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The Editor will be glad to receive MS. articles and also illustrations of current architecture in this country and abroad with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

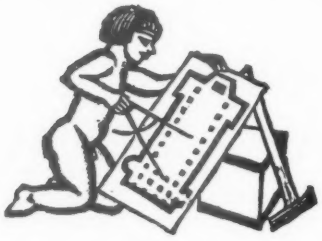
THURSDAY, JUNE 11, 1942. NUMBER 2472: VOLUME 95

PRINCIPAL CONTENTS

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this JOURNAL *should not be taken as an indication that they are necessarily available for export.*

Owing to the paper shortage the JOURNAL, *in common with all other papers, is now only supplied to newsagents on a "firm order" basis. This means that newsagents are now unable to supply the* JOURNAL *except to a client's definite order.*

In common with every other periodical and newspaper in the country, this JOURNAL *is rationed to a small proportion of its peace-time requirements of paper. This means that it is no longer a free agent printing as many pages as it thinks fit and selling to as many readers as wish to buy it. Instead a balance has to be struck between circulation and number of pages. A batch of new readers may mean that a page has to be struck off, and conversely a page added may mean that a number of readers have to go short of their copy. Thus in everyone's interest, including the reader's, it is important that the utmost economy of paper should be practised, and unless a reader is a subscriber he cannot be sure of getting a copy of the* JOURNAL. *We are sorry for this but it is a necessity imposed by the war on all newspapers. The subscription is £1 3s. 10d. per annum.*



from AN ARCHITECT'S *Commonplace Book*

"When we mean to build,
We first survey the plot, then draw the model:
And when we see the figure of the house,
Then must we rate the cost of the erection:
Which if we find outweighs ability,
What do we then but draw anew the model
In fewer offices; or, at least desist
To build at all?"

Shakespeare; Lord Bardolph, King Henry IV.

NEWS

R.I.B.A.

The following notes on the work of the Demobilization Committee of the R.I.B.A. have just been received from the Institute:

The Royal Institute of British Architects formed, in 1941, a Committee of Members with experience of service in the Forces during the last war and in this, to study the problems with which serving architects are likely to be faced at the end of hostilities. They were instructed to draw up a programme of action which could be adopted by the R.I.B.A. and carried into effect at the right time.

The Committee realized that though the claims of all professional men to immediate employment will be advocated by their respective societies, they considered that it should not be forgotten that the successful carrying out of post-war reconstruction schemes will largely depend on the right use of architects and therefore felt it essential that they should be established in their legitimate sphere in time to make a full contribution to the planning to be initiated by the State. With this in mind the Committee first considered the implications arising from the absorption into the Forces of the great numbers of building operatives and others ordinarily engaged in the Building Industry who, on termination of hostilities, will almost certainly be released immediately in order to make good the arrears caused by the cessation of civil building, damage by enemy action and the national urge towards the improvement of living conditions. They found that if the wheels of the Industry were started without the previous provision of planned projects or, at best, ill-considered ones, the resulting waste of money, time and labour would be disastrous. They, therefore, concluded that, as soon as the end of the war can be foreseen, it is essential that architects and their assistants serving with the Forces should be released to enable them to have the material ready for the Industry to work upon; and they also felt that in addition to the obvious desirability of returning students of all subjects to their interrupted studies, there will be special reasons for the early demobilization of architectural students to enable them to complete their training and reinforce the architects dealing with post-war building.

The Committee also had under consideration the problem of small firms of architects, particularly those in single-handed practice, who fear that if their demobilization is delayed they may find on returning to their profession that available work has been absorbed by firms whose partners have not been serving with the Forces, or in which one has been able to remain behind to keep the practice in existence.

With all these considerations in mind the Committee recommend that the R.I.B.A. should, at suitable times, approach the Ministry of Labour and National Service and other appropriate authorities to urge the early release of architects, their assistants and architectural students; that the R.I.B.A. should, in conjunction with its Allied Societies and in consultation with the Ministry of Labour, set up a bureau on the lines of that which the R.I.B.A., the Society of Architects and the Architectural Association maintained after the last war; and that the Ministry of Labour should be asked to consult the R.I.B.A. bureau on the grounds that it would possess the necessary knowledge regarding local distribution of the profession, single-handed practices and such matters, and would thus be in a position to give advice designed to avoid hardship caused by delay in demobilization. Further, they recommended that the Board of Education should be asked to consider the question of the provision of grants to assist demobilized assistants and students to complete their interrupted studies and to qualify in their profession as was done after the last war and, finally, that the R.I.B.A. should, at a suitable time, point out to the appropriate authority that if a portion of the Building Industry now working on the War Building Programme is to be turned over to carry out part of the post-war reconstruction before the end of the war, consideration should be given, before that action is taken, to the question of the prior release of architects and assistant architects to prepare the necessary material for the Industry to work upon.

The Council gave general approval to these recommendations and, on its instructions, the Committee is following up the matter, step by step, as seems opportune.

PLANNING

On Tuesday of last week the Minister of Works and Planning Bill was considered in Committee, read the third time, and passed.

A.A.S.T.A.

The talk by Miss Justin Blanco-White is to be given at the Trade Union Club, Reading, to-day, at 7.30 p.m.; not 3.30 p.m. as stated in our last issue.

Elizabeth Denby

Elizabeth Denby who, with Mr. Noel Carrington, arranged the* Homes to Live in *Exhibition which is now being held in the Exhibition Hall, St. Martin's School of Art, 109, Charing Cross Road, London, under the auspices of the British Institute of Adult Education and the D.I.A. Chief object of the exhibition is to stimulate ordinary people to consider the many aspects involved in the building of their future homes. In electing Elizabeth Denby to be Honorary Associate the R.I.B.A. has conferred well-deserved recognition on one who occupies a unique position in the architectural world. Her experience in flat management, and her researches abroad, which were embodied in her valuable book* Europe Rehoused, *have enabled her to make important contributions to a number of housing schemes. Elizabeth Denby is the star in the profession she invented for herself, "Consultant in Low Rental Housing."

INSTITUTION OF STRUCTURAL ENGINEERS

CANDIDATES ELECTED TO MEMBERSHIP

As Students: Harold Wilfred Bradbury, of St. Helens, Lancs.; Norman Spencer Cleaver, of Purley, Surrey; John Walter Gardiner, of London; Bernard Jean d'Arcy Harlow, of Dewsbury, Yorks; Peter David Ellesmere Jones, of Swansea; Thomas Reginald Moss, of Knutsford, Cheshire; Dennis Richard Frank Row, of Mansfield Woodhouse, Notts; David John Vickery, of London; William Hood Ovens Wight, of London.

As Graduates: Cyril Dawson Askew, of Sale, Cheshire; *Denys Norris Johnson, of London; Francis Jack Laws, of Hadleigh, Suffolk; John Parker, of Tipton, Staffs; James Dunphy Partridge, of Kilbirnie, Ayrshire; Ronald Winstanley, of Stockton-on-Tees.

As Associate Member: †Ralph Gordon Times, of Synnerton, near Stone, Staffs.

As Member: Harry Heywood Hughes, of Liverpool.

* Transfer from studentship.
† Transfer from graduateship.

SHELTERS AT FACTORIES

The Minister of Home Security has recently made an Order amending the provisions governing the amount of floor area per person in non-dormitory air-raid shelters up to a

certain size in factories and commercial premises. The Order reduces the floor area to be provided in such shelters from 6 square feet to 3¾ square feet per person.

The Order, the Ministry of Home Security wishes to point out, applies only to shelters which on the basis of the new standard may accommodate up to 50 people. Thus it will allow surface shelters designed to hold from 31 to 49 persons to be used for a maximum of 50 persons provided that the shelters are freely ventilated by two entrances connected directly or indirectly with the open air. But the order does not apply to larger shelters. Thus, it does *not* enable 80 persons to be accommodated in shelters provided for 50 persons.

WAR DAMAGE REPAIRS

The War Damage Commission issued in a recent *London Gazette* a notice which affects the whole of the County Borough of Exeter.

The notice is issued under Section 7(2) of the War Damage Act, 1941, whereby provision is made for securing that the making of payments by the Commission in respect of war damage shall have regard to the public interest. The publication of the notice in the *Gazette* is, therefore, of great importance to all those with interests in war damaged property, and particularly to those professionally concerned with work on such properties, since upon them must, in practice, fall the responsibility, on behalf of their clients, for seeing that the requirements of the Act are complied with.

The effect of the notice is that any person proposing to execute works of war damage repair in Exeter where the total ultimate cost will be more than £1,000, or ten times the net annual value of the hereditament, whichever is the less, must first inform the Commission. That body in its turn will consult the appropriate Local and Planning Authorities to ascertain whether the carrying out of the proposed works would conform with their intentions regarding re-planning and other public interests. The price limits laid down will be strictly enforced, and the incurring of a larger expenditure than that named without prior notification to the Commission will render the person doing such works liable to forfeit the right to repayment by the Commission. If, therefore, there is a doubt whether the figure named will be exceeded, the proposed work should be notified to the Commission.

Power is given to the Commission in such cases to impose requirements as to the nature of works, the materials to be used, and the time for their execution, and it may change a cost of works payment into a value (or total loss) payment in those cases where restoration of a building would be contrary to the public interest. In the case of buildings which have been totally destroyed the Commission is already empowered by the Act, without the previous publication of notices in the *Gazette*, to attach conditions to the payments made, in order that the public interest may be observed.

The powers conferred upon the Commission by the Act are exercisable only in direct relation to war damage, and the action which it has now notified is not to be confused with any steps which may be taken with regard to "reconstruction areas" as recommended in the Uthwatt Report, or with any measures decided upon by the authorities responsible for short or long term planning.

PUTTY

In connection with the revised schedule of prices issued by the National Association of Putty Manufacturers, a number of correspondents have drawn attention to the difficulties likely to arise from the return to the earlier practice of supplying of putty in returnable kegs. For many years the package question has been one of joint difficulty both to the manufacturers and merchants and it was hoped that in a very few years it would have been possible to say that returnable packages were no longer in use throughout the industry.

Unfortunately the war has made it necessary to reverse temporarily the policy of the Association, and in accordance with the official orders and expressed wishes of the Government, manufacturers are now supplying putty in returnable packages only, except in the case of the smallest quantities.

It is sometimes overlooked that not only is it important that the package should be returned but that the greatest possible care should be exercised during transit and while in the users' possession. The metal itself can of course be ultimately recovered as scrap and again put into circulation, but the possibility of saving of labour expended in the manufacture of the container in the first instance is then lost, and as it is so important to save labour as to save metal, users of metal packages have only to realise that by using packages carefully and returning them promptly they are contributing effectively to the war effort to ensure their whole-hearted co-operation.

A man, a girl, and a wax doll are asleep in bed on page 1 *of the pamphlet* Your Inheritance *(first published as one of our special issues, A.J. Dec.* 25, 1941). *These have been attacked by a critic for their lack of charm.*

C H A R M

YOUR INHERITANCE has provoked some fascinating reactions. *Journeyman Architect*† writes: "There is nothing funny about the pictures of people in bed, nor even the wax doll. Propaganda is a most potent form of salesmanship; and the first essential in salesmanship is that charm by which an interest is aroused and a state receptive of subsequent suggestion achieved. It is not pleasing to be told one is like a wax doll 'asleep with both eyes and mouth open.'"*

This argument, that charm is a necessary part of propaganda is interesting. It is certain that many successful campaigns have not observed the rule. Halitosis, B.-O., foot health, California Syrup of Figs—have these charming subjects been treated in a charming way? Possibly such comparisons will be dismissed as unworthy, but the rule holds no better for serious subjects. "The ox knoweth his owner, the ass his master's crib, but Israel doth not know." On the other hand some goods are undoubtedly sold by charm: high grade cosmetics for instance. Which method one adopts seems to depend on the audience one is trying to get at. The upper classes require charm; the majority of the population is embarrassed by it. For instance, the alphabet the Housing Centre designed for exhibition in shelters had one screen which showed a baby asleep under an apple blossom tree, or something of that sort. It was labelled Q—for Quiet—and was a very charming picture. Nobody got the idea. If the baby had been bawling its head off with an electric drill a few feet away from its pram the point might have got home. The people who live in shelters must suffer a great deal from noise but they need to be made aware of the fact before they can understand what quiet

†Official Architect, May 1942

*The full quote is given in note 1 at the bottom of the next page.

means, because they have never known it. To assume that their tastes are already the same as those of a qualified architect really implies a much greater sense of superiority than the assumption that they are not.

This *a priori* argument is borne out by the way people react. *Journeyman Architect's* reaction is typical of the architectural profession, a very cultured minority. But he's quite mistaken when he associates himself with the vast majority of people, sound in mind and body, to whom such propaganda is or ought to be directed. They just don't notice the absence of charm. Doll's heads, yellow covers, lower-case initials[2] and scrap-book make-up don't seem to affect them one way or another, perhaps because they are used to penny papers. It is the readers of *The Times* and the *New Statesman* who suffer. Nor do they seem particularly outraged by the assertion that though their eyes are open they do not see; they don't belong to the small circle which attaches snob value to culture.

In fact the trouble with *Your Inheritance* probably is that it doesn't go far enough. It assumes that people will dislike squalor once their eyes are open to it, whereas the 30% of the population who suffer most because of it are probably not aware of it and may even enjoy it—a fact which can only be changed by propaganda that is far from charming, designed to make them suitably self-conscious. Similar for instance to the Russian propaganda against drunkenness.

★

[1] " There is nothing funny about the pictures of people in bed, nor even in the wax doll. Nor do you amuse people, still less do you please them, by telling them that they are like a wax doll. Propaganda is a most potent form of salesmanship; and the first essential in salesmanship is that charm by which an interest is aroused and a state receptive of subsequent suggestion achieved. It is not pleasing to be told one is like a wax doll, ' asleep with both eyes and mouth open.' I would recommend anyone who doubts this to try house-to-house selling and, by way of introduction, to cock snooks at the occupier who opens the door." *Just the same,* Your Inheritance, *first published February, 1942, has already had a second edition, so charm or no charm, salesmanship or no salesmanship, somebody is buying it.*

[2] *Journeyman Architect is very cross about lower-case initials. He writes:*—" Then, too, there is the choice of colour. It is stated that certain people are antipathetic to certain colours. It so happens that I dislike yellow, especially a ' greenery yallery.' This, of course, is personal; and there may be many to whom yellow gives pleasure. But about the substitution of lower case initials where the rules of English orthography demand capitals there can be no two opinions amongst educated people. We are English and we write English, and this is nothing but a silly affectation. To write ' the architectural press ' as the name of a firm of publishers is every bit as bad as to dot the capital I. Why not ' the arshitectural press ' and have done with it! Why use English letters at all? "

The Architects' Journal
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Telephone: Vigilant 0087-9

NOTES & TOPICS

FEES AND THE FUTURE

The announcement has just been made that a revised scale of fees has been agreed for private architects who supervise the building of hostels and camps. It is not a very important announcement but on reading it at this precise moment one cannot help wondering about one or two things which may prove very important.

★

One wonders, for example, how many private architects will receive the revised emoluments. However revised they may be they are still fees; and fees for anything connected with building could nowadays, by a careless mention in the House of Commons, shatter a Portal. This is an absurd situation but it exists. M.P.'s may miss all that matters in a Parliamentary wrangle, but years may pass without the slackening of their grasp on a good witch-word. And as it was with Bolshevik at the time of the Arcos raid, so now it is with Building Fees.

★

But the compulsory holiday from fees which a great many architects have had for two-and-a-half years, enables them to face with some detachment a much bigger aspect of the fees question than our legislators' disapproval of them. In their new-found detachment most architects can be coaxed into the admission that 19 in 20 of them are incompetent at collecting fees.

Sir Stafford Cripps and Sir James Grigg at the Homes to Live In *Exhibition designed by Elizabeth Denby and Noel Carrington.*

They are incompetent at dividing them, at doing what has to be done to them; in short, they dislike them.

★

I received a letter recently from an architect who has risen rapidly in the Royal Artillery, and was by no means unfortunate in pre-war days —one of those once-a-year letters peculiar to wartime. A large part of the letter was a hymn of praise that for a year or two he was freed from the calculations, cheeseparing, window-dressing and dunning which had taken up half his pre-war time. This admission impressed me the more because its author's management of the drearier side of architecture had always been meticulously competent.

★

I therefore believe that if architects could get rid of the fee system without sacrificing freedom and initiative the large majority would gladly do so and their clients would unquestionably get better value for their money. It should not be impossible for architects to devise a system of employment which would do those things, and one hopes that the professional bodies who are considering post-war problems have not forgotten this one. Otherwise hundreds of architects who dislike the fee system will be forced, after the war, to rely on its diminishing possibilities rather than enter one of the *à la* Civil Service architectural departments which have proved so woefully unable to produce architecture.

H-M-S FOR H-R-S

No fewer than 350 people attended the opening ceremony of *The Homes to Live In* Exhibition, designed by Elizabeth Denby and Noel Carrington for the British Institute of Adult Education and the D.I.A., including two members of the Cabinet, Sir James Grigg, Secretary of State for War, and Sir Stafford Cripps, Lord Privy Seal.

Sir Stafford, who opened the exhibition, stressed the fact that its chief purpose was to enable the general public to realize that they were the clients of the experts, not the servants. The exhibition, he said, is thus designed for the average man and woman to enable him or her to demand a decent standard of housing after the war.

★

At this point a stranger on the next seat nudged me and said: "Two to one he talks about Homes for Heroes." I took him, and in the next sentence Sir Stafford said: "Can we this time make Homes for Heroes more than a hollow slogan?"

★

The exhibits are a great credit to Elizabeth Denby and Noel Carrington, but the lay-out of the exhibition doesn't reach the high standard of its predecessor, *Living in Cities*. It lacks the Misha Black touch.

ASTRAGAL

HOUSING

IN THE WEST

TWO SCHEMES FOR THE MINISTRY OF SUPPLY

ARCHITECT: G. A. JELLICOE

SCHEME 1: *Resident Architect: D. W. Plumstead. Contractors: William Cowlin & Son, Ltd. This site illustrates alternative uses of the block unit. Along the main road long terraces are used, but with the strong horizontal line broken at intervals by thick tree planting. On the inner road the blocks are grouped on a more domestic scale, with the introduction of pairs of houses for contrast. The whole is set against a background of mountains. The houses in the rendered finish illustrated are on an adjoining site, where Mr. Alwyn Lloyd was adviser, and illustrate some variations of the standard design.*

SCHEME 2: *Resident Architect: Anthony Pott. Contractors: Bovis, Ltd. A sharply sloping site gave the opportunity for the housing to be planned with fine views towards the south. Part of the roads were already in existence, and from these the plan was developed. Pairs of houses contrast with long terraces, the central group of the scheme rising across steep contours.*

GENERAL—The housing schemes here illustrated are two of seven schemes designed to provide war-time accommodation for factory workers. In most cases these would be married men, who would thus be able to have their wives and families living with them. The possibility was kept in view that it would be taken over by the Local Authorities concerned after the war, and accommodation, roads and services, therefore, conform with the local requirements.

ORGANIZATION—The architect was given seven sites simultaneously, and was asked to complete the work as quickly as possible. The general contractors for each site were appointed by the Ministry of Supply very soon afterwards. The Ministry stated that so far as the architect was concerned, they would deal with one chief architect, but if he in turn cared to sub-let any of his sites that was no concern of theirs.

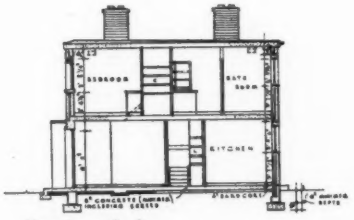
The first problem was therefore one of organization. After reviewing all the unknown problems that existed at that date, April, 1941,

SCHEME 1

and the fact that communication with the sites was liable to be cut off for a considerable time, a programme of decentralization was adopted. On each site was placed a resident architect with full powers to make decisions and adjust the designs according to the material available, and to the circumstances of the sites; this decision to be made without reference back to the central office.

Structural details were worked out exactly in London, and standardized as far as possible. This standard unit was found to be a quicker and more rapid method than to hand over the design entirely to independent architects for each site who were not in a position to assemble knowledge so quickly. The basis of this unit was the exact standardization of plan, and therefore must be of a type that would be universally accepted in the wide area of England that the sites cover; and would lend itself to adjustment whether the site were hilly or flat, urban or rural.

With this standard plan, the layouts were broadly worked out at the central office, and then passed over entirely to the site architects. The intention of the grouping was explained. This programme of decentralization and dependence on men capable of making a decision was very valuable, especially in the early stages. The flow of materials to each site was even more complex than anticipated, and one of the



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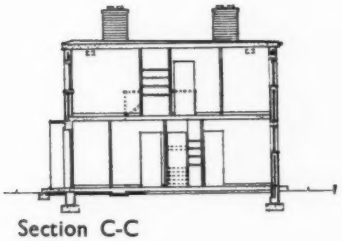

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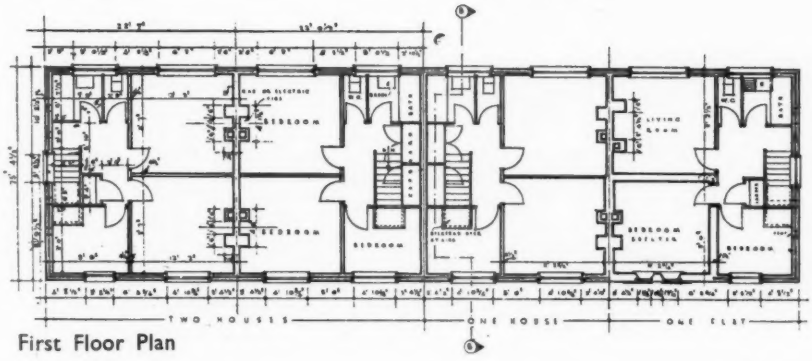
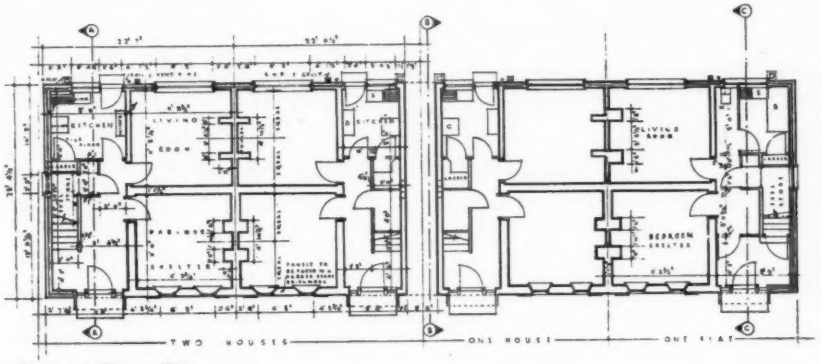


First Floor Plan



Ground Floor Plan

TYPE PLANS—HOUSES AND FLATS

Perspective of the terrace housing block facing the main road. The view on the facing page shows the application of the terraces to a continuous informal street in Scheme 1, and the harmonious relationship between the new blocks and the old buildings in the background.

A variation of the standard design in Scheme 1, *by Mr. T. Alwyn Lloyd, on a portion of the site for which he was consultant. The rendered finish and the extra weight of parapet above the first floor windows are the main variations.*

interests in going from site to site is the particular use of materials. An example of this is shown in the different types of porches, based on the standard design. As telephonic and rail communication improved in the summer, this local decision was not so important.

DESIGN — The requirements called for a standard two double and one single bedroom, and living room and parlour. The question of A.R.P. was left to the architect to incorporate. At that time, as it was feared that bombing might continue and seriously interrupt the work, it was considered advisable to incorporate this within the structure of the house. The whole building is therefore designed for strength, with the parlour as the particular A.R.P. shelter. This conception of the whole structure produced a new external form. There were to be neither parapets nor overhanging eaves, and in fact the block of the house tended to become in shape not unlike the ordinary street shelter. The cross walls were essentially kept simple, not only for strength but also for rapid construction. The floors and ceilings were also so planned to give additional structural strength against blast in any one direction.

But for the fact of the windows, it would have been possible to make the whole house itself a shelter. But the windows proved insuperable, and therefore the maximum protection was confined to one room. This is achieved by 13½ in. walls, approved ceiling slabs, and small temporary windows protected by shutters. It is of interest that the light in these rooms is dull but not unsatisfactory.

The use of the parlour as an A.R.P. shelter called for slight variation of plan, and although the size of the living room and parlour combined are normal standards, it is recognized that the usual proportion of large living room and small parlour had been changed. This is proving interesting in experience, because it calls for greater use of the parlour itself. But the inflexibility of this structural plan tends to consideration of how this rigidity may be overcome in the future. The simple through walls, both vertical and horizontal, are excellent

structurally, but peculiarly final.

The design of the interior has endeavoured to introduce the sense of form not merely of individual rooms, but in relation of the rooms one to another. This has meant elimination of small passages, and has brought a diffusion of light as far as possible. There are in fact no dark corners, and the downstairs and upstairs hall are one continuous design joined by the staircase. In both cases there is space for a small piece of furniture, that downstairs in some instances being large enough for a pram.

The programme originally called for an equal quantity of flats and houses, and by the removal

of a partition or so the flats were to be returned to the standard family houses. The terrace housing that was suggested showed that this could economically be accomplished by the end houses being flats and the centre houses being the usual houses. In practice this exact proportion did not work, as the numbers of flats were changed, and on hilly sites it was not possible to build in terrace form. Particular care was taken that the standardized plan ran evenly through the terrace block, and only a minor adjustment was made for the through passage to the back doors. This even plan could only be maintained by reinforced concrete, and the spaces at the top of the stairs have been proved excellent for cupboards,

SCHEME 2: HOUSING IN THE WEST. *BY G. A.*

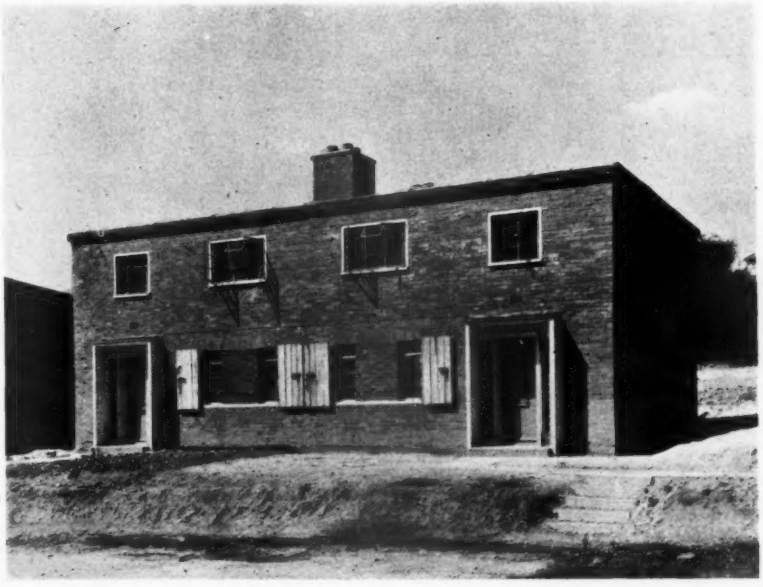
S C H E M E 2

The long terrace blocks. The passages to the backs of the houses lie between the pairs of porches. The view reproduced below shows the treatment of a semi-detached block. The A.R.P. shutters will, of course, be removed after the war.

and help to take the place of the attic in the pitched roof.

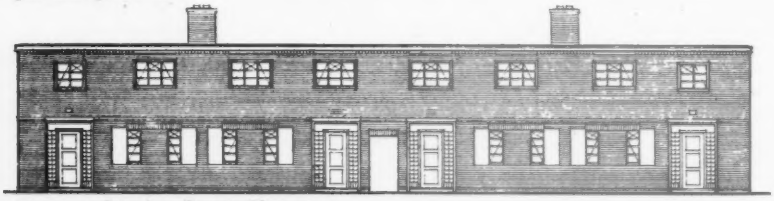
The emphasis on the porches has been due to the desire to give domestic character to the houses themselves. These simple block forms which lend themselves to endless landscape groupings, might without this be out of human scale. But the welcoming porches suggest that the interior of the house itself is entirely the private domain of the tenant. The glass bricks each side of the porch are set in a surround that gives a sense of protection to so precious a material, and thereby tends to emphasize the fastidiousness of the glass itself. On plan the divided light gives an even distribution in the hall, one side lighting the downstairs passage, and the second lighting the staircase. The hall is of sufficient proportions for the quality of light to be appreciated. From the outside, although it is not possible to experiment with this in war-time, it is anticipated that the light in the hall will throw a glow through the glass

JELLICOE



SCHEME 2: HOUSING IN THE WEST *BY G. A.*

This view shows the sharply sloping site. The flat roofs allow the tenants of the upper houses a view of the landscape which would not have been possible if pitched roofs had been used. Below, the adaptation of the semi-detached block to a hilly portion of the site.



Terrace Block : Front Elevation

bricks that will make a porch light unnecessary and create a sense of welcome after dark. On a sunny day from across the street it is attractive to watch the sun glinting on the edges of the glass, but an unexpected discovery has been the effect of the sun upon a façade of houses facing north. When one of the internal doors is left ajar or open, the glass bricks pick up and diffuse over their own surface the patches of sun beyond. When, therefore, the south side of the street is in shade and seen against the sun, the porches are often glowing with light.

The windows of the house are of the usual standard type, but they have been set in a reconstructed stone frame that preserves them from the coarseness of the brick. The windows themselves are set either deeply in the cill, or are brought out to the surface, according to their position. The variety given to this in perspective is interesting. The glass set forward picks up the reflections of the sky, for there are no shadows thrown upon it. The glass set

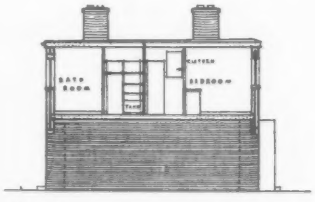
JELLICOE

back loses its sparkle, because of deep shadow, but the void thus made emphasizes the solidity of the building.

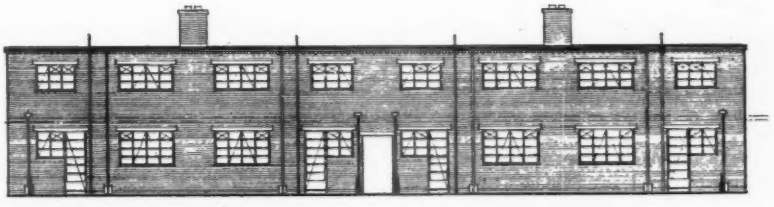
The external box of the house had no form in history upon which to fall back and, therefore was itself designed as a piece of pure sculpture. The whole design came eventually to settle round the section to the eaves, which are obviously immature in design. The simplicity of the box shape emphasized the surface texture, and it must be admitted that war-time conditions of brick building did not bring out the beautiful qualities of brickwork that have made this wall surfacing in the past one of the finest existing.

LAYOUT—The basis behind the whole of the layouts was to group the standard units in such a way that they would give a sense of neighbourliness. Thus the initial design was based on the "genre" or genius of the site. If it were hilly, this fact dominated the disposition; if it were flat, then simple grouping of square forms came about. These landscape dispositions have been described in principle by S. Gidien as organic and geometrical. In considering the layout, existing trees and hedges have been carefully preserved, and, in addition, planting plans have been prepared for each site, and it is hoped that these may be carried out after the war.

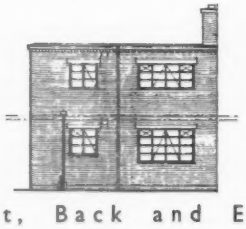
Photograph and perspective looking up the central portion of the site. The hedge planting, etc., shown in the perspective may be carried out in the future.

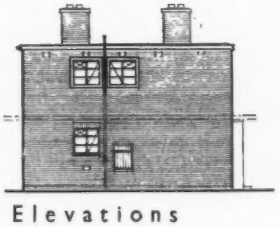


Section

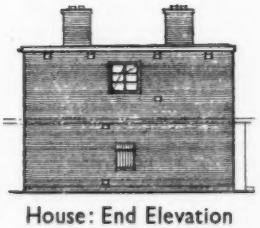


Rear Elevation





Flats: Front, Back and End Elevations



House: End Elevation

TYPICAL ELEVATIONS OF HOUSES AND FLATS

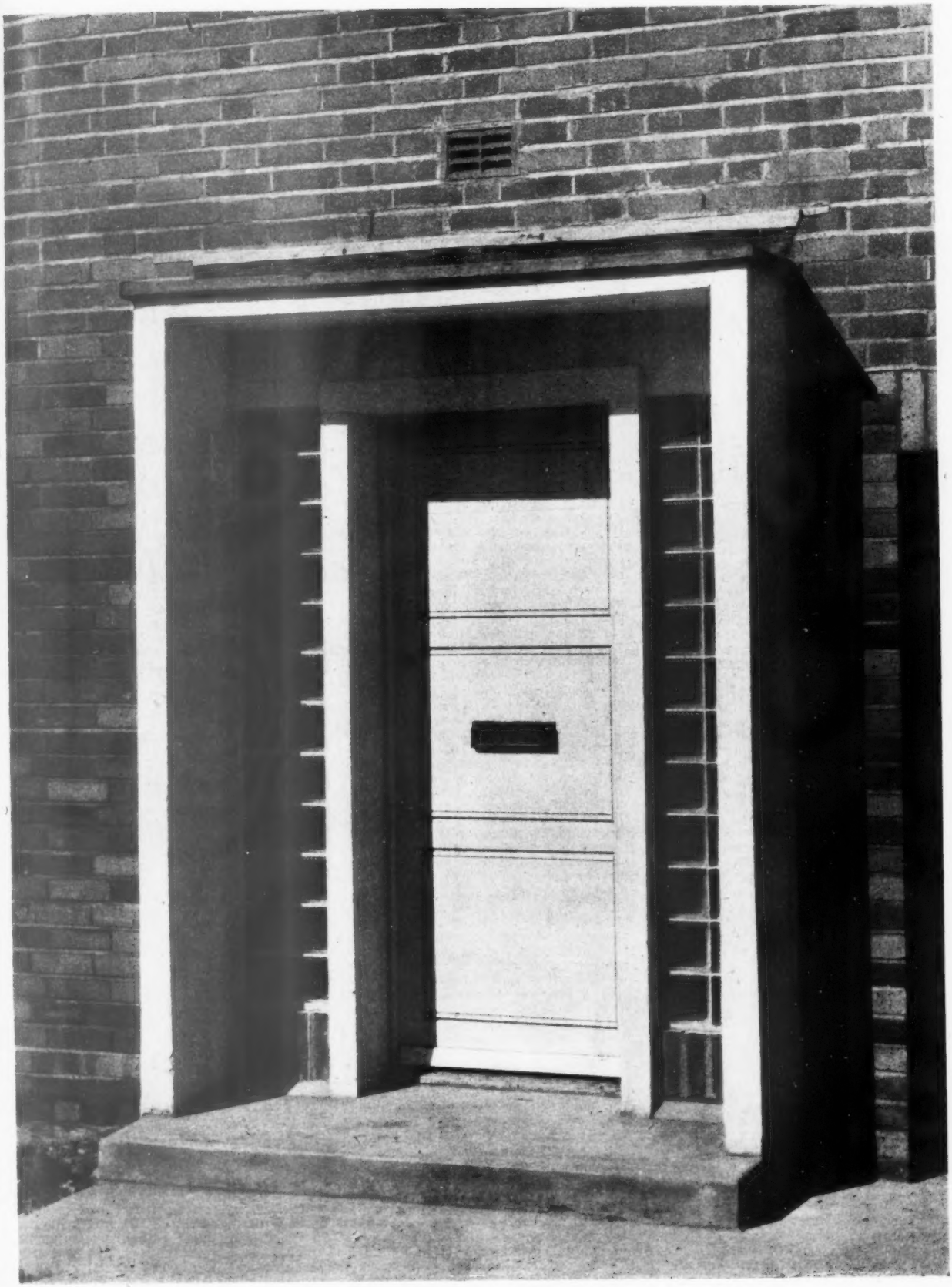
Semi-detached blocks. The staggered treatment affords better aspect and greater privacy. On facing page: Porch detail, showing the rendered finish which is the most usual throughout the site. On some other sites the wing walls have been carried out in facing brickwork or in white brick.

PLAN—The shelter room is provided with 13½ in. brick walls, and small windows with A.R.P. shutters. Note the splayed reveals to increase light. These windows after the war would be replaced by a single window of normal size. The flats are in general placed as the end units of terrace blocks. Very little alteration will be required after the war for conversion from a pair of flats to a house, where desired. The ground floor scullery-bathroom and W.C. become the kitchen, and, with the replacement of the first-floor sink by a wash-basin, the bathroom is ready for use. Points in detail planning are: Separate bathroom and W.C., access passage to back doors between each pair of houses in terraces, provision of ample cupboard space in houses, dressing-table cupboards provided over stair bulkheads, fixing for blackout by fillets overlapping the window openings on either side, and fillets in the staircase treads for direct fixing of carpets.

CONSTRUCTION & FINISHES—On each site construction was based on availability of materials and speed of deliveries. Where necessary, two different types of floor and roof were used on one site to avoid delay. Complete duplicate sets of working drawings were prepared for 3 in. or 2⅝ in. bricks, as supplies became available. External walls are of hollow brick. Floors, roofs and stairs are all fire-resisting, by various proprietary firms. The roofs are designed with a slight one-way fall, so that all down pipes are kept on the back elevations. A sliding joint of felt to the topmost course allows for expansion between the brickwork and roof slab. Metal windows are used throughout, and the varied modelling of window reveals has been carefully considered on the elevations. Timber saving points are: Painted cement skirtings in lieu of wood. Asbestos cement draining boards. Architraves are reduced to minimum dimensions. Floor finishes are either asphalt, screeding with linoleum finish, or, where linoleum was unobtainable, a paint finish on screeding. Externally applied colour is in general limited to the street doors, as plenty of natural colour arises in the buildings themselves. The glass brick panels, for example, colourless at close range, take on a marked green colour from a distance. For each site a separate colour scheme was prepared. Internally the rooms are finished in plain light distempers, as being the most economical.

SERVICES — Cooking: Various types of stoves are provided in all living-rooms, with space for gas or electric cookers in kitchens, if provided by tenants. Hot water is from combination stoves in houses, and by gas or electric water heaters in flats. One bedroom is provided with a gas or electric fire; heating elsewhere is by open coal fires.

SCHEME 2: HOUSING IN THE



WEST: *DESIGNED BY G. A. JELLICOE*

The series of twelve papers on "The Post-War Home: Its Interior and Equipment," which have been read at intervals during the current session of the Royal Society of Arts, was concluded by Mr. A. C. BOSSOM *when he read a paper summarizing the points made by previous speakers in the series. The title of his talk, printed below, was:*

CONCLUSIONS

Literally hundreds of committees have been set up—some under Government auspices, some by learned societies and some by public-spirited citizens—to investigate and define as fas as possible what should be done, physically, with post-war Britain. General town and country planning, distribution of population, arrangement of roads, treatment of canals, handling of railways, development of pendentive towns, treatment of elevations—in fact, practically everything has come under the investigational microscope except one important subject: *The Post-War Home: its Interior and Equipment*. The home where the majority of men spend two-thirds of their time; and it is the treatment of this home, and the smaller home in particular for the mass of everyday folk, that, in the last analysis, is probably the most important item on our post-war agenda. Recognising this, the Council of the Royal Society of Arts decided last year to initiate a series of lectures on "The Post-War Home," to be given by the best authorities on the particular subjects selected for consideration.

Under the chairmanship of Mr. George Hicks, M.P., Parliamentary Secretary to the Ministry of Works and Planning, the first lecture was given by Mr. Howard Robertson, F.R.I.B.A., and he went right to the heart of the problem by saying: "There are two things of paramount interest to people; one, the pay envelope and the other, decent living conditions for family and children." Money depends on employment and the development of the home will help re-employment as will no other factor, as well as fulfilling the second condition by providing decent living accommodation for the family. Without this re-employment at a suitable wage, it will be literally impossible to construct a stable post-war world.

Miss Elizabeth Denby's lecture on *Using Space to Advantage* explained how the post-war home could be spacious but, at the same time, there is not the slightest doubt that cost of production and limited public funds will influence its size. This could be counteracted, however, by clever handling of length, breadth, height, light and colour to convey a sense of spaciousness as well as using every available inch to its maximum. *Materials, Old and New*, were presented by Mr. E. F. Armstrong, PH.D., D.SC., LL.D., F.R.S. He told us of the developments through which the world has passed; the age of wood and textiles, the age of pottery, earthenware, china and glass, leathers, and now metals, synthetic products, cellulose finishes and over the threshold into the age of plastics. He showed how plastics are providing every possible form of labour-saving device to free man, and the housewife in particular, from drudgery and replace this with greater comfort and more time for other useful purposes.

Adaptation of Design to Standardisation and Mass Production is the next logical consideration in the equipment of our homes, and Mr. Frank Pick, that pioneer of progress, agreed to handle this subject, but, Providence decreed otherwise, and this lecture was given by another authority on the same subject, Mr. F. R. Yerbury, HON. A.R.I.B.A., and Director of the Building Centre. He showed how after-the-war standardisation can effect economy in labour, materials, time and money, and, those who read his story in full will appreciate the depth of his exposition. Prefabrication and standardisation are naturally followed by *Common Sense in Furniture Design* and Mrs. Darcy Braddell gave a most valuable review of the varying phases imposed upon furniture design by time, custom and geography, and how the urge of to-day is to return to the commonsense, freed from eccentricities, and aim for beauty, comfort and charm at reasonable cost.

Who has not heard American visitors exclaim: "Look at your British weather!" Mr. James Hogan, R.D.I., explained in the next lecture that owing to climatic conditions much of our time is spent indoors and we should, therefore, surround ourselves with things cheerful in colour, beautiful in design and of good taste, and what a tremendous help *Pottery, Glass and Plastics* are in this direction. He pointed out that good design never dates, that good material and workmanship are the most economical in the long run, and prove the most satisfactory and durable. To-day we have toughened glass for cooking utensils, for frameless glass doors, bricks and plates; semi-opaque materials for interior walls and rolled opal for lining bathrooms, kitchens, etc., and all sorts of tableware and decorative pieces. Mr. Holbrook Jackson dealt with *Household Fabrics*—which do so much to turn a house into a home—describing the introduction of cotton, linens, laces and the synthetic materials of to-day; our curtains, carpets, napery; their warp, woof, weave, colour and texture were all described to tempt the housewife of the future. We were told of fabrics that will not shrink, fade, crease, collect dust or provide resting-places for moths! Then Mr. Percy Smith, R.D.I., speaking on *The Contribution of the Fine Arts*, urged that from the front door of every home cleanliness, colour and cheerfulness should pervade throughout all houses to the villages, towns and cities.

The Occupier himself, was dealt with by Mr. George Hicks, M.P. He emphasised that the main thing is to satisfy, to lighten the housewife's burden, to give the children an opportunity to grow up strong, healthy citizens. Would any home to-day be complete without *Lighting, Heating and Ventilation*? Mr. F. Fitzmaurice, B.SC., A.M. INST.C.E., HON.A.R.I.B.A., and Principal Scientific Officer of the Building Research Station, described the part played in our lives by natural and artificial light, heat and ventilation, and of how many countries are more advanced than we are in handling these essentials, and that we ought to absorb from the progressive nations the research and progress made in utilising these accessories in our homes. And, lastly, Miss Helen Masters, B.SC., the well-known Head of the Battersea Polytechnic Domestic Science Training College, dealt with *Domestic Offices: Equipment and Maintenance*. She quoted Sir Francis Bacon's phrase: "Houses are built to live in and not to look on; therefore let use be preferred before uniformity, except where both may be had," and enlarged upon this in a review of the home from the mediaeval manor to the modern luxury flat, calling attention to the snobbery of position and possession which has been responsible for so much faulty planning.

I think most people will agree that this series of lectures has been fairly complete, and that the lecturers have endeavoured to present fairly the point of view of architect, constructor, inventor and user alike. Many will, no doubt, make valuable contributions to our form of living to-morrow, but in spite of all that may come from this source, we must endeavour to be individuals and not automatons. These lectures have emphasised this desire for individuality and, accordingly, have aroused discussion and correspondence which has revealed many different opinions held various groups and schools of thought:

(1) There are those who want every to stay as it is, or even to put it back where it was years ago;

(2) There are those who have every that has been used in the past aband and everything renewed;

(3) There are those who want everything mass-produced, that all homes may be of one pattern everywhere;

(4) There are also those who want everything made by hand, the ancient crafts revived and machinery excluded; and,

(5) There is a very large group, the majority—and I am one of these—who want to keep the best of yesterday, if something better is not available, and who wish to augment this in every way possible with new and finer things and desire to gain the maximum benefit from man's inventive genius.

It is most desirable that we should take every possible advantage of new inventions as they come along and, yet, at the same time, enjoy aesthetic culture and individuality in our post-war homes. Whether this is achieved by mass-production or not, we can maintain our inalienable right to enjoy our own whims and fancies within that place called "home." Where we can delight in our treasures be they fine or meagre, old or new, mass-produced or made by hand, and where we can be individuals free to and able to exercise our own likes or dislikes to our hearts' content—provided we do no injustice to others.

I am one of this group, and unblushingly confess that the conclusions reached by these lectures amount to an increasing determination to obtain a happier, fuller and richer life for the greatest possible number. It will be impossible to reach this goal if existing limitations, restrictions and obstructions have not been removed by the time the war ends; and this means, though they may have been of use in their day, laws and regulations which now crimp and cramp, MUST GO. It matters not whether it be a departmental or a municipal authority who is responsible for the creation or administration of such control, if they obstruct beneficial progress, they must be corrected—mere tinkering or further palliatives will not satisfy, and legislative cheese-paring in this field must be resisted to the utmost. This may involve a small Treasury loss, but, if it means the enrichment of post-war and succeeding generations, the Treasury, as the custodian of our national assets, must meet the desires of the majority. The nation's wealth is its people: its men, its women and its children, and not the lumps of gold in the Treasury vault; and, though these play a vital part in our existence, they must not be permitted to enslave us. There are no technical difficulties to prevent the great majority having something better than was furnished in the past; it is for us to make a simple but direct choice, and insist that we have things done in the way we wish.

To make the post-war home a place of gracious possibilities, it must be set in sufficient space to allow it ample sunlight and fresh air, and a garden large enough in which to grow sufficient for the family needs. This fundamental heads the list. Next, the materials forming the fabric of the home must be durable, weather resisting, non-absorbent, easy to maintain. The houses themselves should have as many rooms as possible for the minimum rent; in fact, I think that most will agree with this, that if the steady decline in our population is to be stopped, decent living conditions without too much overcrowding

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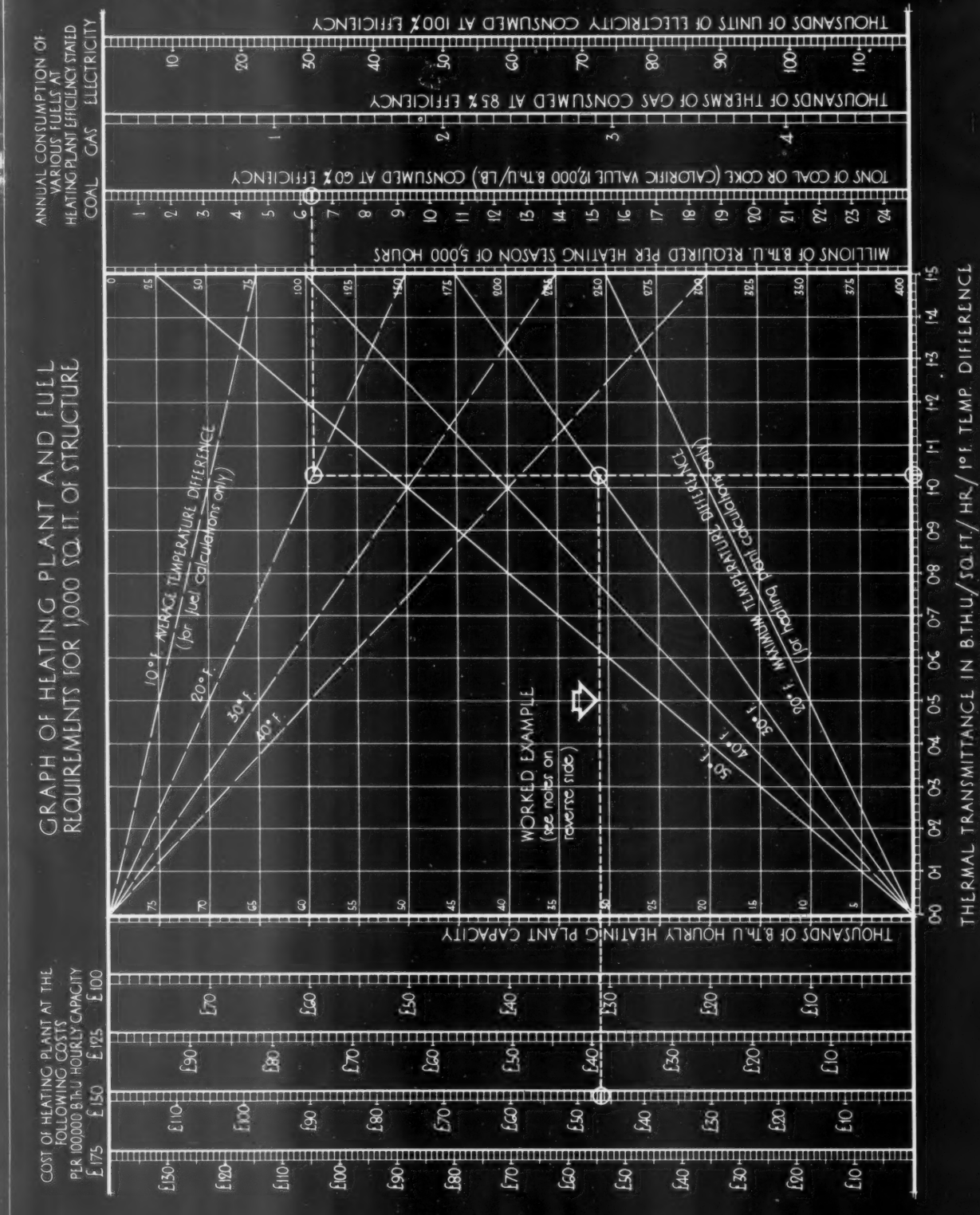
GRAPH FOR FINDING HEATING PLANT & FUEL REQUIREMENTS FOR 1,000 SQ. FT. OF STRUCTURE, for a range of thermal transmittances and temperature differences.



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INFORMATION SHEET: HEATING: PLANT COSTS & FUEL REQUIREMENTS.
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• 866 •

HEATING

Subject : Analysis of Heating Plant and Fuel requirements for building structures.

General :

The graph shows (*a*) the capacity and cost of heating plant and (*b*) the annual fuel requirements, to make good heat losses by conduction through 1,000 square feet of a structure, for a range of thermal transmittances up to 1.5 and for various air-to-air temperature differences.

Capital and annual heating costs relating to various structures and temperature requirements can therefore be compared. Reduction in these costs by insulating a structure may be read direct from the graph if desired by using the *reduction* in thermal transmittance.

Fuel figures are based on a heating season of 5,000 hours.

Worked Example :

Find the saving secured by lining 100,000 sq. ft. of corrugated asbestos cement with ½ in. TenTesT by the Patent Metal Cover Strip Method. *Data* : Maximum temp. diff. 30° F. ; average temp. diff. 20° F. ; thermal transmittance uninsulated 1.4 ; insulated 0.37 ; reduction 1.03 ; heating plant cost £150 per 100,000 B.Th.U. hourly capacity ; fuel coal, costing £2 per ton.

Draw lines as shown dotted and read on appropriate scales :—

Reduction in hourly heating plant capacity
30,900 × 100 = 3,090,000 B.Th.U.

Saving on capital cost of heating plant
£46 10 0 × 100 = £4,650.

Saving in annual fuel consumption
6.4 × 100 = 640 tons.

Annual cash saving
£2 × 640 = £1,280.

Capital saving.—Installed cost of insulation being £3,325, capital saving = £1,325.

TABLE OF THERMAL TRANSMITTANCES §

Construction	Uninsulated	Insulated with ½" TenTesT	Reduction by Insulation
Corrugated Iron ...	1·5	0·37*	1·04
Corrugated Asbestos Cement	1·4	0·37*	1·03
6" Concrete and Asphalte	0·70	0·37†	0·33
4" Breeze Concrete and Asphalte ...	0·59	0·34†	0·25
Truscon-type Concrete Roof and Asphalte	0·80	0·29‡	0·51
4½" Brick (Hard) ...	0·78	0·29‡	0·49
2" Gypsum Slabs ...	0·73	0·28‡	0·45
¼" Asbestos Cement Flat Sheets ...	1·16	0·33‡	0·83
1" Timber on Studding	0·57	0·25‡	0·22

§ **Thermal Transmittance :** the overall air-to-air-coefficient of heat transmitted from inside air to outside air through the structure, expressed in B.Th.U. per hour, per square foot, per °F. difference in air temperatures.

* Fixed by Patent Metal Cover Strip method.

† TenTesT between asphalte and roof deck.

‡ Fixed to timbers with air-space.

General Notes :

(*a*) **Fuel Tonnage :**

The first scale on the right of the graph shows the annual heat requirements in millions of B.Th.U.'s. It is therefore easy to arrive at the equivalent volume of any fuel when its calorific value and the expected heating plant efficiency are known.

(*b*) **Calorific Values of Fuels :**

The following table shows representative calorific values for various types of fuel.

Anthracite	14,000 B.Th.U.	per lb.
Bituminous coal ...	13,000 ,,	,,
Sub-bituminous coal	11,000 ,,	,,
Lignite	8,000 ,,	,,
Coke	13,000 ,,	,,
Fuel Oil	18,000 ,,	,,
Gas (manufactured)	500 ,,	per cu. ft.
Electricity	3,415 ,,	per K.W.H.

(*c*) **Heating Plant Efficiency :**

In practice no heating system succeeds in transmitting into the building 100 per cent. of the calorific value of the fuel used, with the exception of direct electric heaters or gas heaters without flues. The following figures may be useful indications of the degrees of efficiency which may normally be expected from various types of heating plant.

Gas boiler	80 to 90 per cent.
Oil-fired boiler	70 ,, 75 ,,
Gravity feed boiler	70 ,, 75 ,,
Mechanical stoker	60 ,, 70 ,,
Solid fuel hand-fired boiler	50 ,, 60 ,,
Anthracite stove	60 ,,
Open fire	25 ,,

Note.—Small heating plants, such as domestic systems, are generally relatively less efficient than larger systems.

(*d*) **Total Heat Loss :**

The graph deals only with heat lost by transmission through the various parts of the structure. It does not deal with air changes or other causes of heat loss and therefore does not show the total heating plant capacity or fuel requirements of the building.

(*e*) **Relative Area of Insulation :**

Insulating any given area of a structure reduces heat loss to an extent independent of the heat losses through other parts of the structure. For example, insulating 1,000 sq. ft. of corrugated iron roofing will reduce heat losses by a certain amount for given temperature conditions whether this area is the whole of the roof or only a part of a roof of which the predominant area is glazing.

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STEEL

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THE BRITISH STEELWORK ASSOCIATION, STEEL HOUSE, TOTHILL STREET, WESTMINSTER, S.W.1

PATENT WELDED TUBULAR CONSTRUCTION

Data Sheet No. 3

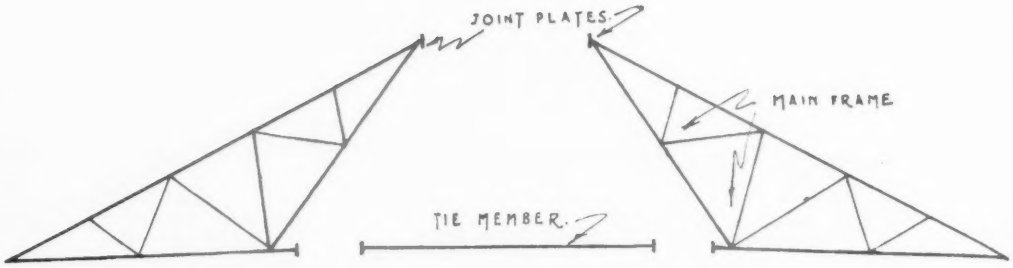

Fig. 1. Composite roof truss for spans ranging from 15′ to 40′.

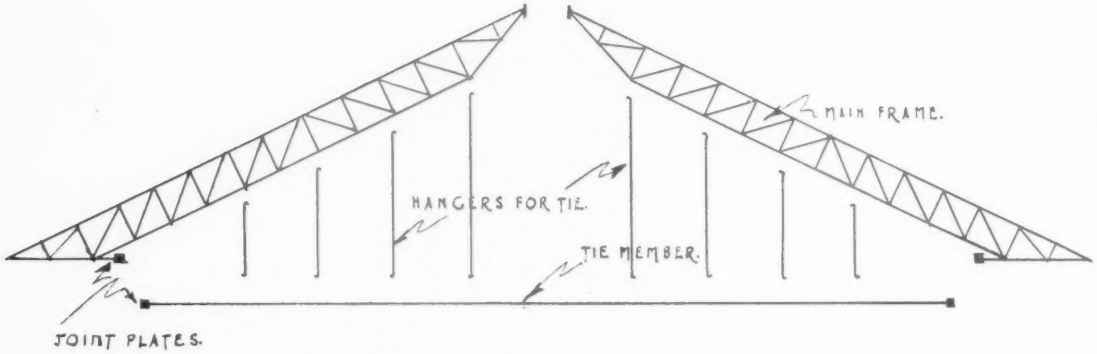

Fig. 2. Composite roof truss for spans ranging from 30′ to 120′.

COMPOSITE TRUSSES

Truss designs dealt with in Data Sheet No. 2 were designed and produced to give a range of trusses for roof spans from 15 ft. to 60 ft. suitable for quarter and 30° pitch roofs at 10 ft. to 12 ft. centres—purlins to be of tubular steel or timber. Fig. 1, above, shows this composite form of truss.

An alternative design is detailed in Fig. 2. This design may be said to supersede the earlier standard designs ; it is suitable for spans from 30 ft. to 120 ft. and offers a simplified form of construction by reduction of the number of intersecting members at any one point. This form of truss is employed for roofs of quarter to 30° pitch and provides the simplest possible form of fixing for the asbestos-cement roof covering; the large roof cubage may be considered a disadvantage and the pitch of the roof can be reduced by slight amendments to the truss design. Details showing a further modification of this type of truss, for barrel form roofs, are dealt with in a later Data Sheet.

These composite trusses (Fig. 1 and Fig. 2) are composed of two main sections and a tie member and greatly facilitate handling and transportation ; erection is extremely simple, the sections being bolted or welded together on the site and lifted into position by means of a single pole and tackle. The reduction in weight effected by this form of construction may be estimated as approximately 50 per cent. on existing methods.

(*continued on page xxvii*)

- **Speed in erection**
- **Economy in steel**
- **Lightness of structure with great strength**

must be provided for the average family unit, and they must be allowed privacy, liberty and the opportunity for fun. Translated into bricks and mortar, this means the greater number of houses must include a kitchen-dining-room where all can do their helpful bit, and none need be passengers; another sizeable living room where either father, mother or the young can foregather without being kill-joys to the rest, and there must be three bedrooms—two capable of being used as study bedrooms if desired. The five-roomed home, with the necessary etceteras, is, therefore, the smallest decent family accommodation for which we must aim, if this important social problem, the decline of the British race, is to be overcome.

Agreed on the minimum size of the average house, the next problem is to make living within it as easy as possible—in other words, eliminating avoidable work. What is the basis of most work? Heating, cooking, sewing and cleaning, and all these can be given the benefit of the latest scientific research. Although the cheerfulness of the open fireplace demands the inclusion of one at least in every household, the major source of heating should be by either electricity, gas, communal steam or oil. That old bug-bear, clearing out grates or carrying coal, must be ended. In this country, thermostatic control is never found in smaller houses and very seldom in the larger; but if properly installed, this would more than save in fuel consumption alone in the first year or so, its initial cost of installation. Heating services for either warming rooms or cooking food should be controlled simply by a switch—no matter whether it be by electricity, by gas, by steam from a municipal heating plant, or from an oil furnace in the basement. These services are, of course, already provided to some degree for lighting, sewing and constant hot water, but can be greatly extended to include all houses in our reconstruction period, and, I look forward to the time, when the moving of the thermostatic indicator need be the only effort required of the household chancellor of the exchequer, mother, to get every service she requires; but above all, she must be freed from the drudgery of interminable heating and cooking.

The provision of thermal units from a distant source for every house, also calls for a similar improvement in our methods of insulation. The leakage of heat through walls, ceilings, windows and doors can be avoided by good design and proper construction with the appropriate insulating materials. The walls of to-morrow's home should be akin to the sides of a refrigerator so that winter's cold and summer's heat can both be kept in their proper place, while the interior of the house can be either hot or cool according as its occupant desires! All doors and windows should be fitted with weather stripping and this application of insulation to the living unit, the home, will pay a handsome dividend by ending the present needless wastage of heat which, to-day, costs the nation millions of tons of coal, coke or wood a year, and which are now burnt without the desired results to those who foot the bill. Lighting and cleaning, too, can shake off old handicaps. Science has greatly improved our lighting, and the introduction of plastics can do much to relieve the irksome annoyance of endless cleaning. The deadening of sound is also important and our future houses should all be constructed to have sound-proof walls, floors and ceilings so that sounds do not pass from one room to another, let alone from one house to another.

Mass-production comes into its own in the kitchen and bathroom. These vitals of the home can gain much by being produced as complete, scientifically planned units. Built-in furniture must meet the common requirements of all, give the maximum amount of space for other pieces in the room, and yet relieve house owners from the heavy expense of large moveable pieces of furniture: but, these fitments should fulfil their function unobtrusively and permit individual lares at penates to fit harmoniously into the various rooms without appearing to be unwelcome intruders. Many gadgets have been invented and many more will come, and the house should be fabricated to allow for these new benefits to be incorporated as they become available, and the old ones discarded without destruction of or interference with the actual structure of the house.

The Royal Society of Arts is arranging for these lectures to be bound together in one volume, and it is much hoped that Government and municipal authorities throughout the country will note the helpful remarks made by the various lecturers in their call for the adoption and use of new materials, and the utilisation of science and aesthetics in the development of our post-war home, so that it may be a haven for children and grown-ups alike, where they can get their inspiration; where they can be encouraged to study, to create for themselves; where they can get tired from honest toil in the garden; and where they can turn for repose and recreation to elevating interests which result from living in the companionship of substantial character and good taste.

LETTERS

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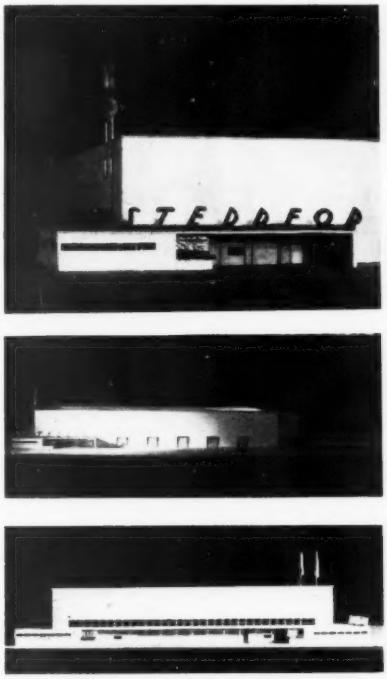
(Secretary, R.I.B.A.)

Royal Academy

Sir,—Being human, I naturally consider Mr. Tubbs's review of the exhibition in the JOURNAL for May 14 highly intelligent, at least in parts. But I feel that there is underlying it an implication which is a little misleading. He draws a picture of a war-aroused people looking up and hungry to be fed with, at the least, a new vision. "Here," he says, "there is no sign of the new breadth of vision." Whether or no there is a ferment in the architectural mind, a new awareness to match the people's eagerness, will not be apparent in the R.A., simply because here are on show buildings designed before the war broke out. My Marlborough Science Buildings, for example, were built ten years ago, when Hitler was still unknown, except to political specialists. Few of us have had any work to do since Poland was invaded. For exhibitions we can only bring our old stores out of the larder. Here and there one may still prove to be fresh. For the rest, though we may be thinking, we are no more productive than other men. We are remembering again—and perhaps teaching others—how to kill. Now I must go out and plant my onions.

London. WILLIAM G. NEWTON

Sir,—Regarding Mr. Tubbs's review, you may care to see the enclosed photographs of a model of the



post-war Eisteddfod Pavilion that I submitted and had rejected by the R.A. this season. It may serve to illustrate that they may not wish to recognize any future for architecture, or that prefabricated design (as intended in this structure) shall not darken, or enlighten, their walls.

Southport, Lancs. EDWARD BANKS.

Registration

Sir,—I send herewith a supposition which may be of interest to readers of your page.

Under the Architects' Registration Acts as they now stand, it is possible for a person to qualify for registration, then to take up some other employment for a great many years, and afterwards to practice as an architect, presenting to an unwitting public, a wealth of inexperience, directly contrary to the intention of the Acts.

H. E. DAVIES.

R.I.B.A. Council Election

Sir,—With reference to Mr. Allan Slater's letter in your issue of June 4, your readers will realize that I was not arguing on matters of policy but simply pointing out inaccuracies in statements of fact.

There are further inaccuracies in Mr. Slater's last letter, but I will not weary your readers with them.

IAN MACALISTER

London. *Secretary, R.I.B.A.*

★ *I AM a surveyor and architect (M.Inst.R.A.) and was born in August, 1907. When do I become de-reserved?* - - - - - - - Q 919

★ *THERE has been a good deal of discussion about the number of bricks laid per day by bricklayers. I always understood that before the war 600 per day was a fair average. I have been informed by a builder that he now has to pay his men a bonus if they exceed 255 bricks per day. Is this true?* Q 920

THE ARCHITECTS' JOURNAL

INFORMATION CENTRE

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.

Enquirers do not have to wait for an answer. 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.
Telephone: VIGILANT 0087

Q 919

ARCHITECT, YORKS.—*I am a surveyor and architect (M.Inst.R.A.) and was born in August, 1907. If you could answer me the following questions I should be greatly obliged. 1. When do I become DE-RESERVED? 2. Shall I receive notification in advance? 3. What is the correct procedure to take with regard to obtaining deferment? 4. When is the time to carry out item 3 (above)?*

The fact that you have not already been called up suggests that you have been classified as a surveyor, but if you wish to check this up, you can apply to your local office of the Ministry of Labour and National Service. As you may know, your classification depends upon the work upon which you are engaged and not upon your qualifications, e.g. a fully qualified architect is not classified as an architect if he is employed merely as a draughtsman or junior assistant.

The Schedule of Reserved Occupations (revised December, 1941) gives the age of reservation for architects as 35, for building and quantity surveyors as 25, and for quantity surveyors with recognized professional qualifications as 23. It should be remembered, however, that all ages referred to in the schedule are the ages at the date of registration.

From January 1, 1942, all ages of reservation are raised by one year on the first day of each month, thus the age of reservation for architects on May 1 was 40. A notification is sent to each man stating the date on which he will be de-reserved and requesting him to inform his employer.

Applications for deferment must be made on Form N.S.300, obtainable from the local office of the Ministry of Labour and National Service, and should be forwarded to the office of the Ministry of Labour and National Service shown on the man's certificate of registration. The application must be made 15 days before the date on which he ceased to be reserved. Normally the application is made by the employer, but an opportunity is given to the man to make an application when he is called for medical examination.

Q 920

ARCHITECT, LONDON.—*There has been a good deal of discussion in this office about the number of BRICKS per day LAID by bricklayers. I always understood before the war that 600 per day was a fair average for straightforward work, and that this figure could often be exceeded by highly skilled tradesmen. I have been informed by a builder that under the Government scheme he now has to pay his men a bonus if they lay more than 255 bricks per day. Surely this cannot be true. If bricklayers will only lay half as many bricks during our present struggle as they did before the war something drastic is required. Can you give me particulars of the Government scheme to which the builder is referring?*

The builder is referring to the Essential Work (Building and Civil Engineering) Order, 1941, which is applied to urgent work of national importance, but either you have misunderstood him or he has put the matter in the worst possible light.

The Order provides that a bonus shall be paid for anything over and above the basic output laid down, but the basic output varies from 40 bricks per hour for 4½ in. work to 80 bricks per hour for 31½ in. work (i.e. anything from 340 to 680 bricks in an 8½-hour day).

For 14 in. work the basic output is 510 bricks per 8½-hour day, which does not compare very unfavourably with your peace-time figure if it is borne in mind that many of the fittest men have been called up, and the number of bricks laid depends to a great extent upon the slowest man in the gang.

It is probable that the builder was referring to a specific job, in which most of the brickwork is 4½ in. work pointed both sides. The basic output for this work is 355 bricks per 8½-hour day, but this cannot be compared with pre-war standards for mass brickwork, left rough.

Q 921

ENQUIRER, LONDON.—*I shall be pleased if you can answer the following points on building COST for work carried out in East Ham area during October-November, 1941. The job consisted of a one-storey building with temporary corrugated asbestos roof. 1. A reasonable labour cost of fair facing common fletton brickwork in cement mortar, the labour consisted of wiping with a sack every four courses as the work proceeded. 2. The labour cost of fixing 3 in. by 2 in. purlins (spiked to 3 in. principal rafters at 4 ft. 3 in. centres), the purlins used being salvaged timber supplied by client; in some cases the timber contained nails.*

We consider that the following prices would be reasonable for a job of an average size:

1. Fair face, 1s. 6d. per yard super.
2. Fixing purlins, 3s. per ft. cube.

The prices for similar work in small quantities would be relatively higher. For a very small job it is usual to charge daywork and the cost very often bears little relation to keen prices for measured work, based on competitive tendering.

PATENT WELDED TUBULAR CONSTRUCTION

Data Sheet No. 3

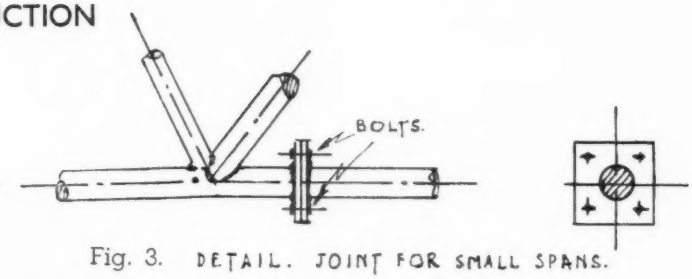


Fig. 3. DETAIL. JOINT FOR SMALL SPANS.

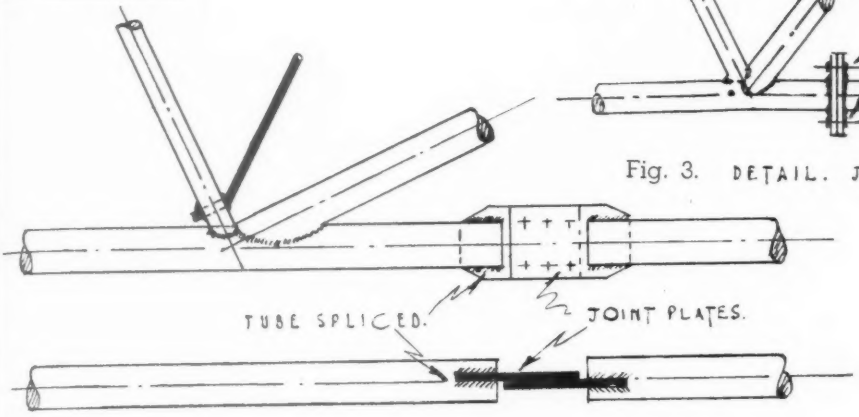


Fig. 4. Bolt connection for larger trusses.

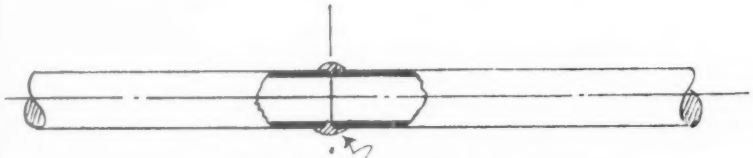


Fig. 5.

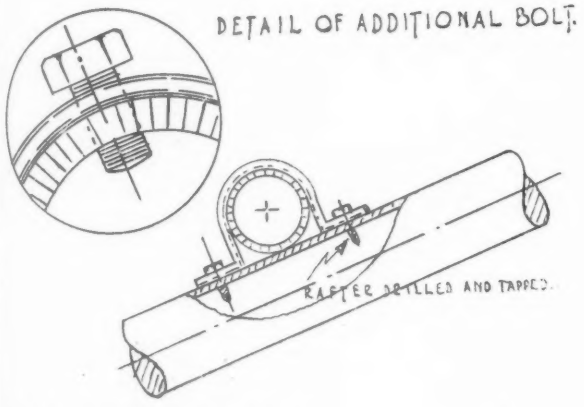


Fig. 6. Detail of purlin clips.

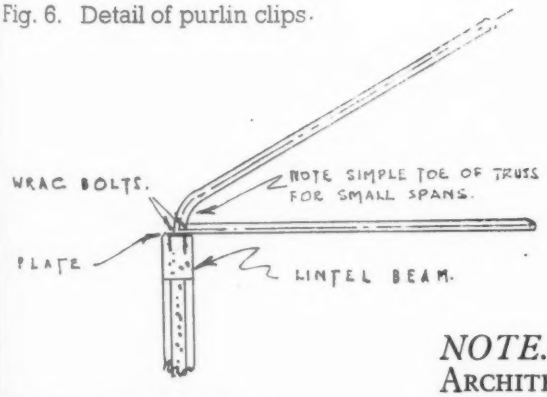


Fig. 7. Truss toe fixing for 20′ span principle.

Figures 3, 4 and 5 show alternative methods of jointing the composite parts. For small span trusses the bolt connection, with the bolts in tension, as shown in Fig. 3, is employed. Fig. 4 shows the bolt connection for larger trusses, with the plates reversed and the bolts used in shear instead of tension. Fig. 5 shows the alternative method of butt welding for large span trusses.

In deciding the method of jointing to be used the economy factor has to be considered, and this is governed by the size of the job and the site conditions prevailing. It may be said that the bolt connection shown in Fig. 4 is more generally used. (This question is more fully dealt with in Data Sheet No. 7).

Detail of purlin clips for single section tubular purlins is given in Fig. 6 (fabricated purlins, and their fixings, for large span trusses are dealt with in later Sheets). This method of connection is not entirely direct, being in the form of a clamp tightened by two bolts and, with the larger span trusses, owing to the human element, might not be considered to provide adequate stiffening against horizontal movement; the use of the additional tightening bolt, inset in Fig. 6, eliminates the possibility of such horizontal movement.

Fig. 7 shows the toe of the small 20 ft. span principle and the method of attachment employed when this type of principle is used in conjunction with precast reinforced concrete beam and panel construction (the same method of fixing can also be used with brick construction).

NOTE.—These data sheets are appearing weekly in THE ARCHITECTS' JOURNAL—*they will be available shortly in complete Folder form and application for these Folders should be addressed to Scaffolding [Great Britain] Limited, 77, Easton Street, High Wycombe, Buckinghamshire.*

PRICES

BY DAVIS AND BELFIELD, CHARTERED QUANTITY SURVEYORS

The price of bricks rose on May 18 due to a levy of 3s. 0d. per thousand payable to the Ministry of Works and Planning: rates of wages have not changed during May.

BASIC MATERIALS	Increases over pre-war prices at end of				
	January, 1942	February, 1942	March, 1942	April, 1942	May, 1942
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Portland cement	+37·8	+37·8	+37·8	+37·8	+37·8
2-in. Unscreened ballast	+71·01	+71·01	+71·01	+71·01	+71·01
Fletton bricks (at station)	+11·89	+11·89	+11·89	+11·89	+18·38
Stoneware drainpipes (British Standard) 2 tons and over	+28·13	+28·13	+28·13	+28·13	+28·13
Roofing tiles	+30	+30	+30	+30	+30·
Steel joists (basic sections) ex mills	+47·5	+47·5	+47·5	+47·5	+47·5
Lime greystone	+35·29	+35·29	+35·29	+35·29	+35·29
Sheet lead	+54·35	+54·35	+54·35	+54·35	+54·35
Iron rainwater goods and soil pipes	+26½	+26½	+26½	+26½	+26½
Copper tubes	+29·79	+29·79	+29·79	+29·79	+29·79
White lead paint	+31·82	+31·82	+36·36	+36·36	+36·36
RATES OF WAGES (Central London Area)					
Labourers	+19·05	+22·22	+22·22	+22·22	+22·22
Craftsmen	+14·29	+16·67	+16·67	+16·67	+16·67

LABOUR—Rates of Wages since 1st February, 1942.

LONDON DISTRICT	Craftsmen	Labourers	N.B.—Painters
Within 12 miles radius	2s. 0½d.	1s. 7½d.	½d. less than
From 12-15 „ „	2s. 0d.	1s. 7d.	other craftsmen

GRADE CLASSIFICATIONS

	A	A¹	A²	A³	B	B¹	B²	B³	C
Craftsmen	1/11	1/10½	1/10	1/9½	1/9	1/8½	1/8	1/7½	1/7
Labourers	1/6¼	1/5¾	1/5½	1/5	1/4¾	1/4¼	1/4	1/3½	1/3¼

W. A. Davis.
F.S.I.