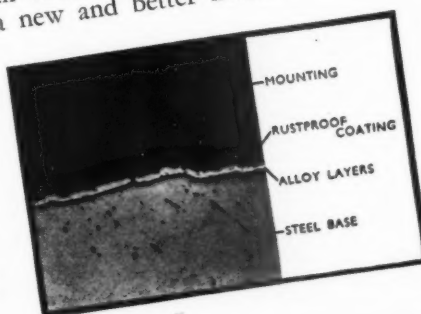


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Inset is an actual micro photo showing the intermediate alloy layer which binds the outer layer inseparably to the steel. It is this complete and inseparable union which gives the process its great value and differentiates it from all painting and coating processes.

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# Construction in THE MODERN MEDIUM

*This is the concluding Article of a series on the principles and practice of reinforced concrete construction. It is suggested that this article should be cut out and kept in a file with other information relating to reinforced concrete construction.*



Architect : Godfrey Samuel.

This being the final article of the present series, it is perhaps both convenient and appropriate to review the subject matter of the fore-runners, wherein it was shown what can be done when the technique of the modern constructional medium—reinforced concrete—is allied to skilful architectural direction. In this medium can be produced structures for all purposes, from those related to stark industrialism to those in the gentler realm of domestic architecture; witness the accompanying illustrations. And in the wide zone between these two extremes we find blocks of flats, shops and offices; centres of entertainment, culture and religion; structures to meet civic needs as well as the requirements of the transport of goods and passengers, and the supply of light, power and water; efficient factories and farms

—in fact wherever construction is needed to-day to fulfil the widespread activities of civilized communities, there reinforced concrete will be found producing structures that at one and the same time are eminently successful in function, exceedingly varied and pleasing in appearance, and economical in first cost and upkeep.

The maintenance charges for a well designed reinforced concrete structure are virtually nil throughout the very many years of life expected and attained by this material. The first cost, too, is sufficiently competitive with that of other materials to be attractive, especially as this is accompanied by certain inherent advantages not attributable to alternative materials. Of itself, a reinforced concrete structure is fireproof and offers the maximum possible resistance to the disruptive effects of aerial bombardment, earthquakes, subsidence and vibrations, and to the corrosive effect of weather and of products

associated with industrial processes. The monolithic nature of the whole structure also allows the architect extreme latitude in planning especially as regards the positioning of supports and the arrangement of windows and other openings. Traditional planning may not always meet the needs of modern usage and here reinforced concrete steps into the breach.

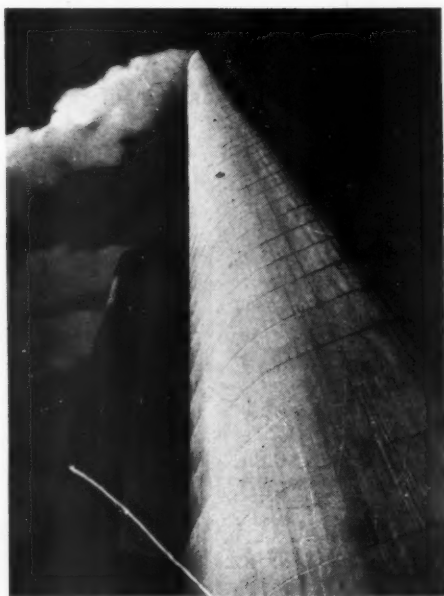
Monolithic construction—this "oneness" of the whole—means that all parts of the building, including walls, floors, roofs, etc., have a structural function added to their primary object, thereby resulting in a building of minimum weight. This is in turn reflected in a reduction of the load carried on the foundations—a self-evident economy. No other material but concrete—

and for any but very light loads, this means reinforced concrete—is economically practicable for sub-ground work, whether for column bases or retaining walls.

Preceding articles of this series have demonstrated how internal planning is assisted by the slender proportions of columns and beams in reinforced concrete, what scope there is for courageous designing of stairs, balconies and the like, and what advantages accrue from the adoption of beamless floors.

In the present and the post-war periods all activities must be conducted with the minimum of national effort. This means the utilisation of the minimum amount of material and transporting this material the minimum distance. With a reinforced concrete building of modern design, only about five per cent. of the total weight of material required is represented by the steel reinforcement which may have to be brought from a distance; about fifteen per cent. represents the cement which is manufactured at centres well distributed about the country, while the overwhelming balance consists of locally obtained stones and sands.

The economy in weight of steel, the decreased dead weight compared with brick and masonry structures, combined with the other advantages enumerated, are the factors that have led to the acceptance of reinforced concrete as the primary structural material of to-day.



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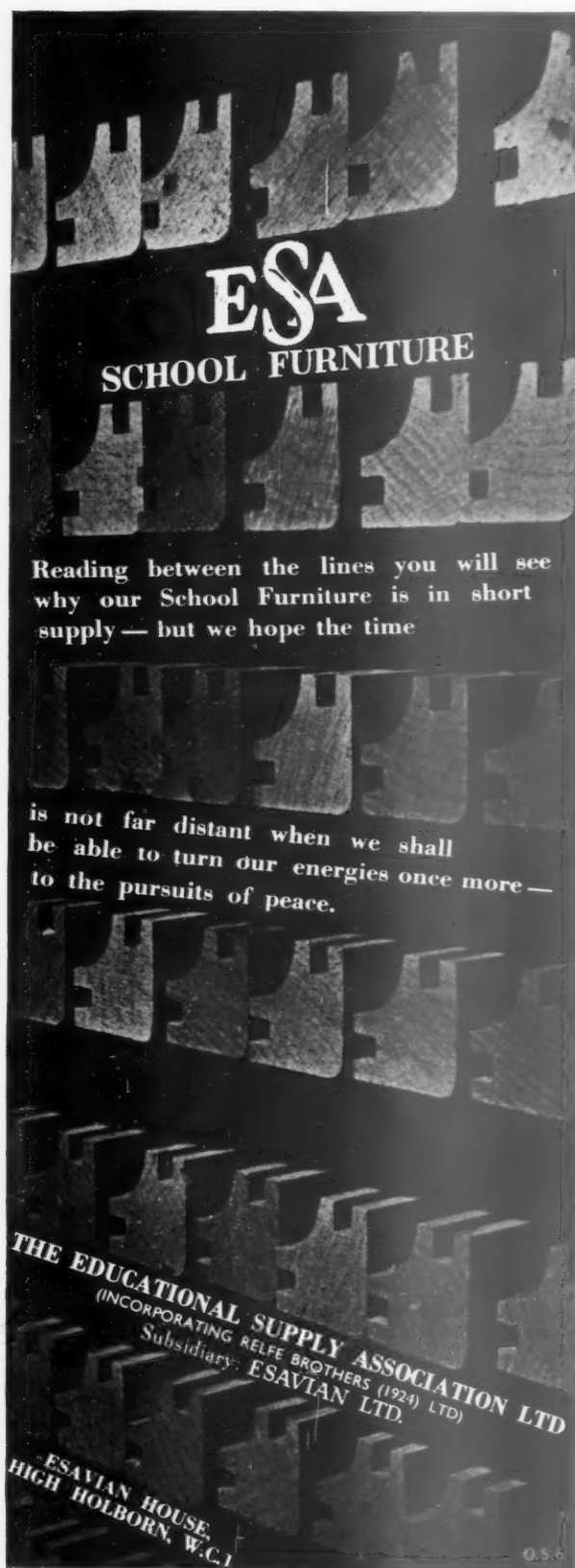
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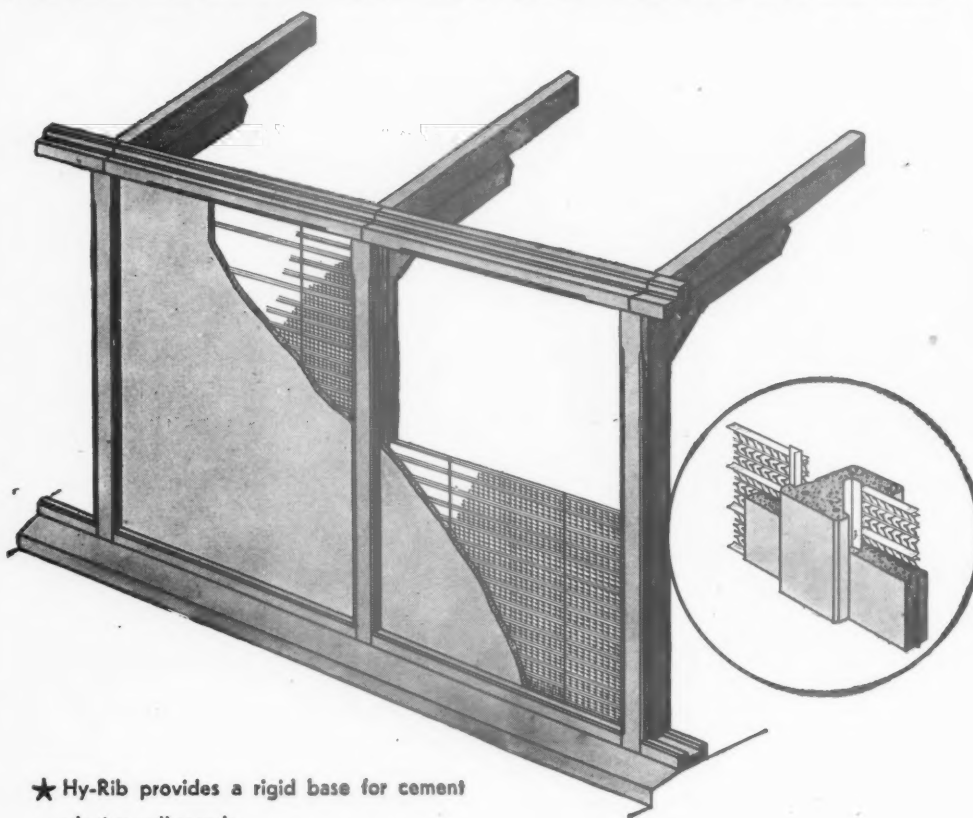
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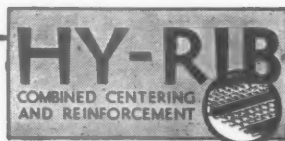
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Dear Sirs,

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I made a thorough survey of damage in daylight and found that: The Fire-Bomb had struck the roof not behind the chimney, but up the roof about 6 ft. away, penetrated the tiles, fallen on the Asbestos Wood over the wardrobe in the best bedroom, this containing about £100 worth of dresses and coats, etc. The Fire-Bomb bounced across from the point of impact on the Asbestos Wood to behind the chimney in the roof, a distance of 6 ft. and there rested at the point where the Asbestos Wood joined the Chimney Breast. During the twenty minutes between the falling of the bomb and its discovery it had been burning merrily. When it was discovered it had burnt through the Asbestos and set fire at the end to one ceiling joist, the trimmer joist, one rafter and four tiling laths.

You can imagine the mess I should have had had I not inserted the Asbestos protection, for I had taken my wife and two children, before the raid commenced, into the Shelter in the garden, my neighbour having done the same, and he was helping with me on a house that was on fire 50 yards away. So both the houses were empty.

I estimate that the Asbestos Wood saved at least a damage of £200, if not the whole of my home, furniture as well, and possibly next door as well.

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(Signed) HAROLD WOOTTON.



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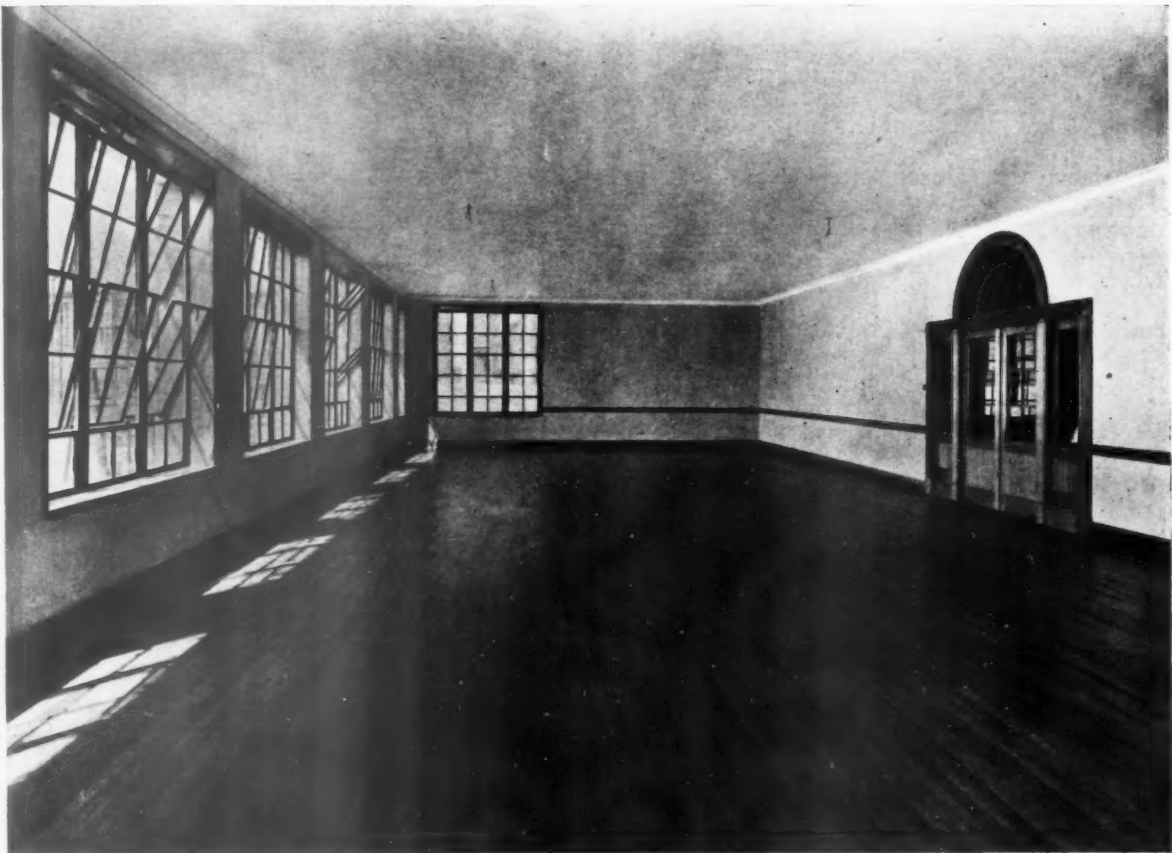
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hold himself responsible for material sent him.

THURSDAY, DECEMBER 3, 1942.

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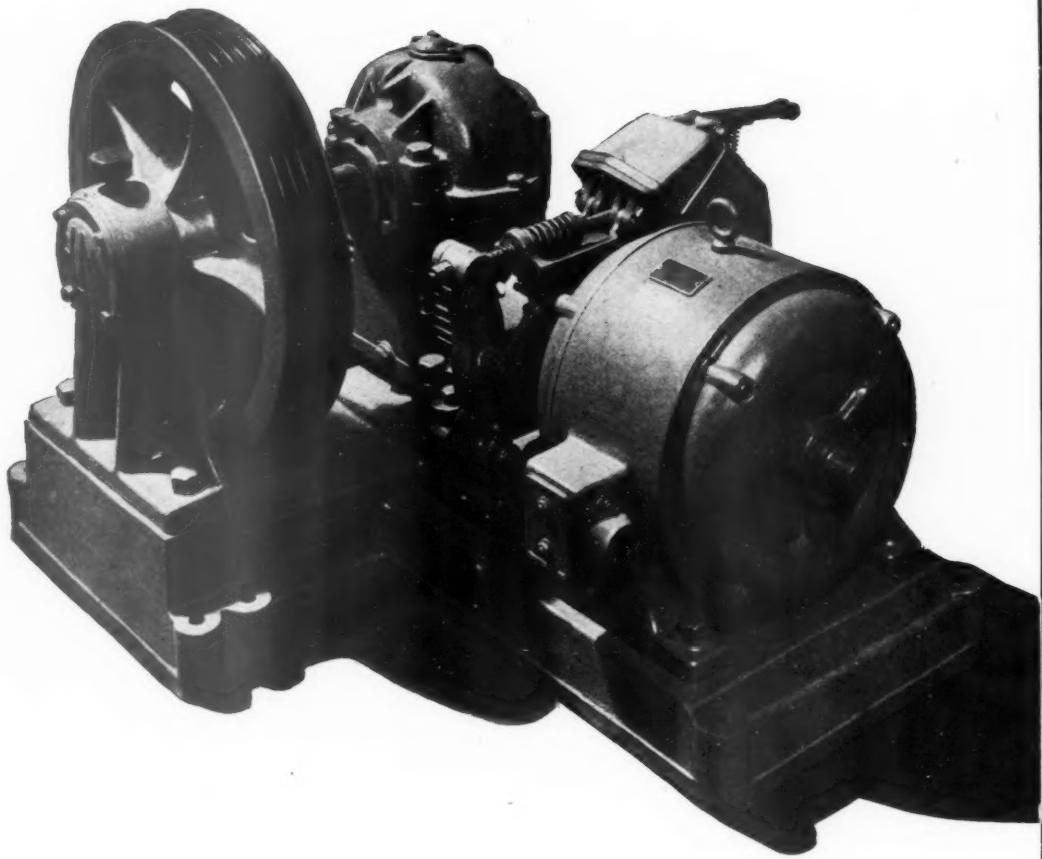
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*The fact that goods made of raw materials in short supply  
owing to war conditions are advertised in this JOURNAL  
should not be taken as an indication that they are necessarily  
available for export.*

*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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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*

These fruits of civilization inspired enterprise even in Hurst. . . . It was discovered that the sandy flats would furnish exquisite sites for the homes of heroes back to the land they had saved. Along the high road broke out a rash of squalid habitation—old railway carriages, wooden bungalows and at last cottages of some substance and comfort. On either side the land, which had produced nothing but heather and gorse through the ages, became piebald and hideous in a belt of sullen crops blotched by poultry runs. The settlement spread, living hard, and thrived, in a sort of mutual cannibalism, upon itself. Further enterprise pressed upon light industry the temptation that land at Hurst was cheap, transport easy, young labour multiplying on the spot, and hopeful, adventurous factories were planted there. Streams of buses flowed out to the sprawling squalor and extended it. The railway, shaken from its slumbers and electrified, built it a station. You will not easily find so far from a great town such a mess.

From *The Great Game*, by H. C. Bailey.

Though every news item is news to someone, it doesn't follow that all news has the same value for everyone. The stars are used to draw attention to the paragraphs which ought to interest every reader of the Journal.

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

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

Any paragraph marked with more than two stars is very hot news indeed.

## NEWS

The exhibition of plans for the REDEVELOPMENT OF LONDON, which has been running at the Royal Academy since the beginning of October, closed on Saturday last. Sir Charles Bressey, Vice-Chairman of the committee responsible for the scheme, speaking at Burlington House last week, said the exhibi-

tion had given the committee many pleasant opportunities of gathering the opinions of a throng of visitors of all classes and ages, in and out of uniform. The depth of affection felt for London on all hands was plainly evident.

On behalf of the builders of Great Britain, Sir Jonah Walker-Smith, Director of the National Federation of Building Trades

Employers, sent the following **THANKSGIVING DAY TELEGRAM** of greeting to Major-General Russell Hartel, Commander-in-Chief of the U.S. Forces in Great Britain:—

"Upon this anniversary of Thanksgiving Day, Sir Jonah Walker-Smith, on behalf of the National Federation of Builders, extends hearty congratulations to the United States Forces in this country and sincerely hopes that the camps and aerodromes which have been constructed for our most welcome friends are as comfortable and convenient as circumstances will permit."

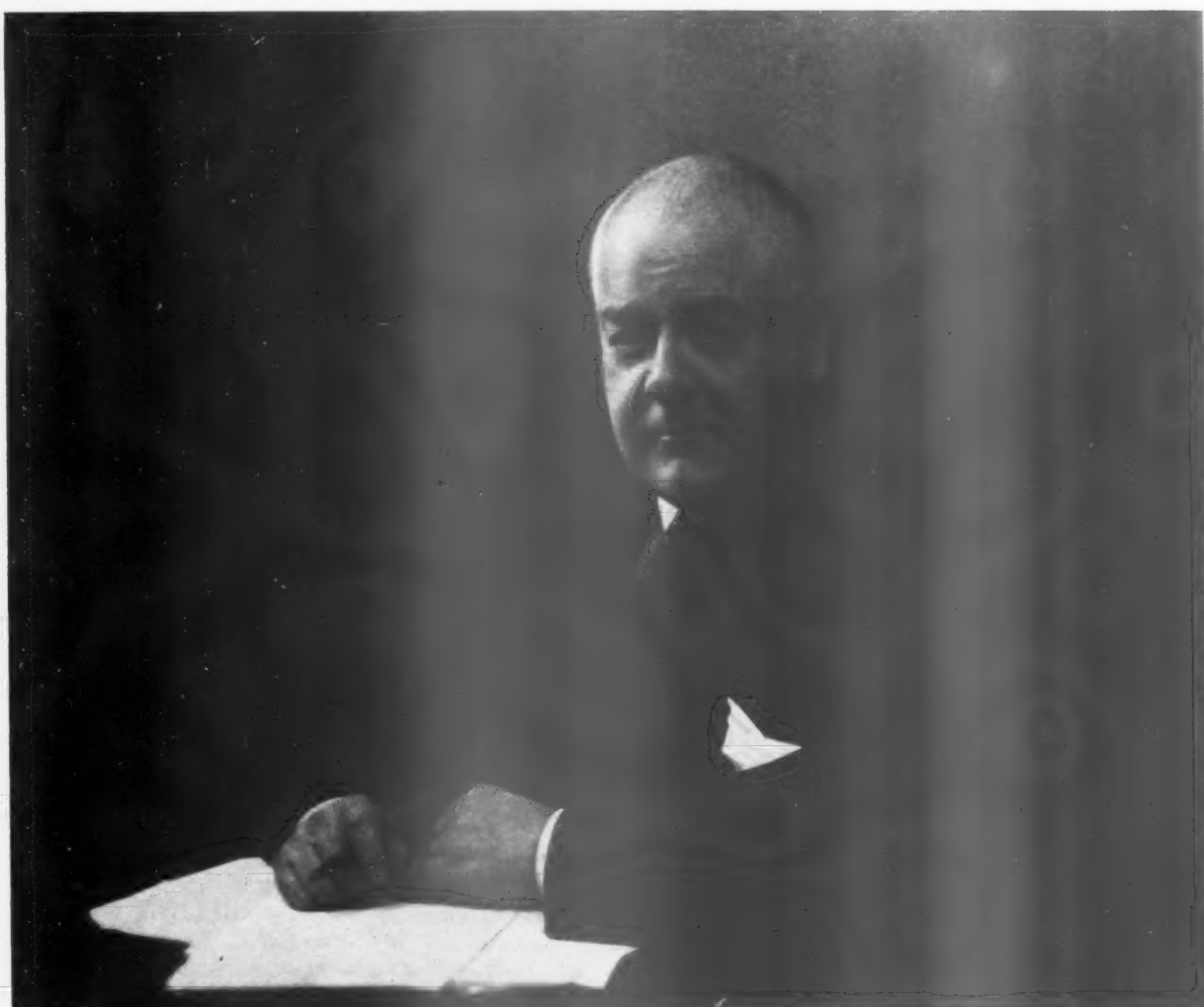
Birmingham City Council considered last Tuesday a preliminary scheme for **POST-WAR RECONSTRUCTION** costing £96,230,000 and employing 32,827 workmen.

Sir Edwin Lutyens, P.R.A., and Professor Patrick Abercrombie have been appointed ADVISERS TO THE HULL CORPORATION on schemes for rebuilding and replanning damaged areas.

"Rebuilding Britain" is the title of the EXHIBITION organized by the R.I.B.A. Reconstruction Committee, which is to open at the National Gallery at the beginning of February, before going on tour in the provinces and possibly among the Home Forces. The R.I.B.A. states: The aim of the Exhibition is to show the public General Principles for reconstruction. It will emphasise our important needs for work, homes, health, education and recreation, and suggest an approach to planning by means of which these needs can be satisfied. It will suggest that only through a national approach to planning, which includes industrial location and a proper use of the land, can rebuilding be properly carried out. It will not show detailed proposals for rebuilding particular areas, but will show general examples of the type of development to which the method of approach can lead.

★★

On Saturday last the A.A.S.T.A. celebrated the twenty-fourth anniversary of the foundation of the Association; the annual general meeting was held in London on the same day. Established after the last war, the Association has just changed its name to the ASSOCIATION OF BUILDING TECHNICIANS, in order to describe more ade-



## President of the L.M.B.A.

This month the London Master Builders' Association celebrates the seventieth anniversary of its establishment in 1872. To mark the occasion a reception is to be held at the R.I.B.A. (whose President, Mr. W. H. Ansell, was seventy a fortnight ago), to-day, December 3. The guests (including Lord Portal, Minister of Works and Planning) will be received by the President of the Association, Mr. Wilfred Eric Rice, O.B.E. Born in 1898, Mr. Rice was educated at

Dulwich College and London University, and served in France with the 58th Division in the last war. He is Joint Managing Director and Deputy Chairman of Rice & Son, builders and contractors, of London, and is a Liveryman of the Innholders Company. Mr. Rice is a member of the National Camouflage Contractors Advisory Committee and Chairman of the Brixton Local Employment Committee, for services to which he was awarded the O.B.E. last January.

*quately its comprehensive membership of all technical men and women in the building industry.*

*Owing to the shortage of labour for works of repair and to the cessation of house building, the HOUSING CONDITIONS OF LIVERPOOL have seriously deteriorated. This statement was made by a Deputation from the Liverpool Corporation in an interview with the Ministry of Health.*

The deputation said that owing to the shortage of labour for works of repair and to

the cessation of house-building, the housing conditions of the City had seriously deteriorated. A very tentative estimate of the City's post-war need was 30,000 houses. They considered that as soon as labour and materials could be made available, war-damaged houses should be fully restored and the 2,000 new houses on which work was suspended in 1939 should be completed. The Council were ready to let at short notice contracts for 7,000 houses on sites for the development of which plans had been prepared.

The Minister said that he was glad to know of the preparedness of Liverpool where so much good housing work had been done before the war, and he hoped all local authorities would concentrate on putting themselves in a similar position. In his view housing was going to be the biggest and most vital social problem. The question of more labour and materials being made available for repairs was being considered and he was still hopeful that some new house-building could be undertaken before the end of the war. If his hopes

were realized, a start should clearly be made on uncompleted sites. He undertook to arrange for officers of the Ministry of Health and of the Ministry of Works and Planning to visit Liverpool in order to examine the problems on the spot with representatives of the Corporation.

*"An enormous housing programme will need to be embarked upon after the war and we in the BUILDING SOCIETY MOVEMENT intend to play our part in that urgent and vital matter. The Government and all the authorities concerned will need all the help that we and others can give."*

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*It is imperative that good houses shall be built in large numbers as quickly as possible after we have won the war." This statement was made by Mr. William McKinnell, Chairman of the Building Societies' Association, at Newcastle-upon-Tyne last week.*

★

*In March, 1941, the Quantity Surveyors' Committee of the Chartered Surveyors' Institution appointed a special sub-committee to consider and report upon the present position and future prospects of the QUANTITY SURVEYING PROFESSION. The Report has been adopted by the Council of the Institution and was made public on Tuesday, Dec. 1. The Report states:*

The policy of the exercise of official control in the past has led some to believe that there will be a definite tendency towards the further regimentation of the industry in the post-war period, especially having regard to the great volume of work then to be undertaken. We do not find that the opinion is held in responsible quarters that this policy of control is likely to lead to the nationalisation of the industry. In the evidence submitted to us the view was generally expressed that such a course would be unwise judged from the standpoint of the highest national interest. Such control of the industry as may be considered desirable in the national interest, however, should be exercised by the Government after full consultation with the industry itself if the best results are to be obtained.

We have endeavoured to discover how the "time factor" affects the consideration of terms of contract. In our opinion it cannot be guaranteed that time is saved on the completion of the contract by making an immediate start when preliminary details have not been settled. In cases where it is not possible or advisable to wait until fully prepared and detailed particulars of the work are available we are of opinion that an agreed schedule of prices for the particular contract is the best alternative.

We are very strongly of opinion that if the system of competitive tendering is to survive it is essential that such competitive tendering be on a fair basis and among contractors of equal standing and suitability for the proposed work.

The contractors' evidence—with one exception—condemned "cost plus" contracts with surprising unanimity and all expressed their willingness to submit tenders for work on bills of quantities under the conditions before described, provided they were relieved of the risk of changes in labour rates and protected from alterations in the cost of materials by the usual "up and down" clause.

*The PAPER IN BATTLE-DRESS exhibition organized by the Waste Paper Recovery Association, is to open at the Ford Showrooms in Regent Street, W.1 to-day. It will be open daily from 9.30 a.m. to 5 p.m. (Saturdays from 9.30 to noon). Admission is free.*

## AFTER THE WAR

THERE are people who object to discussing what should happen after the War. They say it distracts attention from the war effort, and that it is a useless waste of time, because there is no way of foreseeing the circumstances that will exist when peace is at last declared. But it contradicts commonsense to maintain that one makes better progress by omitting to consider where one is going, and one is forced to conclude that people who advance these arguments have other and better reasons for avoiding discussion—that they have in fact already made up their minds where they want to get to but consider it politic to keep their decisions secret. They argue that the War is an inchoate interlude because they hope that that is what it will prove to be; and they prefer the future to remain something of a mystery because they know very well that their peace aims cannot hope for any great measure of support. For these people *After the War* means after the war is over. But few of those who are bearing the brunt of these difficult times share this point of view. Most are increasingly anxious to know what the result of their exertions is to be. They realize that they must hammer out a common policy now if they are to get what they feel they have earned—what they have never before had—the opportunity of doing the best work they can in their own way, with reasonable certainty of getting an appropriate share of the world's goods in return. These people attach a different meaning to the words *After the War*. For them the relevant date is not some future armistice but September 3rd, 1939 which saw the unstable society of the inter-war years topple like Humpty Dumpty to its final doom—final because hardly anybody wants reconstruction to mean its re-establishment. For these people *After the War* means after the declaration of War. For them the War is no interlude because the only hope they can see of building a new and more satisfying society is to accept as a starting point the conditions which now exist. The future does not seem to them entirely unpredictable because they are willing for it to grow out of the present. In their vocabulary, *reconstruction* is not another word for escapism; it is the description of an excellent method of winning the war. The JOURNAL uses the words *After the War* and *reconstruction* in this sense. In Parliament the discussion of fundamental problems is banned—the past history of both parties makes it seem hopeless to look for agreement without the clean sweep of a General Election—because the King's Government must be carried on. But there is no reason why people who are not politicians should observe a similar silence. The professions are outside politics and there is no excuse for a policy of inconsequential opportunism among architects, at a



time when the profession as a whole is threatened with revolution. This is strong language but it is a matter of fact that the Architectural profession has been shaken to its roots by the War. The War building programme has been carried out largely without its help. There has been no Mr. Kahn in this country—no medals have been struck over here in public recognition of services rendered to the country by prominent members of the R.I.B.A. There are signs now that doubt about the future usefulness of architects is spreading from the Government to the general public.\* It is a matter of the greatest urgency that some attempt should be made by architects to plan their own future—an attempt which can only be made with any hope of success by a united profession speaking through its accredited representatives.

\*Dr. Robson. See Astragal.



*The Architects' Journal*

War Address: 45, The Avenue, Cheam, Surrey

Telephone: Vigilant 0087-9

# N O T E S & T O P I C S

## AERODROMES

I have discussed the Select Committee's last report on Aerodrome Construction with another friend who has had some experience in this branch of war-time building.

"Everybody," he said, "will welcome the report, if only for the galvanising effect it will certainly have upon the Civil Servants concerned, both uniformed and otherwise. If there's one thing these people hate more than a parliamentary question it is a parliamentary report, and both of

them should therefore be encouraged—for they do get the files moving faster—even if only in a frenzy of self-defence.

"I agree with Astragal's remarks about progress schedules, but in fairness to the Air Ministry I must record that I have seen them hanging in R.E.'s offices, and I do know of one large job which was finished to time. But in general the charges of inefficiency and delay fired by the Committee at the Air Ministry (not you will note at the building industry) are justified, if a little wildly aimed.

"It is not made sufficiently clear, for instance, that the frequent alterations to plans referred to are made not as a rule by the Works Directorate, but by the R.A.F.—i.e. not by the architects but by the clients. Most of the changes are necessary, but undoubtedly a few of them are made irresponsibly. The C.O. of a station has very wide powers, but only rarely building or engineering knowledge, and the results can be both disturbing and expensive. Suppose, for instance, he requires the provision of a length of service road. If he is persuasive and patient enough, and the request is not unreasonable, he will probably get the road built. Next week he may be posted, and his successor, a man perhaps of different ideas, may not only decline to use it but will possibly do his best to get it removed.

"Again, the Committee rightly objects to the salaries of A.M. engineers being lower than those of the contractors' agents whose work they are supposed to supervise, but surely such inequalities are a commonplace to-day. The bricklayer often makes more than the architect's assistant, the foreman painter more than the camouflage officer or, for that matter, the man who makes the bullet more than the man who fires it. By all means raise the salaries, if you can, but you will gain little unless at the same time you raise the power of authority held by the man on the site. At present the most trivial decisions have to be referred to higher authorities, and this is one of the most constant causes of delay.

"Other causes not directly mentioned by the Committee, but none the less important, are the following. *First*, lack of interdepartmental liaison, even in the most obvious and trivial matters, resulting in such errors as buildings being reconditioned a week before they are demolished, or re-surfaced runways being torn up again for cable-laying.

"*Second*, inflexibility of specification and technique. Some degree of standardisation is, of course, necessary, but not at the expense of ignoring conditions of site, availability of local materials, etc. Here we have much to learn from the U.S.A., where the greatest possible use is made, for instance, of materials found actually on the site. Technique is adapted to the site, and is preceded by research often carried out in site laboratories.

"*Third*, misuse of plant. In this country we have not had much experience in handling large and complicated construction plant whereas the Americans have made a study of it, and use it both economically and efficiently. They keep it well and regularly serviced while on the job, and ensure that it is not overloaded. What a contrast to the dumps of half-wrecked lorries and gear to be seen to-day on any site in this country, ruined while still new from careless driving, overloading and lack of proper and

skilled maintenance. Stricter supervision in this matter is, I suggest, essential.

★

"Fourth, shortage or misuse of technical staff. There is definitely a shortage of trained supervisory staff on the majority of contracts, and work and speed suffer as a result. Also, my personal view is that the building side of Air Ministry works organisation is over-dominated by the civil engineer. You will find fully qualified architects wasting their time tracing or filing drawings, while engineers, competent no doubt in road-making or hydraulics, struggle hopelessly with the problem of layout and planning with which they are completely unqualified to deal. In the Civil Service mind, architecture is still a matter of columns and cornices, and as there's no time for that in war-time, well, architects should be kept out of harm's way.

★

"One final word. A select committee's report is only really valuable if its recommendations are listened to and acted upon, and previous examples have not always been encouraging—but don't give up hope unless you hear that the report is 'under active consideration'—for that, in Civil Service jargon, means that the matter is finally dropped."

#### BEAUTY AND UTILITY IN PLANNING

Under this somewhat unpromising title Mr. Ansell addressed the Town and Country Planning Association on a question of great topical interest—the part architects should play in planning the country. A statement of Dr. Robson's: "There is no valid reason why the training or experience of an architect should be regarded as specially relevant to Physical Planning at a National Regional or even local level," provoked the choice of subject. It's the first time, as far as I know, that the profession has challenged it.

★

Reviewing Dr. Robson's formidable list of people whose specialist knowledge has a bearing on planning—a list which includes statisticians, economists, transport experts, high-

way engineers, lawyers, geographers, financial experts, medical officers, botanists, biologists, geologists, electrical mining and gas engineers, public administration experts, psychologists and students of public relations—Mr. Ansell agreed with him up to a point. "I would accept the whole list and even add to it," he said, "but when discussions have been made by our great planning committee, as it might be called, then I maintain that only planners with architectural training can translate their decisions into three-dimensional fact."

★

Supposing, Mr. Ansell enquired, any one of these specialists were given a sheet of paper, a pencil and a large size indiarubber and told to plan an area, how many of them would know where to begin? And of those who began, how many would be able to continue after they had mapped the needs of their own speciality—transport, perhaps, or wild flowers, as the case might be?

★

The fact of the matter is that the average non-architect is so unused to thinking in three-dimensional terms that he isn't even aware that there's any need to. He can arrange standardized buildings (as per list), in orderly rows on an ordnance map (just as the jerry builder does) and imagine that that is planning. It isn't planning, of course, it's just assembly. A designer is continually modifying the elements he plans with to weld them into a whole that works well and looks good. The non-architect finds this as difficult to understand as the theory of relativity. And so he is apt to think that setting a programme is the same as executing a design, and to think, as Dr. Robson does, that the architectural approach is not relevant.

#### SHORTAGE OF PLANNERS

Professor Abercrombie taking the chair at a recent C.P.R.E. conference said: "We are undoubtedly deficient in architects who can handle country planning. We are at our wits' end to find people we can entrust with that great work." To

which Mr. R. G. Brocklehurst has replied angrily in the *Architect & Building News*: "Such a remark is sheer nonsense. It is nonsense because the profession generally is not aware that any efforts have been made to find architects to entrust with such work."

★

The retort seems fair enough. No steps have been taken to publicise the existence of this desperate need. There's nothing surprising about this. The inadequacy of the usual channels through which work is distributed and talent recruited has been pointed out often enough. But isn't it time, perhaps, to explore new ones?

★

Which raises the question: Is there any talent? Professor Abercrombie's remark might be taken to imply that we lack it and that plans are being held up for the want of it. One reason for the shortage is obvious. Most of the talent is in the army. But not all of it. There'd be a better case for getting men out of the Army if more convincing attempts were made to carry on without them.

★

In this connection several thoughts occur. Does Professor Abercrombie demand experience? If so, is this reasonable in a country where no planning worth talking about has yet been done. All we have done so far is to administer planning Acts which, as Mr. Ansell has pointed out, is a different matter altogether.

★

It is generally agreed that planning is work for teams of specialists co-ordinated by architects. Such a policy might mean creating not one but many new appointments in each area. But the issue is one which ought to be faced. Mr. Brocklehurst is almost certainly right in principle when he says "appoint and pay architects, surveyors and road engineers to work together in groups under energetic leaders in districts required and results will be achieved."

ASTRAGAL



## LETTERS

*J. S. Austin*

*A. Trystan Edwards,*  
*A.R.I.B.A.*

*N. S. Aslan*

*Ex-Student*

*"Registered"*

*Pembroke Wicks,*  
*(Registrar, Architects'*  
*Registration Council)*

### After the War

SIR,—I have been trying to arouse some interest in the future of the profession for about eighteen months. I meet a lot of architects, so I decided that the best means was to expound my views to every one of them.

I found that the profession was in four parts:

(a) Those who had not thought of the matter (75 per cent.);

(b) Those who thought that after the war the private practitioners would become millionaires automatically (about 10 per cent.);

(c) Those who thought that there would only be Ministries and builders in charge, and were already making contracts with the builders (about 12½ per cent.);

(d) Those who realized the dangers and thought there was a chance of survival of the private practitioner (now about 2½ per cent.).

The opinions of intelligent lay people who knew the profession were that

it had only itself to blame because

(a) It had no unity of purpose;

(b) It made no attempt to help itself;

(c) It would persist on publicising schemes for rebuilding which nobody wanted—a typical case of this was the MARS Group's plan for London, which created a great deal of antagonism.

However, I think that a change is taking place and the majority of architects are becoming seriously alarmed at their unpreparedness for the future. Unfortunately being alarmed is not enough, and I am sure that only a great deal of hard work and courageous plain speaking will achieve any result.

Would it be possible to obtain a straw vote by providing a page in the JOURNAL in the form of a short questionnaire on the main issues.\* The page to be printed with the JOURNAL's address so that it could be folded and returned without waste of paper.

J. S. AUSTIN.

London.

### R.A. Plan

SIR,—May I lend my support to the opinion expressed by Lord Esher in his letter in the November 12 issue, that some of the critics of the Royal Academy plan for London have done less than justice to its merits?

I should like to mention two cardinal virtues which, in my opinion, the scheme possesses. In the first place it is a heartening event when an institution which plays so important a part in our national life as does the Royal Academy dares to assert that the art of architecture exists to fulfil its own noble and humane purposes without being continually constrained, humiliated and condemned to impotence by that "orthodox" finance which has effectively prevented any project of radical reconstruction from being carried out or even proposed by Local Authorities in the inter-war period. In making this affirmation members of the Royal Academy Town Planning Committee have earned the right to be acclaimed as reformers and liberators and their example should inspire architects all over the country to perform their true social function which is to state the claims of the community in terms of architecture, no matter what vested interests may discourage them from so doing.

Secondly, they have been bold enough to remind the British public that while utility and economy should have their proper place in building, there is such a thing as architectural *splendour* without which the full range of design cannot find expression. If the protagonists of "the modern movement" object to the stylistic idiom by which, in the Royal Academy designs, the effect of

\*See article on facing page.

splendour is produced, let them indicate how a similar quality can be attained by methods of their own choosing.

In his letter Lord Esher, while warning their innovators that the historic London is not the right place for their experiments, hints that they might, perhaps, find a more appropriate field in "the hundred new towns." May I say that in formulating its planning policy the Hundred New Towns Association has tried to give due recognition to the conservative as well as to the radical element in civic design? And I hope that if and when the new towns are built Lord Esher will find in them some of the architectural qualities which he justly admires in the old London and elsewhere.

A. TRYSTAN EDWARDS.

London.

SIR,—It seems to me that Lord Esher's letter in your issue for November 12 contradicts itself and confuses the issues involved in the R.A. Plan.

He says: "Even the changes suggested by the Royal Academy Committee, which are not fundamental 'town planning' in the modern sense, have excited alarm lest the character of London be lost..." Had the plan been carried out in modern spirit of fundamental town planning nobody would have been alarmed, and London would have been improved.

Let us take two districts from the R.A. plan and analyse them in this light:—

1. Park Lane and the Ring Road.

What character has the R.A. preserved by taking the Ring, thus all the heavy and through traffic, to Marble Arch, Park Lane and Hyde Park Corner? Is it not unwise to bring such a big load of mixed traffic to that highly developed centre of Mayfair? Modern traffic with its urge for speed should, if possible, be neither heard nor seen. This centre should have been bypassed, thus relieving congestion and preserving the local amenities of one of the best places in central London. Even from an engineering point of view it is doubtful whether the R.A.'s plan would be a permanent solution to the traffic problem.

2. Elephant and Castle.

This part of London has been drastically re-planned and developed into a community centre totally different from anything at present existing. Anybody who does not know that area might think that the place was virgin rural district. Indeed, if the R.A. project is carried out that part of London will definitely be "something" which will have no bearing or association to that existing to-day. It would be interesting to know how this project is going to preserve the character and personality of that part of London which "has for a thousand years developed its own peculiar personality and become deeply embedded in the affections of its citizens,"



[INTRODUCTION.—It is possible to regard the last three years as an unpleasant interlude at the end of which normal conditions will be re-established. To people who think this way the words *AFTER THE WAR* may mean what they seem to mean, but there are not many architects who confidently expect to return to the *status quo*. The majority feel that the war is not an interlude but the climax to a series of changes, the cumulative effect of which has been, amongst other things, to alter out of all recognition the conditions under which architects are trained to operate. For these people the significant date is not some future armistice but the declaration of hostilities on September 3, 1939, which finally put the closure on the particular world they had been accustomed to think of as normal. They are immensely concerned that steps should be taken now to re-organize the profession to meet the new conditions. These, as they see it, already exist, and after the war will continue to exist, modified certainly by the end of the war, but nevertheless growing out of it (the war, in this light, can be regarded as the first and painful stage of a British New Deal). The article which follows is the first of a series in which THE JOURNAL has asked several different people to describe probable post-war developments in the architectural profession and the changes which are indicated if the profession is to be made fit for the kind of work that is likely to be required of it, for unless its services are effectively available when they are needed they will not be available at all. These questions and their

as Lord Esher puts it. Or is it that the Elephant and Castle, St. George's Circus, and most of that part of London have no association with the past, and to wipe it out and put "something else instead" would not matter very much? I believe this is all wrong. London needs improvements in re-planning but not by destroying the roots of its foundation.

Although a town-planner and engineer, primarily I am an architect, and I still think that the re-planning of London should be tackled by town-planners guided first and foremost by the knowledge of the fundamentals and ideals of town-planning, with architects and engineers as collaborators.

N. ASLAN.

London.

## Registration

SIR,—Strongly supporting "Architect's" letter in your issue for November 5, I, too, was very surprised to learn of the facilities granted to Polish architectural students.

While I do not doubt that this is a good thing—indeed, it points to the fact that our authoritative circles are awakening to the realization of the importance of qualified Architects—I do think that more consideration could be given to British students, more reasonably, now that we are "turning the corner," than was possible on the outbreak of war.

May I particularly show the neglect of that most enthusiastic person, the part-time student, who, unlike his wealthier fellows, is unable to bear the cost of full-time University training.

While the latter has been able to obtain deferment from military service until after his exams., the former, having the status of architectural assistant, has not only been promptly transferred to National Service, but has suffered the cancellation of such evening classes as he may, in some cases, still have been able to attend.

For these reasons, I am able to name myself (temporarily, I hope) an  
London.

EX-STUDENT

SIR,—The letter from the Registrar, Architects' Registration Council will, I am sure, prove very disquieting to the profession generally.

Apparently any person, in any trade or profession, may use the designation "architect," and be exempt from prosecution under Section 1 of the Architects' Registration Act, 1938, providing he does not actually practise or carry on business as an architect.

I was under the impression that the whole purpose of the Act was to prevent the use of such designation except by persons whose architectural qualifications were acceptable to the Admission Committee, and whether in practice or not.

Either the Act or its administration is at fault, and immediate steps should be taken to remedy this and any other defect which interferes with the spirit of the Act.

Newcastle, Staffs "REGISTERED"

SIR,—The answer to the question put by Mr. Mactaggart in his letter in your issue for November 19 is to be found in the words of Section 1 of the Architects' Registration Act, 1938, which reads as follows:—

"A person shall not practise or carry on business under any name, style or title containing the word 'Architect' unless he is a person registered under the principal Act."

A person in salaried employment engaged on architectural work is certainly "practising or carrying on business." It is immaterial whether he does so as a principal or merely as an architectural assistant, or in any other capacity. In any such case unless registered, he would be committing an offence were he to use the title of "architect" for the purpose of his work.

PEMBROKE WICKS,

London.

Registrar, A.R.C.

answers affect every architect without distinction of place, sex, seniority, or creed (in or out of the services), from the President of the R.I.B.A. to the junior draughtsman. For this reason any reader who has something to say is invited to make his contribution to the series. Anyone who accepts this invitation is asked to be brief. In view of the paper shortage both sides of a page can be written on, and notes need not be typed.]



# AFTER t h e W a r 1

[BY A. CALVELY COTTON]

This article proposes a plan for the establishment of the architectural profession in a strong and influential post-war position. The opinions I express are not intended to criticize the policy of any professional institution, but are personal views into which have been incorporated the views of many other architects at several professional levels and from various parts of the country. During the past year the profession has discussed the situation in a much more serious way than ever before. Individual members are at last beginning to wake up to their

danger and to their former irresponsibility. The publication of a plan, even though a great many may be allergic to it, may stimulate the growing effort and prove a useful basis for discussion.

This plan is only proposed on the supposition that the majority of the profession desire the continuance of private practice in the post-war period and, it cannot be pointed out too strongly, that there is a number of architects who believe that it is already too late to create a position which would allow the continuation of architects as free agents.

If conditions are to be regained which will allow architects to practise privately again, it can be argued with some strength that the profession must be able to convince the public and the Government that it is capable of efficiently executing the enormous amount of work which will be required of it in the immediate post-war period. I am of the opinion that the profession is being ignored during this war because it had no efficient organization capable of carrying out the vast building scheme required.

My purpose, therefore, is to propose a plan which will:

(a) Provide organization by the profession which will be able to carry out efficiently the post-war programme;

(b) strengthen the profession to such an extent that it does not ask to be allowed to help, but takes its proper place automatically;

(c) provide for the welfare of the members of the profession.

It should be noted that these three provisions are closely interwoven.

#### THE PLAN

To establish an efficient organization big enough to cope with the work, each architect's office must be able:

(a) To supervise completely the spending of the client's money; the construction in all its branches and the legal aspect of the contract and conditions.

(b) Design the construction and the layout of the building well and the æsthetic side at least neatly.

(c) Make a good profit so that the office will be well housed and the staff contented.

(d) Carry out very large commissions.

In my opinion, the obvious solution to these conditions lies in the creation of large offices consisting of at least twelve architects, quantity surveyors, specialists, architect "improvers," pupils, tracers, business managers, etc.—the only "outside" offices to be architects who specialize in definite types of buildings, such as cinemas, hospitals, churches, etc., and who would be employed as consultants, as in the medical profession.

The small office, which was the backbone of the pre-war private architect's side of the profession, was unable:

(a) To carry out work on a big scale.

(b) To provide the wide experience and technical knowledge necessary to carry out work efficiently.

(c) To unify or strengthen the profession.

(d) To be run as economically or efficiently as a big office.

(e) To allow facilities for the sound training of draughtsmen and pupils, so that they may have the opportunity to become architects.

To strengthen the profession so that it automatically controls its rightful province in post-war reconstruction, three main requirements are necessary.

(a) The unifying of the whole profession on a strong and unanimous policy, declared by an authoritative medium.

(b) The prevention of the employment of architects by builders on a salary basis and the prevention of architects employed by local authorities or the Government, from erecting buildings within the scope of the private architect.

(c) The stoppage of abuses to the professional code by prompt, strict and fearless disciplinary action.

(d) The preparation of the pupil for his business career by more practical education.

(e) The prevention of all registered architects, who would normally be assistants, from setting up in private practice and thus causing: (1) shortage of assistants; (2) high salaries; (3) a further splitting up of the profession; (4) making it impossible for a number of firms to carry out large commissions.

(f) Realistic propaganda.

Taking each requirement separately, the first (a), and most important, seems impossible to solve, and is impossible, if members are not prepared to show more unselfishness than they have done in the past. I would suggest that one of the chief reasons is, that no policy that attracts every type of mind has ever been proposed, and the greater part of the propaganda offers only an æsthetic ideal of rebuilding over which everyone agrees to disagree.

Each of us, after years of financial uncertainty, living in billets and digs, and being unable to do our own work, will want to return home first of all and be able to work as securely and peacefully as possible—and by peacefully I, for one, do not mean the continuance of the struggle for existence which passed for private practice before the war. I suggest that the scheme should be put to the profession, offering financial security and that a practical plan would be as follows:

The scheme-making institution should split up districts, and in each district "license" a group office which would be named after its district. The scheme-making authority would also nominate the first head of the firm, who would manage the office for the directors of the firm, who would be all the registered architects and consultants in the firm. The firm would be paid on

a profit-sharing basis, but each architect, improver or pupil would be paid a basic salary fixed by the number of years by which he had passed his final examinations, or his advancement of study. Proficiency pay, in the shape of share in the profits, would then be voted additionally by the directors. A portion of the profits would be paid into the scheme-making institution as a sinking fund to help the whole profession in times of need.

The second (b) and third (c) requirements need only determination.

The fourth (d) needs no explanation.

The fifth (e) requirement needs a book written on it, but I am unable to pass it by without making the suggestion that: (1) pupils should be taught that, in spite of statements to the contrary, they are training to be very practical artists, lavishly spending their clients' money; and (2) that the working drawing is the only architectural drawing which really matters and even that is only a means of transferring a design from his mind to that of the builders. I think that architectural students should work as clerk of works assistants or draughtsmen during the day and attend ateliers for design at night. I think, too, that there is now a great opportunity for selecting and teaching specialists, such as designers, constructors, job managers, etc.

The last requirement (f) is also too tempting to pass by. The architectural profession is like a firm approaching the public with drawings and beautifully illustrated catalogues, showing the most up-to-date cars; these the public would not buy, because they knew the firm had not a factory capable of executing the designs. Realistic propaganda would be the creation of the factory and the making of experimental models.

...

After the war, a number of people are going to be demobilized at different times and the group office seems to offer them a solution to some very great difficulties. It would offer them a partner's place in a going concern, a chance to remember the things they have forgotten and, what is more, a chance to compete with those architects who have been fortunate enough to keep their offices open and build up their practices.

The group office offers to members a return to the traditional loyalty to the firm, the interchange of experience, an opportunity to create a "panel" for clients who are unable to pay full fees, the prevention of freshly fledged graduates without experience from starting up in practice, a greater chance to show ability, and the abolition of the "hire and fire" methods.

It might even rid us of the architectural competition, though I have always thought that the Government should stop it under the Gaming Laws.



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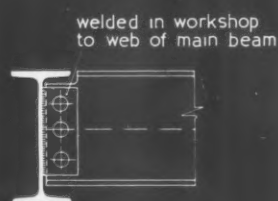
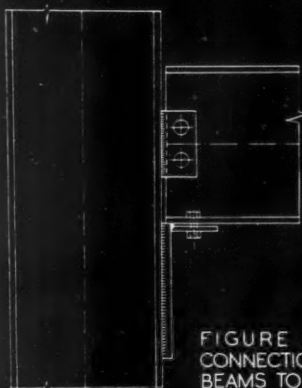
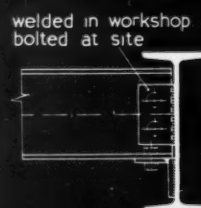
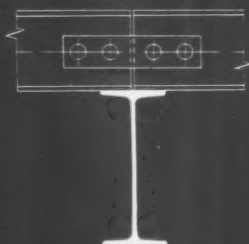
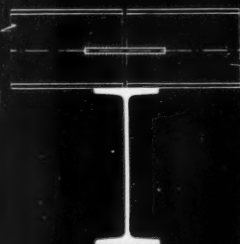
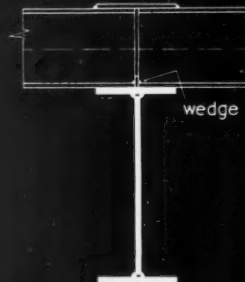
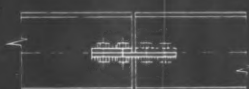
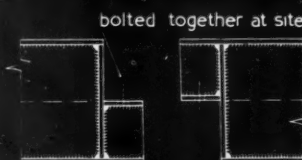
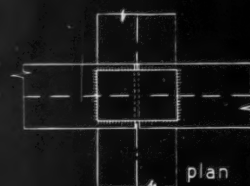
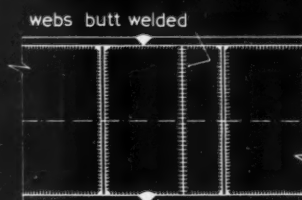
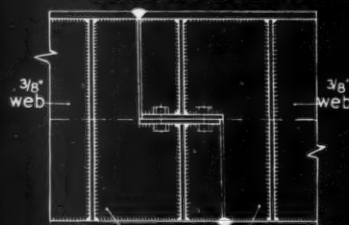
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## THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

DETAILED CONSIDERATIONS OF DESIGN IN WELDED STEEL: 16  
CONNECTIONS AND SPLICES IN BEAMS AND PURLINS (A)FIGURE 1  
SIMPLE COMBINATION OF  
WELDING AND BOLTING BEAMSFIGURE 2b  
CONNECTION OF  
BEAMS TO COLUMNSFIGURE 2a  
CONNECTION OF  
IMPORTANT BEAMS  
WITH BRACKETFIGURE 3a  
BOLTED SPLICE PLATEFIGURE 3b  
WELDED SPLICE PLATEFIGURE 3c  
WELDED SPLICE PLATE TO ACHIEVE  
CONTINUITY UPPER FLANGEFIGURE 4a  
WELDED SPLICE  
FOR SMALL PURLINSFIGURE 4b  
SPlice FOR LARGER JOISTSFIGURE 5c  
WELDED SPLICE PLATE TO ACHIEVE  
CONTINUITY UPPER FLANGEFIGURE 5a  
SPlice FOR CONTINUOUS BEAMSFIGURE 5b  
SPlice FOR PLATE GIRDERFIGURE 5c  
SPlice ACTING AS HINGE

*Issued by Braithwaite & Co. Engineers Ltd. Compiled by Samuely & Hamann Consulting Engineers*

INFORMATION SHEET: STEEL FRAME CONSTRUCTION 87 WELDING 43  
Sir John Burnet Tait and Lorne Architects One Montague Place Bedford Square London W.C.1

# THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION INFORMATION SHEET

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## STRUCTURAL STEELWORK

**Subject :** Welding 43 : Connections and Splices in Beams and Purlins (a).

**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 maximum economy in the design of the steel framing.

This sheet is the sixteenth of the section on detailed considerations of design in welded steel, and is the first of a series dealing with Connections and Splices in Beams and Purlins.

**Connections :**

Where beams have to be connected, the actual method of connection is very similar to that used in riveted constructions except that plates are used instead of angles. The plates are usually welded to one beam in the workshop, and bolted to the secondary beam at the site. See Figure 1. Where important beams have to be connected, it is preferable to support the secondary beam by means of a bracket which is welded to the main beam in the workshop, and takes the load while the plate, arranged in the same way as for simple beams, is merely for stiffening purposes and is bolted on. See Figure 2a.

**Beams to Columns :**

The same arrangement serves for the connection of beams to columns, and is illustrated by Figure 2b.

**Rigidity :**

Beams should not be connected by means of site welding unless rigidity is necessary. Any welding immediately causes rigidity, and at a point where this is not required, it may set up additional stresses in certain members not strong enough to take them. Where rigidity is essential the connections should therefore be site welded. See the examples given for splices.

**Splices :**

Beams and purlins may be spliced for two different reasons :

- (a) If the beam is longer than the maximum length that can conveniently be transported, or is otherwise available from stock ;

- (b) If obstacles are in the way of the beam. The first usually applies to purlins, and the second to continuous beams.

Splices may also be grouped as follows :

- (1) Splices which are not required to take bending moments ;
- (2) Splices which are required to take bending moments.

All splices in welded construction can be either bolted or welded, and the decision usually depends on whether or not the size of the building is sufficient to warrant site welding. In Figures 3a, b and c examples of the simplest of all splices are shown, namely two R.S.J.'s or channels resting on the upper flange of another beam, girder or lattice girder. Here the connection is merely for stiffening. Figure 3a is bolted and Figure 3b is welded. Figure 3c shows the same arrangement in cases where continuity is required. In many instances it is found preferable to locate the splice at a point where the bending moment is zero which may be situated some distance from the supports (see Figures 1b and 1c, on Sheet No. 27 of this series). In this case the splice is designed to transmit shear force only. Figures 4a and 4b show such unsupported splices. As rigidity is not required, bolting is usually preferable to site welding.

In Figure 4a a splice for a small purlin is shown ; Figure 4b shows a splice for a larger joist. In both cases arrangements are made by means of seatings so that the supported part rests on the cantilever end and no reaction is transmitted through the bolts. Erection is greatly facilitated in this way.

**Continuous Beams :**

In Figures 5a, b and c, splices for continuous beams are shown. Figure 5a gives a case where a beam is supported by another girder, the upper flange of which is at the same level as the beam itself.

Figure 5b shows a splice in the centre of a beam or plate girder. This kind of splice should be avoided if possible, as the best position for a splice is, in any case, the point where the bending moment is a minimum, i.e., some distance from the support, say about one-fifth or one-sixth of the length of the beam. (See above reference to Sheet No. 27.)

In this case a splice, as in Figure 5c, is the simplest. Here the splice is first treated as a hinge, the cantilevering end supporting the other part. When fixed in position the two parts of the upper flange are welded together as are the two parts of the lower flange.

**Previous Sheets :**

Previous Sheets of this series on structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 751, 755, 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, 843, 845, 847, 848, 849, 850, 851, 852, 853, 855, 856, 857, 859, 860, 862, 863, 865 revised, 867, 869, 870, 871, 874, 875, 877, 880, 882 and 883.

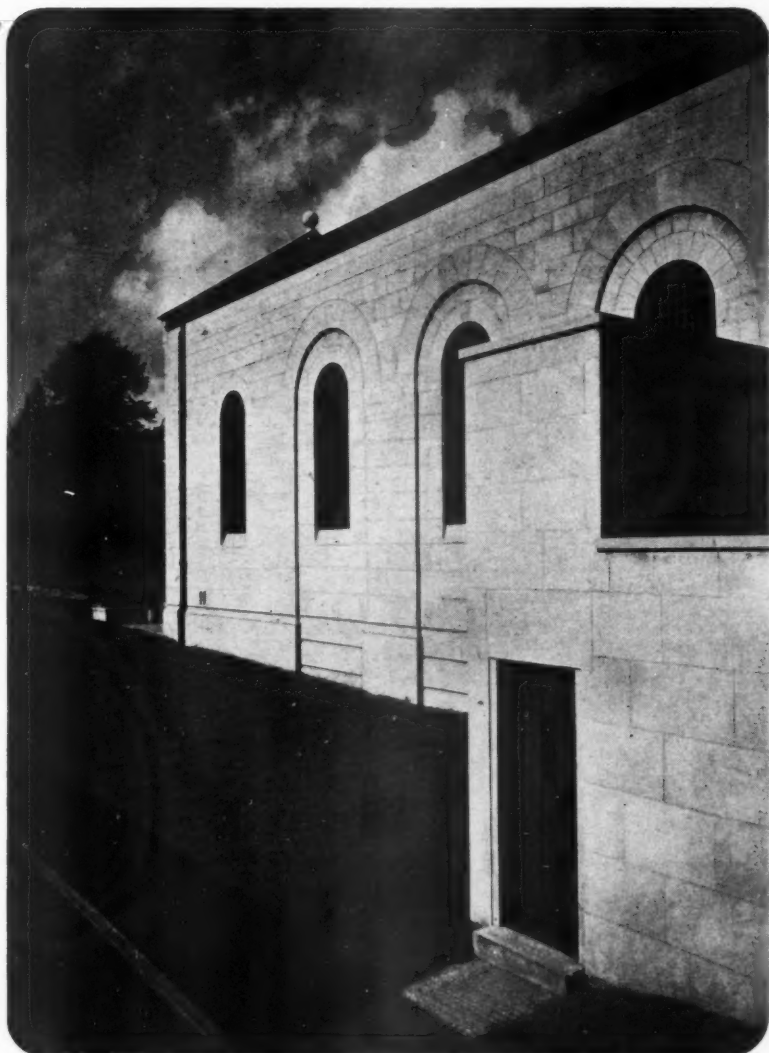
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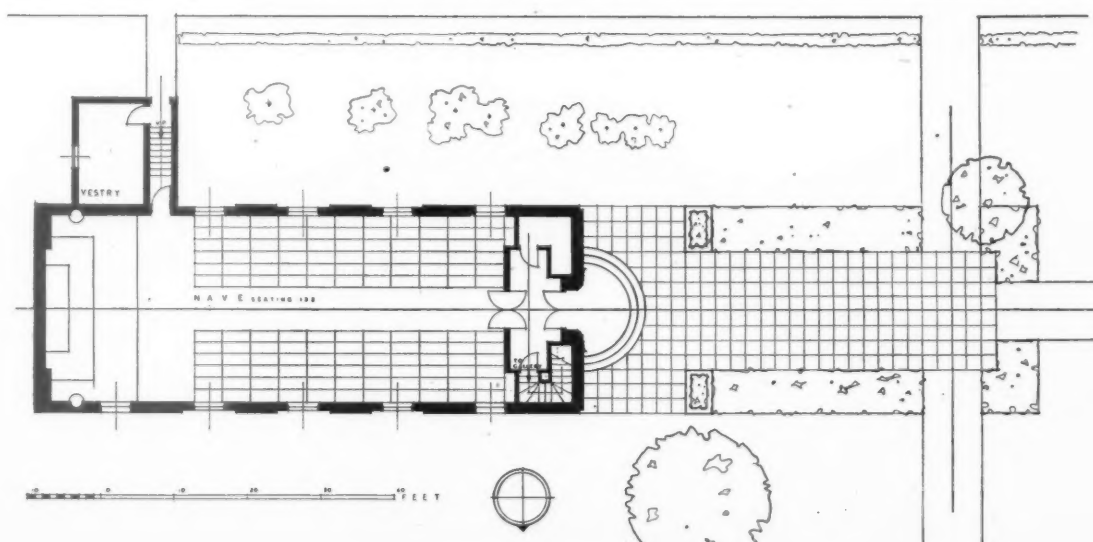
Whitehall 3993.



*The chapel is situated in the grounds of Northampton General Hospital. The photograph shows the south front with the projecting wing, housing the vestry, in the foreground.*

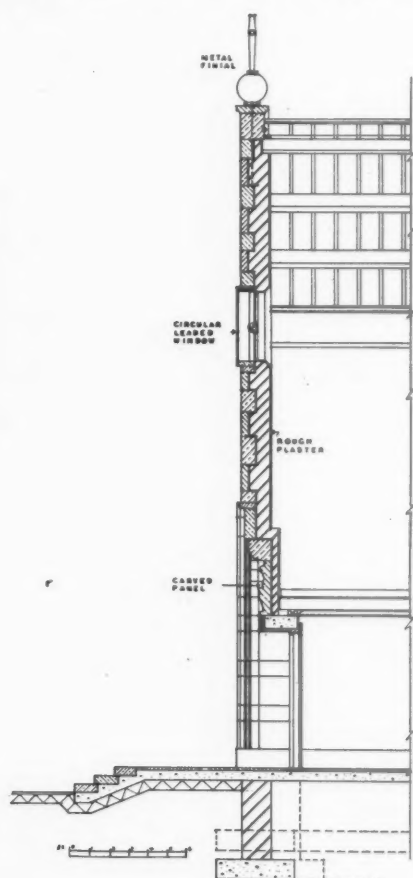
# CHAPEL, NORTHAMPTON

BY SIR JOHN BROWN AND A. E. HENSON

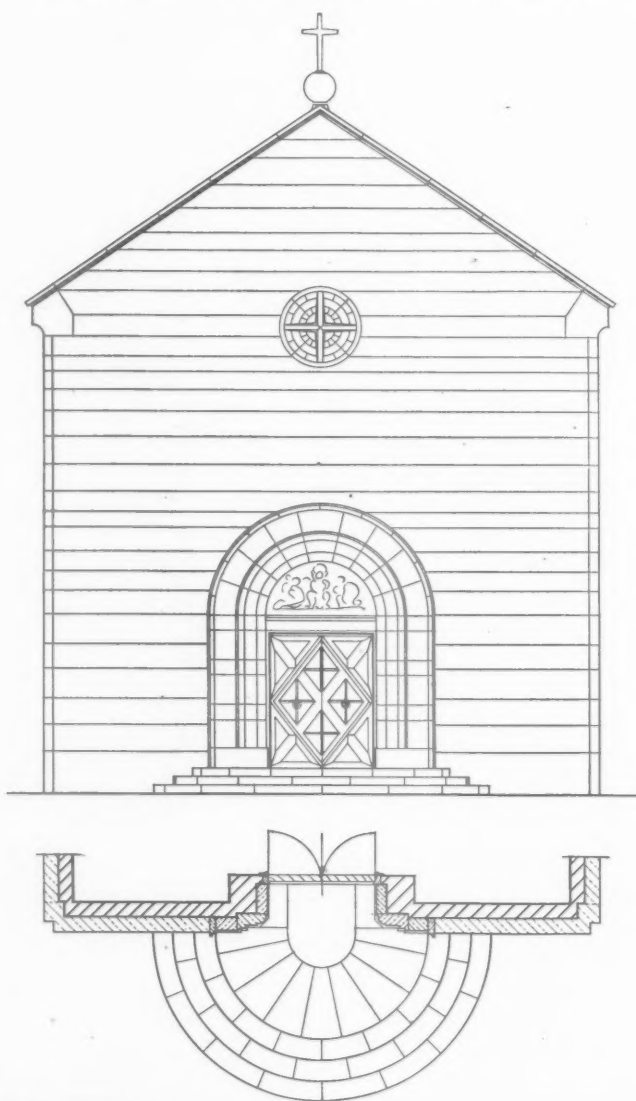




# CHapel, NORTHAMPTON GENERAL HOSPITAL DESIGNED BY SIR JOHN BROWN AND A. E. HENSON



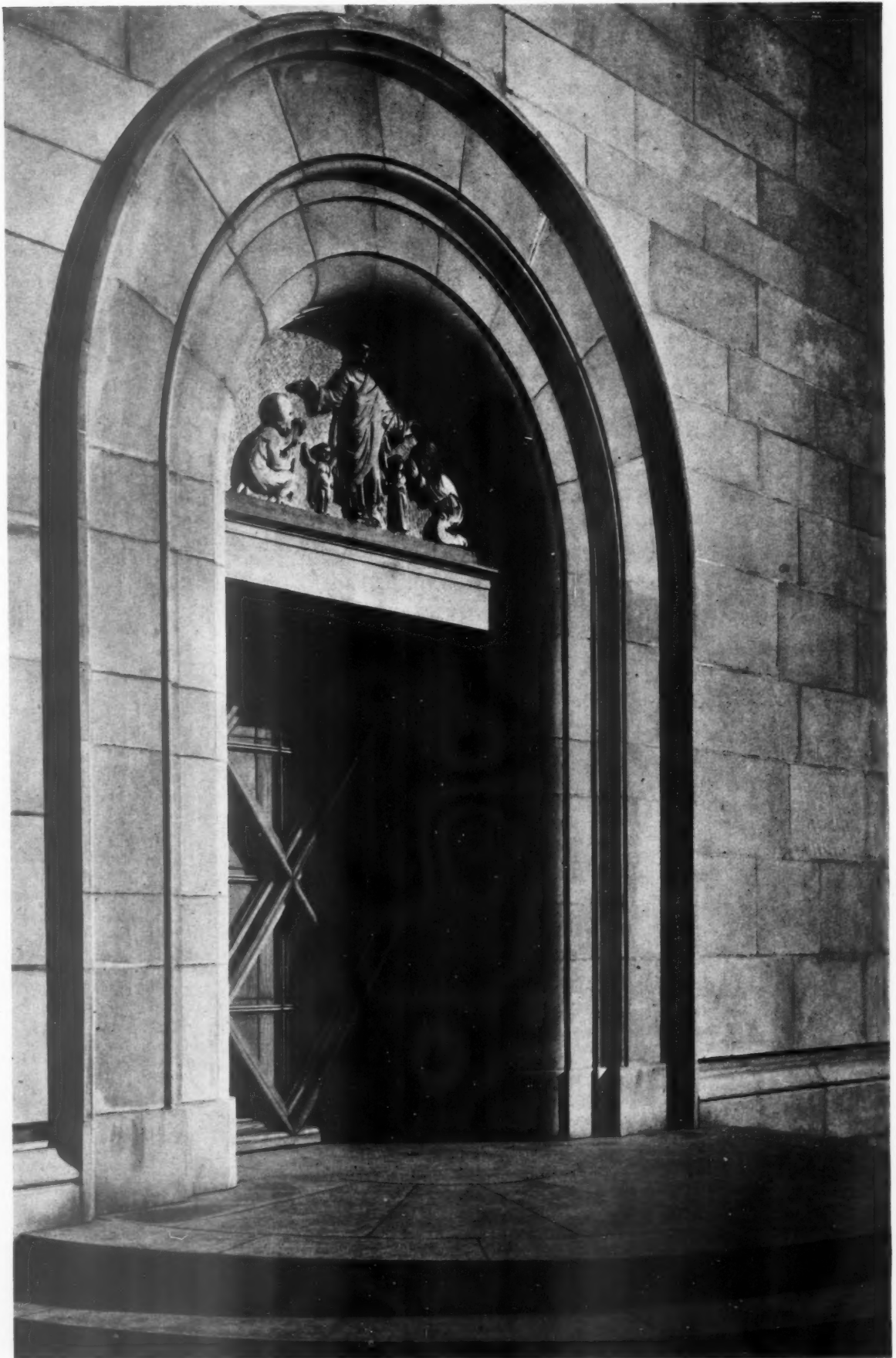
MAIN ENTRANCE



PLAN AND  
ELEVATION



Left: a view from the west, showing the main entrance; the projecting wing on the right contains the vestry. Facing page: detail of the main entrance.





*The sanctuary, taken from the vestry side of the chapel, showing the Altar on the right. Right: the wrought-iron screen to the chancel. Facing page, top: a view from the gallery; bottom: looking towards the main entrance.*



**GENERAL**—Two additions have been made to the Northampton General Hospital since war began. The first was the nurses' home, a four storeys high brick building accommodating 120 nurses. This was completed in 1940 and illustrated in our issue for March 28 of that year. The second is the newly finished chapel, now illustrated. Both buildings have been built from the designs of Sir John Brown and A. E. Henson. The chapel stands in a quiet region of the grounds, behind the main wards of the hospital and well back from the road.

**CONSTRUCTION**—Walls are brick, faced externally with artificial ashlar stone and the roof, of wood trusses, boarded is covered with slates. Over the entrance door is a carved tympanum. The windows have leaded lights. **INTERNAL FINISH**—Walls are plastered, the ceiling is of wood, painted, and the screens and the railings to the chancel are wrought iron. The floors are concrete, finished with reconstructed Hopton Wood tile paving in the central aisle, chancel and porch, and with oak blocks in the vestry and where seats occur in the

chapel. Joinery and staircase are oak, lightly stained, and polished. **SERVICES**—Heating is by radiators, fed by low-pressure hot water off the existing accelerated system of the hospital; lighting by electric pendant lamps, and by floodlights to the chancel and the balcony.

**COST**—Contract price £4,720 (1/8 per cube ft.), final cost £5,042 (1/9½ per cube ft.). The final cost included increasing the height of the chapel by 4 ft. and the provision of cupboards, tables, etc., in the vestry, none of which was included in the contract price.

The general contractors were Henry Martin Ltd.

For list of sub-contractors, see page xxiv.

CHAPEL, NORTHAMPTON GENERAL HOSPITAL  
DESIGNED BY SIR JOHN BROWN AND A. E. HENSON







*St. Mary's, Aldermanbury, was built by Wren in 1666-70, probably on mediaeval foundations. It is an unattractive building, not improved by the Italian tracery inserted, in spite of protests from the architectural press, by Victorian Mr. Woodthorpe. (From The Bombed Buildings of Britain).*

## LITERATURE

### MODERN RUINS

*The Bombed Buildings of Britain.* Edited by J. M. Richards, with notes by John Summerson. London: Architectural Press. Price 15s.

The English are indifferent to the art of architecture. Different architectural expressions are liked by different sections of the community in so far as they reflect the interests of that section, or in so far as they give rise to associative ideas. A pub is liked because it is evocative of the warmth and good fellowship of the bar parlour; a cinema of the synthetic love-infested world of Hollywood. Gothic tracery may spell religious mysticism to one, white painted concrete forms the "modernism" of streamline to another. In none of these instances is architecture appreciated for its own sake as the art of building.

The English care very much about nature, although, as is evident from the desecration of the countryside, they do not yet care so much about it as personal freedom. Their love of nature includes a love of buildings, providing they occupy a subordinate position. A building reflective of the countryside and arranged within it meets with unqualified approval, almost enthusiasm; transposed to an environment of bricks and mortar it will pass unnoticed.

The further a building has returned to a state of nature, the more it will be liked. A ruin is preferred to complete entity; but the ruin must be in association with nature. There is, for example, no response to a dilapidated Georgian house in an urban scene, however perfect that house may be as an architectural composition. The more sophis-

ticated have developed the eighteenth century cult of the ruin, but even they are more inclined to view it through the eyes of say Claude or Poussin, as part and parcel of a "landskip" rather than an artistic phenomenon in itself. Brambles almost always entwine the alien acanthus leaves of the fallen capital, ivy climbs the naked tracery.

We now have a new kind of ruin, the air raid ruin, and the Architectural Press have thought it fit to record what is of architectural importance in their new book "The Bombed Buildings of Britain."

Mr. J. M. Richards, the editor, succinctly indicates in his foreword the attitude one should bring to bomb damage: "The architecture of destruction not only possesses an aesthetic peculiar to itself, it continues its effect out of its own range of raw materials. Among the most familiar are the scarified surface of blasted walls, the chalky substance of calcined masonry, the surprising sagging contours of once rigid girders and the clear sienna colouring of burnt-out brick buildings, their rugged cross-walls receding place by place, in sunny mornings in the City. Moreover, the aesthetic of destruction bears no relationship to any architectural merit the building may have possessed in life. In death merit is of a different order, and some of the most dramatic and evocative ruins have flowered suddenly out of a structure no one would have looked at twice." Nevertheless, in spite of the paintings of such war artists as Mr. John Piper and Mr. Graham Sutherland, it is almost certain that the public will not view the bomb damage illustrated in this book as so much aesthetic phenomena. They are too near in time, in fact some are still smoking under the lens of the camera. The forms themselves and their colours and textures are too harsh and unfamiliar, there is no softening of corners and surfaces by wind and rain, no breaking down of silhouette through the growth of plants and flowers. Nature is missing. Besides, strong emotion such as anger and hate may permeate these ruins and make impossible the detached and con-

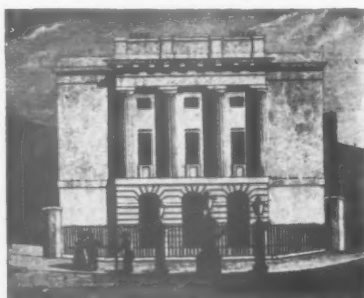
templative attitude which is sometimes brought to older and more gentle ones.

At a first glance then, this may seem a depressing book to the architect, but it is not a depressing book. On the contrary, it is an enjoyable one. The size of the page has allowed considerable variety in the arrangement of the pictures. The layout has been most skilfully handled, and there are prints and engravings of many of the buildings before damage, kept quite small so that they do not conflict with the photographs. Firmly and accurately drawn, they show the building exactly as it was built in all its detail.

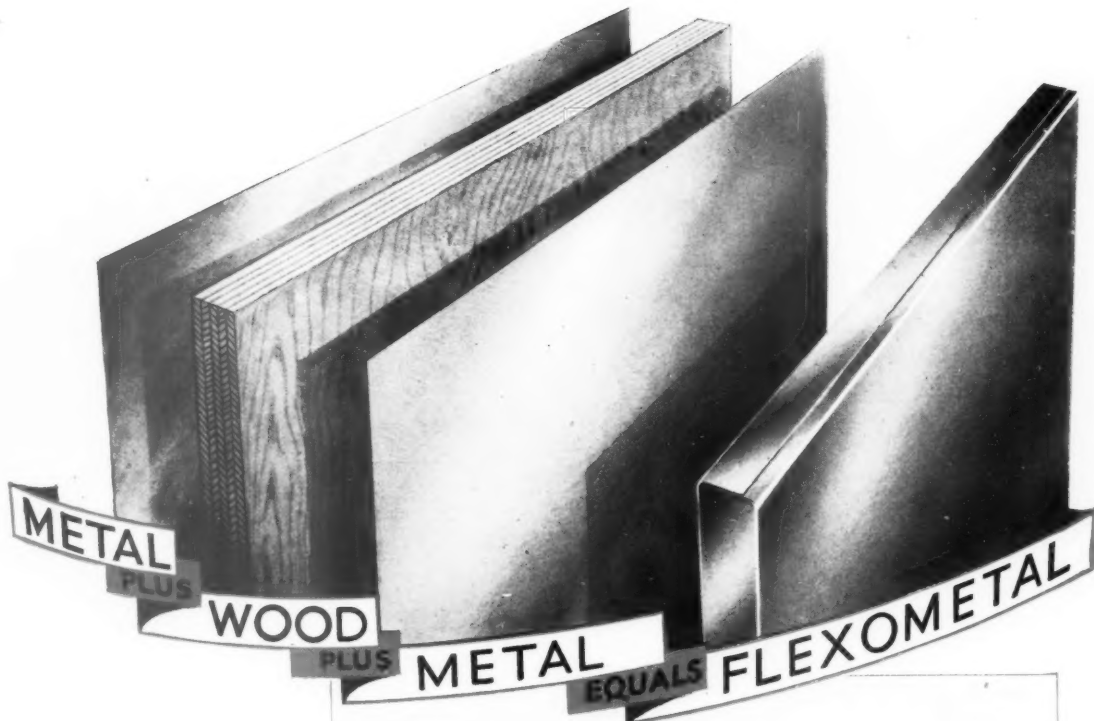
The book's chief value is as a record and an obituary notice of the damage that English Architecture has suffered through the 1940-1941 air raids. In this connection Mr. John Summerson has written historical and critical notes on each of the buildings illustrated. Inasmuch as the buildings are from all over the country and of almost every style and type, the notes constitute practically a miniature history of architecture. The knowledge he reveals is remarkable. He judges each building on its merits; whether it be Foulstin Greek, Pugin Gothic or Barry Italian, he preserves a detached and critical sense free from any form of bias. All this together with the turn of speech with which he is gifted makes one wish for more than these all too brief notes. No doubt Mr. Summerson as Assistant Director of the National Buildings Record is a very busy man, but he has no right to keep from us his specialised knowledge and his powers of criticism. It is now nearly eight years since his "John Nash" was published; high time some one bullied him into making another major contribution to the appreciation of English Architecture.

Mr. Summerson does not discuss the fate of the damaged buildings. Which are to be rebuilt and if so, whether on their original sites or elsewhere? Which are worth restoring and if so, what is the nature of the restoration to be, architectural, archaeological or a compromise between the two? Are any to be left as ruins for their own sake, and if so, which? True, he occasionally

*The Dock Offices, St. Katharine's Dock, Liverpool, designed by Philip Hardwick. [From The Bombed Buildings of Britain.]*







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# **FLEXOMETAL**

# PATENT WELDED TUBULAR CONSTRUCTION

Data Sheet No. 9

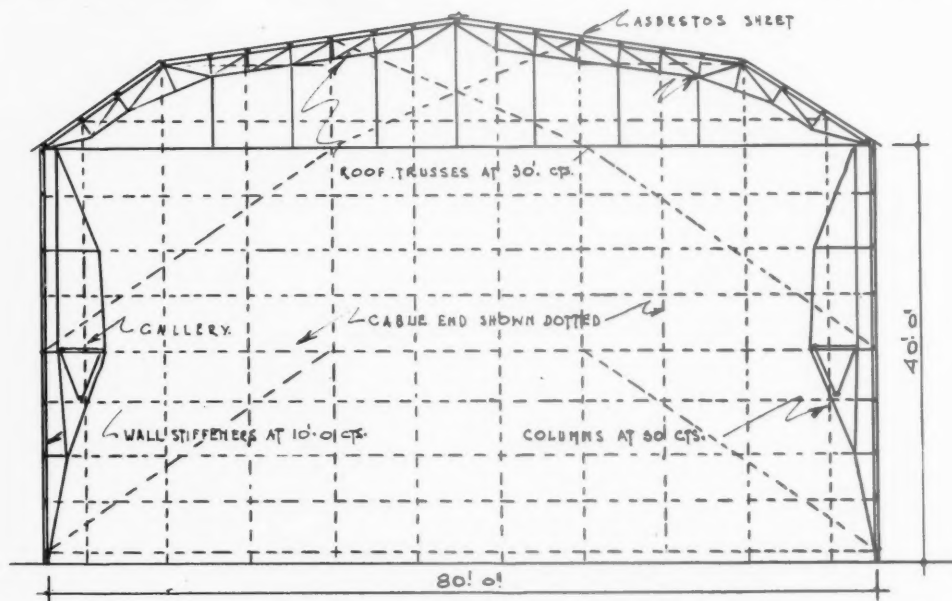
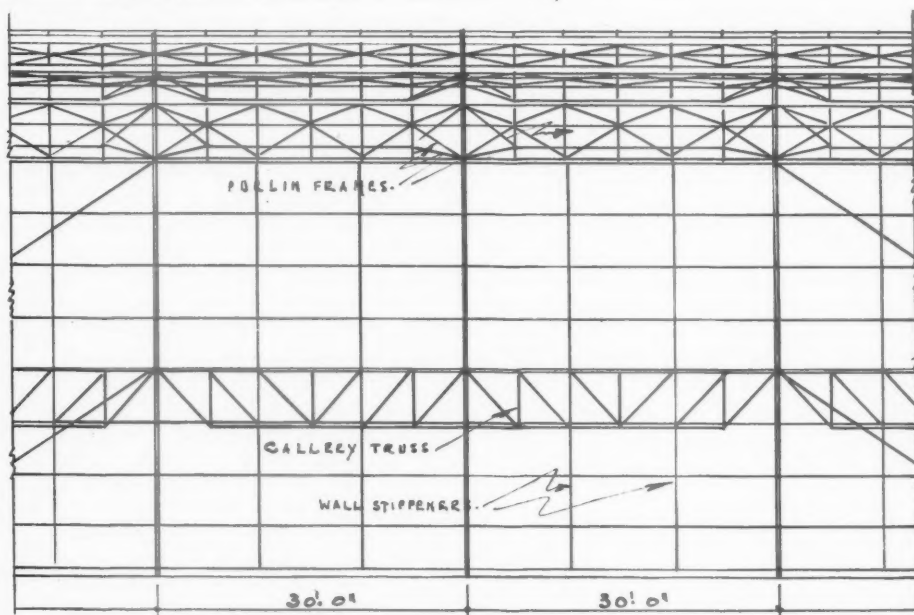


Fig. 20 (left). Tubular frame construction for an 80' span building.

Fig. 21 (below). Elevation detail.



## 80' SPAN STRUCTURE

Previous sheets have dealt with the lighter type of structural steel assembly. For larger structures, of any dimension, welded tubular steel construction is equally flexible and adaptable, and has been shewn to effect a saving in steel tonnage of nearly 50 per cent.

The frame construction shewn in Fig. 20 (elevation in Fig. 21) was designed as the housing for a model stage at a film production centre. This structure has a clear span of 80 ft., is 120 ft. in length and the height to the eaves is 40 ft.; the roof trusses and the tubular columns are placed at 30 ft. centres. Along either side, and extending the whole length of the structure, is a gallery supported on tubular trusses. The whole of the exterior is covered with asbestos-cement sheeting.

The tonnage of this particular structure is 37.5, and cost details, inclusive of delivery and erection, but excluding floors and foundations, are available.

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

3.







High Street, Newmarket, described in 1692 as "full of Inns," and still full of them, is a typical product of the kind of town which developed along a great highway in the 17th and 18th centuries. Before the coming of the railways, the White Hart, seen in the illustration, was the great hostelry of Newmarket. It stood on the north side of the street, to which it presented a stucco front, with an archway in the centre leading through to the stable yard. Above, the High Street after an air raid. Right, From an old engraving.—(From *The Bombed Buildings of Britain*).



St. Mary's, Islington, was built on the site of an earlier church in the middle of the eighteenth century, when Islington was one of the main centres of suburban development and the place of residence of prosperous city men. The architect was Lancelot Dowbiggin, a carpenter, who built a plain church with a steeple of considerable richness, obviously inspired by the older Dance. (From *The Bombed Buildings of Britain*).

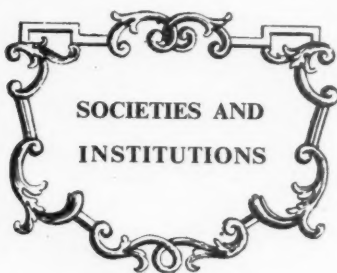
makes a guarded suggestion; for instance he says of Fords Hospital, Coventry: "The hospital received a direct hit but escaped annihilation by fire and can certainly be reconstructed, perhaps on a less inconvenient site," and of Holy Trinity, Hotwells: "If Hotwells Church is not rebuilt as a whole, the entrance front is a fragment well worth preserving for its beauty," but generally he remains silent.

Mr. Richards in his foreword states that the book is not the place to discuss the subject and that "each case must be decided on its merits, topographical, social and architectural." Perhaps he is right, but the point is who is to decide each case? It would be interesting to know what Mr. Richards and Mr. Summerson thought of Mr. Clough

Williams-Ellis' proposal in a letter to *The Times* that the city churches should be rebuilt in the provinces.

It has been clearly demonstrated that our architectural heritage cannot be safely left in the hands of local authorities and that private effort is not powerful enough to fight the speculators and public indifference. The young architects and architectural critics of this country have far too long been the spectators of muddle, confusion, indifference and sheer ineptitude; when the time comes, they must take it upon themselves to see that each case really is judged on its merits, and that the opinions of such proven experts as Mr. Richards and Mr. Summerson are given.

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Thomas [St. Helens, Lancs.]; Watson, Frank Cooper [Narborough, Leicestershire]; Watson, Reginald Austin [Bridgewater]; Weller, William John Harrison [Wolverhampton]; Wheeler, Harry [Chelmsford]; Williams, Edward Watkin [Flint, North Wales]; Willis, Stanley [Worcester]; Wilson, Henry, O.B.E. [Grangemouth].

The following details of the "Rebuilding Britain" Exhibition to be held at the National Gallery in February have been issued by the Institute:—

As an introduction, the Exhibition will trace historically our inheritance of good building and natural scenery, the development from a rural to an important industrial community, and the evils that this unregulated development has caused, and will make clear that a policy of patching and restrictive legislation is not enough, and that long-term positive planning is essential.

Examples of conscious town-planning in the past will be explained in relation to the societies that made them, and the various attempts to deal with the problem of the modern city will be shown. It will be suggested that modern town-planning must allow the city to grow without choking or unduly lengthening communications, spoiling the amenities and dragging down the standard of living. Our large cities have expanded, without a plan, in a chaos of industrial and residential quarters which have spawned outer suburbs that not only waste money, time and energy in transport, but have also lost all community feeling. How this might be remedied, and the amenities that should be provided, will be demonstrated with photographs and diagrams dealing with housing, industry, transport and social services.

The rural problem will also be analysed; the requirements of the countryside as a real partner to the towns in the production of fresh foods, for instance, and the main building needs for the rehabilitation of rural life will be demonstrated. A further section will deal with the recreational aspect of the countryside—our coastline, mountains, parks, etc.

Having outlined the elements of the rebuilding problem, the Exhibition will indicate on broad lines the way in which these principles could be combined in a plan, first on a national scale and then for the main urban areas. It will be emphasised that eighty per cent. of our population lives in the six great urban agglomerations, and that these are the chief urban problem. It will show how these might be dealt with by means of a system of planning which could be put into operation over a number of years, and which would be flexible enough to be adapted to changing circumstances.

The final section of the Exhibition will deal with the way in which rebuilding might be organised, and will emphasise that it is work that will need our maximum scientific and artistic resources. Modern materials and methods of construction, the possibilities of prefabrication, and the relation of the rebuilding effort to the post-war industrial and labour positions will be explained.

The Exhibition will end with a section telling the public that rebuilding is in their hands. If they want the advantages that modern thought and invention can provide, they should see that they get them. The architects and planners will be ready to work for them.

An illustrated book based on the theme of the Exhibition and the work of the R.I.B.A. Reconstruction Committee will be published concurrently with the opening of the Exhibition at the National Gallery. The Exhibition has come into being through the joint efforts of the R.I.B.A. and the Building Industry. The Institute has arranged the form and content; the whole Building Industry—master builders, operatives and manufacturers of building materials—has borne the cost. But it has been understood from the outset that the Exhibition is in no sense a medium for advertisement; donations have been from Associations, not from individual firms, and all architectural work is anonymous.

## DIARY

Thursday, December 3.—Town and Country Planning Association. 1.15 p.m. At the Y.W.C.A., Great Russell Street, W.C.2. "R. A. Plan for London." By Austen Hall. Sir Edwin Lutyens, P.R.A., will preside.

Saturday, December 5.—Living-in Cities Exhibition. At Arborfield.

## BUILDINGS ILLUSTRATED

CHAPEL AT NORTHAMPTON GENERAL HOSPITAL (pages 363-367). Architects: Sir John Brown & A. E. Henson, F.R.I.B.A. General contractors: Henry Martin, Ltd. Sub-contractors and suppliers included: Excelsior Patent Stone Co., Ltd., artificial stone; Pearce & Cutler, Ltd., glass; Acme Flooring & Paving Co., Ltd., Woodblock flooring; Ashwell & Nesbit, Ltd., central heating; E. Goldston, Ltd., electric wiring; W. F. Knight, Ltd., electric light fixtures and metalwork; Dryad Metal Works, door furniture; S. L. Reynolds & Son, carving. STATION IN ESSEX. In the list of sub-contractors for the Station in Essex in the JOURNAL for November 19, it should have been stated the tiling was carried out by Bryon & Co., Ltd., Art Pavements & Decorations, Ltd., and Van Straaton & Co., Ltd.

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Q 995

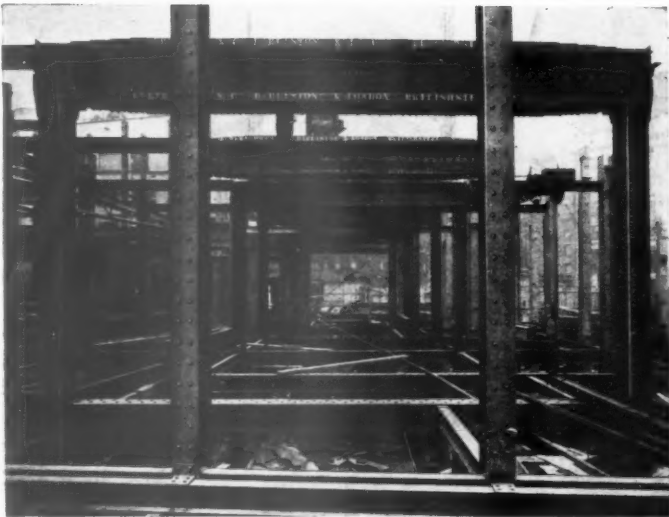
ARCHITECT, SCOTLAND.—My client has recently secured the tenancy of a lodge situated about 400 yards from an unfiltered and natural reservoir of 1,000,000,000 gallon capacity belonging to the local authorities. The locality of the reservoir is open moorland with grazing ground around the edges. The drainage of the lodge goes direct into the water. The authorities have now disclosed the fact that the property has been condemned owing to the drainage. First, I desire to know if the soil matter from a lodge of 16 rooms, three bathrooms and kitchen quarters could create a high percentage of CONTAMINATION IN A RESERVOIR of this capacity. Secondly, what type of chemical decomposition tank could be adapted to the drains to ensure a clear outlet.

The position of entry of the sewage is one of the many important factors. A drain entering near the outlet of a reservoir would be very much more harmful than one entering near the inlet.

In any case such a question can only be of academic interest as there can be no doubt that the authorities have (and must use) the power to prevent sewage entering a reservoir until it has been rendered harmless.

The law relating to water pollution is too complicated to give here, but Section 3 of the Rivers Pollution Prevention Act, 1878, may be of interest. This provides that every person who causes to fall or flow into any stream

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("stream" under the Act means nearly all water courses) any solid or liquid sewage matter shall, with certain exceptions, be deemed to have committed an offence against the Act. One of the exceptions under Section 3 is, if the channel along which the sewage flows was constructed at the date of the passing of the Act and the best practicable and available means are being used to render the sewage harmless.

When deciding upon the most economic method of dealing with the sewage, a great deal must depend upon the interpretation of the word "harmless": in this particular instance, the local bye-laws and regulations, and also local conditions.

It would appear that the most economical method of dealing with the matter is an ordinary septic tank discharging into the ground and not into the lake. The first practical step is to find out the requirements of the authorities.

### Q 996

MANUFACTURERS, LONDON.—*We are considering the erection of a works canteen for which we shall require approximately 500 chairs and 66 tables, each measuring 7 ft. 0 in. by 2 ft. 6 in and seating eight persons. Can you give us the names of any firms who specialise in STANDARD CANTEEN FURNITURE in wood. If possible, both the chairs and tables should*

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*Chairs and Tables.*—Beattall Furniture Co., Ltd., Penhall Road, London, S.E.7 and Oxford Woodcraft, Ltd., 474, Cowley Road, Oxford.

### Q 997

ARCHITECT, LIMERICK.—*Could you give me the titles (and publishers if possible) of FRANK LLOYD WRIGHT'S PRINCIPAL BOOK.*

There is at the R.I.B.A. Library "An Organic Architecture" (the architecture of Democracy), by Frank Lloyd Wright, consisting of the Sir George Watson Lectures of the Sulgrave Manor Board for 1939, published by Lund Humphries & Co., Ltd., 12, Bedford Square, London, W.C.1. Price 7s. 6d. In this is contained a bibliography, from which we have extracted the undermentioned names of the books written in English.

"The Buildings of Frank Lloyd Wright," by Henry-Russell Hitchcock, although not by the Architect himself, is the latest and most comprehensive

book, and is well worth studying. It is expensive and may be difficult to obtain, but there is a copy in the R.I.B.A. Library, and no doubt copies exist in other libraries.

"Modern Architecture," being the Khan Lectures for 1930, by Frank Lloyd Wright. Published by Princeton University Press.

"Two Lectures on Architecture," by Frank Lloyd Wright. (Art Institute of Chicago). Publishers not known. Printers: Lakeside Press, R. R. Donnelley & Sons, Coy., Chicago.

"An Autobiography," by Frank Lloyd Wright. (Purely Life Story). Published by Longmans Green & Co., New York.

"In the Nature of Materials." (The Buildings of Frank Lloyd Wright, 1887-1941), by Henry-Russell Hitchcock. Published by Duell, Sloan & Pearce, New York (1942). Price 36s. 0d.

Frank Lloyd Wright "On Architecture"—Selected Writings. Introduced by Frederick Guthem. (No illustrations). Published by Duell, Sloan & Pearce (1941). Price 24s. 0d.

### Q 998

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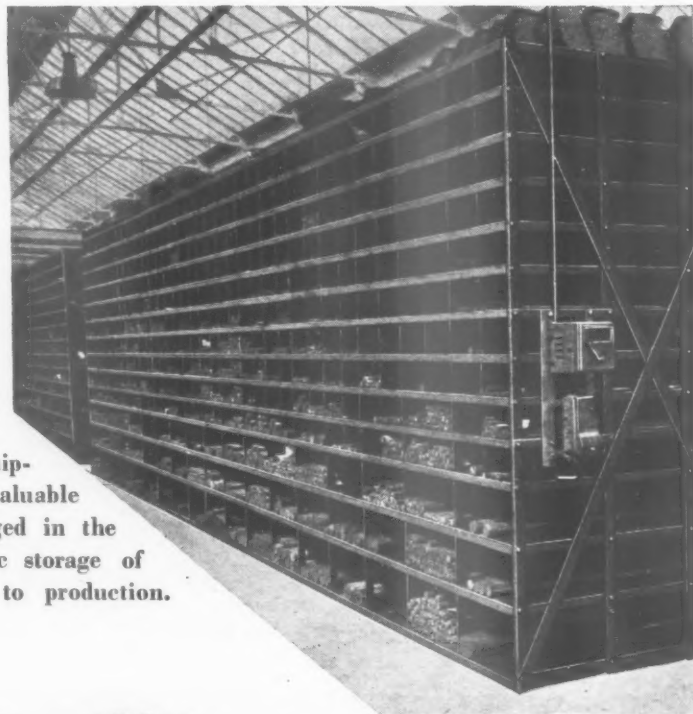
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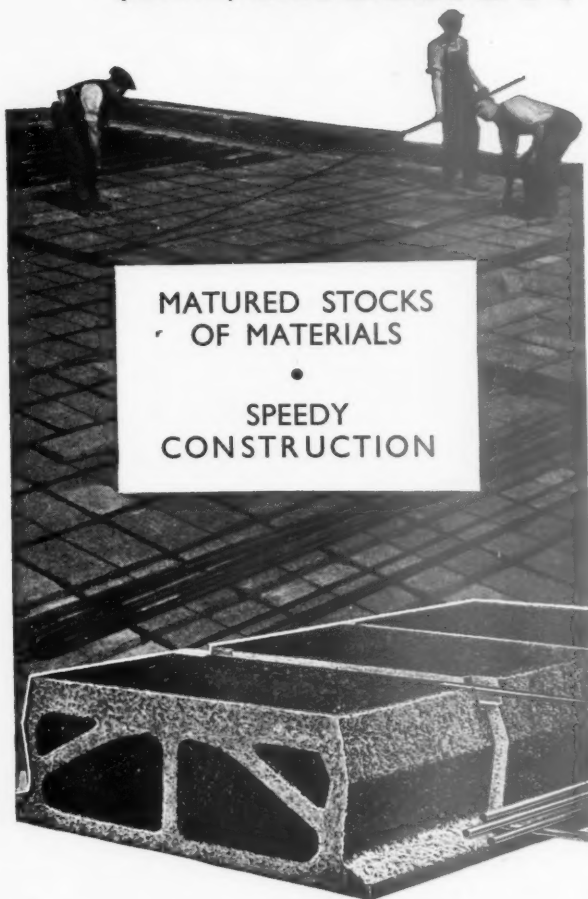
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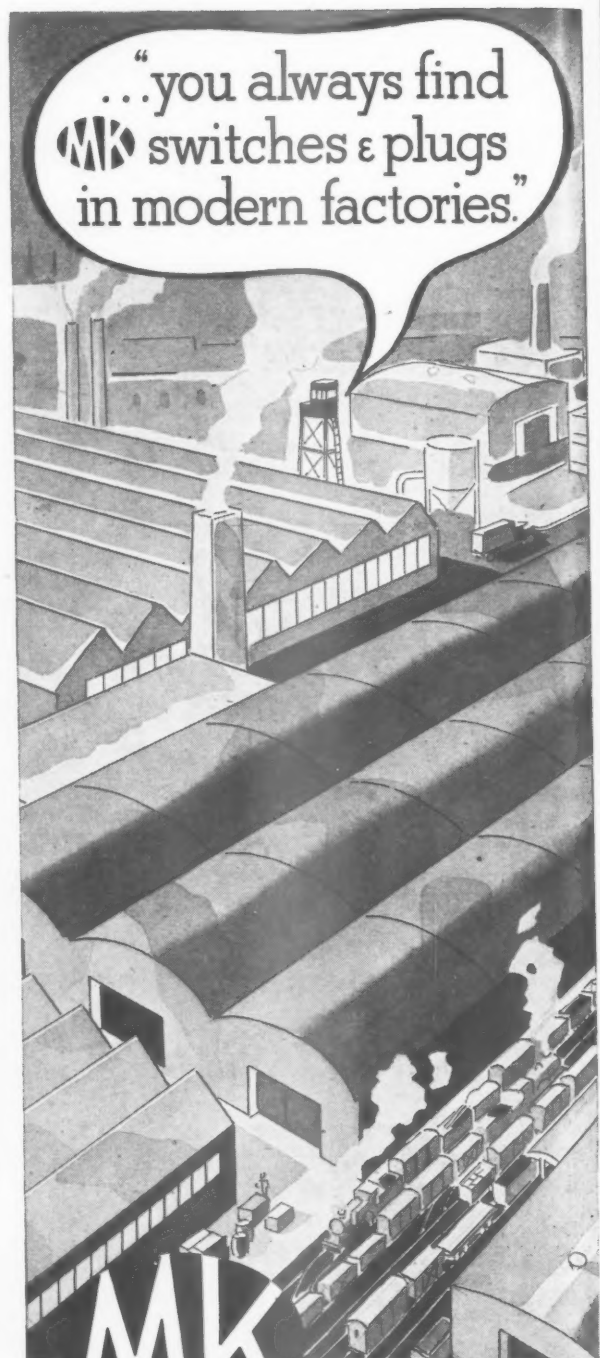
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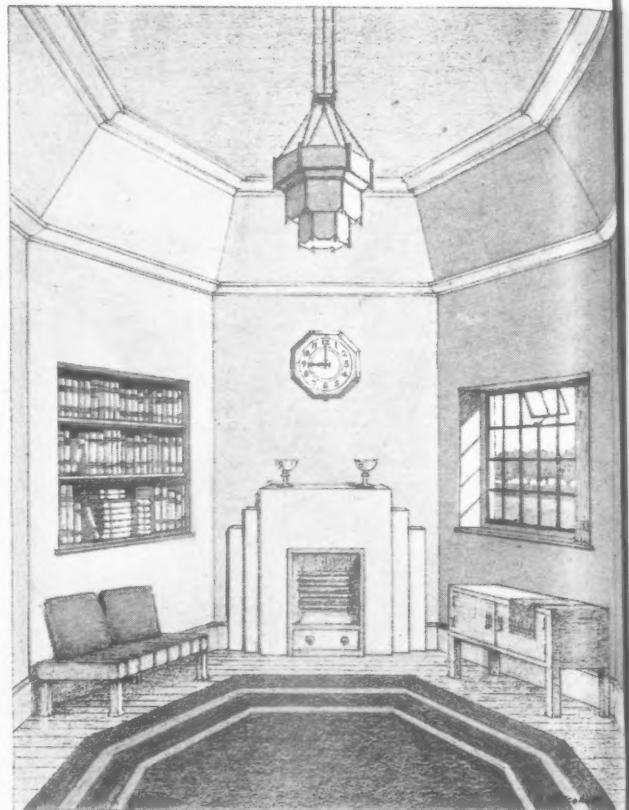
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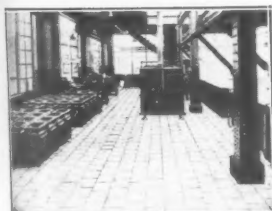


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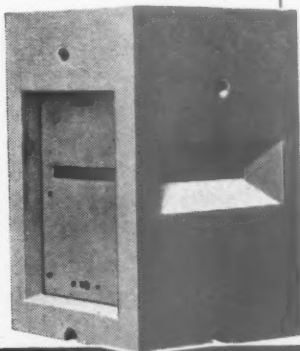
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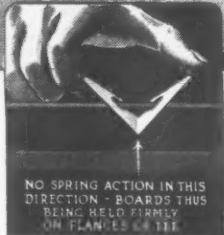
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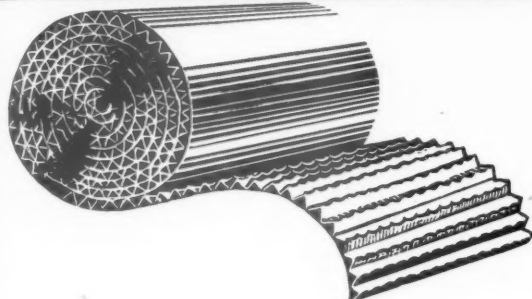
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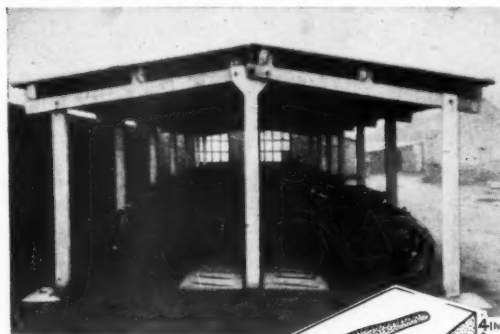
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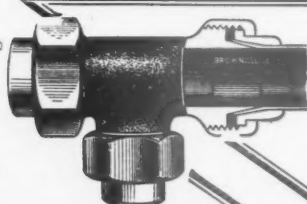
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