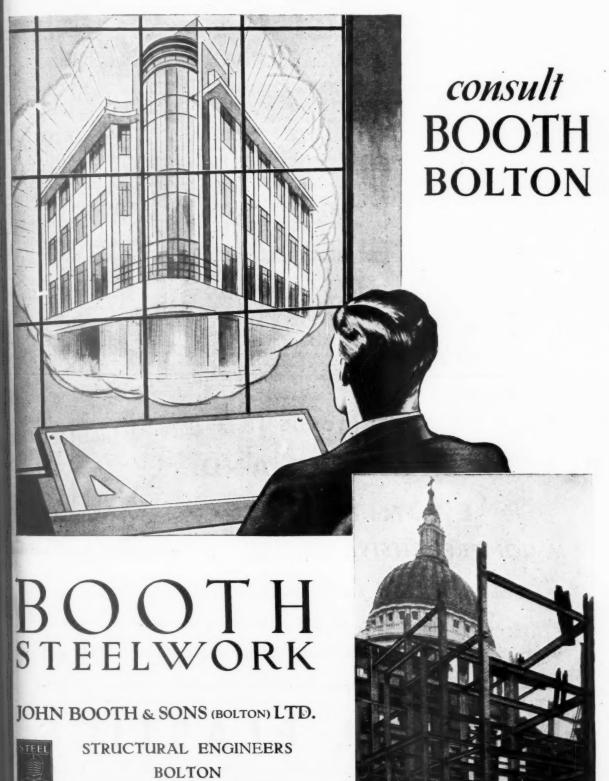
# Whilst the building is still a vision ...



### iv] THE ARCHITECTS' JOURNAL for July 13, 1944

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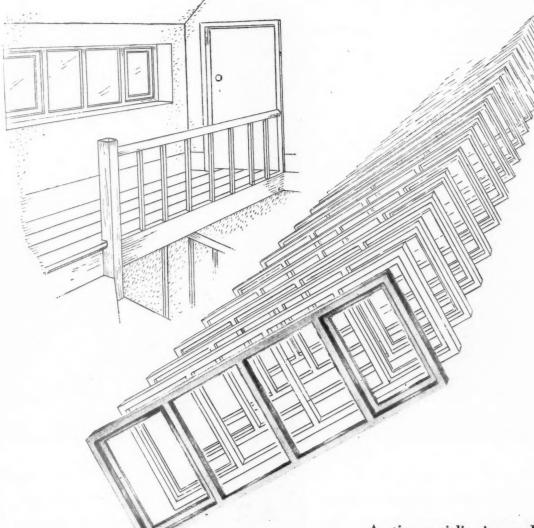
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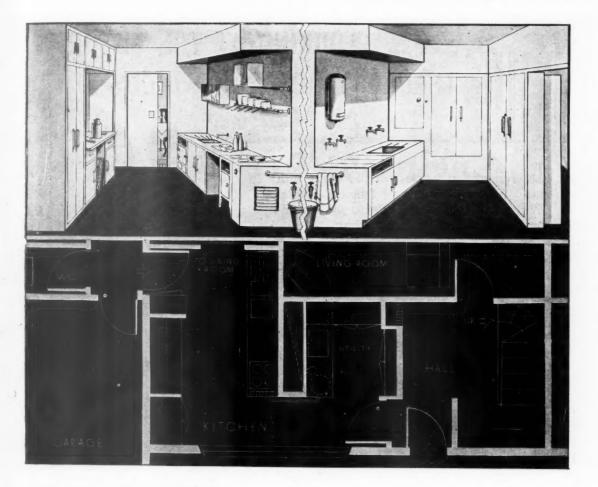
'Isteg,' in short, is a better and cheaper form of reinforcement and as safe as the Bank of England.

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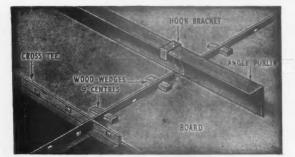


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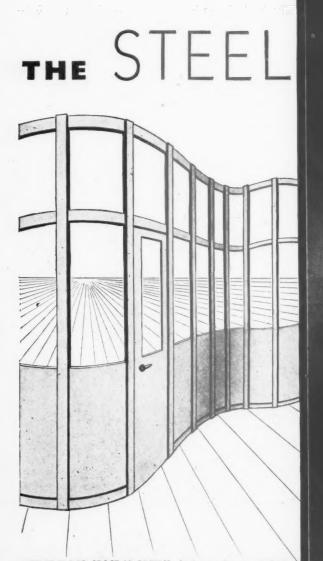
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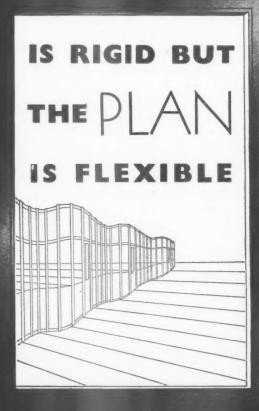
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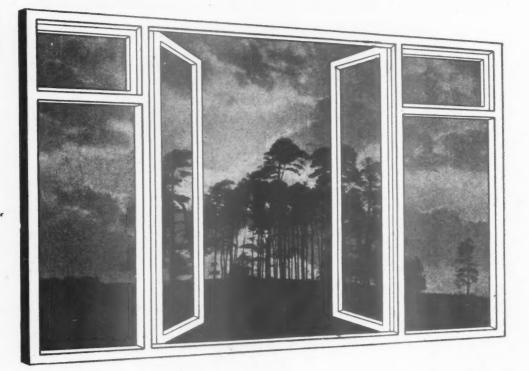
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Windows which are as good to look at as they are to look through will be a real contribution to the Better Housing which is so much demanded. That is why the joinery trade called in the best of architectural assistance and gave so much care to the proportions of their new Standard Wood Casements.

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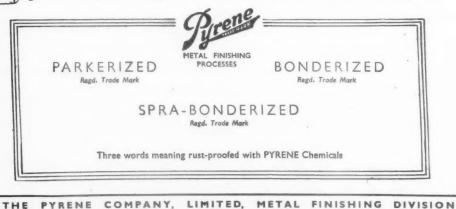
"PYROGRIP" Cold cement for dressing mops and bobs used for scurfing and polishing.



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War developments which have taken place in this period are at present available only to Government Factories and Contractors.



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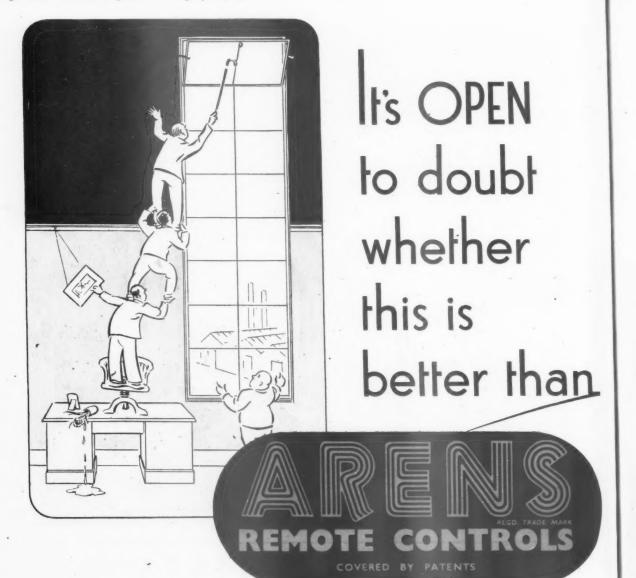
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Russian in their vast size are these facades of old St. Petersburg — only the wealthiest of autocrats could build on so fantastic a scale. In all else these buildings speak of Europe reaching back through France and Italy to classical origins. They represent the marriage of Russia and Europe for which Peter the Great founded his planned city on the Neva. In their easy reconciliation of poise and grace with enormous scale, they have a living message for

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THE ARCHITECTS' JOURNAL for July 13, 1944 [xxi



HY-RIB

# in FRAMED HOUSE CONSTRUCTION

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Below: Illustration of framed house with external walls and first floor in Hy-Rib construction. This house is one of over 5,000 domestic dwellings constructed in the inter-war period in which the external walls were of cement rendering on Hy-Rib. The photograph was taken in May 1944, when the house was 22 years old.

RREY

Above: Diagrammatic drawing of framed house showing Hy-Rib in walls and floor.

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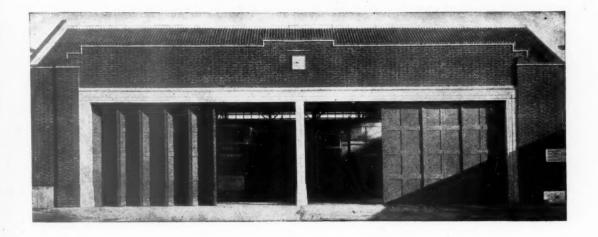
architect's head to be cut off!

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181 HIGH HOLBORN

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Leonard-Thermostatic Water Mixing Valves have been widely adopted for all types of group washing by leading Architects. By means of a quick-acting thermostat they deliver blended water from hot and cold supplies and keep the temperature steady no matter how pressures or temperatures fluctuate in the supplies. They avoid

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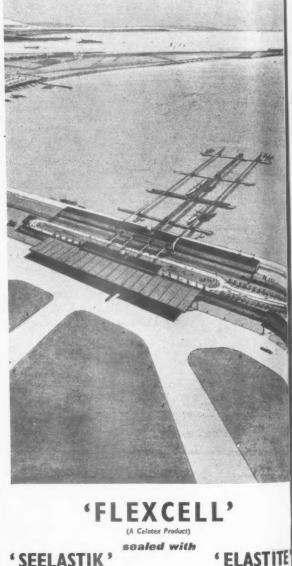
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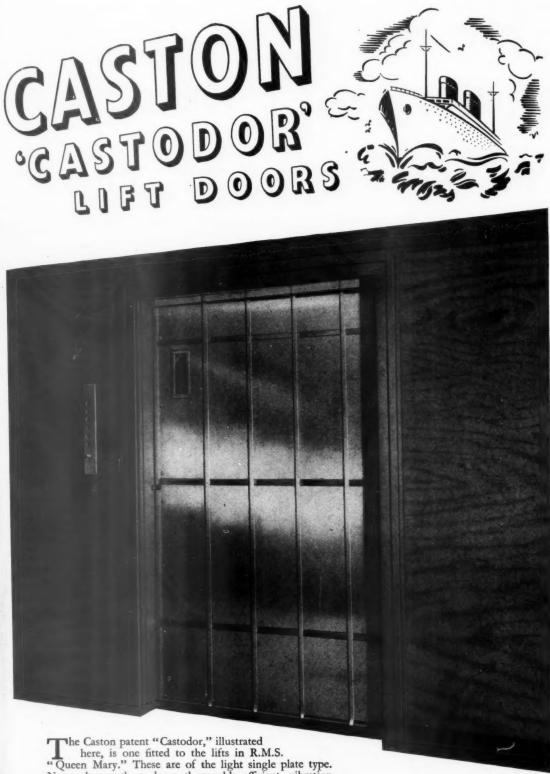


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### THE ARCHITECTS' JOURNAL for July 13, 1944 [xxvii

N F M

In common with every other periodical this JOURNAL is rationed to a small part of its peacetime needs of paper. For this reason it is virtually impossible for Newsagents to accept new orders for the JOURNAL for the time being, and the Publishers are also now unable to enter new subscriptions. Intending subscribers should, however, send in their names either to their Newsagent or direct to the Publishers to be recorded on the "waiting list" when



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JULY 13-27 sor, BIAE.)

CHELMSFORD. The English Town: Its Continuity and Development, Exhibition, and When We Build Again, Film. (Sponsor, SEPT. 1-9 TCPA.)

DUDLEY. Rebuilding Britain Exhibition. At the Public Library. (Sponsor, BIAE.) JULY 13-29

GRANTHAM. The English Town: Its Continuity and Development. Exhibition. At the Guildhall. (Sponsor, TCPA.) JULY 13-26

LEEDS. When We Build Again and Homes of To-morrow. Exhibition and film. Exhibition and film. JULY 13-22 (Sponsor, TCPA.)

LANDYBIE, SOUTH WALES. When We Build Again. Exhibition and film. At the National Welsh Eisteddfodd. (Sponsor, TCPA in collaboration with Messrs. Cadbury Bros.) Aug. 7-11

LONDON. LONDON. RA Exhibition. Weekdays 9.30 a.m. to 7 p.m. Sundays 2 to 6 p.m. Admission : One Shilling. JULY 13-AUG. 7 National Buildings Record Exhibition. At the National Gallery. Photographs of buildings of architectural interest throughout the country taken during the past three years for record purposes. Most parts of England, from Northumberland to Cornwall, are represented and the subjects range from the Central Tower of Durham Cathedral to Georgian wallpaper in a house at Falmouth. (Sponsor, National Buildings Record.) 10 a.m. to 12.30 p.m., 2.15 p.m. to 6 p.m.

### JULY 13-15 Town House Exhibition. At 13, Suffolk Street, S.W.1. (Sponsor, Housing Centre.) JULY 13-31

Sir William Jowitt, K.C., M.P. The Govern-ment's White Paper on the Control of Land Use. At the Chartered Surveyors' Institution, 12, Great George Street, Westminster, S.W.1 3 p.m. JULY 18

F. J. Osborn. The Control of Land Use. At13, Suffolk Street, S.W.1. (Sponsor, Housing Centre.) 1.15 p.m. JULY 18

American Housing in War and Peace Exhibi-tion. At the RIBA, 66, Portland Place, W.1. The exhibition, prepared by the Museum of Modern Art in New York, brought here by

CAMBRIDGE. Rebuilding Britain Ex-hibition. At Homerton College from July 13-17. At Newnham College, July 20-27. (Spon-regulated by the story of American housing before and during the story of American housing before and the story of American housing before and during the war. Photographs, diagrams and text show the work of the US Government Housing Agencies and private organizations in the various fields of housing in cities and in rural areas. The exhibition demonstrates the high quality of the dwellings erected, the new materials and new methods of construc-tion that have been used in wartime building. Many of the solutions and experiments are relevant to British post-war problems of pro-viding housing for temporary occupation while permanent houses are going up. Pictures of several large schemes of permanent town building completed before the war and largely building completed before the war and largely inspired by legislation and planning in Britain are also included. The designer of the ex-hibition at the Museum of Modern Art is Mrs. Mary Cooke, who worked for govern-ment housing authorities in Washington after her return in 1935 from Britain, where she worked with the architectural firm Tecton. JULY 19-AUG. 26

Sir Albert Howard. Fresh Food and Town Planning. At 2, Savoy Hill, Strand, W.C.2. Chairman, Lord Portsmouth. (Sponsor, TCPA.) 1.15 p.m. JULY 20

Edward H. Newman. Education for House-holding. At 13, Suffolk Street, S.W.1. (Spon-sor, Housing Centre.) 1.15 p.m. JULY 25

Reconditioning England Exhibition, 1944. At St. Martin's School of Art, 109, Charing Cross Road, W.C.2 JULY 24-AUGUST 7

F. J. Osborn. Preservation and Progress. At a meeting to be held by TCPA in con-junction with *Reconditioning England* Exhibi-tion at St. Martin's School of Art, Charing Cross Road, W.C.2. Chairman, Lord Harms-worth worth. 3 p.m. JULY 25

London Master Builders' Association Half-Yearly Meeting. At the Dorchester Hotel, Mr. H. C. Harland, President of the Associa-tion, will preside. Mr. Henry Willink, M.P., Minister of Health, is to be the guest of honour. JULY 27

NEW MALDEN, SURREY. The English Town: Its Continuity and Development. Exhibition. At the Public Library. (Sponsor, TCPA.) Aug. 19-26

NUNEATON. Homes to Live In Exhibition. At Riversley Park Art Gallery. Miss Ivor Jones, guide lecturer. (Sponsor, BIAE.) JULY 13-22

### DETROIT PUBLIC LIBRARY.

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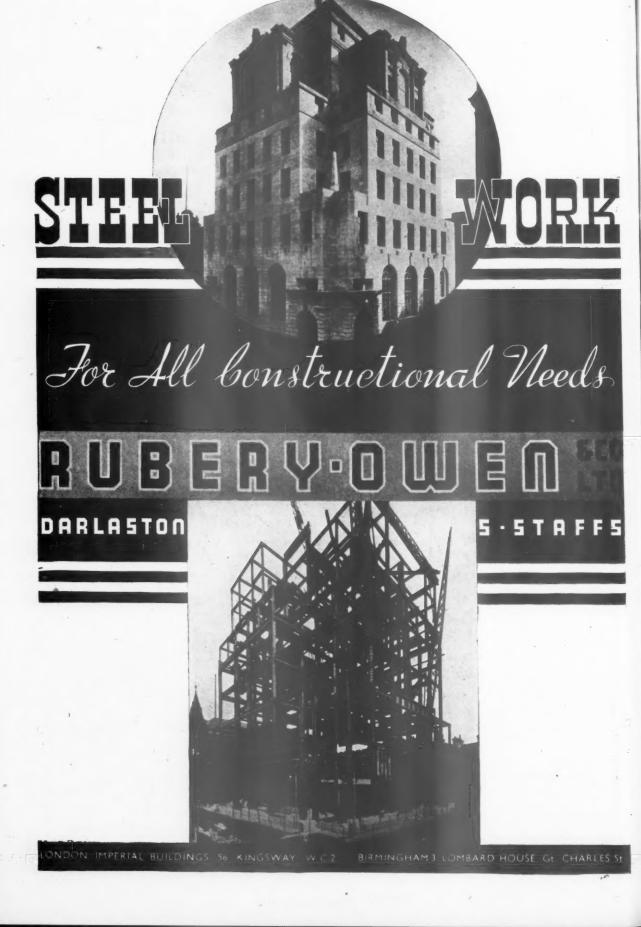
Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL's starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.

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

Oxford is to be preserved alive, the activity of the Oxford Preservation Trust in promoting change for the better must equal its resolution in OPPOSING CHANGE FOR THE WORSE, said Mr. H. G. Goodhart-Rendel. Addressing the annual meeting of the Trust at Oxford, Mr. Goodhart-Rendell said that Viennese psychologists might not yet have encountered any excessively fond mother who killed and stuffed her beloved children to perpetuate their innocence, but this is very to perpetuate their innocence, but this is very much what excessively fond preservation societies are apt to do with beloved places. The famous village of Broadway seems absolutely airless under its glass case, and the aspect of ruined castles and abbeys, skilfully mummified by the Office of Works, often suggests to the sensitive the thrall of some sinister magician. In Oxford, the Old Clarendon building seems to demand pro-Clarendon building seems to demand pro-tection as a masterpiece, and the buildings tection as a masterpiece, and the buildings of Keble College as a successful work of high aim, whereas the only plea I can make for the retention of Rhodes House will be that of economy. It has cost a lot of money and is in good condition. Moreover, given time, it may acquire documentary value. If Oxford is to be preserved alive, their activity in promoting change for the better must equal their resolution in opposing change for the worse. Other things being equal, change is better than stagnation, and the aim of each generation of Oxford men must always be to leave Oxford better than they found it. leave Oxford better than they found it.



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### from AN ARCHITECT'S Commonplace Book

CONTEMPORARY RHYTHM. [From Fine Building, by Maxwell Fry ((Faber & Faber)]. We have few opportunities of judging of the quality of the contemporary rhythm, the scale of the modern urban scene in its entirety. I felt it moving in the view through the open end of Cockfosters Station -looking along the platforms, with their elegant reinforced concrete furniture, towards the tracks, the signal box and the long low lines of the train-sheds beyond. What would utterly destroy the sweet strong rhythm is missing : there are as yet no jerry-built villas in the view, and if we are serious about our town building, there never will be. Again, in Stockholm on the way to the airport, there was a moment when the contemporary rhythm was most strongly established. On the left were sports fields surrounding a wide-spanned building housing tennis courts, and the setting for the whole was diversified by rocks, trees and occasional houses. It is hard to say in what way this pattern of natural and artificial structure evoked so marked a feeling of harmonious exhilaration, but something in the tempo of the swiftly moving highway set a long beat which was echoed in the smooth span of the sports building and carried on again in one after another smaller detail : of balustrade, lamp standard and the like : while the lines of the road and of the building were as completely congruous as though, to use McColl's simile, they had been cut in one pattern on ice by a single skater. I can remember vividly the impression it gave of belonging to me and my generation and how the truth of this filled me in the momentary glimpse that came as I passed over it in the plane a few minutes later. Remembering this scene, I remember also Alvar Aalto's advice, "Don't study town planning, it is all architecture."

The Architects' Registration Council announces that MAIN-TENANCE SCHOLARSHIPS have been awarded to the following. Francis O. Brown, Sheffield; Charles H. Cullum, Grimsby; Derek B. Cottam, Blackburn; Maurice C. Dakin, Ilkley; Samuel Heaton, Rothwell; Denis L. Mills, Romford; Jack Ogden, Wyke, Bradford; Charles H. C. Oates, Frinton-on-Sea; Joseph R. Parker, Blackpool; Donald A. Pate, Preston; Fred Rogerson, Rochdale; William G. Sellers, Kirkham, Lancs; John H. Ward, London; Ruth Wise, London; Kenneth Wrigglesworth, Hull; Bernard B. West, Bedford.

It is announced that CHARING CROSS HOSPITAL is to be rebuilt on part of Northwick Park Golf Course, Wembley. Middlesex County Council proposes to buy the whole of the golf course from the trustees of Harrow School for £188,000. The total area is 192 acres, of which Charing Cross Hospital will have 20 acres. Another site in the area is allocated for a new technical college, and a third is to be occupied by a cemetery. Over 80 acres will be devoted to an open space for the public, perhaps as a golf course. An additional 20 acres each will be available for playing fields for Harrow County School and a school at Wembley.

Post-war requirements of industry cannot fully be met unless there is an improvement in the STATUS of the DESIGNER. The following resolution to this effect was carried unanimously at a meeting of industrial and publicity designers convened by the Society of Industrial Artists and held recently at the RIBA: This open meeting of designers for industry and publicity believes that the post-war requirements of industry in both home and overseas markets cannot fully be met unless there is an improvement in the status of the designer. To this end effective professional organization is essential, and this meeting therefore endorses the policy and programme of the SIA as set forth in the prospectus here discussed. Speakers

included Milner Gray (President, SIA), in the chair, Misha Black, Wells Coates, Lieut. Games, Warnett Kennedy and other wellknown figures of the design world. The resolution was seconded by James Holland. The discussion brought out the importance of vocational education of designers and the Society's policy and plans were enthusiastically supported.

Mr. R. A. Easdale has been elected President of the WEST YORKSHIRE SOCIETY OF ARCHITECTS. Other elected officers are: Vice-Presidents: C. Sunderland and Noel Pyman. Hon. Secretaries: Norval R. Paxton and J. R. Tolson. Hon. Treasurer: Wm. Broadbent. Council, Fellows: F. Abbey, J. S. Allen, W. S. Backhouse, P. Benson Haswell, C. Hickson, L. Holdsworth, C. E. Horsfall, H. Jackman, R. A. H. Livett, G. R. Oddy, H. F. Sharp, Wm. Tocher; Associates: J. J. Birkinshaw, W. Clifford Brown, R. Thompson.

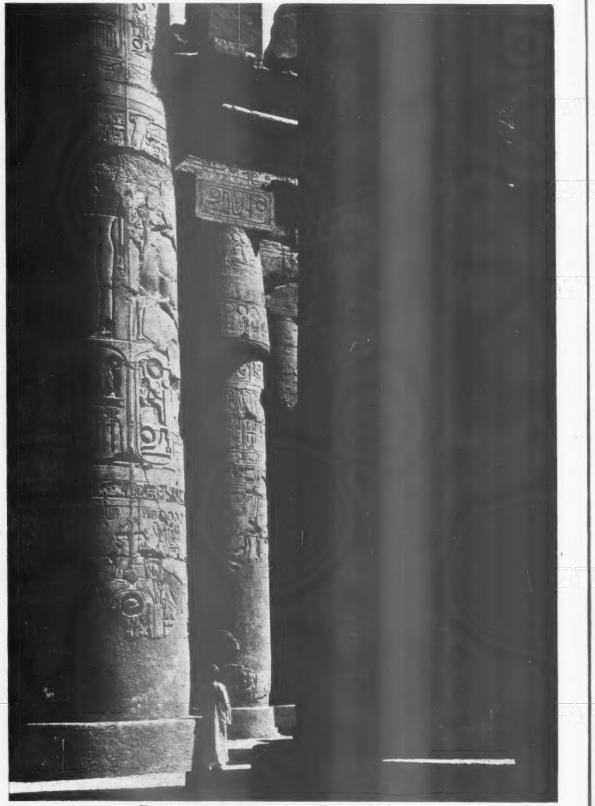
Birmingham City Council is seeking powers to nominate TENANTS FOR REPAIRED BOMBED HOUSES. Lord Chesham, President of the National Federation of Property Owners, in a protest to Mr. Willink, Minister of Health, says that such powers would violate the present ruling that owners have the right to let. Although repairs are carried out by the local authority, the cost is borne by the War Damage Commission, the war damage contribution being paid by the owner.

At Staines, Middlesex, work has begun on THE WORLD'S BIGGEST AIRPORT. It will have an area of 2,800 acres, 300 acres bigger than Idlewild, the New York airport. At present much of the work is concerned with draining the site, and the erection of steel and wooden huts for the accommodation of hundreds of workmen who will arrive shortly.

Leicester City Council considered a plan by the Housing Committee for MUNICIPAL BEER PAVILIONS on the city's housing estates. The Housing Committee asked the City Council to consider whether the Corporation should manage and control premises used for the sale of intoxicants on housing estates. It was argued that the Corporation should retain a measure of control, instead of handing over sites, with enormous values, to brewers. The report was redrawn until a later date.

An unnamed purchaser has THE ESTATE bought OF GARBOLDISHAM, Norfolk. The whole of the estate went to an unknown buyer for £48,000. The estate comprises buyer for £48,000. nearly the whole of the village of Garboldisham, including the post office, butcher's, baker's and blacksmith's shops, about 70 cottages, nine farms and five small holdings. The actual annual rent roll was given as £1,904. Garboldisham has been in the possession of the Molineau-Montgomerie family for over two centuries, and was sold under the direction of Mrs. Rosemary H. B. Howard, the last member of her race.

Mr. John R. Hill, who has been for TWENTY - FIVE YEARS COUNTY ARCHITECT, first with Dumfriesshire Education and Authority subsequently with Dumfriesshire County Council, has retired. Two solid silver entrée dishes and a sauceboat were presented to him by his associates in the building and works department and officials and friends in the Dumfries County Buildings, and he received a gold watch from the principal officers and deputies of Dumfriesshire County Council. Two of his best buildings in Dumfries are the new Dumfries Academy, with its spacious hall, and the police headquarters. Mr. J. D. Jack, senior assistant to Mr. Hill, and Mr. John Robson, C.B.E., county clerk, made the presentations.



### Permanent Building

A new view of an ancient building—the Great Hypostyle Hall in the Temple of Karnak, as seen by the brilliant eye of Mr. G. E. Kidder Smith's camera. To-day, by contrast, the weight, the indestructibility,

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THE ARCHITECTS' JOURNAL for July 13, 1944 [21

Following are the WINNERS OF THE TARRAN COMPETION CONTRACTION OF THE TARRAN COMPETION CONTRACTOR The assessor was T. Cccil Howitt, D.S.O., F.R.I.B.A. Design type T/2/1, i.e. Bungalow with two bedrooms. First: Frederick Hill, A.R.I.B.A. (Sergt, R.A.F.). Second: Arthur M. Foyle, A.R.I.B.A., and Glyn Roberts, A.R.I.B.A. (Condon). Third: Arthur Pickles (Halifax). Commended: John H. McMorland (Lieut, R.E.). Design Type T/3/1, 'i.e. Bungalow with three bedrooms. First: Arthur M. Foyle, A.R.I.B.A., and Glyn Roberts, A.R.I.B.A. (London). Second: A. I. Richards, A.R.I.B.A. (London). Second: A. I. Richards, A.R.I.B.A. (London). Second: A. I. Richards, A.R.I.B.A. (Banstead, Surrey). Design Type T/2/2 i.e. House with two bedrooms. First: George E. Salt, L.R.I.B.A. (Southport). Second: Shapley and Davison (Leeds). Third: John P. Tingay, A.R.I.B.A. (Bastcote, Middlesex). Design Type T/3/2, i.e. House with three bedrooms. First: George E. Salt, L.R.I.B.A. (Southport). Second: E. H. Lockton, A.R.I.B.A. (London). Third: Shapley and Davison (Leeds). Commended: Eric S. W. Atherton, A.R.I.B.A. (Harrow - on - the - Hill, Middlesex), and Basil E. Brenchley, A.R.I.B.A. (Southport). Second: E. H. Lockton, A.R.I.B.A. (London). Third: Shapley and Davison (Leeds). Commended: Eric S. W. Atherton, A.R.I.B.A. (Harrow - on - the - Hill, Middlesex), and Basil E. Brenchley, A.R.I.B.A. (Banstead, Surrey).

Langley Park, a Buckinghamshire Beauty Spot, has b e e n A C Q U I R E D F O R T H E P U B L I C. The park has been acquired for the public under the Green Belt scheme at a cost of  $\pounds 109,000-\pounds 100$  an acre. Forty per cent. of the cost will be met by the LCC ( $\pounds 39,400$ ), 10 per cent. by the Slough Borough Council ( $\pounds 108,000$ , 10 per cent. by the Eton Rural Council ( $\pounds 10,800$ ), and the remainder. by the Bucks County Council ( $\pounds 48,000$ ). The estate is three miles from Burnham Beeches. It is proposed to use part of Langley Park for camping sites for young people and playing fields.

Last week the following successful candidates taking part in the RIBA EXAMINATIONS FOR PRISONERS OF WAR were amounced by the Royal Institute. At the RIBA Intermediate Examination for Prisoners of War, held at Stalag Luft 6 in the spring of 1943, F/Sgt. Douglas Pearcy passed in the History of Architecture. At the RIBA Final Examination for Prisoners of War, held at Oflag IX A/H in the autumn of 1943, Captain R. G. Bateson passed in the subjects for which he sat, as follows : B.1, General construction; C., Hygiene (including drainage, ventilation, heating, lighting and water supply); D., Specifications and the properties and uses of building materials; F., Thesis.

To ensure that HISTORIC COTTAGES are not destroyed when sites for post-war housing are chosen, a survey is being made at Lavenham, Suffolk. The Rural District Council, the regional planning officer and the Society for the Protection of Ancient Buildings are co-operating, and a public meeting is being held. Lavenham was once the centre of the hand-weaving industry.

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## THE CONTROL OF LAND USE: BLIGHTED LEGISLATION

THE Government has now made known its policy in regard to the control of land for planning purposes, but

it cannot be said that the proposals in the White Paper or the Town and Country Planning Bill will satisfy in certain vital respects the expectations of the general public, local authorities or professional planners.

The most important statement in the White Paper is the frank admission that "it is not proposed that a single master plan should be devised by the Government and imposed on the country, nor that the existing pattern of land ownership or land use should be swept away." This stand-put attitude is the keynote of the proposals and we can see from it how unwilling is the Government to accept fundamental change, however necessary it may be in the sphere of public administration or a transformation of the land system, in order to serve the purposes of town and country planning.

The need for positive national and regional planning of the basic factors of physical reconstruction is now generally recognised by professional planners, but neither in the White Paper nor the Bill is there the slightest appreciation of the principle. The initiative is throughout left to the local authorities without any attempt to provide a national and regional framework into which local plans can fit. The Ministry of Town and Country Planning and the other Departments concerned are brought in only in a supervisory or approving capacity.

The Uthwatt Committee recommended the State acquisition of all development rights in unbuilt land outside the towns on payment of a global sum; the compulsory purchase of all such land by the State at the time of its development; the purchase by the planning authority of any areas requiring redevelopment as a whole, at a price not exceeding that prevailing at March 31, 1939; and the imposition of a betterment levy of 75 per cent. on any future increase in the annual site value of developed land.

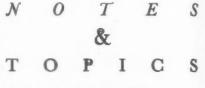
The Government has rejected the first two of these proposals completely and the remaining proposals in part. In doing so, we fear it has been more concerned with the interests of landowners than with the aims of planning. In place of the acquisition of all development rights, landowners are to be required in all instances to obtain the consent of the local planning authority to development or redevelopment. The slight degree of control which this is expected to produce is indicated by the statement in the White Paper that "over by far the greater area of the country owners will be able to go on using their land just as they do now without interference of any sort." If this prophecy is correct, the whole planning issue has been shelved. The Bill substantially increases the powers of local planning authorities to acquire land compulsorily and by more expeditious procedures in specified circumstances: in particular when they are dealing with areas of extensive war damage which need laying out afresh and redeveloping as a whole, and areas of bad layout and obsolete development which require similar treatment. This is all to the good, but the extent to which these powers are exercised will be mainly determined by the financial provisions of the Bill. There are two aspects of these—the system of grants in aid, and the compensation and betterment proposals.

The provision for Exchequer grants is on an excessively mean scale. Local authorities in areas of extensive war damage are to receive money to defray the cost of acquiring and clearing land sufficient to meet the loan charges for a period of only two years. A proportion of the loan charges may attract grant for a further eight years if the Minister is satisfied that the damage has not been sufficiently repaired to enable the land to be brought into use for a substantial pur-A further extension to thirteen years is permitted if pose. special' circumstances obtain. No assistance is available to enable the local planning authority to devote all or part of a blitzed area to non-revenue producing purposes, such as an open space or a civic centre. Nor does the Bill provide for central grants to assist the planning of areas of bad layout or obsolete development. All this is left entirely on the shoulders of the many small, poor and weak local authorities which possess planning powers. In our opinion the financial provisions of the Bill require redrafting on far more generous lines.

By contrast, the Government is relatively generous towards They are to receive, for land compulsorily landowners. acquired, the price current at March 31, 1939, even when the present price has fallen to a much lower figure. There is to be a betterment charge of 80 per cent. of the enhancement of value derived from permission to develop or redevelop. But from this is to be deducted the compensation which would have been payable if permission had been Thus, compensation is allowed for an injury refused. to the landowner which he has not suffered. The compensation provisions are described in the most nebulous fashion because the Government considers that they cannot at present decide upon the correct amount which should be paid. In consequence, only the right to compensation is to be determined in the near future, leaving the standard of payment to be settled at the end of a five-year period. Behind the delay, uncertain handling and weakness of the Government's compensation proposals there doubtless lies much political bickering, party strife and manœuvring for The resulting policy is narrow in outlook and position. offers little inspiration to those who eagerly await the Britain of tomorrow.



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



THE BRAITHWAITE HOUSES

At the Royal Academy a design for terrace houses of unit construction by F. R. S. Yorke is exhibited, and it was illustrated on page 348 of the JOURNAL for May 11. This is the design on which are based the two experimental houses now nearing completion on the LCC Watling Estate at Hendon sponsored by the Braithwaite engineering company.

The experiment is undoubtedly among the most important that have been, and are being, carried out on prefabricated methods, more especially as it relates to a flexible system of standard units with a wide range of possible variations and combinations applicable to detached, semi-detached and terrace houses, and to three-storey flats. Complete freedom of design is possible, as well as of choice of cladding materials.

As long ago as 1920 Braithwaites built the well-known Telford allsteel house to ease the housing shortage after the last war. Now after two years of research through the co-ordinated efforts of engineer, architect, builder and commercial organizer, the company has produced the Hendon job. Unlike the Telford house, it is not all of steel, for only the framework is metal. Other materials used include lightweight concrete, asbestos-cement, brick, plasterboard, plywood, aluminium foil and mineral wool.

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A grid dimension of 38 in. is the modular basis for all plans. The whole job is precision built, and contains many interesting constructional details. It's a pretty rigid and solid affair with nothing temporary about it, and perhaps it cannot strictly be called prefabricated in the usual meaning of that rather vague word. It does, however, provide the important advantages. of dry assembly, quick erection, precision building and the use of semi-skilled labour. Moreover, the plumbing and electric wiring are both factory produced.

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The important problem of heat conservation, too rarely considered fully enough, has been worked out carefully, and it is claimed that the coal fire in the Hendon houses will save 50 per cent. of fuel as compared with the old type of fireplace. By a system of convection, heat from the ground floor flues is used to warm the air of the bedrooms above. As well as a far higher standard of both thermal and sound insulation, the houses will have much greater fire resistance than is to be found in the traditional brick house with timber floors and pitched roof.

Very few manufacturers of experimental houses will tell you anything about their systems before their type houses are complete. Even the Ministry of Works, with



The Braithwaite houses at Hendon under construction. Two sections of the steel frame are being bolted together. See Astragal's note.

no trade secrets to keep, is carefully and rather strangely guarding from public gaze its type houses now being built at Northolt (ready very soon, I understand). How, then, have I learned all this about the The fact is Hendon experiment? that Braithwaites have magnanimously invited all who are interested to visit the Watling Estate site at any time they wish and to watch the whole process of building from the laying of the foundations (begun on June 16) to the final decoration, and to offer constructive criticism. This is a very sensible course, and sets a good example.

#### ARMY TYPOGRAPHY

Government publications to - day touch all levels of typographical merit, from the highest to the lowest. At the top of the scale you have the Army posters designed by Lieut. A. Games, R.E., and the various Ministry of Information booklets of which *There's Freedom in the Air* and the *Eighth Army* book are recent examples. Down at the bottom, where printing is just printing and *designed* printing has never been heard of, are many of the technical Army publications.

Recently there have been signs that someone is making an attempt to render some of them more readable—not, however, by printing them in a better type but by interspersing their text with ragged little sketches such as used to appear in the more gossipy columns of the motoring or motor-cycling magazines. Nobody will deny that the end — improved readability — is desirable, but is this the best means to attain that end ?

As it happens, quite a number of commercial users of print, from publishers to jam manufacturers, recently published have Press advertisements consisting of type and type-set ornaments which prove (if any proof were needed) that good typography without illustration is more eye-compelling than bad typography with irrelevant Surely those who jazzy sketches. are responsible for the Army's printing are not too haughty to take a lesson in legibility from the jammakers.

### DECENTRALISED DRAMA

It is an unusual and pleasant experience to attend a public discussion in which those taking part speak audibly as well as intelligently. At the recent luncheon debate organised by TCPA to discuss the National Theatre and presided by actor - manager Lewis over Casson with the brisk precision of an experienced trades union official (he is president of Equity), the principal speakers were from the professional stage, and they were as clear about what they wanted to say as they were in saying it.

### \*

Miss Sonia Dresdel, a smoky, husky-voiced brunette with frighteningly efficient breath - control, who opened the discussion, made a plea for the decentralization of the theatre-or, as Mr. Casson put it, for a national theatre and not a National Theatre-and revealed some startling statistics. Thirty-five million people in this country, it appears, have never seen a playand who knows how many have never seen a good play? Comparable figures could no doubt be given for the other arts.

The first answer would seem to be more theatres, combined with galleries, social centres, restaurants, perhaps-(Mr. James, of CEMA, revealed that the National Gallery has cleared over £20,000 from its canteen)-for our provincial towns and regional centres, which could provide not only temporary homes for those "dessiminating," as Dr. Herbert Read called it, "metropolitan culture," but could assist in the perhaps even more valuable work of building up a locally inspired and fostered culture in every region. It's no good, in fact, sending ballet companies and collections of contemporary paintings to a town unless it possesses some place in which to house them. Nor will any local repertory or art society flourish healthily when its only centre is a room over the local café. CEMA has proved that the public will support art, and it is up to the local authorities and planners and architects to provide homes for it in their post-war schemes.

ASTRAGAL



## LETTERS

- A. Wise, A.R.I.B.A.
- S. Buzas
- A. J. Price, A.M.I.C.E.
- A. E. Phillips

### The Churchill House

SIR,-Your leader writer has already pointed out that the MOW house is neither sufficiently out that the MOW house is neither sufficiently permanent nor sufficiently temporary to be anything in particular. It is neither un-demountable nor properly demountable. It is not entirely the child of the building in-ldustry, nor of the motor industry. He even ikened it to the old horseless carriage. The motor industry can produce a techni-cally evellent but inhuman tank for inhuman

cally excellent but inhuman tank for inhuman purposes, or it can produce an equally efficient motor car, æsthetically satisfying, for human purposes. The MOW seems as far as externals are concerned to have produced a tank.

The Government of 1944 states that the life of the Government of 1944 states that the file of the Government of 1954 necessarily agree? I, for one, would not be surprised to find well preserved examples still inhabited when Germany, under entirely new manage-ment embergie on its third World Work ment, embarks on its third World War in 25 or 30 years' time. After all, it is only human nature to squeeze out the last drop of rent.

nature to squeeze out the last drop of rent. Within limits it is more sensible. Your correspondent Mr. Philip Cundall's mention of Caravan leads me to enclose (see facing page) as a matter of interest, a sketch scheme I prepared some two years ago when limited-life emergency housing first appeared in the offing. I believe that show-men's caravans in particular often have a life considerably in excess of ten years. The almost universal attraction of caravans must be admitted. Many people (a substantial numbe admitted. Many people (a substantial number in America) live in caravans from choice. Others pay anything from 3 to 6 guineas a week for their use over short periods.

Thousands would own them if they could afford it.

Consequently I suggest that it is much more sensible to offer the public something that is manifestly a sort of caravan but much better, than to offer it something that is manifestly a house, but much worse (in spite of the a house, but much worse (in spite of the refrigerator—the sugar on the pill). Further-more, I suggest that everything possible should be done to suggest that the temporary dwelling is NOT intended to be a house. For want of a better I suggest the name Caravilla— unless that happens to be a very rude word in Spanish or something. The kitchen might be referred to no the cellu, the bedroorne be referred to as the galley, the bedrooms as cabins.

Unless something like this is done, the public, like your correspondent Mr. Kelly, will certainly compare the insulation and spatial standards of the temporary dwelling with those of a permanent house, and since the former should do a lot towards paying for itself in a matter of only ten years, it seems rather too much to expect that they should compare altogether favourably. With forms of construction that are neces-

sarily somewhat unfamiliar, it is difficult to design for a definite predetermined life, and consequently it seems rather reckless to fasten on a period like ten years with anything more than a vague intention of sticking to it. The value of the MOW house would be limited except on its original site. It might be found to have some remaining life after the local need for it had passed. The value of a more demountable type would then be a good deal higher since its demountability would make its removal to another site a simple and economic proposition.

Such municipally owned dwellings could then have their remaining life assessed and certified, be sold to the highest bidder and re-erected elsewhere, say for holiday use during that period. They would have every opportunity of paying for themselves.

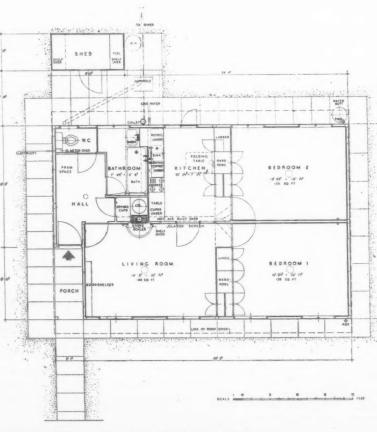
Recent inconclusive correspondence in your columns about the position of the farm bathroom shows clearly that there worker's is no single solution to such a problem. A competition such as the Northants probably competition such as the Normans produces fifty different designs all with a motor of bad points. In spite produces fifty different designs all with a minimum number of bad points. In spite of the advantages of mass-production, I hope that the public, rapidly becoming glassy-eyed, will be allowed some choice, however little. I hope the country will not be flooded with temporary dwellings of one type, and one type only, however good it may be in its own way. In other words, I hope that "It ain't a gonna rain no Mowhouses." Launceston

A. WISE

10-0

SIR,-Why is it necessary after the many lessons from America and the Continent for the Government to produce a single type of factory-made house, to be mass produced and delivered complete for erection anywhere and everywhere? This obviously is the wrong way to set about emergency housing, and it is clear from the many criticisms in the press from the ordinary man in the street and from the letters in this Journal, that one plan only (however good it is) can suit only one particular type of family. The right way would have been to have designed an efficient struc-tural unit, together with cupboard, kitchen and hash unit, together with cupboard, kitchen and bath units. This structural grid and the fitment sizes would then be the backbone for a large number of plan types, ranging from a one-room unit, for the single person, to the multi-celled dwelling, for a family with children.

But to confine myself to the plan within the 600 odd sq. ft. of the MOW house, if we have to accept this factory-made house, the change over of the kitchen and bathroom (see



The Churchill House. Revised plan of the Ministry of Works.]

A car Mr. a simila emerg House

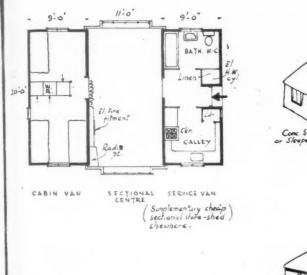
plan) se amende without the hal and/or plan fo into the 13 ft. kitchen window cupboa 5 ft. 2 i is a fu Londo

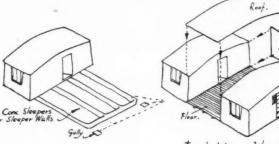
SIR,attract Portal countr Works Nobe but b doubtf of ten will be withst the co There tion, t manne 500,00 a floc inclue 32 ft. or blo 0ccup The o fore, their amuse will a and n A be storey frame filled sizes.

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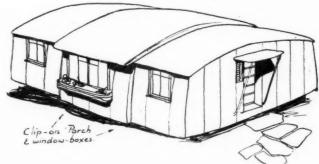
2 End

Wells





Transportation : 3 Loads SiteWork: R.W. goods E service connections Vans built on skids & handled by Jacks, rollers, & winch tackle on lorry.



A caravan scheme prepared two years ago by Mr. A. Wise who suggests that something similar should be done to meet the present emergency instead of erecting the Churchill House. See letter on facing page.

plan) seems to me to improve the original (and amended) plan considerably. Bedroom 2 can, without disadvantage, be reduced in size and the hall made adequate for storage of pram and/or bicycle. The space used in the old plan for the passage in the kitchen is taken into the living room, making the width about 13 ft. A back door can be installed in the kitchen, but a fixed working table under the window would be more useful. The drying cupboard is in the bathroom (enlarged to 5 ft. 2 in.), where the washing unit is, and there is a fuel cupboard in the hall. London. S. BUZAS. and heating arrangements could be prefabricated and be of the same materials as the Portal dwelling or of other suitable prefabricated materials. The roofs could be as now proposed, so that later on they could be made into permanent flat roofs or pitched timber roofs covered with tiles or slates. The foundations would be made wide and strong enough to enable the temporary walls to be encased later on by  $4\frac{1}{2}$  in. reinforced brickwork or concrete walls

The only disadvantage would be that it might take slightly longer to build a two-storey house than a bungalow, but the number of houses which could be constructed of prefabricated units could be made much larger (they could be encased and made into permanent buildings later on), so that at the end of the second year the output of houses could be larger than the temporary bungalows and permanent houses built with the jusual materials and methods.

The advantages of the proposals are :

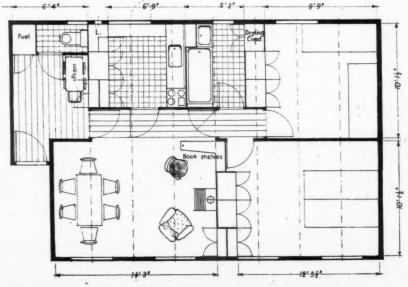
(1) The houses would have nearly as long a life as those constructed by normal methods and materials, as they would be protected by brick walls and permanent roofs against the weather soon after the temporary works had been constructed.

SiR,—In common with many others, I am not attracted by the prospect of 500,000 or more Portal bungalows being erected all over the country as proposed by the Ministry of Works.

Nobody can claim that they will be anything but blots on the landscape and it is very doubtful that they will be removed at the end of ten years. I venture to predict that they will be in use for a much longer period, notwithstanding the Government's assurance to the contrary. There can be no real objection to prefabrica-

There can be no real objection to prefabrication, but what is open to much objection is the manner in which it is proposed to be adopted. 500,000 or more Portal bungalows, each with a floor area of approximately 700 sq. ft. (including the external store) and a frontage of 32 ft. 4 in. plus the openings between the pairs or blocks of 4, 6 or 8, will mean that the space occupied by these erections will be considerable. The occupiers of these bungalows will, therefore, have longer distances to travel between their dwellings and their places of work, amusements and shopping areas, and this will add to the cost of transport and living and mean wasted hours in travelling. A better proposition would be to have twostorey houses constructed with a light steel

A better proposition would be to have twostorey houses constructed with a light steel framework and the wall and roof spaces filed in with prefabricated units of standard sizes. The partitions, cupboards, plumbing



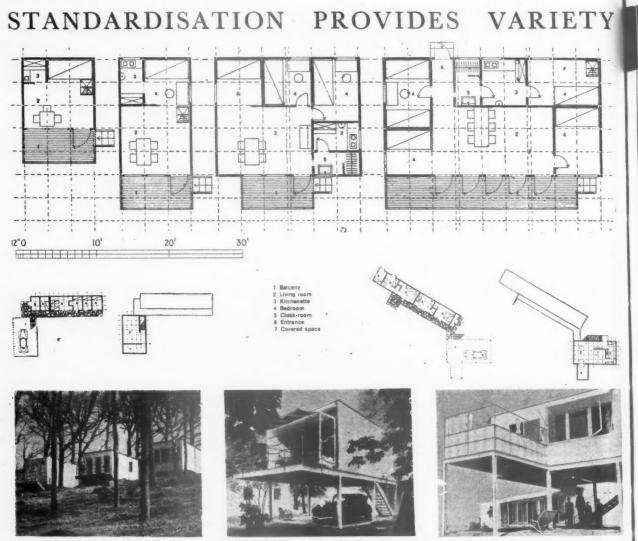
The Churchill House. Suggested plan by S. Buzas.

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On pages 33 to 36 is illustrated a house of steel and timber built on a system of standard prefabricated units. Here are a few alternatives of the same system which provide an interesting example of how wide a variety of different arrangements is possible with the use of a few standard parts which, at the same time, maintain harmony of scale and character. Top, plans of four one-storey types. Centre, left, plan of an exhibition house. Centre, right, plan of a week-end house. Above, left, a row of the smallest of the one-storey types of which a plan is shown at the top. Above, centre, the exhibition house. Above, right, the week-end house.

- (2) The demolition of the bungalows with the foundations, drains, water and other services which would not fit in for permanent dwellings will waste many millions of pounds. The salvaged value of the bungalows will be comparatively small.
- (3) The houses would be erected more quickly han by the normal methods without the disadvantages of the temporary method of
- disadvantages of the temporary method of construction.
  (4) When the bungalows are to be demolished the tenants will have to transfer to another site and will lose all the work they have put into the gardens and improvements in their houses. There will also be the cost of removal of their furniture and inconvenience of moving into another house, as well as having new neighbours. All these would be avoided
- (5) Houses with three bedrooms would be erected instead of two-bedroom bungalows, which soon become too small if a family is to be reared. It must be borne in mind that many service men have married during the war and already have one or two children.
- (6) When encased with brick walls and tiled

or slated roofs, the houses will be similar in appearance to those erected by normal methods and avoid the unalluring prospect

- of the unlovely Portal dwellings. (7) The encasing of the walls and additions of permanent roofs would cause less inconvenience to the occupiers than having to leave for another house. (8) As the brick walls and tiled or slated roofs
- are added they would not need highly skilled labour, and this would allow the more skilled labour to be available for the higher class of buildings, e.g. schools, churches, etc. I realize as well as anyone that the men in

the services will require a house as soon as possible after being demobilised. I was in a similar position after being demobilised after the last world war when no houses were available.

I feel, however, that most would prefer to than be compelled to occupy a small bungalow which would soon not be to their requirements. I do not know how far the Government is committed to the Portal dwellings, but hope it is not too late to consider the erection of

two-storey buildings which can be converted into permanent buildings. A. J. PRICE.

Yeovil.

Borough Surveyor of Yeovil.

### Build in Slate

SIR,-The North Wales Slate Quarries

Association have an inspiring advertisement in the ARCHITECTS' JOURNAL for May 4, 1944. It encourages me to ask a question I have often wanted to ask. Why the stone refuse from the slate quarries could not be used for building houses? So far as my observation

building nouses? So far as my observation goes, it is of convenient size to handle, and it usually seems to have one straight edge. In this neighbourhood alone there are huge dumps. There are also thousands of tons of gravel from the lead mines which have been in existence since the time of the Romans, and which could be turned into cement mortar and used for rough casting and used for rough casting. Slate slabs could be used for floors, shelves,

sinks, rain water tanks as well as roofing. In fact the quarries could be kept busy and we should be using the natural gifts of the earth. Wrexham. (MRS.) A. E. PHILLIPS

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### ROLLED GLASSES

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### **Double Rolled Cathedral:** Rolled : Irregular texture on one surface. Slight obscuration. Translucent,

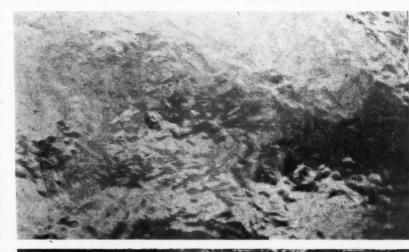
The accompanying photographs are full-sized illustrations of a typical section and elevation.

Stippled Cathedral : Rolled : Irregular texture on one surface. Slight obscuration. Translucent.

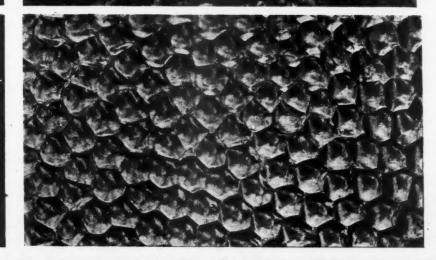
The accompanying photo-graphs are full-sized illustrations of a typical section and elevation.

No. 2 Hammered Cathedral : Rolled : Irregular texture on one surface. Medium obscuration. Translucent.

The accompanying photographs are full-sized illustrations of a typical section and elevation.







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The Government's Town and Country Planning Bill\* and White Paper<sup>†</sup> on the Control of Land Use, which have received such widespread criticism, are here reviewed by Regionaliter. He assesses the proposals alongside those of the Uthwatt Committee, and considers how far each succeeds in surmounting four obstacles-compensation, betterment, compulsory acquisition and finance — which have hitherto frustrated all efforts to achieve physical planning in Britain.



# CONTROL of the USE of LAND

### [BY REGIONALITER]

The Government has at last revealed its policy for dealing with land in connection with planning and reconstruction after the war. The White Paper on "The Control of Land Use" explains the principles which the Government considers should be applied, while the Town and Country Planning Bill embodies some of these principles, but by no means all, in a series of elaborate legislative provisions intended to facilitate the acquisition of land for planning purposes, for

 Town and Country Planning Bill. House of Commons Bill 31. 1943-4, H.M.S.O. 1s. 2d.
 The Control of Land Use. Cmd. 6537. H.M.S.O. 4d. post free. assessing the compensation payable in connection with land acquired for public use and for extending the powers of planning authorities.

### FOUR OBSTACLES

Before examining the proposals we may remind ourselves of the defects in the land system which have hitherto frustrated all efforts to achieve town and country planning in Britain. First, there is the difficulty of controlling the use to which land is put without paying compensation on a fabulous scale quite beyond the resources of most local authorities. This excessive scale of compensation is derived from the element of floating value. Second, there is the failure to recover betterment from the owners of land whose value has been enhanced by planning schemes or public im-provements. *Third*, the absence, save in a few narrowly defined circumstances, of powers of compulsory acquisition of land for planning purposes. Fourth, the absence of any grant in aid from Exchequer funds to assist local authorities to meet the heavy cost resulting from the purchase of land or the regulation of its use.

### THE UTHWATT SOLUTION : FIRST OBSTACLE

The Uthwatt Committee recommended dealing with the first of these defects by means of the immediate vesting in the State of all development rights in unbuilt land outside the towns in exchange for a global sum representing the fair value of these rights to the State taken as a whole and distributed among owners in proportion to the estimated development value of their individual holdings at March 31, 1939. The State, moreover, was to purchase all un-developed land at the time when it was about to be developed, and would lease the land to the developer for a term of years. As regards built-up land, the Committee advocated that planning authorities should be able to purchase whole areas requiring reconstruction, at prices not exceeding those obtaining at March 31, 1939.

The Uthwatt scheme was by no means perfect. It had, in fact, certain important disadvantages, not the least of which was that it removed from the owners of undeveloped land all incentive to develop. But nearly all professional planners and persons interested in planning had come to support the Uthwatt scheme because, although far less satisfactory than nationalization, it seemed also far less controversial politically and would have dealt once and for all on broad lines with the highly vulnerable rural and semi-rural areas, and would have gradually brought an increasing proportion of such land under public ownership.

### **GOVERNMENT OBJECTIONS**

The White Paper expressly rejects the Uthwatt scheme on the unconvincing ground that it would involve different treatment for owners of undeveloped land outside the towns, from that accorded to owners of similar land inside the towns and owners of developed land wherever situate. This differentiation, combined with the perennial difficulty of knowing where to draw the line between town and country areas would, it is alleged, "give rise to much controversy and dissatisfaction." But so, it is already evident, will the Government's own proposals.

### THE GOVERNMENT'S SOLUTION: FIRST OBSTACLE

In place of the Uthwatt scheme the White Paper proposes that although the landowner will remain in possession of his development rights as at present, he will not be able to exercise them without obtaining the approval of the planning authority. This will apply to all land, wherever it may be, and whether built up or not.

We shall thus have a system in which the responsibility for development or redevelopment will remain with the owner; in which the onus will be placed on local planning authorities of consenting or refusing consent to development; and in which the ownership of land will remain in private hands.

This closely resembles the system which has hitherto existed in areas where planning schemes were already in operation, with one important exception : namely, that financial questions are in future to be dealt with on a national scale. The White Paper recognizes the futility of expecting local planning authorities to absorb the many wide fluctuations in land values which must inevitably result from the vagaries of local government boundaries, from schemes for the dispersal of industry, the decongestion of urban aggregations, agricultural policy, the reclamation of derelict land, national parks and so forth. All these factors will lead to a redistribution of land values on a substantial scale, and in order to prevent the incidence of rising or falling values in any particular locality from exercising a determining influence on the attitude of the local planning authority in regard to land use, the Government proposes to transfer all the financial questions relating to compensation and betterment to a central Land Commission. The structure and functions of this body are not described. We are only told that it is to be independent, so far as possible, in the administrative sphere, but responsible to Ministers and through them to Parliament.

It is curious that the framers of the

White Paper should recognize the need for centralization of finance while rejecting completely the idea of national planning. This is especially odd when we find them declaring that a substantial redistribution of values will result from *national* policies. Surely it is reasonable that national policy in such matters as the location of industry, between different areas, for example, or the construction of garden cities, should be nationally planned and administered.

# THE UTHWATT SOLUTION : SECOND OBSTACLE

I come now to the second defect in the present system-the failure to recover betterment. The Uthwatt Committee advocated a levy of 75 per cent. on the increase of annual site value accruing to land not included in the State acquisition of development Here again its rights scheme. recommendation is rejected on the ground that it would be " extremely complicated " and " its efficacy, from the revenue-producing point of view, is open to doubt." Moreover, declares the White Paper, the levy will be imposed even on increases which have not been realized in cash by the owner, or for which he may already have paid when purchasing the land.

These arguments are scarcely more than debating points. Our system of land tenure is the most complicated in the world. It is, in fact, a public scandal except in those few places where the system of land registration is in force. The members of the Uthwatt Committee were the highest experts in the country on all aspects of that system; and their proposal seems plain sailing to the ordinary man. We are not even told why it is supposed to be impracticable except in terms so vague as to be meaningless.

### THE GOVERNMENT'S SOLUTION: SECOND OBSTACLE

Under the Government's proposals the landowner will be required, when permission is granted to develop or redevelop for a different use, to pay a betterment charge equal to 80 per cent. of the difference between the value of the land with the benefit of the permission and its value if permission had been refused. This proposal will bear far more lightly on the landowner than the Uthwatt recommendation, for the latter envisaged a recurring yearly payment based on the annual site values, whereas the Government contemplate a single payment based on capital value which would clear the owner's liability until such time as the land was again licensed for development or redevelopment. And from this once-over payment is to be deducted the compensation which would have been payable for the loss of development value existing at

March 31, 1939, if permission had been refused. Will anything at all remain to be paid by way of betterment? Very little, we should expect. The Government's scheme was considered by the Uthwatt Committee and rejected for reasons which the White Paper does not attempt to answer.

The compensation provisions of the Government's scheme are based on the principle that where land is deprived of any development or redevelopment value attaching to it at March 31, 1939, "fair compensation" should be paid. But the framers of the White Paper consider that no one can at present say what this should be. So no compensation at all is to be payable until a period of five years has elapsed, when an expert committee will be appointed to report on the amount of compensation which should be paid. In the meantime, the land is to be classified in three categories and the right to compensation on an undetermined scale established. Anything more nebulous and unsatisfactory than this method it would be hard to imaginé. It gives the impression that the landowning interest is simply playing for time.

Incidentally, the tripartite division called for by the White Paper requires the classification of land into "green," or rural land, "white " land (comprising all other unbuilt land) and built-up land. The complexities of drawing such distinctions in terms of hard and fast lines on a map are at least as great, if not much greater, than those involved in the Uthwatt scheme, which the Government rejected for that reason. This disposes of the idea that the Government scheme is simpler or more practicable.

### THIRD OBSTACLE:

A SUBSTANTIAL ADVANCE

The third defect in the present situation is the absence of powers to acquire land compulsorily. Here the Bill certainly makes a substantial advance. It enables the Minister of Town and Country Planning, where he is satisfied on the application of a local planning authority that an area which has sustained substantial damage should be laid out afresh and redeveloped as a whole, to make an order declaring the land concerned to be subject to compulsory purchase. The local planning authority can then purchase such land compulsorily. The Minister can take similar action to enable a local authority to deal satisfactorily with conditions of bad layout and obsolete development in its area.

There are certain other purposes for which the Bill authorizes compulsory acquisition. Thus, land may be acquired for highways in connection with areas of extensive war damage; and

also for the public service where the Minister of Works and the Minister of Town and Country Planning consider it necessary, or for the Post Office where the Postmaster-General and the Minister of Town and Country Planning are of the same mind. These are welcome additions to the powers of the local and central planning authorities. The Bill also introduces new procedures for acquiring land for planning purposes, but although these methods are an improvement on the existing procedures, they do not give an impression of being imbued with any sense of real urgency or need for speed.

FOURTH OBSTACLE: INADEQUATE PROVISION

Fourth and last, we come to the question of grants-in-aid. The payment of compensation to landowners in respect of restrictions imposed on their land by planning schemes will be taken care of. by the Land Commission. There will remain the financial burden of acquiring land for planning purposes, open spaces, etc. Hitherto there has been no grantin-aid available for expenditure of this kind, except in the matter of highways.

The Bill introduces a limited and by no means generous system of grants to meet the cost of acquiring and clearing land in blitzed areas. There are three stages contemplated for these grants. The first and most general stage will cover the payment of loan charges for a period of two years from the date of borrowing. This period is certain to be grossly inadequate to get blitzed areas on to a selfsupporting basis. A second stage provides for payments to meet the loan charges in whole or part for a further period not exceeding eight years. They would be payable where the Minister is satisfied that the area of extensive war damage remains, and the land is in consequence incapable of being brought into use for any substantial purpose. A third and final stage provides for an extension of grant for a further five years, making fifteen years in all, but this comes into operation only where there are special circumstances preventing the rapid redevelopment of a blitzed area.

There is no provision of grants to assist local authorities to devote land acquired for planning to open spaces and similar purposes, nor to enable them to meet the loan charges on the capital cost of buildings. The whole question of financing the construction of new buildings both in areas of extensive war damage and those requiring development or redevelopment is left completely untouched. It is scarcely surprising that local authorities are viewing the Government's proposals with misgiving.

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ord condition within two weeks. F.A.S. Safe Wharf 6 Tons and over Portland 417 "Ultra rapid	Reinforcement Home trade maximum basis price for mild steel rods, §" diameter and upwards, ex mills delivered to station or siding per ton £16 19 6 Extras for : §" and §" diameter per ton 16 §" diameter per ton 16
ed condition within two weeks. 6 Tons and over 2 ortland per ton 51/- 417 " Ultra rapid hardening per ton 71/- -	Reinforcement         Home trade maximum basis price for mild steel rods,         §" diameter and upwards, ex mills delivered to         station or siding          per ton £16 19         Extras for :         §" diameter          %" and §" diameter          if" diameter
od condition within two weeks.       In 80-ton freights         6 Tons       F.A.S. Safe Wharf         and over       London Area.         Portland          417       Ultra rapid         hardening          per ton 51/-       48/6         Vater repellent          per ton 81/-	Reinforcement         Home trade maximum basis price for mild steel rods,         §" diameter and upwards, ex mills delivered to         station or siding          per ton £16 19         Extras for :         §" diameter         per ton 30         §" diameter         §" diamet
condition within two weeks.     In 80-ton freights F.A.S. Safe Wharf       6 Tons     and over       and over     In 80-ton freights       6 Tons     in River Thames,       and over     London Area.       417 "Ultra rapid     per ton 51/-       hardening     per ton 57/-       Vater repellent     per ton 81/-       etas White (1 barrel 376 lb.)	Reinforcement         Home trade maximum basis price for mild steel rods,         §" diameter and upwards, ex mills delivered to station or siding per ton £16 19 6         Extras for :       per ton £16 19 6         §" diameter per ton 10         fs" diameter per ton 10         fs" diameter per ton 10         fs" diameter per ton 30         fs" diameter per ton 44         fs" diameter per ton 44
od condition within two weeks.       In 80-ton freights         6 Tons       F.A.S. Safe Wharf         and over       London Area.         Portland       per ton 51/-         417       Ultra rapid         hardening       per ton 71/-         Aspid hardening       per ton 81/-         Vater repellent       per ton 81/-         Lase White (1 barrel 376 lb.)          Colorcrete rapid hardening, buff and red       per ton 91/-	Reinforcement         Home trade maximum basis price for mild steel rods,         §" diameter and upwards, ex mills delivered to         station or siding          per ton £16 19         Extras for :         §" diameter         §" diameter         f" diameter         §" diameter         f" diameter         station or siding         f" and §" diameter         f" diameter         station         f" diameter         f" diameter         station         f" diameter         station         station         station or siding
od condition within two weeks.       In 90-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       in River Thames,         and over       London Area.         over       per ton 51/-         417 "Ultra rapid       hardening per ton 71/-         hardening per ton 57/-       54/6         Vater repellent per ton 81/-       per ton 81/-         Las White (1 barrel 376 lb.)       per ton 91/-         Colorcrete rapid hardening, kuff and red per ton 91/-         Solorcrete rapid hardening khaki per ton 91/-	Reinforcement         Home trade maximum basis price for mild steel rods,         §" diameter and upwards, ex mills delivered to         station or siding       per ton £16 19 6         Extras for :         §" and §" diameter       per ton 10         §" diameter       per ton 10         §" diameter       per ton 20         §" diameter       per ton 30         §" diameter       per ton 30         §" diameter       per ton 60
ood condition within two weeks.       In 80-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       in River Thames,         and over       London Area.         Portland       per ton 51/-       48/6         '417 '' Ultra rapid       hardening       per ton 51/-         hardening       per ton 51/-       54/6         Water repellent       per ton 81/-       —         colorcrete rapid hardening, buff and red       per ton 91/-         colorcrete rapid hardening khaki       per ton 91/-         colorcrete rapid hardening kark       per ton 91/-	Reinforcement         Home trade maximum basis price for mild steel rods,         #" diameter and upwards, ex mills delivered to station or siding
od condition within two weeks.       In 90-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       in River Thames,         and over       London Area.         Portland       per ton 51/-       48/6         417 " Ultra rapid       per ton 57/-       54/6         hardening       per ton 57/-       54/6         Water repellent       per ton 81/-       -         tlas White (1 barrel 376 lb.)        per ton 91/-         Colorcrete rapid hardening, buff and red per ton 91/-       01/-       -         Colorcrete rapid hardening dark       per ton 17/-       -         Colorcrete rapid hardening cark       per ton 91/-       -         Colorcrete rapid hardening cark       per ton 175/- to 399/-       -         Solorcrete (paper bags free)       per ton 225/-       -	Reinforcement         Home trade maximum basis price for mild steel rods,         #" diameter and upwards, ex mills delivered to         station or siding
od condition within two weeks.       In 80-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       in River Thames,         and over       London Area.         Portland        per ton 51/-         417 '' Ultra rapid       hardening          hardening        per ton 71/-         Bapid hardening        per ton 81/-         Vater repellent        per ton 91/-         Colorcrete rapid hardening, buff and red       per ton 91/-         Solorcrete rapid hardening khaki        per ton 91/-         Solorcrete rapid hardening dark       per ton 225/-       1-9         10-9       10-19       1 ton and	Reinforcement         Home trade maximum basis price for mild steel rods, <pre>#" diameter and upwards, ex mills delivered to station or siding per ton £16 19 6</pre> Extras for : #" and #" diameter per ton £16 19 6         Extras for : #" diameter per ton £16 19 6         #" diameter per ton £20         #" diameter per ton £21/-         Bestarding liquid, in 5-gallon drums (for exposing aggregate) Ditto (for obtaining a bond)
od condition within two weeks.       In 80-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       in River Thames,         and over       London Area.         Portland        per ton 51/-         417 '' Ultra rapid       hardening          hardening        per ton 71/-         Bapid hardening        per ton 81/-         Vater repellent        per ton 91/-         Colorcrete rapid hardening, buff and red       per ton 91/-         Solorcrete rapid hardening khaki        per ton 91/-         Solorcrete rapid hardening dark       per ton 225/-       1-9         10-9       10-19       1 ton and	$\begin{array}{c c} Reinforcement\\ \hline Home trade maximum basis price for mild steel rods, $$$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$
od condition within two weeks.       In 80-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       in River Thames,         and over       London Area.         Portland       per ton 51/-       48/6         '417 '' Ultra rapid       hardening       per ton 71/-         Bapid hardening       per ton 57/-       54/6         Water repellent       per ton 81/-       —         Colorcrete rapid hardening, buff and red       per ton 91/-       6 ton upwards         Colorcrete rapid hardening dark       per ton 175/- to 399/-       per ton 225/-         Nowcrete (paper bags free)       per ton 225/-       1-9       10-19         Ciment Fondu, delivered Central       cwts.       cwts.       cwts.       cwts.	Reinforcement         Home trade maximum basis price for mild steel rods, <pre>#" diameter and upwards, ex mills delivered to station or siding per ton £16 19 6</pre> Extras for : #" and #" diameter per ton £16 19 6         Extras for : #" diameter per ton £16 19 6         #" diameter per ton £20         #" diameter per ton £21/-         Bestarding liquid, in 5-gallon drums (for exposing aggregate) Ditto (for obtaining a bond)
od condition within two weeks.       In 90-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       in River Thames,         and over       London Area.         ortland        per ton 51/-         417 " Ultra rapid        per ton 51/-         hardening        per ton 57/-         Sapid hardening        per ton 81/-         Vater repellent        per ton 81/-         Las White (1 barrel 376 lb.)        per ton 91/-         Solorcrete rapid hardening thaki        per ton 91/-         Solorcrete rapid hardening dark        per ton 101/-         Solorcrete rapid hardening dark        per ton 225/-         Solorcrete (paper bags free)        per ton 225/-         1-9       10-19       1 ton and         Siment Fondu, delivered Central       cwts.       cwts.         London area        per ewt.       15/3         Aggregate and Sands (Full Loads)       Yunscreened ballast	Reinforcement         Home trade maximum basis price for mild steel rods, #" diameter and upwards, ex mills delivered to station or siding per ton £16 19 6         Extras for : #" and #" diameter per ton 16 #" diameter per ton 16 #" diameter per ton 26 #" di
od condition within two weeks.       In 80-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       in River Thames,         and over       London Area.         Portland       per ton 51/-       48/6         *417 " Ultra rapid       hardening       per ton 71/-       -         Bapid hardening       per ton 71/-       -       -         Rapid hardening       per ton 81/-       -       -         Vater repellent       per ton 81/-       -       -         Colorcrete rapid hardening, buff and red       per ton 91/-       0 lorcrete rapid hardening khaki       per ton 91/-         Colorcrete rapid hardening khaki       per ton 71/-       -       -         Colorcrete rapid hardening khaki       per ton 91/-       -         Colorcrete rapid hardening khaki       per ton 70       -         Solorcrete non-rapid bardening       per ton 70       -         Solorcrete non-rapid hardening       per ton 71/-       -         Solorcrete rapid hardening       per ton 70       -         Solorcrete non-rapid bardening       per ton 70       -         Solorcrete non-rapid seriel       per ton 70       -         Margergate and Sands (Full Loads)       -       -	Reinforcement         Home trade maximum basis price for mild steel rods, <sup>§</sup> " diameter and upwards, ex mills delivered to station or siding per ton £16 19 6         Extras for : <sup>¶</sup> and <sup>§</sup> diameter per ton 10 <sup>¶</sup> diameter per ton 10 <sup>¶</sup> diameter per ton 20 <sup>¶</sup> diameter per ton 30 <sup>¶</sup> diameter per ton 30 <sup>¶</sup> diameter per ton 30 <sup>¶</sup> diameter per ton 40 <sup>¶</sup> diameter per ton 40 <sup>¶</sup> diameter per ton 40 <sup>¶</sup> diameter per ton 10 Lengths of 40 ft. to 45 ft per ton 10 Lengths of 45 ft. to 50 ft per ton 10 Lengths of 45 ft. to 50 ft per ton 10 Lengths of 45 ft. to 50 ft per ton 10 Lengths of 45 ft. to 50 ft per ton 10 Lengths of 45 ft. to 50 ft per ton 10 Lengths of 45 ft. to 50 ft per ton 10 BurlckLAYER Progallon 13/11 BRICKLAYER *Rough stocks per 1,000
od condition within two weeks.       In 90-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       and over         over       per ton 51/-         417 " Ultra rapid       bardening         hardening       per ton 51/-         4217 " Ultra rapid       bardening         hardening       per ton 71/-         Abardening       per ton 57/-         State repellent       per ton 81/-         Las White (1 barrel 376 lb.)          Olorcrete rapid hardening thaki       per ton 91/-         Solorcrete rapid hardening dark       per ton 91/-         Solorcrete rapid hardening dark       per ton 91/-         Solorcrete rapid hardening dark       per ton 225/-         In-9       10-19       1 ton and         Siment Fondu, delivered Central cwts.       cwts. upwards         London area        per werk. 15/3         Magregate and Sands (Full Loads)       12/8         Unscreened ballast        per yard cube         (Down) Washed, crushed and graded       ahingle       12/9         (Down) Ditto        per yard cube       12/9	Reinforcement         Home trade maximum basis price for mild steel rods,         #" diameter and upwards, ex mills delivered to station or siding
ood condition within two weeks.       In 90-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       and over         Portland       per ton 51/-         417 "Ultra rapid       bardening         hardening       per ton 71/-         Bapid hardening       per ton 71/-         Colorerete rapid hardening, buff and red       per ton 91/-         Colorerete rapid hardening khaki       per ton 10/-         Colorerete rapid hardening khaki       per ton 91/-         Colorerete rapid hardening khaki       per ton 10/-         Colorerete rapid hardening khaki       per ton 125/-         Colorerete rapid hardening khaki       per ton 125/-         Colorerete non-rapid bardening       per ton 125/-         Showcrete (paper bags free)       per ton 125/-         London area       per yer wets.         Colorerete as in per ton 12/-       per yard cube 12/-         Colorerete hallast       per yard cube 12/-         Colorerete per base 12/-       per yard cube 13/9 <td>Reinforcement         Home trade maximum basis price for mild steel rods,         #" diameter and upwards, ex mills delivered to         station or siding      </td>	Reinforcement         Home trade maximum basis price for mild steel rods,         #" diameter and upwards, ex mills delivered to         station or siding
and condition within two weeks.       In 90-ton freights         6 Tons       and over         6 Tons       and over         Portland       per ton 51/-         417 " Ultra rapid       hardening         hardening       per ton 71/-         Rapid hardening       per ton 57/-         Star repellent       per ton 81/-         Colorcrete rapid hardening, buff and red       per ton 91/-         Colorcrete rapid hardening dark       per ton 175/- to 399/-         Showcrete (paper bags free)       per ton 175/- to 399/-         Showcrete (paper bags free)       per ton 125/-         1-9       10-19       1 ton and         Ciment Fondu, delivered Central cwts.       cwts.       cwts.         Aggregate and Sands (Full Loads)       Yuscreened ballast       per yard cube 12/-         '(Down) Washed, crushed and graded       ahingle       per yard cube 13/9         'Broken brick       per yard cube 14/6       per yard cube	Reinforcement         Home trade maximum basis price for mild steel rods, #" diameter and upwards, ex mills delivered to station or siding
and condition within two weeks.       In 90-ton freights         6 Tons       and over         6 Tons       and over         Portland       per ton 51/-         417 " Ultra rapid       hardening         hardening       per ton 71/-         Rapid hardening       per ton 57/-         Star repellent       per ton 81/-         Colorcrete rapid hardening, buff and red       per ton 91/-         Colorcrete rapid hardening dark       per ton 175/- to 399/-         Showcrete (paper bags free)       per ton 175/- to 399/-         Showcrete (paper bags free)       per ton 125/-         1-9       10-19       1 ton and         Ciment Fondu, delivered Central cwts.       cwts.       cwts.         Aggregate and Sands (Full Loads)       Yuscreened ballast       per yard cube 12/-         '(Down) Washed, crushed and graded       ahingle       per yard cube 13/9         'Broken brick       per yard cube 14/6       per yard cube	Reinforcement         Home trade maximum basis price for mild steel rods,         #" diameter and upwards, ex mills delivered to station or siding
and condition within two weeks.       In 90-ton freights         6 Tons       F.A.S. Safe Wharf         6 Tons       in River Thames,         and over       London Area.         ortland       per ton 51/-       48/6         417 " Ultra rapid       hardening       per ton 57/-         hardening       per ton 57/-       54/6         Vater repellent       per ton 81/-       -         Las White (1 barrel 376 lb.)        per ton 91/-         Solorcrete rapid hardening, buff and red       per ton 91/-       6 ton upwards         Solorcrete rapid hardening dark       per ton 91/-       -         Solorcrete rapid hardening dark       per ton 91/-       10-19 1 ton and         Solorcrete non-rapid hardening curves.       cwts.       cwts.       upwards         Solorcrete non-rapid hardening dark       per ton 175/- to 399/-       1-9 10-19 1 ton and         Siment Fondu, delivered Central cwts.       cwts.       upwards       12/8         Aggregate and Sands (Full Loads)       12/9       12/9       12/9         '(Down) Washed, crushed and graded       ahingle       per yard cube 13/9       13/9         Broken brick       per yard cube 16/-       14/6       14/6         'Sharp washed sand	Reinforcement         Home trade maximum basis price for mild steel rods, #" diameter and upwards, ex mills delivered to station or siding
ed condition within two weeks.       In 90-ton freights         6 Tons       and over         6 Tons       in River Thames,         and over       London Area.         over       per ton $51/-$ 417 " Ultra rapid       hardening         hardening       per ton $57/-$ Sapid hardening       per ton $57/-$ Adaption of the second seco	Reinforcement         Home trade maximum basis price for mild steel rods, #" diameter and upwards, ex mills delivered to station or siding
and condition within two weeks.       In 90-ton freights         6 Tons       and over         and over       per ton 51/-         417 " Ultra rapid       hardening         hardening       per ton 51/-         417 " Ultra rapid       per ton 51/-         hardening       per ton 51/-         Kapid hardening       per ton 57/-         Sapid hardening       per ton 57/-         Sapid hardening       per ton 57/-         Sapid hardening       per ton 81/-         Colorcrete rapid hardening, buff and red       per ton 91/-         Colorcrete rapid hardening khaki       per ton 71/-         Colorcrete rapid hardening khaki       per ton 71/-         Colorcrete rapid hardening khaki       per ton 91/-         Colorcrete rapid hardening khaki       per ton 725/-         Saper ton 725/-       1-9         Colorcrete rapid hardening cark       per ton 225/-         Showcrete (paper bags free)       per ton 725/-         London area        per yard cube 12/-         Clowr) Washed, crushed and graded       aningle         Aggregate and Sands (Full Loads)       12/-         '(Down) Washed, crushed and graded       aningle         'Broken briok       per yard cube 12/-	Reinforcement         Home trade maximum basis price for mild steel rods, #" diameter and upwards, ex mills delivered to station or siding per ton £16 19 6         Extras for : #" and #" diameter per ton £16 19 6         #" and #" diameter per ton £16 19 6         #" diameter per ton £26 19 6         #" diameter per ton £26 19 6         #" diameter per ton £26 19 6         Lengths of 40 ft. to 45 ft per ton £26 10         It diameter per ton £26 10         #" diameter per ton £26 10         Lengths of 40 ft. to 45 ft per ton £26 10         Lengths of 40 ft. to 50 ft per ton £26 10         Lengths of 45 ft. to 50 ft per ton £26 10         Sundries         Retarding liquid, in 5-gallon drums (for exposing aggregate) per gallon \$21/- Dito (for obtaining a bond) per \$21/00 10         Sand limes per 1,000         * Hough stocks per 1,000         * Third stocks per 1,000         * Third stocks per 1,000         * Phorpres preseed Flettons per 1,000
and condition within two weeks.       In 90-ton freights         6 Tons       and over         bardening       per ton 51/-         417 " Ultra rapid       hardening         hardening       per ton 51/-         417 " Ultra rapid       per ton 57/-         hardening       per ton 57/-         Sajid hardening       per ton 51/-         Sajid hardening, buff and red       per ton 91/-         Colorcrete rapid hardening dark       per ton 91/-         Solorcrete rapid hardening dark       per ton 225/-         1-9       10-19       10 and         Suborete (paper bags free)       per cwts.       cwts.         London area       per cwt.       15/3       14/9       12/8         Aggregate and Sands (Full Loads)       12/-       (Down) Washed, crushed and graded       ahingle       13/9         Broken brick       per yard cube       13/9       Broken brick       per yard cube       14/6 <td>Reinforcement         Home trade maximum basis price for mild steel rods, f' diameter and upwards, ex mills delivered to station or siding per ton £16 19 6         ** diameter and upwards, ex mills delivered to station or siding per ton £16 19 6         ** diameter per ton £16 10 6         ** diameter per ton £16 10 6         ** diameter per ton £16 10 7         ** Ditor (for obtaining a bond) per gallon £171 10 7</td>	Reinforcement         Home trade maximum basis price for mild steel rods, f' diameter and upwards, ex mills delivered to station or siding per ton £16 19 6         ** diameter and upwards, ex mills delivered to station or siding per ton £16 19 6         ** diameter per ton £16 10 6         ** diameter per ton £16 10 6         ** diameter per ton £16 10 7         ** Ditor (for obtaining a bond) per gallon £171 10 7
cod condition within two weeks.       In 80-ton freights         6 Tons       and over         Portland       per ton 51/-         "417"       Ultra rapid         hardening       per ton 51/-         "417"       Ultra rapid         hardening       per ton 51/-         Bapid hardening       per ton 57/-         State repellent       per ton 57/-         State repellent       per ton 81/-         Colorcrete rapid hardening, buff and red       per ton 91/-         Colorcrete rapid hardening dark       per ton 715/- to 399/-         Colorcrete non-rapid hardening       per ton from 175/- to 399/-         Snowcrete (paper bags free).       per ton 71/-         1-9       10-19       10 and         Ciment Fondu, delivered Central cwts.       cwts.       cwts.         Colorcrete apid ballast       per cwt.       15/3         "Unscreened ballast       per yard cube       12/-         "Down) Ditto       per yard cube       14/6         "Dito       per yard cube       14/6         "Down) Ditto       per yard cube       14/6         "Down) Ditto       per yard cube       14/6         "Dito       per yard cube       16/-	Reinforcement         Home trade maximum basis price for mild steel rods, #" diameter and upwards, ex mills delivered to station or siding
cod condition within two weeks.       In 80-ton freights         6 Tons       and over         and over       per ton 51/-         "417" Ultra rapid       hardening         hardening       per ton 51/-         "417" Ultra rapid       per ton 51/-         hardening       per ton 51/-         "417" Ultra rapid       per ton 51/-         hardening       per ton 51/-         "417" Ultra rapid       per ton 51/-         hardening       per ton 51/-         "416" White (1 barrel 376 lb.)       per ton 91/-         Colorcrete rapid hardening khaki       per ton 91/-         Colorcrete rapid hardening dark       per ton 91/-         Colorcrete rapid hardening dark       per ton 1075/- to 399/-         Snowcrete (paper bags free).       per ton 1075/- to 399/-         Snowcrete (paper bags free).       per on 225/-         1-9       10-19       1ton and         Ciment Fondu, delivered Central cwts.       cwts.       cwts.         London area       per or       per yard cube 12/-         "Down) Washed, crushed and graded       per yard cube 13/9         "Broken brick       per yard cube 14/6         "Down) Ditto       per yard cube 14/6         "Down Ditto       per	Reinforcement         Home trade maximum basis price for mild steel rods, #" diameter and upwards, ex mills delivered to station or siding per ton £16 19 6         Extras for : #" and #" diameter per ton £16 19 6         #" and #" diameter per ton £16 19 6         Lengths of 40 ft. to 45 ft per ton £16 19 6         Lengths of 40 ft. to 45 ft per ton £16 19 6         Sundries         Retarding liquid, in 5-gallon drums (for exposing aggregate) per gallon 21/- Dito (for obtaining a bond) per gallon 13/11         Ditto (for obtaining a bond) per gallon 13/11         BRICKLAYER         * Rough stocks per 1,000         * Third stocks per 1,000         * Phorpres presed Flettons per 1,000         * Phorpres presed Flettons per 1,000 6         Blue Staffordshire wirecuts per 1,000 28         * Lingfield engineering wirecuts per 1,000 28         * Lingfield en
acd condition within two weeks.       In 90-ton freights         6 Tons       and over         and over       per ton 51/-         2011and       per ton 51/-         417 "Ultra rapid       London Area.         hardening       per ton 51/-         417 "Ultra rapid       per ton 51/-         hardening       per ton 57/-         Sapid hardening       per ton 57/-         Sapid hardening       per ton 81/-	Reinforcement         Home trade maximum basis price for mild steel rods, #" diameter and upwards, ex mills delivered to station or siding

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### BRICKLAYER-(continued)

Facing and Engineering Bricks-continued

		9	9					
Midhurst Whites						per	1,000	-
†Hard stocks, firsts						per	1,000	_
†Hard stocks, second	8					per	1,000	-
Sand-faced, hand-ma	de red	8			per 1	,000	from	185/6
Sand-faced, machine-	made	reds			per 1.	,000	from	_
Red rubbers (91-in.)						per	1,000	
<b>Uxbridge Flints</b> (whi	to)				from	per	1,000	86/-
Uxbridge Flints (	cream	, ligh	t gre	ys,	etc.)	-		
per 1,000							from	113/-
Dunbriks (concrete),	greys	or Com	mons,	ex w	orks	per	1,000	66/-
Dunbriks (concrete),								
<b>†Southwater</b> engine	ering	No. 1	(firs	t qu	ality	-		
red pressed)						per	1,000	148/-
<b>†Southwater</b> engine	ering :	No. 2	(secon	d qu	ality	*		
red pressed)						per	1,000	128/-
Blue pressed	***		* * *			per	1,000	314/6
		works				-		
1 -								

### Limes and Sand

					1-to	on lots 6-ton	lots
Lime, greystone				per	ton	61/-	
Lime, chalk				per	ton	61/-	
Lime, blue Lias (in	cluding	paper	bags)	per	ton		
Lime, hydrated (in	eluding	paper	bags)	per	ton	70/6	
Washed pit sand					per	yard cube	13/6
(For cements, se	e " Con	cretor.	")		-		

Hire of jute sacks charged at 1/6 and credited at 1/6. If left charged at 1/9.

Sundries

Wall ties, self coloured				per cwt.	
Wall ties, galvanized				per cwt.	-
D.P.C. slates, size $18'' \times 9''$				per 100	44/9
D.P.C. slates, size 14" × 9"				per 100	38/3
D.P.C. slates, size 14" × 41				per 100	11/6
Ledkore D.P.C. Grade A			per	foot super	81d.
Ledkore D.P.C. Grade B			per	r foot super	101d.
Ledkore D.P.C. Grade C			per	r foot super	1/-
t Trade discount 5 per cer	nt. and	cash	discount	5 per cent.	Prices

include delivery on minimum of £5 orders.

Airbricks : Red and buff terra	9" × 3"	$9'' \times 6''$	$9'' \times 9''$	$12'' \times 9''$	14"×9"
cotta each	1/-	2/1	4/7		12/7
Black cast iron, School Board pattern airbricks		9" × 6"	$9'' \times 9''$	1'2" × 6"	12" × 9"
per doz.	-		_	10/020	
Galvanized ditto per doz.					-
Black hit and miss cast iron ventilators					
per doz.		_	-	_	
Galvanized ditto per doz.		-	_	-	
Buff terra cotta chimney	1' 0"		2' 0" 2		
pota each	3/8	4/4	6/4 8	3/4 19/	- 32/5
Fireclay per ton	67/6				

Wall reinforcement supplied in standard rolls containing 25 yards lin.\*2" wide black japanned ... per roll 2/5<br/>\*2" wide galvanized ... per roll 3/-Greater widths pro rata<br/> $2\frac{1}{2}$ " price carriage paid<br/>on orders of £5. Discounts for quantities 24" price carriage paid on orders of £5. Dis-

Partitions, etc.

				2"	24"	3"	4"
Breeze		per	yard super	2/4	2/9	3/4	4/4
Pumice		per	yard super	4/-	5/-	6/-	7/-
Hollow	Block	per	yard super	2/9	3/-	3/7	4/1
Plaster		per	yard super	5/-	5/8	6/11	7/3
†1" Wood				per yard	super from	4/2 to	4/10
†2" Wood				per yard	super from	6/7 to	7/61
†3" Wood				per yard	super from	8/6 to	9/81
† Price	s acco	rding to	o quantity	ordered.	21º/ Cash	Discour	at.

		Gas Fl	ue Bloo	cks	Single Flues	Double Flues	
Straight blocks				each	1/4	2/5	
Backing Block			per se	et of 3	3/3	5/8	
Cover blooks				each	1/8	3/6	
Raking blocks 45°				each	3/2	4/11	
Raking blocks 60°				each	2/2	3/5	
Offset blocks				each	3/10	5/4	
Closer blocks				each	1/4	2/5	
<b>Closer</b> flashing blocks				each	1/1	. 1/10	
Straight flashing bloc				each	1/1	1/10	
Terminal and cap			F	tee set	7/3	12/3	
Middle terminal and	cap		ĩ	ber set	6/9	11/6	
End terminal and cap	р		ĩ	ber set	71-	12/-	
Corbel block				each	5/4	10/9	
Gathering block				each		3/7	

### DRAINLAYER

Agricultural Pipes 2"

3" 4"

Pipes in 12" lengths ... per 1,000 77/6 110/- 147/6 285/-(Delivered in full loads Central London Area.)

Salt Glazed Stoneware Pipes and Fittings

Salt Glazed Stone	nvare Pipes		-	- 1	Galvani
Dines (9/ longths)		4"	6"		II OIL O
Bends, ordinary	6	ach 1/6	2/6 3/9	4/6 6/9	MASC
Pipes (2' lengths) Bends, ordinary Single Junction, 2' long Yard Gulley, without grating	0	ach 3/4	3/-	9/-	
Yard Gulley, without grating	0 Osstina	ach 6/3	6/101	11/3	Build
Ordinary round or square painted	Grating,	ach -/71	1/3	2/6	Blocks Add for
Ordinary round or square	Grating.			-/0	Add Ior
galvanized Extra for Inlets, horizontal Extra for Inlets, vertical	0	ach 1/01	2/1	4/41	Templa
Extra for Inlets, norizontal	0	ach $1/0$	2/3	1/6 2/3	super
intercepting irap with	Staniord				Templa
Stopper		ach 17/6	22/6	37/6	Prices
Grease and mud interceptor a silt and grease for 6", 9" a	with bucket	ing with i	ron each	20/-	per t
grating, painted			)		
grating, painted Ditto, with iron grating galva	nized		each	21/101	6" ×
The above prices to be varie different qualities given. All	subject to	llowing per	contages	count	6" × 9" ×
		a ber com			9″ ×
		British	d Sta	ritish	12" ×
		Standar		asted	12" × Cornice
Orders for 2 tons and over		Plus 15	% Plus	40%	COLLICS
Orders for 2 tons and over Orders under 2 tons, 100 piec Orders under 2 tons, less that	es upwards	Plus 32	1% Plus	571%	SLAT
Orders under 2 tons, less that	n 100 pieces	8 Plus 42	1% Plue	012%	02.1
		Best	Secor	ds	
Orders for 2 tons and over	]	Plus 71%	Subject t	0 15%	24" ×
Orders for 2 tons and over Orders under 2 tons, 100 piece Orders under 2 tons, less than	100 pieces	Plus 35%	best qual	ity for	20" × Pric
014015 411401 2 10116, 1065 11411	100 10000 1	1018 00 /0	all sizes	109 101	1110
Cast Iron Dr.	ain Pipes an				Hand-
Socket and Spigot Pipes :					
Weight Size	9 fts.	6 fts.	4 fts.	3 fts.	Machi
(per 9 ft.)	0/9	019	each	each 11/2	Berksl
1.1.8       4" per yard         1.1.20       4" per yard         2.0.6       6" per yard         4.0.2       9" per yard	8/7	9/6	15/1	11/2	
2.0.6 6" per yard	12/9	15/2	24/5	19/6	16" co
4.0.2 9" per yard	23/1	30/3	52/6	40/-	tStan
	2 fts.	18 ins.	12 ins.		Slates
1.1.8 4" each	9/3	7/10	7/3	6/6	* 1
1.1.20 4" each	9/5	_	-	-	· 1
1.1.8 4" each 1.1.20 4" each 2.0.6 6" each 4.0.2 9" each	14/8	_	_	-	Pantil
				+	* L * P
Tonnage Allowances :					5% ta
Orders up to 2 tons Orders 2 to 4 tons h	088 21%				ŤI
Orders 4 tons or over	or less 5%				100
		4"	6"	9"	JOII
Single junctions	each	14/6	30/~	52/9 91/3	14"
Bends	each	39/7	17/1 30/- 66/-	162/3	
Gulleys ordinary trapped	each	19/2		-	111
Grease Gullev trap	each	152/6			Price
H.M.O.W. large socket	ulley trap	)			
with 9" gulley top	and heavy	92/9	61/0		1 1
grating and one back in	ter eacu	9919	01/8	-	1 4"
Channels i	n Brown Glo	azed Ware			'#'
Half round straight channels	94" long		4" 6 /3 1/10		*Prio
Half round straight channels				4/08	The
Ditto, short lengths	(	each l	/3 1/10	01 -	dis
Half round ordinary channel Ditto, short	bends		/101 2/9		Aabe
Ditto, short	6		10 2/8		8' Marb
Three-quarter round branch			5/- 7/6	_	8'
Half round tanar channels 9	4" long	each	6"×4"	9" × 6" 6/9	Ar Ar
Half round taper channels 2 Half round taper channel be	nds	each	4/81	8/51	
The above prices are subj	ect to the sa	me discou	nts as tho		
for "Best" quality salt gl	azed stones	ware pipes	•		Fi
Mar	hole Covers	, etc.			f" D. Joint
		]	Black Ga	vanized	Join
$24^{\prime\prime} \times 18^{\prime\prime}$ single seal for fo	ot traffic.	(Weight	19/3	30/-	
0.0.3 in lots of 24) 24" × 18" single seal for	light car	traffic.	1919	30/-	Slate
(Weight 2 cwts. in lots	of 24)	. each	49/7	88/2	Root
24" × 18" Wood Block p traffic. (Weight 3 cwt	attern. F	or road	Coated	70/2	Bitu
aranne. ( av argine 3 GwG	• • • • • • •	. Onicit	CORIO	1 1010	

### DRAD

6"

Cast iro Galvani

### DRAINLAYER-(continued)

5/-

/6 /9 /-/3

/6

/41 /6 /3

/6

1-

10j the int.

shurd

d %

5% of for

fts. ach 1/2 1/6 19/6 10/-

ins. 6/6

9" 2/9 1/3 2/3

----

9" 3/41 4/21

5/01

0/11 < 6" 6/9 8/51 riven

30/-88/2

Manhole Covers, etc.—(continued)	
Fine Cast         Galve           Cast iron steps, $13\frac{1}{4}$ " long, $6$ " wide, $9$ " in wall, approximate weight $5\frac{1}{4}$ lb. each per dozen $17/4$ 28/ Galvanized fresh air inlets with cast brass $4$ "         6"	11
Galvanized fresh air inlets with cast brass 4" 6" fronts (L.C.C. pattern) each 7/7 31	
MASON Yorkstone	
Building quality Robin Hood and Woodkirk Blue Stone. Blocks scrappled, random sizes per foot cube Add for blocks to dimension sizes per foot cube dimension	3/1 ch
Templates with sawn beds, edges rough (up to 4 ft.	
Templates with sawn beds, sawn one edge, per foot cube 8/1 Templates with sawn beds, sawn two edges, per foot cube 9/5 Prices f.o.r. Yorkshive, railway rate to London Station	4
per ton. (Minimum 4-ton loads.) 29/1	
Artificial Stone $6'' \times 3''$ Copings and sills per foot run 2/1	Ł
6" $\times$ 3" Copings and sills per foot run 2/1 6" $\times$ 6" Copings and sills per foot run 3/2 9" $\times$ 3" Copings and sills per foot run 3/2 9" $\times$ 3" Copings and sills per foot run 4/4 12" $\times$ 3" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 12" $\times$ 6" Copings and sills per foot run 3/3 13" $\times$ 6" Copings and sills per foot run 3/3 14" $\times$ 6" Copings and sills per foot run 3/3 15" $\times$ 6" Copings and sills per foot run 3/3 15" $\times$ 6" Copings and sills per foot run 3/3 15" $\times$ 6" Copings and sills per foot run 3/3 15" $\times$ 6" Copings and sills per foot run 3/3 15" $\times$ 6" Copings and sills per foot run 3/3 15" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6" Copings and sills per foot run 3/3 16" $\times$ 6	1
$9^{\prime\prime} \times 6^{\prime\prime}$ Copings and sills per foot run $4/6$	3
$12'' \times 3''$ Copings and sills $\mu$ per foot run $3/3$	\$
Cornices according to detail, per foot cube (from) 9/3	3
SLATER, TILER AND ROOFER	
Best Bangor Slates £ s.	
24" × 12" per 1,000 actual — 20" × 10" per 1,000 actual —	
Prices include for delivery to site in lots of 1,000 and upwards	s.,
$\frac{Tiles}{\text{Hand-made sandfaced 10}_{1}^{\prime\prime} \times 6\frac{1}{2}^{\prime\prime} \text{ red roofing tiles}} \qquad $	d.
per 1,000 -	
Machine-made sandfaced $10\frac{1}{4}$ " × $6\frac{1}{4}$ " red roofing tiles per 1,000 —	
Berkshire rustic pantiles per 1,000 -	
Asbestos-cement 16" corrugated sheets, grey per yard super 3/01 18tandard 3" corrugated sheets, grey per yard super 2/91	
Slates (Manufacture temporarily suspended):	9 6 6
JOINER	
Asbestos-cement and Asbestos Products	
*#" Semi-compressed flat building sheets, grey per yard super 1	/31
†#" Ditto        per yard super 1         †#" Ditto        per yard super 1         †#" Ditto        per yard super 1         *Prices are for orders of two tons and over and are subject to 1       advance and 5% trade discount.	/4/11
<sup>1</sup> Asbestos wallboard (in sheets 8' 0" × 4' 0"), per foot super -	/4
#" Ditto per foot super -	/31 /21
The following asbestos prices are subject to 10 per cent. to discount :	rade
Asbestos-coment stipple glazed sheets (in sheets $8' 0'' \times 4' 0''$ and $4' 0'' \times 4' 0''$ ) per yard super 8	1-
Asbestos Insulating Board per foot super	-/-
	Over 600
vards vards v	ards
* Fireproof plaster board per yard super 2/8 2/4 2 * Ditto per yard super 2/8 2/2 1	2/0 <del>]</del> /10]
Joint tape (approx. 250 feet run) per roll 1	/6
voint inter per 10	-/4
Slaters or sarking felt per yard run -	/9
Sooting felt (l-nly bitumen) ner yard sup l	1-
Bituminous hair folt	-1-

### THE ARCHITECTS' JOURNAL for July 13, 1944 [31

### JOINER—(continued)

### Sundries—(continued)

<b>Building</b> pape							ard run	
" Cabots " Qu	(K. 40)					per y	ard run	-/51
							ered carr.	free.
Double ply		per roll	-			per ha	alf-roll	
All rolls 28 y	ards long k	y 36" w	ide. 8	Spec	ial t	erms fo	or quantit	ies.
Cut steel class	o nails	l" per	cwt.	40/	3	4″ p	er owt.	31/3
	floor brad	s 2"		30/	9	3″		29/6
Bright oval w	ire nails	3.00	**	43/	4	4"	**	31/3
Galvanized v	vire staple	s with	slice					
cut points				1" >	( 12	gauge	per cwt.	52/-
Scotch glue							per ewt.	

### STEEL AND IRONWORKER

Steelwork	£	8.	d.	
Basis price for rolled steel joists sections $5'' \times 3''$ to $16'' \times 6''$ , in 10 ft. to 50 ft. lengths ex mil per to		10	6	

### PLASTERER

A BALEND & BREEDEN						
		Plaste	r and Ceme	nt		
				1-ton		
				loads		
Sirapite (coarse)			per ton	91/6		
" (fine)			per ton	99/6		
Victorite No. 1			per ton			
No. 2 of	r non	-sweat	per ton	96/6		
Thistle (browning	z)		per ton	91/6		
Thistle (haired)			per ton	-		
Pink plaster			per ton	91/6		
White plaster			per ton	94/6		
Keene's pink			per ton	138/-		
Gypstone			per ton	70/6)		
Glastone			per ton	73/- }	ex Works,	
Paristone (haired	(		per ton	70/6	Kent	
Snowcrete (Tyro			1 ton lot			
				wards	per ton	149/-

### Sundries

Sharp washed	d sand	l						per yard	cube	14/6
Cow hair								per	owt.	64/-
Goat's hair								per	cwt.	93/-
Expanded n	netal	lathing.	9'	0"	X	2'	0"			
¶" mesh ×								per	sheet	2/9
Wire Slate na	ails (g	alvanized	1) 13	Y X	15	ga	uge	per	cwt.	62/5
<b>83</b> 99	" (b	right wir	e)					per	ewt.	-
17 Diretor h	heard	(plaster	has	(0)		5-1		150-300		ver
" Plaster b		er yard			- 3	2/3		yards 1/111		yards /91
1‡" Galvaniz Serim cloth	ed nai	ils pe	r cv	vt.		58/3				
Gornin Ciotai	-		er I			3/1	10			

### Wall Tiles

The following prices are subject to 75 per cent. addition :

Commercial quality.					
Ivory, white, etc., glazed	6" ×	6" ×	ł"	per yard super	10/1
Angle beads (11 wide)				per yard run	1/21
··· ·· (1" ··· )				per yard run	-/10
Rounded edge tiles				per yard run	2/61
Coloured enamelled brig	ht gla	zed,			
6" × 6" × 1"				per yard super	14/3
Angle beads (11" wide)				per yard run	1/47
				per yard run	-/111
Rounded edge tiles				per yard run	2/7
Eggshell gloss enamelled,	6" ×	6" ×	ł"	per yard super	15/-
Angle beads (11" wide)				per yard run	1/71
······································				per yard run	1/02
Rounded edge tiles				per yard run	2/81
Special rates for quantiti	88				

### PLUMBER

31 lb. and upwards milled sheet lead in quantities of 5 cwts. and upwards	per owt.	40/-
Add if cut to sizes Lead ternary alloy, No. 2 quality extra over	per ewt.	3/-
abeet lead	per owt. per owt.	14/- 18/-

.

Lead

### 32] THE ARCHITECTS' JOURNAL for July 13, 1944

### PLUMBER-(continued)

Cast Iron Goods

	0	
	Percentage Adjustment on List No. 3100 A.B. 1/2/40	
Rainwater Goods (painted or unpainted)	Plus 171%	
Soil goods (coated or uncoated)	Plus 171%	

### Mild Steel Rainwater Goods

The following prices are subject to 21 per cent. trade discount and 40 per cent. advance.

24 gauge rainwater slip jointed pij	<b>Des.</b>				
	2"	21"	3"	31"	4"
Galvanized round pipes with ears per 6'0"	2/71	3/11	3/9	4/3	4/9
Painted round pipes with ears per 6' 0"	2/41	2/9	3/11	3/71	4/
Painted or galvanized short lengths with ears, extra each	-/6	~/6	-/6	-/6	-/6
18 Gauge gutters. 3"	31	4"	41"	5″	6"
Galvanized half round gutters per 6' 0" 2/-	2/3	2/41	2/9	3/-	3/71
Painted half round gut- ters per 6' 0" 1/6	1/9	2/-	2/3	2/6	3/-
Painted or galvanized short lengths extra					
each $-/3$	-/3	-/3	-/3	-/3	-/8

### Asbestos-Cement Rainwater Goods

The following prices are subject to 15 per cent. advance and  $12\frac{1}{2}$  ' per cent. trade discount.

Orders over £30 are subject to  $17\frac{1}{2}$  per cent. trade discount. Rainwater place.

Prices are for 6' 0" lengths, and 10' 0" lengths in 2",  $2\frac{1}{2}$ " and 3" diameters. Short lengths up to 2' 0" are charged as one yard. From 2' 0" to 4' 0" charged as  $1\frac{1}{2}$  yards. From 4' 0" to 6' 0" charged as 2 yards. Over 6' 0" charged as 10' 0".

### Round pipes.

2"	 	 		per yard run 1/10	
$\frac{21}{3}$	 	 		per yard run 2/0	
	 	 		per yard run 2/5	
31"	 	 		per yard run 2/11	Ł.
	 	 		per yard run 3/41	
41"	 	 	***	$\dots$ per yard run $4/10$	Ł
	 	 		per yard run 5/91	
6"	 	 ***	***	per yard run 7/1	

### Gutters.

Short lengths of gutter up to 2' 0" charged as 1 yard; from 2' 0" to 4' 0" as  $1\frac{1}{2}$  yards, and over 4' 0" as 2 yards. Half round gutters  $3^{"}$  4"  $4\frac{1}{2}$ " 5" 6" 8" per yard run  $1/3\frac{3}{4}$   $1/6\frac{3}{4}$   $1/7\frac{3}{4}$  1/11 2/8  $3/3\frac{1}{4}$ Ogee gutters per yard run -1/11  $2/0\frac{3}{4}$   $2/5\frac{3}{4}$   $3/0\frac{1}{4}$   $3/1\frac{1}{4}$ 

Ogee gutters	per yaru run —	1/11	2/02	2/08

### **INTERNAL PLUMBER**

Lead pipe in coi	ls, 5 owts.	and up	wards		per cwt.		40/3
Lead soil pipe .					per ewt.		44/3
Add if ribbon m	arked				per ewt.		-/6
Lead ternary al	loy, No. 2	2 qualit	y extra	over	lead pipe		
					per cwt.		14/-
Plumber's solde	r				per cwt.		155/-
Tinman's solder					per cwt.		210/-
Drawn lead tray	ps with br	ass scre	w eye, (	6 lb.			
				1"	11"	11"	2"
S. trap			each	2/9	3/2	3/11	5/8
P. trap			each	2/5	2/7	3/3	4/7
Extra for 3" de	ep seal		each	-/8	-/8	-/8	-/8

Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.

Tubes.								
Tubes 2 ft.	long and	over	1"	3"	1"	11"	11"	2"
	1	per ft	-/51	-/61	-/91	1/1	1/41	1/10
Pieces 12"	to 231" 1	ong						
	-	each 1	1/1	1/5	1/11	2/8	3/4	4/9
Bends		each -	-/11	1/2	1/71	2/71	3/2	5/2
Fittings.								
Elbows, squ	1are	each 1	1/1	1/3	1/6	2/2	2/7	4/3
Elbows, rou	ind	each 1	1/2	1/5	1/8	2/4	2/10	4/8
Теев		each 1	1/3	1/7	1/10	2/6	3/1	5/1
Crosses		each !	2/9	3/3	4/1	5/6	6/7	10/6
Sockets, pla	ain	each -	-/4	-/5	-/6	-/8	-/101	1/3
Sockets, di	minished	each -	-/6	-/7	-/9	1/-	1/4	2/-
Flanges		each	1/-	1/2	1/4	1/9	2/-	2/9
Сарв		each .	-/5	-/6	-/8	1/-	1/3	2/-
Plugs		each .	-/4	-/5	-/6	-/8	-/10	1/3

### **INTERNAL PLUMBER**—(continued)

Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc. (continued)

Fittings and flanges and tubes ordered in long random lengths are subject to the following trade discounts :--

	Tubes	Fittings	Flanges
" Light Weight "	 511%	471%	
" Heavy Weight "	 44%	394%	28% 151%
and a second sec	/0	004 /0	4 /0

### COPPERSMITH AND ZINC WORKER

### Copper

Hot rolled copper sheeting in 1 cwt. lots,	all		
gauges to 24 wire gauge		per lb.	1/11
Light gauge copper tube, solid drawn		per lb.	1/31
Copper tube, solid drawn screwing sizes		per lb.	1/21
Copper wire, 10 and 12 gauge		per lb.	1/2
Copper nails, 1" and up		per lb.	_

### GLAZIER

Sheet Glass cut to size (ordinary glazing quality)

18 oz. clear sh					p	er	foot	super	3 d.
24 oz. ditto on	""R" qu	ality				99	9.9	9.9	5d.
26 oz. ditto								99	6 d
32 oz. ditto						99	9.9		8jd
1" figured roll	ed and ca	athedral	glass	(white)			39	99	6 d
1" ditto, appr	oved tint								914

### British Polished Plate Glass cut to size

Ordinary # Substance Glazing

In Plates not	exceeding	for Glazing Purposes	Selected Glazing Quality	Silvering Quality
2 ft. super	per foot super	2/2	2/4	2/10
3 ,,	per foot super	2/9	3/-	3/9
5 ,,	per foot super	3/-	3/6	4/3
*45 ,,	per foot super	3/6	4/-	5/5
*100 ,,	per foot super	4/6	5/7	7/2
*Plates exce	eding 100 ft. super	or 160 in.	long or 100	in. wide

at higher prices. Special quotations should be obtained for other qualities and thicker substances.

### Wired Glass Cut to Sizes

1" Wired cast			per	ft.	super	91d.
ti" Georgian wired cast			per	ft.	super	10d.
‡# Polished Georgian wired glass			per	ft.	super	3/2
<sup>‡</sup> For cutting to allow for wires	in	adjacent	pie	008	to be	" lined
up," add 4d. per foot super.						

Supplied in sizes up to 110 in. long and up to 36 in. wide.

### PAINTER

Snowcem paint				per cwt.	56/-
White ceiling distemper				per cwt.	22/-
Washable distemper					
Ready mixed white lead					
lots, 14 lb. tins				per cwt.	96/6
Aluminium paint				per gallon	-
White enamel				per gallon	-
White enamel paint					27/-
Stiff white lead (genui	ne Eng	lish a	stack		
process, 1 ton lots, 1 c				per cwt.	74/6
Liquid driers				per gallon	23/-
Linseed oil raw (5 gallon o					6/11
" " boiled (5-gallo		)		per gallon	7/2
French polish				per gallon	15/6
Knotting			·	per gallon	24/-
Oil stain (scumble)				per lb.	31-
,, ,, red oxide				per cwt.	72/-
., ., middle Brunswic		· · · ·		per cwt.	95/-
" " dark umber …				per cwt.	105/-
", ", golden ochre				per cwt.	82/-
Varnish (outside quality)					221-
++ ++ ++ ++ ++ ++ ++ ++ ++ ++ ++ ++ ++					24-
99 99 99 99 99 99 99 70 11 99 99	flatting			A 0 33	261-
Turpentine, genuine Ame	rican 5	gallon		A U	-
				11	4-
Creosote, 1 gallon lots				man mallam	1/9
Putty				per cwt.	23/6
Utility Glazing Putty				per ewt.	21/3
Size				man 1 amet	30/-
Best quality English gold				man haal	3/6
Extra thick, ditto				per book	4/2
TABLE OTION' (1000				her poor	-1-

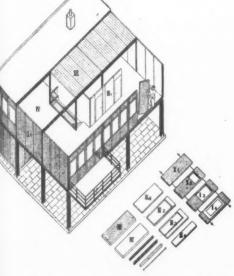
Top, balco



# SWEDISH STEEL AND TIMBER PREFABRICATED HOUSE Designed by Eric Friberger

GENERAL-A modern development of the centuries-old traditional Swedish timber house, it lies on the slope of a hill overlooking Gothenburg to the south-east. It is based on a system of a limited number of mass-produced standardized parts capable of a great variety of combinations, a few examples of which are shown on page 26. As with most unit systems, an advantage is that new elements can be added to an existing house of the same construction as and when new rooms are required. In this example the covered space on the ground floor will eventually be transformed into rooms. Other advantages are demountability and speed of erection with unskilled labour.

**CONSTRUCTION** — Steel frame and standard timber panels. The external ground floor walls are nonweight-bearing but those on the first floor take the weight of the roof panels. Units are bolted together for rigidity, the standard bay being 10 ft. by 10 ft. A structural advantage of the system is that the timber has space to move. In types as small as 10 ft. by 10 ft. walls and roof are not reinforced with steel sections. One storey buildings with steelwork are similar to the first floor of the Gothenburg example and have a steel angle at each corner, all steelwork being enclosed. The fall of the roof is obtained by building the whole house on a 1:100 slope. Ground floor walls



anges 28%

1/1: 1/3: 1/2: 1/2:

> 3id. 5d. 6id. 8id. 6id. 9id.

vering uality 2/10 3/9 4/3 5/5 7/2 . wide

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> Top, south-east elevation with its cantilevered balcony. Above, axonometric showing standard units.

34] THE ARCHITECTS' JOURNAL for July 13, 1944

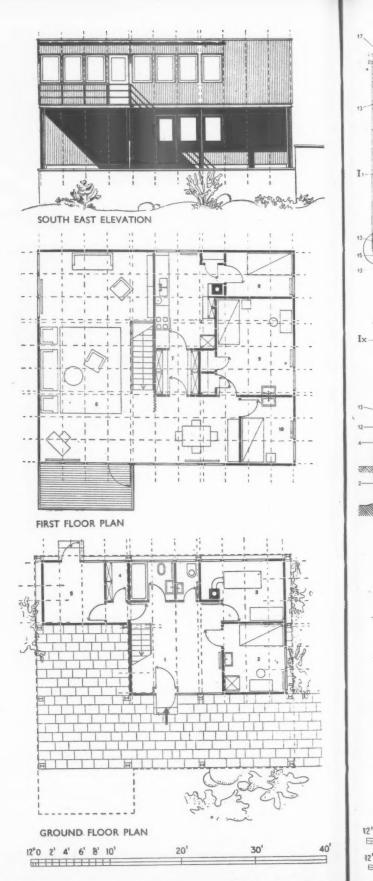






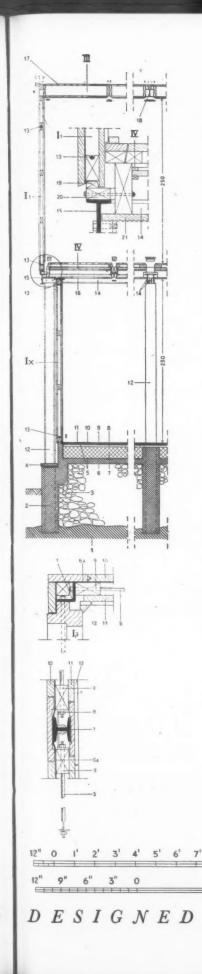
Above, three progress photographs of the construction. Right, south-east elevation and ground and first-floor plans. (1, entrance hall; 2, guest room; 3, heating chamber; 4, food store; 5, store; 6, living-room; 7, service pantry; 8, maid's room; 9, owner's bedroom; 10, guest room.)





D

SWEDISH PREFABRICATED HOUSE



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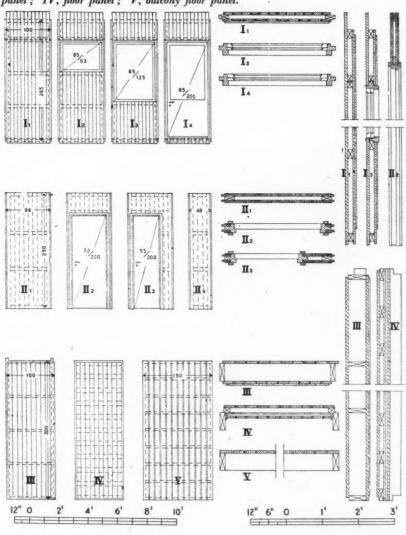
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Left, section through the external wall with sectional detail (1, rock; 2, reinforced concrete foundation walls; 3, stone hardcore; 4,  $2\frac{1}{2}$  in. limestone slabs set in cement mortar; 5, asphalte D.P.C.; 6, 3 in. reinforced concrete; 7, 7 in. slag concrete; 8, cement screed; 9, soft building board; 10, hard building board; 11, linoleum; 12, 6 in. by 6 in. R.S.S.; 13,  $\frac{1}{2}$  in. steel rods clamping wall panels; 14, two  $5\frac{1}{2}$  in. by  $2\frac{3}{4}$  in. internal R.S.J.'s; 15, 6 in. by 3 in. external R.S.J.; 16, T and G wood ceiling; 17, patent roofing felt; 18, 5 in. by 5 in. roof R.S.J.; 19, normal wood fixing fillet; 20, special wood plate screwed to R.S.J.; 21, special wood soffit.) Left below, details in plan through first floor of Gothenburg house, which is the same as for other one-storey types. (5,  $\frac{1}{2}$  in. steel rods clamping wall panels; 6a, building paper; 7, steel stanchions; 8, angles riveted to vertical steel; 9, frame of wall panel; 10, outer T and G wood scheathing of panel; 11, inner T and G wood sheathing; 12, porous Masonite wall-board.) Below, the standard units, elevations and sections; I, external wall panels; II, internal partition panels; III, roof panel; IV, floor panel; V, balcony floor panel.



are slightly recessed and leave the steel frame visible. Substratum is granite, foundations being concrete. In this case the ground floor is solid concrete but normally it would be of the standard wood sections laid between sleeper walls. Floors : heating chamber and store, cement screed; entrance hall and guest room, linoleum on

E R I C

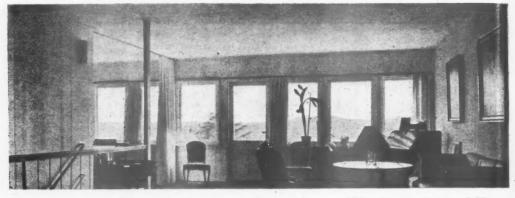
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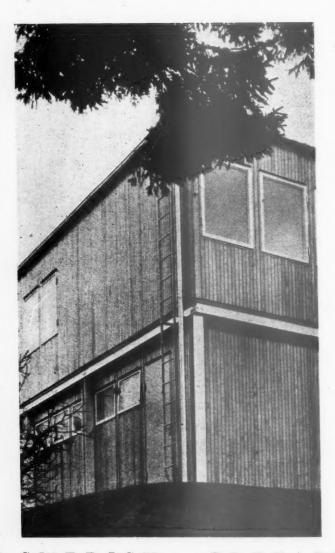
asphalted fibre board; bathroom, tiles set in asphalt on a subfloor of cork with concrete beneath; first floor throughout, normal surfaces of the standard timber floor units. Wall finish, internal: porous Masonite on external walls and ceilings, hard Masonite on partitions; heating chamber, lined throughout with asbestos sheeting.

18

FRIBERGER



Below left, west corner. Below right, Above, living-room. south-east elevation after planting has developed, and the covered space on the ground floor.



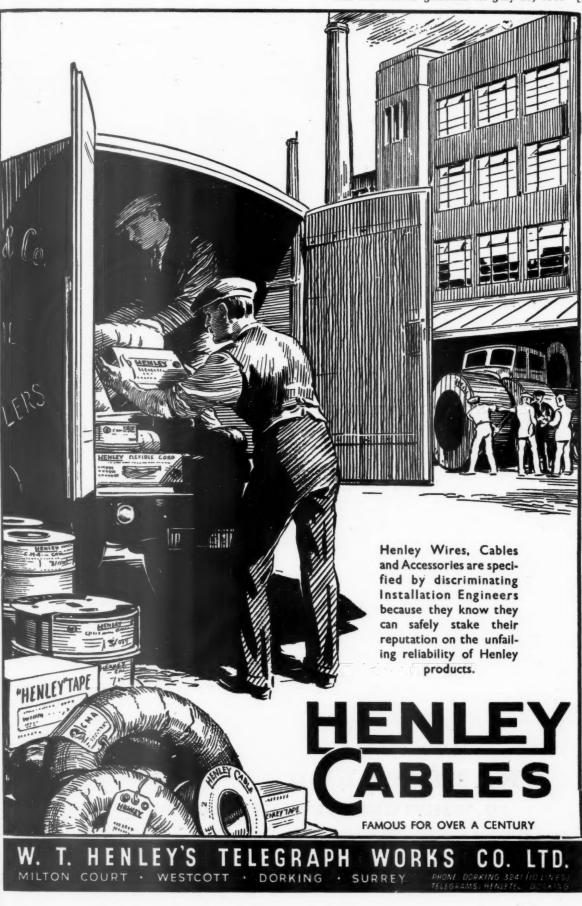
All interior joinery painted, Masonite surfaces being treated with a wax base paint. Wall finish, external : boarding of panels, one coat of Cuprinol as used for ships diluted by 50 per cent. turpentine and final coat of pure varnish, thus preserving the natural colour of the wood; steel frame, painted aluminium; external joinery and concrete walls, painted light neutral colours. Roof finish : two layers of bituminized felt.

STANDARD UNITS-The normal external wall type, I, is of tongued and grooved boarding both sides on framing, with an inside finish of porous Masonite, size 8 ft. 8 in. by 3 ft. 4 in. Internal partition type, II, is similar but has thin close boarding faced both sides with hard Masonite, size 8 ft. 2 in. by 3 ft. 0 in., except for II<sub>4</sub> which is 1 ft. 6 in. wide. Roof type, III, is of similar but heavier construction, the ceiling side being faced with porous Masonite. Floor type, IV, has two thicknesses of boarding and a sheet of insulating fibre board. Balcony type, V, has battens openly spaced on a timber frame. Standard cover strips finish the joints between panels.



SWEDISH PREFABRICATED

HOUSE



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# 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.

STRUCTURE

1527

**Building** in USA

METHODS OF BUILDING IN THE USA. The Report of a Mission appointed by the Minister of Works. (HMSO, 1944, 4d. Extract in A.J., Feb. 10, 1944, pp. 121-3). Design of Buildings. Building Procedure. Construction and Costs. Factory Produced Building. Summary of Recommendations.

The purpose of the Mission was to survey American practice in the design and confunction of buildings, in equipment and finishing, and in the use of materials, with a view to securing in Great Britain in the postwar period :

(a) Increased speed and output.
 (b) Reduced building cost.

(c) Improved standards of equipment and finish.

(d) Improved conditions for operatives.

The mission visited a great number of American cities in the Eastern states, the Middle West and the Pacific Coast areas, and is preparing detailed appendices to the Report. These will be published later. The present Report is a brief survey of American building practice. particularly on questions of organisation and control, standardisation, research and in-formation services, costs, finance, the use of old and new materials, factory production, temporary housing.

In American design great attention is paid to simplification of workmanship and to the maximum of mechanisation in constructional work. Great use is made of factory produced parts with a tendency to job standardisation and restriction of wet processes. There is a general desire to dispense with surface finishes. The manufacturing industries are experimenting with composite materials each combining the function of two or more existing materials. The consumption of electricity, gas and water is much higher than in this country : the consumption of water per head of population is more than double the British rate. Spacious-ness and economy of planning of large buildings is made possible by extensive use of artificial lighting and mechanical ventilation. In schools, offices, shops, etc., ceilings are treated with sound absorbent materials. Central heating systems are installed in practically all buildings. The trend is towards

district heating, using a central plant to supply heat and hot water to communities which may number anything up to 40,000 persons. A considerable volume of scientific research is regularly undertaken by a large variety of interests. An important branch of research

is that which deals with statistics. The know-ledge gained by research workers is efficiently disseminated through trade publications and the daily press, broadcasting, exhibitions, technical and scientific meetings held in great numbers throughout the USA.

A building is fully designed before it is put to tender. Before the architect starts to prepare his plans, the building owner is expected to supply him with the fullest instructions which are seldom altered once the work has begun.

1 G

The contractors are supplied with complete working drawings and specifications before tendering and are able to plan their operations well in advance of work on the site. Difficulties are anticipated so that there is a minimum of variations. The contractor is obliged to take off his own quantities and since remeasurement is eliminated, it is practically impossible for an unscrupulous contractor to recoup himself on the adjustment of accounts in the event of his having submitted an uneconomic tender. The American method of taking off quantities is simpler than the British standard method.

The Report compares the cost of a building in USA and in this country, and analyses the cost of labour and materials. The building operative's interest in his work is ensured in USA so that good output is secured. On large buildings the best craftsman in each trade is selected by a committee of award specially appointed for each building. In-dividual awards are also made to recommended craftsmen irrespective of the buildings on which they are employed. The co-operation among all concerned with a

job is closer in USA than in this country. The general contractor sees that all conform to a master time and progress schedule. Since construction is more rapid, less money is absorbed by interest charges on construction finance.

The development and use of lightweight aggregates has gone further in USA than it has in this country. A process known as Vacuum Concrete is sometimes used for maturing concrete floors and slabs. The excess water is removed from the concrete by suction and the final strength of the concrete may be as much as 30 per cent. greater than that of similar concrete not treated by this method. Its resistance to frost is increased. The cement gun process has been used extensively for repairing buildings damaged by earthquake. Various agents for soil stabilisa-tion are successfully used. The thermal insulation of windows is increased by the use of davide after thermal model. of double glass. There is a rapidly extending use of plywoods bonded with new synthetic

resins and glues. The preparation of good quality concrete surfaces is well understood. Factory production of complicated units such as plumbing, kitchen and heating assemblies is regarded as more promising than the production of entire houses. It is claimed however that under conditions of claimed, however, that under conditions of full production factory produced houses should cost less than those constructed by customary Architectural design and amenity methods. need not suffer from the factory production of houses, provided there is a sufficient variety of types suitable for use in attractive combinations, and great attention is paid to the quality of design.

The Report ends with a summary of recommendations.

### **Fire Precaution Code** 1528

INTERIM CODE OF FUNCTIONAL RE-QUIREMENTS. (CLASSIFICATION CODE). CHAPTER IV, PRECAUTIONS AGAINST FIRE (for Dwellings and Non-residential Schools of not more than two storeys

in either case). Codes of Practice Committee of the Ministry of Works. (British Standards Institution, 2s.). Draft for comment, subject to revision. General requirements : safety of occupants, restriction of external spread. Recommended standards for surface finishes, walls, structural framework, floors, roof coverings, chimneys, flues and hearths. Method of testing the flame-propagating properties of the surfaces of materials. Classification of the surfaces of materials in terms of flame-propagating properties.

The degree of fire resistance is considered from the point of view of personal hazard and exposure hazard. (See Inf. Centre No. 1516.) Structural hazard is left to the option of the

building owner. The safety of the occupants is determined by (a) the ease with which materials ignite and the rate at which fire develops, and (b) the period during which the main structural elements resist the effect of fire. In order to attain the desired standard of safety in regard to (a), it is necessary that none of the materials used in construction and exposed to accidental ignition should readily ignite or propagate flame. The details of a suitable test, which is not yet a British Standard, are set out. The materials are graded in four classes and a list of the materials, whose surfaces fall within each class, is given. Regarding (b), it is considered that at least half an hour should be allowed for occupants to escape and the structural elements should therefore resist the fire in the house at least half an hour from the time of the outbreak. It is suggested that the development of a fire in a house after burning for half an hour is roughly equivalent to a quarter of an hour of the standard test according to B.S.476, and that if the elements of the structure are such as to resist the standard test conditions for a quarter of an hour, they may be expected to permit the occupants to escape before the structure is in danger of collapse. (The possibility of the adaptation of the fire test set out in B.S.476, to provide for this condition, is under consideration ; at present the lowest grade of fire resistance specified is half an hour of the standard test).

Safety against spread of fire into a house may also be provided by the above requirements, but also by spacing of houses and by fire fighting. On the assumption that the ratio of window to wall area will remain substantially as hitherto, no special requirements for the fire resistance of windows are included. In the subsequent clauses standards for various

parts of buildings are set out (surface finishes,

walls, floors, etc.). A solid 9 in. brick wall or 11 in. cavity brick wall affords a degree of fire resistance in excess of what is actually required. On the other hand, the usual timber floor of 7 in. by 2 in. joists with nominal 1 in. plain boarding and a wooden lath and plaster ceiling, does not resist even half an hour of the B.S.476 test (see Inf. Centre No. 1516). This type of floor is accepted as the minimum standard in houses of not more than two storeys, but for floors separating occupancies a fire resistance of not less than half an hour is suggested.

## LIGHTING

1529

### Sunlight Code

INTERIM CODE OF FUNCTIONAL RE-QUIREMENTS FOR DWELLINGS AND SCHOOLS (CLASSIFICATION CODE). CHAP-TER I (b), SUNLIGHT. Codes of Practice Committee of the Ministry of Works. (British Standards Institution, 6d.) Draft for comment, subject to revision. Winter sunlight. Methods of analysis. This short Code outlines the factors requiring consideration if winter sunlight is to enter into rooms and recommends that not less than one hour of sunshine should be able to enter the principal living room in dwellings and classrooms in schools towards the end of the mid-winter sun day. A recommendation is also made that where possible kitchens should receive one hour of sunlight at the beginning of the day, and that sunlighting of the ground around buildings should also be considered.

Part II of the Code refers to methods of analysis which are recommended. These are the Burnett diagrams and the Heliodon. This Code directly affects planning and will, therefore, be of considerable importance to architects, who should take the opportunity now offered to comment on this draft.

## ACOUSTICS

1530

and Sound Insulation

Noise Code

INTERIM CODE FUNCTIONAL OF **REQUIREMENTS FOR DWELLINGS AND** SCHOOLS (CLASSIFICATION CODE). CHAPTER III, PRECAUTION AGAINST NOISE. Codes of Practice Committee of the Ministry of Works. (British Standards Institution, 2s.) Draft for comment, subject to revision. Desirable standards and methods of obtaining them.

Part I deals with Desirable Standards of Sound Insulation. This commences with certain definitions wherein it is stated that decibel can be equated. (This is a most welcome simplification.) Two tables are given : one shows maximum permissible values of the intrusion of outdoor noises and the other gives recommended standards of sound insulation between rooms. Part II outlines methods of obtaining the

standards set out in Part I, dealing in turn with assessment of outside noise, siting and lay-out of buildings and treatment of windows lay-out of buildings and treatment of windows from the point of view of excluding external noise. Then internal noise is dealt with in terms of: noises to be guarded against, resistance of structures to air-borne and impact sounds, continuous construction, dis-continuous construction, sound insulation values, impact sound, equipment noises. This part contains a number of valuable tables. Considerable emphasis is given to the importance of good initial planning to the importance of good initial planning to should be a valuable asset to all architects, and although stated to be for dwellings and schools, the principles outlined will hold good for other types of building.

# HEATING

and Ventilation

1531

## Ventilation Code

INTERIM CODE OF FUNCTIONAL RF-QUIREMENTS FOR DWELLINGS (CLASSI-FICATION CODE). CHAPTER I (c), VENTILATION. Codes of Practice Committee of the Ministry of Works. (British Standards Institution, 6d.) Draft for comment, subject to revision. Recommendations for controllable openings. Minimum air-changes, flues and shafts.

This Code is in three parts : Part I. Recommendations for controllable windows or other openings and access of air to them to ensure adequate air-change in dwellings at times when the demand is for relatively large volumes of air for cooling the

occupants. The suggestion in this part of the Code appears to follow present bye-law practice although it is a little curious that in two paragraphs at the end the ventilation of larders is required to be by openings to the external air or by mechanical means, whereas ventilation to bathrooms and water-closets by mechanical means is not mentioned.

Part II. Recommendations for the minimum rate of air-change during cold weather when windows are normally kept closed. A table of recommended rates of air-change is given. Part III. Methods whereby the recommendations set out in Part II can be obtained. Certain minimum standards of flues and ventilating shafts are recommended, together with suitably disposed inlets, but it is pointed out that alternative methods could often be devised which would give equal or better performance.

### **Reference Back**

DOMESTIC RING MAIN. E. Jacobi. (Reference back to No. 1488, May 18, 1044) 1944.) Need for local fusing was referred to. Statement that this would involve use of two sizes of plug should have read "two sizes of fuse," since one of advantages of ring main system is use of one standard size of plug and socket throughout the house for all purposes.

## 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.

### 1533

1532

Q How can one obtain posters and photographs from the various Ministries concerning Army and Air Force activities for exhibition purposes ?

A We understand that if you write to Mr. G. E. Paterson, Ministry of Information, Room S.O.S., 013, Malet Street, London, W.C.1, he will be able to help you.

### 1534

We are proposing to manufacture pre-fabricated wall units for housing, consisting of a thin steel plate, wallboard and wadding covered with Rexine, the idea being that the constructional unit and final finish can be erected at one and the same time. We are, however, disturbed at the possibility of bug infestation either through the pests finding their way into the crevices at the joints or into the body of the unit if the surface is damaged or torn. Can you tell us whether there is any substance which can be incorporated into the unit, such as a paste which can be spread on to the steel plate or a powder or liquid for impregnating steel plate or a powder or liquid for impregnating the wadding, which would definitely act as a reliable preventive agent?

A There is no known method of preventing infestation. There are, however, a number of deterents.

If you are requiring large quantities we should advise you to get in touch with a good manufacturing chemist who would be able to supply you with suitable insecticides. Alternatively, you could get in touch with specialist firms.

We suggest the three mentioned below. British Insecticides, 13, Moscow Road, London, W.2. Ozonal Laboratories (1930), New Wharf Road, King's Cross, London, N.1. Haller Laboratories, 325, Borough High Street London S.5.

Street, London, S.E.1.



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 economise space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front Except where inverted cover. commas are used, the reports are summaries, and not verbatim.

### MOTCP

### New Order

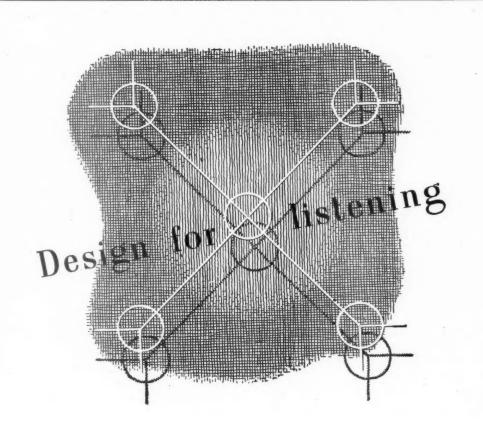
The draft of a new Order defining and regulating the powers of control over development to be exercised by local authorities during the period between the date of coming into force of a resolution to prepare a planning scheme and the coming into operation of that scheme, has been published by the Stationery Office on behalf of the Minister of Town and Country Planning

Interim development control has hitherto been exercised through an Order made in 1933 under the Town and Country Planning Act, 1932. The necessity for a new Order, states MOTCP, rises mainly from two causes : first, the war and the changed outlook on planning have materially altered the require-ments to be met in the exercise of planning control; and, secondly, the Town and Country Planning (Interim Development) Act of 1943 has given local authorities wider powers of interim development control, the practical application of which needs to be

In view of the abnormality of war-time conditions, it is proposed that the new Order shall remain in force for the duration of hostilities only, at the end of which time a further Order will be made.

The draft Order defines the degree of control to be exercised by setting out five categories of development which are ordinarily to be permitted.

These are: (1) Development carried out by a body



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Many areas in this country (as well as the island of Malta) have had the full benefits of this service throughout the war.



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exercising statutory powers on land specifically designated by Parliament (e.g. the construction of a new waterworks). This class is limited to development authorised by statute before the date of the new Order. In the case of future statutes, the Minister proposes to secure any necessary planning control during the passage of the enactment. (2) Development by a local authority or by a statutory undertaker which has been sanc-

tioned by a Government Department before the coming into effect of the Order.

(3) The restoration of war-damaged pro-perty, except in cases where it involves an increase in size or a material alteration of the exterior of buildings.

(4) Alterations to, and the maintenance of, existing buildings, provided the alterations do not affect the exterior and are not connected

do not affect the exterior and are not connected with a change of use.
(5) Certain specified categories of development carried out by statutory undertakers, mining undertakers and certain other authorities. These are set out in detail in the Schedule to the draft Order, and include a variant of constructional and other work a variety of constructional and other work by railway companies and by undertakers responsible for docks, harbours, canals, electricity, gas and water supplies, mining, land drainage, sewerage and lighthouses.

In certain special circumstances, however, as, for instance, where there are proposals as, for the redevelopment of an area, control may be exercised even in the case of development falling within one of the above permitted categories.

These special circumstances, whether in relation to areas or particular cases, are fully set out in the Order. In the case of develop-ment in category 5, Part II of the Schedule specifies the kinds of development (including maintenance) which remain permitted in all circumstances

Among other changes in procedure the draft Order also introduces special machinery for

dealing with development by a local authority or statutory undertaker where sanction by a Government Department is required, and with development required for war purposes, so as to secure that in the more important and difficult cores the amplication for a theories. difficult cases the application for planning permission can be decided by the Minister of Town and Country Planning in consultation with the sanctioning department.

## BSA B. Wycherley R.

June 22, R. Bruce Wycherley, Chairman of the Building Societies Association, issued a BUILDING SOCIETIES REVIEW, extracts from which are given below.

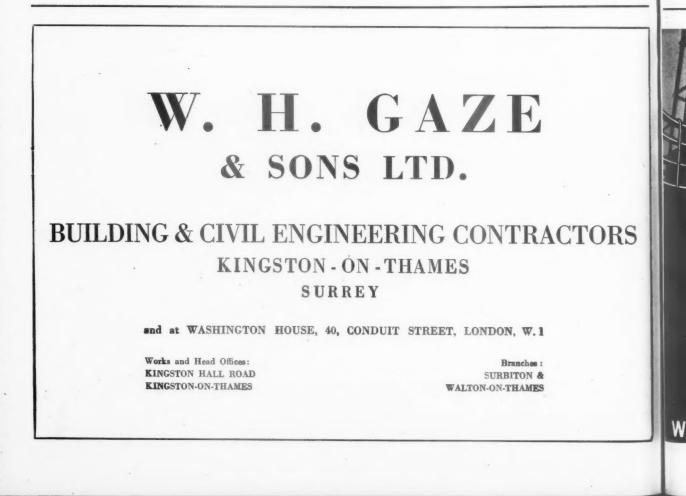
R. B. Wycherley: Suggestions that some official pressure either by a Government department or by the Bank of England has been exercised in favour of an active amalgamation policy for building societies are totally unfounded. I should like to put on record that I am quite unaware of any such pressure whether direct or indirect. As matters stand there are large and small, local and national, societies, and I hope we shall all fit ourselves to accept the responsibilities which will fall upon us after the war.

I welcome every well-conceived and administratively practicable improvement in planning, for this will give building societies better and in the long run improve the stability of the personal covenants of their borrowers. After all, we should not think much of a general who entered into battle without a plan, nor of a builder who laid out his foundations without one. So long as our planners keep their feet on the ground and do not enter the realms of fantasy in their visions of new towns, building societies have nothing to fear from this new and wide conception of the duties of Government and local government bodies in relation to housing and town planning.

The acceptance of new conceptions regarding the functions of the authorities in relation to housing does not mean the end of private enterprise development in this country. It merely means that private enterprise will coordinate its activities in relation to a master plan. The provision of houses for letting will occupy an important place in the post-war housing effort. It is clear that the authorities intend that there should be, as far as possible, an adequate choice as between houses for renting and houses for purchase. The building societies have always been prepared to advance money to owners of property for letting and they have every hope of being able to render an eminently useful service in this field in regard to new houses after the war.

ANNOUNCEMENTS A IN IN O U IN GE M E IN I S Mr. B. A. P. Winton Lewis, DIPLARCH., A.R.I.B.A., A.I.A.A.S., has taken over the practice of the late William F. Andrews, A.R.I.B.A., F.S.I., Bostel House, West Street, Brighton, Sussex. The practice will be con-tinued in all respects as heretofore from the come address under the stude of William F. and address under the style of William F. Andrews, architects and surveyors. Mr. Winton Lewis will continue to practise in London from 8, Buckingham Palace Road, S.W.1, as heretofore.

The Directors of Ragusa Asphalte Paving Company, Limited, announce that Major Owen Hart, D.S.O., has been elected to the board of directors of the Company and will take up an executive position.



THE ARCHITECTS' JOURNAL for July 13, 1944 [xxxiii THERE'S A G FOR EVERY SIZE OF SCREW Whenever you use a screw, use a Whenever you use a Screw Rawlplug too. They are invalu-Use a Rawlplug too! able for fixing electric, gas or sanitary fittings, wires, cables, machinery, fuse boxes, piping, shelves, picture rails, etc. Rawlplugs range in size from the small No. 3 for light wiring, to the large No. 28 which will withstand a direct pull of over 4 tons. Rawlplug fixing is safer, quicker and neater than any other method-and Rawlplugs are still obtainable from stock. THE RAWLPLUG CO. LTD., CROMWELL ROAD, S.W.7 B. 304 SPECIALISTS IN

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xxxiv] THE ARCHITECTS' JOURNAL for July 13, 1944



THE ARCHITECTS' JOURNAL for July 13, 1944 [XXXV

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ELIMINATE GRUB SCREWS BY ORDERING EVERITE DOOR FURNITURE WITH MICROTITE MULTI-ADJUSTING SPINDLE. (Patent No. 465364)

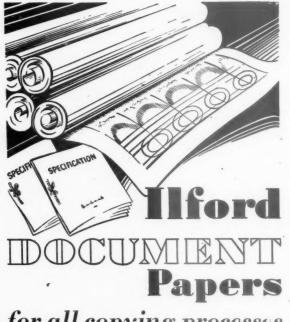
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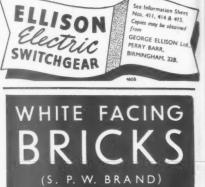
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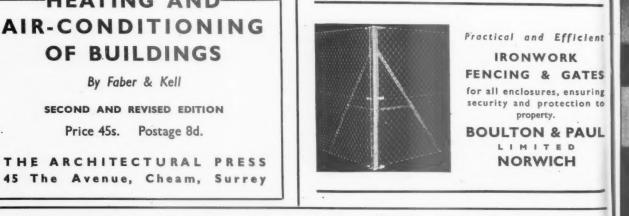
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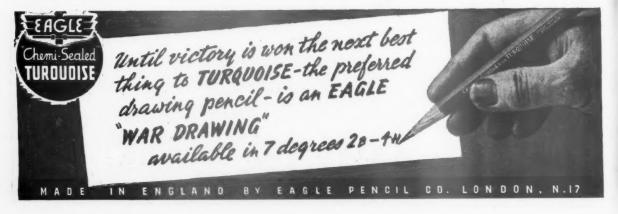
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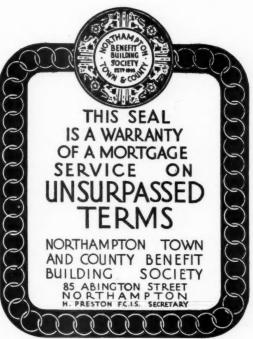
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