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THE

ARCHITECTS'



JOURNAL

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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, OCTOBER 23, 1941. NUMBER 2439: VOLUME 94

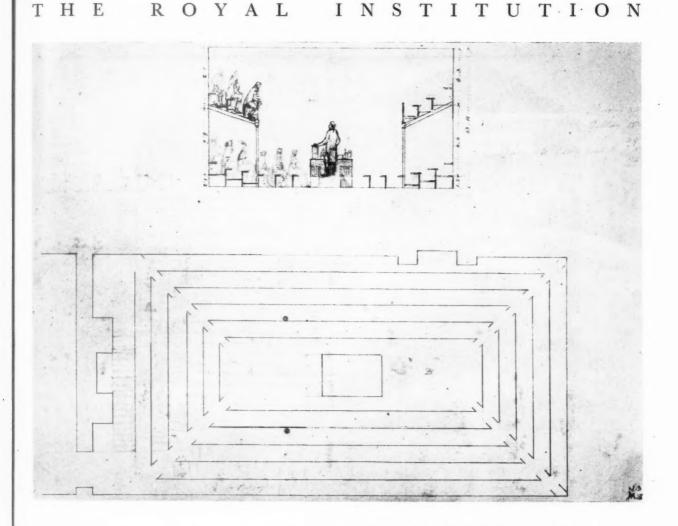
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PRINCIPAL CONTENTS

The Royal Institution			••	•• •	• •	269
This Week's Leading Article	• •	• •	• •	••	••	271
Notes and Topics Astragal's notes on current	 events	• •	••	••	••	272
News	••	••		••	••	274
Literature	•••	••	• •	••		274
False Antithesis	••		••			274
Residential Chambers at Pete Designed by H. C. Hug				11		276
Letters	••	••		••	••	278
Information Sheet Structural Steelwork (845)	••	• •	••	facin	ng pag	e 278
Rosehill Court, Carshalton.	Desig	ned by	Harr	y Wes	ton	
and R. Jelinek-Karl		•••	• •		• •	279
Information Centre			• •	• •	•••	283

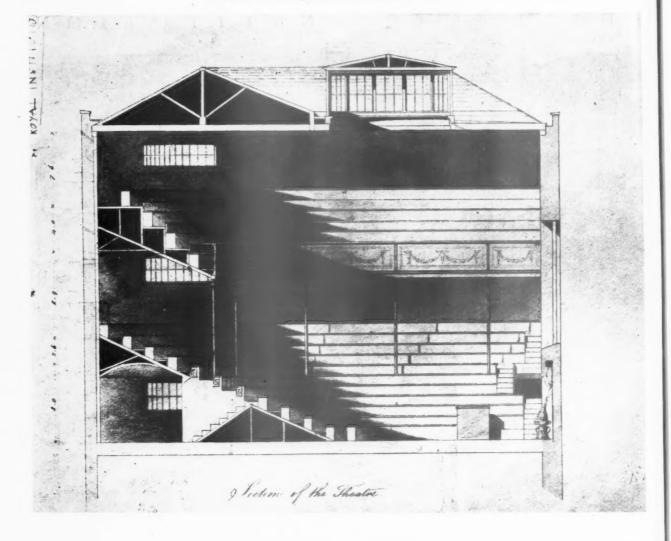
The fact that goods made of raw materials in short supply owing to war conditions are advertised in this JOURNAL should not be taken as an indication that they are necessarily available for export.

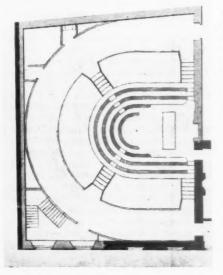
Owing to the paper shortage the JOURNAL, in common with all other papers, is now only supplied to newsagents on a "firm order" basis. This means that newsagents are now unable to supply the JOURNAL except to a client's definite order.



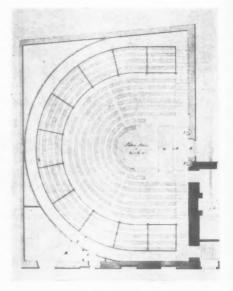
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Sketch design (architect unknown) for the conversion of the ground floor of five houses in Albemarle Street into a lecture room for the Royal Institution : these designs were never executed but were superseded by those of James Spiller, illustrated on page 270. The Royal Institution was founded by Count Roumford in 1799 to popularise science and further its application to the needs of industry. The Royal Society, founded by Wren for the same purpose, had by this time become almost exclusively interested in abstract problems. The Royal Institution later developed along the same lines, so that about 10 years ago it was necessary to found yet another body designed to fill the same role—the British Association for the Advancement of Science. Shortly before the present war a special Division of the British Association called the Division for Social and International Relations was set up to study the scientific application of technical work : its first meeting was held recently in the lecture hall at the Royal Institution, and extracts from the papers read were reproduced in last week's JOURNAL. The subject discussed (from different points of view) was Science and World Order, and speeckes emphasized developments of science which will be needed for post-war relief and reconstruction. The part played by architects and planners in this discussion was the subject of last week's leading article.





The lecture hall at the Royal Institution as it was originally designed and built in the year 1800. The authorship of these drawings is a matter of great dispute. The building is stated in the A.P.S. dictionary to be the work of James Spiller. Mr. Berry Jones, however, in his book on the Royal Institution, states that it was the work of Webster, at that time Clerk to the Institute, who was not an architect at all. Other sources suggest that Faraday and Roumford had a hand in the design of it. The hall was reconstructed by Wimperis, Simpson and Gutherie a few years ago, fireproofed and tested for acoustics, but its original character remains unchanged: A few minor alterations were made : the columns supporting the balcony were removed, and a black board was substituted for the curious arrangement in the fire-place.



THE ROYAL INSTITUTION



THE BIG HALF-CHANGE

HEN people who should know are asked whether the many changes which have taken place in the building industry in 25 months of war add up to a permanent Big Change they are apt to take time over their replies.

One of these knowledgeable people, when pressed upon the matter, has summed up building's present state in these words : "The changes add up to the biggest *half-change* ever—a half-change because it is still possible for the industry to go back to ways of 1938; it is far more likely to go on; but heaven knows what it will be like when the other half of the change is over."

Let us accept this estimate of the industry's position in October, 1941, and try to single out the most potent ingredients of this biggest half-change of all time.

The first is not far to seek. It is—let us be truthful, come what may—the change in the motives and attitude of mind of the bigger contractors and manufacturers of the industry. Before the war these firms' worries were profits, the job, the next job (which includes position and prestige). Now, the profits are limited and automatic ; the job in hand receives attention ; but at least equal attention goes to the next job—to manœuvring for position with one eye on during and the other on after the war. Beneath the surface of public notice the greater and lesser leviathans swoop, jostle and scamper. Now and then a fin breaks surface ; a man retires or takes office, a question or a speech is heard by the House. These are the only public signs of the biggest part of the Big Change.

Next comes the change in the motives and attitude of mind of building designers—not so important, because it is not so widespread and because the designers themselves are not so powerful. Before the war the professions were hag-ridden by fees, the job and the next job. Now, many of their members are on salaries, and need no longer worry whether they are paying assistants too little or too much (the Government pays them also.) The next job haunts them far less than in peacetime : they are able to give undivided attention to the job in hand. Even some architects who fear it is all very unprofessional and know they are much poorer, feelmore carefree than ever before, and find themselves regarding the Schedule of Fees for War Damage Repairs (expressed in guineas) as complicated, slightly old-world. It is strange what war can do to normal professional men.

N

Third ingredient is CONTROL. All and each of many controls, of materials, labour, wages, prices, petroleum, bonus rates. Control is the great leveller. All jobs get about the same proportions of the same materials and the same standard of labour. Most contractors cannot lose their labour : few of them can spur labour to greater output or sack it when low output becomes lower. Never, in theory, was there a time when administrative ability counted for more in building, never a time when the race was so free to all without fear or favour.

Fourth potent ingredient of the big half-change is what matters most to architects and matters enormously. What World War 1 did to the aeroplane, World War 2 has done to modern architecture. It has turned it from a fad into a national necessity. In August, 1939, attempts to span 20 feet with a few lengths of 3 ins. by 1 in. soft wood were only made by callow Bloomsbury exhibitionists with Leftist leanings. In October, 1941, every architect does it as a duty, every architect has to do it to wring a standard of hardwood from his Timber Controller for places where hardwood matters most. Nor is this all. Ten thousand habitable rooms now have walls 3 inches thick for every one in 1938, and a hundred building schemes are modern in layout, units, plan form and construction for every one before the war. The buildings do not glitter whitely. Much trouble is taken to prevent their glittering at all. That is the only difference.

It may be that of these four potent ingredients of the big half-change the first three will lose in time some of their force. The fourth never will. War has cut the laziness, the clichés, the heavy-handed what-I've-always-done right out of architectural practice. It has forced all the architects of larger war building schemes to begin again, to cover the maximum space with the least material. To do this well does not ensure a result that is fine architecture but it is the best of all possible trainings for the architecture of the post-war decade. Those who miss this training for any reason, bar one, are hazarding their professional throats.

So much for the big half-change. And what, it may be asked, has been the effect of all this on pace and the efficiency of war building?

Next week the JOURNAL will do its best to answer this enquiry.



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

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ΤΟΡΙ

ACADEMIES FOR YOUNG COMMONERS

I N a letter to Astragal published last week Mrs. Olive Bennett expresses strongly the view that public schools have proved an unsatisfactory method of educating children, and that any extension of the State system of education to include a large number of camp boarding schools would therefore be little short of a national disaster.

Her reasons, if I understand them rightly, for taking this point of view, are that the boarding school system has not, in the past, encouraged individuality; and that home influence, even if somewhat narrow, allows children greater freedom to develop along lines of their own choosing. They may not learn so much, but what they do learn they acquire through their own efforts and so the knowledge is more valuable.

This line of argument raises several points. First of all boarding schools need not necessarily be run on the same lines as public schools; bullying, fagging and an undue emphasis on the importance of team games have in the past been part and parcel of a boarding school education; but they are not essential parts of it. In most of the newer public schools they are successfully discouraged and less importance is also attached to the passing of examinations. The average public school boy of to-day is more imaginative and less insensitive than the generation that allowed advertisement hoardings to appear in Trafalgar Square. (Can public school boys really be saddled with this responsibility?)

Secondly, assuming that the right type of home influence is the best possible background for education, \blacksquare view with which I am inclined to agree, what does this imply in terms of planning to-day? Is there any hope in the immediate future of providing conditions which promise reasonable chances of success?

A recent analysis*shows that in the average working class family boys use their homes merely to eat and to sleep; girls spend more of their time there but it is little to their advantage. "Space at home is limited and, therefore, since the boys are noisy and often quarrelsome the street must be their playground. Since this is a male dominated society, which means in the present case that little assistance is demanded from the boys for housework, they have most of their time out of school to themselves and thus, because the home mainly lacks positive attractions the tendency for them to prefer the street is strengthened."

"The girls are differently affected. While the boys are usually allowed to play, the girls must assist in running the home, looking after children, going errands, any of the multitudinous jobs which need to be done. All over the country educationists complain that owing to the calls of housework girls' attendance at school drop from the time they are ten or eleven onwards. They are faithful replicas of their mothers who have always 'the air of trying to catch up with the work ; always the incessant certainty that it is impossible.' They experience, too, the same neglect. Living in a constant hurry there is little time or opportunity for the parents to develop understanding and patience towards children. 'Love needs time and time is money.'"

Surely, at any rate, until an entirely new way of living is made possible by extensive replanning, the cure lies in a tremendous extension of out-of-school activities organised by teachers who can devote their whole time to the job, in connection with camp schools of a new type built in country districts where equipment, both indoors and out, can be provided on a scale that is scarcely possible in our existing towns, and away from cheap counter attractions like the cinema and the pin table saloon. Camps of this kind could be used for many other purposes if educationists ultimately decided in favour of day schools nearer home. Youth hostels, rest centres and holiday homes will always be needed.

KEEPING A GRIP ON THE BOYS

Every architect who has had a share in executing a large building scheme in quick time has sooner or later come up against the problem which was called co-ordination until the youngest architects made us wince at every sight of the word.

The number of men in or on the job grows wondrously, unnoticed, until the never-ending telephone bell, the never-empty waiting room, compel a stocktaking.

A bleak-visaged architect and perhaps six right-hand men then find that they have accumulated around them : 1 quantity surveyor, 6 consultants, 1 general contractor and 20 sub-contractors and specialists. And it is fortunate if the representative of each of these has not two right-hand men of his own—making in all about 75 noticeable sheep gathered about the feet of Architecture : who do anything rather than merely look up if they are not fed. And on the wall, a silent pointer to man's ineptitude, is a huge Progress chart whose diagonal line of coloured cubes marches almost decisively ahead of actual events.

* The Problem of Leisure. H. W. Durant, B.Sc.Econ. George Routledge and Sons Ltd. 1938.

What should we do?—the Profession asks itself. The answer is never in doubt. We will have a Site Meeting once or twice a week, where everyone is present and thus all this daily badgering will be cut out. The Profession feels pleased with itself, talks happily of getting down to those details and stands itself a drink.

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But when the long hut on the site is finally crowded to capacity with the hungry sheep, things look a wee bit difficult, and the Profession's eye skims with distaste over face after face whose unanswered applications for "just *any* drawing" come far too readily to mind.

*

But far, far worse is to come. "Let us," says the Profession, putting a snap in it, "rattle through the small, short points first—Mr. Fargus . . . you're the most handsome . . ." and a moment later the Profession could have bitten its tongue off.

*

A Midlothian smile breaks slowly, very slowly, over Alexander Fargus's face; slowly, very slowly, he unfolds a blue print on his knee; his thumb hitches with deadly facility into his waistcoat armhole and slowly he leans back and clears his throat.

"Take a North West basement manhole, Mr. Blanque," he begins. "As I was telling Mr. Woodcock only last Tuesday, the matter-r-r really goes back to last Whitsun and more . . ."

At the far end of the room the Assistant Consulting Electrical Engineer very slowly puts his hat on, tilts it over his nose with one finger, makes a questionable gesture at the Assistant Quantity Surveyor with his disengaged hand, and tiptoes to the door.

"That damned boy," thinks the Profession to itself as a film settles over its eyes, " will get on far too fast."

OXFORD STREET . . .

After lamenting in a tone of suitable reverence the loss in blitzes of various architectural treasures, public speakers have been apt in the last nine months to change gear : and to opine in brighter tones that many of the other buildings which have been destroyed would have been swept away long ago if we had had proper feelings of social responsibility. And so on.

There is doubtless some truth in all this. But speakers in this vein have been extremely careful to be general in their references; and this seems to me to be unworthy of the bolder and better democratic spirit which now animates us all. If we lament publicly and specifically when St. Paul's is shaken by high explosive, why should we not rejoice, with discretion, when a notorious nest of horrors receives a clip? during nine months it has received some noticeable knocks and, architecturally speaking, every gap is pure gain.

*

In pre-war days when one's bus was jammed for twenty minutes or so, it was saddening to ponder over the time and energy, vivas of money and high intelligence, that was devoted within adjoining buildings to making Oxford Street London's leading shopping centre without a single thought of any external and collective move to the same end.

AND INNS OF COURT

Unfortunately, while most of Oxford Street remains standing the Inns of Court have been destroyed. In reporting the damage suffered by them in air raids it seems to me newspapers overlooked one of the most important aspects of a bad business—the changes it may bring about in the manner of life within the Inns.

¥

It is sad that individually important buildings or those associated with famous men should have gone; it will be far worse if residence within the Inns disappears as a result. Most of us by now believe that a measurable improvement in standards of living in London can only be achieved by the substitution of flat blocks for houses in the central areas. And it therefore seems of immense importance that the lessons of the Inns of Court should be learnt by everyone. For only in the Inns have the potential merits of *proper* flats been secured, and the evils avoided. That this has happened as much by accident as design does not affect the argument.

*

Compare the average commercially successful flat block with a flat in an Inn. The former has acquired almost all the characteristics of a hotel—flunkeys, central circulation, dashing lifts and central corridors. The difference between it and a hotel lies in the repetition throughout the building of activities (and their noises) which occur in a hotel only in a carefully chosen few places—washing up, sherry parties, wireless reception and so on. The failure of "hotel" partitions to confine these flat block noises is the subject of complaint, even by those who like hotel life.

*

A flat at an Inn of Court avoids these evils by being designed primarily for privacy; and it seems worth remembering that the plan of chambers in an Inn was evolved about 400 years ago by those who knew what mattered in communal life and has remained unchanged ever since. Every flat in an Inn runs from back to front of the block, and each is flanked on one side by an 18 inch party wall, and on the other by the sound baffle of a staircase. And even when allowance is made for the quiet surroundings of many blocks in the Inns and the good manners of those who live in them, their sound insulation must be reckoned vastly superior to that of a modern flat block.

The morals for post-war flat designers seem to be : (1) an Inns of Court plan with a lift instead of staircase, and Building Research Station sound insulating construction instead of insulation by mass; and (2) a central parcels and message depot at a single entrance gate in order to cut down the cost of porters and attendance.

ASTRAGAL

NEWS

★ D.I.A. New Council Page 278

★ Lord Reith on his Reconstruction Plans Page 282

DIRECTOR OF TRAFFIC REQUIREMENTS

The Ministry of Supply announces the appointment of Major H. M. Lawrence, R.E., as Director of Traffic Requirements for the Ministry of Works and Buildings, whose transportation the Ministry of Supply directs.

CROYDON'S BOMBED TOWN HALL

The War Damage Commission has agreed to make a preliminary grant of $\pounds 12,000$ towards the cost of rebuilding Croydon's bombed town hall.

LITERATURE

TOWN AND COUNTRY PLANNING

Town and Country Planning by Gilbert and Elizabeth Glen McAlister is a most valuable addition to existing literature on Housing. It is easy to read and crammed with facts; seldom before can so much information on the subject have been contained in a book designed to appeal to the general public. It will be difficult for anyone who has read it, however apathetic by nature, to delude himself that energetic reforms are unnecessary.

The surprising thing about the book, however, is its title : Town and Country Planning. Out of a total of 170 pages, 131 are devoted to housing. Chapter headings are as follows : Physical En-vironment, Some Social Consequences (chiefly facts about slums), A Hundred Years of Housing Progress, Housing Standards and Design (historical again), Building Costs, The Organization of the Building Industry (building societies, co-operative societies, housing societies), Housing Between the Wars, Housing for the Family. These headings sum up the attitude of the authors to planning. They talk about family homes, base their conclusions chiefly on historical data, and call the result town planning. It should be pointed out, however, that the subject matter dealt with is not town planning. It is not even the whole of housing, since the discussion is confined only to that part which concerns the housing of families with young children. Numbers of course do not represent fairly the relative importance of different types of housing, MEANS REAL HOMES FOR FAMILIES

WITHIN WALKING DISTANCE OF PLEASANT WORK PLACES

DECENTRALISATION



AND OF

PLAYING FIELDS & COUNTRYSIDE

but the fact is that only about 36.5 per cent. of the homes required are homes for families. Later chapters which deal with town planning (three only) are rather more sketchy than those devoted to housing, and tend to repeat what has already been said.

In the admirable survey of past and present housing conditions, one can see the good use Mr. McAlister made of his time as secretary of the Garden Cities and Town-planning Association. But one feels on occasions that the dice are loaded, and that the conclusions drawn by the authors are not always those which would be reached by an unbiased reader. For instance in the middle of a list of diseases which can reasonably be supposed to be aggravated by dampness, lack of fresh air and sunshine, showing their incidence among basement and nonbasement children, the following statement appears : " One in every five nonbasement children is undernourished; two out of five basement children are undernourished." Is there any necessary connection between living in a basement and going short of food? The authors say: "It can be shown

The authors say: "It can be shown that there is a definite relationship between the overcrowded central wards of a city, the less crowded inner wards and the more spacious outer wards, and the incidence of practically every disease," and they quote an impressive set of statistics to prove their statement. But it is a long jump from this to saying: "Take people out of the crowded slums and place them in decent *houses* and you will cut the death rate by more than half." You probably would, but you might do it equally effectively by a number of other measures. Two points are worth noting:

1. There is no necessary connection whatever between density per acre and

THAT PEOPLE MUST SPEND

HOURS TRAVELLING

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LONDONERS SPEND £40,000,000 A YEAR IN ONE TENTH OF LONDONERS LOCAL FARES ABOUT LIVE BY CARTING OTHERS

past it has been usual to provide flats only in places where the density is high. But one cannot proceed to argue that it Actually some London slums, where two-storey houses are general, can show higher densities than the unsatisfactory flat schemes put up to replace them. 2. At present a h

2. At present a high density per acre is almost always linked with other conditions unfavourable to health; overcrowded rooms, narrow, stuffy, badly ventilated streets, lack of open space, buildings designed with an aggressive disregard for all physical requirements, and incomes that are insufficient to provide a proper and nourishing diet.

Is it the density that causes the sickness, or is it these other factors ? Until further figures are forthcoming, it is impossible even to conclude that high density development is unsatisfactory. It may be.

But don't let us jump to conclusions. I think I am right in saying that a large proportion of the Dutch working classes live in flats arranged to give a relatively high density and that their vital statistics show them to be considerably healthier than we are. Next to New Zealand they have the lowest infant mortality figures in the world. Mr. E. Maxwell Fry is quoted as lending his support to the garden city movement. "The flat," garden city movement. "The flat," he said on one occasion, "is logical only under conditions imposed by the development of industry and transport, and the absence of domestic service. Our present system of development is heaping up trouble for us in the future. Flat life as known in London fails to recognize the existence of children, and denies the proper entry of sun and air. To live in boxes off the ground and away from contact with the earth is not the life of a free man." The italics are mine.

Two screens, from Decentralized Satellite Towns, an Exhibition arranged by the Town and Country Planning Association.* The first shows three great advantages that might be secured by planning good housing, good communications and plentiful open space, which are contrasted with their opposites, displayed on the second screen. The screens headed respectively Decentralization Centralization, regardless of the and fact that it is equally possible to plan for both sets of conditions, and that without planning both are equally objectionable. On the face of it decentralization, which is just another word for dispersal, is likely, other things being equal, to increase rather than diminish the difficulty of providing good communications. It provides no auto-matic cure to our transport problems, neither does it necessarily produce good housing conditions, or well laid-out towns. Planned decentralization might possess the three ad-vantages claimed, but it has no right to monopolise them. They could be realized, on the whole equally well, by planned redevelop-ment of existing centres. The open country might not always be within walking distance, but there is no reason why parks, playing fields, or why open country should not be, within half an hour's travelling distance. Many people are still afraid that planning will be along arbitrary lines, and that it will give rise to evils more serious than those it sets out to cure, by the rigid application of preconceived ideas. It is a pity to play into their hands by associating the advantages of planning with a particular policy which is in fact only one among many ways of achieving the same results. The screens are achieving the same results. The screens are reproduced from Town and Country Planning, by Gilbert and Elizabeth Glen McAlister.

275

* Town and Country Planning Association is the new name adopted by the Garden Cities and Town Planning Association in 1941. The Garden Cities and Town Planning Association grew out of the Garden Cities Association founded by Sir Ebenezer Howard in 1899. The name was first changed in 1900 1909

I think most people would agree that conditions imposed by development of industry and transport, and the absence of domestic service are conditions which cannot lightly be swept aside. At any rate Mr. Fry recently sponsored a plan prepared by the M.A.R.S. group, in which roughly half the population was housed in 10-storey flats with large surrounding open spaces.

All types of housing are necessary in any large scheme. It is the business of professional planners to determine without bias the circumstances in which each is most suitable. The case for some small houses in a garden city setting is strong, but it is not the whole of housing, still less is it Town and Country Planning. A.H.T.B.

[Town and Country Planning. By Gilbert and Elizabeth Glen Mc Alister. Faber & Faber. Price 12/6 net.]

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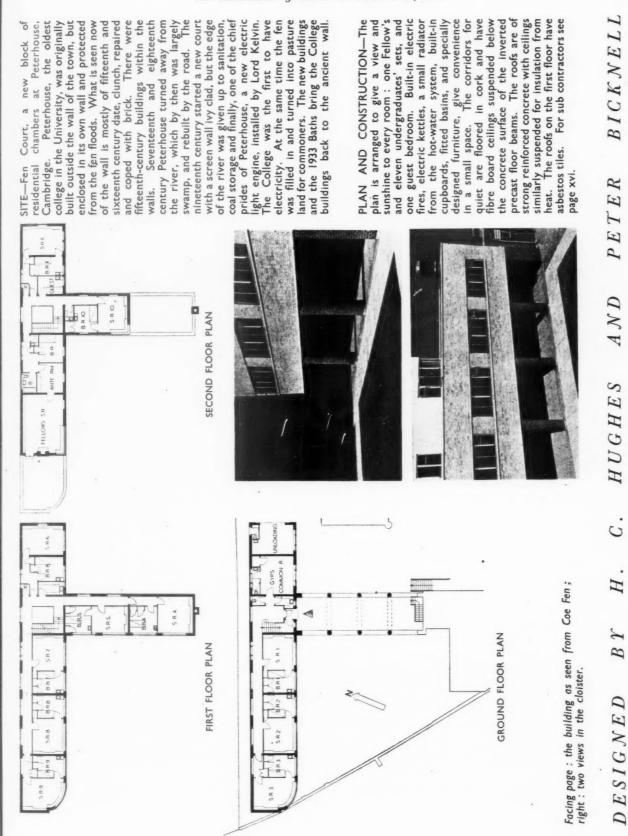
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LETTERS

G. B. J. ATHOE

Secretary, Incorporated Association of Architects and Surveyors.

LOUIS ERDI

Diploma Architect, Federal University, Zurich.

R.H.

Reconstruction.

SIR,-Apropos of post-war reconstruction, let me revive memories of an Act of 1588, when Elizabeth was on the throne. This made it illegal to erect or maintain a cottage without " laying four acres of land thereto," and provided that persons allowing more than one family to live in a cottage were to be fined ten shillings a month, payable to the Lord of the Manora considerable sum in those days.

The Act, repealed in 1775, would not be workable in its entirety to-day, but surely some part of its spirit might be replaced on the Statute book so that discouragement would be offered to the exploiters of quantity at the cost of quality in the coming great reconstruction.

If the Act was felt to be desirable in 1588, how much more desirable would be a similar edict in an era of ribbondevelopment and jerry-building.

The abnormal demand for accommodation which followed the last war is almost certain to be repeated after the present one, and nothing but drastic legislation seems likely to be able to put a period to the enterprise of unscrupulous opportunists who will otherwise reap a rich harvest from the ignorance and necessity of the public.

G. B. J. ATHOE.

Storekeeper

London.

SIR,-Reading Astragal's notes in the ARCHITECTS' JOURNAL recently I feel you would be interested to know of another storekeeper-architect's struggle to get back to the life-giving, beloved, dusty, smoky, wonderful atmosphere of a planning office.

I am a Jugoslavian born Hungarian citizen, 32 years of age, holder of degrees in architecture from the Universities of Zurich and Budapest. I came to this country-in anticipation of the things which since happened on the Continent-half a year before the outbreak of war, leaving my parents, possessions, private practice and good reputation as an architect behind. I

started to build up a business with some inventions of mine, all of which, of course, are useless for the duration. As I had means to live for a considerable time, I did not worry much but offered my service to any conceivable Government department, and was finally put on to the list of the Special Register of the Ministry of Labour.

As my means got smaller, I was forced to go in for any kind of job I could obtain. I accepted just over a year ago the vitally important work of a kitchen porter in a small residential hotel, studying the most correct way to build a kitchen most difficult to work, with the least sanitation imaginable.

· Needless to say, my stay there was not a huge success, and a few months later I found myself paying a week's salary to an agency for getting me work as a storekeeper in a West End hotel. Having been used to mathematical precision I succeeded in keeping the butter, cheese and salmon in good account and made a better show--however, the tone did not appeal to me and I sought for a change.

Having paid again one week's salary to an agency, I received my present job as storekeeper-cellarmanaccountant in a local canteen. It is a cushy job if one does not like the sun and air and if one likes to do heavy work in a tropical temperature. It is even a very essential work, because I hardly think anyone else could be found who would be willing to do it -except probably any other intellectual who is at large and not wanted for the war effort.

Believe me, dear Astragal, there is not an advertisement to which I have not replied, there is no forum to whom I did not apply and all in vain, my fault being my citizenship I believe. After all, I am an alien, and as such no sacrifice which I made in order to serve the cause I consider just can qualify me to work for it.

LOUIS ERDI London.

Collaborate with Russia

SIR,-I have read the correspondence on collaboration with Russia with Surely it is not much interest. seriously suggested that collaboration would lead to the wholesale adoption of Russian technique or the slavish copying of foreign buildings. True collaboration should mean the interchange of ideas and the adoption of principles to suit our native requirements. In music and the theatre the Russians are world-famous; her writers and poets are well known. Have we nothing to learn from her architects or her gigantic housing and town planning schemes. If not let us collaborate even if only to profit from her mistakes. London

R.H.

D.I.A. NEW COUNCIL

At the annual meeting of the Design and Industries Association, held at the R.I.B.A., the following Council were elected :

President : the Lord Sempill.

Vice-presidents : Mr. Harold Curwen, Sir Ambrose Heal, Mr. Charles Holden, F.R.I.B.A., Sir James Morton, Mr. Frank Pick, Mr. Hamilton T. Smith, the Rt. Hon. Josiah Wedgwood, the Lord Woolton, (Above are ex-officio members of the Council.)

Chairman : Mr. F. R. Yerbury, Hon. A.R.I.B.A.

Vice-Chairman : Commander V. H. Goldsmith.

Treasurer : Mr. J. W. Waterer.

Members of Council : the Lady Sempill, Miss Himsworth, Messrs. W. J. Bassett-Lowke, R. Dudley Best, Lt.-Gen. Sir John Brown, Messrs. N. L. Carrington, F. Chippendale, F. E. Courtney, G. R. W. Crowe, G. Dunn, T. A. Fennimore, John Grey, C. E. Gane, W. H. Hall, G. A. Jellicoe, B. C. Joseph, Lt.-Col. Maxwell, Messrs. R. D. Russell, H. G. Strauss, M.P., M. Hartland Thomas, V. V. Tatlock.

The Council of the Association has decided to organise an essay competition amongst schools on the subject of "The house I would like to live in, with its equipment and furnishings." Prizes of ten, five, and three guineas will be offered for the best essays.

Lt.-Gen. Sir John Brown suggested that the Association should organize exhibitions which would be circulated amongst some of the army camps where exhibitions and lectures of all kinds were enjoyed and appreciated.

WAR DAMAGE CLAIMS

Captain Crookshank, Financial Secretary to the Treasury, stated that there had been no excessive delay in dealing with war damage claims in view of the large number of notifications of damage which the War Damage Commission took over from the Inland Revenue Department. These had to be dealt with alongside the new notifications coming in under the War Damage Act.

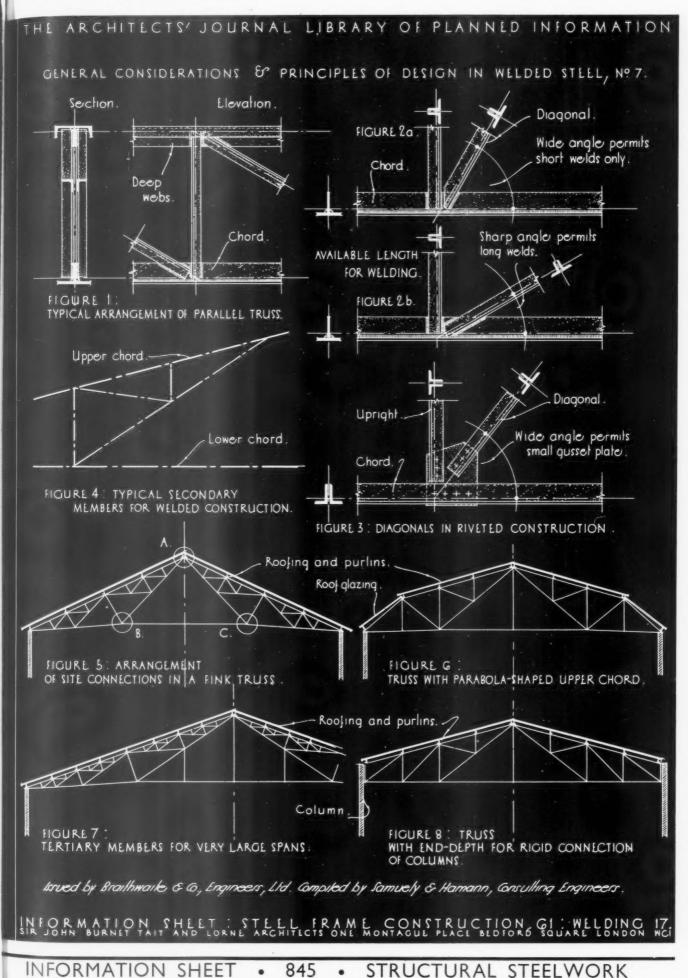
The Commission had now almost overtaken these arrears, and most claimants had had an indication of the Commission's intention in the issue to them of the claim form appropriate to the apparent degree of damage. The remainder should receive damage. the forms in the next few weeks. Thereafter the staff would be adequate, so far as could be foreseen, for the issue of claim forms immediately on notification of damage. Settlement of claims in cost of works cases proceeded as the claim forms were returned; many had already been paid. In cases where a value payment was considered appropriate, payment would not normally be made until the end of the war: meanwhile the claim bore interest at 21 per cent.

A.A.S.T.A. LONDON BRANCH

October 24, at 7 p.m., Dance and Cabaret, at the Allenby Club, 20, Hand Court, W.C.1 (Holborn or Chancery Lane Tube Station). Bar, Cabaret (informal dress). Tickets 5s. double and 3s. 6d. single, from : A.A.S.T.A., 113, High Holborn, London, W.C.1.







THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET • 845 •

STRUCTURAL STEELWORK

Subject : Welding 17 : General Considerations and Principles of Design in Welded Steel, 7: Systems of Welded Roof Trusses, 1.

General :

This series of Sheets on welded steel construction is a continuation of a preceding group dealing with riveted and bolted construction, and is intended to serve a similar purpose—namely, to indicate the way in which economical design as affected by general planning considerations may be obtained.

Both the principles of design and the general and detailed application of welded steelwork are analysed in relation to the normal structural requirements of buildings. The economies in cover and dead weight resulting from the use of lighter and smaller steel members and connections are taken into consideration in the preliminary arrangement of the building components in order to obtain a maximum economy in the design of the steel framing.

This Sheet is the seventh of the section dealing with general considerations and principles of design in welded steel, and illustrates systems of roof trusses in which this type of construction is used and their advantages over riveted trusses.

Welded Trusses :

Trusses constructed in accordance with Figures I and 2 of Sheet 15 of this series, are built up in a manner resembling that of riveted construction, with members which take direct stresses (no bending), the main difference being the absence of gusset plates in welded construction.

The omission of gusset plates, which involves a saving in steel and labour as well as a more direct flow of stresses, is possible owing to the small space occupied by the weld compared with that required for a number of rivets to take the same load, but in many cases a careful choice of section is necessary to provide even the small space required for the weld. To achieve this it is important to ensure that deep webs are arranged for the chords, e.g. as shown by the section in Figure 1.

Length of Welds :

The length available for welding where two members touch each other depends largely upon the angle at which they meet, and this is illustrated by the comparisons given in Figures 2a and 2b. For this reason flat diagonals are preferable to steep ones. This is particularly important, as it is contrary to riveted practice, where steep diagonals are required in order to obviate large gusset plates. See Figure 3.

F

Secondary Members :

Small angles between members mean large panels and, therefore, except for very light construction, systems with secondary members are used more frequently for welded than for riveted construction, the secondary members serving to reduce the length of the upper chord between nodes. See Figure 4.

Bending moments in the upper chord, due to intermediate purlins, can be avoided in this way or at least substantially reduced, and owing to the reduced buckling length, the section of the upper chord can be smaller. The practical application of secondary members is explained in Figure 5, and Figure 7 shows a large span truss (say 120 ft.) where even tertiary members may be used to advantage.

Form of Trusses :

The ordinary Fink truss makes use of this arrangement (Figure 5) and other more economical forms can be constructed in the same way. In Figure 6 a truss is shown the upper chord of which approximates to a parabola. Figure 8 shows a truss which retains a certain depth at the ends and may be used for rigid connections to the columns.

Site Connections :

For erection purposes and in order to maintain adequate depth in the centre, systems should consist of two main parts connected by a tie. This allows the number of site connections to be reduced to three, at the points A. B and C in Figure 5.

at the points A, B and C in Figure 5. Where parallel trusses are involved, the same principle of connections can be adhered to, but it is usually better to have the main diagonals falling instead of ascending.

Previous Sheets :

Previous Sheets of this series on structural steelwork are Ncs. 729, 733, 736, 737, 741, 745, 751, 759, 763, 765, 769, 770, 772, 773, 774, 775, 776, 777, 780, 783, 785, 789, 790, 793, 796, 798, 799, 800, 801, 802, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 816, 819, 821, 822, 823, 824, 826, 827, 828, 830, 832, 836, 837, 838, 839, 840, 842 and 843.

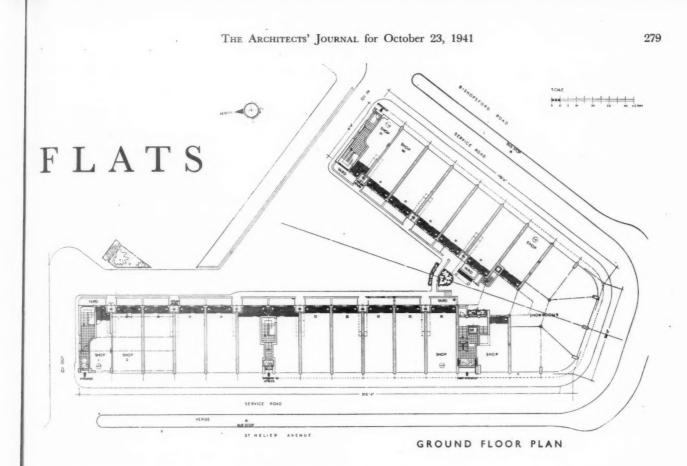
Issued by : Braithwaite and Co., Engineers, Ltd.

London Office (Temporary Address) : . . King's House, Haymarket,

London, S.W.I.

Telephone:

Whitehall 3993.



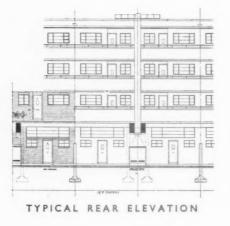
R O S E H I L L C O U R T CARSHALTON, SURREY DESIGNED BY HARRY WESTON AND R. JELINEK-KARL

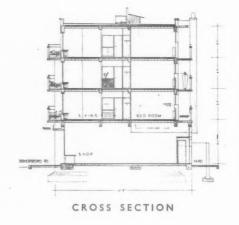
SITE—In the centre of a new housing estate at the junction of Sutton, Carshalton and Morden. The site measures 1.6 acres. The ground landlords, the London County Council, granted a building lease with the stipulation that the development was to include an entertainment and shopping centre to cover the needs of the surrounding area. The resulting schemes include a super cinema, seating 2,000 and containing a cafe and dance hall, 26 shops and 57 flats.



Right: window detail at corner of south-east front.

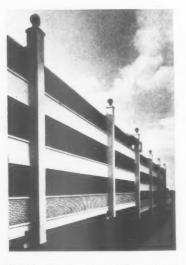




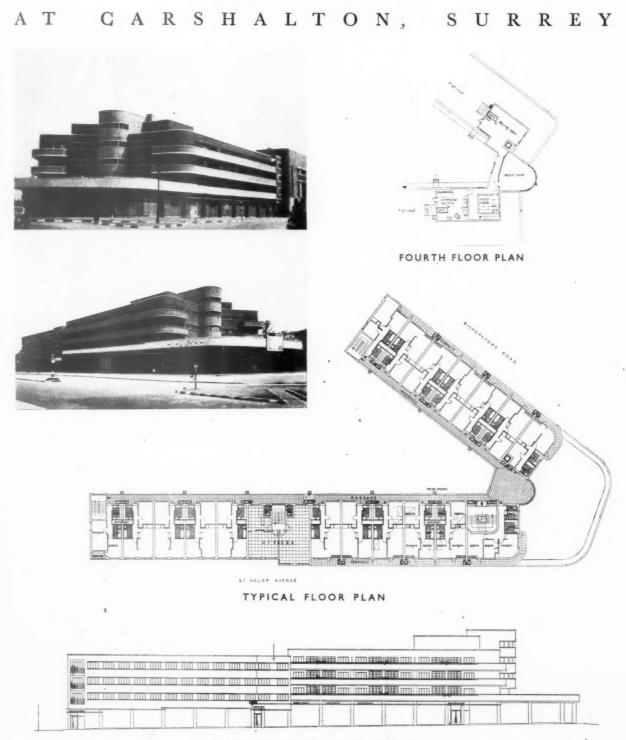


DESIGNED BY HARRY WESTON AND R. JELINEK-KARL Below: typical rear elevation. The house refuse is placed in chutes, built in the balcony piers, and falls into bins at ground floor level. One chute serves two flats; left: centre feature of main front.





PLAN—On the ground floor there are 26 shops of a uniform frontage of 19 ft. 6 in. and 40 ft. depth. First, second and third floors comprise 57 flats of two and three rooms, kitchenette and bathroom. The flats are accessible from three entrances, one of which is installed with a lift. The fourth floor accommodates a communal laundry, drying rooms and store rooms. Six offices are also included with an independent entrance from St. Helier Avenue.



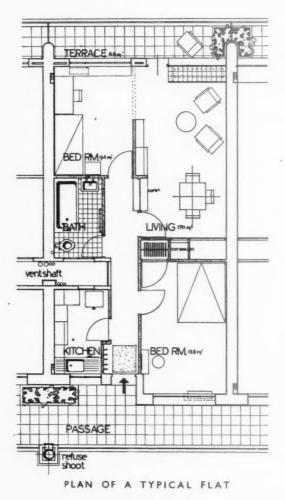


CONSTRUCTION AND FINISHES -Reinforced concrete; main walls in brickwork, carried to roof level, thereby serving as party walls both to shops and flats over. The exterior is faced with hand-made and sandfaced multicolour red bricks with the semi-circular central tower and the

facings are : first floor balcony, buff glazed tiles; pillars between shops, pre-cast black and buff faience. A concrete fascia is provided above the shops to obtain a uniform height of shop signs. The coping is artificial stone. Floors and roof are hollow block tiles, the roof being finished balconies faced in buff bricks. Other with 2 in. insulation board and 3-ply

Ruberoid. There are central heating and domestic hot water from boilers of $2\frac{1}{2}$ million B.T.U., a plumbing and vent shaft between each kitchen and bathroom to serve the purpose of permanent ventilation, and refuse chutes. The kitchens are equipped with cabinets and refrigerators. A cupboard wall is fitted between the

ROSEHILL COURT CARSHALTON



BY HARRY WESTON AND R. JELINEK-KARL

LORD REITH ON HIS RECONSTRUCTION PLANS

In the House of Lords, Viscount Samuel asked the Government whether they were in a position to say when the legislation on Town and Country Planning, proposed in the statement of the Minister of Works and Buildings on July 17, would be presented to Parliament. The noble viscount, who moved for papers, said that there had been widespread disappointment that the Government had not followed the carefully considered recommendation of the Uthwatt Committee to create a central planning authority. The Council of Ministers, which Lord Reith in July described as "an embryo," had not shown any growth and progress was being blocked by departmentalism. It was time that a protest should be made against the way the Government were ambling along.

After the war there would be the exceedingly grave problem of unemployment, when people were discharged from the Armed Forces and the munition factories. There would be a fearful scramble for international trade. Obviously the industry likely to give most opportunities for employment would be the building trade with all its subsidiary means of supply. If plans were not ready to be carried out there would be national indignation. Ministers responsible would be swept away, but the damage would already have been done.

Lord Addison, Lord Balfour of Burleigh, Lord Harmsworth, and Lord Mancroft supported the motion.

Lord Reith, Minister of Works and Buildings, said that actually "the embryo" had done a considerable amount. It had produced \blacksquare Bill which was in an advanced stage. The Minister of Health had worked hard and long and well, and so had the Minister without Portfolio. Progress had been definite and when the Bill was introduced their lordships would appreciate that. There was also an inter-departmental committee associated with him on reconstruction problems. They had produced some excellent reports which were being acted upon, and one specific result was that the Minister of Health had appointed regional planning officers for all the regions to deal with problems that might arise.

Also he (Lord Reith) was about to appoint regional officers for propaganda purposes and to encourage local authorities to establish joint committees where they did not already exist. So things would shortly be moving in the regions. With regard to the preparation of designs and the supply of materials for post-war use, a great deal was being done in the Ministry of Worksstandardization, economy of design, and the use of alternative materials. At a later date he hoped he might be allowed to give the House an account of that because it an important activity for which no was publicity had been sought.

I assure your lordships (Lord Reith concluded) we are not going to be caught by the peace. I made it clear enough in July that I thought the problems of peace much more serious than the problems of war, and the Government share my view. The need and its urgency are realized and my colleagues and I are doing better than we have been able to make known yet, and shortly I hope to be able to give the House more definite news than I have been able to to-day.

The motion was, by leave, withdrawn.

SOME QUESTIONS ANSWERED THIS WEEK:

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ope nite \star WHO supplies costing Indoor Shelter an **Q** 808 about f. 10?

★ HOW can I prevent Condensation on a Concrete Q 809 Roof? -

 \star TO whom should I apply for deferment of Q 811 Military Service?

A R C H I T E C T S' JOURNAL ТНЕ

CENTRE INFORMATION

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 until their question is published in the JOURNAL. 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 by post to-

ARCHITECTS' JOURNAL THE 45 THE AVENUE, CHEAM, SURREY

-but in cases where an enquirer urgently requires an answer to a simple question, he may save time by telephoning the question to-

VIGILANT 0087

The reply will come by post.

Q 808

ARCHITECT, LANCASHIRE.-I have been asked to recommend an INDOOR SHELTER of the Morrison type TO COST about £10. I understand from my client that he is unable to obtain a Morrison shelter. Could you recommend something similar that is immediately available.

The following designs for an indoor (anti-debris) shelter have been approved by the Ministry of Home Security :-

Security :-Proprietary Design No.
1. R.E. 27/25/2.--The Kleine Co., Ltd.,
9-13, George Street, Manchester Square,
London, W.I.
2. R.E. 27/25/3.--Messrs.Wright, Anderson & Co., Ltd., Regent House, Kingsway, London, W.C.2.
3. R.E. 27/25/19.--Messrs. Robert
Morris, Ltd., Farnworth, Near Bolton.
4. R.E. 27/25/23.--Messrs. Dart Cash
Carrier Co., Ltd., Campbell Road, Stoke-on-Trent.

Q 809

ARCHITECT, NEWCASTLE.-What are the nature and use of Sea Foam as an insulation agent, to prevent CON-DENSATION ON the underside of CONCRETE ROOFING of a flour store, the roof being of Truscon beam type.

283

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Alternatively, I presume that insulating sheeting, such as Tentest and Celotex laid under a bituminous sheeting, would be effective and would be recommended.

You may be thinking of Foamagg, which is no longer made. Solite foamed slag aggregate made by the Ruberoid Co. Ltd., Commonwealth House, New Oxford Street, London, W.1, is rather similar and can be incorporated in renderings and plaster as well as concrete. It is true that this material tends to minimise condensation but we have not heard of it being used as a rendering specifically for that purpose.

Celotex and Tentest insulating boards can certainly be recommended for preventing or minimising condensation, but they are not likely to prevent condensation entirely if laid on top of the concrete and under the roof coverings, as you suggest, as the concrete slab will not take up variations in room temperature, quickly, even if it is insulated from the outside air.

As an alternative you might consider the use of Cork-Tex-B, an anticondensation paint, incorporating granulated cork, manufactured by Messrs. Thos. Parsons & Sons, Ltd., 315, Oxford Street, London, W.1.

Q 810

ENQUIRER, ABERDEEN.-I am 31 years old, and have been engaged for the last 15 years (i.e. since leaving school) in cabinet-making and shop-fitting, for the last eight years in an executive capacity. I have had training in practical cabinet-making and slight experience in practical building; I am able to read plans and draw rough plans to scale. Could you suggest any EXECUTIVE POSITION for me IN THE ARCHITECTURAL PROFESSION? I am quite prepared to devote time and expense. to study and training?

Most executives have had a long and expensive training in architecture, although it is not impossible for an unqualified draughtsman to reach a responsible position after considerable practical experience. As a cabinet maker and shopfitter you are probably a competent draughtsman, and we think your only hope is to obtain a position as a draughtsman with a view to studying and improving your position.

Should you wish to study architecture before securing a position you could take a short war-time correspondence course with one of the following, but even such a course would give no guarantee of employment :---

The International Correspondence Schools Ltd., International Buildings, London, W.C.2.

INFORMATION CENTRE

Mr. C. B. Box, F.R.I.B.A., M.R.C.I., 115, Gower Street, London, W.C.I. Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I., St. Catherine's College, Cambridge.

Q 811

ARCHITECT, LONDON.-Can you tell me to whom I should apply for DEFERMENT OF MILITARY SERVICE. I am liable to be called up but am working as a senior assistant on works of National Service. My employer is willing to support an application for deferment of service sent in by me.

It has been agreed by the R.I.B.A., the Ministry of Works and Buildings and the Ministry of Labour and National Service, that applications for deferment should be made to the architectural society to which the applicant belongs. The architectural society will then examine the cases and pass them on with their recommendations to the Ministry of Works and Buildings, who will in turn report to the Ministry of Labour, with whom the decision rests.

In your case application should be made on Form N.S.100, copies of which can be obtained at any of the local offices of the Ministry of Labour and National Service and which should be sent to the R.I.B.A. Please note that the application must be made by your employer.

Q 812

ARCHITECT, LONDON.—Can you tell me whether the owner of property requisitioned by the War Office is liable for CONTRIBUTIONS UNDER the WAR DAMAGE ACT. My client considers that as the property has been requisitioned by the War Office, the contributions should be paid by them.

The War Damage (Business Scheme) Order, 1941, exempts from compulsory insurance, under the business scheme, goods owned by a person which are not being used by him because they have been requisitioned. There is no similar Order for land, however.

The War Office has no proprietary interest in land compulsorily acquired and is in a position similar to that of a short tenant who also pays no share of the contribution; in consequence your client will be liable to contribute under the War Damage Act.

Q 813

ARCHITECTS, YORKSHIRE.—We shall be obliged if you can furnish us with particulars of any books at present in circulation with the MONUMENTAL LETTERING STYLES and typography created BY the late ERIC GILL. We suggest the following :-

Monumental Lettering Styles. "Manuscript and Inscription Letters," by Edward Johnston. Published by Sir Isaac Pitman.

Typography. "Writing, Illuminating and Lettering," by Edward Johnston. Published by Sir Isaac Pitman.

"Lettering," by C. G. Holme. 'Published

by The Studio. "Type Faces." Published by Simson-Shand, Hertford. All these books are in the R.I.B.A.

Library and we might remind you that the R.I.B.A. has a postal service, the Institute

R.I.B.A. has a postal service, the Institute paying outgoing postage. There was a book called "Typography," by Eric Gill, published by Steed and Ward; it is no longer obtainable but, of course, you might be able to find a copy in a Library. J. M. Dent, of 10, Bedford Street, London, W.C.2, may republish the hook in due course republish the book in due course.

REFERENCE BACK

This section deals with previous questions and answers.]

Q 777

Our attention has been drawn to the fact that the Granwood Flooring Company's present address is Riddings, Derbyshire, and not as published in answer to this question.

Q 791

In answer to this enquiry we gave the name of Messrs. Honeywill & Stein, Ltd., as a reliable firm able to advise on materials to be used for sound absorption.

The building department of Messrs. Honeywill & Stein, Ltd., including the insulation department of that company, was amalgamated with Messrs. Gyproc Products, Ltd., on October 1, 1940. The address is : Messrs. Gyproc Products, Ltd., Great Burgh, Epsom, Surrey.

Q 802

In the answer to this query we stated that the Army Education Service covered all subjects for the examinations of the Chartered Surveyors' Institution, Auctioneers' and Estate Agents' Institute and the B.Sc. Estate Management. We are indebted to the Auctioneers' and Estate Agents' Institute for pointing out that the service does not cover every subject, nor are there full examination courses. We give below a list of subjects in connection with building and surveying, dealt with by the Army Education Service : elements of valuation, agricultural science, elements of agriculture, elements of forestry, elementary building construction, drainage of buildings, central and local government, elements of geology, heating and ventilation, land drainage, elementary quantities, and history and elementary economics of agriculture.





PLANT HIRE

The Ministry of Works wishes to draw attention to the recently published Order on control of rates of hire of plant— Statutory Rule and Order, 1941, No. 1277. This Order sets out a list of maximum rates at which various types of building and civil engineering contractors' plant can be let out on hire together with the conditions. It is important to note that these rates apply not only to plant hired out on Government work, but also to plant hired out on private work. Copies of the Order can be purchased from H.M. Stationery Office. Price 2d.

BUILDERS' £1,000,000 SAVINGS DRIVE

The appeal made by Mr. George R. Hicks, M.P., Parliamentary Secretary to the Ministry of Works and Reconstruction and Chairman of the War Savings Committee of the Building, Civil Engineering and Allied Trades, to employers to cooperate in raising $\pounds 1,000,000$, the cost of 100 cruiser tanks as the industry's part in the National Savings Campaign has already met with a warm response. The Council of the National Federation of Building Trade Employers has recommended its members to give this savings drive their full support.

Several large firms have already fixed their targets. Kirk & Kirk, Ltd., of Putney, are aiming at $f_{10,000}$, one cruiser tank; and Sir Lindsay Parkinson & Co., Ltd., are also out for $f_{10,000}$, another cruiser tank. Edmund Nuttall, Sons & Co. (London), Ltd., have decided to save $f_{6,000}$ in six months on one job alone. Kent & Sussex Contractors, Ltd., of Erith, Kent, are aiming at $f_{2,500}$ in six months. Wates, Ltd., of London, are holding a special month's drive this month (October), to raise $f_{1,600}$. J. Laing & Son, Ltd., who are co-

operating in the $f_{1,000,000}$ drive, have already shown that a high percentage of saving can be effected on a building job. A contract employing 200 men aimed at raising the cost of a barrage balloon, $f_{2,00}$ in eight weeks. They did it in seven weeks. Their success represented an average weekly saving of 10¹ per employee. John Mowlem & Co., Ltd., have a special bonus and deduction from pay scheme on a number of jobs.

THE BUILDINGS ILLUSTRATED FEN COURT, PETERHOUSE, CAMBRIDGE (page 276-277). Architects : H. C. Hughes and Peter Bicknell. General contractors

and Peter Bicknell. General contractors Kerridge (Cambridge) Ltd. Among the sub-contractors and suppliers were the following: Williamson Cliff Ltd., bricks; Trussed Concrete Steel Co. Ltd., pre-cast beam floors; Colchester Steel Construction Co., windows; Limner and Trinidad Lake Asphalte Co. Ltd., asphalt road; Rattee and Kett Ltd., stone masonry; Cambridge Artificial Stone Co., paving and cills; Pilkington Bros. Ltd., glass 'bricks; George Lister and Sons, handrail; Tentest Fibre Board Co. Ltd., suspended ceilings; Wachal Flooring Co., hardwood flooring; Cork Insulation Co. Ltd., cork tile flooring; J. A. King and Co. Ltd., ronmongery; J. Wontner-Smith, Gray and Co. Ltd., heating and hot water system; Cambridge University and Town Gas Light Co., gas installation; A. Macintosh and Sons Ltd., sanitary fittings; Electric Wiring and Repair Co., electric installation; Merchant Adventurers of London Ltd., Oswald Hollmann Ltd. and Ferranti Ltd., electric fires; Masonite Ltd., roof over stairs; Parker Winder and Achurch Ltd., cycle racks; J. W. Gray and Son Ltd., lightning conductors; Buoyant Upholstery Co., S. A. Lord and Son, and W. C. Carter Ltd., furniture; Percy Leach Ltd., curtains.

NEW REGULATIONS FOR SALE OF ROOFING

New regulations were authorized by the Director of Roofing, Ministry of Works and Buildings, to take effect from October 6. Briefly the new system of control permits manufacturers and merchants to sell to consumers from stock without the necessity of obtaining a permit from the Executive Committee as heretofore.

Merchants desiring to order stocks from manufacturers for delivery to their warehouses or direct to the consumers must obtain a permit from 'the Executive Committee. When sending orders the merchants must certify their total stock of roofing of all makes. A printed form is available for this purpose and a supply is available on application.

The maximum stock of roofing felt any merchant will be allowed to hold is the equivalent to 250 24-yard rolls of any make. Merchants wishing to take up stocks of roofing felt under the new regulations should either be members of one of the trades associations or should have been recognized dealers in roofing felt before the war.

This modification of the regulations is intended to make the system of control easier for the industry, but the authorities wish it to be clearly understood that the principle underlying the restrictions previously in force should be continued by distributors, preference being given to all Government orders and those connected with the nation's war effort.

These regulations govern all stocks of Ruberoid, Starex and Pluvex, held by merchants, hence the dispersal scheme is suspended.

