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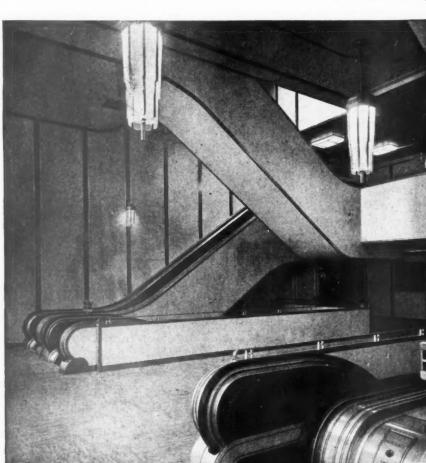
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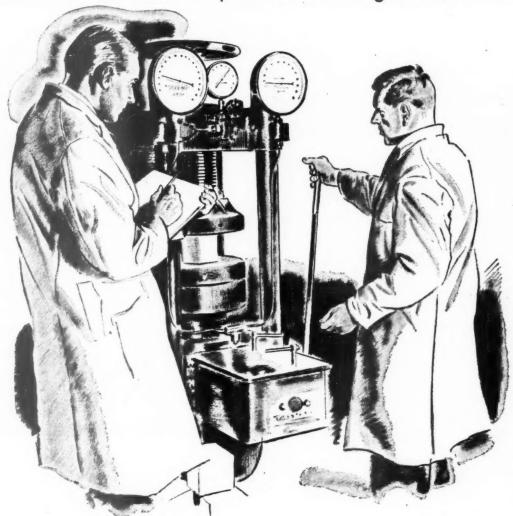
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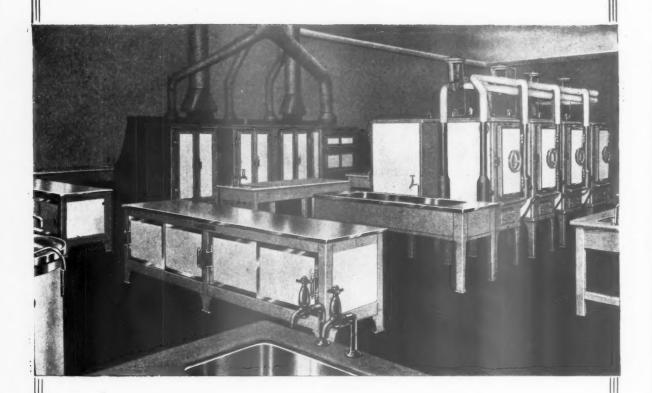
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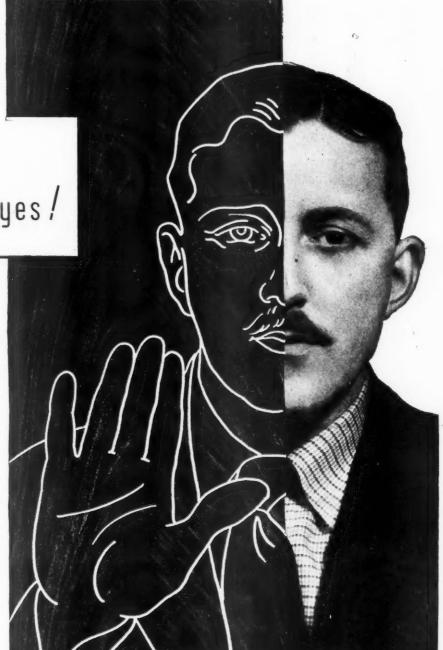
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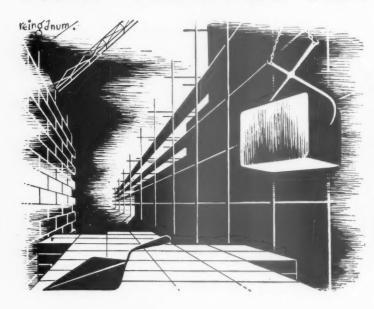
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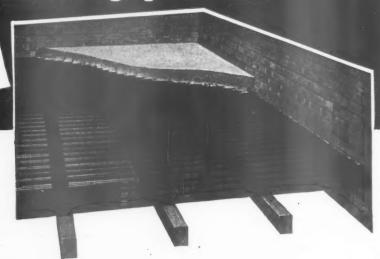
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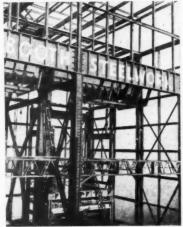
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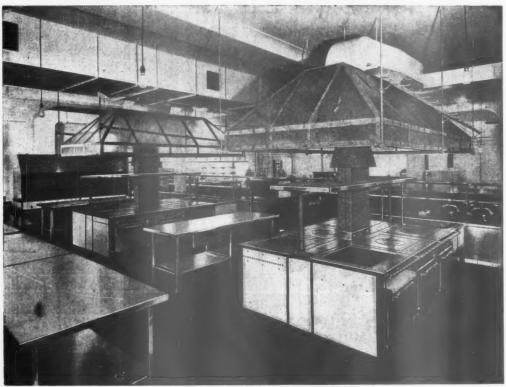
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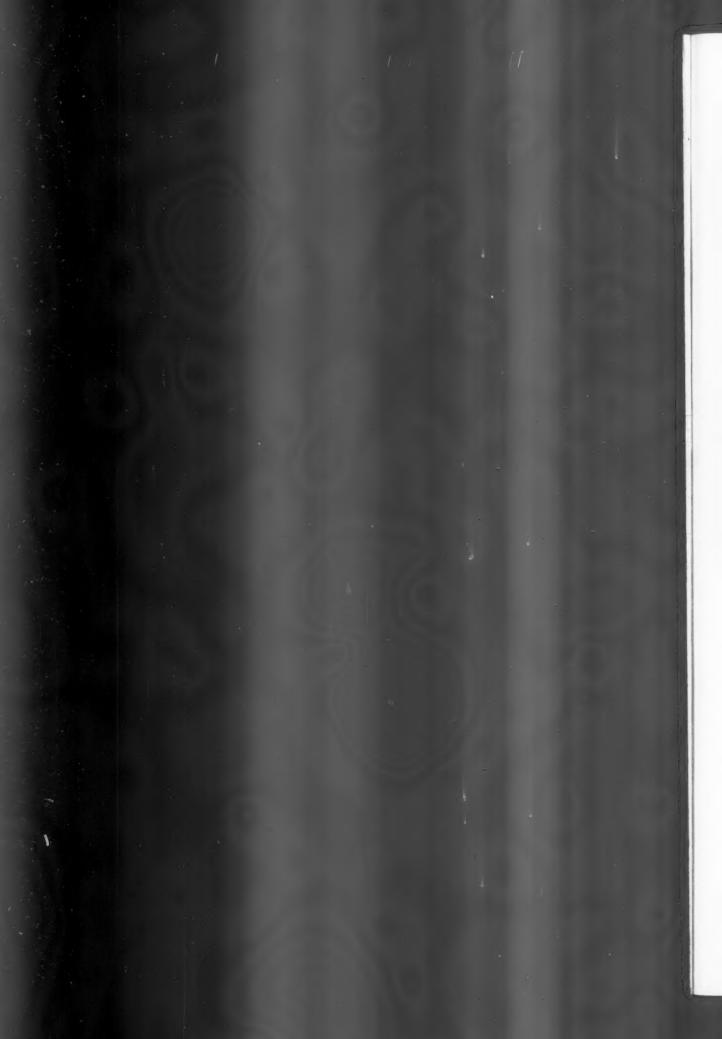
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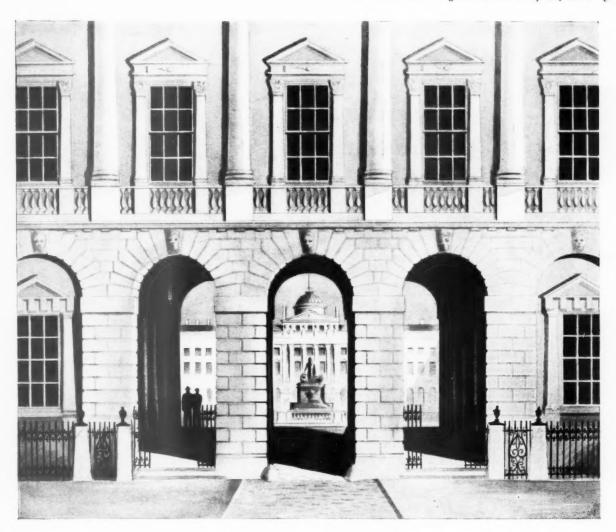
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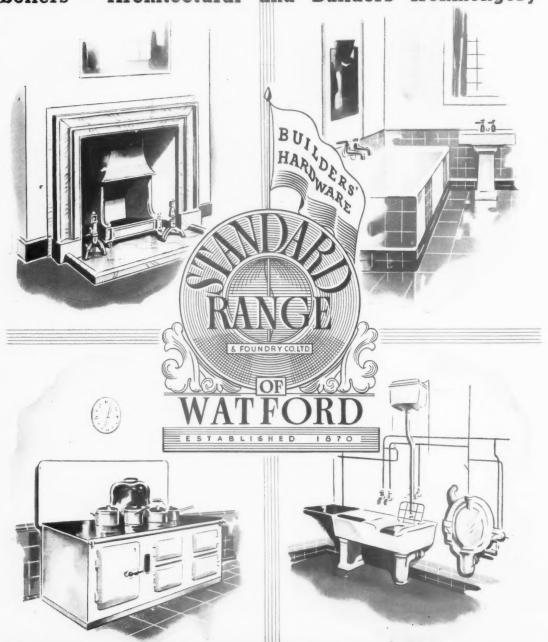


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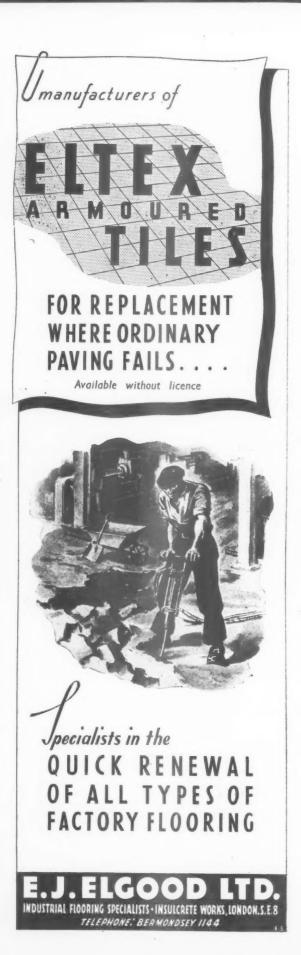
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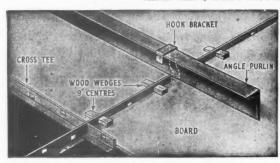


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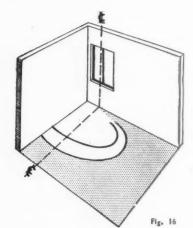
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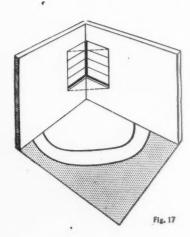
SOUND LIGHTING PRINCIPLES

Sheet Nine

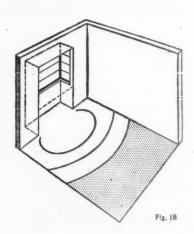


#### a few daylighting DON'TS:-

Don't place a window slap up against a partition or a side wall. Light spreads equally from the centre-line of a window, and a window against a wall loses nearly 50 per cent. of its efficiency (Fig. 16).



Don't use corner windows unless you have a very good reason, such as a view, to justfify it. The light obtained from a corner window is only equal to the light that would be obtained from a window placed diagonally across the opening with a canopy over (Fig. 17).



Don't expect the side-lights of a bay window to add to the light in a room. The light obtained is only equivalent to a window of the size of the actual window opening, with a hood over it (Fig. 18).

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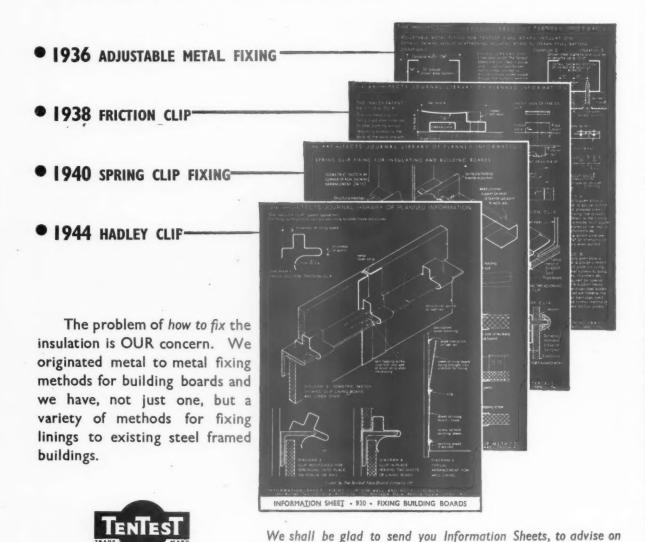
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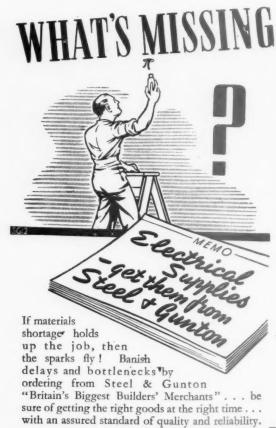
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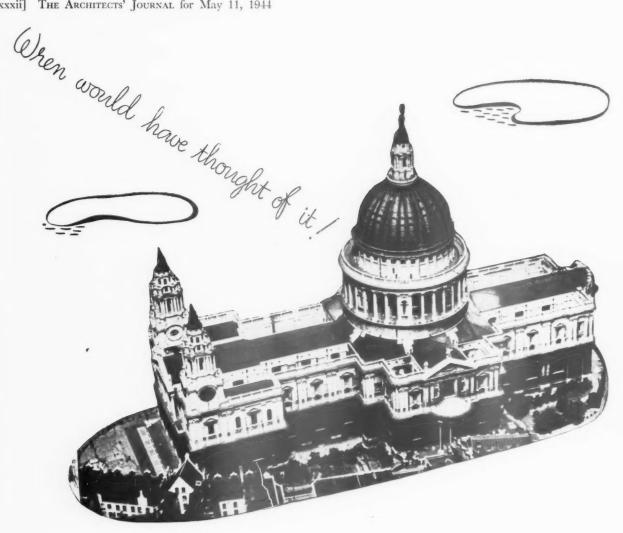
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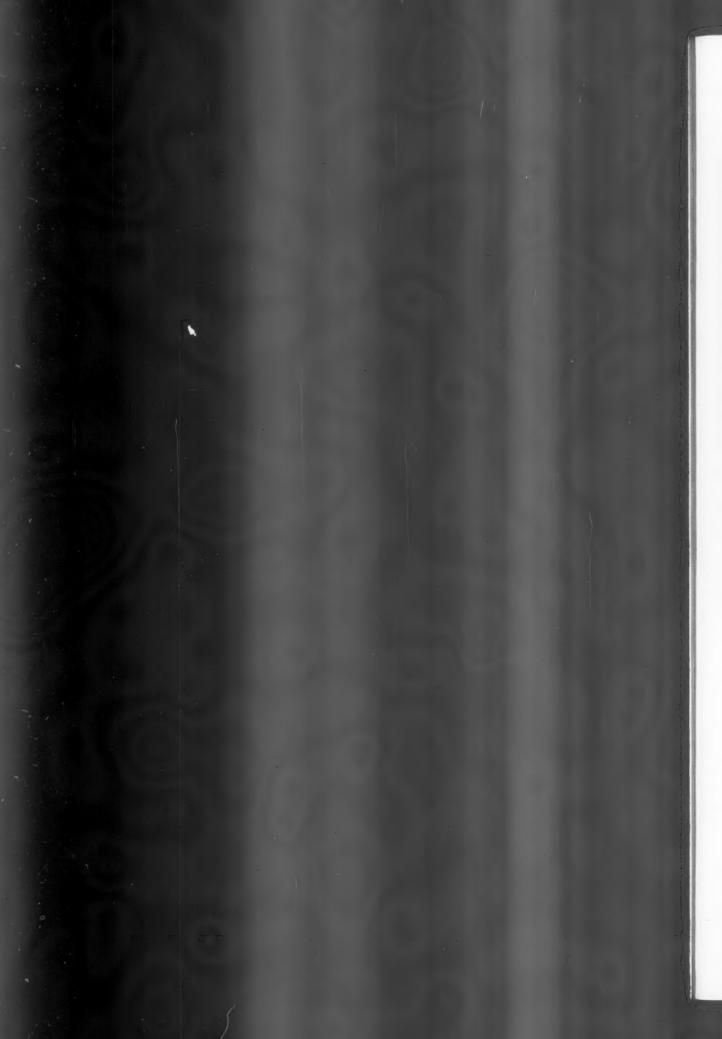
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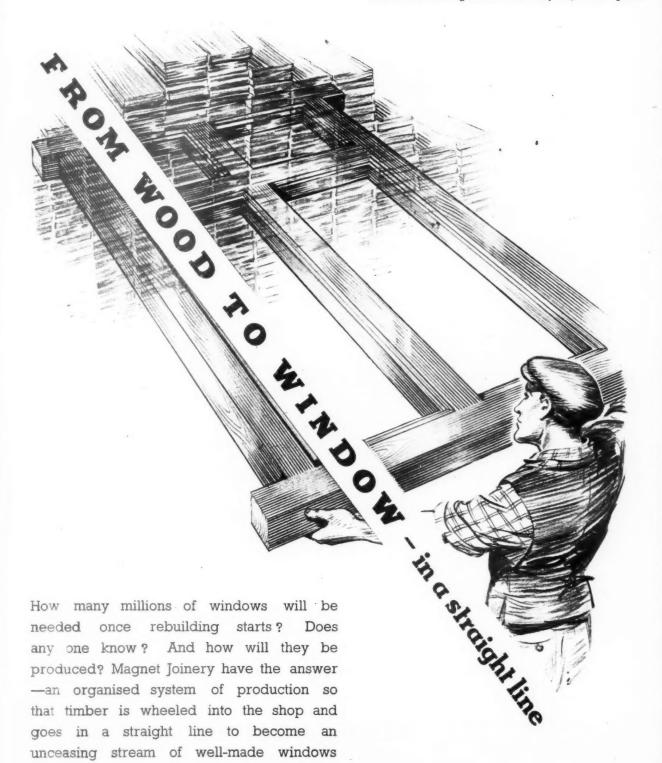
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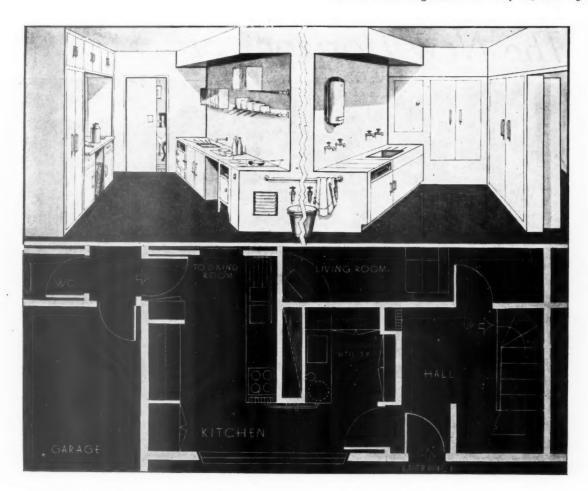
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# The New Horizon . . 7



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



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# DIARY FOR MAY JUNE AND JULY

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

BURNLEY. Rebuilding Britain Exhibition. (Sponsor, BIAE.)

DARLINGTON. Rebuilding Britain Exhibition. At Darlington Public Library and Art Gallery. Guide lecturer, Miss Helen Kapp. (Sponsor, BIAE.) May 17-31

EPSOM. When We Build Again. TCPA film and exhibition. May 20-27

ISLE OF WIGHT. Homes to Live In Exhibition. Accompanying CEMA Design Exhibition. (Sponsor BIAE) May 11-23

LONDON. RA Exhibition. Weekdays 9,30 a.m. to 7 p.m. Sundays 2 to 6 p.m. Admission: One Shilling. May 11-Aug. 7

Hugh Casson. Exhibition of Drawings and Water-colours. Gloucestershire in Wartime. At 34-36, Bedford Square, W.C.1. (Sponsor, AA.)

Evelyn Gibbs. Art in Education. Fifth lecture on the Artist and Reconstruction. Under the auspices of the Artists' International Association. At the National Gallery, Trafalgar Square, W.C.2. Admission 1s., members 6d. 3 p.m. May 14

Northamptonshire Rural Workers' Cottages Competition. Exhibition of winning designs. At Housing Centre, 13, Suffolk Street, S.W.1. (Winning and other designs were illustrated in the JOURNAL for March 30). MAY 15-31

AA Election of Officers and Council for Session 1944-45. At ordinary general meeting at 34-36, Bedford Square, W.C.1. 6 p.m. May 16

AA Discussion. Virtues and Vices of Architectural Journalism. At 34-36, Bedford Square, W.C. Chairman: John Summerson. 6 p.m. May 16

J. Alan Slater. The Common Wealth Party's Housing and Planning Policy. At Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) 1.15 p.m. MAY 16

Dr. J. H. Paterson. The Welding of Plastics. At Institution of Civil Engineers, Great George Street, S.W.I. (Sponsor, Institute of Welding.) Dr. Paterson's paper will be followed by a demonstration. 6 p.m. May 17

Electrical Association for Women. Nineteenth Annual Conference. At the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. Address by Gwilym Lloyd George, M.P., Minister of Fuel and Power. In the chair: The Dowager Lady Swaythling.

MAY 18

Philip James. The Patronage of Art in the Post-War World. Sixth lecture on the Artist and Reconstruction. Under the auspices of the Artists' International Association. At the National Gallery, Trafalgar Square, W.C.2. Admission 1s., members 6d. 3 p.m. May 21

Alderman W. Hyde. Health Services and Town Planning. At Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) 1.15 p.m. MAY 23

H. J. Manzoni, City Engineer and Surveyor, Birmingham. Sanitation in Post - War Building. At Royal Sanitary Institute, 90, Buckingham Palace Road, S.W.1. Chairman, Osmond Cattlin, Vice-President of the Royal Sanitary Institute. 2.30 p.m. MAY 23

A. J. Moore. Hardwoods. At City of London College, Electra House, Moorgate, E.C.2. Chairman, A. D. Macfarlane, Chairman of the Hardwood Importers' Section of TDA. (Sponsor, TDA.) 6 p.m. MAY 17

J. S. Barnes, Chairman of the Plywood Section of TDA. *Plywood*. At City of London College, Electra House, Moorgate, E.C.2. Chairman: W. R. Bousfield. 6 p.m.

L. L. Waide. Planning and Social Statistics. At Essex Hall, Essex Street, W.C.2. (Sponsor, TPI.) 6 p.m. MAY 25

West Wycombe Rural Cottages Competition. Exhibition of all the designs submitted. At Regent Street Polytechnic School of Architecture. (The winning designs were illustrated in the JOURNAL for April 20). 9.30 a.m. to 5 p.m. MAY 29-JUNE 3

Sir Harry R. Selley, M.P. The Conservative Party's Housing and Planning Policy. At Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) 1.15 p.m. MAY 30

E. H. B. Boulton. Technical Director TDA. Home-Grown Timber. At City of London College, Electra House, Moorgate, E.C.2. Chairman: Stanley Longhurst, chairman of the English Timber Merchants' Association. 6 p.m. MAY 31

RIBA Council Election Results. To be announced at general meeting at 66, Portland Place, W.1. Followed by informal meeting at which Sir Malcolm Trustram Eve, Chairman of the War Damage Commission, will talk on The War Damage Act and Architects. (Sponsor, RIBA). 6 p.m.

NEWTON ABBOT. Colour Exhibition. At Newton Abbot School of Art. (Sponsor, CEMA.)

# NEWS

THURSDAY, MAY 11, 1944 No. 2572. Vol. 99

By the Ministry of Works ... 349
Information Centre ... 358
Societies and Institutions ... 359,

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

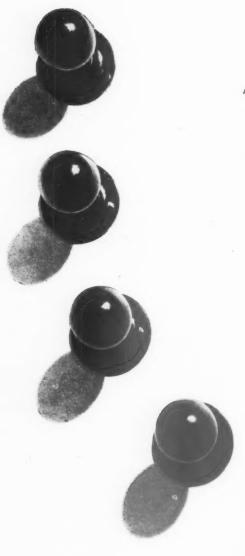
means spare a second for this it will probably be worth it.

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

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

In the construction of a new type of luggage van now used by the Southern Railway a PAPER-BASED PLASTIC material has been used. Paper-based plastics of this and other types are being increasingly used in the war, not only for this essential transport, but for the electrical equipment in aircraft and many other purposes. Paper is vital in the manufacture of this group of plastics—one more call on the paper supplies of the country, and one more reason why there must be no slackening off in paper salvage.

One of the most unpopular features of the new Lincolnshire farm cottages, says the Rev. P. A. Sharp, is the RIDICULOUS SIZE OF THE PANTRIES. They are so small, said the Rev. P. A. Sharp, rector of the village of Thoresway at a meeting of the Caistor Rural District Council, that you cannot stand up in them and stretch your arms out, and the wives of farm workers, accustomed to providing a good meal for their husbands, are calling them Woolton pantries. It may be all right to have a wartime pantry for war-time rations, but what about after the war? Mr. G. H. Earnshaw, who has had charge of the council's building programme, said he quite appreciated this point of view and everything possible has been done to meet it. The present pantries are about double the size of those originally proposed. It was stated at the meeting that several farm workers whose applications for the cottages had been accepted have now refused to become tenants.



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### from AN ARCHITECT'S Commonplace Book

PRIDE OF THE KREMLIN. [From Cleanliness and Godliness, by Reginald Reynolds (Allen and Unwin)]. It was but recently that My Lord Beaverbrook told us of his visit to the Kremlin, where His Lordship and the British Mission, together with Comrade Stalin and others, contributed to the united war effort by enjoying the biggest slap-up party (says Lord B.) at which I have ever assisted. And having done their best to help the men at the front by drinking some thirty toasts, including one to the Freedom of the Press, they not unnaturally had need of some relief, which they found in a toilet with fittings by Shanks, of Barrhead. Fortunate indeed are those who sit in the seat of the Czars, however uneasily their heads may lie; for the works of Mr. Shanks which were shown with such pride to the English Comrades are, alas, all too rare in Russia. Here at least, we may hope, they found uncensored paper, and may have reflected that if the newspapers of Britain and Russia carried as little cargo they would not have drunk in vain to their freedom. But it is of Barrhead and Mr. Shanks that I am thinking, of that original Shanks of whom I learn from Reynolds News that sixty years ago he called his workmen around him to inspect his latest model. Then, seeing the unexpected volume of water sweep into the pan, this pioneer seized a cap from the head of a 'prentice boy, stuffed it into the lavatory basin, and as the flood engulfed it cried out: It works! It works!

Negotiations are in progress for the AMALGAMATION OF TWO BUILDING SOCIETIES—the Leeds Permanent and the Woolwich—under the name of the British Building Society. The Leeds Permanent was established in 1848, the Woolwich in 1847. The assets of the two societies exceed £80,000,000. It is anticipated that a satisfactory provisional agreement will shortly be concluded, in which event the proposals will be laid before the members of both societies at an early date for their consideration and approval. The societies hope, in the course of a few months, to strengthen still further the amalgamation by the incorporation, with the consent of their members, of the Liverpool Investment and the Dunfermline Building Societies. It will be recalled that two other large building societies, the Abbey Road and the National, amalgamated last year under the name of the Abbey National Building Society. See A.J., September 23, 1943.

In Birmingham's redevelopment of slum areas after the war, BLOCKS OF FLATS EIGHT STOREYS HIGH and hostels providing accommodation for single people are planned. The hostels will have 14-storey-high towers, numbering probably nine, which will be provided with lifts. The towers will accommodate 585 people. The authorities consider this scheme will provide the best available social amenities in congested areas, and they are planned for the redevelopment of the Duddeston and Nechells districts of the city.

Birming ham City Council is experimenting with a prefabricated house, which can if necessary be GUTTED, REDESIGNED AND REBUILT to meet new conditions of living. The experiments are being carried out by the Public Works Committee on the advice of the city engineer. According to The Times, the structure consists of a light steel frame within which a permanent house interior can be constructed with any suitable materials, prefabricated or other, and which can be clothed with either a temporary or a permanent

covering, the former, where used, being removed and superseded at a later date by permanent materials as they become available and the building industry stabilized. The whole of the house interior is considered to be suited to a large measure of prefabrication and the steel frame is claimed to have other important advantages. It is adaptable to rapid prefabrication, and clothed with temporary materials would enable houses to be built very quickly. Provided the prefabrication is organized on a scale sufficiently great, says an official memorandum, it should be possible to erect these houses with their temporary outer covering in a matter of days as compared with weeks or months occupied for a permanent house before the war, and the replacement with brickwork and tiles can be effected as labour is available at a more leisurely rate which will ensure the amenity of good craftsmanship. It is also claimed that it is quite possible that if during the lapse of years there was a demand for a different type of home as the result of changing conditions, the position could be met to some extent because the steel frame has no internal supports, so that the inside of the house can be completely gutted, redesigned, and rebuilt to meet new conditions. It would, for instance, be possible to convert a block of six houses into a block of four without disturbing the frame, the roof, and possibly other features; or if it is found that a large number of two-bedroom houses were required, the three- or four-bedroom houses could be converted to meet those needs.

Three Thames Valley Councils are PROTESTING AGAINST A THAMES VALLEY HOUSING SCHEME.

The protest is being made to preserve land on the north bank of the river opposite the Old Deer Park in Richmond. Negotiations were in progress for land occupied by the Royal School for Naval and Marine Officers' Daughters, now evacuated. The ground was to be used as a housing estate, but the local authorities, Heston and Isleworth, declared their opposition to the proposal. Richmond and Twickenham Councils, as local authorities who would also be affected by the building, supported Heston and Isleworth, and the building firm put in an appeal to the Minister of Town and Country Planning. An inquiry was arranged at which the three local authorities were to be represented, but on two occasions the inquiry was called off, apparently by the building firm, who, it is believed, have reconsidered their attitude. Councillor W. J. W. Westlake, chairman of Richmond Town Planning Committee, said it was a clash between two essential purposes—one the provision of houses and the other the maintenance of open spaces. We do not want

anything erected that will detract from the natural beauty of the Thames, and this would injure materially the outlook from the Richmond side of the river. The Council are not opposed to development for housing purposes, but they are intimately concerned with the preservation of the Thames.

The Minister of Health, Mr. Willink, visited Coventry and inspected two PRE-FABRICATED ALL-ELECTRIC HOUSES erected by private enterprise. Throughout the houses are interchangeable plug points so that any light or appliance can be plugged in anywhere. The kitchen equipment, in addition to cooker, water-heater and refrigerator, includes home laundry facilities.

The Plastics Materials Industry has set up a Joint Industrial COUNCIL TO DEAL WITH WAGE RATES and conditions of employment of labour. The membership of the Council is made up of representatives of the employers and employees. The chairman is elected annually from either side alternately. The Plastics Joint Industrial Council functions in relation to the main Joint Industrial Council for the Chemical Industry. It includes representatives of the Unions involved and selected representative firms in the Plastics Materials Industry which is allied to the Chemical Industry; thus rates of wages and conditions of employment in the firms represented on the Council are controlled by national agreements. The present chairman is Mr. H. V. Potter, Managing Director of Bakelite Limited.

To prevent more deterioration of buildings, fifty thousand gallons of PAINT MAY BE RELEASED by the Government.

Removal of control on exterior painting is expected at the same time. Hints that concessions are expected were given by Mr. Samuel Clipson, retiring president, at the annual meeting in London of the Federation of Painting Contractors. He stated that only 1 gallons of paint would be required for a cottage.





### Utility Home

A prototype of MOW's mass-produced emergency steel house, referred to recently by Mr. Churchill in his BBC talk, is open to inspection at the Tate Gallery for about a month. According to Lord Portal, once in production it should be possible to produce over 20,000 of these houses a week. Their cost will be about £550 complete. Tickets for admission to see the house are being allocated by

local authorities and MOH. A similar house will before long be shown in Scotland. Above are views of the exterior and of the living-room. Full details are given in this issue, while our leading article comments on the design, for which Mr. C. J. Mole, Deputy Director of MOW, Mr. Arthur Kenyon, its consulting architect, and Dr. Stradling, its chief scientific adviser, are responsible.

# Mr. Willink told M.P.s there is NO WATER CRISIS.

Mr. Willink, Minister of Health, opening a debate in the Commons last week on water supplies, moved a resolution welcoming the intention of the Government—declared in the White Paper presented to Parliament—to introduce measures for the improvement of the country's water supply administration. Discussing the present water situation, Mr. Willink said: It would be wrong to talk at the moment about a crisis. There is not a water supply crisis, but on the other hand we are suffering from three consecutive dry winters, and this last winter, and, in particular, last March, was quite embarrassingly dry. We have adequate powers, and I should not hesitate to use them if necessary. The main towns' supplies are not in difficulty at present. The Metropolitan Water Board has not asked for any special steps to be taken. Mr. Willink said it is proposed to introduce at an early date a Bill to provide for substantial Exchequer assistance for the extension of rural water supplies and sewerage. Mr. A. G. Walkden (Lab., Bristol, S.) said that on his side of the House they would have preferred a national water board under a strong chairman, similar to Lord Ashfield, responsible to the Minister. Mr. Robert Morrison (Lab., Tottenham, N.) declared that the public are getting rather tired of the Government trying to solve problems by setting up advisory committees which have no powers to carry out reforms.

£1,750,000 is allocated for SITES FOR LCC HOUSES in the estimates for the coming year to be submitted to the Council.

Among the principal items of the capital expenditure estimates is £1,051,300 for housing, including £1,000,000 for the acquisition of land (a) where acquisition was decided on before the war, with any additional adjoining lands that are capable of early development without displacing appreciable numbers of persons, and (b) where it has been recently decided, with the Ministry of Health and Treasury approval, to secure land now with a view to building as soon as practicable. A further £750,000 is included in the estimates as a provisional sum for acquisition of additional sites under schemes which may be submitted later to the council. Should further expenditure in 1944-45 be necessary it will be possible to draw on a contingency provision of £2,000,000 for "general enlargement of spending and lending powers subject to any necessary approval by the Treasury."

After hostilities a NATIONAL MEMORIAL TO THE FALLEN—fighting men, Civil Defence Services, and everyone who has taken part in the war—should be erected in London, possibly on the Embankment. This suggestion was made by Admiral of the Fleet Lord Chatfield, at a London conference on war memorials arranged by the Royal Society of Arts. He said: To me war memorials have nothing to do with weapons or trophies. The proper place for guns, model ships, aircraft or tanks is in the museum. I feel it will not be wise to duplicate all those small memorials of the last war which nearly every village had. Instead I suggest a small plot of ground added to the village memorial where inhabitants can sit and rest and reflect.

### PORTAL'S PRIORITIES

A hand-made prototype of the Government's proposed factory-made, temporary, demountable emergency house of steel, to which the Prime Minister referred in his last broadcast talk, is now on view in the grounds of the Tate Gallery. Full details of the prototype are published in this issue. As revealed by Lord Portal in the House of Lords on May 2, these houses—Portal's Priorities as Lord Addison dubbed them—will probably cost £550 each, complete with their £100 worth of fittings and all services laid on. They will be publicly owned and licensed for a limited period. The house is designed for families of four, and preference in tenancy will be given to newly-weds. The pressed steel industry will be the main contructors—in fact, to a large extent, the motor industry—though a good deal of timber will also be used.

Those responsible to the Ministry of Works for its design and construction are Mr. C. J. Mole, Deputy Director of Works, Mr. Arthur Kenyon, consulting architect to MOW, and Dr. Stradling, late of the Building Research Station and

now Chief Scientific Adviser to the Ministry.

This is the only house of its type on which the Government is concentrating. According to Lord Portal it should be possible to manufacture between 200,000 to 250,000 in two years, though the target figure has not yet been fixed. It is therefore important that the house should be as perfect as possible in every way within its limiting conditions before it actually goes into production, since once the final design has been decided upon and the costly jigs, tools and equipment needed in its mass-production are ready, little in the design can be revoked. It is to be hoped, therefore, that the Ministry of Works will seriously consider, and indeed ask for, constructive criticism from every quarter before committing itself to production. To this end we heartily welcome comments on the house from Journal readers for publication.

What criticisms and comments have we to offer? First, the Ministry must be congratulated in having acted upon the principle of the factory-made demountable house. Secondly, it is to be congratulated on having produced a design which, within its economic restrictions, is well planned and equipped, and, so far as can be judged from the drawings and model, has been technically well considered.

A criticism of principle, however, must be raised. It would surely have been wiser to develop a system of unit construction rather than a single type of house, so that variation in plan and lay-out could have been obtained. Moreover, one wonders why other systems of construction have not been evolved, if only experimentally. Even in war this should not have been beyond the resources of a great Government department.

Æsthetically the interior is fairly "pleasant," though this cannot be said of the exterior, which is dead and barren

in character. A good deal more thought should certainly be given to it. Sensitivity and imagination may be rare but they cost nothing. The houses will have other purposes than the mere shelter of some members of our present population. One of them, as Mr. Churchill has told us, is to help the steel industry in the coming hard times of peace. Another, we presume, is to encourage young couples to halt the decline in population. The houses should therefore surely look anything rather than sterile.

This raises the question of the lay-out of the houses. Here the local authorities must show some initiative and imagination in landscaping, siting and planting, for without these new and infinitely dreary slums will be produced. The cost and planting of trees, shrubs and flowers should not be

left entirely to the tenants.

Though further thought is needed about details, and also especially about the outside appearance, the prototype seems to us to be an encouraging first effort by the Government in a realm of building with immense future potentialities.



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

PAXTON'S GLASS GIRDLE

One hopes before each opening day of its exhibition that a new life may suddenly have infused the Royal Academy, but one is perennially disappointed. The taste of those who select the architectural exhibits can invariably and justly be called dull. It would be unfair to call it old-fashioned, unfair to the shades of the great building engineers of the last century - Telford, Labrouste, De Dion, Eiffel, Paxton-men whose adventurous spirit is rarely expressed in the architectural room of Burlington House.

Among the exhibits at the Academy

this year is a detailed scheme by the RA Planning Committee for its London Ring Road A. Several similar schemes have recently been designed and they are generally considered to be very drastic proposals, put forward with only a half-hearted belief that they will ever be carried out. Yet how much more daring and dramatic was Paxton's Glass Girdle of nearly 90 years ago, and with what faith in its ultimate realization did its designer propose it.

This extraordinary project was brought to life again in the January number of World Review, wherein it is described by Barbara Bliss. "Towards the end of the Crimean War in 1855," she writes, "Sir Joseph Paxton, M.P., gardener and man of affairs to the Duke of Devonshire, gave evidence before a Select Committee of the House of Commons, appointed to consider 'Metropolitan Communications.'"

"He proposed a girdle of glass and white painted iron should be constructed, enclosing eight railway lines, an arcade of shops, and a thoroughfare - a belt of Chatsworthian conservatory, 10 miles long, and as wide as the transept of the Crystal Palace. Paxton maintained that easy communications were of benefit to all who came and did trade with London, and that

his plan would make it 'the grandest city in the world.' Not only traffic relief was in his mind, but he intended by careful regulation of the temperature to bring fresh conditioned air to the Londoner. He believed he was creating, as well, a thing of beauty. It was to be lined with Staffordshire tiles with the colouring burnt in, the exterior made of glass, iron and pottery. A gleaming, sparkling thing to lighten the smoky gloom of mid-Victorian London.'

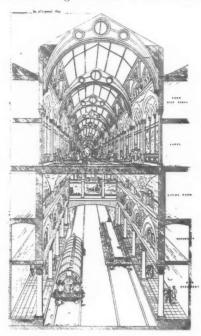
In 1855 it appears that it took longer to drive by horse vehicle from London Bridge Station to Paddington Station than to travel by rail from London Bridge to Brighton. Thus London had its traffic problems then as to-day

By his railway, Paxton claimed the City could be reached from Westminster in 12 minutes as proudly as the RA Planning Committee now claims that by its ring road, Liverpool Street could be reached from Victoria in 8 minutes and King's Cross from Paddington in 4. The Girdle would in fact have taken roughly the same route as all the Inner Ring Roads recently proposed, first in the Bressey-Lutyens plan, then in the LRRC plan of the RIBA, more recently in the County of London plan and now in that of the RA. Like the ring road, the Girdle linked the railway termini, including Victoria, which had then only passed the paper stage. A branch joined the New Cot with Piccadilly Circus.

But in conception it was the blood brother of the spinal stem proposed by MARS. In this Great Victorian Way railway lines were to be in pairs, built in two layers in separate glass tunnels on each side of the main central arch which would roof the road, the shops or the houses and the promenades. The railways would be ramped over the cross thoroughfares. Across Hyde Park the Girdle would contain railway lines and a promenade only, where carriage exercise could be enjoyed under cover in wet weather. To provide against the noise and vibration of the trains, double walls enclosing an insulating space of air

would separate the railway lines from the buildings on the street and promenade. The Girdle "was to take on a different character according to the part of London it crossed. There were to be houses for the rich near the Park, humbler houses elsewhere, hotels near the stations, shops and offices near the business quarters. Places of entertainment and amusement were to be laid out on land which would be acquired near the Girdle."

The enterprising Paxton planned a system of running water to keep clean the glass roofs of the Girdle.

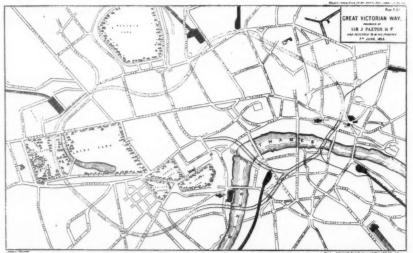


He also proposed a form of airconditioning by which the air within could not only be kept pure but would be warm in winter and cool in summer. "In fact, as the Girdle approached the Park, shops were to give way to private houses, in order that the wealthy elderly and infirm could live in a glass Riviera, and so would not 'be obliged to go to foreign countries in the winter." A feat this, which may not have been beyond the powers of one who had successfully cultivated the tropical Regina Water Lily at Chatsworth.

It was a sign of the times that the idea was taken seriously. The Prince Consort approved of the plan, and the Chairman of the Select Comspecially recommended mittee Paxton's "splendid designs" to the House of Commons. Asked if his proposals would make London as popular to tourists as the boulevards of Paris, Paxton replied, "The Girdle would be the greatest novelty in the world, and the tourist trade would help to pay for it." He had other ideas to suggest later, but the Girdle was their basis.

This scheme must have appealed enormously to the Victorians. Why was it never carried out? If you have ever sat in the Gallery of the House and listened to a parliamentary debate, you will know the answer.

ASTRAGAL



Above is a plan of Paxton's Great Victorian Way, laid before a Select Committee of the House of Commons appointed in the eighteen-fifties to consider Metropolitan Communications. The architectural designs have not been published but Moseley's drawings, clearly inspired by Paxton's Glass Girdle, give some idea of its probable appearance. One of these is shown on the left above. See Astragal's note.



# LETTERS

Colin Penn (National Organiser ABT)

G. V. Downer

E. S. W. Atherton, A.R.I.B.A., A.M.T.P.I.

G. B. J. Athoe

C. Birdwood Willcocks, F.R.I.B.A., A.M.T.P.I.

### Salaries

-The letter from Mr. E. S. W. Atherton is welcome because no time can be more suitable than the present for drawing attention to the inadequate salaries of architects, and for a campaign to improve them. As he suggests, sporadic outbursts are no use. A determined and sustained effort is needed.

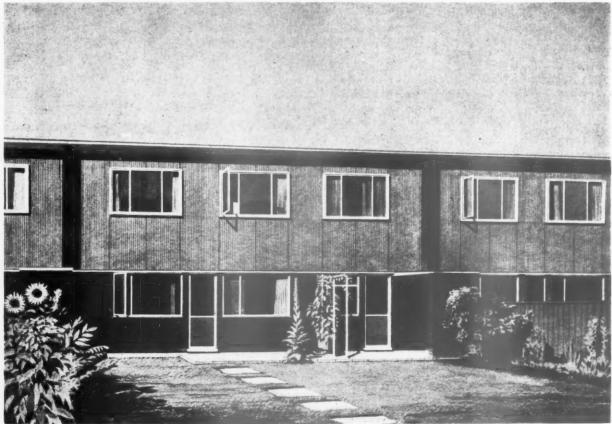
The Association of Building Technicians is constantly taking up cases for individual members and for groups in various offices. We are at present reaching a settlement in a dispute with a local authority which has lasted for nineteen months. It seems certain that we shall secure improvements in this particular case, but there is much more to be done. It is necessary to have considerable backing in the office concerned if there is to be a reasonable chance of success. Cases such as this require, too, the preparation of a large body of statistical evidence, a process which would be much easier if more people supported us in the work.

the work.

We have also sent protests on various occasions when jobs have been advertised at low salaries, but our experience is that this is an ineffective method. It is clear that a more militant and determined attitude on the part of the whole profession is needed. It would be interesting if readers would give their capitages at a bow a salary scale for

their opinions as to how a salary scale for architects should be framed. This question is much more difficult than would appear at is much more difficult than would appear at first sight. One of the main questions is whether the scale should be based on age. In the opinion of my Association it should be, at least in the lower portion, for to link a certain rate of pay with a certain designation such as Assistant Architect or Junior Assistant leaves enormous loopholes. At the same time, of course, provision must be made for additional pay for persons with unusual abilities or

### PREFABRICATION AT THE ROYAL ACADEMY



The Royal Academy's Summer Exhibition opened at Burlington House on April 29, and will remain open until August 7. the architectural exhibits are more concessions than usual to contemporary design including that reproduced above by F. R. S. Yorke of terrace cottages on the LCC Watling Estate, of prefabricated unit construction. Further drawings will be illustrated in our next issue, including those by the RA Planning Committee for London communications dealing mainly with the inner ring road.

qualifications, and above the age of 25 or 30

qualifications, and above the age of 25 or 50 it is hardly possible to use an age basis.

What are reasonable rates? What should be the normal weekly hours? At what rates should overtime be paid? These are some of the questions on which your readers' opinions would be valuable. Material unsuitable for publication would be welcomed and treated confidentially if sent to me at 5, Ashley Place, S.W.1.

COLIN PENN, National Organiser, Association of Building Technicians.

### Daylight in Pipes

SIR,—I am astonished that the American drawing office illustrated on page 308 of your April 27 issue, should be regarded as efficient in view of the colossally expensive and trying type of lighting shown. The long parallel streaks formed by the fluorescent strips make even the photograph rather trying to look at. I would also point out that these fluorescent tubes do not run down at all evenly and as soon as two or three begin to fall off the lighting will become uneven and still more trying to the eyes.

The drawing office in question could be much more efficiently, more economically and more effectively lighted by a few well-designed indirect fittings using ordinary filament lamps; the maintenance costs and current consumption would be about 90 per cent. less.

In my opinion architects who accept this sort of thing are traducing their profession.

London

G. V. DOWNER

### City of London Sketch Plan

SIR,—Mr. Lindy in his letters has been unable to justify any of the points of criticism of either the leading article or my previous letter, and he has as a last resort turned to a personal attack to which he devotes more than two-thirds of his letter. One or two points raised in his last letter I feel require some comment.

Mr. Lindy endeavours to give the impression that there is something rather sinister in having obtained one's qualifications at the beginning of the war—he does not of course require me to inform him that one of the Authors of the Sketch Plan did not obtain his qualification until a later date. I would like to ask Mr. Lindy, if a person who has received an architectural training at a "recognized" school of architecture is not in a position to critisire the number of the property o

criticize, then who is?
The author of the Sketch Plan appears to doubt if any other political system allows freedom of expression. I would like to remind Mr. Lindy that when the Planners of the Moscow Plan were preparing their scheme, criticism was asked for and presumably received.

In conclusion I would add that I have discussed the City of London Sketch Plan with many Town Planners and Architects, several of whom have been in successful private practice for many years; and without exception there has not been one voice in support of the scheme.

E. S. W. ATHERTON

Harrow-on-the-Hill

### Ownership of Land

SIR,-A letter of mine in the lay press on Sir,—A letter of mine in the lay press on Building Finance has produced a crop of correspondence from all sorts of people, including many professional men who feel that no real progress can be made in physical planning until the vexed question of the ownership of land is settled. So intrigued am I by the arguments in favour of public ownership adduced by many correspondents, including economists, farmers, and fellow professionals, that I am urged to seek the hospitality of your columns to invite architects and surveyors, especially town planners, to give me their views on a subject which I feel looms largely in the shape of things to come.

> G. B. J. ATHOE, REGISTERED ARCHITECT

London

### An Unusual Staircase

SIR,—I was very interested in the photograph and note on the staircase at Rivenhall Place, published by Astragal on April 13.

There were a number of such staircases in the old part of Plymouth, near the Barbican, of which the central newels, I was told years ago, were made from the masts of Henry VIII's battleships. A good example was in the house in New (?) Street, which was restored and used as a Museum and which I hope has survived the bombing.

Reading

C. BIRDWOOD WILLCOCKS

### THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

ROLLED GLASSES

Rough Cast or Double Rolled Rough Cast: Rolled: Both surfaces uneven due to contact with the table and rollers. Medium obscuration. Translucent.

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

Plain Rolled (also known as Ribbed Rolled and Hartley's Rolled): Rolled : One surface impressed with parallel

ribs (19 to 1 inch). Considerable obscuration.

Translucent.

The accompanying photographs are fullsized illustrations of a typical section and elevation.



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INFORMATION SHEET: GLASS 10:

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# • 937 •

### GLASS: No. 10

Subject : Rough Cast or Double Rolled Rough
Cast ;

Plain Rolled (also known as Ribbed or Hartley's Rolled).

#### General:

This Sheet is the tenth of the series dealing with glass and glass products, and the second of the section on types of glass.

Rough Cast, or Double Rolled Rough Cast; Plain Rolled (also known as Ribbed Rolled and Hartley's Rolled):

### Light Transmission:

80 per cent. to 85 per cent.

### Maximum Standard Sizes:

120"×42" for  $\frac{1}{6}$ " (Plain Rolled only) 120"×46" or 130"×26" for  $\frac{3}{16}$ " 120"×46" or 144"×26" for  $\frac{3}{16}$ ".

### Nominal Thicknesses and Weights:

1" ... I lb. 3 oz. 3" ... 2 lb. 10 oz. 114" ... 3 lb. 6 oz. All per sq. ft.

#### Quality:

Made in one quality only.

### Colour :

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### Standard Variations:

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#### Packing:

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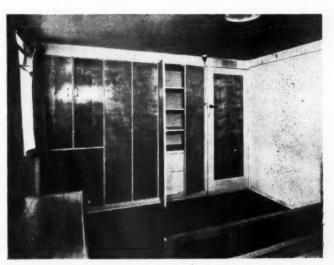
# EMERGENCY

FACTORY-MADE HOUSE

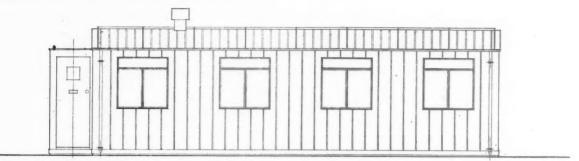
BY THE MINISTRY OF WORKS

GENERAL—The hand-made prototype of MOW's proposed temporary, emergency, demountable, mass-produced, steel house, has now been erected and is illustrated here. The cost including all equipment and fittings with services laid on, but excluding land, will be about £550 delivered complete. (See also the frontispiece and leading article).

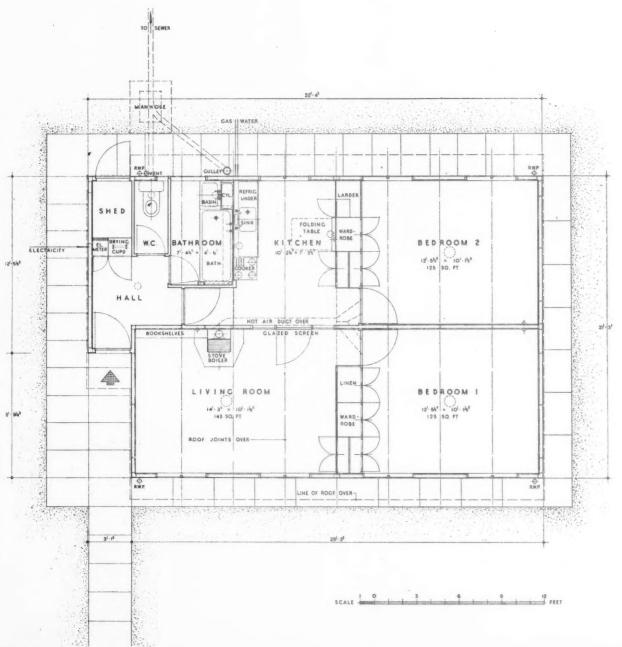
CONSTRUCTION—The floors, which are in sections, are formed of sheet steel joists to which wood flooring is directly screwed. The walls are in panels of equal widths (except at the corners) into which are built the steel windows. The panels are set on a sheet steel cill at the floor level and between similar vertical corner and middle posts. Three horizontal steel flats, one at the bottom



posts. Three horizontal steel flats, one at the bottom screen and door. Above, a view of the fitments in bedroom No. 1.

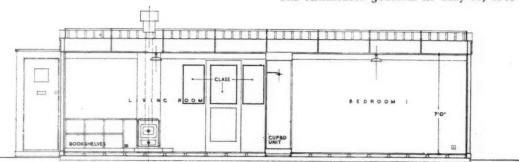


FRONT ELEVATION

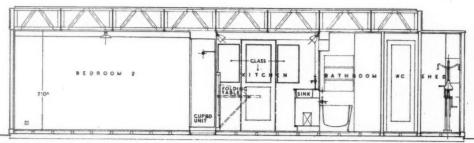


PLAN

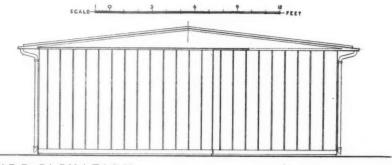
M.OW'S EMERGENCY FACTORY-MADE HOUSE



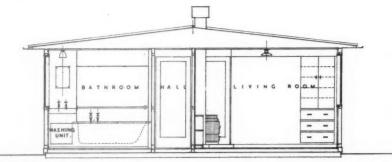
LONGITUDINAL SECTION



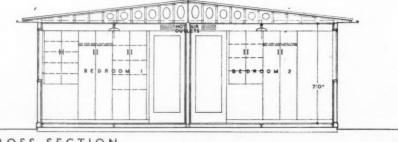
LONGITUDINAL SECTION



SIDE ELEVATION



CROSS SECTION



CROSS SECTION

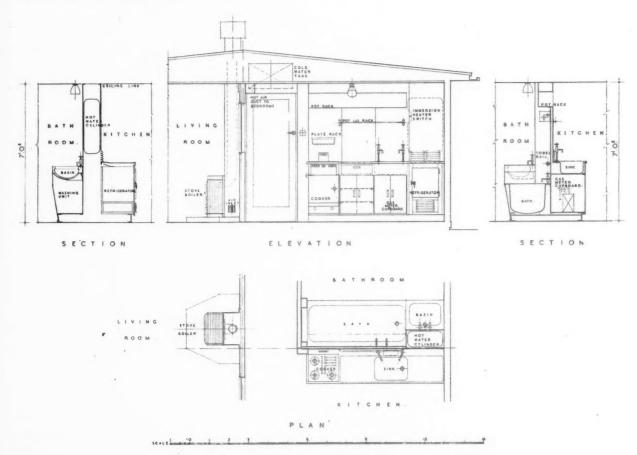
and one at the centre, are in the thickness of the wall and by means of steel wedges at the ends of these flats the sections are tightened up. At the joints of the sections special mastic weathertight seatings are inserted. The walls are clad externally with sheet steel, swaged to provide stiffness and coated with flocculent anti-drum material on the inside. Internally, the wall is lined with steel in the kitchen, bathroom, w.c. and hall, and elsewhere designed to receive plyboard or other similar wall lining. Within the external wall thickness is fixed faced aluminium foil on paper, mounted on a light timber frame, which will make the house similar in insulation value to an 11 in. hollow brick wall house.

The roof has pressed metal joists at centres corresponding to the widths of the wall panels. The steel ceiling is plain but the steel roof is swaged to obtain rigidity. Longitudinal steel bracings are introduced at the centre of the span. Above the ceiling level is placed aluminium foil mounted on timber frames.

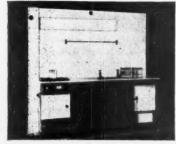
The steel is bonderized, primed and painted (sand-painted in the case of the prototype), except the roof which is bonderized, primed and tar sanded externally.

The house contains about 5 tons of steel, while the floor takes half a ton of timber.

Prior to delivery of the emergency

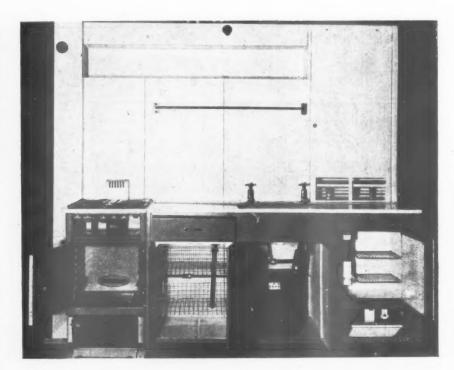


KITCHEN AND BATHROOM UNIT



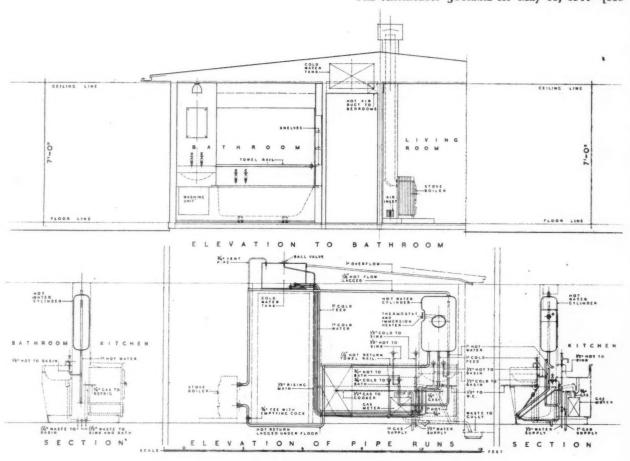
Right, the kitchen-bathroom unit, open on the kitchen side, includes cooker, sink and refrigerator. Above, the same, doors closed. On facing page, same unit on bathroom side.

factory-made house, a concrete slab is laid and tarred on the top surface and the necessary services and drains are put in. After the floor sections are laid and bolted together on top of the concrete, the end walls and side walls are positioned, wedged and bolted, working from one end of the structure. The partitions, cupboards and kitchen units are placed in position before the walls

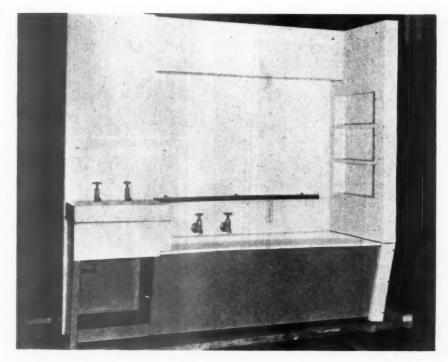


EMERGENCY FACTORY - MADE

H



KITCHEN AND BATHROOM UNIT

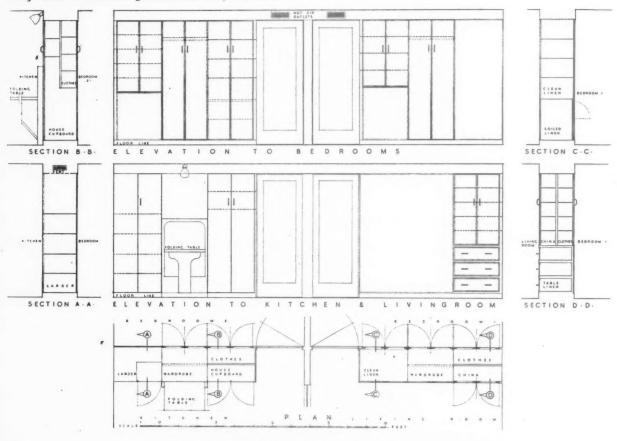


HOUSE: MINISTRY OF WORKS

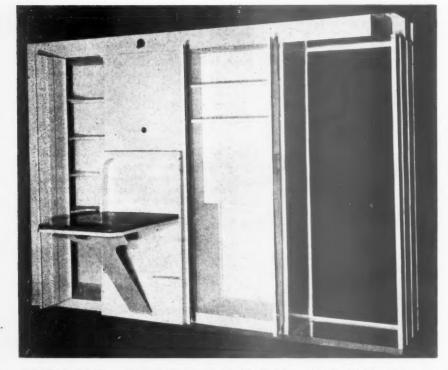
are erected. The placing of the roof, bearing on the outer walls and the internal central spine wall, is the last constructional operation.

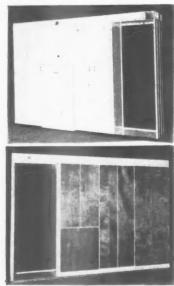
FEATURES—The two partitions between the kitchen and bedroom and the living-room and bedroom are arranged as two cupboard units. All the cupboards on the kitchen side are in steel. The bedroom side of this unit has plywood panels to the doors but all framing and shelving is in steel. The cupboard unit between the living-room and bedroom is in steel with plywood panels to the fronts. The kitchen and bathroom unit is built into a steel unit.

The hot water is heated from a boiler at the back of the living-room open heating stove connected to the hot water circulating cistern. An electric immersion heater, thermostatically controlled, is fixed in the circulating cistern to heat about seven gallons of water for sink use when the living-room fire is not in use. The living-room fire provides hot air to the two bedrooms through steel ducts.



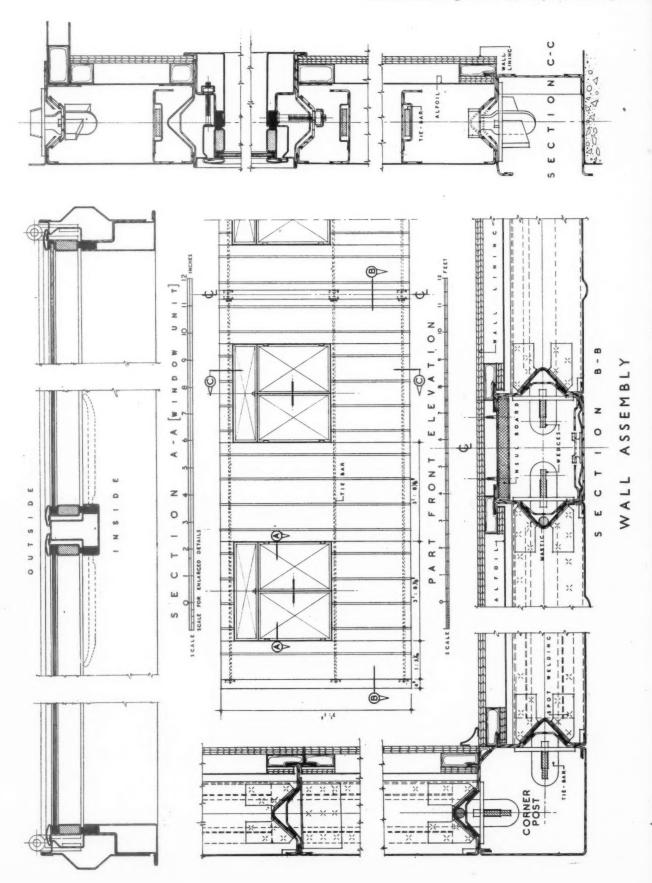
CUPBOARD UNITS

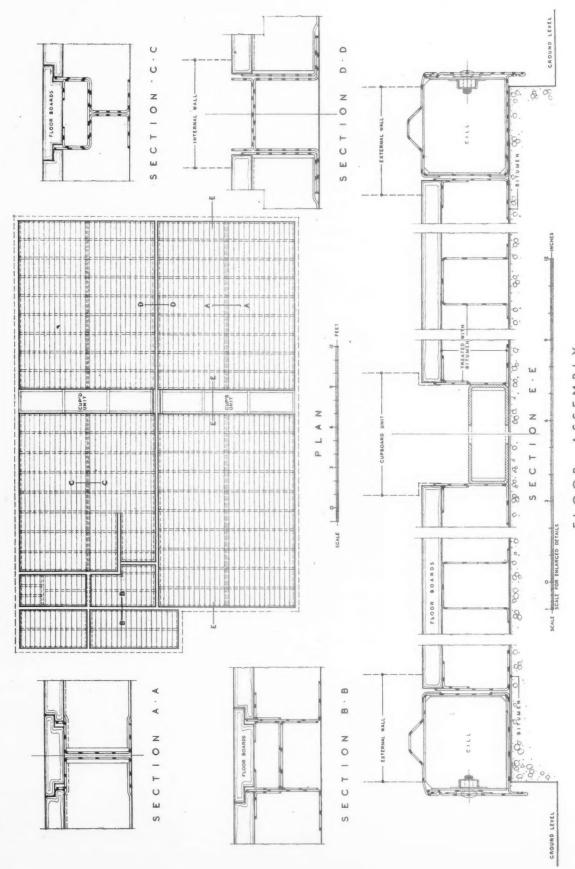




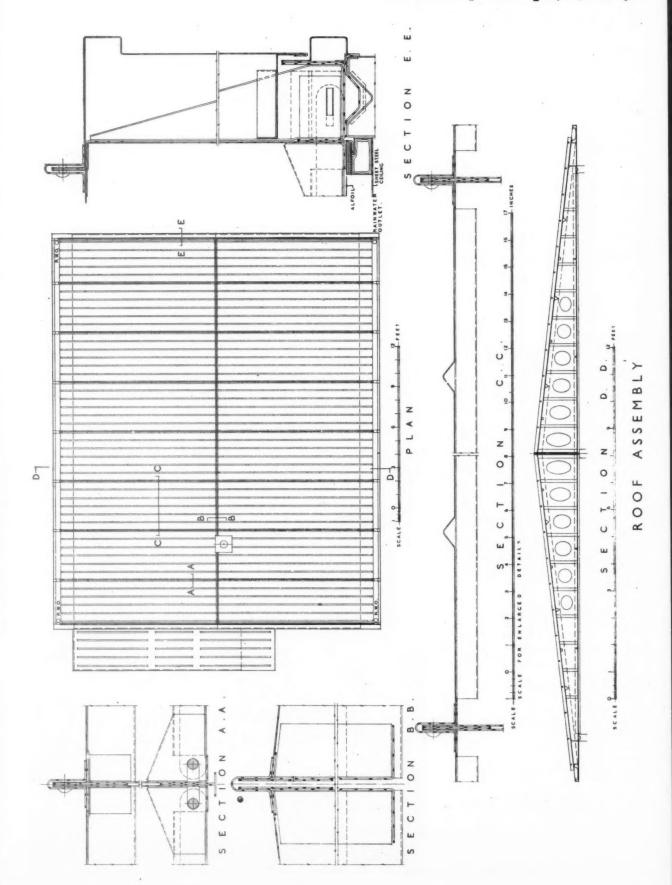
Left, the kitchen-bedroom unit from the kitchen side, includes larder, broom and cutlery cupboard, folding table. Top, the same, doors closed. Above, the unit between living-room and bedroom, bedroom side.

MOW'S EMERGENCY FACTORY-MADE HOUSE





FLOOR ASSEMBLY



# INFORMATION CENTRE

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

9.0

5.0

### PHYSICAL PLANNING

Community Planning COMMUNITY PLANNING IN DETROIT.

J. Davidson Stephen. (Pencil Points, January, 1944). Detroit has planned for a 1990 population of 5,000,000 divided into communities of 38,000 each composed of ten neighbourhoods averaging 3,800.

Each neighbourhood of 3,800 persons has:-

	Acres.
400 single family houses occupying	57-1
300 double family houses occupying	30.0
200 multiple family houses occupying	20.0
1 nursery-elementary school occupying	6.0
1 recreation area occupying	5.0
1 shopping centre occupying	2.5
1 civic centre (P.O., etc.) occupying	2.5
	123-1

Thus ten neighbourhoods occupy 1.231.0 acres. In addition the community of 38,000 has :-Acres 20·0 20·0

2 Junior High Schools occupying 1 Senior High School occupying Central Business Centre occupying

1 Central Civic Centre occupying

To these building space requirements are added 200 acres of recreation area and 260 acres of green protective belt, making a total of 776 acres for the community elements, and a grand total of 2,007 acres or 3·1 square miles. This is an overall density of 19·1 persons per gross acre, excluding land required for industry.

### STRUCTURE

### Low-Cost Housing Low - cost HOUSING (TIMBER);

AMERICAN RESEARCH ON SUITABLE FORMS OF CONSTRUCTION. R. Cotterall-Butler. (The Builder, December 10, 1943, pp. 468-473). Review of US National Bureau of Standards: Report BMS 99, entitled Review and Heat-Transfer Properties of Multiple Box-Girder Plywood Panels for Walls, Floors and Roofs.

The US National Bureau of Standards does not "approve" a construction, nor express an opinion on its merits or demerits, but confines itself to the publication of the results of its research, leaving it to architects and engineers to form their own opinion on the suitability of the structures tested. The Bureau's research is based on standardised methods.

The roof, wall and floor structures examined in this report consisted of a sheet of Douglas fir plywood glued and nailed between two Douglas fir frames. The external surfaces were faced with other plywood sheets of Douglas fir. The report describes in detail the grade of the timber used and the various glues. Compressive, transverse load, con-centrated load, impact and racking load tests were carried out. The results are illustrated by graphs and tabulated summaries are included

The thermal transmission properties of wall specimens only were examined. The computed value of the heat transmission coefficient of the wall is .252 as against a test result of .260. Comments by the sponsor of the system are included. No data relating to the weatherresistance of the system are given.

### Moving Buildings

MOVING BUILDINGS IN THE USSR. A. Ling. (The Architects' Journal, Feb. 24, 1944, pp. 151-162.) Examples of moving multi-storey buildings in USSR. Details of equipment. Economic conditions for moving instead of demolishing and rebuilding.

The practice of moving buildings has been neglected in this country, but well developed both in USA (see Information Centre No. 1171) and USSR. It is an important method which allows road widening. In the reconstruction plan of Moscow 150 buildings are scheduled for moving.

The moving of buildings of architectural value can be decided upon almost independently of economic considerations. For buildings of negligible architectural value economic considerations must play a greater

Under the most favourable conditions moving a building may cost only 40 per cent. of the cost of a new building of similar size. Additional costs will be incurred if the nature of the building, the site and the move is less favourable. In general, the building to be moved should be in a good state of repair, over three storeys in height, cover a small area and have a simple ground plan, it should be moved in a straight line, parallel to the longest side,

as short a distance as possible. So far buildings up to a maximum weight of 23,000 tons have been moved, and there are examples of circular movement, lifting, etc. Apart from saving in terms of money, the method has the advantage of saving materials, labour and of maintaining the use of existing buildings practically without interruption. Investigations are still being made for further improvements in technique in order to reduce the cost and time required.

### Lightning Protection

THE PROTECTION OF STRUCTURES AGAINST LIGHTNING. J. F. Shipley. (Journal of the Institution of Electrical Engineers, December, 1943, Part I, p. 501). Description of nature of lightning and how to deal with it in buildings.

In a previous item (No. 1150) the new Code of Practice for protection against lightning was reviewed. The present paper gives the background of modern work on which the Code is based.

It commences with an interesting description of the nature of lightning, the electrical stress in the lower atmosphere and the effect of high structures in localizing the stress and assisting structures in localizing the stress and assisting the discharge of the stroke. Apparently the Empire State Building provides a remarkable example in which the stroke is actually preceded by an electrical streamer from the top of the tower. There is a full account of what happens when a flash occurs, and two maps showing the frequency of electrical storms in this country and in the world as a whole.

The principles governing lightning protection are set out, and constructional details of protective systems are described.

The paper is most interesting reading, though the Code itself of course meets the normal needs of practice.

### PLUMBING

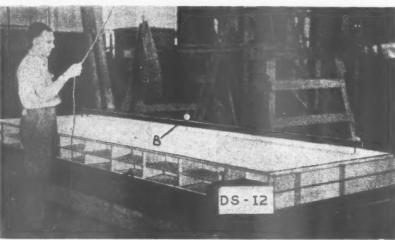
### and Sanitation

### Hygiene in Reconstruction

SANITARY SCIENCE AND HYGIENE IN RECONSTRUCTION. A. F. Russell. (RIBA Journal, February, 1944.) Extracts from Chadwick Trust Essay 1943, dealing in general way with various aspects of hygiene.

The author lists factors detrimental to health in towns as :-

1. Congested site development, preventing access of light, sunshine and air, and



Research by the U.S. National Bureau of Standards on low-cost timber housing. A floor specimen is undergoing an impact test. 'A' is a deflectometer, 'B,' a set gauge. See No. 1148.

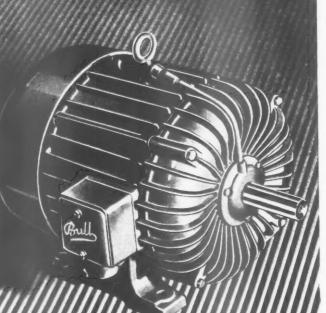


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the chamer of th

containing not even the most elementary amenities

2. Overcrowding of individual dwellings, occasioned by scarcity of accommodation and high rents.

Atmospheric pollution, due to intensive multiplication of absolescent methods of domestic and industrial heating.

4. Adverse effects of noise, which although yet incompletely determined, undoubtedly exists in varying degrees.

5. Pressure of economic circumstances aggravated by town conditions; the average town dweller has none or few of the countryman's opportunities for augment-ing his food or fuel supply at little or no

cost.
There follows discussions of town planning aspects, types of housing, quietness, daylight, atmospheric pollution and refuse disposal.
Although of considerable interest as a general survey the individual aspects are not dealt with in such detail as they have been in various papers of comparatively recent date.

### QUESTIONS

and Answers

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

1485

Wall Construction

Q Do you consider the following method of external wall construction for domestic work, sound and economical? 4½ in. inner loadbearing brick wall tied to 3 in. terra cotta or concrete proprietary hollow or solid blocks, rendered externally with two coats cement render 1 in. thick, the outer coat waterproofed. Cavity to be 2 in. thick. External angles of buildings to be of 9 in. dressed stone, likewise plinth, window and door jambs, etc.

There is nothing wrong with the principle. Brick and hollow tile cavity walls were used before the war for cheap houses, where the bye-laws permitted, and have frequently been

used since the war for camps and the like. It is normal practice for the external skin to be of brick and for the partition block to form the internal lining. Cement rendering as an external finish has not proved very successful in this country and the brick finish

makes the use of cement rendering unnecessary.

Obviously long lengths of half brick wall are not satisfactory without some support and it is usual to incorporate small brick piers into is usual to incorporate small order piers into the design which could, of course, be of stone if you prefer it. Again, half brick walls are not usually capable of withstanding the stresses of a pitched roof and normally the roof is designed with trusses so that the point loads bear on the brick piers. The frequency and size of the piers must depend upon the length and height of wall unsupported by lateral walls and also upon the type, weight and span of the roof.

Factory Act

What regulations have been published under Sections 7 (Sanitary facilities) and 42 (Washing facilities) of Factories Act 1937, other than S.R. & O. 611 and 581?

A No regulations, other than those contained in S.R. & O. 611 and 581 have been issued under Sections 7 and 42 of the Factories Act, 1937.



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

### MOH

## Repair of Houses

A circular (49/44) has been issued to local authorities by the Secretary of the Ministry of Health on THE GENERAL SCHEME FOR REPAIR OF HOUSES, from which excerpts are given below. The circular 2871 referred to below was published in the A.J. of Oct. 21, 1943, p. 298.

I am directed by the Minister of Health to refer to Circular 2871 of October 11, 1943, and to Circular 9/44 of January 29, 1944, and to draw your attention to various matters which have arisen or may arise in connection with the operation of these Circulars.

SUPPLY OF LABOUR PROGRAMMES

The fact that few local authorities have complained that they have been unable to secure contractors and labour for essential work suggests that local authorities have not yet taken full advantage of the new scheme. Whilst it is appreciated that in some areas the position has been affected by the withdrawal of men for urgent operational tasks and for first aid repairs of war damage, local authorities in general are urged to place orders authorities in general are urged to place orders forthwith for the work they want done, and to adjust their demands from time to time in the light of experience.

The programmes should provide in particular for the completion, in so far as it may be practicable, of all war damage repairs by the end of the year. Every effort will be made by the Government to see that labour and materials are available. If local authorities materials are available. If local authorities experience difficulty in making such provision they should at once inform the Senior Regional Officer of the Ministry.

The supply of labour may be supplemented the supplemented the

as building operatives are released from work directly connected with the war effort. In particular it is hoped that numbers of men may return to their homes and old employers in rural districts, so enabling these firms to function again as contractors on housing work. In order to ensure that full advantage is taken of returning men, local authorities and con-tractors are advised to keep in close and regular touch with the Local Officers of the Ministry of Labour and National Service.

LIMITS OF EXPENDITURE

The limit of expenditure laid down, viz., £500 per house or £400 per flat or similar £500 per house or £400 per flat or similar tenement, is meant to cover the whole building costs, including such items as fees of outside architects employed by the local authorities, employment of Clerk of Works, etc., and such fittings as cookers, gas and electric lighting, and accessories. The expenditure is intended to relate to any work carried out on any building after the issue of Circular 2871 (i.e., October 11, 1943) regardless of any work that may have been done on that building before that date. The figure, however, is a comprehensive figure, including repair of wardamage, restoration of dilapidations, adaptation or conversion. tion or conversion.

ABNORMAL EXPENDITURE

With reference to paragraph 3 of Circular 9/44, any proposals by local authorities for expenditure in exceptional circumstances in excess of £500 per house or £400 per flat, as the case may be, should be submitted to the

the case may be, should be submitted to the Senior Regional Officer.

Where a private owner in similar exceptional circumstances wishes to undertake building work costing more than £500 per house or £400 per flat he must send in his application for a certificate to the local authority. The application should not be sent direct by the supers to the Senior Regional Officer. Where owner to the Senior Regional Officer. Where a local authority regard the owner's application as reasonable and wish to grant a certificate, they should refer the case to the Senior Regional Officer; if he approves the local authority should send the certificate and the application form C.L. 1136 to the Regional Licencia Officer, positiving him of the Senior Licensing Officer, notifying him of the Senior Regional Officer's approval.

REPAIR OF SERIOUSLY DAMAGED HOUSES

It is the repair of these houses to which the Government attaches the greatest importance.

Government attaches the greatest importance. Under the special scheme for the repair of C (b) houses by group contractors, local authorities drew up lists of houses and submitted them to the War Damage Commission. In a number of cases the War Damage Commission were unable at the time to classify a portion of the houses as subject to cost of works payments. Local authorities should not review these lists with a view to extending their programme of repair to cover all the houses which are now regarded by the War Damage Commission as repairable at the Commission's expense. at the Commission's expense.

The Ministry of Works are proposing to issue a revised war-time economy standard which will permit of certain relaxations of the present standard in respect of some of the materials required for the completion of houses or for substantial repairs of war damage. Pending this revision, local authorities should consult the Senior Regional Officer of

As regards timber, it has been agreed with the Ministry of Health in any cases of difficulty. As regards timber, it has been agreed with the Timber Control that some discretion should be given in the meantime to the Ministry of Health regarding the amount of timber specified in individual cases. As local authorities are aware it was laid dwar for timber specified in individual cases. As local authorities are aware, it was laid down for the repair of C (b) houses that timber used must not ordinarily exceed one-fifth of a standard per house. Under the new arrangements economy of timber is of course still necessary and the object should continue to be to restrict the use of timber. But the average amount may be raised to a quarter of a standard per house provided the amount used in respect of any particular dwelling does not exceed half a standard. In addition it will be open to lead authorities in addition it will be open to local authorities in exceptional cases to submit applications for further amounts where they consider it to be justified.

When a private owner wants timber, steel or cast iron he should apply to the Regional Licensing Officer, whether he requires a building licence or not, except that in the

case of timber where no building licence is required, application should be made direct to the Area Officer] of the Timber Control.

LIAISON WITH THE WAR DAMAGE COMMISSION
The War Damage Commission has undertaken to supply local authorities, as soon as possible, with lists of all houses so far classified by the Commission as likely to be total losses. If a house was damaged before January 1, 1943, and is on the list supplied, the Commission cannot pay for its repair. Other houses to which the damage is merely superficial may be presumed repairable at the Commission's expense. Where however, substantial repairs are required, the local authority should ask the Commission whether it is safe to proceed with repairs. The Commission has undertaken to give urgent priority to any such inquiries, which may be made over the telephone.

ARCHITECTS' FEES

If local authorities find it necessary to engage
the services of outside architects, the fees in
respect of war damage repairs and work of a
similar character will continue to be those
laid down in Circular 2720. The work
involved in conversions and adaptations or in
the completion of unfinished houses is, however,
of a different category and the appropriate
fees are now being considered in consultation
with the Royal Institute of British Architects.
A further communication will be addressed to
local authorities on this matter in due course.

REQUISITIONING
Under present procedure when a local authority wish to requisition a house under Circular 2845 and to carry out work there, they must furnish the Senior Regional Officer of the Ministry of Health with an estimate, and his approval is normally given subject to satisfactory tenders being obtained. To speed up the procedure, local authorities are relieved from the necessity of furnishing an estimate where the cost would not exceed £100, provided they attach a certificate from the appropriate Technical Officer stating that the proposed works are reasonable and sufficient to render the house fit for occupation having regard to war-time standards. On receiving consent to requisition, local authorities could then proceed with these works without obtaining the prior approval of the Senior Regional Officer.

UNFINISHED HOUSES
It should be made clear that local authorities have no authority to complete partly-built private houses at the owner's expense. If they wish to do the work, they must either buy the uncompleted house or requisition it. Under Section 90 of the Housing Act, 1936, local authorities may make loans to the owners of houses wishing to carry out works of reconstruction, enlargement or improvement. The Minister's sanction is not required. The Minister's sanction is not required. The Minister's sanction is however required to advances under Section 91 of the Housing Act to persons or bodies desiring to increase housing accommodation, for example, by the conversion or adaptation of existing houses or the completion of unfinished houses. The Minister would be willing in a suitable case to consider a proposal by a local authority to advance money under this Section for the completion by private persons of partly-built houses, if the local authority are satisfied that

REFERENCE TO PLANNING AUTHORITIES
It is emphasized in paragraph 5 of Circular
9/44 that the raising of the limits of expenditure
makes it more important than ever that, before
deciding to incur or certify expenditure on a
house, a local authority should be satisfied
that the condition of the house is such as to
justify the expenditure. Only in rare cases
should work exceeding, say, £100 be carried
out on a house in a confirmed Clearance
Order. It is also important that the local
authority should consider beforehand whether
the repaired premises will constitute a serious
obstacle to permanent works of reconstruction.
Special reference to the Planning Authority
may be necessary, having regard to the pro-

the houses will be brought into occupation so as to relieve urgent needs.

visions of any Interim Development Order for the time being in force and to any specification of areas under Section 20 of the War Damage Act 1043

HOUSING (RURAL WORKERS) ACT

The new limits of expenditure set out in Circular 9/44 also apply to applications for assistance under the Housing (Rural Workers) Act. In extension therefore of Circular 2877 of the 29th October last, works not exceeding £500 per house may now be dealt with in accordance with the principles laid down in Circulars 2871 and 9/44 without submitting particulars of individual applications to the Minister.

### TDA

# Competition

Rules for the competition for the design of a PAIR OF SEMI-DETACHED TIMBER HOUSES promoted by the Timber Development Association, have now been arranged and approved by the RIBA. Extracts from the rules are given below. Full details can be obtained from the Secretary, Timber Development Association Ltd., 75, Cannon Street, E.C.4.

The Promoters have appointed the following to advise them on the conduct of the Competition: C. Cowles-Voysey, F.R.I.B.A.; Brian O'Rorke, M.A., F.R.I.B.A.; Frederick MacManus, F.R.I.B.A.; Bryan Latham, Vice-President of the Timber Trade Federation of the U.K., G. W. Grosvenor, Chairman of the Timber Building Manufacturers Association, who will act as a jury of assessors to adjudicate on the whole of the designs submitted, and to make the award.

The Award of the Assessors will be accepted by the Promoters, and within one month of the date thereof the following premiums shall be paid in accordance therewith, viz.:—
To the author of the design placed first by the Assessors, £250; to the author of the design placed second, £100; to the author of the design placed third, £50.

The Promoters do not intend to build houses to any of the designs submitted, but they intend to bring the premiated designs, and any other designs they consider suitable, to the notice of the competent authorities concerned with housing and to advertise them by exhibition and in the Press.

Designs must reach the Timber Development Association, Ltd., not later than 12 noon on Saturday, September 30, 1944, after which no design will be accepted.

Any questions which the Competitors desire to ask must be addressed to the Timber Development Association, Ltd., on or before June 1, 1944, and all such questions and answers thereto, as the Assessors consider necessary, will be sent to each Competitor and will form part of the Conditions and Instructions to competing Architects. Questions should be sent anonymously.

The object in promoting this competition is to assist the Promoters in putting forward, as an example, a design or designs, for a pair of semi-detached houses which will show the positive advantages of timber construction in the speedy and economical provision, in quantity of attractive, permanent houses.

It may be assumed that all normal building trackers attracted and atthe building statement.

It may be assumed that all normal building timbers, plywoods and other building materials will be available, and materials other than timber may be used at the Competitors discretion where thought practicable or desirable. Competitors are invited to put forward their own ideas as to the type of construction to be used—which may be pre-assembled, if desired—and their attention is drawn to the following aspects of the problem: (a) Ease, speed and economy

of production and erection; (b) efficiency in the use of timber and any other materials which may be used; (c) low maintenance

For the purpose of this Competition a level site with a frontage to the road of 65 feet may be assumed. The site is of ample depth and all services are available. No aspect is given for the site and the house is to be planned as an "any aspect" house. The attention of the Competitors is drawn to those clauses in the Ministry of Health Model By-laws—Series IV—1939, dealing with buildings constructed wholly or partly of timber.

A total floor area of 900 sq. ft. (exclusive of

A total floor area of 900 sq. ft. (exclusive of any nesessary one-storey outbuildings) is not to be exceeded, and within this area Competitors are asked to plan accommodation suitable for two adults and three children. The area is to be measured within the external walls, but is to include areas occupied by internal walls and partitions, chimney breasts, and flues. Competitors are free to allocate the floor area as they think best, provided that planning and design make for CONVENIENCE and COMFORT with special regard to labour saving, economy in fuel consumption for cooking, room and water heating. Three separate bedrooms must be provided.

All drawings are to be on sheets 20 in. by 30 in. finished in ink. Prints of drawings may be submitted provided they are sufficiently clear for line block reproduction. Drawings may be delivered flat or rolled.

The following drawings are required to a scale of \(\frac{1}{2}\) in. to one foot: Plan of each floor; section or sections; three elevations. Drawings to a larger scale to show any special constructional details which cannot be shown on the \(\frac{1}{2}\) in. scale drawings. The drawings should show any fixed furniture or fittings which are to be provided as a part of the house. No perspective drawings are required. The Promoters undertake to have perspective drawings or models of the three premiated designs prepared in time for the exhibition.

A concise typewritten report is to be submitted

A concise typewritten report is to be submitted giving such information and explanation as cannot be shown on the drawings. It should contain a description of the materials proposed to be used, the methods of construction and assembly and notes on maintenance.

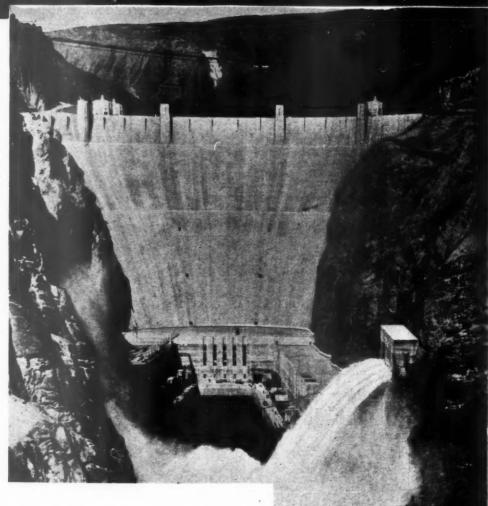
### RIBA

### New Members

Hon. Corresponding Member (1).—Ahlberg, Claes Axel Hakon (Stockholm, Sweden).
FELLOWS (12).—Andrews, Percy Maguire (Manchester), Beaumont, John Somerville, M.C., B.A. (Manchester), Hayworth, Dudley Parkes (London), Mant, Cecil George (London), Cross, Max George (Weymouth), Mort, Arthur Edward Thomas (Major, R.E.) (Winchester), Osborne, Arthur Leslie (Leamington Spa), Smith, John Marsh (Ebbw Vale, Mon.), Griffiths, Stanley Albert (Stourbridge), Haxton, Andrew David (Leven, Fife), Smith, Stuart Veitch (Pontefract, Yorks), Wright, Will John Brockie (Glasgow).

Associates (40).—Anderson, Harry (Cambridge), Barnett, Michael (London), Barron, Donald Gabriel (University of London) (London), Blacklock, John Donald (Sunderland), Booth, Alan Leetchfield (Northern Polytechnic, London) (London), Bosanquet, Mrs. Hilary June (Architectural Association) (London), Coia, John Peter (Glasgow School of Architecture) (Glasgow), Crossley, Alan (Stockport), Crowe, Mrs. Sheila Margarite (University College, Dublin) (Dublin), Daley, Harry (London), Dunand, Miss Amelia Ethel Catherine (Twickenham, Middlesex), Early, Miss Eleanor Mary (Witney, Oxon), Edwards, John Edward Graeme (Birmingham), Emmerson, George Thomas (Darlington, Co. Durham), Evans, Miss Jessie Maud Morton (Royal West of England Academy, Bristol) (Bristol), (Bristol),

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A.R.C.A. (Gt. Missenden, Bucks), Pearce,
George Albert Henry (Camberley, Surrey),
Poel, Stanley Bacon (Gidea Park), Reeks,
Charles (London), Paid Stanley Thomas Charles (London), Reid, Alexander Budge (Reading, Berks), Ryder, John Gordon (King's College (University of Durham) Newcastle-upon-Tyne) (Newcastle-upon-Tyne), Sayce, Gordon Henry (London), Wyatt, Samuel Thomas (Bristol).

Overseas.—Aronowitz, Isaac, B.ARCH. (Rand) (East London, South Africa), Chalmers, Gordon Tudhope, B.ARCH. (Rand) (Johannes-

Gordon Tudhope, B.ARCH. (Rand) (Johannesburg), Greenblo, Ezra (Cape, South Africa), Greig, Mrs. Doreen Edith (Johannesburg).
LICENTIATES (16).—Charles, Major William Henry (London), Farmer, Cyril Parsons (London), Farrall, Arthur William Edward (London), Gessey, Leonard Richard (London), Gooderson, Arthur Vivian (Ruislip), Gray, Louis Henry, F.S.I. (London), Greenhalgh, Harold, P.A.S.I. (Bolton, Lancs). Hudson. Harold, P.A.S.I. (Bolton, Lancs), Hudson, Miles Walter (London), Hudson, Walter Oakley (London), Kirk, Stanley Lawrence (Worthing, Sussex), McKinlay, George (London), Mitchell, Leonard Percival (London), Mortimer, Harold (London), Ponsford, Harry Thomas (London), Smith, Clarence Edward (Bromley, Kent), Thomas, Rowland Archer (Manchester).

# PRICES

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DACIO MATERIALE	Incr	Increase over pre-war prices at end of						
BASIC MATERIALS	Jan. 1944	Feb. 1944	Mar. 1944	Apr. 1944  Per cent. +41·46 +108·70 +29·73  +43·75 +60 +47·5 +43·53 +65·22 +32·5 +46·21				
Portland cement 2-in. Unscreened ballast Fletton bricks (at station) Stoneware drainpipes (British Standard) 2 tons and over Roofing tiles Steel joists (basic sections) ex mills Lime greystone Sheet lead Iron rainwater goods and soil pipes White lead paint  RATES OF WAGES (Central London Area)	+43.75 +45 +47.5 +43.53 +65.22 +32.5 +46.21	Per cent. +41·46 +108·70 +29·73 +43·75 +45 +47·5 +43·53 +65·22 +32·5 +46·21	Per cent. +41·46 +108·70 +29·73 +43·75 +60 +47·5 +43·53 +65·22 +32·5 +46·21					
Labourers	+26·98 +21·43	+26·98 +21·43	+26·98 +21·43	+26·98 +21·43				

LABOUR-Rates of Wages since April 2, 1943.

Within 12 From 12-1	miles 5 ,,	radius		2s. 1½d. 2s. 1d.		Labourers 1s. 8d. 1s. 7 <sup>3</sup> d.	for deli	very to	f material site in the unless	Centra
GRADE CL	ASSI	FICAT	IONS							
		A	A1	$A^2$	$A^3$	В	Bı	$B_3$	$B_3$	C
Craftsmen .	. 2	2/-	1/111	1/11	1/101	1/10	1/91	1/9	1/81	1/8
Labourers .	. 1	/7	1/61	1/64	1/53	1/51	1/5	1/43	1/41	1/4
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3. Actual cover of an 8' 0" sheet as laid, 7' 6" x 4' 0".
4. Spacing of purlins up to 4' 6" centres. Horizontal supports for side sheeting up to 6' 0" centres if sheets are fixed vertically.
5. Number of square yards of sheet-DETAILS

Number of square yards of sheet-ing per ton is approx. 102.

fig. per ton is approx. 102.

6. Minimum end lap of roofs, 6".

Side lap, 2\frac{1}{2}".

7. The weight of 100 sq. ft. as laid for roofing with fixing accessories is approximately 320 lbs., or 29 lbs. per sq. yard.

### FIXING

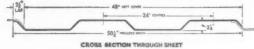
The sheets should be fixed to steel purlins with \( \frac{1}{16} \) diameter galvanised bolts and purlin clips, and to timber purlins with gimlet pointed screws \( \frac{4}{1} \) long.

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"2" Type Louvre Blades.
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ACCESSORIES

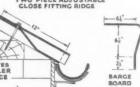
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TWO PIECE ADJUSTABLE

PIECE



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10.0.	4.676	103.33	1	4' 24"	14	56' 24"		
9' 6"	4.442	98.17	2 1	8. 51	15	60' 21"		
9' 0"	4.208	93.00	3	15. 51	16	64' 2		
8' 6"	3.974	87.83	4	16' 24"	17	68. 31		
8' 0"	3.741	82.67	5	20' 21"	10	72: 21.		
7' 6"	3.507	77.50	6	24' 21"	19	76' 24"		
7.0"	3.273	72.33	7	28' 21"	20	80': 21"		
6' 6"	3.039	67.16		35. 51	21	84' 21"		
6' 0"	2.806	62.00	9	36' 24"	22 1	88' 21"		
5' 6"	2.572	56,83	10	40' 24"	23	92. 25		
5' 0"	2.338	51.67	11	44' 2."	24	96' 21"		
4' 6"	2.104	46.50	12	40" 25"	25	100. 31		
4" 0"	1.870	41.33	13	25. 31	26	104' 24"		

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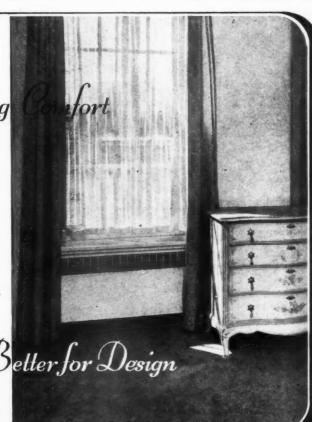
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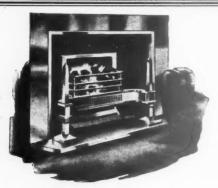
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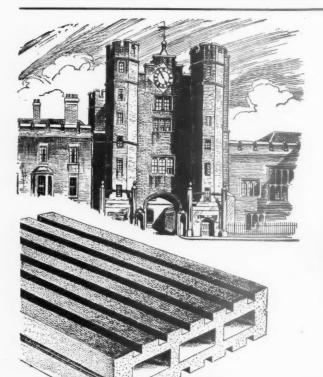
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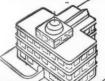
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Replies to Box Numbers should be addressed care of "The Architects' Journal." War Address: 45 The Avenue, Cheam, Surrey.

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The Incorporated Association of Architects and Surveyors maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Address: 75 Eaton Place, London, S.W.1. Tel.: Sloane 5615

#### CITY AND COUNTY OF THE CITY OF EXETER.

APPOINTMENT OF CITY ARCHITECT.

APPOINTMENT OF CITY ARCHITECT.

Applications are invited for the above appointment at a salary of £900 per annum rising by annual increments of £50 to £1,000 per annum plus cost of living bonus now £33 168. Od. per annum. Applicants must not be under 35 years of age.

The person appointed must be a member of the Royal Institute of British Architects and will be responsible for designing and carrying out the Council's Architectural work, including its Housing and Educational Building Programmes.

He will be required to advise the Council on all Architectural matters under its control, and be responsible for the upkeep and maintenance of the Council's Buildings and Properties and the control of the staff engaged on such work.

The appointment will be subject to three months' notice on either side and to the provisions of the Local Government Superannuation Act, 1937. The person appointed will be required to pass a medical examination. Applications stating age, qualifications and full record of experience, together with copies of three recent testimonials should be sent to the undersigned not later than the 2nd June, 1944.

No application forms will be issued.

C. J. NEWMAN,
Town Clerk's Office,
Exter.

### 28th April, 1944. WEST SUSSEX COUNTY COUNCIL.

COUNTY PLANNING DEPARTMENT.

Applications are invited for the appointment of a Draughtsman in the County Planning Department.

The appointment will be to the temporary staff, and the commencing salary, inclusive of overtime and war bonus, will be £235 3s. 6d.

Applicants should be neat and efficient draughtsmen of some experience.

Applications stating age, qualifications, experience, and any other relevant particulars, together with the names of two persons to whom reference could be made, must reach me at the County Hall not later than first post on Wednesday, 17th May, 1944.

T. C. HAYWARD, Clerk of the County Council.

Chichester, Sussex.

County Hall, Chichester, Sussex.

. CARDIGANSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of an Architectural Assistant in the above Department, which will be made permanent in twelve months if services

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Applications, stating salary required, qualifications, age, experience and when free to commence duties, accompanied by a copy of one recent testimonial and the names of two referees, to be sent to the undersigned not later than Monday, 15th May, 1944.

IVOR EVANS,

County Council Offices,

Clerk of the Council.

County Council Offices, Aberystwyth, Cardiganshire. 27th April, 1944.

### MERIONETH JOINT PLANNING COMMITTEE.

APPOINTMENT OF PLANNING OFFICER.

APPOINTMENT OF PLANNING OFFICER.

The Committee invite applications for the appointment of County Planning Officer at a salary of £500 rising by annual increments of £25 to £600 per annum, plus bonus and travelling allowance according to the Merionethshire County Council Scale. (Cost of living bonus is limited to Officers whose salaries do not exceed £525 per annum).

The person appointed will be required to devote the whole of his time to his duties, and must be fully conversant with the Town and Country Planning Acts, Orders, Circulars, etc.

Applicants must have had wide experience of planning and membership of the Town Planning Institute will also be an advantage.

The appointment will be terminable by three months' notice in writing on either side, and will be subject to the Local Government Superannuation Act, 1937, and the Sick Pay Scheme and other rules and regulations of the Merionethshire County Council. The successful candidate will be required to pass a medical examination.

Applications in writing giving age and full particulars of qualifications and previous experience, together with copies of three recent testimonials should be submitted to the undersigned not later than Thursday, the 1st day of June, 1944.

HUGH J. OWEN, Clerk to the Joint Committee.

County Offices. Dolgelley. 1st May, 1944.

### COUNTY BOROUGH OF DARLINGTON.

BOROUGH SURVEYOR'S DEPARTMENT—CHIEF ASSISTANT ARCHITECT.

Applications are invited for the appointment of Chief Assistant Architect at a commencing salary of £550 per annum rising by two increments of £25 to £600 per annum, subject to deductions under the Local Government Superannuation Act, 1937.
Applicants must be Associate Members of the Royal Institute of British Architects. They should have considerable experience in the design of schools and other public buildings.
Applications endorsed "Chief Assistant Architect" should be delivered to me not later than 1 p.m. on Wednesday, the 31st May, 1944.

H. HOPKINS,

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### Architectural Appointments Vacant

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

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

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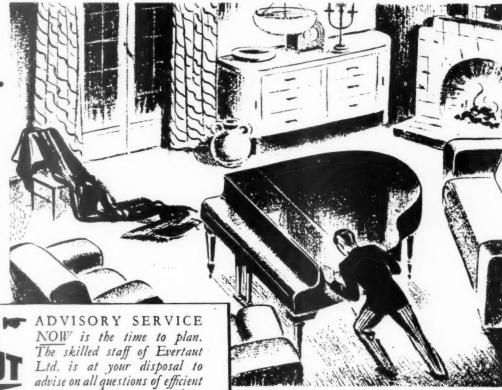
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STUDENT wishes to purchase any pre-war copies of the Architectural Review; also any volumes Library of Planned Information; also any volumes Oeuvre Complete of Corbusier. Box 629.

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