THE ARCHITECTS' JOURNAL



standard

contents

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

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* A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ig to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

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Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1.

Sloane 3158/1601

Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1. Euston 2450

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ILA Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783

I of Arb. Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2. Temple Bar 4071

IOB Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197/5176

IR Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3. Avenue 6851

IRA Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172

ISE Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128

IWA Inland Waterways Association. 11, Gower Street, W.C.1. Museum 9200

LiDC Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.

Whitehall 7264/4175

LMBA London Master Builders' Association. 47, Bedford Square, W.C.1. Museum 3891
MARS Modern Architectural Research Group (English Branch of CIAM)
Gontran Goulden, Building Centre, 26, Store Street, W.C.1. Museum 5400
MOA Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. Museum 5400
MOH Ministry of Education. Curzon Street House, Curzon Street, W.1. Mayfair 9400
MOH Ministry of Health. 23, Saville Row, W.1. Mayfair 9400
MOLNS Ministry of Labour and Local Government. Whitehall, S.W.1. Whitehall 4300
MOLNS Ministry of Labour and National Service, 8, St. James' Square, S.W.1. Whitehall 6200

MOH Ministry of Health. 23, Saville Row, W.1.

MOHLG
Moll Ministry of Housing and Local Government. Whitehall, S.W.1.

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Mayfair 9494

Ministry of Works. Lambeth Bridge House, S.E.1.

Natural Asphalte Mine-Owners and Manufacturers Council.

NAS National Association of Shopfitters. 9, Victoria Street, S.W.1. Abbey 1010
NBR National Buildings Record. 37, Onslow Gardens, S.W.7. Kensington 8161
NCBMP National Council of Building Material Producers, 10, Princes Street, S.W.1. Abbey5111
NFBTE National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham 4041/4054

NFBTO National Federation of Building Trades Operatives, Federal House,
Cedars Road, Clapham, S.W.4. Macaulay 4451
NFHS National Federation of Housing Societies. 13, Suffolk St., S.W.1. Whitehall 1693
NHBRC National House Builders Registration Council. 82, New Cavendish Street, W.1.
Langham 4341
Molecul 1380

NPL National Physical Laboratory. Head Office, Teddington. Molesey 1380
NSA National Sawmilling Association. 14, New Bridge Street, E.C.4. City 1476
NSAS National Smoke Abatement Society. Chandos House, Buckingham Gate,

NT National Trust for Places of Historic Interest or Natural Beauty.

42, Queen Anne's Gate, S.W.1. Whitehall 0211

PEP Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245

RCA Reinforced Concrete Association. 94, Petty France, S.W.1. Whitehall 9936

RCA Reinforced Concrete Association. 94, Petty France, S.W.1. Whitehall 9936
RIAS Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.
Edinburgh 20396
RIBA Royal Institute of British Architects. 66, Portland Place, W.1. Langham 5721

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ROYAL Institution of Chartered Surveyors. 12, Great George St., S.W.1.
Whitehall 5322/9242
RFAC Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1. Whitehall 3935
RS Royal Society. Burlington House. Piccadilly. W.1. Regent 3335

RFAC Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1. Whitehall 3925/9242 Whitehall 3935 Royal Society. Burlington House, Piccadilly, W.1. Regent 3335 RSA Royal Society of Arts. 6, John Adam Street, W.C.2. Trafalgar 2366 RSI Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1. Sloane 5134 Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101 SBPM Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1. Victoria 2186

Grosvenor Gardens, S.W.1. Victoria 2186
SCR Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8.
Western 1571
SE Society of Engineers. 17 Victoria Street Westminster, S.W.1. Abbey 7244

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SFMA School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3. Mansion House, 3921
SIA Structural Insulation Association. 14, Moorgate, London, E.C.2. Central 4444
SIA Society of Industrial Artists. 7, Woburn Square, W.C.1. Langham 1984

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SIA Society of Industrial Artists. 7, Woburn Square, W.C.1.
Scottish National Housing. Town Planning Council.
Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.
SPAB Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.
Holborn 2646

TCPA Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2
Temple Bar 5006
TDA Timber Development Association. 21, College Hill, E.C.4. City 4771

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TPI Town Planning Institute. 18, Ashley Place, S.W.1. Victoria 8815
TTF Timber Trades Federation. 75, Cannon Street, E.C.4. City 5040
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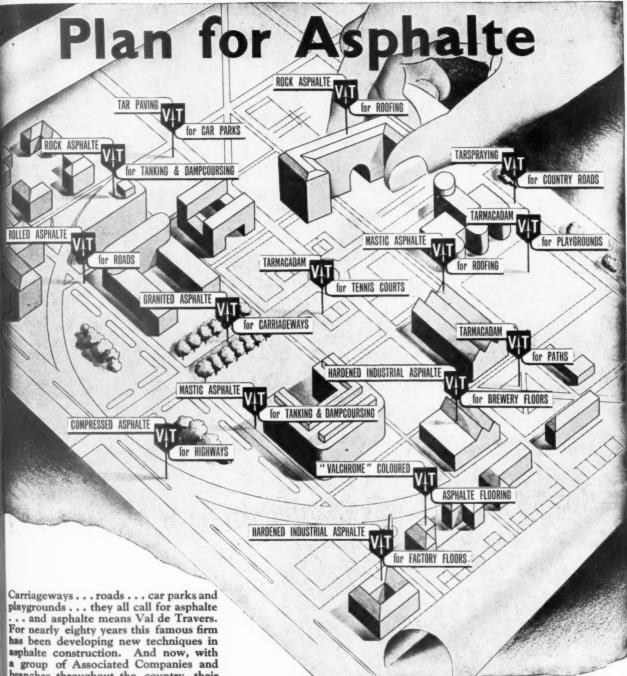
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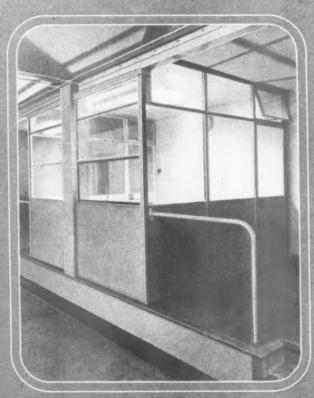
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3′ 0″	52	46	39
3' 6"	39	33	29
4' 0"	30	26	22
4' 6"	24	20	_
5' 0"	20	_	_

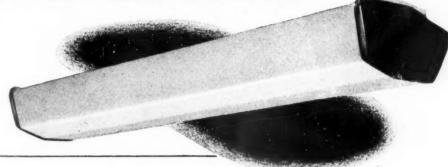
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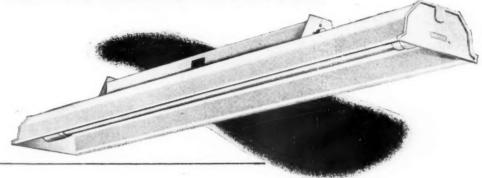


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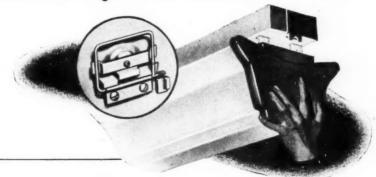
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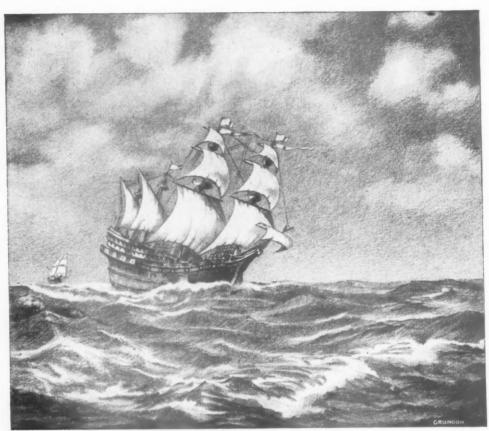
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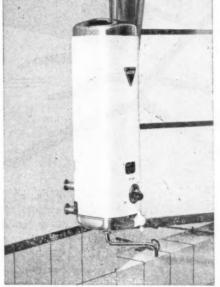
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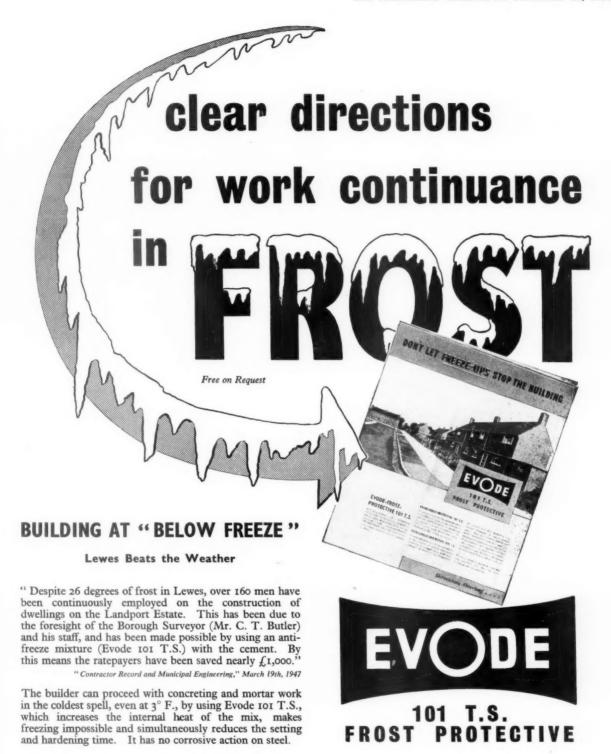
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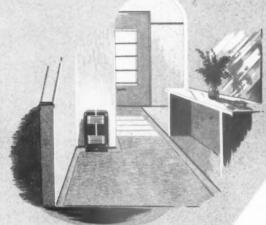
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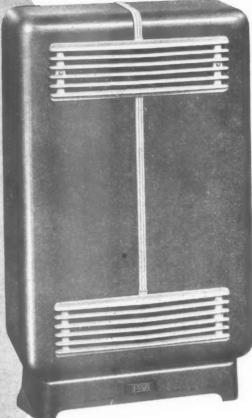
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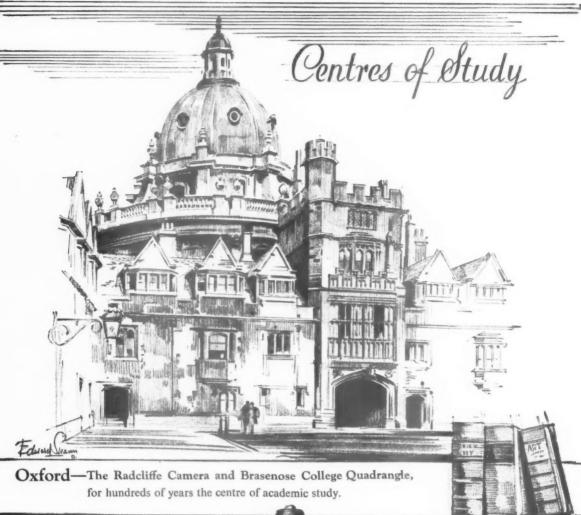
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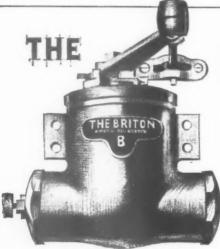
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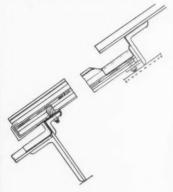
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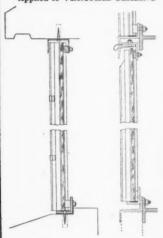


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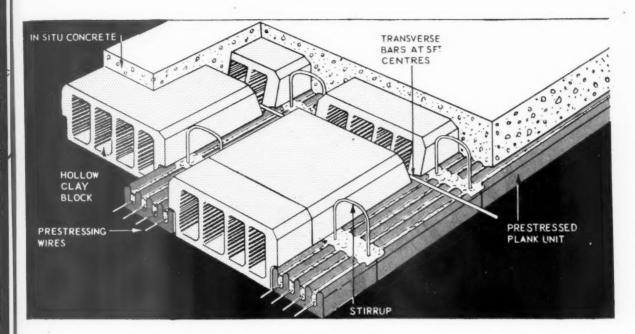
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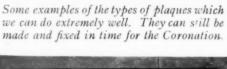
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Architects: Herbert A. Welch & Felix J. Lander, FF.R.I.B.A.

Arens gear supplied by the Crittall Manufacturing Company, Limited, of Braintree.



D

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B.H./S.W. Type I controls fitted to fanlights in the Reception Room.

Building designed by: Standard Motor Company, Planning Dept.

Arens gear supplied by Mellows & Company, Limited, of Sheffield.

Photograph by courtesy of The Limmer & Trinidad Lake Asphalt Company, Limited.



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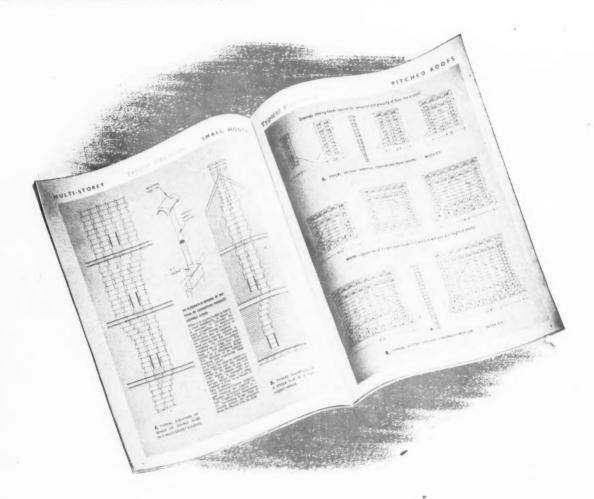
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Paton & Baldwins new Factory at Darlington is equipped with both Arens window and damper control gear.

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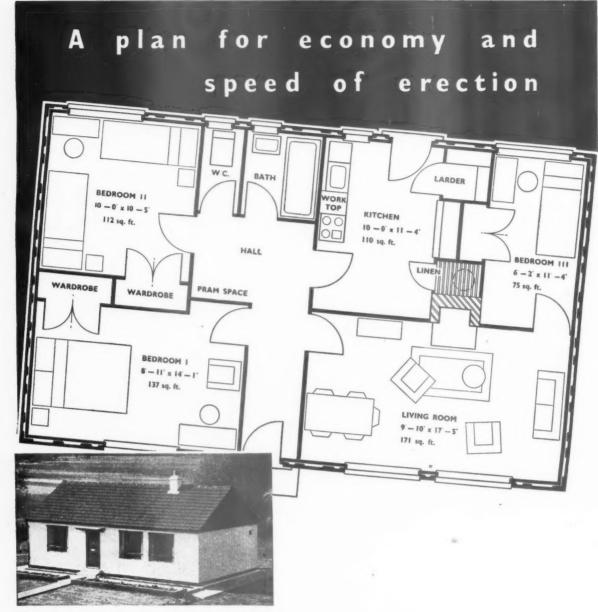


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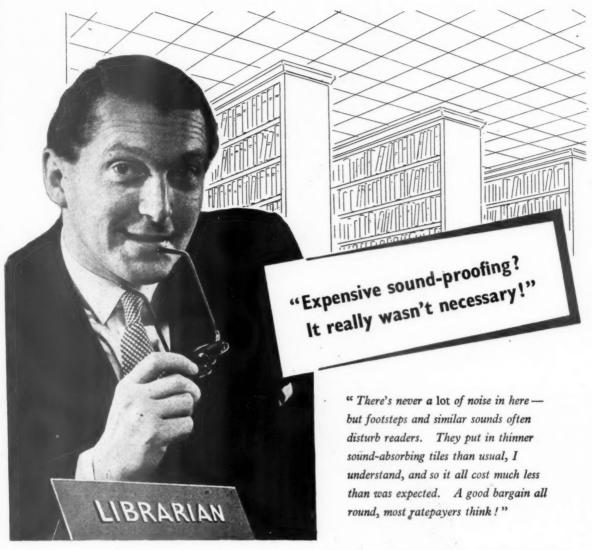
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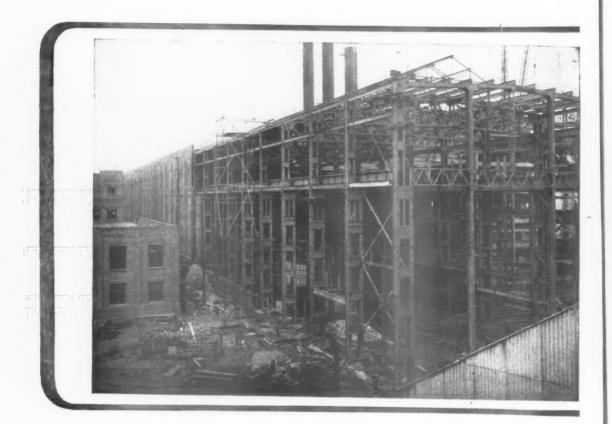


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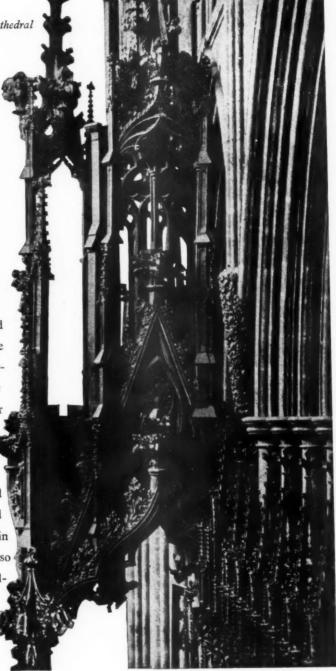


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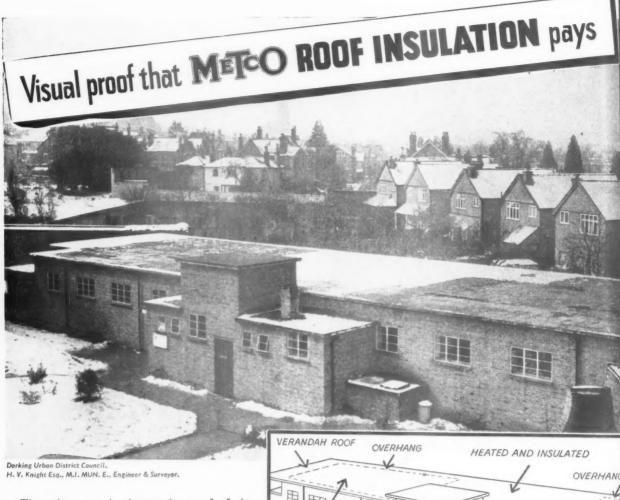


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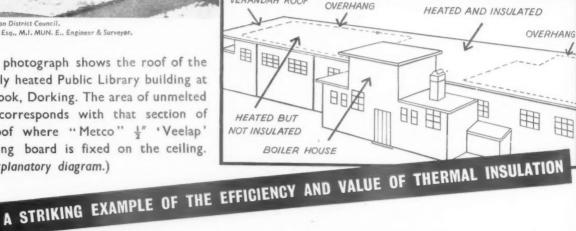
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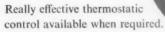


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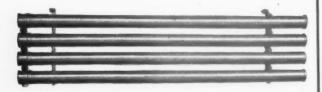


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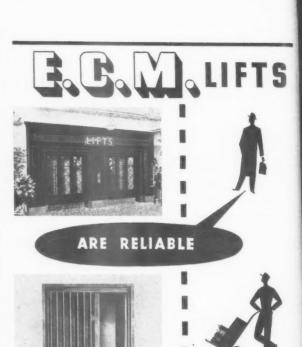


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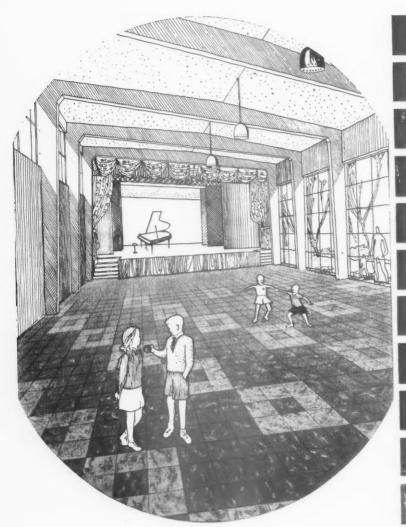
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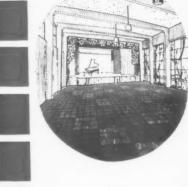
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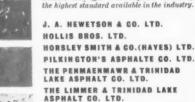














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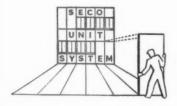


Erith County Grammar School, Belvedere, Kent.

Architect: P. J. B. Harland, F.R.I.B.A.

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WITHOUT STEEL

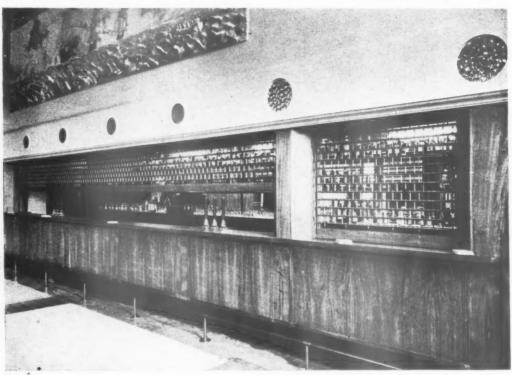


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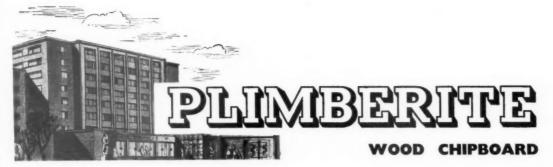
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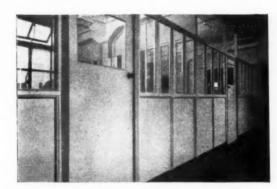
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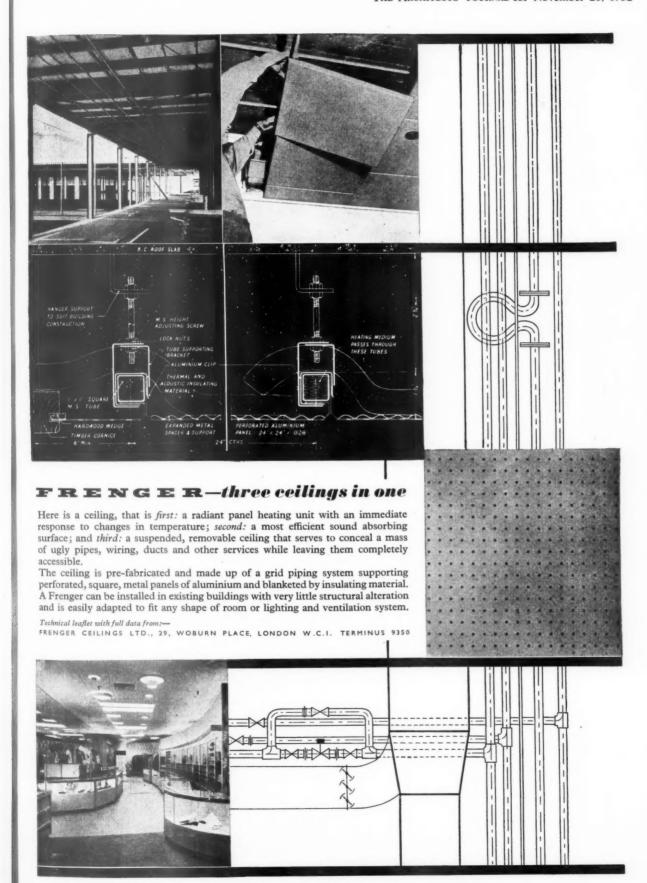


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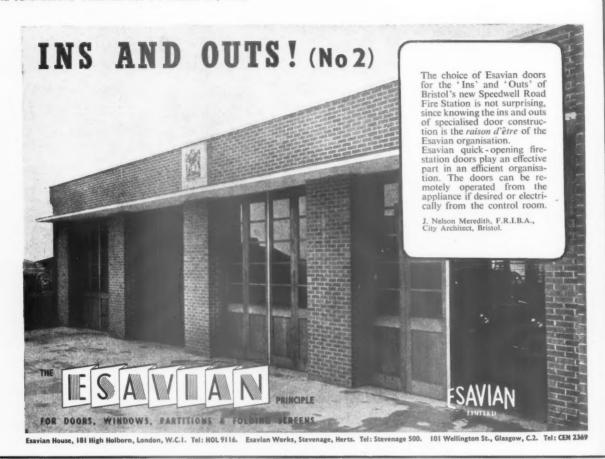
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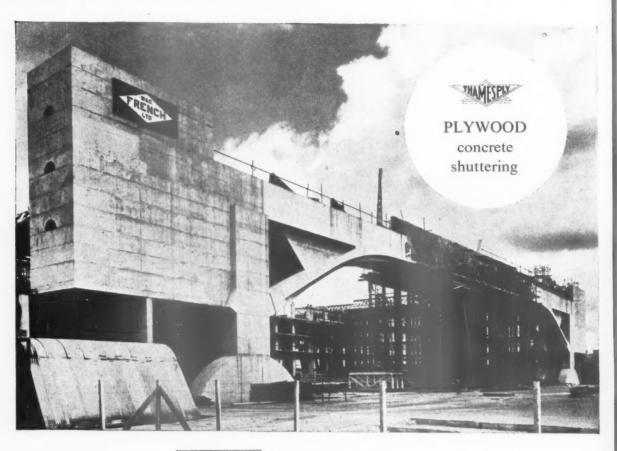




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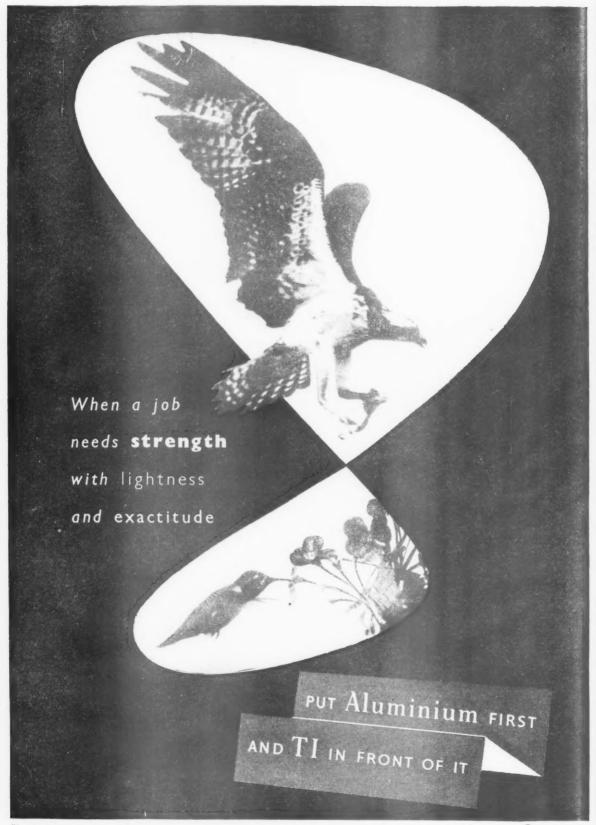


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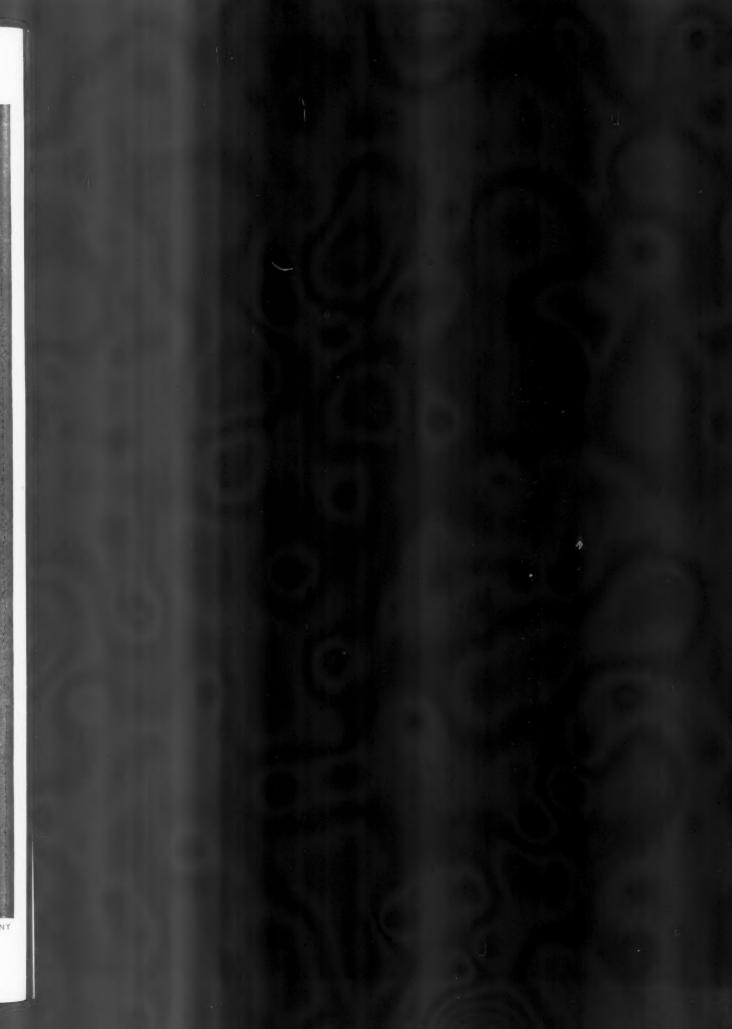
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No. 3012 November 20, 1952 VOL 116



THE ARCHITECT IN FICTION . . .

For ASTRAGAL there has been one highlight during the past week-a new play by Michael Clayton Hutton called Dead Secret. This is drama for architectural students of all ages; a RIBA-tickler; a work that will elevate the minds of "Worried," "Frustrated," and other contributors to our correspondence on The Overcrowded Profession. The architect, as you may have noticed, has lately been treated by playwrights with the respect previously given only to barristers, doctors, and authors. But although, like other professional men, he has been allowed matrimonial difficulties (Red Letter Day) and "adult" problems (The Third Person) on the stage, he has

rarely shown himself to be a Man of Taste, and only on one occasion has he got down to a drawing-board (*The Happy Marriage*). How much better it is, then, for the dignity of the profession, that the architect, if featured in a play, should be an off-stage corpse, as in *Dead Secret*. After all, the dead architect cannot be blamed for those ghastly green chair covers, or for placing the grand piano at a point where the staircase, the front door and the kitchen door deposit a whistling draught.

While we are on the subject of the architect in literature, did you notice that an architect was recently added to the list of those hag-ridden men who become murderers on the daily crime page of a certain evening paper. "It was on the third Tuesday after Michaelmas that John Smith, architect, decided that his wife, Mabel, must die . . ." Did he kill her with a blunt drawing-board instrument or shut her up in a cavity wall? He did not. His profession had nothing to do with the story. Which just shows-doesn't it?-that we are becoming a household word; that the public doesn't have to be told what an architect is.

. . . AND IN NON-FICTION

Unfortunately there are writers who cannot be prevented from misrepresenting us to the public—or should I say to the enlightened layman? Such writers castigate modern architects for holding views they never have held, and setting up the Aunt Sally of literal functionalism for the pleasure of knocking it down again. The classical example of this was, of course, Sir Reginald Blomfield's book *Modernis*-

mus. His attacks on modern architecture were the natural protest of an eminent man who had survived into a world that was calling in question many of the values on which his authority had rested.

Modernismus was published as long ago as 1934. But its ideas have not died. You will find the same line taken Reginald Turnor's book The Smaller English House,* which has just This ends with a been published. chapter called "The Modern Movement," an utterly garbled account of what modern architecture is after, bringing up all the old misinterpretations of functionalism, and of Le Corbusier's "machine à habiter." It is somewhat absurd for a book on modern architecture to contain no description or picture of a building designed since 1939. The last chapter of this lavishly illustrated book contains photos of some early Connell, Ward and Lucas houses and one or two of houses by Tecton, Yorke and Burnet, Tait and Lorne. The final illustration is the Gropius and Fry house in Chelsea (1936). There is no hint of further development. Nor is there a suggestion that these buildings do not speak for everything modern architecture stands for. There is only a declaration that the trend the author sees in them ought to be reversed.

The rest of the book is better informed. In fact, it is quite a useful summary of the changes small house design has undergone since medieval times, illustrated with many familiar photographs. Incidentally, you may be surprised to find that "smaller"

^{*} Batsford, 42s.



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houses include Stanton Court, Glos., Burford Priory, Cornbury House, Oxon., Chicheley House, Bucks., Sir Walter Scott's Abbotsford, Sezincote and Philip Webb's "Clouds."

THE LONDON BUILDERS' CONFERENCE

No doubt you read Mr. Eccles' reply to the question in the House about the activities of the London Builders' Conference, behind whose "innocent sounding title," according to P. Wells (Faversham, Lab.), "there existed an organization which made a farce of competitive tendering and extracted large sums of money from those for whom work was done without performing any service." Even before the war the RIBA council said it was "unable to register approval of the operations" (of the London Builders' Conference) and suggested that a form of declaration should be made out by anyone submitting a tender. (The Council reaffirmed its disapproval last year.)

If this form of declaration had been generally used, the Conference's activities would long ago have been brought to an end. But few architects seem to have used the suggested declaration form. Now that the MOW has adopted the use of a declaration, a deadlock seems to have arisen. The ministry says, in effect, "if you don't sign the declaration, we shan't consider your tender," while the Conference says "we shan't suspend our activities unless you stop using the declaration."

Mr. Eccles may be right in saying that the whole system of tendering needs revision; he said, if you remember, that improvements should be made in the combined operation of architect, quantity surveyor and contractor, and that the RIBA should lead the way. Certainly, the attitude of mind that considers the contractor and the architect as being in opposite corners of the ring, with the quantity surveyor as a sort of referee, is not the way to get good, efficient and economical buildings.

GREY WORNUM AT THE RIBA

Prize days are always pleasant occasions; after all, what could be nicer to watch than virtue and accomplishment properly rewarded? But though ASTRAGAL has sat through a number of such agreeable events in his time



Not an inkstand but a salt and pepper pot whose function is expressed in lettering on its side rather than in its design. This is one of 182 designs for Coronation souvenirs approved by the COID and on view to the buyers, education authorities and the Press at Tilbury House, Petty France, S.W.I.

he thinks the Gold Medal ceremony at the RIBA last week was the best of the lot. You could almost feel the atmosphere of affection which surrounded Grey Wornum in his wheeled chair as he listened to the tributes to his work and personality being gracefully paid by Edward Maufe, Austen Hall, John Gloag and Christian Barman, all of whom, quite rightly, picked out Wornum's re-planning of Parliament Square as a really first-rate—and greatly under-publicized—piece of civic design.

But the speech of the evening was, of course, Grey Wornum's—witty, sincere, splendidly irreverent, full of quotations from such famous jesters as Frank Lloyd Wright and Groucho Marx, and delivered with a spry vigour which was a delight to all his friends.

Altogether a remarkable and very cheerful ceremony which ASTRAGAL wouldn't have missed for anything. Our best wishes to the latest Gold Medallist for a quick return to health and activity.

SOFT WOOD RESTRICTIONS

By this time you will have discovered that last week's headline news of more butter was not as good as it sounded. But have you realized that the MOW's economy memorandum promising you less soft wood is not as bad as it seems? There is an impressive list of restrictions, but if you go through it carefully you will find nearly all the restrictions are the same as the ones in the old P.I.80 memorandum. And you've been working to that memo, for three years or so.

The only difference is that the restrictions now apply to all types of building—not only to houses, for which the 1.6 standards allowance remains the same.

KEEPING CLEAN

If I've been stating the obvious, let me continue to do so by quoting conclusions from the second instalment of the inquiry into our hot water supply. Nearly everyone would take more baths if the hot water supply were improved; this has something to do with cost in the lower income groups as well as lack of adequate equipment. There doesn't seem to be much of importance to archi-



Dr. J. L. Martin

Dr. J. L. Martin, successor to Robert Matthew as LCC Architect, has been with the Council since 1948. He studied architecture in Manchester University where he qualified (in 1930) and later lectured. From 1934 to 1939 he was head of the School of Architecture in Hull and in 1939 he became

principal architect to the LMS. He is seen here outside the Royal Festival Hall, the building whose design was his special responsibility and whose existence is a monument to the remarkable coming to life in recent years of the department which he will have in his charge.

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tects in this report, so let me merely record my astonishment that as many as thirty to thirty-five per cent. of the people who have to use kettles and pans for water heating still make the effort to have up to four baths a week. And how, by the way, did the compilers of the report find out about the Great Unwashed, the seven per cent. who take less than one bath a week? Take heed; the best friend who won't tell you may well report you to an investigation committee.

THE WELL-DRESSED BRICKLAYER

"Such things," you may say. "don't happen in the West." But what makes you so cocky about being a Westerner? Haven't you heard of the latest advance on the Eastern building front? The well-dressed woman bricklayer there is wearing a "two-piece overall in beige," as shown at a recent fashion show held in Leipzig. The belted jacket of the overall can be taken off during (lemon) tea breaks to reveal "a close-fitting blouse with open collar." There are "outside patch pockets on the trousers" (one for trowel and plumb-line, one for powder compact and lipstick) and a cap with chinstraps completes the outfit.

These clothes will, no doubt, be finding their way to Warsaw, where over two thousand women bricklayers are at work on the reconstruction of the city. In the evenings, however, it will be difficult to tell a bricklayer from a stenographer or a commissar's wife, for, said the master of ceremonies at the Leipzig fashion show, "in the evening, clothes must (repeat must) conform stylishly with the surroundings of the Palace of Culture," and twenty-two evening gowns, the majority in Greek style, were also on show.

Perhaps the free issue of special costumes might attract more women in this country to the building trade. There are already about twenty thousand women in the industry—mostly in joinery 'shops—but, so far, very few are on building sites, and none are bricklayers. The NFBTO insists that theoretically there is nothing to prevent women becoming bricklayers here. Which statement brings me abruptly to the end of my allotted space with no moral drawn. I leave you to ponder on the matter.

ASTRAGAL

POINTS FROM THIS ISSUE

London Builders' Conference: attack and defence	• •	page 603
AA Symposium on Modern Secondary Schools		page 608
The maintenance of existing houses		page 609

The Editors

THE GIRDWOOD REPORT

THE Girdwood Reports on the cost of house-building, the third of which has just been published,* are mainly factual reports and not, therefore, highly controversial. However, unless carefully interpreted, many of the figures in the reports can be very misleading. For example, as Professor Bowen pointed out last week (page 593), the statement that houses now cost £129 more to build than in 1949 does not give an accurate picture of the rise in house-building costs, because the comparison does not relate to identical houses. If it did, the figure for the increase would be f_{192} . Similarly, the figures for productivity are of little value unless it is clearly understood what is meant by "productivity." his article on productivity in the Swedish building industry (JOURNAL for September 11, 1952), Dr. Jacobsson defined clearly the differences between various units of productivity. The number of houses built per man year, he explained, was no measure of productivity in terms of output per man hour. The former depends on, amongst other things, the number of hours worked per man per year, and the size and quality of the houses under consideration. The statement that "productivity" is now 20 per cent. below the 1938-39 figure does not, therefore, prove that building workers work less hard than they did before the war. In particular, delays due to uncertain deliveries of scarce materials cannot be blamed on the operatives, nor is the contractor or the architect always responsible. However, since the working week and the size of houses did not vary much between 1947 and 1949, the fact that productivity is stated to have been 31 per cent. below the pre-war level in 1947 can fairly be said to indicate a 16 per cent. increase in productivity between 1947 and 1949 —an increase which, as the Report shows, has been maintained, but not improved upon, since.

Another fact that stands out clearly from the Report is that the increase in the cost of house-building has been due mainly to increases in the cost of materials and plant. which have been responsible for £95 of the £129 rise—over 75 per cent. (Here the Report provides official confirmation of a trend noted frequently in the JOURNAL.) The Report also confirms that the largest single factor which has increased the final cost of

^{*} The Cost of House Building. (Third Report of the Committee of Enquiry). (HMSO, 1952, 1s. 3d.)

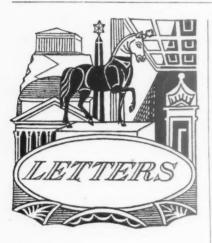
houses to the tenant and the taxpayer has been the increase in interest rates. "Dearer money" has been responsible for an increase in the average economic rent of identical council

houses of 23 per cent.

Another fact suspected by many and now confirmed by the Report is that the rising figures for the number of houses completed each month, are due mainly to less three-bedroom and more two-bedroom houses being built (the proportion of the former has dropped from 80 per cent. in 1948 to 50 per cent. in 1951, while the proportion of the latter has risen between the same years from 13 per cent. to 30 per cent.). In other words, we are probably building no more bedrooms, i.e. re-housing no more people, per month than we were a year or two years ago.

There are no "trick" solutions to the housing problem; apart from allocating much more of the national budget to housing, the only solutions are: more efficient organization (both on and off the site), efficient application of incentives schemes whenever possible, more mechanization on the site and in the 'shop, better site supervision and full exploitation of every aid to cheaper building that has resulted from

research at BRS and other research establishments.



A. C. Pierson, Deputy Chairman, Adeyfield Neighbourhood Council, Headmaster, Adeyfield Secondary School.

L. P. N. Stokes, Priest-in-charge, St. Barnabas' Church.

D. A. Arding, Secretary, Adeyfield Gardens and Allotments Association.

Alaster C. Melhuish, Secretary, Adeyfield Residents' Association.

Fackson and Greenen, F./A.R.I.B.A.

A New Black Country?

SIR,—We—all members of the Adeyfield Neighbourhood Council, representing the social, religious, and political organizations of Adeyfield—have read with interest the letter from Mr. Collins published in the Journal on November 6. We, who have lived in Adeyfield for at least a year, are amazed to learn of the deterioration and approaching dereliction of the neighbourhood, for our experience is rather that now in general appearance, Adeyfield is much tidier than when we came here, with greatly improved gardens and modestly but attractively furnished houses. This improvement is a reflection of a robust community spirit which is growing in responsibility and taking more and more pride in the amenities provided by the Development Corporation.

Mr. Collins' account of damage done to property is not only fantastic; it is we sub-

property is not only fantastic; it is, we sub-True, a patient in-not a "casual obmit, Sir, a fantasy. vestigator—certainly not a "casual ob-server"—might be able to find some "broken windows and damage to woodwork" and even signs of "wilful damage" to the hundreds of trees and shrubs which have been planted, but these are even less in evidence than in most normal communities. As for the charge that the building of the New Town is just another way of "producing slums" the charge is so ridiculous that if it were not also slanderous it would be unworthy of comment.

To speak of Adeyfield as a new "Black Country" suggests that Mr. Collins knows neither Adeyfield nor the country with which

he compares it.

In short, your correspondent's letter is little more than a slander on those who live here, and cannot fail to wound both them and the excellent men and women who have conceived the idea of this New Town and are working unsparingly to bring to fruition what we believe to be one of the finest social experiments of the century

Such a letter demands an apology.

A. C. PIERSON, L. P. N. STOKES, D. A. ARDING, ALASTER C. MELHUISH.

No Waiting

SIR,-We were interested in your article on the reconstruction of Portsmouth, and par-ticularly in the illustration of a new multiple store on page 524. We think the notice "No Waiting" particularly appropriate in view of the speed with which this type of store has been able to proceed, whilst so many other blitzed store premises in various towns are still waiting for building licences. JACKSON & GREENEN

Bournemouth.

MOHLG

Development Charge Abolished

Mr. Harold Macmillan, the Minister of Housing and Local Government, habolished the Land Development Charge, This decision was incorporated in a Bill Mr. Macmillan introduced Tuesday.

Mr. Macmillan's Bill—a fuller one will be introduced next year—will also change the system of compensation under Lord Silkin's Planning Act.

Lord Silkin set aside £300 million, to be acid by the lord by the lo

paid by July 1 next, for landowners who paid by July 1 next, for landowners who lost development rights under planning schemes. This "blanket" payment will not now be made. Instead compensation will be paid, case by case, when an actual building restriction is imposed. It is believed the total amount to be paid will be only a modest proportion of the £300 william.

million.

Many landowners who had no intention of developing their land expected com-pensation just the same. Now they will

not get it

Compensation claims will be held up for 18 months or more until next year's com-prehensive Bill becomes law. When evenprehensive Bill becomes law. When eventually they are paid they will receive added interest from 1948, and will be paid in full. Nearly a million claims were put in on the fund. They amounted to £350 million. So not all claimants would have been paid 20s. in the £ under the old scheme.
The Ministry says: "People who hold

The Ministry says: "People who hold admitted claims and who paid the development charge will be paid on the claim up to the amount of the charge they have

The Government now says that all who

bought in good faith will be compensated. The landowner who sold his land at a high price and did not hand over the claim will not get his claim in full. He will only be paid as much as will bring the price of his land up to its 1947 value. If he has already received full value from the buyer he gets no more from the State. It will still be necessary for people to get planning permission before they build, or dig for minerals, or change the use of a building; and local authorities will continue to deal with their applications for permis-sion. Development plans are not affected. There will be compensation in certain

cases for owners of land who are refused permission to build on it, e.g., where an owner of land, which has building value and is ripe for development, is not allowed to build at all; because the land is too valuable agriculturally or is in a green belt. He will be paid compensation when planning permission is refused; and he will be paid on the basis of the claim which the Central Land Board has admitted on the £300 million fund. He will get the full admitted claim with added interest from 1948.

Compensation will not be paid for refusal to allow the use of a building to be to allow the use of a changed to one which would hurt the neigh-

bourhood.

When a person has been refused permission to develop his land he can apply to the appropriate Government Department for compensation. The department will see if there is a claim on the £300 million fund registered against the land, and whether the case is one in which compensation ought to be paid. If there is a claim, and compensation ought to be paid, they will pay it then.

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BUILDINGS IN THE NEWS

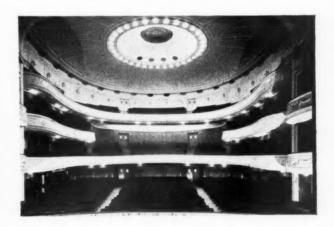
Theatre at Nairobi

The Kenya National Theatre (below) was opened in Nairobi earlier this month. The architect was Mrs. Eugenie Hughes.



Theatre at Budapest

The interior of the Budapest Comedy Theatre was completely destroyed by a bomb in the last war. It has been reconstructed (below) to a new design by the Hungarian architect, Janos Flach, and is now known as the People's Army Theatre.





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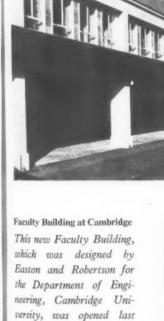
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Flats at Hampstead

later issue.

"Troyes House," the block of flats shown on the right, which was designed by C. E. Jacob, Hampstead's housing architect (assisted by F. L. Willars and Miss M. Pountney), was opened recently at Lawn Road, Hampstead.

week. It will be illustrated

and described in full in a





On November 6 a Symposium on Modern Secondary Schools was given at the AA, 34, Bedford Square, W.C.I. A brief report of the discussion is given here; it will be followed later by a more comprehensive report in the JOURNAL'S Technical Section.

SCHOOLS

Report of AA Symposium

The AA Symposium on Secondary Modern Schools, held in London last week, was in two sections; the first consisting of four papers and discussion on educational requirements, the second of five papers and discussion on the planning, construction and maintenance of these schools.

maintenance of these schools.

The chairman of the second section, Peter Shepheard, vice-president of the AA, opened this part of the symposium with the pertinent remark that the most expensive buildings of the past were by no means the best. The extra incentive of lower costs often had the effect of producing better architecture.

COMPACT PLANNING

COMPACT PLANNING

D. Clarke Hall, who gave a paper on the "Economical Use of Space," said that many of the things the educationalists had asked for in the earlier papers were "out of the question" within the £240 limit. We were almost down to simple brick walls with a roof on, he said. He gave examples of simple, compact, rectangular plans on more than one floor, but even some of these had been found too dear. Keeping within the rectangle and avoiding all breaks and set-backs that would put up the cost was, he said, "quite a fascinating game." We could halve the external surface area by compact, three-storey planning and, if we could achieve an educationally sound building within a compact plan, then we should be able to build with the £240 limit now and after the next rise in the cost of building. C. S. Mardall, who followed Mr. Clarke Hall, also had suggestions to make as to how compact planning could cut costs. A reduction in circulation space by 20 per cent. could, he claimed, produce a 5 per cent. saving in cost, equal to £12 per place. By bringing isolated blocks together into one block, we could produce a tremendous economy, he continued; it would save a wall area, services and staircases and be easier to run. He had seen in Stockholm a school area, services and staircases and be easier to run. He had seen in Stockholm a school with an assembly hall going up through three storeys and with access balconies to the classrooms; it also served as a light area. He knew that earlier speakers had said that

we should not have classrooms, even in-directly, off the assembly hall, but this ex-ample took the idea of compact planning to its logical conclusion.

THE BRICK BOX

Several educationalists criticized strongly attempts "to get a quart into a pint pot." The loss, said one, was in atmosphere, aspect and vista. The brick box, he said, might be a fascinating exercise from the architectural point of view, but it was not so amusing from the educational point of view. so amusing from the educational point of view. There was a great danger of losing the "sense of space," said B. S. Braithwaite (Education Officer, E. Sussex). "We should think very carefully," he said, "before we compress all our buildings into cardboard

Similar sentiments were expressed by a schools' architect, who, referring to a previous speaker's claims of having reduced the length of drains for his schools, said "I don't feel we can take a straight drain and build a school around it!" "I know the £240 limit must be met," he continued, "but £240 limit must be met," he continued, "but I don't see that we have to go back to the rectangular box—I should have thought it was still possible to have the boxes in smaller units. After all, we are building schools, not packing child sardines into brick boxes; architects must strike against cost-per-place if the box is the only solution."

Members of the symposium were, to some extent, relieved when a representative of the MOE said that, if building costs continued to rise so that it was impossible to get a

to rise so that it was impossible to get a good school for £240 per place, they would either have to raise that figure, or abandon the idea of having complete good schools; ite. it might be necessary to abandon the gymnasium or the laboratory. They were not going to provide the architect with an impossible problem, but so far there was nothing in their tender prices to show that good schools could not be built for £240. One of these points was taken up by another speaker, who suggested that where there was more than one school on a site. a gymnasium, in a separate block, could be

shared by the several schools.
Introducing his paper on "Planning to Standardised Components," Richard Sheppard said that, at present, there was a tendency to get a cheaper job by using stan-dardized building components in some parts of the country, while in others, orthodox construction was cheaper. The danger in concentrating on the use of standardized components, said Mr. Sheppard, was that a simple change in the Government's economic programme (for example, if housing sub-sidies were lowered) would upset the whole school-building programme. If there was less building and, consequently, unemploy-ment in the industry, output would go up and orthodox construction would become cheaper all over the country.

Mr. Sheppard warned architects of the

danger of acquiescing in cutting space standards. "We cannot," he said, "go on indefinitely lowering space standards; if building costs continue to rise, the time will come when we will have to stick our feet in and resist attempts to peg prices at a predetermined level.

PREFABRICATION DEFENDED

The Hon. R. A. de Yarburgh-Bateson de-fended prefabricated construction for schools on the grounds that a large number of schools built during the last five years would never have been built at all if prefabricated components had not been used. They had built schools in this way within the £240 limit, yet the full economy of prefabrication had not been realized. There were, he said, too many different systems and too many grids—at least five were in use. He appealed to the Ministry to standardize one module—preferably 3 ft. 4 in.

Mr. Bateson suggested that bottlenecks

which occurred because all the components (for frame, walls and floors) were made in one factory, could be avoided if components could be ordered anywhere, as with traditional components. He advocated simpler systems, on the "Meccano" principle. We should, he said, divorce the structure completely from the cladding, i.e., remove the posts that hold up the roof from the wall. This was easy if we could accept columns in rooms and with widely spaced columns there rooms and with widely spaced columns there was no reason why we shouldn't. Moreover, he added, this idea made possible a wall system that was completely modular, both vertically and horizontally, and halved the number of different components required, During Mr. Bateson's contribution to the discussion, a member of the symposium was heard to say "why not put the frame outside the walls?" This point was taken up later in the discussion. in the discussion.

Bruce Martin also strongly defended prefabrication. There was, he said, much con-fusion between prefabrication systems and fusion between prefabrication systems and the use of prefabricated components; he was in favour of the latter, so that the "putting-together" of the components could be left to the architect. "If new materials are not cheaper than the way we built 500 years ago," said Mr. Martin, "then it's simply because we haven't studied the problem enough. We should be using aluminium, plastics, duralumin, fabrics, glass-silk—in fact, everything produced in sheet, rod or tube form: thing produced in sheet, rod or tube form; let us utilize the factories that turn out sheet materials by the mile."

UNFAIR COMPARISONS

Comparisons between prefabricated and traditionally-constructed schools were, said Mr. Martin, unfair. We were comparing unfinished brick walls, grano., and untreated ceilings, with well-finished walls, cork floors, and acoustic ceilings. It was remarkable, he said, that, in spite of the lack of thought given to the problem, the increased overheads and cost of labour in factory production and the cost of labour in factory production and the cost of transport, we were providing prefabricated buildings as cheaply as other buildings. "We must be wary," he continued, "of superficial comparisons, otherwise we may throw over the whole results of 20 years of building research, embodied in the *Post-War Building Studies* and the *BRS Digests*. To fly in the face of this and return to previous methods of building, on the ground that methods of building, on the ground that they are cheaper, is staying in the horse and cart and candle age.

cart and candle age."

"My idea of a perfect school," concluded Mr. Martin, "is a beautiful shiny thing in the middle of a garden; I agree with the chairman on the importance of the garden—the children should feel that they are in one all the time." [The chairman had said earlier that, if in this climate we built round three sides of an outdoor space it. round three sides of an outdoor space, it became almost as useful as a fully enclosed

L. W. Elliott presented a paper on the "Economical Use of Structures and Materials." He pointed out that, in addition to saving external wall area, compact tion to saving external wall area, compact planning produced structural savings, due to the effects of continuity. Although the percentage saving was less in two- and three-storey buildings, as the number of bays increased, the size of the moments in the structural members decreased. If there was continuity in a multi-storey building. was continuity in a multi-storey building, he explained, less welded joints were needed to produce the required rigidity.

Mr. Elliott advocated the use of space frames and stressed skin construction for

trames and stressed skin construction for schools, so that columns or load bearing walls could be placed wherever required and changed at will; services and light fittings could be within the depth of the space frame. He also thought that schools could be economically constructed with frames of pressed steel. Pressed steel, he said, was produced very rapidly; the trouble, in the past had been that confidence in the past had been that confidence. said, was produced very rapidly; the trouble, in the past, had been that engi-

neers ha welding. F. D. for ecc he said prestres carrying steel co timber per sq. For as the use said, re concret take th

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neers had tried to imitate structural steel with it and used, therefore, complicated

welding. F. D. Green also had suggestions to make for economical structures. For single-storey schools he advocated the use of lat-tice bar joists, with wood-wool slabs. This, tice bar joists, with wood-wool slabs. This, he said, required only 2½ lb. of steel per sq. ft. of floor area. A new technique of prestressed timber units at 4-ft. centres, carrying wood-wool slabs, could cut the steel content down to ½ lb./sq. ft. The timber requirement was only 0.15 cu. ft. per sq. ft.

For assembly halls, Mr. Green advocated the use of light steel trusses, which, he said, required no more steel than reinforced concrete. To avoid ties, the roof could take the form of a space frame. With this

method of construction, steel requirements for a 60-ft. span, were only $2\frac{1}{4}$ lb. per sq. ft. The use of a stressed timber skin for assembly hall roofs could cut down the steel required to $\frac{1}{5}$ lb. per sq. ft., only $\frac{1}{6}$ cu. ft. of timber being required per sq. ft.

of floor area.

Mr. Green said that he liked the suggestion that a 200-ft. square covered structure should be erected, and the school built under it, protected from the vagaries of the weather. But one of the members of the symposium sarcastically commented that this suggestion meant that it was possible to discourse with the architect and leave the dispense with the architect and leave the

design to the headmaster.

A full report of the symposium will appear soon in the Technical Section of

the Journal.

In the second of a series of articles Mr. Watkins shows how little is spent on the repair of existing houses in comparison with the amount spent on new housing and points out why this is so.

ERNEST WATKINS

The Future of House Property (2)

There should be, as I pointed out in my last article, a balance between the amount of money, labour, and materials used for the building of new houses and the amount used for the maintenance of existing houses.

What is spent on new houses? Some £375 million a year. And what sort of labour force is used? Last June the figure was 264,000.

What, then, of the expenditure in men

and money on the upkeep of existing buildings? A rough calculation shows that about 200,000 men are now doing this work. (About 20 per cent. of the number engaged in the building and civil engineering industries.) amount of money spent on repairs is difficult to assess, for there is no means of knowing how many small jobs are outside the licensing limits. But tax returns are useful here as an aid to calculation. The Commissioners of Inland

Revenue's annual report shows that in

1949-50 (the last year for which figures

are available) the total of Schedule A

tax assessments for house property was

£491 million, from which the statutory deduction for repairs was £128 million. The allowance itself was originally based on the proportion of the assessment figure that corresponded with the average spent on repairs; so the £128 million a year is at least a guide.

ANNUAL REPAIR BILL

There is another way of working out the amount spent on repairs. If 200,000 men are at work on repair and maintenance and the average weekly wage of each man is £8, and the cost of materials and overheads is 100 per cent. of the total wage bill, the annual expenditure is £168 million. On each of the 14,300,000 houses in the country, something like £10 a year is spent on repairs and maintenance, on the average. The important words are "on the average."

Is that figure sufficient? Few would say that it is. The figures below give a sample of what some landlords spend

on repairs:

Owners						Net Rents (£s.)	Amount Spent on Repairs (£s)	Repairs as per- centage of Net Rents (Per cent.)
ocal Authorities (19 London County						2,809,594	1,523,351	54
Birmingham Co	rporation					1,182,665	561,878	47
Liverpool Corporation			**	* *		1,739,256	457,938	47 26 39
Manchester Cor	poration					760,065	299,075	39
								1
Rochdale Equitor	able	files of	Nation	 al Fed	era-	3,649	1,933	52
Private owners (sam tion of Property O	able ples from 1 owners, 194	 files of 19-51)—	Nation					
Rochdale Equitor Private owners (sam tion of Property O 1. Sheffield	ples from 1 Owners, 194	files of 19-51)—	Nation	4.4		149	58	
Rochdale Equitor Private owners (sam tion of Property O 1. Sheffield	ples from 1 Owners, 194	files of	Nation	**				
Rochdale Equitor Private owners (sam tion of Property O 1. Sheffield	ples from 1 Owners, 194	files of 19-51)—	Nation	4.4		149 293 1,116 271	58 135 431 118	
Rochdale Equite Private owners (sam tion of Property O 1. Sheffield 2. 3. Ashton-in-M 4. Birmingham 5.	ples from 1 Owners, 194	files of 19-51)—	Nation	**	**	149 293 1,116 271 136	58 135 431 118 49	
Rochdale Equitorial Private owners (sam tion of Property O 1. Sheffield 2. 3. Ashton-in-M 4. Birmingham 5. P. P. M. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	ples from 1 Owners, 194	files of 19-51)—	Nation	**	::	149 293 1,116 271	58 135 431 118	52 37 39 38 43 31 26 31

The Bournville Village Trust reports similar percentage figures for the relationship between the cost of essential repairs and the net rents of its houses.

An average expenditure of 25 per cent. of the Schedule A assessment, or £10 a year per house, may just be sufficient to keep decay in check. It can provide nothing for the excep-tional repair, nothing for improvement. And to be effective in maintaining a reasonable standard of repair. the average expenditure must be spent, or set aside, every year. We are suffering from the lack of attention between 1940 and 1947 when adequate yearly care was impossible. For many properties, the war years began a vicious circle of repair problems, so that, today, the repairs that fall due mount up more quickly than funds can be accumulated from the rents to meet It explains why many private them. owners have despairingly given up the whole idea of repair. They will do what they can be compelled to do. They have neither money nor inclination to do any more. They have lost any sense of personal responsibility. Birmingham Corporation has had ex-

ceptional experience in the ownership and management of small house property. Since the war it has bought some 600 acres of small dwellings and has put into operation a redevelopment scheme for the properties taken over. They are of the type for which an average standard rent would be between 10s. and 12s. 6d. a week. In a paper read at the National Housing and Town Planning Conference this year, Major D. J. E. Lamb, of the Birmingham Corporation, stated that the average cost of repairs to each house, of a kind which he described as "frankly minimal," was £180. It would take over twenty years to accumulate that sum from the rents of the houses on the basis of the Inland Revenue allowance for repairs.

New property, with its higher rents, should be maintainable out of its rents on an economic basis. It would seem that the pre-1914 house cannot be so maintained. Most of this property is privately owned by people who once believed that nothing was safer than bricks and mortar.

THE RENT ACT

One reason why a determined attempt cannot be made to repair this property is that the amount which can be spent depends on the owner's financial And it is estimated that position. some eight million old houses are still subject to the Rent Acts. This means that the owners of them are prevented from increasing the rents beyond the amount paid in 1939 to meet the threefold rise in the cost of repair.

My next article will deal with the problems encountered by the owner of rented property who wants to keep his

property in good repair.

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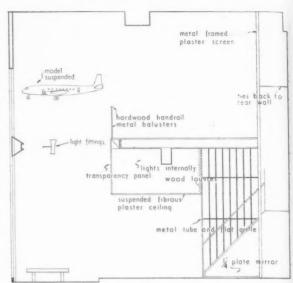
ICELAND TRAVEL BUREAU IN PRINCES ARCADE, PICCADILLY,

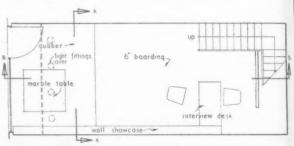


Alterations to 6b, Princes Arcade, Piccadilly, for the Iceland Tourist Information Bureau, have been designed by James Cubitt and Partners; assistant-in-charge, G. V. Richards. The new design was entirely guided metal framed transparency panel > existing stair

Section A.A

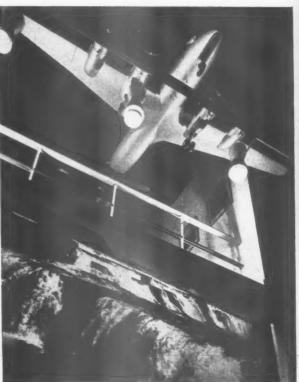
by the unusual proportions of the premises, which can be seen in the photograph opposite. (All other establishments in the arcade either neglect or intentionally destroy the value of the double storey). The main feature of the new design is the emphasis on height and, to this end, the existing balcony was cut back and the lighting in the front of the premises is mainly directed upwards. The ceiling under the balcony was lowered over the interview area and the space between the existing slab





Plan and section B-B [Scale: 1" = 1'0"]





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DESIGNED BY JAMES CUBITT AND PARTNERS

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and the false ceiling is used as a lighting box. In this way the back of the premises is lighted through louvres and lighting is provided for the large transparency (made from a negative $2\frac{1}{2}$ -in. by $1\frac{1}{4}$ -in.), part of which is seen bottom right on the opposite page, which shows a typical Icelandic scene. At the bottom of the stairs is a map of Iceland (top left, opposite). The model aircraft is a Douglas "Skymaster," as flown by Iceland Airways. Contract price, £1,438. General contractors, Holland & Hannen and Cubitts Ltd. Sub-contractors, page 630



T. J. SOPHIAN

Recent Law Cases

IS A HOUSE PART OF A BUILDING?

Under section 11 of the Housing Act, 1936, a local authority may make a demolition order in respect of an insanitary house; under section 12 similar powers may be exercised in respect of a part of a building, or an underground room, which is insanitary, subject, however, to the qualification that in such cases a closing order, and not a demolition order, may be made. In the recent case of Birch v. Wigan Corpn., the question was raised whether a "house" may be part of a "building" for the purposes of section 12.

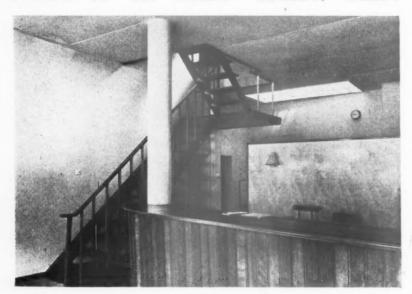
The Act contains no definition of a "house" or a "building" as such. The definition of "house" in section 185 merely states that it includes any yard, garden outhouse and appurtenances thereto or usually enjoyed therewith.

The actual question raised in *Birch v. Wigan Corpn.* was whether, if some of the houses in a row of houses were insanitary, action could be taken by the authority under section 12 so as to make a closing order, but it was held that a house, although it formed part of a block of buildings, could not be regarded as part of a building, *i.e.*, of the block, for the purposes of section 12. In such circumstances, accordingly, the authority could only make a demolition order, and not a closing order, if the house was unfit for habitation.

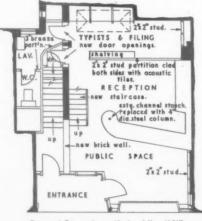
No doubt this decision will prove a stumbling block in the way of housing authorities who will have to elect between making a demolition order which would, perhaps, entail the demolition of contiguous buildings in the block, which were quite sound, and foregoing their powers completely.

The grounds on which the Court arrived at its conclusion that section 11 and 12 were to be treated as being mutually exclusive are of interest. Under section 11 the council was under the obligation of making a demolition order in respect of an unfit house. But if a house was to be regarded as "part of a building," the authority would enjoy the option of either making a demolition order under section 11 or a closing order under section 12. Such an option however could not be reconciled with the absolute obligation imposed on the Council in such a case by section 11 of making a demolition order in respect of the "house." Further, section 12 likewise imposed an obligation on the authority to make a closing order in an appropriate case, and if a "house " was to be regarded as "part of a building" the authority would be simultaneously under different obligations, which, moreover, were of a mandatory nature, in relation to the same premises. The authority, in other words, would have to make a demolition order under section 11 and a closing order under section 11 and a closing order under section 11 dealt with "houses" it would only be reasonable to regard section

OFFICE IN ST. JAMES' STREET, DERBY

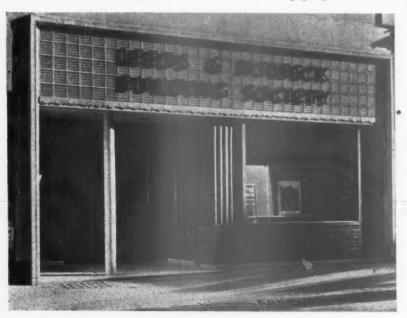


This office conversion, in Derby, of premises originally occupied by a hairdresser, has provided the clients with ground floor accommodation and also offices on the second and third floors. It was designed by Samuel Morrison. The clients required a remodelled street facade, seen in the photograph below, that would not allow a view of the reception area from outside. The reception counter and new open staircase, seen above, are of yang. Contract price was £3,367. The general con-



Ground floor plan [Scala: 1/3" = 1'0"]

tractors were Kirkland (Derby), Ltd. For sub-contractors, see page 630.



12 as dealing with something different from a "house," *i.e.*, a building which was not a "house." This would explain why the expression used in section 11 was "house," whereas that used in section 12 was "building."

According to this decision, therefore, sections 11 and 12 are exclusive, and a "house" cannot be treated as "part of a building." Whether this result, and the consequences it will entail to housing authorities, were anticipated, is to be doubted, but as the courts have repeatedly pointed out, courts of law only construe statutes as they find them, and defects in statute law, if they are to be remedied, can only be remedied by Parliament.

CONTROLLED PROPERTIES

Owners of rent-restricted properties will be disappointed by the decision reached by the Court of Appeal on the question of an owner's responsibility for repair. (Rawlence v. Croydon Corporation.)

v. Croydon Corporation.)
Certain statutory obligations to repair are imposed by the Housing Act, 1936, and also by other Acts such as the Public Health (London) Act, 1936. But it appears that for all practical purposes the language used in the material provisions of these Acts is the same; and the principle underlying the above decision of the Court of Appeal which was given under the Housing Act, 1936, will equally apply to other cases.

Under 5, 9(1) of the Housing Act of 1936.

Under 5, 9(1) of the Housing Act of 1936, the local authority is empowered to require "the person having control" of a house of a type suitable for occupation by the working classes, to execute repairs in order to render it fit for human habitation. And the section provides (in sub-section [4]), that the person who receives the rack rent of the house, or who would receive it if the house were let at a rack rent, is to be deemed to be the person having such control. "Rack rent" for this purpose is defined as rent which is not less than two-thirds of the full net annual value.

In this case the house, which was controlled by the Rent Acts, was let at a rent of £45 p.a. exclusive of rates, that rent being the maximum permitted rent under the Rent Acts, but the "free" rent which could have been obtained for the house in the open market was more than £67 10s. 5d. p.a.; so that if £67 10s. 5d. p.a. was to be regarded as the "net annual value" of the house his rent of £45 p.a. at which it was let would fall short of the necessary two-thirds to constitute a "rack rent."

The landlord accordingly argued that the statutory restrictions imposed on him with regard to the rent chargeable prevented the rent from being a "rack rent" and accordingly discharged him from his statutory liability to repair. Such a contention if upheld, would have had the effect of freeing a very large number of owners from the statutory liability to repair, but the Court of Appeal ruled otherwise. Apparently the law of this decision was that the maximum rent permitted to be recovered by law was for this purpose to be regarded as the rack rent, notwithstanding that a much higher rent might, be recoverable in a free market where restrictions on the rent chargeable were not operative. For such a purpose, accordingly, the law will shut its eyes to the fact that the statutory rent falls short of the true market rental, and will ignore the existence of the latter. And yet for other purposes in the past the law has not neglected to have regard to realities, and to recognize the fact that the property could command a higher rent than the controlled rent. Thus for the purpose of determining the rateable value of premises controlled by the Rent Acts the House of Lords in Poplar Assessment Committee v. Roberts held in 1922 that regard was to be paid to the market rental value and not to the amount of the restricted rent.

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The Architects' Journal for November 20, 1952

HEALTH CENTRE

at FENNERS, CAMBRIDGE

designed by J. M. MACGREGOR and D. WYN ROBERTS

The functions of this new Health Centre for the University of Cambridge are threefold. Firstly, the study of human ecology, which is a study of infectious and contagious diseases in relation to living and working conditions among students and others. Secondly, a preventative health service for students, and thirdly, athletic activities in conjunction with the nearby sports ground.

View from the south-east, with the original pavilion in the background.



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Above, the entrance hall with the window to the enquiry office on the right. Above, right, waiting room on the first floor.

HEALTH CENTRE

at FENNERS, CAMBRIDGE designed by J. M. MACGREGOR and D. WYN ROBERTS



First and second floor plans



Ground floor and basement plans [Scale: $\frac{1}{32}$ " = 1'0"]

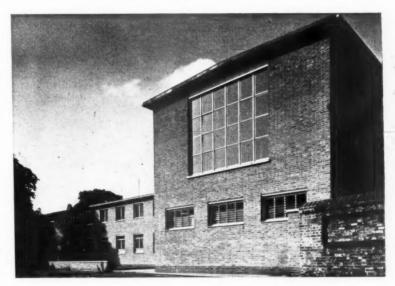


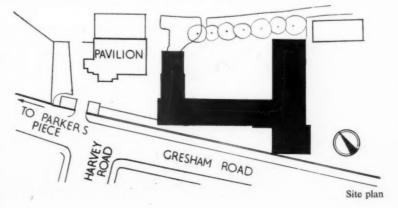
Above, main entrance on the south-west facade. Right, the boxing room, with bicycle store under, from the south.

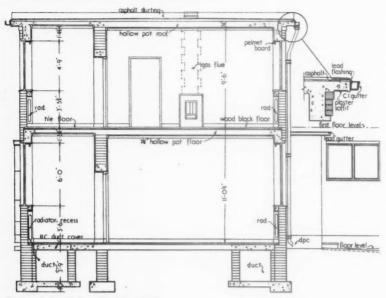
PLAN.—The ecological functions of the building, which are accommodated in the north-west wing, require a professor's room, reader's room, and a secretary. The health centre also acts as a head-quarters for field workers, who carry out studies outside Cambridge. The preventative health service, on the ground floor in the centre wing of the building, allows for periodic inspections by three health officers and X-rays for students. The gymnasium and boxing rooms are in the south-east wing where no one will be disturbed by noise. The north-east corner of the building was only allowed to have one storey as the right of light was held by the existing sports pavilion.

CONSTRUCTION,—It was stipulated that as little steel as possible should be used, and its use has been avoided except for reinforcement. The load bearing brick walls are 18 in. thick up to first floor level in the gymnasium block and 13½ in. above. Elsewhere, walls are 13½ in. thick throughout. Roofs and the first floor are 9-in. reinforced concrete and at junctions with exterior walls continuous RC beams are formed. Partitions are hollow tile.

FINISHES,—Exterior walls are faced with red Berkshire bricks throughout and copings are of







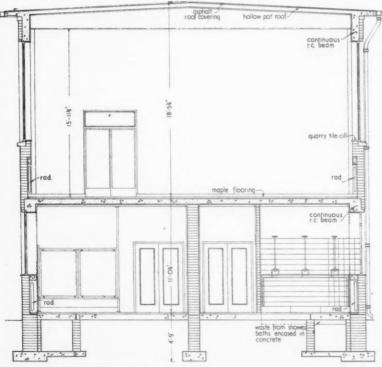
Section A-A [Scales : $\frac{1}{8}$ " and $\frac{1}{8}$ " = 1' 0']

Portland stone. The main entrance canopy is lead covered and above the doors there is lettering incised in mahogany and coloured blue and gold. Floors are finished with Hornton stone in the entrance hall, woodblocks in offices, cork tiles in corridors and landings, beech strip in the boxing room and maple in the gymnasium. Staircases have Hornton stone treads and a dark red tiled dado. Windows are purpose-made steel in steel sub-frames and with steel sills. Laboratory benches are of mahogany. The contract price was £44,625.

The general contractors were Coulson & Son, Ltd. For sub-contractors see page 630.

HEALTH CENTRE

designed by J. M. MACGREGOR and D. WYN ROBERTS



Section B-B [Scale: $\frac{1}{3}$ " = 1' 0"]

Above, right, first floor landing, stair-case and hall below. Extreme right, Professor's room on the first floor. Right, looking west down Gresham Road towards the main entrance.







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RE GOR RTS FURNITURE AND FITTINGS: 30

RECEPTION COUNTER: TRAVEL AGENCY IN LONDON, W.1

Dennis Lennon, architect

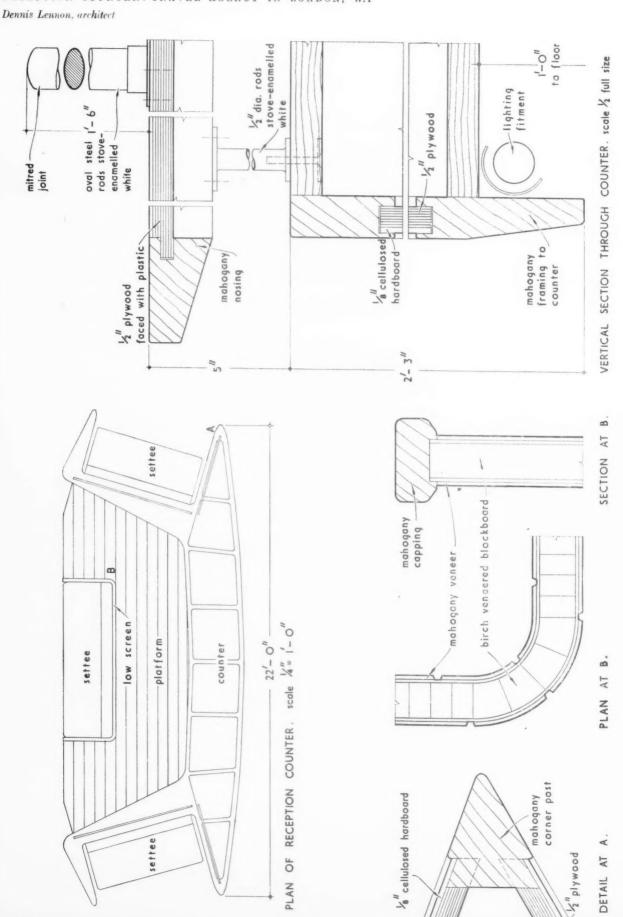
WORKING DETAIL



The low screens around the seats are veneered in mahogany, out away in vertical grooves to reveal a birch veneer beneath.

WORKING DETAIL

RECEPTION COUNTER: TRAVEL AGENCY IN LONDON, W.1



COPPER-FACED WALL: EXTENSIONS TO UNIVERSITY OF DURHAM

J. S. Allen, architect; Oscar Faber and Partners, consulting engineers

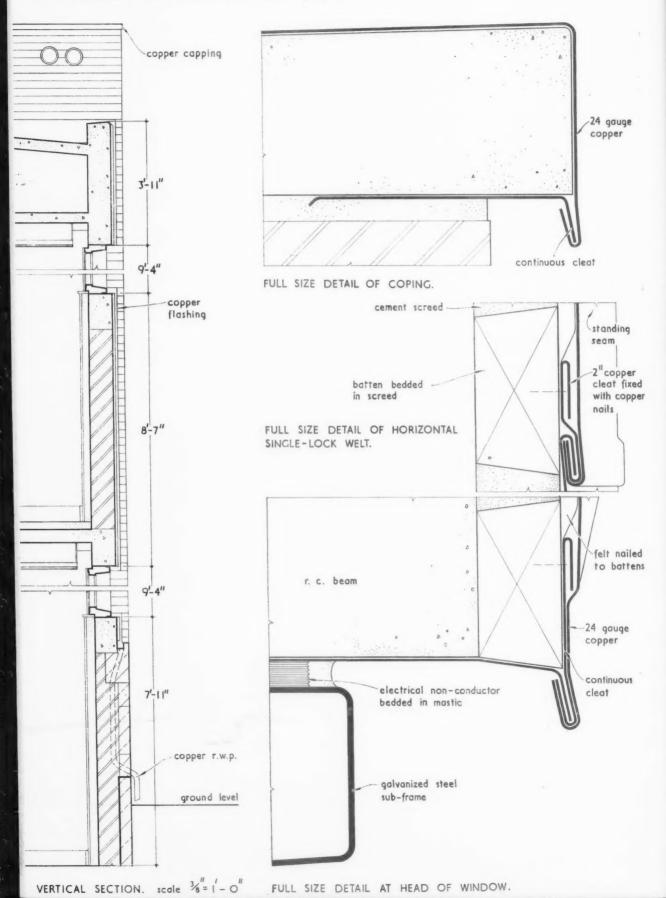


A copper-lined gutter behind the top of the plinth collects any rain water from the sheeting.

WORKING DETAIL

COPPER-FACED WALL: EXTENSIONS TO UNIVERSITY OF DURHAM

J. S. Allen, architect; Oscar Faber and Partners, consulting engineers





Within dwellin living Autho

HOUSES

in ASHLEY CLOSE, WELWYN GARDEN CITY, HERTS.

designed by RICHARD J. NICHOL

Within a residential area largely built up with houses of traditional appearance, the two single-storey dwellings illustrated below and on the following five pages, have been designed to provide contemporary living accommodation while adhering to traditional methods of construction. The necessary Local Authority approval was gained only after some initial difficulty.

The two houses seen from the south.





Left, living room of house 2 from the garden.

SITE.—The two sites, which have a combined area of half an acre, were virgin woodland, the trees being mainly mature silver birch with some hornbeam shrubs and immature oaks. The ground rises gently to the north and the houses are sited to give almost due south aspect to living areas. The site is at such a height that mains water pressure is very low, and this factor was instrumental in the choice of single-storey structures. The site contours dictated the changes in level within the houses and the clerestory lighting to the centrally-placed halls. The narrow frontages to the wedge-shaped sites necessitated placing the houses some way back from the road to gain the maximum south-facing elevations. A single central driveway was most economi-

Elevation of sun-midsummer Water level in roof tank Elevation of sun-midwinter. Terracing in top soil stripped from house site Diagrammatic sec-£3815 392 0 Site boundary tion through site on Original ground line. north-south axis ROAD HOUSE NO HOUSE NO 2 TOOL SHED OPEN BOARDED HOUSE

Site plan

cal and garages.

PLAN.living and placed or bathrooms higher lev living area

cal and governed the central position of the garages.

area

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te is very oice ours and alls. sites rom evamiPLAN.—As the entire south frontages are used for living and working areas the main entrances are placed on the side elevations. Bedrooms and bathrooms are detached from living areas on a higher level. The slope of the ceilings over the living areas allows maximum penetration of winter HOUSES

in WELWYN GARDEN CITY, HERTS. designed by RICHARD J. NICHOL

Below, the large sliding windows on the south side of the living room. Bottom, the living room looking towards the dining space.







sunshine and the overhang of the roof cuts off direct summer sunlight, as well as providing shelter for a pram in wet weather. The area of each house, inside external walls, is 1,500 sq. ft.

HOUSES

at WELWYN GARDEN CITY, HERTS. designed by RICHARD J. NICHOL



Plan of house 2 [Scale: #" = 1'0"]

Detail s

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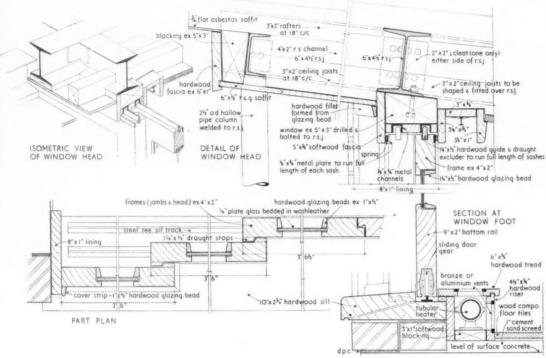
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Cross

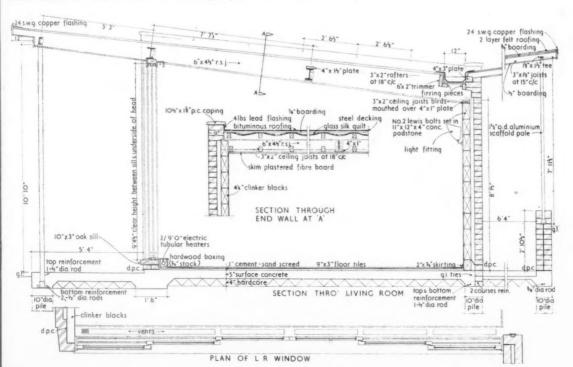
CONSTRUCTION.—Owing to the clay subsoil 10-in. diameter short-bore pile foundations were used. External walls are of 11-in. cavity construction, the outer skin being brickwork and the inner skin clinker blocks. Partitions are of clinker blocks and there are some internal walls of buff bricks. Over living areas roof joists and rafters are carried on 6-in. by 4½-in. R.S.J.'s supported on

 $2\frac{1}{2}$ -in. pipe columns. Floors are of solid 5-in. concrete throughout.

FINISHES.—Roofs are covered with green mineral surfaced felt on \(\begin{align*} \)-in. boarding, with glass silk quilt draped over the rafters. South walls of living rooms are completely glazed and sliding screens allow for a clear opening of 13 ft. 6 in. Elsewhere, windows are



Detail section of window head and sill and part plan (\$ ale: 1\frac{1}{2}" and \frac{3}{2}" = 1'0"



Cross section through living room and plan of south wall

[Scale : 1' 0']



Above, the terrace outside house 1. Below, view from the dining space in house 2.

standard aluminium alloy. Internal walls, where not of fair-faced brick, are plastered and finished with emulsion paint or wallpaper. Floors are covered with 12-in. square cork tiles throughout. Ceilings are of plaster board, plastered and painted.

SERVICES.—A solid fuel boiler provides hot water and serves one radiator and a bathroom towel rail. Living rooms have convector fires with external air supply from ducts under the floors and with warm air vents to dining spaces. There are 18-ft, electric tubular heaters under sills to living room sliding windows. It is intended to instal a forced warm air heating system in the near future.

The contract price was £2,645 for each house, plus £200 for the flooring contract. The cost was 2s. 8d. per foot cube and 38s. per foot square.

The general contractors were Yeomans & Partners,

The general contractors were Yeomans & Partners Ltd. For sub-contractors, see page 630.

HOUSES

in WELWYN GARDEN CITY, HERTS, designed by RICHARD J. NICHOL



TECHNICAL SECTION

Architects and builders, who spend much of their time and energy in dealing with controls, licences, regulations and numerous ministries rightly expect that any central advice should be clear and definite and, if possible, backed up by clear reasons for any restrictive recommendations.

The new series of Economy Memoranda issued by MOW may defeat its own object if it continues as it has started. So far four memoranda have been issued. The first two dealt with economy in cement and made some useful and sensible suggestions; the third deals with bricks and the fourth with timber. The two main faults of these first four advisory notes are that they tend to be contradictory and they leave the reader uncertain as to whether or not the recommendations will be used by various authorities as an additional obstruction to building, i.e., will they become, in effect, mandatory?

The principal contradiction is that, whereas the first two memoranda stress economy in cement, the third and fourth suggest a number of places where cement products may be used in order to economize in bricks or timber. A clear direction on the relative importance of the various materials is needed. Moreover, a number of the recommendations would involve additional costs. Where licence sums are strictly limited, will larger expenditure be authorized if scarce materials are saved? It is difficult to anticipate what housing authorities will do.

It is to be hoped that before any more of these memoranda are issued an attempt will be made to co-ordinate and clarify those already issued.

This week's survey

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13 MATERIALS: TIMBER post-war trends

The number preceding the week s special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant Information Centre items. Further and earlier information can be found by referring to the index published free each year.

This survey of post-war developments in the use of timber, by Arthur Jones, Editor of the Timber and Plywood Annual, deals mainly with efforts that have been made to economize in softwood and, in particular, in the use of long lengths. Later articles will deal in detail with some of the points Mr. Jones raises in this general survey.

Although timber is a primary building material, restrictions on its use in the past 13 years have meant that few architects under the age of 35 can have a full appreciation of the true value of wood in building. At present the architect has to limit himself in housing to using a maximum of 1.6 standards of softwood per 1,000 sq. ft. of floor area, whereas his senior colleague was accustomed to use double this amount in pre-war house-building, for he was concerned primarily with costs and did not have to contend with any artificial restrictions on the use of timber.

POST-WAR SHORTAGES

Users of softwood in post-war Britain have been faced with two main problems: a shortage of softwood, due to outside influences; and a shortage in particular of long lengths. The general shortage has been reflected in the strict



Left, Fig. 1, work-men erecting TDA domestic roof (see details below, Fig. 2). The truss system can be seen, and the absence of large numbers of long rafters is evident.

licensing regulations government which restrict the use of softwood to essential purposes; nevertheless, it should be remembered that there is, in fact, no world shortage of this material. The post-war shortage in Britain has been due to several causes: in 1945 and 1946 the demand for timber actually exceeded the ability of the countries that supply it to produce enough softwood, particularly as many sawmills had been lost in the war: then, for a while, there was a shortage of shipping space which prevented our full timber requirements being imported; now there is a shortage of foreign currency which prevents our buying all the timber we need, although the wood is there to buy. There seems little likelihood of this last problem being solved; the only

DETAILS OF

TRUSSED

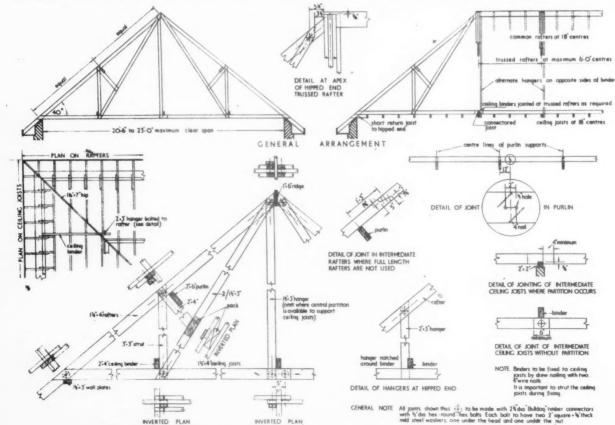
RAFTER

consolation we have is the assurance that softwood will be no more stringently controlled in the coming 18 months than it has been during the last year.

The shortage of long lengths of softwood was already becoming noticeable before the war. We must now recognize that the tall trees from which much timber used to be obtained cannot be replaced overnight. growth timber is providing an everlarger proportion of the softwood we use, and this is a feature which will become even more prominent in the future. The giants of the forest have been cut down, and the architect who specifies long lengths which could have been ordered safely 30 years ago will either have to seek far and wide for the timber he wants, and, having found it, pay a very high price, or be content with the shorter lengths which represent the average parcel coming today from the supply countries.

POST-WAR RESEARCH

Research in the use of softwood has, since the war, been confined mainly to overcoming these two obstacles. Much useful work has been done by the Forest Products Research Laboratory and by TDA. On many schemes the two bodies have worked together, and much credit must go to TDA for the initiative shown in starting many experiments which have since helped the architect. The basis of much of the research has been to treat timber, as far as possible, as an engineering material, while recognizing the limits within which this is practicable. There is no doubt, for instance, that many architects before the war paid little attention to the size of timber really needed for many constructional tasks, being content to specify sizes which erred generously on the side of safety. This meant a waste of timber which no architect can afford today. search shows that safety can be provided in many cases with far smaller timbers than would have been used before the war. This means that, by taking the load-bearing factor into account, a lower quality timber can



SCALES GENERAL ARRANGEMENT % - I foot

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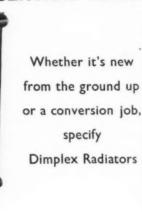


DIFFERENT **PROBLEMS** BUT-

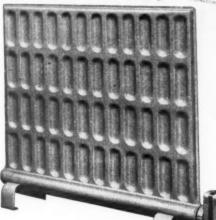
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often be used with safety, thus leading to some saving in cost too.

STRESS-GRADING

Consideration of structural strength naturally leads to the grading of timber for stress properties. Stress grading is undoubtedly a practice that will become more common in the future, although there is already a limited demand for it today. By means of stress-grading, timbers can be sorted into various grades for structural work, according to the strength required to withstand certain loads and stresses. This grading can be done fairly easily by inspecting each piece of wood for knots, slope of grain, split, wane, shakes, etc. (See Figs. 3 and 4.) At the moment few architects in this country specify that stress-graded timber be supplied by the merchant, nor do many ask for grading to be carried out on the site, although in North America it is quite a common practice. A certain amount of training and responsibility is, of course, required, but when the architect and the builder reach the stage where they place value on stress-grading, the timber trade will be ready to meet the demand.

For information on grading rules the BSI specifications* can be consulted. It shows, for example, stress grades for joists and rafters ranging from 1,200 lb./ sq. in. for Douglas fir to 800 lb./sq. in. for Baltic redwood. Knots naturally affect the strength of a beam, but this effect varies greatly with the position of the knot, so that it is possible for a 6-in. by 2-in. joist of European redwood to have a 1-in. diameter knot and remain in the 800-lb. grade, *i.e.*, the grade normally used for rafters, joists and ourlins.

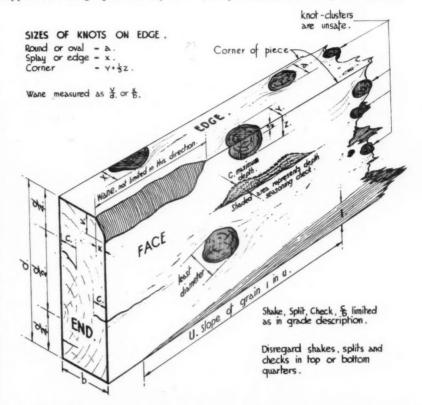
ROOF CONSTRUCTION

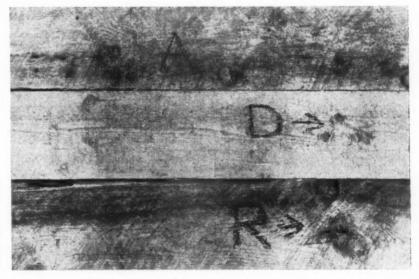
There have been advances in recent years affecting the use of timber in roof construction. The TDA has produced a house roof in which the trusses are of a form of construction which avoids the need for load-bearing partitions on the first floor, saves timber, reduces the demand for long lengths, encourages prefabrication and modern assembly methods, and is quick to erect. These roofs are being used for houses all over the country (Figs. 1 and 2), their value having been tested both theoretically by the Forest Products Research Laboratory, and practically by builders of local authority and private houses. Designs are available for various spans and pitches, and both for gabled and hipped roofs.

The shortage of long lengths of softwood has led to much attention being paid to the use of shorter lengths, particularly for roof construction, without any loss of strength. Gable roofs need a large proportion of long lengths, as

the rafters are all the same length, and, although they are simple to construct, there is no doubt that they are wasteful in timber. Publicity has, therefore, been given to the reduction in the demand for long lengths which can be achieved by using the hipped type of roof. For the hipped roof design produced by TDA three-quarters of the rafters need not be longer than 10 ft., every fourth or fifth pair of rafters being framed and braced to the ceiling in the form of a truss, by means of timber connectors.

The members of roofs shown in the TDA design sheets have been very carefully calculated and they should never

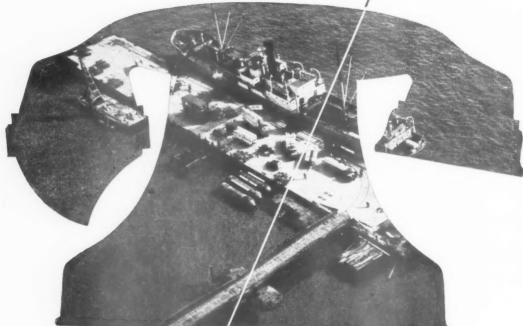




Top, Fig. 3, diagram showing the defects for which the grader looks when stress-grading timber, and how they are measured. Above, Fig. 4, three pieces of Douglas fir submitted for stress-grading. The top piece (A) has been placed in the 1,200 lb. per sq. in. grade; the middle piece (D), first placed aside as doubtful because of the knot cluster, was later rejected; the bottom piece (R) was immediately rejected because of the knots and wane With practise, a grader can work extremely quickly and on the top left-hand side. accurately.

* BS 940: Part 1: 1944 (BS1, 2s. 6d.) and BS 940: Part 2: 1942 (BS1, 4s.).

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therefore be altered to meet some special requirement, without first consulting the Association on the proposed amendments.

SUSPENDED FLOORS

There has been little change in firstfloor construction apart from a general reduction in the sizes of joists and other members, the MOW having approved and, in fact, recommended many economies in the structural use of timber: for example, the adoption of a working stress of 800 lb./sq. in. as the basis for rafters, joists and purlins (timber for these members can now be drawn from parcels of unsorted and 5th quality European redwood and whitewood, or from the "merchantable" grades of Douglas fir, Western hemlock and sitka spruce). However, research is now taking place into new types of construction for first floors, including a technique of prestressed timber. (These will be dealt with in a later article.)

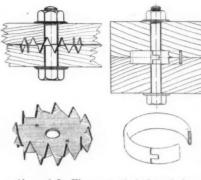
Recommendations for ground floors now require a concrete slab, except where the site slopes so much that the cost would be prohibitive. However, some people are so attached to wooden floors that TDA has devised a compromise, consisting of timber boards, resting on bearers, which, in turn, rest on special bricks. Under present regulations, the bearers must be of hardwood, but the extra courses of brickwork normally associated with suspended ground floors are avoided.

WORKING STRESSES

Probably the most significant advance in the economical use of timber in building has been the assembling of scientific data on working stresses for joists, rafters, purlins and floor boards. Research carried out by various bodies, but especially the Forest Products Research Laboratory, TDA and BRS, has shown that sizes can safely be reduced if certain principles are observed. Thus, the use of interlocking tiles, and hence a lower roof pitch and fewer battens, can lead to the saving of a considerable quantity of timber, while still keeping within the bounds of reasonable safe loading. The MOW leaflet on economy in the use of timber in building* sets out in detail the result of this research and includes tables of maximum safe spans.

LARGE BUILDINGS

The shortage of steel has encouraged the development of timber roofs for large industrial buildings. Several standard designs for large-span timber roofs have been devised by TDA, including trusses for clear spans up to 57 ft. 4 in., with and without suspended ceilings, and knee-braced trusses and columns for large-span single-storey buildings.



Above, left, Fig. 5, toothed-plate timber connector (double-sided); right, Fig. 6, split-ring timber connector. Right, Fig. 7, building up a truss with timber connectors.

Such work involves the fairly wide use of timber connectors. (See Figs. 5, 6 and 7.) Of these the toothed-plate connector (made single- and doublesided) is most widely used in this The split-ring connector, country. although used a great deal in America, is not so widely used here. The use of framing anchors is also becoming increasingly popular. Timber connectors not only make possible the safe use of short lengths of timber, but the resulting member has greater strength than uncut timber of equal length. Care has to be taken in the use of connectors that correct sizes are used and that there is adequate protection against rust.

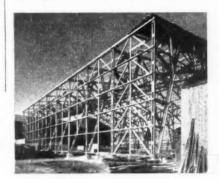
LAMINATION

Lamination has attracted the interest of many architects. In this country

Right, Fig. 8, timber storage shed at Shoreham. Large-span timber trusses, on 3-pin arch system, held together by timber connectors. Below, Fig. 9, close-up of joint at apex of arches.



very large arches built up by the laminating process are exceptional and we have no examples as impressive as those to be seen in North America, but there is little doubt that a considerable future exists for laminated arches in building work. Cost is the greatest deterrent to their wider use at the moment, but research continues to be made into the subject with the aim of making the laminated span a commercial proposition. Already it has been found possible to use the lamination technique in timber on a mass-produc-





^{*} Use of Timber in All Building Work. MOW Economy Memoranda No. 4. (HMSO, 1952, 6d.)

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technique.

The five huge laminated arches of the Waterloo entrance to the South Bank exhibition (see Fig. 10) showed what can be done with timber when little attention is paid to cost. A commercial application of the technique is the experimental glasshouse, 100 ft. long with a clear span of 32 ft., shown in Fig. 11. The arches are at 12-ft. 5-in. centres. Great strength is possible with this method of construction, and the clear spans and the beauty of the arch profile make this system of construction highly suitable for many buildings, including churches. Where cost is not an all-important consideration, architects might well consider this technique, although few firms yet. specialize in it.

NEW HARDWOODS

The difficulty of obtaining licences for softwood is leading to the use, as substitutes, of the new commercial light hardwoods. Many of these are suitable for structural work, and there is little doubt that some of them will remain popular even when (and if) softwood again becomes freely available. The list of the hardwoods which are of value to the architect will grow with experience, but already it is formidably long, including such names as ekki, opepe, iroko, afara, obeche, tali, landa, agba, olon, and a host of others. It is not possible to deal with their value in this article, but they enable the architect to carry out work which would otherwise be impossible under the present restrictions, provided the client has the extra money to spare for these somewhat costly substitutes. However, the cost of many of the hardwoods freely available on the market today is much nearer the cost of softwood than the more traditional hardwoods and the extra cost can frequently be justified.

SEASONING

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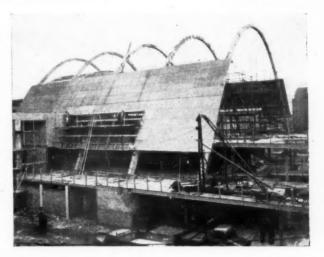
With imports so closely related to softwood consumption, it is natural that timber is not long in the yards of timber importers and merchants. The

RECENT INFORMATION CENTRE ITEMS ON TIMBER

New timbers		13.98:	16.10.52
C 1' C 1		13.97:	25.9.52
Wood screws (BSS) .		13.96:	25.9.52
Timber drying		13.95:	25.9.52
		13.94:	25.9.52
Names of timbers		13.93:	4.9.52
Dry rot: new treatment .		13.92:	4.9.52
Industrial timber trusses .		18.103:	4.9.52
Floor boards		13.91:	17.7.52
Structural softwood:			
strength computation	of	13.90:	10.7.52
Hardwoods		13.89:	10.7.52
FPRL Research, 1950		13.88:	10.7.52
Light timber roof trusses		19.153:	10.7.52
Painting woodwork		13.87:	3.7.52
Wooden doors		19.149:	29.5.52
Natural finishes for woo	d-		
work		13.86:	22.5.52
Suspended timber floors		19.147:	3.4.52

result is that long periods of air-drying in merchants' sheds is now the exception rather than the rule, and the architect must, therefore, not only ensure that the timber to be used is adequately dry, but also make certain that it is properly stored on the site. ARTHUR E. JONES

Right, Fig. 10, Waterloo Station Gate, South Bank, under construction. Application of lamination without great consideration of cost. Below, Fig. 11, economic application of lamination; experimental glasshouse at Bagfordbury. The laminates are 33 in. wide, 3 in. thick, and were scarf-jointed before assembly.





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THE INDUSTRY

From the Industry this week. Brian Grant reports on the Public Works Exhibition, a booklet on rust prevention and a new 13-amp. plug and socket

RUST PREVENTION

The British Iron and Steel Research Association has just published The Fight Against Rust, in which is discussed the work of the Corrosion Committee, founded in 1928 by the Iron and Steel Institute. The regular painting of all forms of steel is nowadays taken so much for granted that the average person never thinks of the enormous annual cost of corrosion. In America the figure is estimated at somealthough the figure for Great Britain is only about one tenth of this amount, it still remains a pretty formidable sum—equivalent, if you like figures, to 50 million

gallons of paint, enough to keep 16,000 painters busy the whole year round.

The booklet starts with several "case histories" which are interesting in that they show that design can often do much to minimize correction. minimize corrosion. Among the examples quoted are the railings outside Westminster Abbey, where the horizontals (2½ by ½ in.) are halved together and bolted with a fish plate beneath the joint. Hence there lodgment for water and the surfaces cannot be painted, the result being that corrosion has burst the \{\frac{1}{2}\-\)-in. bolts holding the joint. Rust, by the way, has roughly four times the volume of the steel from which it is formed, and this amount of expansion is enough to break bolts or rivets, and to crack concrete cladding.
Contrasted with those of the Abbey are the railings of the new Waterloo Bridge, where the horizontals are simple tubes where the horizontals are simple tubes welded to the uprights, thus giving little opportunity for moisture or rust to lodge, and simple to paint all over. Another example shows the danger of using copper and galvanized steel pipe in the same water system, if water supplies are unsuitable. Small particles of copper may be dissolved and, if they are then deposited on the zinc lining of the galvanized steel, they will form a highly dangerous corrosion cell.

So far as atmospheric corrosion is concerned, humidity seems to be of less im-portance than the smoke and salts found in manufacturing towns or by the sea. With a relative humidity of less than 70 per cent, corrosion is virtually negligible, but in places like Sheffield it is high, two and a half times as high, for instance, as in a semi-industrial area like Woolwich, and

five times as high as in rural areas. truly rust-resisting steels, like 18/8 chrome nickel, are virtually incorrodible, but are far too expensive for structural work. However, small additions of chromium and copper can increase corrosion resistance three times or more, because apparently a more compact and impermeable type of

rust is produced.

With regard to surface finishes the booklet contains references to a priming paint, consisting of a mixture of red lead, zinc oxide and asbestine in a linseed oil medium, which may shortly become the subject of a British Standard. For metallic coatings, British Standard. For metallic coatings, aluminium is regarded as roughly equivalent to zinc, but it has the disadvantage that it can be applied only by spray to large and heavy steel articles. The method used for applying a galvanizing coat is regarded as of less importance than the final weight of the coat per sq. ft. of surface.

Finally, the booklet contains an outline of the fundamental research now being carried

out at various centres throughout the country. For anyone who wants to be able to take an intelligent interest in what is going on, this booklet provides an excellent Copies from BISRA, 11, Park

Lane, London, W.1.

THE PUBLIC WORKS SHOW

Anyone who visited the Public Works and Municipal Services Exhibition should have been considerably impressed by the variety of plant shown, from large-scale quarry equipment to picks and shovels. A good deal of the plant was of interest mainly to the larger contractor, but the amount of mechanization now applied to local authority work, such as rubbish collection and road surfacing, gives one a good idea where some of the money one pays in rates goes to, though one gathered from the speeches at the opening ceremony that not all authorities are allowed to buy all the equipment they would like.

One of the most elaborate pieces of equipment on show (though too large to be really properly displayed) was the mobile quarry plant made by Goodwin Barsby of Leicester. The various units are shown in the photograph below, the whole assembly being capable of dealing with material direct from the quarry face, crushing and screening it to the required sizes, and delivering it to stock piles or by elevator into an overhead storage unit for gravity discharge into lorries. Equally impressive were some of the mixing and heating plants for road surfacing materials and for the automatic batching of concrete mixers. Some of the latter are "push-button" controlled with multiple weighing scales and coloured indicator lights, like a combination of Paddington signal box

and a cinema organ.

At the other end of the scale one was reminded that local authorities also have to do such odds and ends of iobs as trimming hedges and the grass around gravestones. Even these processes have now been electrified. The Tarpen Engineering Co. of Ixworth Place, S.W.3, produces the "Hedgemaster"



Above, "MEM" 13-amp. plug and shuttered socket outlet, complying with BS 1363. Below, clipping a hedge with the "Hedge-master."



trimmer in all normal voltages, or with portable petrol generators for use where no mains are within reach. A handy little device which gadget-minded readers may care to buy for themselves—much less trouble than snipping with those blunt shears you forgot to clean and grease when you put them away last autumn.

3-kW. SOCKETS

Ring main wiring with 13-amp, sockets and fused plugs—a method introduced soon after the war-has now become a fairly well accepted practice for new work, and most manufacturers have been producing the appropriate fittings for some time. The appropriate intings to some and photograph, top right, shows a plug and socket in the new "MEM" range (to BS 1363), which is available in brown or ivory and both for surface and flush mounting. Prices are 40s. per dozen in brown; 42s. 4d. in ivory (both plus 15 per cent. PT).

Socket bases are in non-tracking porce lain, and the plugs are easily wired, all cable leads being cut to the same length. (Midland Electric Manufacturing Co. Ltd., Reddings Lane, Tyseley, Birmingham, 11.)

BRIAN GRANT



Mobile quarry plant made by Goodwin Barsby of Leicester

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AJ 20.11.52

Iceland Tourist Information Bureau at 6b, Princes Arcade, Piccadilly, London, W.I.
(Pages 610-611.) Architect: James Cubitt
& Partners. Assistant-in-charge: G. V.
Richards, A.R.I.B.A. General contractors:
Holland & Hannen and Cubits Ltd. Subcontractors: photographic transparency The Autotype Co. Ltd.; wall showcase, Maytransparency. contractors: fair Displays, cane furniture, Dryad Cane Furniture; aircraft model of Douglas "Skymaster," Z. A. Datkiewicz.

Offices at 8, St. James' Street, Derby, for the Leeds and Holbeck Building Society. (Page 612.) Architect: Samuel Morrison, A.R.I.B.A. General contractor: Kirkland (Derby) Ltd. Sub-contractors: artificial stone, Scandolo Ltd.; suspended ceilings, W. Paceto & Samuel Agericae Working Proctor & Sons; patent flooring, Korkoid Decorative Floors Ltd.; central heating, F. & P. Davison; electric wiring, N. R. Kirk & Co. Ltd.; electric light fixtures, Merchant Adventurers Ltd., Troughton & Young Ltd.; door furniture, Wing & Webb Ltd.; signs, Oldham Sign Service Ltd.

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Department of Human Ecology and University Health Service for the University of Cambridge, at Fenners, Cambridge. (Pages 613-616.) Architects: J. M. Macgregor, M.A., F.R.LB.A., D. Wyn Roberts, M.A., A.R.LB.A. General contractors: Coulson & Son Ltd. Quantity surveyor: Davis, Belfield & Everest. Sub-contractors: Asphalt. Cambridge Asphalte Co. Ltd.; reinforced concrete and fireproof construction, Kleine Floor Co. Ltd.; bricks, S. & E. Collier Ltd.; stone, Bath & Portland Stone Firms Ltd.; wood-block flooring, Horsley Smith & Co. (Hayes) Ltd.; central heating, G. N. Haden & Sons Ltd.; gas fixtures, The Eastern Gas Board; electric wiring, The Cambridge Electric Wiring & Repair Co.; electric light fix-

tures, Troughton & Young Ltd.; sanitary fittings, Shanks & Co. Ltd.; stairtreads, Hornton Stone Co.; door furniture, Dryad Metalworks Ltd.; casements, Crittall Manufacturing Co. Ltd.; folding gates, Bostwick Gate & Shutter Co. Ltd.; plaster, G. Cook & Sons Ltd.; metalwork, R. Dent & Son; tiling, Carter & Co. (London) Ltd.; furniture, Russell Furnishings Ltd.; cloakroom fittings, Cloakroom Equipment Co. Ltd.; signs, David Kindersley.

Houses in Ashley Close, Welwyn Garden City, Herts. (Pages 617-622.) Architect; Richard J. Nichol, A.R.I.B.A. General con-tractors: Yeomans & Partners Ltd. Subcontractors: clinker concrete blocks, Broad & Co. Ltd.; structural steel (fabrication) Dawnays Ltd. (erection) Yeomans & Partners Dawnays Ltd., (erection) Yeomans & Partners Ltd.; roofing felt, D. Anderson & Son Ltd.; cork tile flooring, Mundet Cork Products Ltd.; living room fire, Camelon Iron Co. Ltd.; gasfittings, Eastern Gas Board; boilers, Ideal Boilers & Radiators Ltd.; electric wining, Eastern Electricity Board; electric light fixtures, Troughton & Young Ltd., Finmar Ltd., Allom Bros. (cross beam fittings); electric heating, Unity Heaters Ltd.; door furniture, James Gibbons Ltd.; aluminium casements, Williams & Williams Ltd.; join-ery, Fuller Hills Ltd.; wallpapers, John Line & Sons, Ltd., Arthur Sanderson & Sons Ltd.; furniture, Dunns of Bromley, Finmar Ltd., Heal & Sons Ltd.

Correction

In our issue for October 30 we said that the general contractors for the shops for Messrs. Wyndhams, Worley (Properties) Ltd., G. Hoare, Murrays and Reynolds, Arundel Street, Portsmouth, were Messrs. John Hunt, Ltd. This was incorrect. The contractors were R. J. Winnicott, Ltd.



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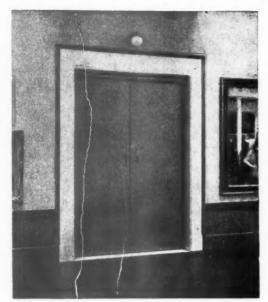
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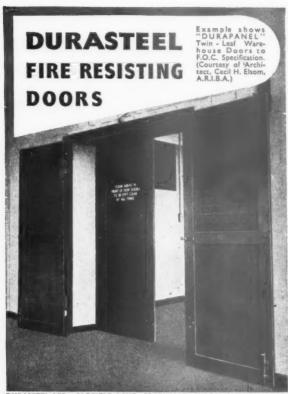
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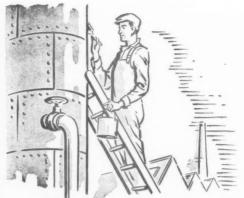
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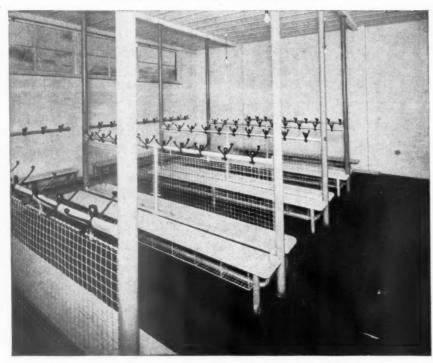
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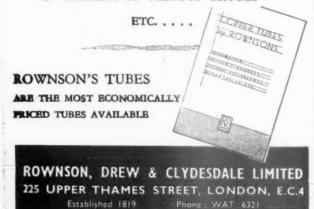
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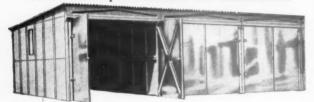
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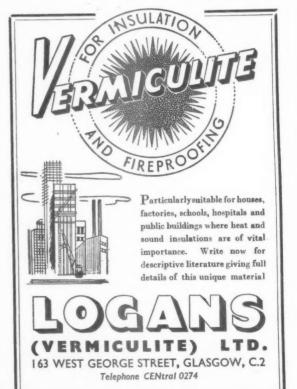
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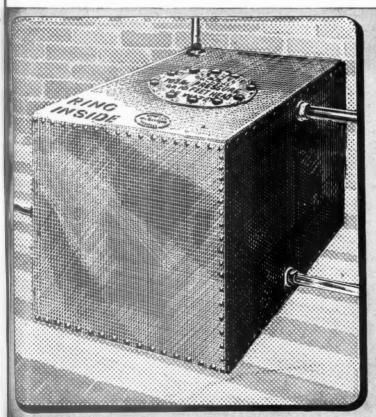
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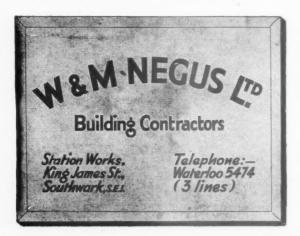
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JOHN DUNLOP,

Town Clerk.

JOHN DUNLOP, Town Clerk.

City Hall, Belfast. 5th November, 1952.

5th November, 1952.

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DEPARTMENT.
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The appointment will be subject to the scheme of Conditions of Service for Local Authorities, and to the provisions of the Local Government Superannuation Act, 1937, and will be terminated by one month's notice on either side. The successful candidate will be required to pass a medical examination.

THE COUNCIL WILL GIVE ALL POSSIBLE ASSISTANCE TOWARDS THE PROVISION OF HOUSING ACCOMMODATION FOR THE SUCCESSFUL APPLICANT.

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H. O. HAWKINS,

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Civic Centre, to be returned by 29th November,
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Applications, suitably endorsed, giving details of experience and qualifications, together with copies of three recent testimonials, must be received by the undersigned not later than Saturday, 29th November, 1952.

F. W. ROBERTS.

Town Clerk.

F. W. ROBERTS. Clerk

Town Hall, Nelson. 11th November, 1952.

BOROUGH OF ILFORD.

APPOINTMENT OF ARCHITECTURAL
ASSISIANT (GRADE VII).

Applications are invited for the appointment of an Architectural Assistant on the permanent staff of the Borough Engineer's Department. Applicants should be Associate Members of the R.I.B.A. and should possess good general experience in a Municipal office. Salary in accordance with Grade A.P.T., VII, viz., 2710, rising to 2785 p.a., plus London weighting.

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BOROUGH ENGINEER AND SURVEYOR AND PLANNING OFFICER'S DEPARTMENT.
APPOINTMENT OF SENIOR PLANNING ASSISTANT.
Applications are invited for the appointment of a Senior Planning Assistant, in accordance with the A.P.T., Grade VII, commencing salary £710 per annum. A car allowance will be paid in accordance with the prevailing scheme for essential users. The appointment will be subject to the Scheme of Conditions for A.P.T.C. Services, to the General Conditions for A.P.T.C. Services, to the General Conditions of Service within the Corporation as varied from time to time, and to the provisions of the Local Government Superannuation Acts.

The successful applicant will be required to pass a medical examination, and the appointment will be subject to one month's notice on either side. Candidates must have had extensive experience in Town Planning and must be Corporate Members of the Town Planning Institute or hold an equivalent qualification.

Applications, stating age, present and previous appointments, experience, qualifications, etc., together with the names of three referees, should be addressed to the Borough Engineer and Surveyor and Planning Officer, Town Hall, Barnsley, to reach him not later than Monday, 8th December, 1952.

Canyassing will disqualify, and applicants

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A. E. GILFILLAN,

A. E. GILFILLAN,

Town Hall, Barnsley. November, 1952.

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Full details of past and present appointments should be given.

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Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, not later than the 29th November, 1952.

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Applications, stating age, qualifications and experience, along with copies of three recent testimonials, should be lodged with the Town Clerk, City Chambers, Dundee, on or before Saturday, 6th December, 1952.

ROBERT LYLE, Town Clerk.

City Chambers, Dundee. 12th November, 1952.

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APPOINTMENT OF PERMANENT ARCHITECTURAL ASSISTANT, BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the permanent position of Architectural Assistant in the A.P.T. Division, Grade VI (&670-£735 per annum). Applicants should hold suitable qualifications and have had some experience in housing.

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

Applications, stating age, qualifications, experience, etc., together with the names and addresses of two persons to whom reference may be made, should be sent to the undersigned in envelopes endorsed "Architectural Assistant," so as to be received not later than Saturday, 6th December, 1952.

Canvassing disqualifies, and applicants must state whether to their knowledge they are related to any member or senior official of the Council.

C. A. CROSS,
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Town Hall, Prestwich, Lancashire.

Town Hall, Prestwich, Lancashire. 21st November, 1952.

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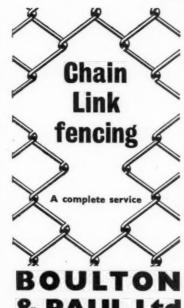
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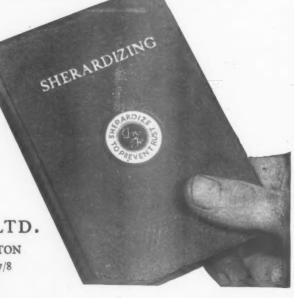
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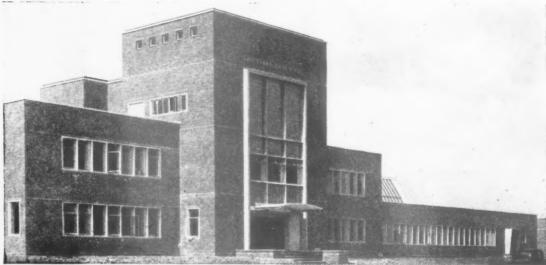
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