

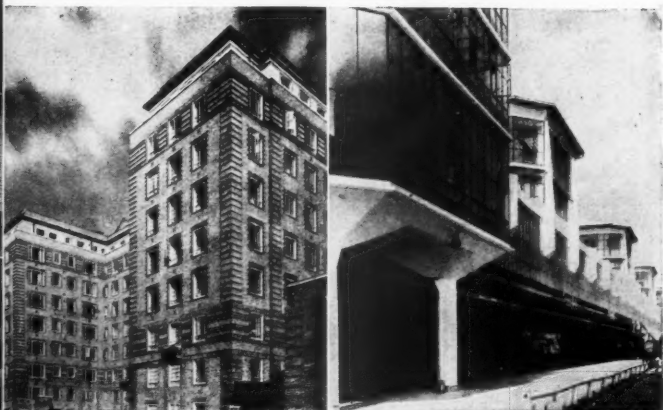


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# THE ARCHITECTS'



## JOURNAL

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WITH WHICH IS INCORPORATED THE BUILDERS'  
JOURNAL AND THE ARCHITECTURAL ENGINEER  
IS PUBLISHED EVERY THURSDAY BY THE ARCHI-  
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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, NOVEMBER 13, 1941. NUMBER 2442: VOLUME 94

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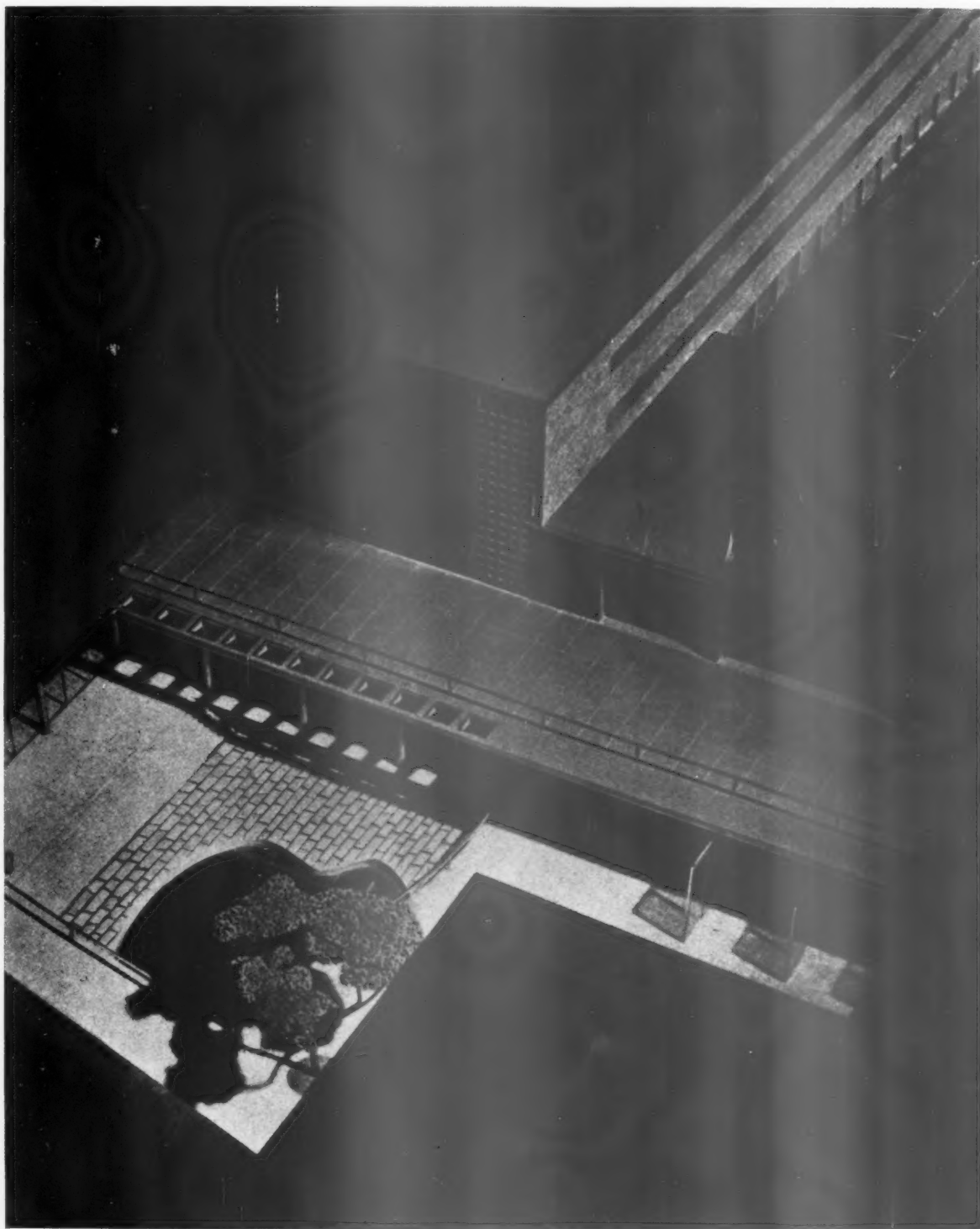
The fact that goods made of raw materials in short supply  
owing to war conditions are advertised in this JOURNAL  
should not be taken as an indication that they are necessarily  
available for export.

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.

W I L L   P E A C E   L O O K   B E T T E R



*Will Peace Look Better. By R. Murry. From the exhibition of war-time sketches by Members of the A.A. The exhibition closes tomorrow.*

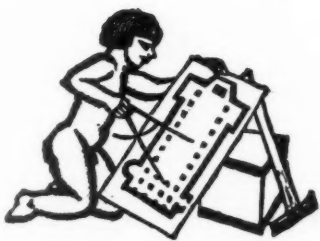


## ART GALLERY

*Model of the proposed Smithsonian Gallery of Art, Washington : view across Sculpture Court towards picture gallery. The model is of marble, glass and metal, and was constructed by Eliel and Eero Saarinen and J. Robert F. Swanson, architects, whose*

*design won first place in open competition. The proposal to erect the building immediately opposite the National Gallery of Art has aroused much discussion in America. See pages 325-330.*





## UP THE PROVINCES

ARCHITECTS are nowadays realising that the most complicated part of their job is to get their programme defined. This zeal for getting a correct programme had in pre-war days reached such proportions that before the war students at the A.A. spent so long defining their programme that in the end they had no time to submit any drawings—merely their research work. Architects must be artists if they are to be anything worthy and no artist can do justice to a vague programme, so in many ways the students were right—First things first.

Now as to town planning and a programme, the exhibition "How to Live in Cities," to which one might add further exhibitions "How to Live in Towns or in Villages," had the right notion behind its title—HOW TO LIVE. This is surely the keynote to town planning.

Let us examine the wants of the average worker. He would wish a pleasant workplace near home at a convenient rental and a pleasant home near park or green, a market for his wife for shopping, especially greengrocery, smart shops for special things, a nice restaurant for ordinary life, and special ones for high days and holidays. He would want convenient public houses, cinemas and, most important of all, a nice modern school nearby for the children with playing fields for them.

He would *not* want a town without public houses or markets, with endless dreary houses without focal point or direction, with an hour's journey to and from work and possibly a difficult boiler to light up at night or in the morning. Yet most towns are horribly like this.

His wife would want an easy house to run with cooking facilities at home, but sometimes she would like to leave home and enjoy local life. She would want convenient clinics, hospitals, libraries and churches. She would like her town streets to be pleasant to look at and to have trees and squares and green among them. These demands are common to most. It is true they can be enlarged, yet how often do we get even them?

Examine the towns you know—even the modern towns—and see how terrible they are. Look at our industrial towns in the Midlands and the North. Look at Welwyn with its lack of market places and public houses; look at Dagenham.

The machine must benefit all, likewise the best designers, but each place must be special to itself and its local life and industry. Instead of this nowadays the towns become more and more alike—the multiple shops, Woolworths, Burton (the tailors of taste), Boots, Lyons, etc., have turned all our villages and towns into the same places. How much longer will the people tolerate this? Come our modern Ruskin, our Morris, and come before the war is over and lead us forward to a good life where quality matters and visual things are important, where fake is outcast and sincerity valued, where go-getting and gold-digging are forgotten, where intrinsic value and beauty matter. Town planning is an architect's job, no specialist's.

So you provincial architects—you know that your towns are a mess. You know that you are fitted to make something better of your towns, and that time and again opportunity presents itself so that you might act boldly and do something to make your towns nearer what you would enjoy.

Is it necessary for you to wait for the R.I.B.A. or for Lord Reith? Is there nothing that you can do now that will earn you the name of architect? Is it sufficient to be good married men and warm and comfortable citizens?

Town planning is with you, good Fellows and Associates. You who live in these towns know the citizens, know the properties and ownerships, the local squabbles, the pith and life of the place. And how this can be given a direction, and the town a form and a harmony. How the meeting of four streets, where the Burtons and Woolworths and Marks and Spencers congregate, can be brought to some breadth and dignity, and how the green trees and flowers can be led into and among the sordid bricks and mortar, so that at last architecture comes into its own again.

Architecture is not enough. Architecture is town planning and town planning is life; and neither will be born out of committee rooms in London, but out of the towns, cities and villages over the length and breadth of the country: out of PROVINCIAL MEMBERS.

Therefore, provincial members, find out all good men and true among your committees: join with them, and between you all set about the reconstruction of your towns.



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

# NOTES & TOPICS

## DEPARTMENTS' DEPARTMENTS

The JOURNAL's search for the causes of war building's low output had to be limited to primary causes. But I hope that it will be able in future to look around for the bigger secondary causes. Among these Departments' Departments stand out a very objectionable mile.

★

One would have imagined, for example, that the camouflage and A.R.P. aspects of building schemes of secondary military importance could by now be subjected to reasonable standardization, that the principles, required accommodation, and structural recommendations could be sent to architects in pamphlet form, and that two or three men would be all that were needed within a single Ministry to give further advice.

★

In fact each building Ministry has acquired a ponderous A.R.P. Department and most are in a fair way to having a camouflage enclave of equal size. These adjuncts have to justify their existence. They do so by (1) war with the Ministry's central core for not consulting them soon enough and often enough; (2) war with architects employed by the Ministry for ditto ditto and *lèse majesté*; (3) by full-bodied nattering with other bodies which claim avoiding powers in certain fields.\*

★

The consideration which the views of these Departments' Departments receive is, it has been noticed, subject to cyclical variation. The cycle is as follows. A new Big Noise appears in a Ministry and his satellite architects are at once called stoutly to account for not carrying out the recommendations of DD/13. The architects go through the motions of doing so.

★

A month later the Big Noise, on a visit to the job, says that one of DD/13's instructions can be (unofficially)

\*e.g.—Ministry of Home Security (A.R.P. and Camouflage), and National Fire Service.

disregarded. Two months later the Big Noise gives it as his personal opinion (on the 'phone) that if DD/13 had its way nothing would ever be built anywhere. Three months later the Big Noise (in a whisper over his desk) is asking the architects for some evidence which will cut DD/13's throat from ear to ear. If the Big Noise does not go very soon after that DD/13 is unlucky and stays unlucky. If he does it is the architects who are unlucky. A tremendous number of Big Noises seem to have been disappearing during the past year.

★

## FILLETS AND STRINGS

"I have sometimes wondered," said my companion on the bus (at a town which has not been left quite alone) "whether it is possible to fillet a fish by giving it a big enough shock . . . Look at that."

★

I looked. In the building by our side, partly reinforced concrete, most of the hangers, rods, straps and odds and ends at which we stare with reverence on engineers' blue prints, were draped above a beam in a long bristling *chevaux de frise* while the concrete hung limply below.

★

And this reminded me of a warehouse, *circa* 1900, which I inspected on the morning after it was cool. The floors were of a very early type of hollow block threaded with steel in one direction only. The heat of the fire had split the blocks into separate strings and had rounded most of them; so that, on and on for three or four days, there trailed over the main beams strings of the most life-like, gargantuan and liver coloured sausages.

## HUNT OUT YOUR WASTE PAPER

The country needs 100,000 tons of waste paper immediately for munition-making. Architects are in a particularly good position to help in this essential drive for salvage. Every architect has masses of drawings, plans, specifications and correspondence, which are no longer needed. Hunt through your plan-chests, cupboards, files, drawers, attics. You will be surprised at the amount you can produce. It is of vital importance. Do it now.



*Diversion, by John Grey, reproduced from the exhibition of war-time sketches by members, now on view at the A.A.*

#### EXHIBITION AT THE A.A.

War-time sketches by members now on exhibition at the A.A. are a strange collection. Some fantastically realistic, others prosaically even pedantically romantic.

★

The former modelled more or less closely on work of official war artists includes, for instance, a picture called *Lowestoft*, which consists of some baroquery on a column with sea behind and a barbed wire entanglement round the base (after the manner of Ardizzone), another called *Over Frankfurt, 1941*, shows a moon, a bank of clouds and a pool of blackness punctuated with shell splinters slashed with flame.

★

The latter modelled on generations of academicians are laboriously realistic in detail, but in spite of this the whole set-up seems as unreal as a drop cloth for the *Coq d'Or*—as unreal but not nearly so glamorous or exciting. Farmyards without land girls, villages without troops, woods without lorries, churches with glass in the windows belong to another world; so does the careful manner in which they are presented by a smug generation of painters determined to portray with precision a world which contains neither problems to be solved nor mysteries requiring an explanation.

★

I found the former amusing; the latter inadequate. But this attitude was not general. More than one elderly visitor recoiled from efforts to assimilate contemporary realities muttering "pointless, incomprehensible," to linger by some undatable water-colour greeted as "a careful study of light and shade" or a "masterly application of the rules of perspective."

★

#### ANCESTRAL HOMES

According to Mr. Osborn, everyone secretly longs for an ancestral home, where he can grow up, marry, have children and die all under the same roof. Primogeniture of course makes it impossible for everybody to realize this

dream completely. Younger sons and daughters have to make a break at some point; but a flit is as good as a fire, and no one wants the experience more than once.

★

E. M. Forster, not concerned with its architectural implications, advances the same view in "*Howard's End*." People, he says, must have roots. Without them they develop no character. Every move is a psychological amputation.

★

If this is true, it's going to have a big effect on planning. It means, in fact, garden cities with a settled population. But is it true? Are we really vegetables (perhaps molluscs would be a more apt comparison). Molluscs make their own shells, and if their shells are damaged or removed (provided they don't die) they have to make new ones, a process which is most exhausting and involves a stage of uncomfortable transition.

★

Taking a superficial view the answer is easy. We are not in the same class as snails. We come and go as we please and are not organically connected with our shells. Why then do Mr. Osborn and Mr. Forster attach so much importance to ancestral homes? Is immobility a real psychological need or can the craving be explained in physical terms?

★

If one goes into the question more thoroughly and examines what house-moving involves, one is forced to the somewhat surprising conclusion that we are in 20th-century England, only once removed from molluscs. We don't have to build our outer shells, it's true. As a rule they are, provided for us in more or less inconvenient positions by house agents or estates developers. But what they provide is only an outer husk, a mere skeleton of what we need. Weeks and weeks of patient work with hammers, scissors, saws and tacks are required to fit out the chosen shell. The process of adaptation is most uncomfortable.

★

What house in this country, for instance, when empty and to let is properly equipped with cookers, boilers, plate racks, shelves and cupboards in the kitchen; with bookshelves in the living room and hanging space in the bedrooms; with mirrors, towel rails and brackets for tooth mugs in the bathroom; with curtain tracks, pelmet boards, connections for gas fires, plugs for electric lamps, iron and vacuum cleaners all over the house? Even floors are usually left in such a state that they must be completely covered by carpets or lino or something cut to fit the room in order to keep the draught out and provide a surface that can be kept clean.

★

A thousand and one things that are completely impersonal and ought to be standardised have to be dismantled every time one moves and literally built in to a new house before it's habitable. To call the average house to let a house ready for occupation is nearly as misleading as to say that half an acre of field with a hedge round it is a garden.

★

Under existing conditions it must be confessed that Mr. Osborn and Mr. Forster are right. For human beings moving is a most painful process to be avoided at all costs, and will continue to be so long as fixtures and fittings have to be carried about as if they were personal treasures or family heirlooms.

ASTRAGAL



## NEWS

### ★ Disgraceful Conduct of Architects Page 324

### ★ Compulsory Return of Building Labour Page 324

### ★ Mr. Frank Pick Page 324

### BUILDING INDUSTRY STILL DISORGANIZED

After two years of war, the building resources of the country, a primary and major part of any total war effort, remain virtually disorganized. The industries are in consequence suffering from a process of functional disruption resulting from a largely self-charged unco-ordinated departmentalism acting in place of the application of an enlightened and war inspired policy of national direction. This opinion is expressed in the Building Industries Survey of the Building Industries National Council, which states:—

A fundamental conception of the organizational resources of the building industries appears to be singularly lacking on the part of those at present officially charged by the Government with responsibility for meeting the urgent war-time building needs of the country. The building industries as a whole and in their great corporate capacity have not yet even been asked to organize themselves upon a war-time basis.

The industries are not primarily functioning upon a war-time footing. Moreover, what war-time efforts the industries are allowed to make are distinguished by the measure of divided departmental control exercised over them—labour by one department, materials by another and at least six departments striving separately for the same small products—buildings—all competing for new directional staffs in the process.

This is not the fault of any one Department of State: it arises from a sheer lack of concerted Cabinet policy based upon ordered and intensive direction. An intelligent feeling of frustration and sense of repression is thus engendered, representing a waste of potential resources which the country ought not to be asked to suffer at a time when every element of energy is urgently called for. Thus the depleted resources of the building industries remain at best under present conditions in a state of unbalanced and largely disorganized animation, a position which can only be righted by the accredited leaders of the industries being given their rightful and proper place in the councils of government dealing with war-time building organization and production.

Apart even from the lack of ordered direction and progress there is no evidence that the full resources of the industries are yet fully employed on any effective basis of allocation to a national programme of requirements or performance. Architectural and related services remain manifestly unused to a disquieting extent; contractors have in some cases reverted to advertising for work, and manufacturers are beginning to express fears of redundant stocks and plant.

The position calls urgently for a reversal of the present policy of basing the national building programme upon the narrow conceptions of departmentalism; the future of war-time production must lie in an increase of the responsibilities of the industries themselves, on the simple principle that, given the necessary scope, guidance as to requirements, and freedom of function, there is nothing that direct Government administration of an industry can do better than that industry left to its own responsible resources can achieve.

### WAR DAMAGE PAYMENTS

The War Damage Commission state that they are receiving a number of inquiries with regard to difficulties experienced by persons who have suffered war damage in getting repairs done to their property

owing to the reluctance of builders to give credit.

A suggestion has been made which it is thought will in many cases meet this difficulty. This is that the claimant should give a written authority to his builder to receive payment from the Commission in respect of the work. The Commission will recognize such an authority, and on completion of the work will pay the builder as agent for the claimant, provided that the authority given is not in law a formal assignment of the right to payment. Following is an approved form of authority:

To the War Damage Commission. File No.  
Property.....

I have appointed M..... my agent to receive on my behalf any temporary works payment or cost of works payment under Part I. of the War Damage Act, 1941, in respect of the cost which I have incurred or shall incur in executing works which M..... has completed and/or has undertaken to carry out for me in order to make good war damage to the property described above.

The receipt of the said M..... shall be a full discharge for any sum so paid.

Date..... Signed.....

### R.I.B.A.

It has been decided that the R.I.B.A. Examination for the office of Building Surveyor under Local Authorities shall be held once only in 1942. The examination will take place on May 6, 7 and 8, 1942, and the closing date for the receipt of applications is March 24.

## LETTERS

J. CUNNINGHAM, A.R.I.B.A.

G. G. HAYTHORNTHWAIT, Capt. R.E. (A).

SIR,—I am surprised to read that Astragal in your issue for June, appears to regard Soviet structural advances as mainly in the project stage. I found a tour of the U.S.S.R. just before the war a very strenuous matter due to the large number of notable engineering and architectural structures which were visited. Even then owing to lack of time I was able to see only a small proportion of them.

The Palace of the Soviets was then in the stage when the huge stanchion bases (each steel shoe larger than a house) were being placed in position to receive the many thousand tons which each is now carrying. A building of these gargantuan proportions takes time to build and I am not sure than even our "star" contractors could improve on the tempo. Astragal should therefore have patience.

So far as canals are concerned, Astragal has no doubt learned of the Moscow-Volga Canal, completed some years ago. Apart from the immense work involved in the canal itself, this necessitated rebuilding a dozen bridges in Moscow within two years. Com-

pare over fifteen years haggling over Waterloo Bridge, still not rebuilt.

A further example which I saw was the brilliant Dnieper Dam and Power Station in the Ukraine (finished 1933), a forerunner of more extensive schemes in hand. May I also mention the Moscow Metro as an unsurpassed example of underground railway construction?

Surely Astragal must be acquainted also with photographs of work illustrating acres of housing, schools, hospitals, sanatoria, theatres and so on now in use. Surrounded as they are by these achievements, it does not occur to Soviet citizens that there is any necessity to repeatedly boost them. They discuss the next steps forward, assuming (evidently wrongly) that the Astragals already know of their achievements and are more interested in their future plans.

J. CUNNINGHAM,

Reading.

### Impington at Work

SIR,—May I plead with you to look more closely at the two photographs you have published of Impington Village College, one on page 238 and the other on page 246 in your issue for October 9. Their comparison provides an honest portrayal of the aesthetic shortcomings of contemporary building, to which you have done little justice.

I contend that the comparison reveals all the shortcomings of contemporary architecture. A careful, impartial study of the two photographs reveals three categories of fault, all common to contemporary architecture. Finality of composition; utter dependence on specially selected landscape or alternatively no capacity of adaption; and, lastly, meanness in detail and materials. These faults are all evinced in the comparison of your photographs.

The composition of the college and the birch tree, in full leaf, is sufficient unto itself. Put a group of human beings in the forecourt and the composition goes to pieces; it objects to people.

The college composes well against the birch. Hard lines require immediate contrast amid the soft lines and tones of our land. This can only be given by carefully selected trees. It is notable that in nearly every sensational presentation of contemporary buildings, either an exotic or a birch our most graceful native is prominently employed as a disruptive agent. This selected landscape relies for its effect upon a limited field of vision, it does not redeem hard lines which are exposed to normal surrounding country.

During the last thousand years we have gained a high sense of appreciation of human craft and we have relics of past crafts which still delight us,



# TWO WAYS OF LOOKING AT A BUILDING



In the issue for October 9, the Journal described the chasm that yawns between the way the architect and the way the public sees a building. People see it as a convenience somewhere in the background of themselves; the architect sees it as an entity, with a life of its own which people must be allowed to share.

These two ways of looking at a building were illustrated in two photographs on pages 238 and 246 reprinted on this page. Captain G. G. Haythornthwaite, in his letter on page 322, asks us to look more closely at the two photographs. The comparison, he says, reveals all the shortcomings of contemporary architecture.

Some of us, for instance, still find pleasure in the Prior's Doorway at Ely Cathedral. Herein, well developed, is that which is totally lacking in contemporary building, richness in detail and material.

We have to satisfy the demands of a disordered industrial society and it is not surprising that we compromise with aesthetics, but surely it would be more fitting to admit the compromise and present our architecture as an expedient, unformed with confessed faults, rather than sacrifice our standards of aesthetics which, to my mind, sir, you have done by drawing from the comparison of the two compositions in question, nothing, but that one is "Not worse but different" from the other.

G. G. HAYTHORNTHWAITHE

Welwyn.

### COMPULSORY RETURN OF BUILDING LABOUR

The Minister of Works and Buildings has made an Order (S.R. & O. 1941, No. 1642) calling for a return from all persons (other than those who were required to register as building or civil engineering contractors under Defence Regulation 56AB) who employ labour engaged in building or civil engineering activities.

This is a compulsory return and failure to make it renders a person to whom the Order applies liable to the penalties prescribed by the Defence Regulations.

The main purpose of the return is to obtain information as to the building and civil engineering labour employed in industries other than the building and civil engineering industries themselves. The returns will, therefore, cover workpeople engaged on maintenance work, as well as on new building and civil engineering work, who are employed by persons other than registered builders and civil engineering contractors. All such employers, in whatever industry they may be, are required to furnish returns of any workpeople employed by them on building and civil engineering activities.

Information is required as to the number and trades of persons engaged in such activities, and as to the value of work done by them in October, 1941. The trades concerned include the following:—

Joiners and carpenters (when engaged on work in connection with building and civil engineering, not on shop work), bricklayers, slaters and tilers, painters, plasterers, plumbers, glaziers, builders' labourers. Persons engaged generally in the construction, reconstruction, alteration, repair, maintenance, decoration or demolition of buildings or fixed works of construction (including excavation, levelling, the making of earthworks and foundations, the laying of pipes and sewers, the construction of roads and railways, tracklaying, etc.).

Copies of the form (B.C.E.4) on which the return is to be made will be available at local offices of the Ministry of Labour and National Service on and after November 12. They must be filled in and returned to the Ministry of Works and Buildings (Registration of Builders), Sanctuary Buildings, 18, Great Smith Street, London, S.W.1, not later than November 22. Full instructions will be found in Part A of the form.

The Ministry of Works point out that:

This is in no sense a registration of employers of building and civil engineering operatives; the Order calls merely for a return of information.

The return is required from employers, not from individual employees.

The return is required only in respect of operatives engaged on building and civil engineering work, and not on manufacturing or other activities in an undertaking. For example, a wood cutting, joinery and timber concern may employ a number of carpenters on building maintenance work. These should be returned; but carpenters and joiners engaged upon the main business of the undertaking should not be included.

### SCIENTIFIC AND INDUSTRIAL RESEARCH

The Lord President of the Council has appointed Sir Franklin Sibly, D.Sc., LL.D., to be a member of the Advisory Council to the Committee of the Privy Council for Scientific and Industrial Research. The Rt. Hon. the Viscount Falmouth has retired from the Council on completion of his term of office.

### LUNCHEON TO MR. ASHLEY WARD

To mark his election as chairman of Thos. W. Ward Ltd., Sheffield, the directors and local directors of the Company gave a luncheon to Mr. Ashley S. Ward and Mrs. Ward (the Mistress Cutler) at the Grand Hotel, Sheffield. Presentations were made to Mr. and Mrs. Ward as tokens of the good wishes of the directorate.

### MR. WORTHINGTON ON RECONSTRUCTION

In our post-war reconstruction we must insist on open spaces, quiet squares and buildings for co-operative use modelled on the Inns of Court. This opinion was expressed by Mr. Hubert Worthington in a lecture on Civic Building at the Royal Academy. Other points made by the lecturer were: We could not abolish smoke, but we could greatly reduce it. Buildings should be designed not individually but in groups. For this the artist designer would be required more than ever, but one dynamic architect would be able to control large units of practical men. Without leadership and team work big schemes could never be carried through: without great design mere man power and economic strength would produce shapeless monsters. There might be perfect traffic arteries, convenient planning of cinemas, shopping centres and so on; but if there was not the spirit of the artist animating the whole, our cities would fail to attain that outward and visible expression of the best British spirit that should be the ultimate expression of our reconstruction.

When the war was over we should have shoddy timber buildings to meet immediate needs and tide over a period of transition. Change was going on so rapidly that some people thought hospitals, cinemas and certain other kinds of buildings should be constructed to last not more than thirty years; but civic buildings should have character and style. They should be built of materials that would stand the test of time. They should be designed by those who believed in historical continuity and a civilization that was to endure. To use Wren's phrase, they should be "in the gust of the age." They should be masculine and unaffected.

The destruction of Queen's Hall called for the establishment of a group centre for music, a great temple where music could be enjoyed at economic prices, and with smaller halls adjoining for musical societies. There should be a garden to wander out into between the acts. London had long demanded a national theatre and opera house. If these were built they should have sites as noble as that of the Paris Opera House; the site was as important as the building itself.

The new London University had given a fine lead of wisdom, forethought and imagination. It was an extremely interesting development of ten acres and an instance of that grouping of interests which we ought to see again and again.

### DISGRACEFUL CONDUCT OF ARCHITECTS

What is considered to be disgraceful conduct of architects is given in the following notes regarding decisions of the Discipline Committee of the Architects' Registration Council:—

September 15, 1939.—The Committee find that the respondent has been guilty of conduct disgraceful to him in his capacity as an architect in that he has issued a monthly circular advertising his architectural services.

December 30, 1940.—In the opinion of the Committee it is disgraceful conduct for an architect to have a commercial interest in the supply of building materials, either (i) by way of commission on the sale of such materials, or (ii) as a principal, partner or manager of a company or firm trading in such materials.

May 20, 1941.—The Committee find that the respondent, by inserting an anonymous advertisement in the Press offering his services as an architect, has been guilty of conduct disgraceful to him in his capacity as an architect, within the meaning of Section 7 of the Architects (Registration) Act, 1931.

### A.A. OF IRELAND

Even if the war stopped now it might be ten years before Eire's imports could approach pre-war level, said Mr. G. McNicholl, President, Architectural Association of Ireland, at a meeting of the Association in Dublin. He said that Eire could not afford to slack off building for the next decade and advocated immediate research into available building materials, alternative methods of construction and planning.

He urged the setting up of a building research organisation and said aluminium looked like being the building metal of the future.

### RESIGNATION OF DIRECTOR OF BUILDING PROGRAMMES

Mr. Paul Gilbert, who has been Director of Building Programmes in the Ministry of Works and Buildings since the creation of the position, has found it necessary to tender his resignation owing to his firm's urgent commitments on work of national importance. Mr. Gilbert will continue to serve on the Central Council Works Committee.

### MR. W. H. ANSELL

We are glad to announce that Mr. W. H. Ansell, President of the R.I.B.A., is making steady progress after his second operation and has left hospital.

### MR. FRANK PICK

We record with deep regret the death of Mr. Frank Pick who died suddenly last Friday evening at his home in London. He was 62.

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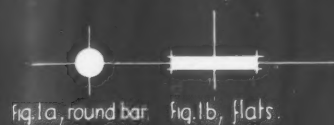
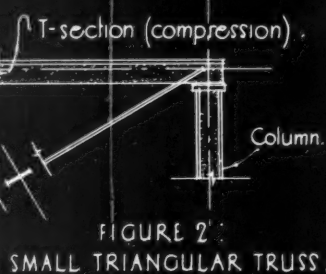
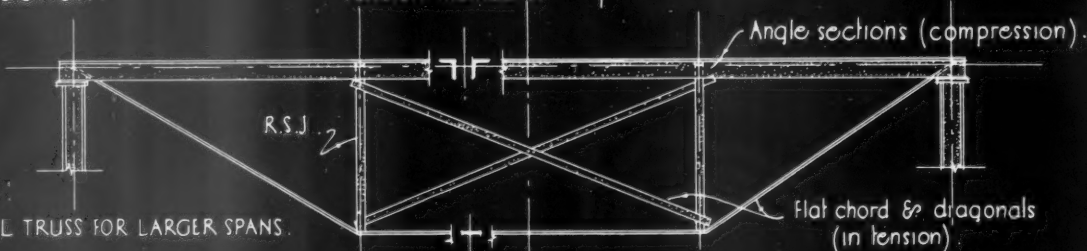
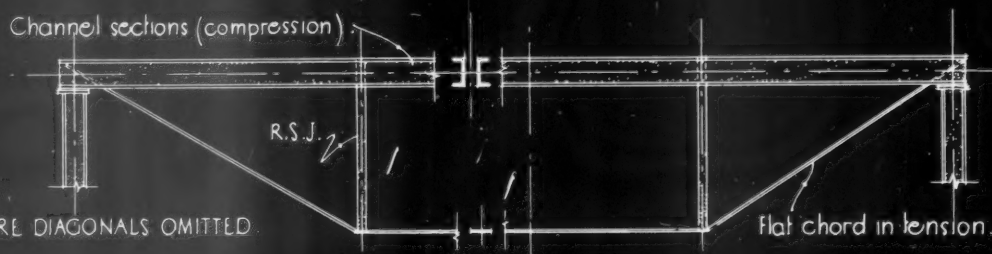
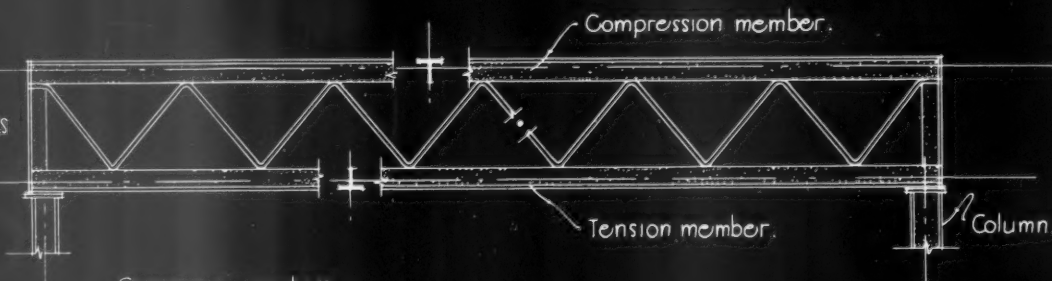
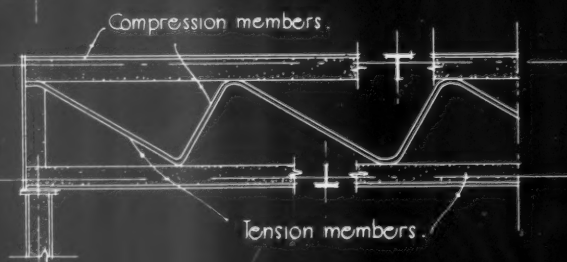
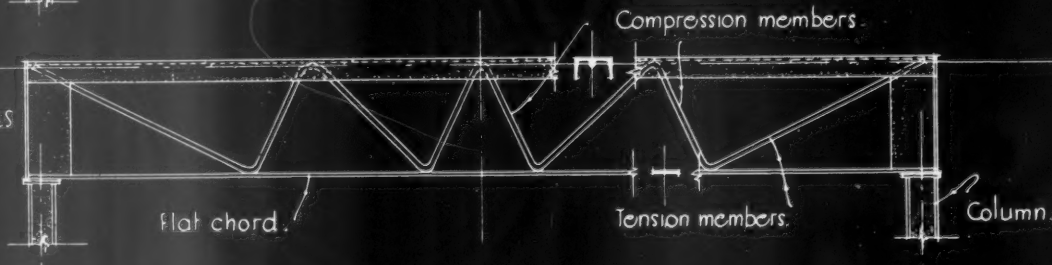
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## THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

GENERAL CONSIDERATIONS & PRINCIPLES OF DESIGN  
IN WELDED STEEL, No 8.FLANGELESS SECTIONS  
FOR WELDED TRUSS  
CONSTRUCTION.TYPES OF TRUSSES  
USING FLAT  
TENSION MEMBERS.FIGURE 3:  
THREE-PANEL TRUSS FOR LARGER SPANS.FIGURE 4:  
(ditto) CENTRE DIAGONALS OMITTED.FIGURE 5:  
REGULAR DIAGONALS  
WELDED TO WEBS  
OF TEES.FIGURE 6:  
DIAGONALS  
CONFORMING TO  
STRESSES.TYPES OF TRUSSES WITH ONE-  
PIECE DIAGONALS CONSTRUCTED  
FROM ROUND SECTIONS.FIGURE 7:  
ROUND DIAGONALS  
COMBINED WITH  
FLAT TENSION  
MEMBERS.

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

INFORMATION SHEET: STEEL FRAME CONSTRUCTION, G2: WELDING No 18.  
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS, ONE MONTAGUE PLACE, BEDFORD SQUARE, LONDON W.C1.

THE ARCHITECTS' JOURNAL  
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## INFORMATION SHEET

• 847 •

### STRUCTURAL STEELWORK

**Subject :** Welding 18 : General Considerations and Principles of Design in Welded Steel : No. 8, Systems of Welded Roof Trusses (2).

**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 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 eighth of the section illustrating general considerations and principles of design in welded steel, and is a continuation of the previous Sheet on the systems of welded roof truss construction.

**Sections :**

As pointed out in Sheet No. 2 of the welding group, in welded trusses the flanges of the members need not touch each other. Therefore, apart from the typical rolled sections used for riveted construction, other sections may be employed which have no flanges, e.g., round bars and flats. The sections shown in Figures 1a and 1b will be used mainly for tension members, as their stiffness is comparatively small. Their great advantage lies in the fact that round bars can be bent cold in any direction, and flat bars in at least one direction without difficulty, thus obviating the use of special connections which entail labour and material.

**Application :**

This is of particular importance for small trusses, which, constructed in this way, are more economical than R.S.J.'s.

Figure 2 shows a triangular truss with a flat as tension member. In this case the flat is preferable to the round section as it has greater stiffness sideways.

In Figure 3 a similar construction is indicated for a larger span with three panels, and in Figure 4 one in which the centre diagonals have been omitted. Strictly speaking, however, this system belongs to the group which will be discussed in the following Sheet.

Another group of trusses could have diagonals constructed from round sections. In this case all the diagonals can be made from one piece, which is zig-zagged from top to bottom, as shown in Figure 5.

**Transmission of Forces :**

The welds must be strong enough to transmit all horizontal forces to the chords, and where the diagonals are in compression, the section itself would have to be strong enough to withstand buckling.

In order to reduce the section, it should be arranged that the diagonal has tension in the first panel and that the greatest compression occurs in the second, where the forces are reduced compared with the first panel. This type of truss can be carried out in such a way that the compression diagonals are steeper and shorter than the tension diagonals, the buckling length thus being reduced, and in addition the first panel (where the chord has to transmit smaller forces) can be lengthened.

In this way, the forces in the first compression diagonal would be still further reduced. See Figures 6 and 7.

**Combined Systems :**

Both the systems described in Figures 2 to 4 and 5 to 6 can be combined, and a flat used as the lower chord with the zig-zag diagonal of round section as shown in Figure 7. The upper chord would have to be stiff, and a channel section with a horizontal web would be suitable, being particularly stiff sideways where the buckling length is greatest.

**Previous Sheets :**

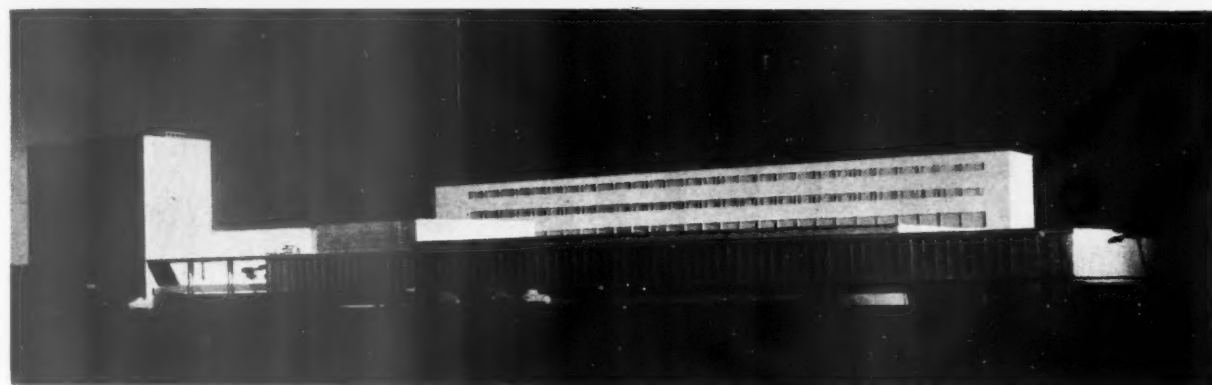
Previous Sheets of this series on structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 751, 755, 759, 763, 765, 769, 770, 772, 773, 774, 775, 776, 777, 780, 783, 785, 789, 790, 793, 796, 798, 799, 800, 801, 802, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 816, 819, 821, 822, 823, 824, 826, 827, 828, 830, 832, 836, 837, 838, 839, 840, 842, 843 and 845.

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King's House, Haymarket, Westminster,  
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**Telephone :** Whitehall 3993.



## FLASHBACK and FORWARD

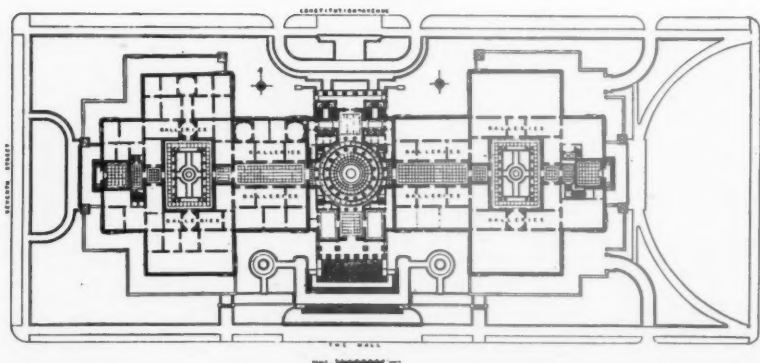
### A STUDY IN CONTRASTS

Criticism has been aroused in America over the siting of the proposed Smithsonian Gallery of Art, Washington. If it is built in the Mall as designed, the city will possess a most singular study in architectural contrasts. There are two reasons for this singularity. First, the new building, a slick example of modernism, will face the newly finished National Gallery of Art, a perfect representation of neo-classical design in the Grand Manner. Secondly, the two buildings so strikingly dissimilar in their outward expressions make two quite different

approaches to the same problem—the design of an art gallery. The National Gallery of Art was illustrated in the Journal for June 5 last under the title, *Flashback*. "The Journal believes (said the Journal) that this building will very soon take a prominent place in the history of architecture: it believes that it will within a decade be regarded as the apotheosis, and the end, of an architectural outlook and endeavour which has had immense influence in this country, as in the U.S.A., for nearly 75 years. It believes that the architects of both

countries will realize that along this road one can go no farther. The National Gallery of Art represents perfection in neo-classical design in the Grand Manner, so far as an ideal site, unlimited money, the highest possible skill and unlimited care by some of the best craftsmen in the world, can achieve perfection. Its plan in balance, axis and vista is the perfect Beaux Arts plan; its external massing has the

*The National Gallery of Art, Washington, and the Smithsonian Gallery of Art, which will face it.*

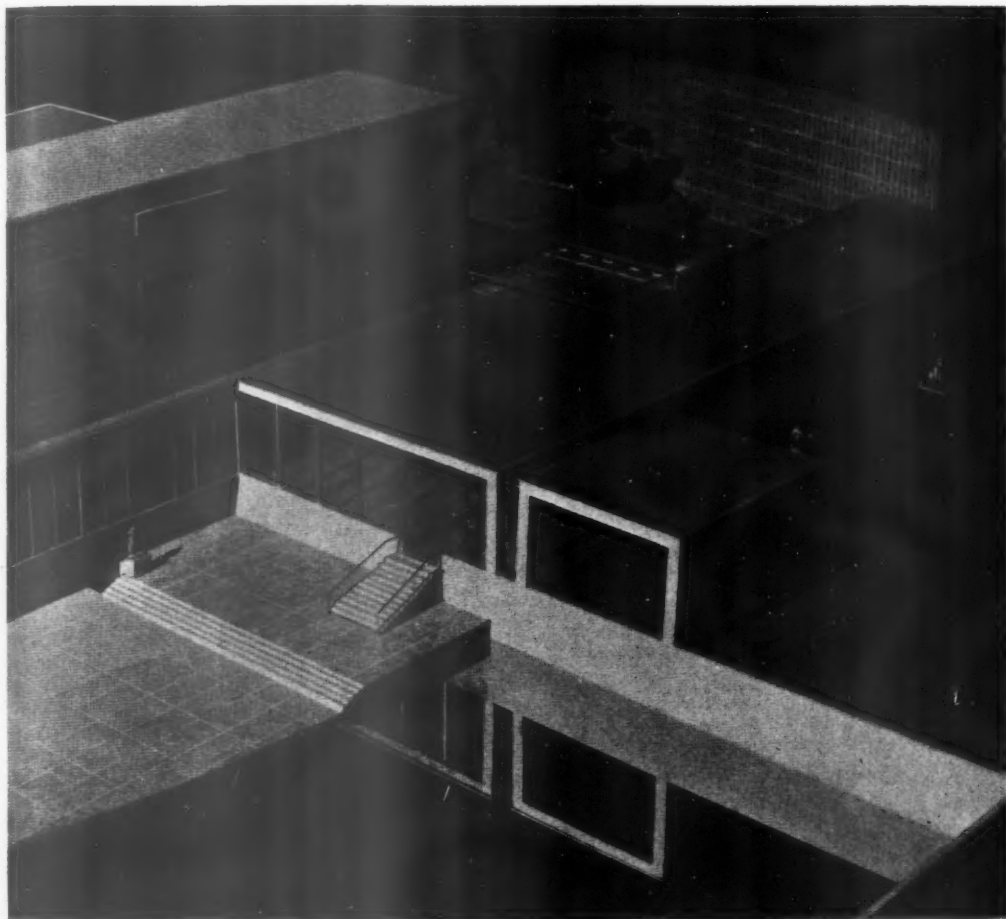


*DESIGNED BY  
JOHN RUSSELL POPE.  
ASSOCIATE ARCHITECTS:  
OTTO R. EGGERS AND  
DANIEL PAUL HIGGINS*



GALLERY OF ART, WASHINGTON

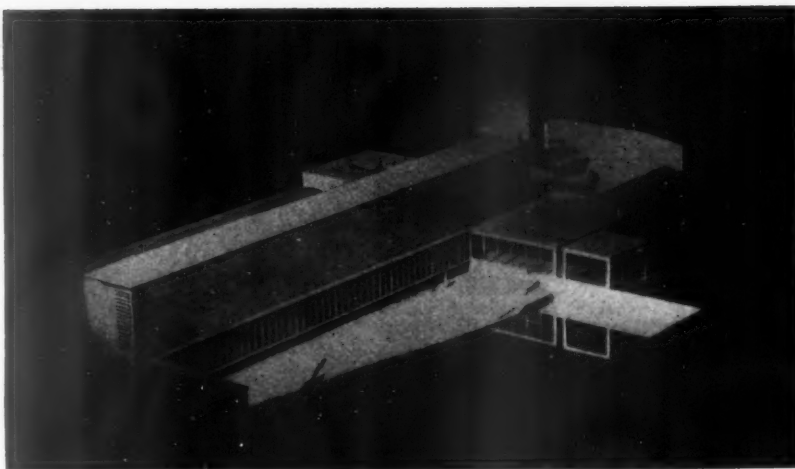




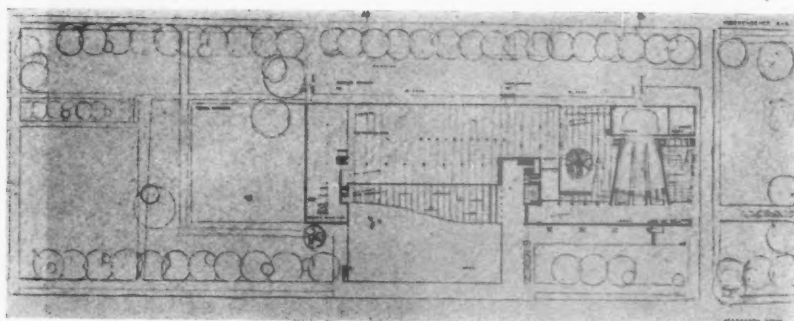
subordination and symmetry of neo-classicism at its best; its detail—as might be expected—is superb. To British architects, in the midst of war building problems, the National Gallery cannot but have an appearance of fantasy. They will be glad that it has been

*Facing page, main entrance to the National Gallery of Art; above, model of main entrance to pavilion to Smithsonian Gallery of Art; right, general view of Smithsonian.*

DESIGNED BY ELIEL  
AND EERO SAARINEN  
AND J. R. F. SWANSON



GALLERY OF ART, WASHINGTON



DESIGNED BY  
JOHN RUSSELL POPE.

ASSOCIATE  
ARCHITECTS:  
OTTO R. EGGERS AND  
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GALLERY OF ART, WASHINGTON

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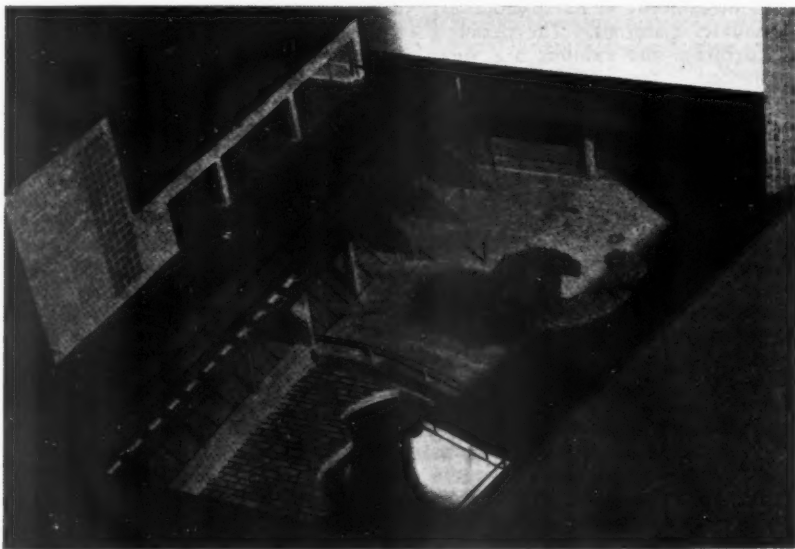
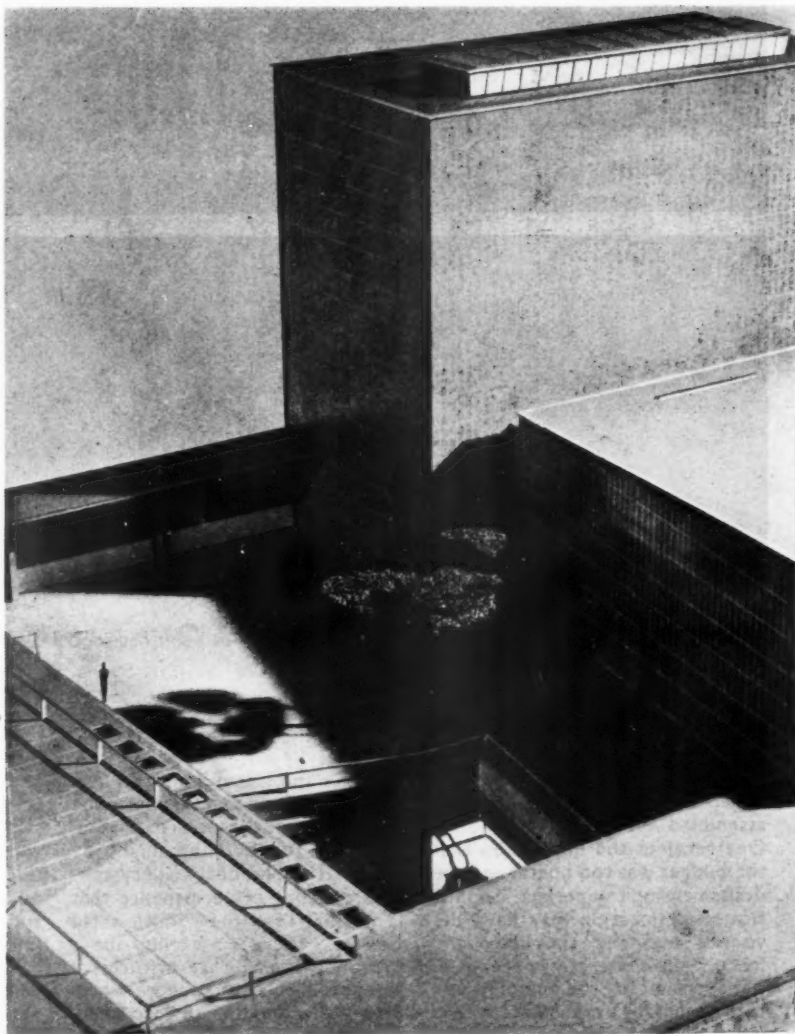
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built, glad that it is America that has built it. But they will feel that in achieving the *ne plus ultra* of Neo-classicism, the National Gallery has also achieved contemporary architecture's greatest flashback". This is the building the new Smithsonian Gallery will face in the great Mall which extends from the Capitol to the Washington Monument and the Lincoln Memorial. It is no matter for wonder, therefore, that the two buildings should have excited discussion in America, and that each in turn should be receiving criticism. It would have been a miracle if they had not. Mr. Lorimer Rich, a New York architect, discussing the two Art galleries in "Pencil Points," says: "If you seek the reason for the Smithsonian look across the Mall at the National Gallery; the National Gallery is impressive. Here is a marble building nearly eight hundred feet long, as long as the Capitol. It stands in a superb setting. The cornices and columns are all in accordance with the best classical precedent. The composition and mass are good. The workmanship and materials are of the best. The building conforms to accepted standards of design of the past 50 years and yet it does not seem alive, vital and organic. It is a panorama of pilasters, double pilasters, breaks, panels, blank windows and belt

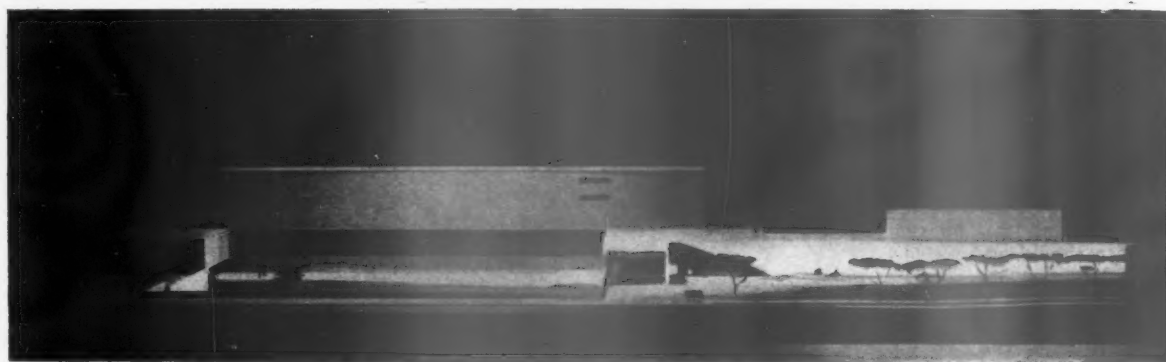


Facing page, detail of the return of the National Gallery of Art to the east of the main entrance, and ground plan of Smithsonian; below, west side of auditorium and stage of Smithsonian; right, view of stage across sculpture court (top) and the sculpture court.

DESIGNED BY ELIEL  
AND EERO SAARINEN  
AND J. R. F. SWANSON



GALLERY OF ART, WASHINGTON



Top, Mall front, National Gallery of Art, design as published in 1937. Bottom, Mall front of Smithsonian.

courses. Most of the vocabulary of neo-classic architecture has been assembled on this one building. One receives the impression that the budget was too liberal and the draftsmanship too perfect. Sophisticated delineation may have devoured intended simplicity and force. How else can one explain a main angle of the building and cornice making five separate breaks in turning its corner. The interior is magnificent in its spaciousness and its materials. The detail is correct; the exhibits are well-lighted. Yet the same lifeless feeling that impresses you about the exterior has somehow invaded the interior. To compare a completed building with one that exists only in model and drawing is difficult. The proposed Smithsonian Gallery is totally unlike any other public building on the Mall. It bespeaks efficiency—streamlined, speedy handling of people. The National Gallery seems to have sacrificed functional merit in order to attain a desired effect. The Smithsonian Gallery has a fine plan and a carefully studied juxtaposition of units which is expected to serve the needs of its visitors in the most simple and tireless manner. Unity of composition has been sacrificed

and the individual units do not seem to be knit together into one strong simple structure. You feel that the building might fly apart. The National Gallery conveys a feeling of permanence that is lacking in the Smithsonian Gallery. There is a fragility about the Smithsonian that disturbs, a thinness in the design which causes the building to lose effectiveness when viewed in comparison with the National Gallery. I do not know why it is necessary for the open entrance porch of the Smithsonian to seem to hang to the main building by a glass strip. I should like to see the porch attached to the main structure in a more permanent manner. The same criticism might be made for the link between the auditorium and the stage box. There is a nervous assemblage of units that seem to indicate uncertainty. The composition needs a master stroke to bind it into a permanent mass. It is interesting to speculate whether the architect of the Smithsonian would have produced this design without the stimulus of the particular competition for which the design was produced. It is possible that without such a set of conditions a middle ground solution might have been attained

and it might have been satisfactory to more people. Public buildings stand for years and they must look well and wear well over a considerable period of time. A building that is too stylish is dated and may soon seem out of style. I like public architectural progress in less violent form. Perhaps that is impossible. If so, I am content with the Smithsonian rather than the static quality of the recent neo-classic buildings. The future of a strong, courageous American architecture seems to lie in the direction of the Smithsonian rather than in that of the National Gallery. We hear some doubts expressed about the appearance of the Smithsonian on the Mall; and its ability to take a harmonious position in the architectural wall which backs up the rows of elm trees. To my mind no single building can menace the Mall composition. This composition is really the splendid rows of trees—four deep—which will gradually attain a height of eighty or more feet. Individual buildings, no matter what their design, are powerless to menace this tremendous conception."

The illustrations of the model of the Smithsonian are reproduced from "Pencil Points."

GALLERY OF ART, WASHINGTON



## SOME QUESTIONS ANSWERED THIS WEEK:

★ *IS a person not registered as an architect allowed to describe himself as a Decorative Architect?* - Q 827

★ *WHAT steps should be taken to secure deferment of military service of an employee who is fully engaged on work of National importance?* - Q 829

★ *CAN a building licence be obtained for first aid repairs costing over £100 to property of private persons?* - - - - - Q 830

## THE ARCHITECTS' JOURNAL

## INFORMATION CENTRE

THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry.

Enquirers do not have to wait for an answer 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—

THE ARCHITECTS' JOURNAL  
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 826

ARCHITECTS, LONDON.—We have been asked by a client about some defective plastering carried out on partitions under the following conditions. From what we can see the partitions were constructed with expanding metal nailed to timber battens and finished with plaster. The UNDER COAT of CEMENT MORTAR has now CRACKED to a great extent and the finishing coat of hydrated lime and putty has scaled off from the under coat. Can you tell me the cause of the trouble and if there is any objection to replastering in lime plaster.

Plaster may fail for many reasons such as incorrect mix, bad workmanship (insufficient key) etc., but there is nothing wrong with hydrated lime and putty on a backing of cement and sand. As the finishing coat has scaled off, it seems probable that the backing coat was not sufficiently scratched and that the key was inadequate.

There is no objection to replastering in lime plaster; it would be advisable to render and float in haired lime coarse stuff, gauged with Portland cement in the proportions of one part by volume of cement to eight parts of coarse stuff, set in lime putty.

Dry hydrated limes have certain advantages including the fact that they require no slaking but merely soaking for a short time. If you decide to use a hydrated lime, you would be advised to use a well-known brand such as Hydralime or Calime, strictly in accordance with the manufacturers' instructions, and on the backing coats advised by them:—

*Hydralime.*—The British Portland Cement Manufacturers Ltd., Club House, Coombe Hill, Kingston, Surrey.

*Calime.*—The Callow Rock Lime Co. Ltd., 4, Lloyds Avenue, London, E.C.3.

## Q 827

ENQUIRER, LONDON.—*Is a person not registered as an architect allowed to describe himself as a DECORATIVE ARCHITECT?*

The only architects who are not required to register are Naval, Landscape and Golf Course architects.

## Q 828

ENQUIRER, DORSET.—*With the following short experience which I have gained, prior to my enlistment, what chances have I of obtaining EMPLOYMENT AS A DRAUGHTSMAN, in a position where I can obtain plenty of experience and opportunities for promotion, when I leave the Service AFTER THE WAR is over.*

*I was employed as a boy trainee in a W.D. drawing office in Malta for about two years, during which time I also began a course of instruction under the International Correspondence Schools, eventually enabling me to become a probationer R.I.B.A.*

*The experience I gained during this apprenticeship consisted of a fair knowledge of the local methods of building and a neat hand at drawing and tracing.*

*I was employed in England by the W.D. after obtaining a transfer from the Malta office for about one year before enlisting; I never gained much experience here, unfortunately, as I was mostly employed in tracing. I have had to rely chiefly on my I.C.S. course to improve my knowledge on Architecture and Building.*

In view of the cessation of all normal building work during the war, the repairs and rebuilding necessitated by war damage, and the fact that numbers of would-be architectural students have had their studies forcibly interrupted, we think there can be little doubt that there will be a very good opportunity for architectural assistants after the war. Naturally, training counts a great deal, but if there is a shortage of trained assistants, un-

trained or partly trained assistants should have the opportunity of progressing rapidly.

## Q 829

ENQUIRER, LONDON.—*What steps should I take to secure the DEFERMENT OF MILITARY SERVICE for one of my employees who is fully engaged on work of National importance.*

You should first attempt to find a substitute from the Central Register.

Assuming that your employee has not received an enlistment notice, you should make an application for deferment, in duplicate, on Form N.S. 100, obtainable from the local office of the Ministry of Labour. The forms should be sent (in your case) to the Royal Institute of British Architects.

If by any chance your employee has already received his enlistment notice, you should apply not for deferment, but for release. The appropriate form in this case is Form N.S. 183, obtainable from the Ministry of Works and Buildings, which should be sent, as before, to your Institute.

## Q 830

ENQUIRER, SURREY.—*Can you let me know briefly what the position is as regards a BUILDING LICENCE. I understand that it is not permissible to undertake work costing more than £100, without a licence, but I am not clear how this affects first aid repairs and repairs of war damage generally. The property I have in mind is for a private individual so presumably I could not get a licence.*

According to the "Notes for the Guidance of Applicants" issued by the Ministry of Works and Buildings, consent is required for the "Construction, reconstruction or alteration of a building . . ." except where the cost does not exceed £100. "Consent" will take the form of a licence in the case of a building for a private individual.

It is sometimes difficult to distinguish between first-aid repairs and reconstruction, but we understand that first-aid repairs will not be regarded as "reconstruction" where they are genuine first-aid repairs, carried out for safety or in order to minimise further damage from weather, etc. All other repairs costing more than £100 (except maintenance work) would almost certainly be regarded as "reconstruction." Whether or not the work was occasioned by war damage has no bearing on the matter.

As the penalties for failure to apply for consent are heavy, we would advise you to write, if in doubt, to the Authority for your district, namely, the Licensing Officer, Ministry of Works and Buildings, Abell House, John Islip Street, London, S.W.1. (Tel.: VICTORIA 4422).

## Q 831

ENQUIRER, BUCKS.—*What size should a CONCRETE BASE be TO TAKE A DIESEL ENGINE which has dynamo direct drive. The whole is mounted on an iron base 4 ft. by 23 ft. and the total weight about 30 cwt. The foundations are of good chalk. Would you recommend a thick base or a thin one reinforced?*

Good hard chalk is able to withstand safely a load of about 4 tons per sq. ft. It is obvious, therefore, that the ground is well able to bear the weight of the engine and dynamo plus the weight of any normal concrete bed.

If, as in this case, the ground is able to bear the weight of the machine and its bed the only object of the concrete is to provide a method of fixing and to eliminate vibration; for this purpose sheer weight is more important than area.

We should only recommend reinforcing the concrete in cases where the weight of a machine is excessive and in consequence the weight has to be spread over a larger area of ground than is occupied by the machine itself.

## REFERENCE BACK

[This section deals with previous questions and answers.]

## Q 783

In answer to this enquiry we stated that Woolgrease Emulsion paints were the most suitable for painting on asphalt surfaces. We are indebted to Messrs. Colas Products, Ltd., for pointing out that the cause of the cracking is the contraction of the gel formed by protein matter in the paint as the latter dries, and that nearly all reputable brands of bituminous emulsion camouflage paints contain a very small percentage of protein and other ingredients detrimental to asphalt. We agree with Messrs. Colas Products, Ltd., that bituminous emulsion camouflage paints made by a reliable firm are nearly always found to be satisfactory and may add that a new Standard Specification is being drafted which will limit the percentage of protein and other detrimental ingredients in such paints.

**BANK OF ENGLAND**

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**BITUMINOUS ROOFING FELTS**

The War Emergency British Standard Specification, B.S. No. 989 bituminous roofing felts and specification for roofing, has been prepared at the request of the Ministry of Works and Buildings, and is based under their authority. The specification comprises three parts, Part 1 is a classification of felts and represents the decision which was arrived at by the Director of Roofing of the Ministry of Works and Buildings, and the manufacturers, as to the range of roofing felts which should be manufactured at the present time.

Part 2 is a detailed specification of the felts covered by the classification and Part 3 is a specification for the laying of the felts. Broadly the methods of laying have been considered in relation to sloping roofs and flat roofs, two methods being specified for the former and three for the latter. Copies of this specification may be obtained from the British Standards Institution, 28, Victoria Street, London, S.W.1. Price 2s. 3d. post free.

**R.A.F. BUILDING TRADE STUDIES**

Discarded copies of building construction, text books, preliminary stages preferable, are wanted urgently by the R.I.B.A. They are required for R.A.F. personnel undergoing voluntary study in the various building trades during the coming winter. The trades involved are carpenter, brick-

layer, drainlayer, concretor, steelerecor and electrician. Books such as Mitchell's Building Construction, and Rivingtons, would be welcomed. Please send to the Secretary, R.I.B.A., 66, Portland Place, London, W.1.

**MINISTRY OF HEALTH APPOINTMENT**

The Minister of Health has selected Mr. F. R. Hiorns, F.R.I.B.A., to take the place of the late Sir Raymond Unwin on the Town and Country Planning Advisory Committee of the Ministry of Health.

**N.F.B.T.E. ADMINISTRATION CHANGES**

The National Federation of Building Trades Employers has re-classified the duties of the administration. Sir Jonah Walker-Smith, M.P., is director and administrative head.

The officials who have hitherto acted as joint secretaries have been appointed to the following offices:—Chief administrative official on commercial and financial matters, Mr. Norman H. Walls (deputy, Mr. H. A. Close); chief administrative official on industrial matters, Mr. I. Ernest Jones, M.A., B.Sc. (deputy, Mr. C. G. Rowlands).

Mr. Howard A. Close, M.A., solicitor, has been appointed contracts and legal adviser,

and Mr. C. Gordon Rowlands, M.A., has been appointed secretary.

All official correspondence for the Federation should be addressed to the Secretary, National Federation of Building Trades Employers, 82 New Cavendish Street, London, W.1.

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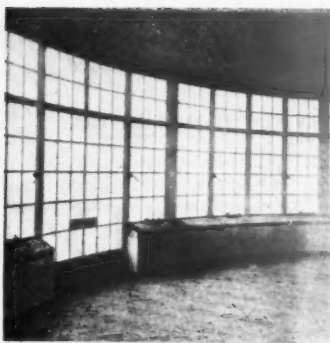
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