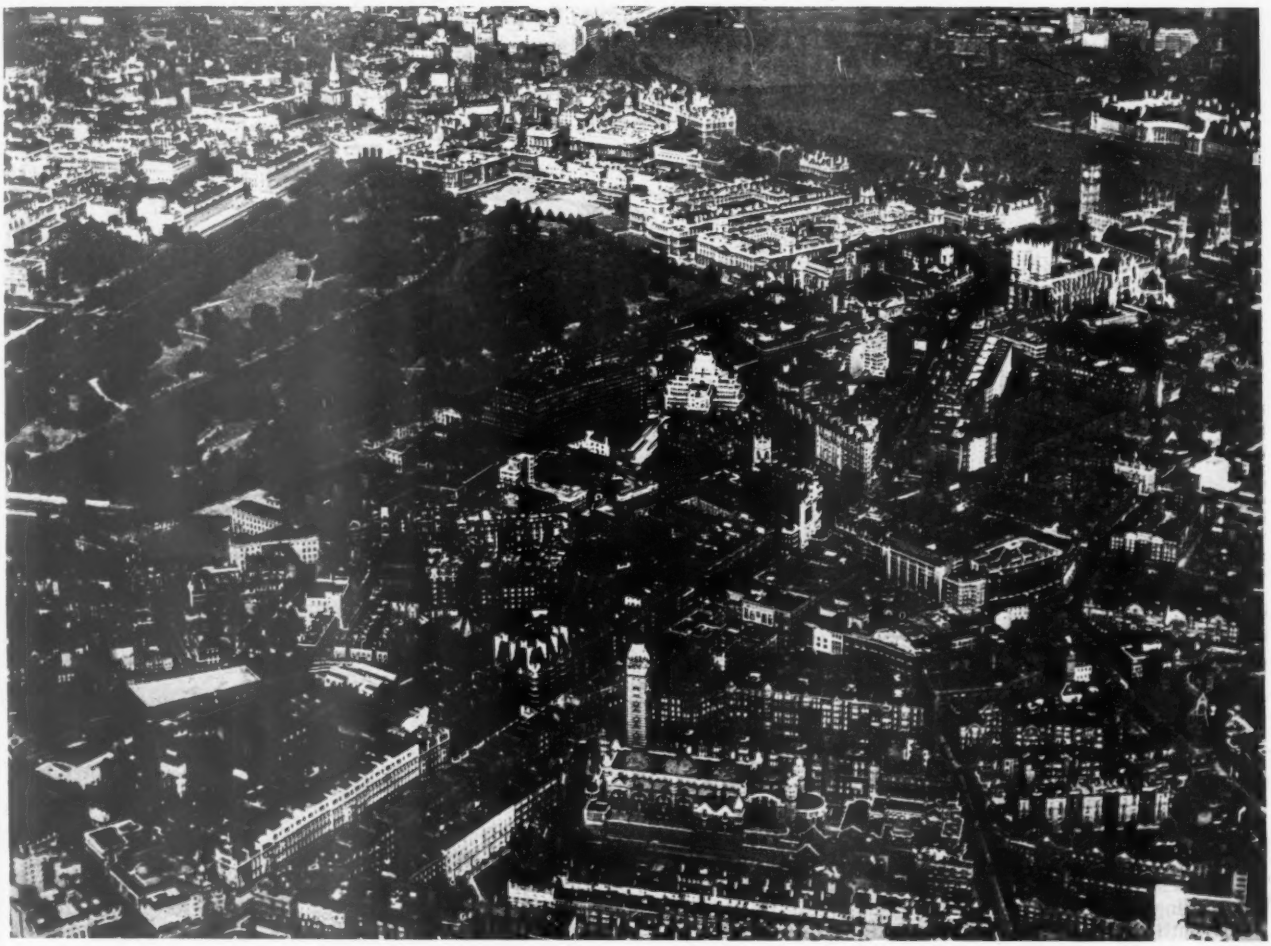
(3) No indoor space for a pram is provided.

A good point of the plan is the access from bedrooms to bathroom without having to cross the hall or living room. And I agree that a back door larger than 1ft. 9 in. is essential, although the size depends upon the size of the unit used.

In the light of all the points raised in recent weeks in the JOURNAL, one cannot help feeling that the plan by Astragal is the best yet published, although what is going to happen if the south front is the road front, is anybody's guess.

M. E. ASKWITH,
Student of the Northern Polytechnic
Hendon School of Architecture

PHYSICAL PLANNING SUPPLEMENT



The story of how London's Victorian hinterland crept forward to a prominent position on the South side of St. James's Park is told in the following article. It describes a town planning scheme of 1832, devised by the Chairman of a Select Committee appointed " to inquire into the most economical and eligible mode of improving the approaches to the Houses of Parliament and to the Courts of Law, and also of improving the immediate neighbourhood of Buckingham Palace." Had the scheme not been sabotaged by the resolution of the Government to construct Wellington Barracks in Birdcage Walk, we might now be possessors of a fine curved street running from Westminster Abbey to Hyde Park Corner, and we might have been spared one of the most chaotic and unsightly areas of central London (shown above in dark tone). The project is particularly interesting in the light of the present-day proposals for the area which so far amount merely to some careful face-lifting and corseting.

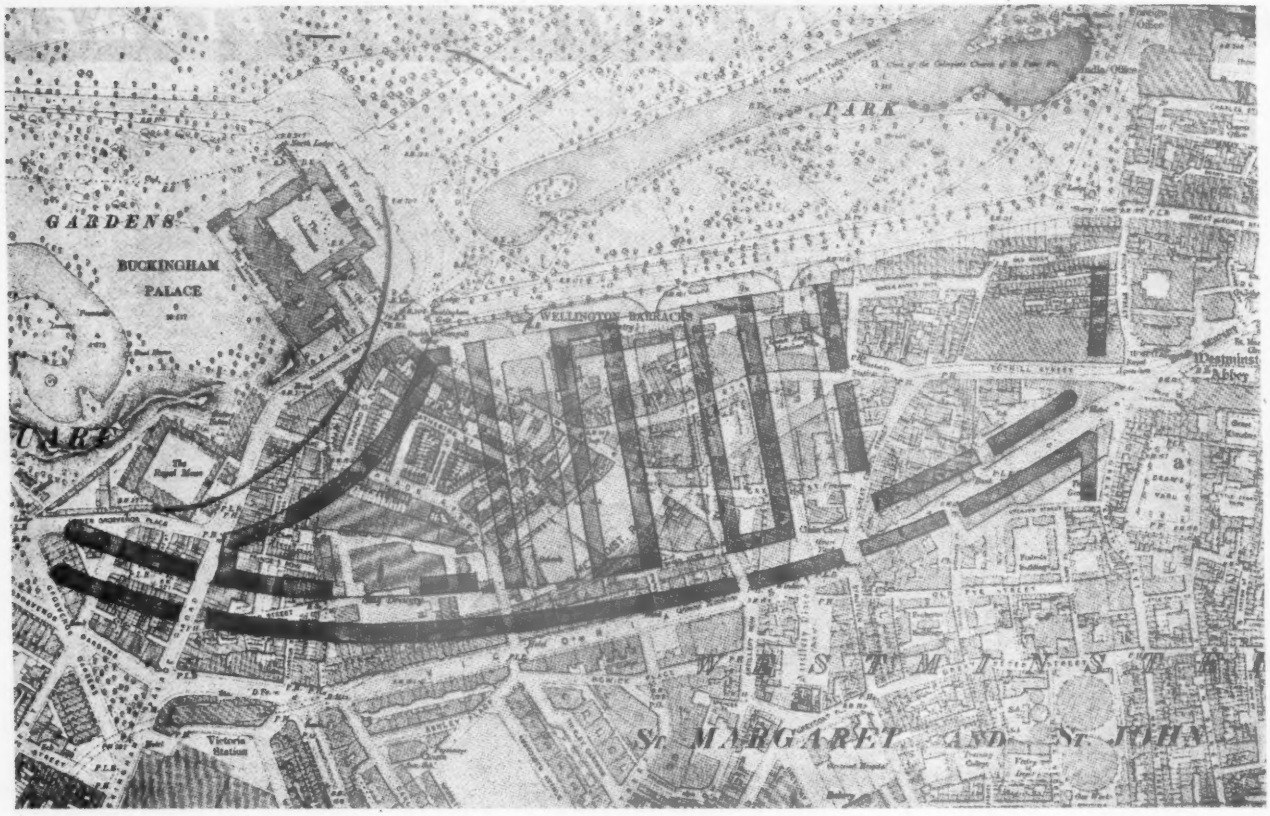
WESTMINSTER *as it might have been*

by Brook Kitchin

It is not commonly known that the Victoria Street (Westminster) of to-day is merely a small modified section of an important town-planning scheme which more or less covered the whole area between the south side of St. James's Park and what is now Victoria Street, which street was intended to be carried from the Broad Sanctuary to " the Chelsea Road " (Buckingham Palace Road), and thence round the back of Buckingham Palace Gardens on the site of Grosvenor Place to Hyde Park Corner.

Though from a modern town-planning point of view open to many criticisms, and though it is, or rather was, lacking in architectural merit, the scheme embodied a distinctly magnificent and ambitious conception, and, if carried out in its entirety, would have given us an area of fine " garden " streets or " squares " with vistas from Victoria Street into St. James's Park, instead of the network of dull mean streets which exists to-day.

The main principles of the scheme, as will be seen by reference to the plan (on page 248), were to carry a street 90 ft. wide from Broad Sanctuary to Lower Grosvenor Place, and to form three " squares," each 900 ft. long by 240 ft. wide, reaching from Victoria Street to St. James's Park, flanked on either side by residential buildings. The scheme was devised by Mr. Rigby Wason, M.P., who was Chairman of the Select Committee appointed in 1832 " to inquire into the most economical and eligible mode of improving the approaches to the Houses of Parliament and to the Courts



1832 PLAN **Above is part of an Ordnance Survey showing the 1832 scheme in relation to Victoria Street, with the great curved way stretching from Great Smith Street to link up with Grosvenor Place.**

of Law, and also of improving the immediate neighbourhood of Buckingham Palace."

How little importance was attached to the architectural aspect of this imposing scheme is indicated by the evidence of Mr. William Bardwell, the architect who prepared the plan and drawing, which consists of six questions:—

"75. You are an architect and surveyor?—Yes.

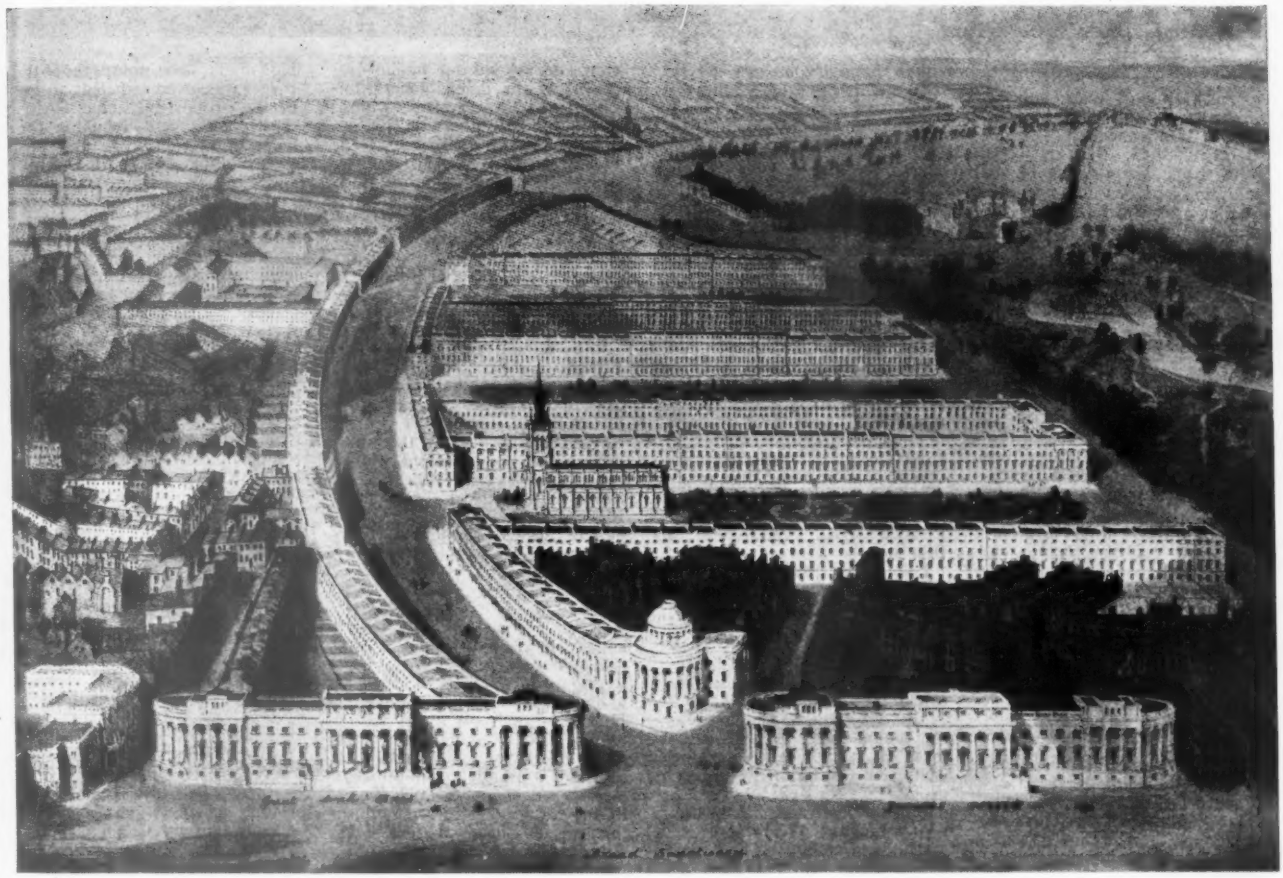
"76. Have you examined carefully the ground from Westminster Abbey to the Chelsea Road?—I have, the ground and buildings.

"77. Have you examined the whole of the ground, and the condition of the buildings on the proposed line of street, from Westminster Abbey to the Chelsea Road?—I have.

"78. Have you made an estimate of the probable cost of

WESTMINSTER — AS IT MIGHT BE

Left is the Royal Academy's proposal for the Buckingham Palace end of Victoria Street. Right is the County of London Plan proposal for the Westminster Abbey end. The Academy proposal with its fountains, vistas and high-density, closed-courtyard office blocks is as out of date visually as it is technically. The County Plan proposal sensibly diverts the main traffic flow from The Sanctuary but seals the West end of the Abbey, perhaps a little too drastically, from London's bus-top sightseer.



1832 AIR VIEW

Above is an air view of the scheme showing the bold sweep of the curve and the three great squares 900 feet long by 240 feet wide reaching from Victoria Street to St. James's Park.

effecting this improvement, including the price of the land and the compensation to the tenants?—I have.

"79. What is the calculation? What does it amount to?—£122,500.

"80. Are you of opinion that the cost of effecting this street could not possibly exceed £150,000?—Decidedly; I am of opinion that it would not exceed £150,000."

The width proposed for the new street was 90 ft. This width was ultimately reduced in the portion that was carried out to between 75 ft. and 80 ft., a width which undoubtedly was, and has proved itself to be, too narrow. The Commissioners were, in fact, advised to make the street 120 ft. wide. Mr. Thomas Cubitt (no doubt a member of the well-known firm) gave evidence before the Committee, and stated, in reference to the value of ground rents: "I should think myself it would be of much more value if the street was wide. If it was my land and I was going to operate upon it as a speculation, I should give 120 ft." Incidentally Mr. Cubitt valued the market price of the land, if the scheme were carried out as designed, at £3 to £4 per foot.

The termination at the Westminster end of the new street does not appear to have contemplated anything in the way of a view of vista of the Abbey, and the opportunity of a really effective treatment of Broad Sanctuary was lost then and lost for ever. The hopeless and improper chaos of architecture around Broad Sanctuary, though locally redeemed by the removal of the Aquarium, is still a distressing blot on London's civic architecture. The long barrack-like lines of the suggested buildings (intended as residences for members of Parliament, etc.) between Victoria Street and St. James's Park, relieved by a highly Gothic church, would, if carried out, as no doubt they would have been, in the Victoria Street style of architecture, have been stiff and uninteresting, and the absence of any communication between the "squares" and St. James's Park, except for pedestrians, would have been an inconvenient defect.

But the scheme was doomed to failure, except so far as Victoria Street of to-day is concerned, and this can by no means be called a success. This failure was due to the resolution of the Government to construct the Wellington Barracks in the Birdcage Walk, notwithstanding the urgent appeal of the Committee: "Your Committee having been informed that it is the intention of the Government to propose to The House the erection of Barracks in the Birdcage Walk, consider it to be their duty to state to The House their deliberate opinion that, if such intention be persisted in, it will be impossible to improve the Neighbourhood of Buckingham Palace without a much greater expenditure of Public Money than is contemplated in the Plan now under the consideration of Your Committee.

"Your Committee have less reluctance in expressing this opinion, as it appears to them that it would be very easy to find a situation for the Barracks in every respect as advantageous as the one proposed in the Birdcage Walk."

But the decision of the Government was final, and as there were probably no persons or bodies sufficiently interested at that time in the development of London to defend the scheme, the chance of effecting a fine improvement at a comparatively small cost was, for no apparently adequate reason, thrown away, and the fine opportunity which this scheme afforded of bringing St. James's Park into close touch with Victoria Street was irretrievably lost by the erection of the barracks, which, as the Committee state, might perfectly well have been situated somewhere else. (*Reprinted from The Architectural Review, November*, 1912)

NAZI RELIEF HOUSING

The German relief housing organization set up by the labour front leader Ley in October, 1943, was to cope with the housing needs of six million bombed-out people. Within a short time one million emergency homes were to be provided. In the first quarter of a year 40,000 homes are reported to have been built; for the following two quarters no figures are available. It is known, however, that about 8,000 emergency dwellings were available in the region Westfalen Nord for munition workers, and roughly the same number in Lower Silesia, the billeting area for bombed-out Berliners. There are 42 such regions in the Reich. Thus if all were provided with the same number of homes as these two priority regions, a total of 300-400,000 homes were produced. Taking into account the shortage of labour and material, it seems unlikely that this number was even approximately reached.

the emergency unit

Against a good deal of opposition Ley insisted on one type of relief home only, and suggestions of a more flexible system of standardization, of the unit type, and provisions for a possible later conversion into a more permanent type of housing, were turned down.

The type of home adopted has an area of 205 sq. ft. (the Churchill house 660 sq. ft.). A tool shed and w.c. can be built on to this unit. A flat roof or pitched can be chosen, according to taste. For families of more than four children, two relief home units can be obtained. Standardization also applies to the allotment of area.

relief home and regional plan

Professor Fritz Schuhmacher, town architect of Hamburg until 1933, said in a recent broadcast: "The destruction of German towns means a severe test for the efficiency and elasticity of regional planning. The wounded town will draw on the resources of the region, and will make uncommonly heavy demands on its strength. These demands result in part from the fact that the task of emergency housing cannot be accomplished by the town itself. The one-storey homes, with a relatively large plot of 2,050 sq. ft., cover a much greater area than the town dwellings for which they are the substitute. They therefore overflow into the countryside. It is foolish to let oneself be consoled by the idea that this is only a temporary state of affairs. Experience teaches that in concentrated habitations nothing is more difficult than to remove provisional measures once they have been carried out. Even if one can get rid of the undesirable buildings, there still remains the division of land set up by the scheme.

The German emergency housing shows familiar failings, both in the doubtful wisdom of adopting a too rigid standardization of the one type house and in the timid handling of the siting problem ; the latter is a particularly urgent question in England where land is so precious.

HIGHLAND CONTROVERSY

There must be many, and not only Highlanders, who watch with more than ordinary interest for any signs of progress in Highland development. Mr. T. Johnston, the energetic Secretary of State for Scotland, had many well-wishers, when he said at the third reading of the Hydro-Electric Development (Scotland) Bill, on the 27th May, 1943 : **"I do hope, trust, and believe, that we have done a good day's work for the Highlands of Scotland, and however much this bill may require amendment it is something to be said for the co-operative spirit abroad that we can unite on agreeing that a great national asset of our country should henceforth be developed on a non-profit making basis for the benefit of the people."**

Some thought Mr. Johnston too optimistic. They regarded the bill as inadequate, and were disheartened by the lack of vision shown by the Cooper Committee, on whose investigations the bill was based. Others however, believed that here another great experiment could be carried out, which, in the manner of a TVA, would bring economic salvation to the Highlands. Now the North of Scotland Hydro-Electric Board has published its Constructional Scheme No. 1, proposing minor installations on Loch Sloy, Loch Morar, Loch Alsh. (See *Hydro-Electric Development in the Highlands*, by Hugh Quigley. Physical Planning Supplement, A.J., 7.9.44.) The scheme has provoked a certain amount of public comment. **The famous leader in combined operations, Lord Lovat, who himself is a property owner in the affected district, writes in a letter to "The Times,"** .. "As a riparian owner of the Loch and River Morar, I have raised no objection (against the proposed scheme) ; peace and beauty must inevitably give way to progress and the district will undoubtedly draw great benefit from light and power. All this is well and good ; it is the method employed which is resented—the fact that the owner gets an ultimatum, a small-scale map with no details and rendered illegible by broad arrows, is of little account, but surely the wider interests of the British public are involved? **A restricting hand can yet be laid on big business and the Northern Electricity Board (it largely consists of engineers) by submitting design and lay-out for public approval of the dams, generating stations and power plants which the nation will otherwise find as a fait accompli on returning to the western Highlands.** Somewhere there is a pamphlet and an amenities committee—the former unobtainable, the latter very shy. How many people know the effect of the Loch Sloy Dam on the beauties of Loch Lomond, a port of call for every visitor from home and abroad ?" Suggesting that drawings and photos should be exhibited in London and other cities, where they could be studied carefully, and that they should be published in the newspapers, Lord Lovat continues : "All this and heaven, too, was promised before the Hydro-Electric Bill passed through the House of Commons. My own contribution to that debate, while supporting the motion was a plea, that Highlanders returning from the Services, should be given employment in the vast work of post-war power construction ; it became propaganda—a parrot cry—but it was adopted by the wrong people, and I had misgivings. To-day, the Highland Division is fighting across Normandy ; our young men are away to the wars ; work for several thousands of imported navvies will begin at Loch Sloy in the autumn. To the uninformed, this betrayal does not appear a useful contribution to the war effort."

The chairman of the North of Scotland Hydro-Electric Board answered Lord Lovat. He made the point that the owner was given sufficient notice of the proposed scheme. Also that plans, were available for inspection from July 3rd onwards, at the office of the County Clerk, Ross and Cromarty (at Dingwall), and at the office of the County Clerk, Inverness-shire (Inverness). A further copy at the post office Morar, for local interests to examine, also at a number of other unspecified places.

Lord Lovat's point concerning the employment of imported labour, was answered by Mr. John Noble, . . . It may be doubted whether the soldiers under Lord Lovat's gallant leadership would wish the start to be delayed, so that a few of them might find unattractive and temporary employment as navvies. They will rightly expect better things . . ."

No matter what the merit of Lord Lovat's argument, he voices more than his own feelings, when he asks for a great deal more information than has as yet been given to the public. He also expresses an uneasiness, more widely felt, that Highland electricity development is not yet sufficiently linked with the interests of the Highland people.

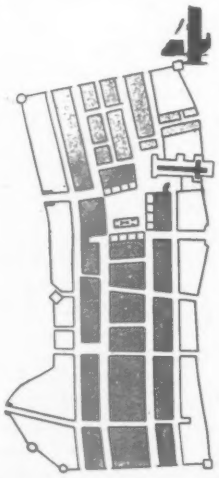
There are very few indications of an economic plan within which electricity would play its part, and scarcely a reference to town and country planning provisions, to safeguard existing, and to create new, amenities in the Highlands.

PLANNER'S QUIZ

THE ANSWER TO THE LAST PROBLEM

3. Colchester, England, in Roman times—1st century—a typical walled-in settlement of armed aliens, centering round the forum containing a Temple to the Emperor Claudius and laid out on the simple lines of a military camp.

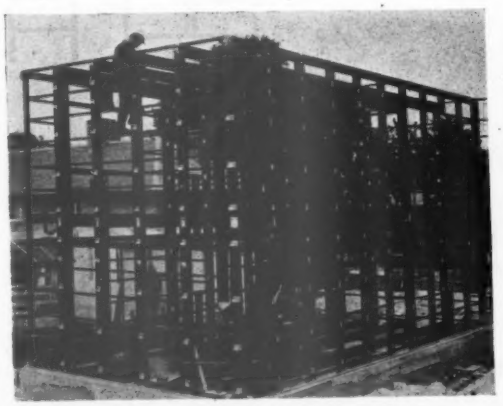
Can you place this town pattern ? Its historical background, the form of social organization underlying it, the town planning approach employed, the locality ?



Answer in the next Planner's Scrapbook.

BRAITHWAITE UNIT FRAME CONSTRUCTION

ENGINEER FOR SYSTEM : F. A. PARTRIDGE
ARCHITECT FOR TYPE HOUSE : F. R. S. YORKE



Top, a perspective by Peter Shepheard of the two houses at Hendon, designed by F. R. S. Yorke. Above, a stage in the erection of the steel frame. Note how the frame itself is used as scaffolding.

GENERAL—The two prototype houses illustrated here are being built under licence from the Ministry of Works, with the support of the Burt Committee on the LCC Watling Estate at Hendon to test a new system of construction developed by the Braithwaite Engineering Company, the firm which built the Telford houses after the last war. The system is one of standard framing precision-built to a grid dimension of 3 ft. 2 in., to which a variety of facing materials can be applied. The experiment is an important advance in house building, and represents the successful efforts of a small team of experts including engineer, architect, builder and commercial advertiser, working in close harmony during the stages of design, assembly and erection. While maintaining the advantages of prefabrication—dry assembly, standardization, factory production, and speed of erection (a house built on the system can be erected in about a fortnight)—the system cannot strictly be termed prefabrication, since wall cladding is fixed to the framing on the site. However, it avoids two major disadvantages of most systems of prefabrication, unsatisfactory jointing and cost of upkeep of the external skin. The system is extremely flexible in planning, use of materials and general design, and can be applied to flats or houses.

FRAME—In the experimental houses, this is of prefabricated steel sections cold-rolled from light-gauge strip which have welded joints.

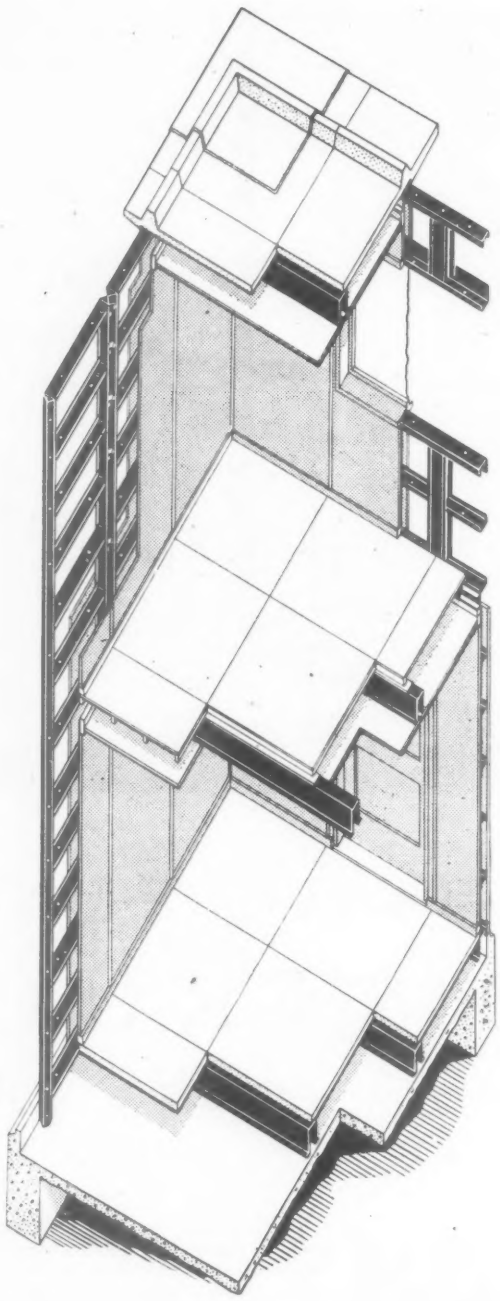
Units are 3 ft. 2 in. and 6 ft. 4 in. wide, of two-storey height, and the overall frame thickness is 3½ in. The frame for a three-bedroomed house can be erected in one day by four semi-skilled men. The frame acts as its own scaffolding. The frames are bolted together by hand with cleats spaced at about 2 ft., which also provide clips for the cover strips securing the cladding and lining. Floors and roof beams are of U-section, 7 in. deep. Other materials for the frame are possible, such as light metal alloys, plywood and plastics.

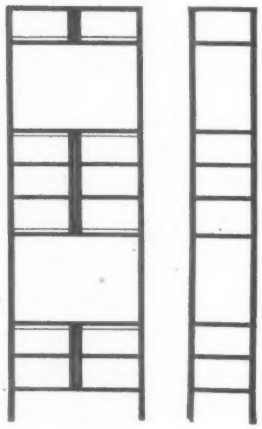
RUST-PROOFING — With thin steel sections, the question of rust-proofing is important, and investigations into this matter are being made. In the type houses, the steelwork is painted. Smaller details are galvanized.

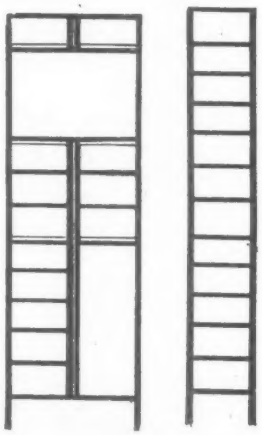
FOUNDATIONS—These are of continuous walls about 1 ft. wide, of *in situ* concrete made in forms standardized to suit both level and sloping sites. The foundation level varies in multiples of 3 in. according to the variations in ground level and to the nature of the soil. Over-site concrete, 3 in. thick, covers the area between the outer walls. Stanchion holes, 9 in. deep, are left in the walls to receive the legs of the frames, which are grouted in.

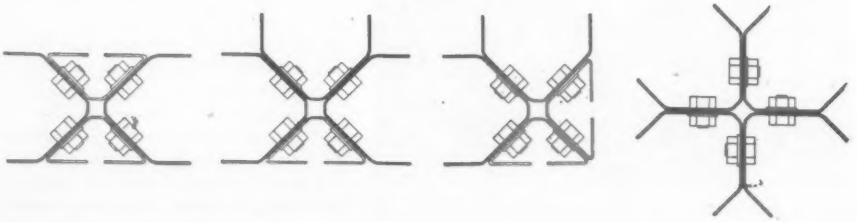
EXTERNAL CLADDING — Though many different materials for external cladding can be used, including brick or local stone, the main material in the type houses is asbestos-cement sheeting, ¼ in. thick, with small vertical corrugations which help both to stiffen the sheets and provide a pleasant texture. The width of sheets is 3 ft. 1½ in., and the full height of the house is covered in two lengths. The sheets require no painting or coating. Zinc flushings provide the weather joint at the lower ends of all sheets. Brick is also used on the lower half of the girder elevation, and enamelled steel sheet on the blank wall of one house. The brickwork is 4½ in. thick and built close to the outer face of the steel frames with waterproof building paper between. The enamelled steel sheets are of 18-gauge, stiffened by vertical fluting and with vertical edges turned in to form sections identical in outline and dimensions with the asbestos-cement sheets.

INTERNAL LINING — Various kinds of internal lining are being tried out—Jixonite, cellular plywood, fibreboard, plasterboard and glazed asbestos-cement. Jixonite has an expanded plastic core faced on the inner side with three plys of birch veneer and on the outer side



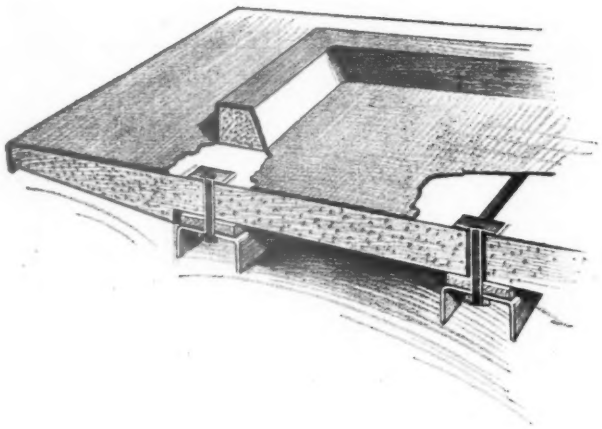




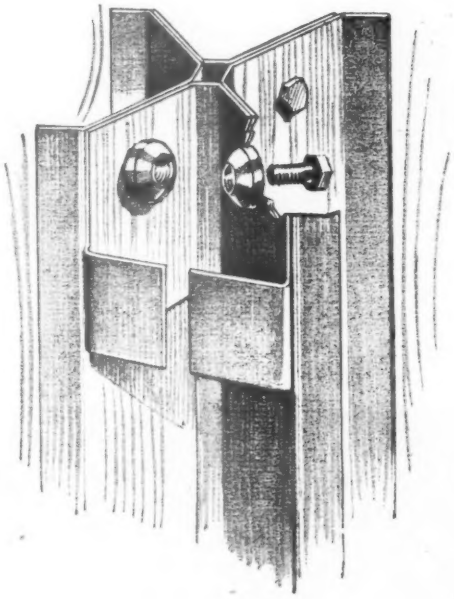


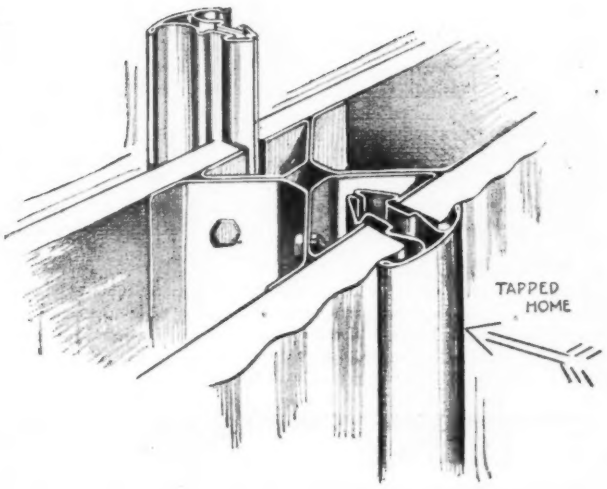
Left, axonometric showing general construction. Below, four frame units, either 3 ft. 2 in. or 6 ft. 4 in. wide, varying according to whether they contain window and door openings or not. Bottom, details of frame connections. The galvanized cleats not only join the units, but act as holders for the spring cover clips which keep the cladding in place.

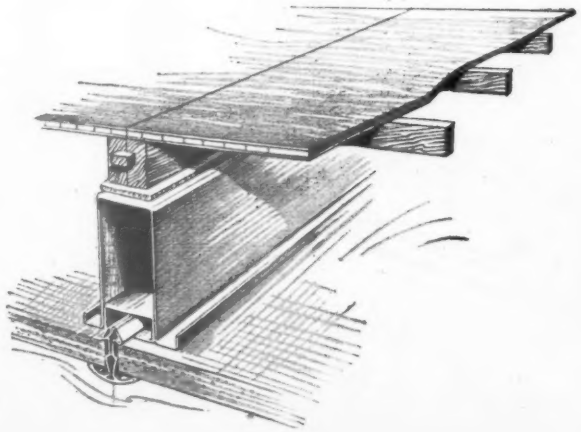
BRAITHWAITE CONSTRUCTION

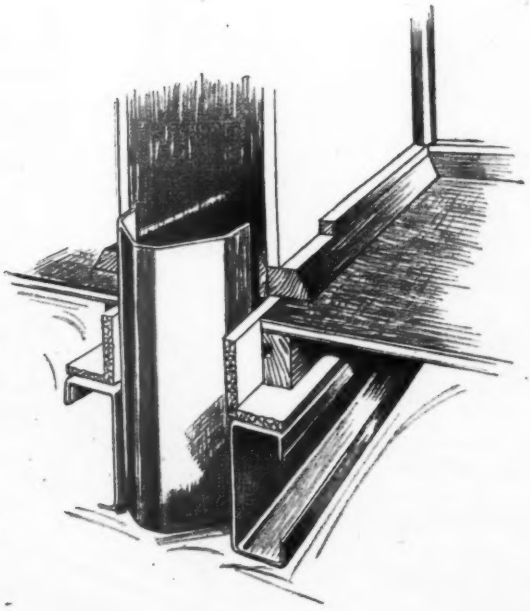


Details of construction. Top left, light-weight cellular concrete roof slabs fixed to frame. Centre left, joint between two frame units showing the cleat which joins the units and acts as spring clip holder. The chambered nuts are welded in so that at the site only a bolt need be handled. Centre right, the spring clip device for holding the external cladding and internal lining. The clips are of zinc. Bottom left, floor construction showing the 7-in deep steel section and floating system for sound insulation. Bottom right, junction of frame and floor units, showing isolation of floor from direct contact with frame to avoid transfer of impact noise.









(against the frames) with one birch veneer and a thin sheet of aluminium. All sheets are ½ in. thick, except the glazed asbestos-cement sheets used in the kitchens and bathrooms. This material is ¼ in. thick, and in order to use standard cover clips, backing felt, ¼ in. thick, is glued to the verticals and horizontals of the frames.

CLIP FIXING—The sheets are fixed to the frames by spring cover clips in zinc extending the full length of the sheet. These clips are simply tapped into the holders on the cleats which joint the frame sections and have sides which form a self-locking wedge between the sheets. Internal linings are mainly fixed with a similar type of clip, but timber cover strips are also used. These are screwed to timber blocks wedged into the cleats of the frame verticals.

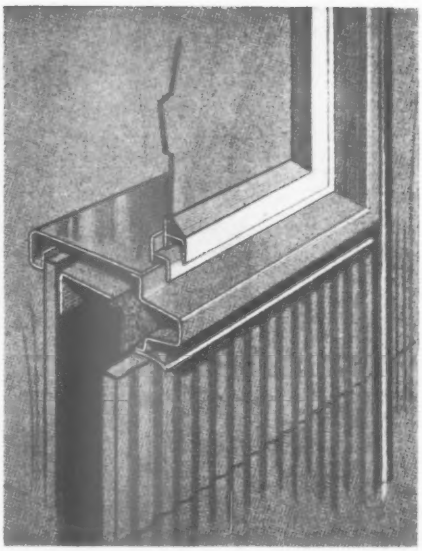
CEILINGS—Fibreboard and cellular plywood are used, all ½ in. thick, 3 ft. 1½ in. wide, and in lengths covering the full width of the rooms. The fibreboard is stiffened laterally with 1 in. by 1 in. timber battens attached with resin glue at about 1 ft. 6 in. centres. Cellular plywood needs no stiffening. The sheets are attached like the wall lining.

ROOF—This is of slabs of lightweight cellular concrete in standard grid sizes, 2½ in. thick, reinforced with steel mesh and finished in bituminous roofing material. The outside blocks overhang the walls and are anchored against uplift by bolts connecting with the steel beams. A surrounding parapet of light-weight cellular concrete set back from the roof edge prevents the spilling of rainwater, which escapes down internal pipes.

PARTY WALL—Here load from floors and roof is carried by the steel frames, and the wall itself, providing fire protection and insulation, is of 2½ in. thick light-weight cellular concrete slabs, 3 ft. 2 in. long by 1 ft. 6 in. deep, built up on each side, close to, but not in contact with the steel frames.

FLOORS—All floors are of the floating type, sound insulated, from steel beams and frames by fibreboard or cork strips. Kitchen floors are of light-weight concrete identical with those on the roof and covered with suitable floor finish. All other floors are of stiffened plywood. In one house they are laid in panels, 3 ft. 2 in. square, and in the other in panels 3 ft. 2 in. wide and 9 ft. 6 in. long. The panel consists of ½-in. thick blockboard stiffened with deal battens, 2 in. by 1 in. thick, attached by resin glue and screws at about 1-ft. intervals and spanning between the beams.

DOORS AND WINDOWS—Windows in both steel and timber are being tried out, each type consisting of sub-frame and surround. The surround, in two parts—external

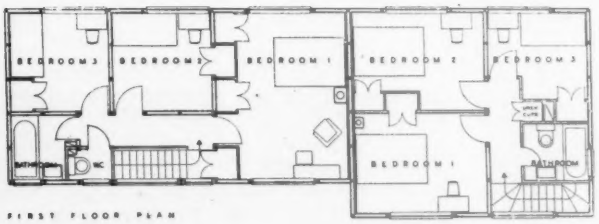


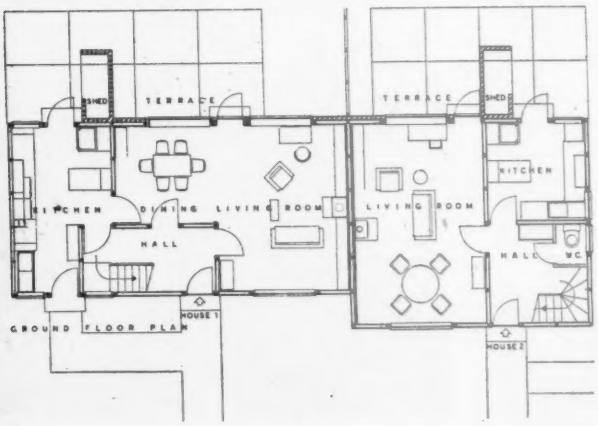
Above, detail of steel casement and window trim showing outside cladding and internal lining. Below, the steel frame units are being fixed to the concrete foundations, into which they are grouted. No unit of construction is anywhere heavier than can be handled by two men.

Above, a half-way stage in the construction. The roof is on, and external cladding is being fixed. Work inside can now proceed under cover. Below left, a detail of the frame showing an angle cleat. The angle covering will be of asbestos-cement held by the standard zinc strips on either side. Below right, a spring covering strip with its rounded head is being tapped into place. The cladding here is of asbestos-cement sheets with narrow reeding.

BRAITHWAITE CONSTRUCTION

Above, the job nears completion. Note the brickwork on the garden elevation. Brick is a possible cladding material as well as local stone. Below, ground and first floor plans of the houses at Hendon designed by F. R. S. Yorke. The grid dimension used throughout is 3 ft. 2 in.





BRAITHWAITE CONSTRUCTION

and internal—is securely bolted and screwed to the frames. The edges are shaped so that the vertical sides can be jointed with the adjacent cladding by means of the standard zinc cover clips. Aluminium windows and windows dispensing with sub-frames are also being considered. Doors are in both steel and timber, and frames are attached and jointed as the windows.

INSULATION—This is provided by the air space and internal lining, the external cladding being merely a weather protection. Except with Jixonite, additional insulation is also needed, and slag wool, rock wool and aluminium foil are being tried out. Slag wool, stiffened with light wire mesh is lodged in the cavities between the verticals and horizontals of the frames. Rock wool, contained in rot-proofed muslin, and made into quilts 3 ft. 2 in. wide, is hung between the external cladding and the steel frames. Aluminium foil is attached by staples to the back of the internal lining sheets. An insulation "C" value of 0.2 has been aimed at.

INSTALLATIONS—Electric wiring is made within the frame units, cables being pre-cut to lengths. The meter is a new type of combined meter, switch and fuse board. Plumbing is largely prefabricated. By a system of heat convection, heat from ground-floor flues is used to warm the air of the bedrooms.

INFORMATION CENTRE

The function of this feature is to supply an index and a digest of all current developments in planning and building technique throughout the world as recorded in technical publications, and statements of every kind whether official, private or commercial. Items are written by specialists of the highest authority who are not on the permanent staff of the Journal and views expressed are disinterested and objective. The Editors welcome information on all developments from any source, including manufacturers and contractors.

PHYSICAL PLANNING

1623 *Factories*

THE FACTORY OF THE FUTURE. *E. Gerner, G. B. Panero and H. Burson.* (*Architectural Forum, June,* 1944, *p.* 79.) Influence of air view on advertising, amenities for personnel, technical developments on new factory design in lighting, heating and noise reduction. Lay-out discussed.

This article makes one substantial contribution to ideas on factory design in that it succeeds in creating a stimulating picture of the modern factory as the attractive and satisfying workshop for community needs. No specific arguments are devoted to the point, but it emerges as the obvious fact from the group of individual ideas which are discussed.

Of these, the least important is probably the reference to the air view of factories as a source of advertising through their orderly design.

Most important seems to be the attitude to personnel problems. In some American factories employees have to walk a mile to their cars; the suggestion is made that in the big layouts the main working areas should be planned for accessibility. It is anticipated that women will remain in factories after this war as they did in offices after the last, and this is expected to involve accommodation for recreation, for changing clothing, for shopping, for factory cleanliness, for leaving children, and so on. And the unpleasant features of mass feeding are noted.

The section on technical developments in lighting, heating, and noise reduction is interesting, but sketchy and perhaps doubtful on some details.

Layout is briefly discussed. The value of sub-assembly for the relief of factory plans is stressed. The point is made that the straight-line production flow can be squeezed into a large box, but it removes the operatives too far from the outside world. Sub-assembly units permit the scale of separate parts of the factory to be reduced, and thereby do away with the large box. The argument is illustrated in three of the figures reproduced here. In the first figure a complete diagram lay-out is given, showing the accessibility of all parts of the plant, and the relation of the plant to personnel facilities and to public transport arrangements.

LIGHTING

1624 *Factory Equipment*

NOTES ON THE LIGHTING OF FIVE TYPES OF FACTORY EQUIPMENT. (*Illuminating Engineering, March,* 1944, *p.* 151.) Notes by five authors on lighting of specialised factory machines: spindle, sheet metal, milling, welding machines.

The following are the titles and authors of the notes:—

Lighting for Horizontal Spindle Machines, by A. W. Larson.

Lighting for Vertical Spindle Machines, by E. E. Elliott.

Lighting for Sheet Metal Fabrication, by E. R. D'Olive.

Lighting for Milling Machines, by K. E. Lagerstrom.

Lighting for Welding, by R. R. Lush.

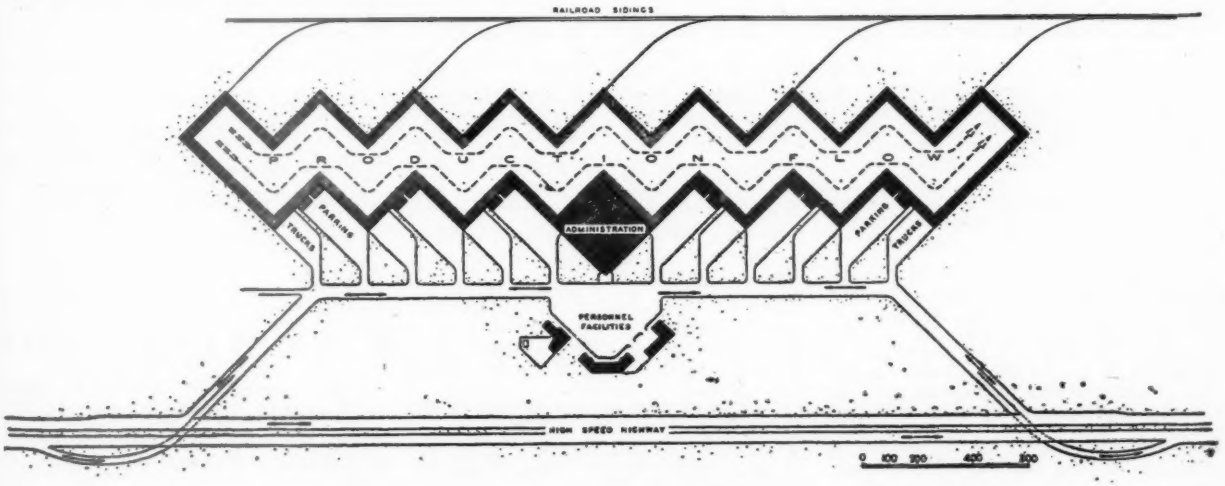
The special value of these notes lies in the detailed understanding of factory light requirements which can be obtained through reading them. Each author appears to have mastered the needs of one generic class of equipment, and the result is a study, not in terms of foot-candles, but in terms of exact problems which have to be overcome in the detailed operation of the machines. Detail is considered down even to such questions as the colour of the oil. It is a valuable type of study, and should be informative to factory designers. One could wish it to be paralleled by studies in other fields.

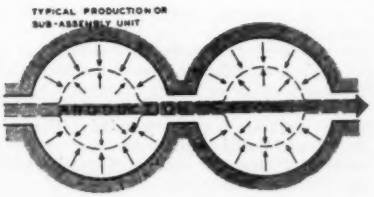
1625 *Economic Evaluation*

AN ECONOMIC EVALUATION OF LIGHTING SYSTEMS. *J. L. Kilpatrick.* (*Illuminating Engineering, November,* 1943, *p.* 493.) How to analyse economic factors in artificial lighting design. Types of data necessary for comparison discussed.

1626 *Graphic Estimating*

GRAPHIC ESTIMATING OF DAYLIGHT. *J. M. Dall and Valle.* (*Architectural Record, May,* 1944, *p.* 83.) Nomograph to determine daylighting provided by given windows, or conversely the size of windows required for given value of daylighting.





Plans showing the straight line factory production principle, broken into sub-assembly units which are integrated into a working pattern. There are many possible solutions. See No. 1623.

A number of nomograph forms may be used to relate daylight values and the window sizes required for them. This particular one assumes known sky brightness and gives an answer in candles per sq. ft. In this country all measurements are left in terms of the ratio of the intensity outdoors at the same moment. This nomograph therefore is relevant only to American design methods.

PLUMBING and Sanitation

1627 **MOW Building Study**

PLUMBING. *The Ministry of Works Post-War Building Studies, No.* 4. *Building Research Board of DSIR.* (*HMSO*, 1*s*.) Plumbing of low cost houses is main subject. Lay-out of installations. Use of materials. Standardization of appliances. Notes on drainage. Recommendations for future research. Test results for siphonage of traps on simple one-pipe installations. Common defects in plumbing.

Plumbing in the past has been based on practice rather than on research. A preliminary survey showed that there were a number of opportunities for greater efficiency and economy in several directions:

(*a*) Removal of hazards to health and reduction of inefficiency and breakdowns in service, causing inconvenience, discomfort and costly maintenance.

(*b*) Securing more uniformity in practice throughout the country.

(*c*) Greater economy in construction, including the use of more workshop fabrication.

More unification of by-laws is required, but the report concentrates on setting down a sound basis and making recommendations for improved practice rather than paying too much attention to the present by-law situation.

The report is divided into five main parts. Throughout parts 1 and 2 it first sets out principles, and then follows, in smaller type, with recommendations for the application of these.

Part 1 deals with the lay-out of plumbing installations, and includes plans. It covers such headings as exclusion of foul air, precautions against frost, precautions against vermin, boiler explosions, efficiency to the user, noise, appearance, corrosion and economy.

Part 2 discusses materials used for plumbing purposes. The recommendations in this section seem to be less definite than elsewhere.

Part 3 indicates the general lines along which standardization of appliances should proceed, and contains many detailed suggestions which should be of value to committees of the BSI. In this section it is interesting to note a fairly lengthy statement of reasons why the flushing valve is not considered suitable for adoption in this country in spite of wide acceptance elsewhere. The Committee also raises serious objections to the use of anti-siphonage traps.

Part 4 contains some notes on building drainage, although it is stated that there was not time to study this subject at all fully. It seems that in house drainage many manholes do more harm than good.

Part 5 lists a number of subjects on which future research is recommended. These include additional tests on the one-pipe system. (Some test results of work carried out for the Committee are included in an Appendix.) Durability of materials, noise reduction and standardization are also suggested as subjects for further research.

Appendix 1 lists a number of defects which have been noted as being of common occurrence. The list is a formidable one and in itself makes an excellent case for the need for a careful study of this report.

1628 **Pipe Jointing**

PIPE JOINTING MATERIAL. *A talk on Philplug Products, by C. H. Taylor, before Manchester and Preston Registered Plumbers.* (*The Plumber and Journal of Heating, August*, 1944.) Description of patent jointing material.

Quotes pressure tests by BRS and tests at other places. Material 90 per cent. asbestos and 10 per cent. cement. Claimed to be more flexible than lead, 30 per cent. cheaper on labour and material and requires no heat or fire.

1629 **Odour in Water**

ODORIFEROUS FUNGI IN WATERS. *H. A. Sandford.* (*Architect and Building News, June* 30, 1944.) Reasons for odour and taste of drinking water.

A description is given of a case where a complaint was made. The occurrence is rare. Apparently it is due to the presence of microscopic "iron-bacteria," fungi or algæ, and may occur even in pipes not left completely stagnant. It is most likely to occur where cold pipes run adjacent to hot.

1630 **Bent Pipes v. Elbows**

BENT PIPING V. ELBOWS. *T. N. Thomson.* (*Plumbing and Heating Journal, July*, 1944.) Possible advantages of substituting bent piping with straight joints for normal elbow joints. Writer concludes bent pipes more efficient. No definite statement on costs. Typical lay-out illustrated.

QUESTIONS and Answers

THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential, and in no case is the identity of an enquirer disclosed to a third party. Questions should be sent to: THE ARCHITECTS' JOURNAL, *45, The Avenue, Cheam, Surrey.*

1631 **ILA**

Q *Could you tell me the address of the Institute of Landscape Architects?*

A The address of the Institute of Landscape Architects is Craven House, Kingsway, London, W.C.2.

1632 **Floor Stain**

Q *A few months ago when the windows of a sitting room were removed for repairs, a temporary screen of English timber framing and corrugated galvanized iron sheets was erected across the room, and the part of the polished oak floor outside the screen was protected and covered with sacking and felt. Unfortunately the rain penetrated through this temporary floor covering and it appears to have washed the sap from the English timber and other impurities under the beeswax polished surface into the grain of the oak flooring; this has left a very dark stain across the oak floor exactly where the wood framed screen was fixed. Please state the best method or methods of removing this stain and for restoring the surface.*

A From the description of the stain on the oak flooring, in your letter, it is not clear whether the stain is just surface deep. If this is the case, it would be best to scrape the whole of the surface of the floor by hand, or with a machine, and then repolish the floor. But if the stain is more than surface deep, it presents a much more difficult problem, since a chemical action may have been set up by the rain washing the sap into the floor, and we do not know of any successful way of removing the stain other than by bleaching it, which would spoil the appearance.

We have consulted The Timber Development Association on your behalf and they are unable to recommend any treatment if the stain is more than surface deep.

SOCIETIES AND INSTITUTIONS

Speeches and lectures delivered before societies, as well as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economize space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front cover. Except where inverted commas are used, the reports are summaries, and not verbatim.

RIBA

Examinations

Final examination, July, 1944. Held in London, Edinburgh and Belfast from July 5 to 13, 1944. Of the 63 candidates examined, 41 passed as follows:—

Passed whole Examination	23
Passed whole Examination subject to approval of Thesis	10
Passed whole Examination subject to approval of Thesis and remaining Testimonies of Study	1
Passed Part 1 only	5
Passed Part 1 only subject to approval of remaining Testimonies of Study ...	1
Passed Part 2 only	1

22 candidates were relegated.

The successful candidates are as follows:—*Whole Examination*: Brown, Reginald W. W. (subject to approval of Thesis); Dessau, Heinz; Edmondson, Kenneth H. (subject to approval of Thesis); Edwards, Arthur M.; Falconer, P. Serrell; Gowans, Alexander A.; Greenfield, L. B. G. (*Distinction in Thesis*); Gregory, Frederick W.; Grose, William P. J.; Grove, Donald E. (*Distinction in Thesis*); Heywood, Leslie A. J. (subject to approval of Thesis); Hindle, Ian M.; Hitschmann, Hans (subject to approval of Thesis); Hobbis, Charles I.; Hoyles, Fred H.; Lancaster, Frank W. (subject to approval of Thesis); Landaw, David; Lawson, Theodore F.; McRobie, Alexander (subject to approval of Thesis); Malcolmson, Reginald F.; Mason, Thomas L. K.; Moate, Frank (subject to approval of Thesis and remaining Testimonies of Study); Parker, C. Antony; Phillips-Howard; B. A. (*Distinction in Thesis*); Pite, Frederick R. (subject to approval of Thesis); Ralph, Stanley; Skelton, Norman T. (subject to approval of Thesis); Stedham, Ronald A.; Taylor, Alastair A.; Thorne, Frank R. (subject to approval of Thesis); Waring, Arnold S. (*Distinction in Thesis*); Wills, Gerald (subject to approval of Thesis); Worthington, Clifford; Wright, Frederick. *Part* 1 *only*: Bradford, Philip W. G.; MacGruer, John G (subject to approval of remaining Testimonies of Study); Melland, Guy S.; Mills, Wilfred E.; Moon, Arthur L.; Wells, Samuel. *Part* 2 *only*: Kennedy, Charles.

Special Final Examination, July, 1944.—Held in London and Edinburgh from July 5 to 12, 1944. Of the 34 candidates examined, 16 passed as follows:—*Whole Examination*: Collyer, William; Cooper, George; Felgate, Frederick L.; Fiennes, The Hon. Laurence J. E. Twisleton-Wykeham; Hastings, Alfred E. J.; Katona, Ervin; Mitchell, W. Porter; Rendell, Frederick C.; Smith, Eric S.; Southall, Reginald E. J.; Sparrow, Ronald J.; Thomas, W. Stephen; Thorpe, Rupert L. *Part* 1 *only*: Bevan, John J.; Carter, William M. *Part* 2 *only*: Pope, David T. B.; 18 candidates were relegated.

Examination in Professional Practice for Students of Schools of Architecture recognized for Exemption from the RIBA Final Examination.—Held in London on July 11 and 13, 1944. Three candidates were examined and passed, as follows:—Couch, Beryl S. (Miss); Sternberg, Eugene; Wilson, Granville H.

Special Final Examination, Salisbury, Southern Rhodesia, July, 1944.—Held at Salisbury, Southern Rhodesia, in July, 1944, when the following candidate was examined and passed:—Agg, Arthur Desmond.

HC

J. G. Ledeboer

September 5, at 13, Suffolk Street, S.W.1. Address at the Housing Centre on THE DESIGN OF DWELLINGS, by Miss J. G. Ledeboer, A.R.I.B.A. Chairman: Professor Holford.

J. G. Ledeboer: The Dudley Committee has attempted to set standards for new houses. The Tudor-Walters report set a standard which, as the result of the economy campaign of 1930-31, was reduced but now instead of its 760 square feet of superficial area the Dudley Committee recommends 900. The first thing to consider in the housing problem is the cost of providing the houses and the rent which can be paid for them; here the Dudley Committee has had but little guidance.

The Dudley Report suggests that prices may fall to within thirty per cent. of their pre-war level. The standard set is what the Committee thinks is the minimum at which a woman can bring up a family while doing the housework herself, but such a standard can only be found by experience. Local authorities, and many organizations such as the Women House Property Managers and architects have stated their experience. After the war opinion surveys may be taken.

The dwelling suggested for a family with three children contains, besides living rooms, three bedrooms and a bathroom. The ceiling level is retained at eight feet in spite of suggestions to bring it down six inches. The Tudor-Walters Report was based on the requirements of an agricultural family. The kitchen range was in the living room, and around that it was assumed the family would assemble. The copper was the only means of getting hot water. The family was seen as a small self-sufficient unit. The Dudley Report envisages a family with far more varied activities and more visitors. Certain factors favour the small house. People go out to the cinema instead of staying round the fire. The husband has his meals in the factory canteen. The youngest children go to the nursery school and all have meals at school.

If we compare our own standard with that of other countries we find the British house much larger than the Swedish. In America also there are fewer and smaller rooms to the dwelling, but American planning may influence us in the direction of eliminating such things as halls and landings.

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal." War Address: 45 *The Avenue, Cheam, Surrey, and should reach there by first post on* **Friday** *morning for inclusion in the following Thursday's paper.*

Replies to Box Numbers should be addressed care of "The Architects' Journal." War Address: 45 *The Avenue, Cheam, Surrey.*

Public and Official Announcements

Six lines or under, 8s.; each additional line, 1s.

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: 75 EATON PLACE, LONDON, S.W.1. TEL.: SLOANE 5615. 991

DERBYSHIRE COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANTS.

Candidates must be over 30, unless medically unfit for Military Service.

Salary £325, by annual increments of £12 10s. to £350, plus cost of living bonus, at present £49 8s. per annum, and an allowance for extended office hours.

Applications should be sent to the undersigned by October 12th, 1944.

The appointments are subject to the approval of the Ministry of Labour.

J. HARRISON,
County Architect.

21st September, 1944. 799

DERBYSHIRE COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

Applications, to be delivered to the undersigned by October 12th, 1944, are invited for the following appointments, with annual increments of £12 10s.:—

ARCHITECTURAL ASSISTANT; £400 to £450 per annum.

QUANTITY SURVEYORS; £400 to £450, £250 to £300, and £200 to £240 per annum; war bonus at £49 8s. per annum is payable, also an allowance for extended office hours.

Applicants must state age and their position concerning Military or other forms of National Service.

The successful applicants will be subject to the provisions of the Local Government Superannuation Act, 1937, and the appointments are terminable by one month's notice on either side.

The appointments are subject to the approval of the Ministry of Labour.

J. HARRISON,
County Architect.

5th October, 1944. 807

NORTH RIDING OF YORKSHIRE EDUCATION COMMITTEE.

Applications are invited for the position of:—

(*a*) ARCHITECTURAL ASSISTANT. Salary £320 per annum, rising, subject to satisfactory service, by yearly increments of £20 to £400 per annum, plus war bonus, at present £49 8s. per annum. Under existing conditions working hours are increased by one-seventh; the payment for this is at the rate of one-seventh of the basis salary.

It is desirable that applicants should be Associates of the Royal Institute of British Architects, with experience in the design and maintenance of Schools.

(*b*) BUILDING SURVEYOR. Salary £225 per annum, rising, subject to satisfactory service, by yearly increments of £15 to £300 per annum, plus war bonus, at present £49 8s. per annum. Under existing conditions working hours are increased by one-seventh; the payment for this is at the rate of one-seventh of the basic salary.

Applicants should have sound experience, be capable of carrying out surveys of existing buildings, be neat draughtsmen, with experience in dealing with Builders' Accounts.

Applications should be made on the prescribed form, which may be obtained from the undersigned on receipt of a stamped addressed envelope. Completed forms of application, together with copies of two recent testimonials, should be returned not later than the 21st October, 1944.

F. BARRACLOUGH,
Secretary.

Education Offices,
County Hall,
Northallerton. 802

Architectural Appointments Vacant

Four lines or under, 4s *; each additional line,* 1s.

Wherever possible prospective employers are urged to give in their advertisement full information about the duty and responsibilities involved, the location of the office, and the salary offered. The inclusion of the Advertiser's name in lieu of a box number is welcomed.

ARCHITECTURAL DRAUGHTSMAN required; used to factory construction and alteration and general building maintenance. State experience, qualifications, age, and salary required, to Box 808.

CAPABLE ASSISTANT required in the Architect's Department of a Multiple Company in the Midlands. Applicants should give full details of experience, salary required, and liability for Military Service. Box 798.

ARCHITECT wanted to take sole charge of Drawing Office for widely used prefabricated system, and of solving day-to-day problems of application and design. Must be energetic and responsible type. Box 794.

CHARTERED SURVEYOR and ARCHITECT in South London requires Technical Assistant in connection with Specifications for War Damage Repairs; re-construction work, etc. Apply, stating experience, salary required, etc., to Box 795.

QUANTITY SURVEYING ASSISTANT required for busy Office; permanent progressive post for the right man. Full particulars to W. H. Saunders & Son, Architects and Surveyors, 2, Carlton Crescent, Southampton. 813

ASSISTANT ARCHITECT (A.R.I.B.A.), with knowledge of industrial work, required for branch office. Apply, stating age, experience, and whether exempt from National Service, to H. V. Lobb, F.R.I.B.A., 19, The Butts, Brentford, Middlesex. 804

MESSRS. HOWARD LEICESTER & PARTNERS, of 21, Bloomsbury Square, W.C.1 (MUSeum 0030), require one Senior and two Junior Assistants; must be competent and experienced draughtsmen, with a sound knowledge of detailing. 809

JUNIOR ASSISTANT required, Student or Associate RIBA, for Industrial and Domestic Work and Town Planning. State age, experience, salary required, and if exempt from National Service. Ronald Vallis, F.R.I.B.A., Frome, Somerset. 782

CAPABLE SENIOR ARCHITECTURAL ASSISTANT required; preference given to applicant having good knowledge of specifications and quantities; permanent progressive post for the right man. Full particulars to W. H. Saunders & Son, Architects and Surveyors, 2, Carlton Crescent, Southampton. 812

LARGE and active firm of Architects and Surveyors in Midlands require:—

(*a*) SENIOR ARCHITECTURAL ASSISTANT, A.R.I.B.A. or equal; highly skilled and experienced designer and draughtsman; able to prepare schemes and illustrate with finished and original drawings and perspectives in various media.

(*b*) SENIOR ARCHITECTURAL ASSISTANT, A.R.I.B.A. or equal; experienced in design and construction of modern cinematograph theatres, etc.

(*c*) SENIOR ARCHITECTURAL ASSISTANT, A.R.I.B.A. or equal; experienced in design of modern hotels and licensed houses.

Applicants to state whether applying for appointment (*a*), (*b*) or (*c*), and to state: Age, liability for National Service, salary required, when available, and to give brief résumé of previous experience. Box 789.

Architectural Appointments Wanted

Architectural Assistants and Students seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice.

A. R.I.B.A., with good all-round experience, desires spare time work. Box 345

ARCHITECT, experienced in carrying through works complete; London and provinces. Box 346.

JUNIOR seeks position, Architect's office, Birmingham district; school certificate. Box 356.

ARCHITECT'S ASSISTANT JUNIOR requires a situation in an Architect's Office, preferably London area. Box 362.

L. R.I.B.A. offers part-time assistance; architectural, structural steel and reinforced concrete; own accommodation; Cardiff district or near. Box 364.

HIGHLY qualified and experienced Civil Engineer, aged 31 (University graduate) desires appointment with Architect, with view to future partnership. For further particulars apply Box 361.

B.A. (Arch.), A.R.I.B.A., Dip. T.P., aged 24 (exempt Forces), varied experience, including town planning, desires post with good prospects; Bristol or South of England preferred. Box 359.

YOUTH, aged 16½, seeks post in London Architect's Office; 3 years' student of Brixton School of Building; will be studying for R.I.B.A. exams. Reply Box 360.

A. R.I.B.A., 26 (exempt), with good all-round practical experience, desires permanent, responsible position in Office which can offer sound post-war prospects; salary required £520; please give some details. Box 352.

QUANTITY SURVEYOR, 6 years' experience professional office and public works, presently employed by public works contractor in South Devon, seeks post with professional firm, preferably in London area. Box 365.

ASSISTANT ARCHITECT, experienced licensed premises, domestic, shop, canteens, desires post with private firm of Architects in Shropshire, Worcester or neighbouring districts; possesses own car; disengaged shortly. Box 363.

ARCHITECTURAL ASSISTANT, aged 26; 6 years' office experience, with part-time school training; varied experience includes hospitals, schools, churches, cathedrals, etc.; working drawings and details; can carry out theodolite, dumphy and general surveys; R.I.B.A. intermediate standard; salary £5 approx.; references. Box 364.

ARCHITECT and SURVEYOR, L.R.I.B.A. (registered), desires responsible position; age 39; Quantity Surveying; 10 years' experience designing licensed houses and hotels for Midland breweries; 4th scale working drawings, details, specifications, hospitals, factories, housing estates, general supervision of works, checking accounts, measuring war damage and preparing schedules of repairs; permanent position with good prospects; salary by arrangement.—Box 350.

Other Appointments Wanted

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

GROUP of Three CHARTERED ENGINEERS (B.Sc., A.M.I.Mech.E., A.M.I.E.E., etc.) offer spare time services; specialists in design of engineering layouts for hospitals and laundries. Write to Group Consultants, 234, Alexandra Avenue, South Harrow, Middlesex. 786

Planning

As originators of the Auto-Recorder System of Machine Milking we have had extensive experience of planning lay-outs to accommodate the new technique. The service of our Technical Department is available to any Architect planning or modifying farm buildings for this purpose. Write in confidence to:—The Planning Dept., Gascoignes (Reading) Ltd., Gascoigne House, Berkeley Avenue, Reading. 603

Miscellaneous

Four lines or under, 4s.; each additional line, 1s.

A. J. BINNS, LTD., specialists in the supply and fixing of all types of fencing, tubular guard rail, factory partitions and gates. 53, Great Marlborough Street, W.1. Gerrard 4223-4224-4225.

WANTED.—Back numbers of "Pencil Point," 1920-1940 Box 806.

FENCING AND GATES of every type, supplied and erected. Specialists in chain link. Boulton & Paul, Limited, Norwich. 662

WANTED.—Copy of F. M. Simpson's "History of Architectural Development"; Vol. 1, or all three volumes. Box 801.

REQUIRED.—Stratton's "Elements of Form and Design in Classic Architecture"; Holmes' "Colour in Interior Decoration"; Curtis's "Architectural Composition." Box 810

ARTS AND CRAFTS EXHIBITION SOCIETY.—19th Exhibition, National Portrait Gallery, Trafalgar Square, September 23rd—October 20th. Daily, 11—4; Sundays, 2—6. Admission 2s. 791

GENTLEMAN, now Army Officer, having a large architectural connection, wishes to invest up to £5,000 in a company allied to the building trade, with a view to active directorship. Box 811.

J. O. SHEPPARD, late of 21, Bedford Row, W.C.1 (and the Granwood Flooring Co., Ltd.), now at 1, East Road, Chadwell Heath, Essex, and on war work, thanks Architects for past cordiality, and looks forward to meeting them again when his new office opens. 800

OWNER of large Sandpit, 20 miles south of London, wishes to contact gentleman or firm able to introduce large scale business. Two kinds of sand available; one clean and easy to work, suitable for brickwork; the other very clean and sharp, suitable for concrete making. Can load at pit, or deliver by own fleet of tipping lorries. All replies will be treated as confidential. Write Box 334, Smiths', 100, Fleet Street, E.C.4. 805

Educational Announcements

Four lines or under, 4s.; each additional line, 1s.

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, 161, West Heath Road, N.W.3. 231

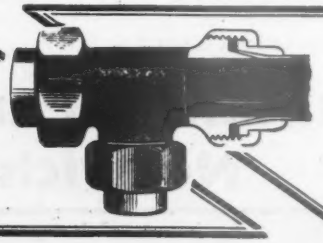
R.I.B.A. QUALIFYING EXAMINATIONS.
Mr. C. W. Box, F.R.I.B.A., M.R.San.I.
Courses by Correspondence and Personal in Studio.
115, Gower St., London, W.C.1.
TELEPHONE: EUSTON 3305 and 3906.

ARCHITECTURAL ASSOCIATION SCHOOL OF ARCHITECTURE.

POST OF PRINCIPAL.

Applications are invited for the post of PRINCIPAL to the A.A. School of Architecture. Candidates should send full particulars of their qualifications and experience, with illustrations of executed work, to the SECRETARY of the Architectural Association, 34/36, Bedford Square, London, W.C.1. Candidates who are abroad may apply by cable, giving names of persons who can act on their behalf in supplying the above particulars.

The last date for receipt of applications is October 16th, 1944. 783



Alphabetical Index to Advertisers

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational Legal Notices, Miscellaneous, Property and Land Sales—*see* pages xxxvi and xxxviii.

Printed in Great Britain for the Proprietors of "THE ARCHITECTS' JOURNAL" (The Architectural Press, Ltd.) War Address: 45, The Avenue, Cheam, Surrey, by HARRISON & SONS, LTD., Printers to His Majesty The King, 44–47, St. Martin's Lane, London, W.C.2