Alphabetical Index to Advertisers

For Appointments (Wanted or Vacant), Competitions Open, Drawings Tracings, etc., Educational, Legal Notices, Miscellaneous Property and Land Sales—*see* pages xxxi and xxxii.

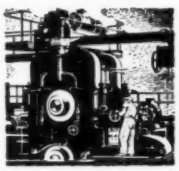
VULCAN'S FORGE. In the classical mythology Vulcan, or Hephæstus, was not merely a deified blacksmith. Though, unlike the other divinities he was ugly and deformed, he was venerated as the God of Fire in its beneficial aspects, who presided over all workmanship accomplished by means of fire, the god of all the mechanical arts as well as the presiding genius of the art of working in metals.

Although Imperial Chemical Industries are, as the name implies, primarily concerned with the production of chemicals, they have a close interest in the art of working in metals, though only in what are known as the non-ferrous metals.

Indeed, I.C.I. (Metals) Ltd. are the largest producers of wrought copper and brass in the British Empire and one of the largest in the world. They are also important producers of the wrought aluminium alloys so largely used in aircraft construction.

The uses of these products are manifold. They enter into almost all sections of the constructional and engineering trades, and range from copper conduits for electrical wiring to boiler plates for locomotives and condenser tubes for the great ocean-going liners and ships of war. Among the many famous vessels whose condensers are fitted with I.C.I. tubes are the "Queen Elizabeth" and the "Queen Mary." Today, although the wide and varied production of I.C.I. (Metals) Ltd. must be devoted entirely to war purposes, research into peace-time problems still goes on.

Just as Vulcan not only built and furnished metal palaces of great beauty for the gods, but also forged the terrible thunderbolts for his father Jupiter to hurl, so the products of I.C.I. (Metals) Ltd. are indispensable both to the comfort and convenience of the nation in time of peace and to its defence in time of war.



ICI *Imperial Chemical Industries Limited* LONDON, S.W

A precious fragment of England

...BUT HOW NOISY!

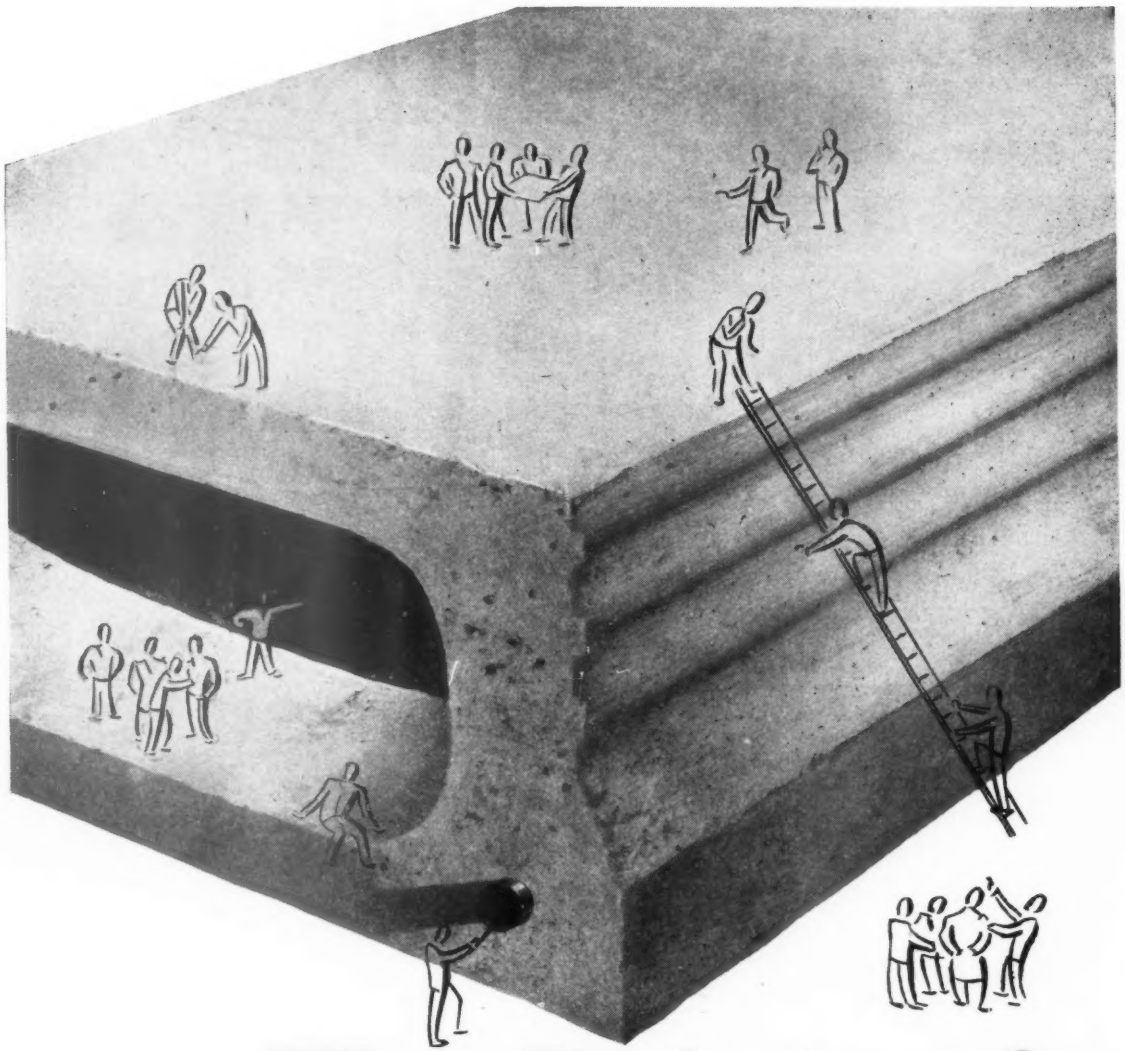
In the 1720's it was built . . . the sumptuous country seat of some munificent Whig . . . today, a great public school. Kent planned its collonades . . . Horace Walpole knew it . . . Pitt, Peel, Palmerston came here often . . . history has been made beneath those gilded ceilings. Much that is precious, much that is unique in English annals is here enshrined . . . but, with the full complement of 500 boys, it is really excessively noisy, and in the vast hall the Headmaster's voice is often drowned in its own echoes. To correct classrooms acoustically, to absorb reverberation in corridors, to restore a gentle quietness, and to do all without the introduction of a single architectural discord —such is the function of Acousti-Celotex in this fine old building.

Experience with a vast range of subjects is embodied in the "Blue Book," Celotex' 80-page text book of Sound Reduction. Published December, 1940. Have you had your copy? It is available by writing to:
Celotex Limited, North Circular Rd., London, N.W.10

ACOUSTI-CELOTEX
MADE IN ENGLAND

REGIONAL DISTRIBUTORS: HORACE W. CULLUM & CO. LTD., CONNAUGHT GDNS., MUSWELL HILL, N.10—SOUTH OF CHESHIRE & YORKSHIRE • WM. BEARDMORE & CO. LTD., GLASGOW—NORTH OF THE CHESHIRE SOUTHERN BORDER, EXCLUDING YORKS. • J. H. BEAN & CO. LTD., 22, BASINGHALL ST., LEEDS, 1—COUNTY OF YORKSHIRE

ACX/3:6

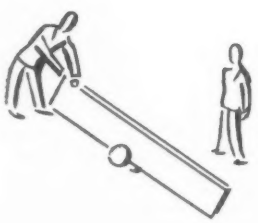


The Points of a BISON FLOOR

BISON FLOORS
SPEED AND STRENGTH

- Scientifically mixed ★ vibrated concrete is used for making the Bison Precast Units
- The reinforcement is welded.
- The units are complete with soffit as you can see, ready for plaster.
- Due to the vibrating system, the soffit is ready to receive paint or lime-whitening.
- The cavity economises weight. This is reflected in lighter structural steel and lower transport costs without any sacrifice of strength.
- Delivery is made whenever and wherever you require from the most convenient of five main distributing centres in different parts of the country.

★ *Owing to the large demands of Government contracts, part of our output is now made by ordinary methods. Any contract can be executed with wholly vibrated concrete and welded reinforcement by arrangement.*



CONCRETE LIMITED

REINFORCED CONCRETE ENGINEERS

Green Lane, Hounslow West, Middlesex HOUnslow 0172

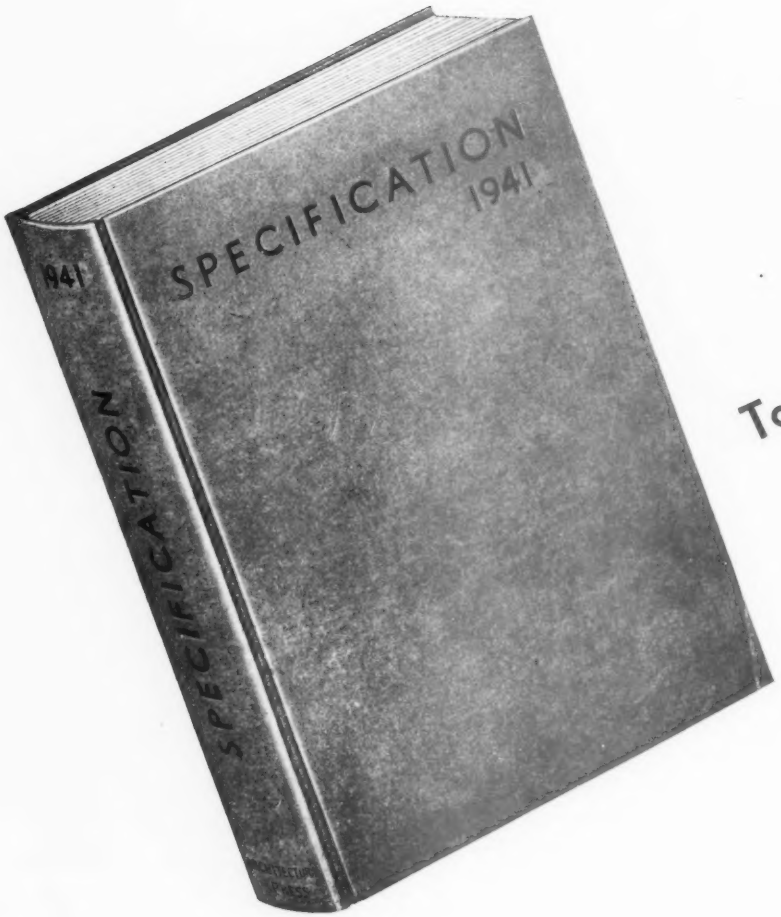
STOURTON, LEEDS 10 Hunslet 75421

Works at: HOUNSLOW, CIRENCESTER, BIRMINGHAM, LEEDS & FALKIRK

SPECIFICATION

1941.

Edited by F. R. S. Yorke, A.R.I.B.A.



To be published shortly.

For Architects, Surveyors and all those engaged on Building and Public Works.

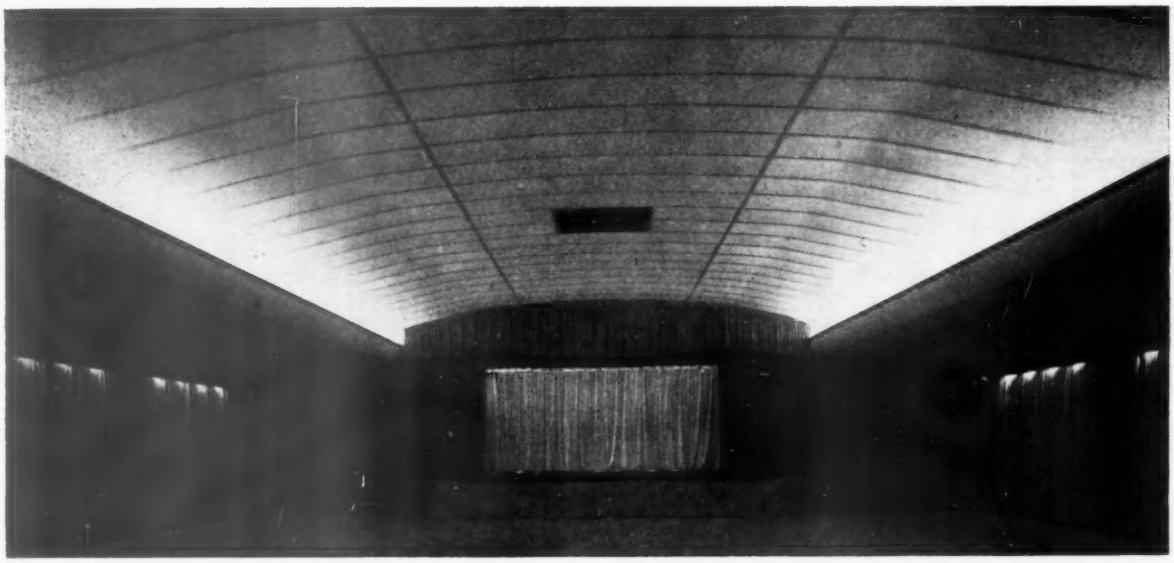
"Specification" contains the latest information on building materials, proprietary materials and methods of constructions, and forms a complete and authoritative guide to the selection of materials, specifying and specification writing. The new volume contains about 600 illustrated pages. **Price 10s. 6d.** Postage 1s. inland, 2s. 2d. abroad.

BOOK SECTIONS

A.R.P. • ASPHALTER • BRICKLAYER BUILDING EQUIPMENT CARPENTER AND JOINER CONCRETE • DEMOLITION, EXCAVATION AND FOUNDATIONS • DRAINLAYER • ELECTRICAL ENGINEER • FIRE-RESISTING CONSTRUCTOR • FLOORS • GLASS AND GLAZING • HEATING AND VENTILATING ENGINEER • INSULATED CONSTRUCTION • IRONMONGER MASON • METAL WORKER • METAL WINDOWS • PAINTER AND DECORATOR • PLASTERER • PLUMBER, SANITARY ENGINEER AND WATER SUPPLY • ROADS AND FOOTWAYS ROOFER • TERRA-COTTA, FAIENCE AND GLAZED WALL TILING

THE ARCHITECTURAL PRESS 45 The Avenue - Cheam - Surrey.

SPECIALISED CONSTRUCTION SUSPENDED CEILINGS



Architect : Raglan Squire, A.R.I.B.A., London

SPRING CLIP FIXING

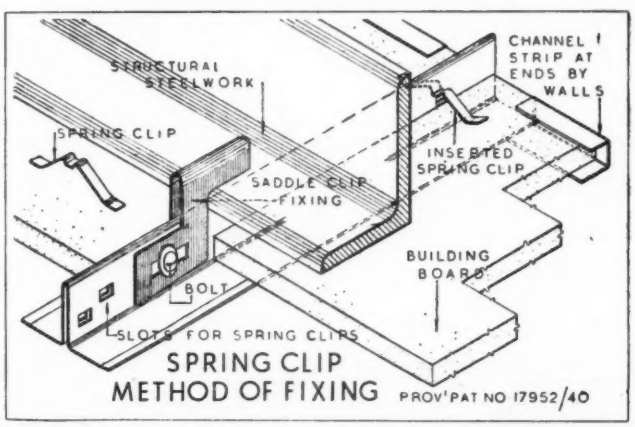
The Canteen for The Airscrew Company Ltd., offers a fine example of the accommodation being provided for the well-being of factory workers throughout the country, in the speedy provision of which Specialised Construction is playing its part.

We illustrate the main hall and a corner of the bar where ceilings are of Tentest fixed by the Spring Clip method (illustrated below). This construction provides in one operation and in minimum time, lightweight ceiling structure, acoustic control, low thermal transmission and a decorative finish without the expense or delay of applied decoration at site.

At short notice we can supply and fix, by this or other Specialised methods, ceilings and linings of any available sheet material.

We cordially invite your enquiries. Whatever your lining problem Specialised Construction has a solution.

CONSULT "SPECIALISED CONSTRUCTION"



SPRING CLIP METHOD OF FIXING PROV'PAT NO 17952/40

TENTEST FIBRE BOARD CO. LTD., 75 CRESCENT WEST, HADLEY WOOD, BARNET, HERTS.

Telephone : BARnet 5501 (5 lines) Telegrams : Fiboard, 'Phone, London

Books on the Planning of Modern Buildings

TOWN HALLS By A. Calveley Cotton, A.R.I.B.A.

Under the collective title of "Town Halls" the author includes the Departments usually incorporated in a municipal centre—Municipal Buildings, Assembly Hall and Law Courts, and examines in detail the planning problems associated with each. In the chapters on departmental layout the views, both of Councillors and permanent officials, are summarized concerning the merits of different arrangements. Six recently built Town Hall schemes—Slough, Worthing, Hornsey, Beckenham, Southampton and Swansea—are fully illustrated by plans, sections and axonometric projections, and have been specially drawn to be easily read. About 40 other town hall plans are included, as well as details of various plan units. Price 6s. Postage 7d.

SMALLER RETAIL SHOPS By Bryan and Norman Westwood

This is the second book to be published in *The Planning of Modern Buildings Series*, which is considering the planning, structure and equipment of certain specialized types of buildings.

The text is sectionized under various headings such as: The Various Problems—Sites and Sales Values—Sites in Detail—Elements of the Plan—Windows—Blinds—Signs—Pavements—Lights, etc.; and is fully illustrated by photographs and plans, while a large number of detail drawings are included. In addition, grouped together at the end of the book, there are 35 pages of illustrations of specially selected shop-fronts, interiors, plans and detail drawings of shops at home and abroad, with descriptive matter. Size: 12½ ins. by 9 ins. Price 10s. 6d. Postage 7d. Abroad 1s.

THE DESIGN OF NURSERY AND ELEMENTARY SCHOOLS.

By H. Myles Wright, M.A., A.R.I.B.A., and R. Gardner-Medwin, B.Arch., A.R.I.B.A.

The new educational policy of which the framework was laid down by the Hadow Report is slowly being put into practice by education authorities throughout the country. With larger grants being made available, it is probable that the pace of re-organization will improve; but the greatest obstacle will still remain the changes in school buildings and their surroundings which the new policy requires. Of these changes the largest are: new Nursery Schools, separate Infant, Junior and Senior Schools; larger sites and looser groupings; and higher standards of equipment.

This book is concerned solely with such problems. It considers Nursery Schools and Classes, Junior and Senior Schools. Dimensions and layouts are suggested for each element in the school plan; the various alternative groupings of the plan units are discussed, and a large number of complete school schemes carried out in this country and abroad are illustrated. No such survey of contemporary school buildings exists at present in this country. The book contains 128 pages and about 250 photographs and drawings. Size 12½ ins. by 9 ins. Price 10s. 6d. Postage 7d. inland.

The principal contents of these books originally appeared in "The Architects' Journal."

Published by THE ARCHITECTURAL PRESS, 45 The Avenue, Cheam, Surrey

BUT—THE GLASS WAS ONLY CRACKED

Georgian Wired Glass stays put in frames 15 feet from blitzed building

This photograph was taken from inside some burned-out premises which adjoined a building glazed with Georgian Wired Glass in metal frames. Although a distance of 10 to 15 feet separated the two buildings the Wired Glass, although cracked, remained intact in the window frames.

THE WAR GLASSES

Wired Glass is one of the war glasses with special powers of resistance. There are also other glasses and glass units which can give extra strength and excellent service in war-time structural work; and here are some facts about their properties:—

1. "ARMOURPLATE" GLASS

"ARMOURPLATE" Glass has special powers of resistance to shock and impact, and to high temperatures. It is produced in thicknesses ranging from $\frac{1}{4}$ in. to $1\frac{1}{2}$ in. Its resistance to severe impact is five to six times that of ordinary Polished Plate Glass of the same thickness. When broken, this glass disintegrates into innumerable fragments neither large nor sharp enough to cause serious injury. It does not splinter, and possesses to the full the transparency, lustre, and flatness of ordinary Polished Plate Glass. In connection with official tests with 500-1,000 lb. bombs bursting at distances of 50 ft. or more, A.R.P. Handbook No. 5 "Structural Defence," states, "$\frac{1}{4}$-in. toughened glass,* solid or hollow building lenses or glass bricks set in concrete frames are highly resistant to blast."

2. "ARMOURLIGHT" LENSES

Toughened Lenses have been specially manufactured for fixing into concrete, and provide approximately twenty times greater resistance to impact than a similar lens in ordinary annealed glass. Official tests have proved that they are highly resistant to blast pressure. In addition, they provide full protection against an incendiary bomb burning on the surface of the lens.

3. INSULIGHT GLASS BRICKS

These are hollow glass units made in two halves and sealed together, and are designed for use in vertical walls. Glass bricks are laid in the same way as ordinary bricks, but being a non-load-bearing unit they should be regarded as a panel within a structure. Recent bombing has shown that they are highly resistant to blast pressure, and, as a result of a test at the Building Research Station Fire Testing Station they have been classified Grade D under the conditions of the British Standard definitions No. 476, as a fire-resisting building material.

4. WIRED GLASS

This is a well-known type of glass, but its efficiency, especially in war-time, is not perhaps fully appreciated. There have been certain references in A.R.P. publications on the effectiveness of wire netting placed over windows as a measure of protection, but in wired glass the wire netting is actually embedded and firmly fused into the middle of the glass itself. In the former case it is highly probable the blast will break the glass, the fragments become dislodged, and the wire netting *may* remain in the aperture; the aperture itself, however, will be left fully open to the weather.

Wire reinforced glass, on the other hand, is highly resistant to blast pressure, and although the glass may be cracked, the wire holds it together as a complete panel and, except in cases of extreme severity, remains in the window opening. Extracts from Government publications state:—

A.R.P. Handbook No. 5—"Structural Defence," page 56:

Glass reinforced internally with wire netting offers considerable resistance to blast.

A.R.P. "War-time Lighting Restrictions for Industrial and Commercial Premises," page 9:

If glass is essential, the substitution of plain glass by wired glass should be considered, especially when repairs are being made in the ordinary course.

War-time Building Bulletin No. 1—"Treatment of Windows," page 4:

. . . . It should be noted that it is considered desirable to use Wired Glass whenever possible, since this has been found, by experiment, to offer high resistance to blast from a nearby high-explosive bomb.

A.R.P. Memo. No. 12—"Aims in Window Protection":

Assuming that glass is likely to be broken, window protection should be devised:—

(*a*) to prevent damage from flying pieces of glass
(*b*) to exclude weather (wind and rain)
(*c*) to act as obscuration in certain cases.

Wired Glass will provide (*a*) and (*b*). When used in conjunction with shutters it will also provide (*c*) inasmuch as the glass remains in the frame even though cracked, thus permitting the shutters still to be used during black-out hours with natural light still available in the daytime.

Wire reinforced glass is a fire retardative and will prevent the spread of fire. It has been approved by the British Fire Prevention Committee's standards—Specification B. The London County Council has approved its use as a fire-resisting material.

A department for Technical Problems

This advertisement is issued by Pilkington Brothers Ltd. Our Technical Department, at St. Helens, Lancashire, is always available for consultation on the use of glass under present conditions, in A.R.P. work, and in any form of structural work.

* *The toughened glass referred to is* "ARMOURPLATE."

THE ARCHITECTS' JOURNAL

THE ARCHITECTS' JOURNAL
WITH WHICH IS INCORPORATED THE BUILDERS' JOURNAL AND THE ARCHITECTURAL ENGINEER IS PUBLISHED EVERY THURSDAY BY THE ARCHITECTURAL PRESS (PUBLISHERS OF THE ARCHITECTS' JOURNAL, THE ARCHITECTURAL REVIEW, SPECIFICATION, AND WHO'S WHO IN ARCHITECTURE) FROM 45 THE AVENUE, CHEAM, SURREY

*

THE ANNUAL SUBSCRIPTION RATES ARE AS FOLLOWS:
BY POST IN THE UNITED KINGDOM... £1 3 10
BY POST TO CANADA £1 3 10
BY POST ELSEWHERE ABROAD £1 8 6
SPECIAL COMBINED RATE FOR SUBSCRIBERS TAKING BOTH THE ARCHITECTURAL REVIEW AND THE ARCHITECTS' JOURNAL: INLAND £2 6s.; ABROAD £2 10s.
SUBSCRIPTIONS MAY BE BOOKED AT ALL NEWSAGENTS

*

SINGLE COPIES, SIXPENCE; POST FREE, EIGHTPENCE. SPECIAL NUMBERS ARE INCLUDED IN SUBSCRIPTION; SINGLE COPIES, ONE SHILLING; POST FREE, 1s. 3D. BACK NUMBERS MORE THAN TWELVE MONTHS OLD (WHEN AVAILABLE), DOUBLE PRICE.

*

SUBSCRIBERS CAN HAVE THEIR VOLUMES BOUND COMPLETE WITH INDEX, IN CLOTH CASES, AT A COST OF 10S. EACH. CARRIAGE 1S. EXTRA

*

45 *The Avenue, Cheam, Surrey*
TELEPHONE: VIGILANT 0087-9 (3 LINES)

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, MARCH 27, 1941. NUMBER 2409: VOLUME 93

PRINCIPAL CONTENTS

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.*

To obtain your copy of the JOURNAL *you must therefore either place a definite order with your newsagent or send a subscription order to the Publishers.*

NO CONDENSATION

Too good to be true?

Strange as it may seem, it is true. Practical tests which have been carried out by numerous Borough Councils prove that two coats of "Ellicem" Tenacious Cement Coating on the walls and on the underside of a Shelter Roof will obviate condensation and sweating. In the shelter illlustrated above only the roof was treated and although there is a certain amount of condensation and sweating on the walls the roof is perfectly satisfactory and has been ever since the "Ellicem" was applied.

May I send you details and advise on your particular problems, not only as regards sweating and condensation but also waterproofing.

REGD. TRADE MARK

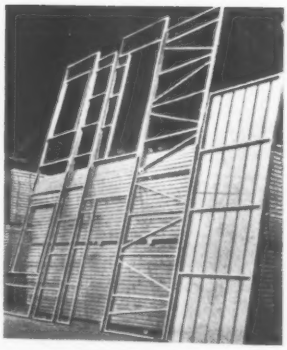
Cecil Kahn

Sole Distributors in Great Britain and Isle of Man:

The Adamite Company Ltd. Head Office: Manfield House, Strand, W.C.2

Temple Bar 6233

Divisional Offices: 42 Deansgate, Manchester, 3; 83 Colmore Row, Birmingham, 3
Stocks also at 49 Reedley Road, Westbury-on-Trym, Bristol, and at Newcastle on-Tyne.



1

2

3

4

5

6

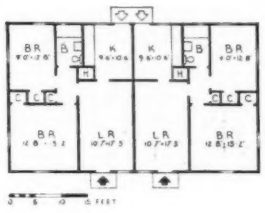
U.S. NAVY'S HOUSING

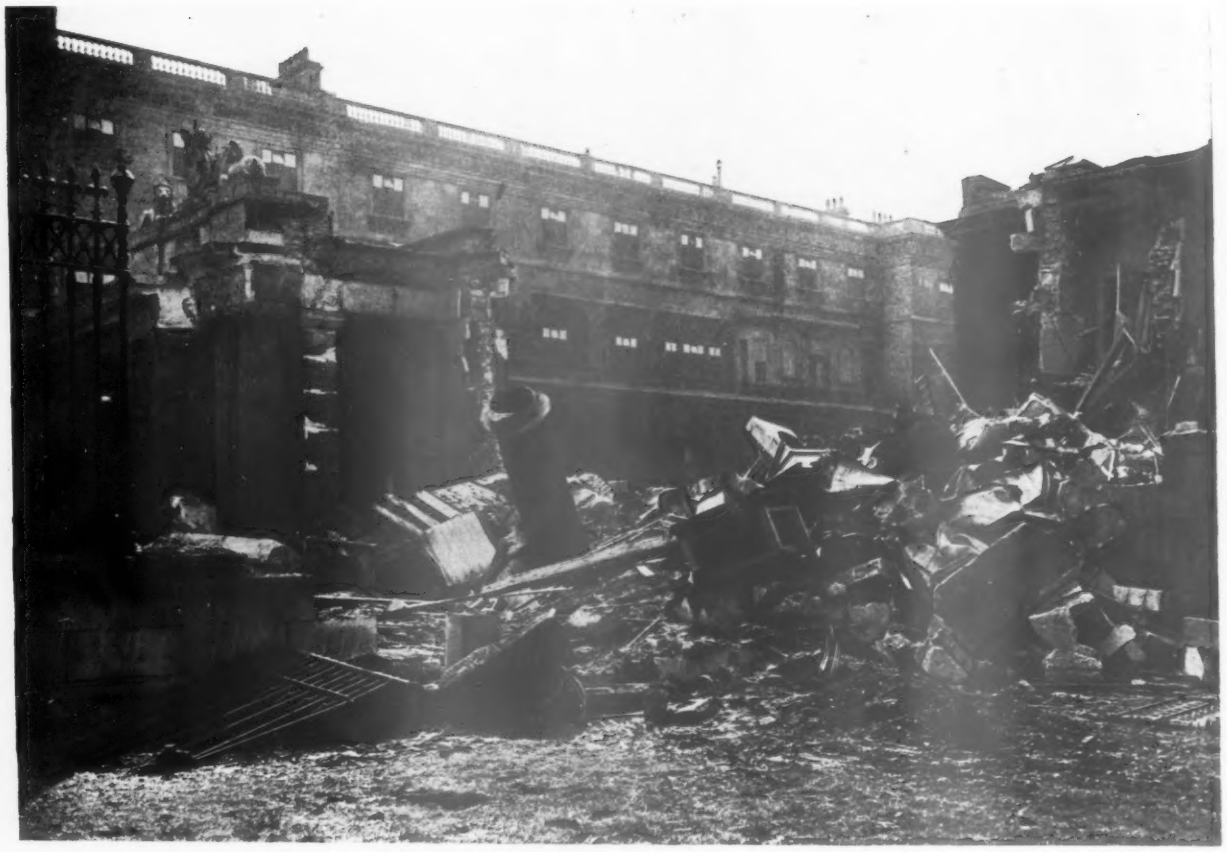
The United States is now carrying out a large war building programme, and the United States Navy has aroused great interest by its success in the use of prefabricated units for its housing requirements. After two and a half months' effective working time it had 43 schemes, containing 23,500 buildings, well advanced in construction, and had completely outstripped the Federal Housing Organizations which were handling the Army's requirements.

This speed was principally obtained by the use of prefabricated steel structural units and dry finishes, and the progress photographs on this page show one of the typical structural systems used.

1. *Light steel-framing members in the factory. Units are coated with zinc-oxide and stoved before leaving the factory.* **2.** *Wall-framing sections being erected on the reinforced concrete plinth.* **3.** *Galvanized sheet steel roof panels being fixed.* **4.** *Roof and framing completed.* **5.** *Black insulating board sheets are clipped over the framing and finished with grey asbestos shingles. Windows are covered and later cut out with an electric saw. Internal finish is wall board tacked to wood strips in the framing sections.* **6.** *Part of one of the Navy schemes nearing completion.*

The United States Navy's high speed in the building of these camps was the subject of a note by Astragal last week. The illustrations are reproduced from "The Architectural Forum."

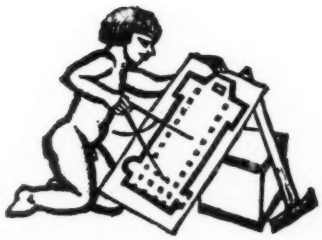




RECENT DAMAGE AT BUCKINGHAM PALACE

For those who still hold to the belief that before this century British architects always built both truthfully and for eternity, it was most unfortunate that the latest bombs to be aimed at Buckingham Palace should have struck some of Nash's work—for Nash was an arch-experimenter with patent materials and novel constructions. In this case the north flanking colonnade, of massy stone to the casual eye, is revealed to be a medley of brick, thin stone slabbing, and cast iron Doric columns. It is even suspected that the stone facing within the colonnade is artificial.

The damaged work formed part of the ever-changing designs which Nash carried out for George IV. between 1825 and 1829 at the cost of over £400,000 spent (and as much again estimated as needed for a completion never reached) and in the face of bitter criticism from the House of Commons. The Palace was altered by Edward Blore for Queen Victoria in 1847, and the most familiar front to the Mall was built at record speed by Sir Aston Webb just before the last war.



RETURN TO WALKING

THE JOURNAL stated last week that in his address to the Royal Society of Arts on future London the President of the R.I.B.A gave the public what they wanted. The bulk of that address dealt with architecture as the *decori urbium* of the R.I.B.A. motto rather than as *usui civium*. For those who wished to read, the President stated clearly enough that a measurably better London could only be obtained if big and tough problems were solved with foresight and magnanimity before ever architects or town planners sat down before sketch pads. But at the moment few people wish to read of the price which must be paid for a better London. *The Times*, for instance, picked out in its report of the address only points of æsthetics and made no mention of location of industry or the need for a London planning authority.

And therefore the JOURNAL recommended that architects should be at pains to make clear in future addresses that the attainment or non-attainment of a better London after the war will depend on decisions which are taken before architects set to work.

With many of these decisions—those of finance and administrative mechanism—architects will have little or nothing to do. But decisions of this kind are the small decisions. The large decisions, the basic aims which a London regional development authority will be charged with carrying out, architects must understand. For the final realization of these aims in buildings and building groups will be accomplished by architects.

In his address Mr. Ansell mentioned two obstacles to a better London which can only be surmounted by the resolute execution of precise policies over a period of years.

First is London's size. For at least five years after the war ends all important industries will have to be helped and guided by the Government. There will therefore be an opportunity, which may not recur for a century, to steer new industries away from London and thus carry out the recommendation of innumerable committees and commissions. Some new industries can be coaxed on to Government trading estates like that at Team Valley, others to new and similar estates around converted ordnance factories. The results of such persuasion, for London and Britain, will be felt slowly. But so were the results of universal education, and no one now denies the worth of that somewhat greater measure.

The second problem is that of haphazard dormitory suburb development. During the twenty years between the wars no single factor caused the inhabitants of the London area more misery and loss of money than this development. It blocked the roads and crowded trains and tubes. It prevented Londoners getting out and strangers coming in. It destroyed local loyalty inside and outside London and supplied none to those who moved because of it. It set down multitudes in houses with a byepass outside the door and half a mile to walk to a shop, without social services or community centres. And for loneliness on the one hand and a heavy price for a season ticket on the other it gave nothing but a rarely used strip of garden.

One of the first aims of a London development authority must surely be to reduce—at all costs—the excessive movement which created the dormitory suburb and was in turn created by it. Rehousing in central areas could be carried out in central areas, and the supposed disadvantages of high flats be countered by more generous social services in their immediate neighbourhood. New housing outside those areas could be so grouped and so provided with shops, schools, recreational facilities and social services that the only movement in or out of them would be that of workers. Housing estates of the 1919-1939 period could, slowly, be given similar shopping and recreational centres in their immediate neighbourhood. Lastly, redistribution of the industries already in the London area could be aimed at reducing the last form of excessive movement—that of workers in and out.

These are only two of the precise aims on really important matters on which plans for a better London must be based. Without such aims the vast roads over and under London, the larger and faster Tubes, of which there is so much talk would merely remove the last rocks in the way of a landslide of perpetual, aimless movement. Because by 1939 science had made it no longer necessary for a man to walk from his home to his work and from work to play and home again is no reason for encouraging him not to do so, still less for spending millions to compel him to put 20 miles between each of them. It would have been better progress to have kept him walking and to have spent the millions on a better home, better workplace and better recreation.

On the realization of these aims and others like them a better London depends: not on vast roads, not even on vistas and colonnades. Architects cannot and should not try to lay down such aims. But they should show that they realize that they must be laid down before the war ends. At present, amidst destruction, architects have the greater influence because their work is constructive. They should be at pains to use that influence well.

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

NOTES & TOPICS

ANOTHER STEP FORWARD

HARD on the heels of the debate in the House of Lords, the House of Commons had its say on war-time building and the principles of reconstruction last week. Architects should buy *Hansard* for March 19, for no newspaper was able, in meagre wartime space, to do justice to a series of excellent speeches which showed plainly that, at the moment, the Commons are unanimous on the principles on which reconstruction should be based.

*

Mr. Greenwood, in replying to the debate, stated that the principle of a central planning authority had been accepted and that the nature and powers of this body were now under consideration. It was hoped, he added, that Government policy on location of industry, control of land, and machinery for handling regional problems would be settled without undue delay. Government departments were already working out, in conjunction with the Ministry of Building, the part that each should play in reconstruction.

*

These are brave preparations for a country at war. And war or no war they cannot be completed too quickly. For it would be foolish to suppose that opposition to every one of these proposals does not exist because it is not heard. It is merely waiting until public opinion and public men are less far-sighted and single-hearted: no one should underrate its power.

WAR-BUILDING PROGRESS REPORT

In opening the debate Mr. George Hicks described steps that had been or soon would be taken to ensure that the building industry's resources were used with the greatest possible efficiency.

*

The standardization section of the Ministry of Building had already secured increases in production by reducing types. The present £500 limit for unlicensed building would shortly be reduced to £100. A new system was coming into operation of estimating in advance total building capacity during a given period and thereafter co-ordinating this total with the requirements of all public authorities. Final approval was to be given during the next few days to designs for workers' temporary housing in raided areas.

*

In the general debate which preceded Mr. Greenwood's reply three points were strongly emphasized: (1) The Ministry of Building—or a Ministry of Planning forming part of it—will have enormous responsibilities when peace comes. (2) Thought must be given now to the organization of the Ministry to enable it to discharge these great duties. (3) It is generally suspected that older Ministries regard the newcomer with some distaste and are trying to secure, or retain, for themselves powers which should logically belong to the Ministry of Building.

*

That *The Times* mentions point (3) in a leading article may be taken as proof that its dangers are not imaginary.

WHERE ARCHITECTS COME IN

There have been many recent references by Ministers to small groups of experts who are examining one or another aspect of reconstruction. The membership of these various bodies is not known. But there is reason to suppose that among economists, sociologists and senior civil servants, architects—even those architects who were the pioneers of British town planning—are poorly represented. And one may assume that it was knowledge of this that led the President of the R.I.B.A. to send a firm, well-judged memorandum* to the Minister of Building.

*

The memorandum states that it is the right and duty of the R.I.B.A. that the knowledge of its members should be fully used in preparations for reconstruction as well as in its physical execution. This claim is made with firmness. The remainder of the memorandum can be summed up in three sentences. The R.I.B.A. is not merely a learned society concerned with preservation of antiquities and the adornment of individual buildings. Among its members are men of great experience of most of the great problems involved in the proper guidance of reconstruction. It is necessary that reconstruction policy should be fully defined before plans are prepared, and that plans should be fully prepared before execution begins.

*

Lord Reith, as architects would have expected, has appreciated the memorandum's point and perhaps also its firmness, and has stated the R.I.B.A. will be asked to nominate representatives to the Consultative Panel which is being set up by the Ministry.

MORE ANTI-INCENDIARY

The Institution of Electrical Engineers has issued a memorandum, compiled by its Ministry of Home Security Advisory Committee, on fire detection devices. The various available devices are described and the most common type, those operated by thermostats, are dealt with in fuller detail.

*

The principal wartime use of these devices would, one imagines, be as additional protection for new buildings and, in particular, new storage buildings. For their installation in existing buildings has two drawbacks in these days of incendiary bombs and fire watchers: the thermostats may not register the arrival of an incendiary

* Printed on page 216 of this issue.—ED. A. J.

bomb until it has a good hold; and what fire watchers want is not so much a device which tells them where the bombs are as one which does something to check them while attention is bestowed elsewhere.

*

From these points of view the Home Office idea of empty fire-resisting upper floors has advantages over any system which merely gives alarm, and a sprinkler system would seem to have marked advantages over both. It seems probable that two-thirds of all the commercial and industrial premises in Britain are rambling collections of buildings, containing a great deal of timber, much in need of a thorough clean out and clean up, and somewhat cramped for space. And it is probable that either no incendiaries at all will fall on any one of these buildings or that a dozen will arrive simultaneously.

*

In these circumstances the wholesale adoption of the "protective" floor idea is unlikely if not impossible, and no system of fire detection would enable two parties of watchers to get round all the bombs before some had a firm hold.

*

A low-pressure sprinkler system would seem the perfect means of surmounting these two difficulties, and I cannot understand why it has not been advocated. The pipes, being fixed to the ceilings, would call for no clearing of floors, and the sprays would both speed up the burning of an incendiary bomb and put out the surrounding fire.

*

Of the efficiency of pre-war sprinkler systems there can be no doubt. A high officer of the London Fire Brigade told me that no fire—save perhaps petrol or oil in bulk—could live under them. Wartime systems would no doubt have to be cheaper and lighter and therefore not so efficient. But they would still make all the difference between a fire getting a hold and failing to do so.

HOME, JAMES

The suggestion has been made by Mr. Hamilton Fyfe in *The Times* that the Elgin Marbles should be returned to Greece, and was taken further by Miss Thelma Cazalet, M.P., who put down a request to the Prime Minister to introduce a Bill to implement the proposal at the end of the war.

*

Much as we all sympathize with the spirit behind this suggestion, it seems likely to set an embarrassing example and to make the owners of many stately homes glance uneasily about the drawing-room.

*

I forget the exact circumstances under which Lord Elgin acquired our famous possession: but my impression is that his methods could not be called worse than opportunist. The methods of many of our forefathers could be called very much worse. I picked up on a bookstall a month or two ago the diary of William Russell, *Times* correspondent in India during the suppression of the Mutiny, and his description of what took place when the Lucknow palaces were captured makes stories from occupied Europe seem very flat. There was also some light-fingered behaviour, one recalls, at Peking at a much later date.

*

Since those days the majority of the nations of Europe and the individuals who compose them have grown more civilized. But a return to place of origin of all precious things would, one fancies, recall far more unpleasantness than it would heal wounds, and would certainly entail a parade of skeletons in the cupboard from which the most hardy champion of the rights of man would be likely to shrink.

SLIPS IN STANDARDIZATION

. . . "and after that go to the Highlands and see some of the unpleasant little houses that the Department of Agriculture has put up for crofters and smallholders."

ROBERT HURD in *The Listener*.

This cause of complaint is not confined to Scotland. In the West Riding there can be seen neo-Georgian red-brick telephone exchanges, which on paper may look swell, but which in their permanent setting in a predominantly stone district are discordant.

*

Housing schemes in places where the local surveyor is unable or too occupied to design the buildings are provided from Whitehall, suitably numbered and aspected, drawn to eighth scale, half-inch, and set out on somewhat stereotyped layout plans prepared locally. These diagrams, suitable for erection in, say, Kent—since they seem to be based on the vernacular building done years ago about Oxted and Westerham—are posted to Yorkshire, where, since nothing like them has been seen before, they astonish the natives. If they must be traditional why should it not be regional traditional?

*

One hopes that post-war standardized housing will in colour and general form show more discrimination. Whether it should be traditional or not is a question which is likely to answer itself.

ROBIN HOOD'S BAY

I suppose it is out of bounds today.

When last I was there a considerable number of houses were being built to the landward side of the town well on the flatter part of the cliff. The same thing was in progress all along the coast. But the old town is the attraction—it lives up to its romantic name and is anything but flat—consisting as it does of a perilous conglomeration of buildings hanging to the eyebrows of the cliff.

*

The main artery is a long, steep, winding lane to the beach, which crosses a brook and then turns abruptly and runs along with it to the shore. It is banked by houses and shops. Most of the houses are several storeys high. They had been put up by the fisherfolk and added to when the family grew. The old people live at the bottom of the tower, the later and younger members in tiers above. The houses are of stone, brick and some cement rendering—slate and pantile roofs mingle haphazard. All of them have a porch of the same type, formed by a wide board, or boards, set up each side of the door, the front edge being cut according to fancy into different patterns. Over these quaint porches there is either a small pitch roof or a pediment. These sentry boxes range from those which spring from the ground to some where the side wings have become merely a bracket.

*

There used to be buskers about in Robin Hood's Bay—itinerant musicians.

One of them when he saw me sketching said to me, "I do that sort of thing myself. But," he continued knowingly, "you can make much more out of a bit of music with the right kind of visitor."

ASTRAGAL.

NEWS

WAR BUILDING AND RECONSTRUCTION

On March 19 the House of Commons discussed measures taken by the Ministry of Works and Buildings to increase the efficiency of the industry in wartime and to prepare for reconstruction. The following report is condensed from *The Times*.

Mr. Hicks, Parliamentary Secretary, Ministry of Works and Buildings (Woolwich, E., Lab.), said that under the system of licensing for private buildings all building operations costing more than £500—a figure which would shortly be reduced to £100—required a licence. The Ministry had licensing offices in each of the twelve Civil Defence Regions, and the local officers had fairly wide delegated powers to ensure that only work which contributed something specific to the war effort should be allowed to continue or to be started.

The Ministry were at present doing a number of camps for the War Office, supervising a large aircraft factory scheme for the Ministry of Aircraft Production, and also doing construction work for the Ministry of Supply, the Air Ministry, and the Admiralty. They were carrying out new works at the rate of £1,000,000 a week. A new system of building priorities was coming into operation, whereby they first estimated the total quantity of building of which the resources of the country were capable in each given period and allocated, on a value basis, between Departments. As far as possible only those works which would be effective before or by the end of the summer were being proceeded with. Works requiring a longer period were only permitted if they were of great strategic importance.

Stocks of cement had now been built up so that supplies would be available all over the country. As the output of cement might not be equal at the end of the war to the capacity of the building industry an independent committee, under the chairmanship of Mr. G. Balfour, had been appointed, and it would report next month.

The shortage of bricks had now been largely cured. The Director of Bricks was organizing the industry on a national basis, and it was hoped that the future allocation of orders and the rational control of brick-works would prevent any shortage recurring. It was hoped also drastically to reduce the number of sizes of bricks manufactured in the country. At present there were sixteen or seventeen different sizes.

With the Minister of Labour, the Minister and himself were in close consultation with the building industry, discussing proposals with a view to obtaining a complete census of building capacity. The aim would be to increase efficiency, particularly by avoiding senseless competition between firms for work and for labour. They hoped also to bring in the smaller builders for work which they could handle.

After a few weeks of "blitz," when local authorities in the Metropolitan area found themselves overwhelmed with repair work, arrangements were made for the withdrawal from the Army of a number of building trade operatives who could be formed into a mobile corps of house repairers working directly under the Ministry. They had at present about 3,000 men working in London, and upwards of 1,000 in provincial towns. A number of depots were set up for the London area, and during the last three months they had been hard at it. Thus there was a select corps of shock troops which could be rushed in at any point where the enemy attack became too much for the first-aid repair organization of the local authority.

For the repair of factories there had been in existence for some time an excellent organization, to help which there had been set up a Department of Emergency Repairs. The Ministry were establishing a nation-wide organization with emergency works officers in all important target towns and areas which were controlled by several assistant directors covering one or more Civil Defence Regions.

These officers were highly qualified men, whose duties were to give technical advice to the local reconstruction panels and to war factories and others whose work was of national importance. They would also have studied all available sources of supply of materials and, in conjunction with the Ministry of Labour, arranged for an adequate supply of labour for first-aid repairs. They would direct the use of any military units which would be brought in, and would ensure the most economical use in both materials and man-power. As part of the scheme lists of architects, surveyors, and engineers were being prepared who would be instantly available to the Emergency Works Officers.

Speaking of reconstruction after the war, Mr. Hicks said that all must have thought that here in the midst of destruction was an opportunity such as had never occurred before of making a bold and challenging start. A wise man once said that genius was an infinite capacity for picking other people's brains—and that was what the Ministry were trying to do. In particular they had invited to assist them a consultative panel consisting of some of the best-known experts on the subjects with which they had to deal, and were recruiting a small nucleus staff inside the Ministry.

While it was to the present that we must devote our full energies, it would be one of the greatest incentives in the march to victory if there could be before us an ever-clarifying picture of the Britain we wanted to build after this struggle and of a great and victorious people worthily housed.

Mr. Lawson (Chester-le-Street, Lab.) said that the defence departments have been the biggest sinners in regard to lack of planning and putting works where they ought not to be. The Ministry of Works should not accept the view that merely because one of the Departments wanted to build works in a certain area the proposal must be accepted. It was not matter of building only, but of deciding what was to be the future shape of the country and the trend of population.

He wanted to see the rural areas of the country preserved. After the last war some very stupid things were done, and stage by stage we had been driven back to the recommendations of Commissions which sat immediately after the last war finished. The country was now living in a very exalted frame of mind. If the hearts of people in cottage and palace could be read it would be found that there was a capacity for sacrifice almost unparalleled in the world's history. There was a danger that after the war was over more special areas would be developed. He hoped that the nation would maintain its present mood after the war was over, and if it could do so there was no problem which could not be solved.

Sir P. Harris (Bethnal Green, S.W., L.) said that many people felt that the damage done in many areas devastated in air raids was a blessing in disguise, and considered that Hitler had done a useful piece of work in demolishing many of those old buildings. He warned the Ministry, however, that in their reconstruction work they would find many difficulties, such as the dislike of poor people to leave the houses and streets in which they and their immediate forebears had lived for generations. There must be no skyscraper buildings, but fewer houses built to the acre in garden city surroundings.

Mr. Silkin (Peckham, Lab.) said that the factors arising after the war would result in great pressure on local authorities to get something done at once, and unless the plans were ready the same mistakes as before would be made and all the talk of a brave new world would go by the board.

Mr. Lindsay (Kilmarnock, Nat. Lab.) suggested that in anticipation of great schemes of town planning after the war, the Government should undertake now research work on the problem of land.

Mr. Bossom (Maidstone, U.) asked what arrangements were being made for the accommodation of workers in towns where the factories had been partially "blitzed" and the houses entirely "blitzed."

Mr. Hicks said that Lord Reith had had an examination made into this question. He was very concerned about providing accommodation of a temporary character so that his ideas and plans for future reconstruction should not be hindered. Architects and experts had been consulted, and also the Departments. By the end of this week final approval would be given to the plans and elevations, and speedy reconstruction would take place. Materials would be used which would not have to be brought from abroad.

Mr. Beaumont (Batley and Morley, Lab.) said that the Ministry of Works and Buildings should have more tangible functions. At present its powers seemed to be lost in mystery.

Mr. H. Strauss (Norwich, U.) said that in the twenty-one years between the Armistice and the beginning of the present war we destroyed more beauty in town and country and at a quicker rate than had ever been experienced in any country in time of peace. That destruction was unnecessary. One fault had been the absence of a central Government authority with planning powers and, secondly, the utter unsuitability of many of the local authorities which had been made statutory planning authorities.

Mr. Greenwood, Minister without Portfolio (Wakefield, Lab.), said it was vital that our energies should be devoted to the war effort, but that was not to say that our minds should not be turning to the fulfilment of our victory in the days of peace. To the other reasons for not permitting building during the war he would add that we should not reduplicate the areas and the lay-out which had been destroyed in so many towns without thinking it all out afresh. (Hear, hear.) That the Government would do. They had begun to get ready for the great day of starting on the big job of obliterating the scars of war and beginning the task of making the most of the country's physical resources.

He believed in planning. We could not after this war go back to the easy days of "go as you please"; nor had he seen any indication of a public desire to do so. By planning he meant the pooling of knowledge and experience to ensure that our limited land was used in the best national interest and our national resources maintained for the public advantage; the preservation of those beauties which once gone could never be restored; a proper relationhip between industry and agriculture. These were enormous tasks.

In regard to the proposed central planning authority, he and his colleagues would prefer to have further time to think of the nature, powers, and constitution of the authority, for its influence on our national life would be so powerful that they could well afford to take their time in setting it up. Regional organization had proved to be an essential part of the structure of Government in wartime. The common adversity had brought local authorities more closely together, and it might be that out of the experience of the civil defence regions there might come some kind of permanent machinery to handle problems of a regional character.

The many Government Departments concerned had examined the report of the Royal Commission on the Location of Industry and the next step was now being considered. A definite Government policy would, he hoped, be reached without undue delay. The question of control of the use of land was under active consideration by an expert committee. The committee had made extensive progress with its investigations. The various Government Departments were endeavouring, in co-operation with the Ministry of Works and Buildings, to work out the part each was to play in the making of the future. The purpose of reconstruction was the enrichment of the life of the people. The people had proved themselves worthy of a great future.

THE I.A.A.S.

It has been arranged for a luncheon to replace the annual dinner of the Incorporated Association of Architects and Surveyors, and the reunion will take place at Claridge's Restaurant, Mayfair, W., on Thursday, April 3. Among others expected to attend are the new President, Mr. Victor S. Peel, the Food Minister, Lord Woolton, and the Rt. Hon. Arthur Greenwood, M.P.

On Thursday, April 24, Mr. F. R. Yerbury will deliver a lecture before the Association, and it is then proposed to revert to evening meetings, commencing at 5.30 and finishing in time for people to get home before the black-out.

THE SOUTH WALES INSTITUTE OF ARCHITECTS

Following officers have been elected for the coming session:

Following were elected for the year commencing, July 1, 1941: Chairman, Mr. John W. Bishop, A.R.I.B.A. Hon. Treasurer, Mr. Harry Teather, F.R.I.B.A. Hon. Secretary, Mr. W. S. Purchon, M.A., F.R.I.B.A. *Executive Committee:* Messrs. L. R. Gower, F.R.I.B.A., J. A. Hallam, M.T.P.I., C. F. Jones, A.R.I.B.A., Ivor P. Jones, A.R.I.B.A., and T. Alwyn Lloyd, F.R.I.B.A. Associates' and Students' Representatives: Miss J. M. R. Bird and Mr. W. J. Phillips. *Representatives on the Council of the South Wales Institute of Architects:* Messrs. E. Attlee, L.R.I.B.A., J. W. Bishop, A.R.I.B.A., E. A. Evans, A.R.I.B.A., L. R. Gower, F.R.I.B.A., J. A. Hallam, M.T.P.I., L. R. Harries, L.R.I.B.A., T. Alwyn Lloyd, F.R.I.B.A., A. G. Lynham, F.R.I.B.A., W. S. Purchon, M.A., F.R.I.B.A., F. W. Roberts, L.R.I.B.A., C. Rosser, A.R.I.B.A., Percy Thomas, O.B.E., F.R.I.B.A., Miss J. B. Treatt, A.R.I.B.A., and Messrs. Howard Williams, F.R.I.B.A., P.A.S.I., J. Williamson, F.R.I.B.A. Associates' and Students' Representatives: Miss J. M. R. Bird and Mr. W. J. Phillips.

LETTERS

C. Gustave Agate, F.R.I.B.A., F.A.R.P.I., President Manchester Society of Architects.

Architects and Reconstruction

SIR,—Your leading article of March 6, 1941, does great injustice to the architectural profession at large and the R.I.B.A. in particular. It is incorrect to say that in 1919 architects failed to realize the importance of improved design in small house building. On the contrary, the mind of the whole profession was greatly exercised by the problem at an even earlier date, particularly in 1917 and 1918, and the great series of regional competitions for small house designs organized by the R.I.B.A. was the direct result of this concern.

C. GUSTAVE AGATE

Manchester.

The JOURNAL *believes that architects after the last war did not realize* sufficiently *how important the small house was as the only direct link between the profession and the ordinary citizen. The R.I.B.A. did hold competitions and publish the results. But the fact remains that the profession was steadily pushed out of the small house field, which might not have happened if architects had paid as much attention to the construction and equipment, and methods of production, of small houses as they did to layouts and elevational design.*—ED. A. J.

Left: A caricature, published in Vanity Fair *during 1872, of "Telegrams" (Baron Julius de Reuter, founder of Reuters News Agency).*

PRESS ASSOCIATION

FLEET STREET, E.C.

SIR EDWIN LUTYENS, P.R.A., *IN ASSOCIATION WITH* SMEE & HOUCHIN

GENERAL—The new building in Fleet Street, illustrated on the following pages, is occupied principally by the Press Association and Reuters, the remaining space being let to British newspapers and Dominion and foreign news agencies.

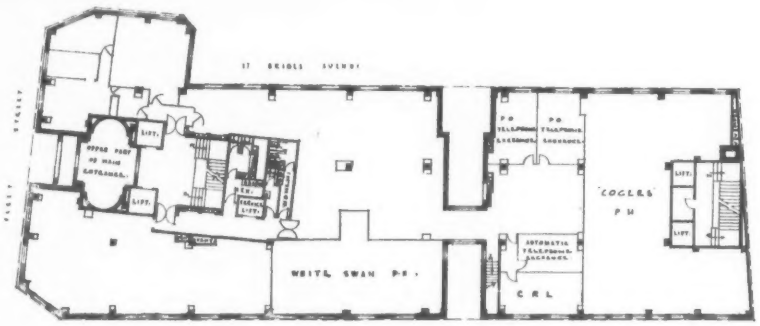
The Press Association is the biggest home news agency. It is owned by the provincial press, and serves both them and the London newspapers over a network of wires spreading from the building. It was founded in 1868. The present chairman is Mr. James Henderson, joint managing director of the Belfast News-Letter. Reuters, the best known British world news agency, has always worked in close co-operation with the Press Association. Reuters was founded in 1859 by Mr. (afterwards Baron) Julius de Reuter. Through the Press Association, Reuters is now also owned by the British provincial press. The Chairman of Reuters is Mr. Samuel Storey, M.P., who is also a director of the Press Association.

On the seventh floor of the new building is the conference hall with an adjoining octagonal hall. The eighth floor contains bedrooms for the resident staff and kitchens which serve the directors' dining-room and staff restaurant. The ninth floor houses lift motors and tanks.

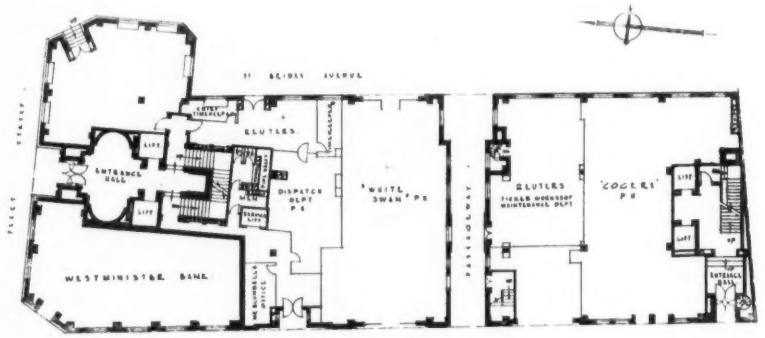
EIGHTH FLOOR PLAN

SEVENTH FLOOR PLAN

FIFTH FLOOR PLAN



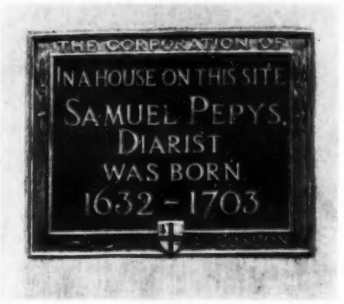
FIRST FLOOR PLAN



GROUND FLOOR PLAN

CONSTRUCTION—Steel-frame, faced with Portland stone. Floors are hollow-tile ; windows, steel and bronze casements. A bronze-gilt figure of "The Herald," designed by Sir William Reid Dick, R.A., fills the circular opening over the main entrance door in Fleet Street. Stone carving is by Mr. Allan Howes, A.R.B.S.

FINISHES—The north (Fleet Street) entrance door is of teak. The walls of the entrance hall are lined with Tivoli travertine and the floors with Tivoli travertine and golden travertine. The main staircase walls and treads are of Tivoli travertine, with black rubber treads inlaid. The balustrade of wrought iron is lacquered orange-vermilion, the handrail being of polished bronze. The south (off Salisbury Court) entrance hall has walls and floors lined with Tivoli travertine ; the walls of this staircase are plastered and the balustrade is treated similarly to the main staircase. The lift cars are of sheet steel lacquered orange-vermilion, the interiors being panelled in mirrored glass. The conference room and directors' rooms and the octagonal hall are panelled in teak. In the entrance hall, at ground floor, are a posting-box and clock combined, designed in teak by Sir Edwin Lutyens.



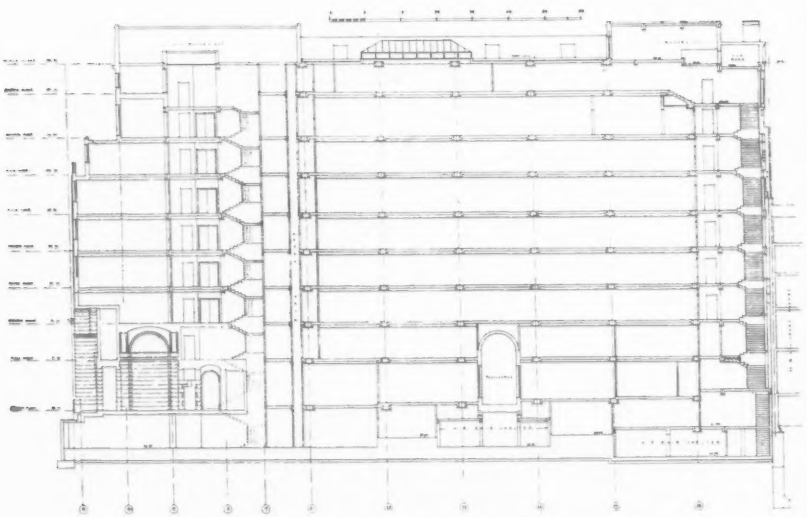
Facing page : The main front, taken from Fleet Street (left) and Salisbury Court. Right : Another view of the Fleet Street front, showing the steeple of St. Bride's Church ; and the tablet on the Salisbury Court front.

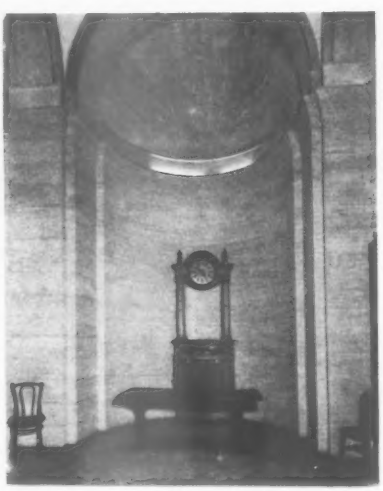
PRESS ASSOCIATION, FLEET STREET, E.C.

SIR EDWIN LUTYENS, P.R.A., IN ASSOCIATION WITH SMEE AND HOUCHIN

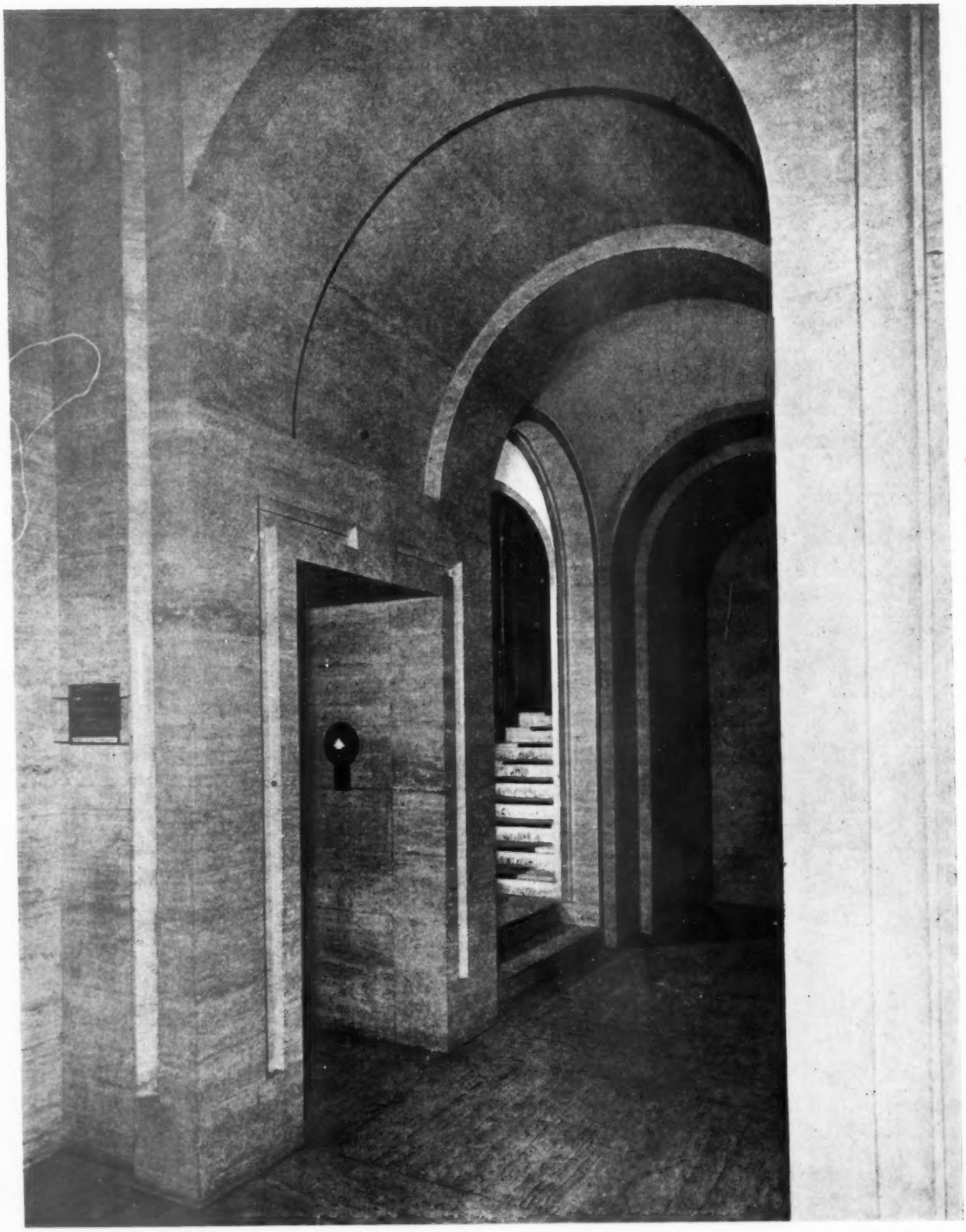
Left : The main entrance from Fleet Street. In the circular opening over the doorway is a bronze-gilt figure of "The Herald," designed by Sir William Reid Dick, R.A., and shown in the photograph below. Bottom, right: The combined clock and posting box in the entrance hall. It is in teak and was designed by Sir Edwin Lutyens.

The general contractors were Messrs. Ashby and Horner, Ltd. The steelwork consultant was Mr. Edward S. Andrews, B.Sc. The electrical consultants were Messrs. Handcock and Dykes, and the quantity surveyor was Mr. E. Hamilton Ashby, F.S.I. For list of sub-contractors see page xxviii.





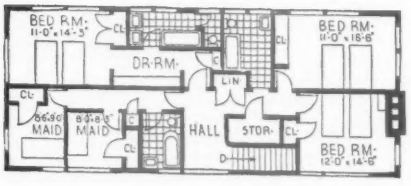
PRESS ASSOCIATION. SIR EDWIN



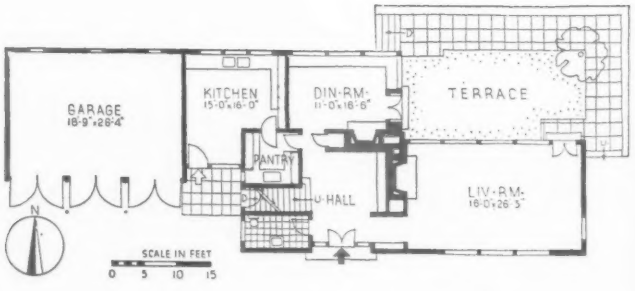
The main entrance, showing a lift and one of the two staircases.

LUTYENS, P.R.A., IN ASSOCIATION WITH SMEE AND HOUCHIN

HOUSE AT ROWLEY, M



GROUND AND FIRST FLOOR PLANS



PROBLEM—A house which both in accommodation and layout comes much closer to British requirements and methods of solution than most American houses. Large storage accommodation and the usual heating plant in a basement constitute the only considerable difference.

Above: The house from the east. The chimney stack is of local brick, the weather-boarding dark-stained and the windows and door surrounds painted white.

DESIGNED BY GEORGE W. W. BREWSTER, JR.

MASSACHUSETTS

CONSTRUCTION—Basement, brick. Walls: 4 × 2 studs, rough-boarded and weather-boarded externally, wood-sheathed within; patent insulation. Floors, timber. Ceilings, plaster on wire lath. Roof, 5-ply bituminous roofing with copper flashings and gutters.

INTERNAL FINISHES—Floors: oak, pine, and linoleum; oak stairs. Walls: birch boards in living-rooms and pine in hall and bedrooms. Bathrooms, plaster.

COST—About 2s. a cubic foot.

Right: Two details of the living room.

Below: The entrance front of the house.

The illustrations of this house are reproduced from "The Architectural Forum."

R.I.B.A. MEMORANDUM ON RECONSTRUCTION

Below is the text of a Memorandum recently submitted to the Minister of Works and Buildings by the R.I.B.A.

The Royal Institute of British Architects exists for the purpose of promoting the art of architecture in town and country.

In the work of post-war reconstruction every member of this Institute is directly interested, for the problems of reconstruction are precisely those which come within the purview of the architect's professional activities. The Royal Institute as a whole, representative of the vast majority of the most fully qualified architects in the kingdom, feels its responsibilities in this matter towards the community whose interests in the field in question it—and it alone—is able to serve in a comprehensive and representative way.

The training and practical experience of the qualified architect bring him into contact not only with the design of buildings, but with major and ancillary problems connected with it. Town planning, transport, planning for industry, housing, finance, legal questions, organization and administration of projects of construction, are all matters which become daily familiar to architects with extensive practices. For the practice of architecture to-day is not confined solely to plan and elevation, still less to transforming works of practical building into ordered architectural coherence. The qualified architect is a man conversant with those same factual problems of broad aspect which confront a Minister of Works and Buildings, a Minister of Planning, a Minister of Reconstruction.

The policy of the Royal Institute of British Architects towards post-war planning and building is based on its long experience of ordered and effective approach towards problems of this kind. This experience leads conclusively to a few simple but important directives. Amongst these are the necessity (*a*) for policy to precede planning; (*b*) for planning to precede execution; (*c*) for work to be both conceived and executed through full utilization of the trained technical skill of the professional and trade elements which comprise the building industry, and in accordance with a procedure the practical value of which has been proved by decades of experience.

The Royal Institute considers that architects are a vital part of the building industry, that its architect members form a learned society within this industry through the nature of their training and calling, but that they remain fully cognizant of their rôle as creative working members of a great industrial community. The Royal Institute dissociates itself most categorically from any other points of view. It realizes also that this is the occasion for the architect to take the lead among the other professions concerned in planning, designing and building for reconstruction. The policy of the Royal Institute at this juncture, which offers such wide possibilities for the improvement of living and working conditions, is that of co-operation with those Government agencies which are charged with a solution of the problems involved. It therefore offers its experience and assistance, not only as a unit in building industry activities, but separately and parallel in its own specialized field.

The Royal Institute asks of the Minister of Works and Buildings that its offer of immediate assistance should not be considered as a routine or empty gesture of co-operation. As a unique body of technicians and specialists it has the right and duty to ask that on the problems of construction and reconstruction which concern the country it should be consulted, that its resources and experience should be utilized, and that Government policy should include consultation with the Institute as a preliminary to the making of far-reaching decisions on building and rebuilding policy.

It has a right and duty to ask that its machinery, well established as it is, should be utilized, and that any Government Department charged with fresh and inspiring problems concerning the country's welfare should be alive to the errors which have accompanied, and will always accompany, all attempts to short-circuit properly qualified advice and experience.

The problems involved in reconstruction, in particular, are so complicated that there is a danger of basic solutions being discarded in favour of experimentation based on untried assumptions: it will be fatally easy to bring about repetition of the mistakes which followed after the 1914-18 war. Questions of public authority, of control of licensing, of standards and standardization; those of transport, the location of industry, zoning in general, are but a few with which the Ministry has already no doubt been concerned, but which are also the concern of the Royal Institute and upon which it holds views to which due weight should be accorded. It is concerned with all legislation present and future which affects those whose future building plans are already being formulated and who look to an early pronouncement on a policy which will define their rights and possibilities. It is concerned also with the necessity for providing an ordered transition back to civilian work on the cessation of hostilities. It is, above all, concerned with all plans and schemes for the betterment, through works and building, of conditions as they existed in the immediate pre-war period; and it will view with alarm and disquiet any evidence of attempts to create such plans without proper consideration and without the guidance of those best qualified to assist in their formulation.

Members of the public are apt, at this time, to refer to the great opportunities, the splendid field of work, open to the architectural profession, and to the Royal Institute in particular. Alas! such opportunities can easily be nullified where the Government, through its appropriate Departments, does not show trust in its professional counsellors. The only true earnest of such trust would be a frank consultation over policy; the importance of the common task warrants it.

The Royal Institute is setting up an *ad hoc* Committee whose sole duty will be to consider the problems of reconstruction and invites the Minister to enable this Reconstruction Committee to function as it should by keeping it informed of those problems with which his Department and the Institute are both concerned, and by utilizing it to assist him in the formulation of policy, rather than as an organ to be made aware only of policy already formulated.

The matters outlined in this memorandum are of vital interest to the Royal Institute, and it will be glad of an early opportunity of discussing with the Minister, through any medium which he may think most useful, the most practical method for co-operation.

LORD REITH'S REPLY

MY DEAR PRESIDENT,—I write to thank you for your letter of March 6, enclosing a memorandum on post-war reconstruction, which I have studied with great care.

I am most grateful to the War Executive Committee for preparing the memorandum, and for their readiness to co-operate in the work of reconstruction. I am anxious to avail myself of all that they can contribute to this national task.

As you know, I have had in mind throughout my preliminary work the great importance of architectural treatment in planning. Initial consultations had to be informal and private, but now that we can proceed with a definite programme of work I am seeking your services on the Consultative Panel which is being set up. I am asking persons of experience over the whole field to assist me, and I want them to be associated with us from the beginning.

There is no objection at all, so far as I am concerned, to the publication of the memorandum, or indeed any expression of the Royal Institute's views, and with reference to the last sentence of the memorandum, if you feel that it would be of advantage to bring some representatives of the War Executive Committee to see me at this stage, I need not say that I shall be very glad to meet them.

Yours sincerely,

J. C. W. REITH

•

PRESERVATION OF HISTORIC BUILDINGS

Steps are being taken by the Ministry of Works to secure the proper treatment of historic buildings damaged in air raids. Selected local architects with special knowledge of the historic buildings in their district have been chosen, in consultation with the Royal Institute of British Architects, to assist and advise local authorities before and during the work of demolition and removal of debris.

The aim will be to avoid, wherever possible, demolishing damaged historic structures and to retrieve valuable fragments and fittings, such as panelling, fireplaces and carved beams. These activities will not be permitted to interfere with rescue work or the restoration of essential services.

The Ministry is anxious that the work of protecting architectural treasures should be started quickly after bombing has taken place, in order to avoid further damage by the weather or inadvertent demolition. It is hoped that local authorities will make full use of the architectural advisers who have been appointed.

Buildings to be watched by local experts include not only castles and mansions, but many lesser-known houses, some still occupied, in our older cities and towns, which are extremely valuable examples of architectural skill.

996

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

DIAGRAMS ILLUSTRATING ADVANTAGES OF WELDED CONSTRUCTION, 1

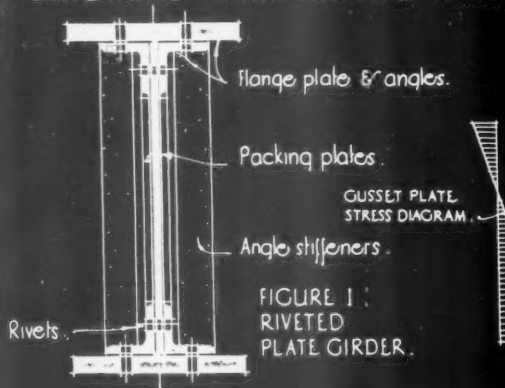


FIGURE 1: RIVETED PLATE GIRDER.

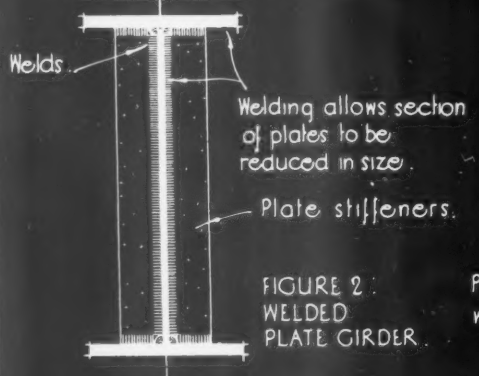
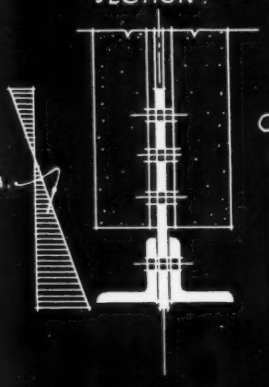


FIGURE 2: WELDED PLATE GIRDER.



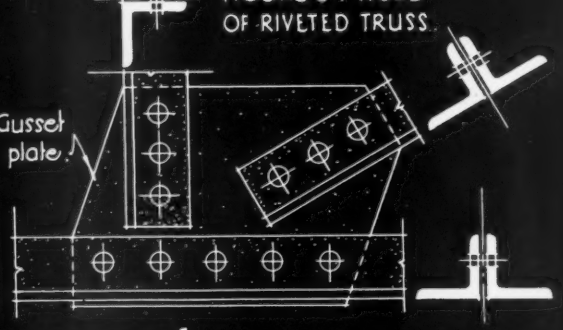
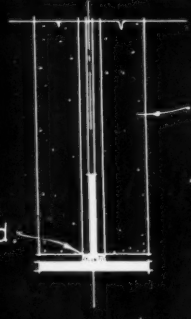


FIGURE 3: NODE OF RIVETED TRUSS.



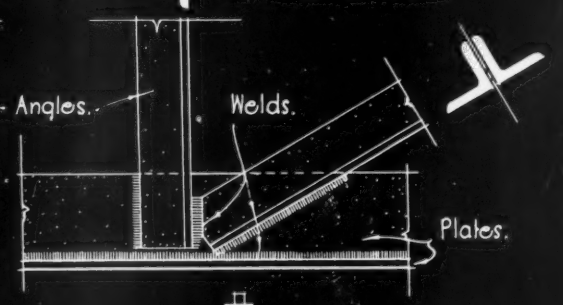


FIGURE 4: NODE OF WELDED TRUSS.

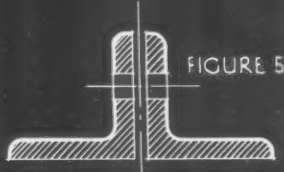


FIGURE 5.

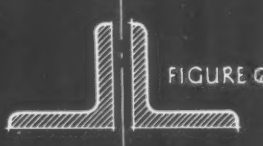
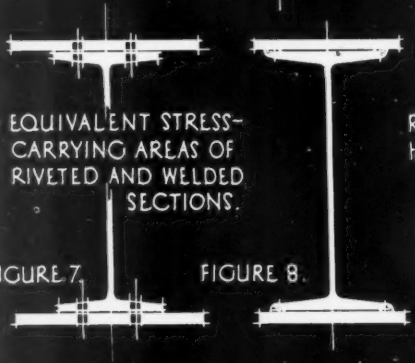


FIGURE 6.



EQUIVALENT STRESS-CARRYING AREAS OF RIVETED AND WELDED SECTIONS.

FIGURE 7. FIGURE 8.

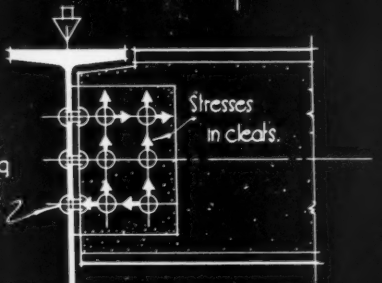


FIGURE 11: BOLTED OR RIVETED CONSTRUCTION.

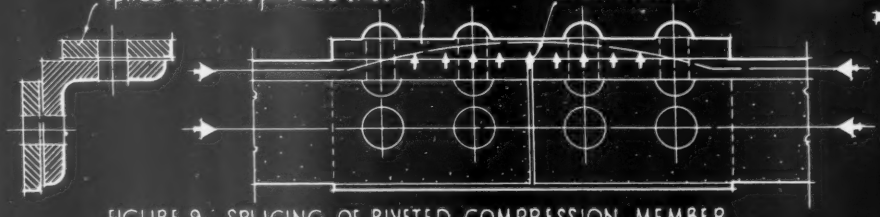


FIGURE 9: SPLICING OF RIVETED COMPRESSION MEMBER.

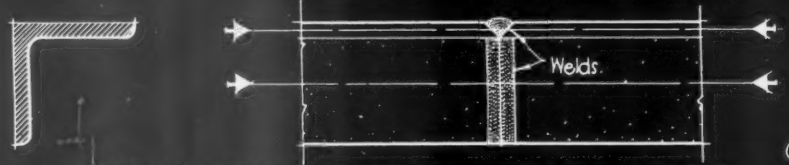


FIGURE 10: SPLICING OF WELDED COMPRESSION MEMBER.

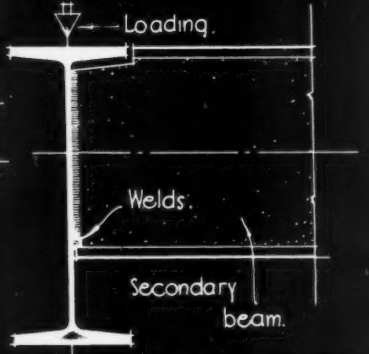


FIGURE 12: WELDED CONSTRUCTION.

COMPARATIVE FLOW OF STRESSES IN BEAM-TO-BEAM CONNECTIONS.

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

INFORMATION SHEET: STEEL FRAME CONSTRUCTION, 47: WELDING No. 3.
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

• 823 •

STRUCTURAL STEELWORK

Subject: Welding 3: Advantages of Welded Construction (*continued*)

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 maximum economy in the design of the steel framing.

This Sheet is the third of the welding group and illustrates the main advantages of this form of construction.

Welded construction is a comparatively modern development, and if, in time, it is partly or wholly to replace riveted construction, it must show certain advantages. These advantages can be grouped under three main headings:

1. Saving of material.
2. More direct flow of stresses.
3. Rigidity of construction.

This Sheet deals with the first and second groups—saving of material and more direct flow of stresses.

Saving of Material:

(*a*) Riveted and bolted construction, as referred to in Sheet No. 1 of this series, requires flanges for holes to be drilled. These flanges are often a dead weight, serving no other purpose than the connection of two pieces of material. On the other hand, by welding, two pieces of metal can be connected which touch each other along one line only, and no flange is provided unless it is required to carry stresses. The riveted plate girder illustrated in Figure 1 may serve as an example. The main structural parts are the web and the flanges, the first serving to carry the shear and the others to carry the bending moment. To connect both of them, four angles are provided which cannot take any shear and are not in the best position for taking stresses. In welded construction, see Figure 2, web and plates would be used as required, connected directly by the welds.

In order to stiffen the web and flanges of a riveted plate girder (Figure 1), angles are usually provided; but it is only the outward projecting flanges which act as stiffener, the flanges parallel to the web merely serving to connect the angles to the web, whilst the pieces of metal (packing plates) inserted between the angles to preserve the distance are entirely dead weight.

In welded construction, Figure 2, a plate stiffener is arranged and the ineffective flange of the angle is omitted. The plates can be connected directly to the flanges as well as to the web, thus increasing the rigidity. This increase is particularly important where concentrated loads are to be transmitted.

In Figure 3 a node of a riveted truss is shown, all forces being taken by a gusset plate riveted to all members, while in Figure 4 the corresponding welded construction shows no gusset plate and the members are welded directly to one another.

(*b*) Another saving in welded construction is the omission of holes. Every hole weakens the structure, and in tension members it is necessary to deduct these holes from the sectional area in order to find the stress-carrying area. See Figure 5. Similarly, for members stressed in bending, the holes are to be deducted on the tension side and, for symmetry, are usually deducted on the compression side also. See Figure 7.

The sections used for welded steel, shown in Figures 6 and 8, can have correspondingly less sectional area and less weight as no such deductions become necessary.

(c) Rivets and bolts transmit mainly shear stresses, and while they are used for tension in exceptional cases, where tension and compression occur, extra cleats are usually introduced in order to produce shear stresses—e.g. in Figure 9, which shows the splices of a compression member. Welding can take compression, tension and shear equally well and, consequently, cleats become unnecessary, the splices corresponding to Figure 9 being as shown in Figure 10.

Flow of Stresses:

To transmit forces from one riveted structural member to another cleats must be employed, and any stresses occasioned by loads have to be carried through such cleats. The longer and more complicated the path of the stresses, the more numerous the secondary stresses which are set up, and the less accurate are the calculated values. For instance, the beam in Figure 11 is supposed to have a reaction at the centre line of the supporting beam. The bolts connecting this beam to the cleats have then to take a bending moment as well as the direct force, and everywhere the cleats will be subjected to complicated stresses, which are usually not taken into consideration, and require an increased safety coefficient.

If, on the other hand, the web of one beam were connected to the web of another by a weld, as shown in Figure 12, no such additional stresses would occur. The same comparison can be made between the riveted splice of a tension member shown in Figure 9 and the welded splice shown in Figure 10. In the riveted construction, the stresses have to be carried, not in a straight line, but from an angle to a plate and from the plate back to the angle, causing cross stresses and local overstressing. Again, in the gusset plate shown in Figure 3, stresses are set up, as shown, for instance, in the cross-section, which often exceed the stresses in the tension members, while no such additional stresses would occur in the corresponding form of construction shown in Figure 4.

These examples show that the material is not stressed so heavily in welded construction, the secondary stresses being reduced, although the calculations may show the same stresses. This leads to the conclusion that it would be reasonable to reduce the factor of safety and that an increase in the permitted stress, accompanied by a corresponding saving in material, can be expected when welding is adopted more widely.

Previous Sheets:

Previous Sheets of the 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 and 822.

Issued by: Braithwaite & Co., Engineers, Limited

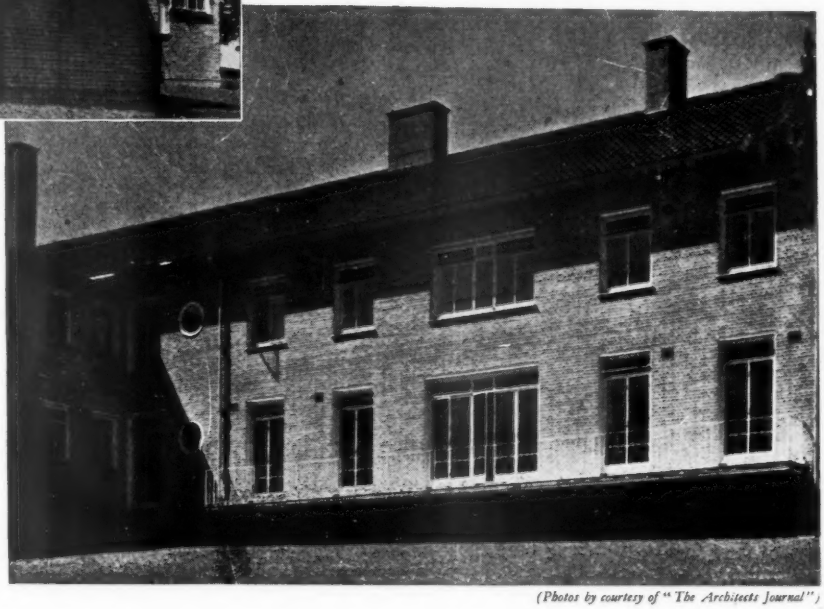
London Office—Temporary Address:
Kings House, Haymarket, London, S.W.1

Telephone: Whitehall 3993

Wycombe Abbey School Sanatorium

Architects:
Messrs. Pite, Son & Fairweather, 16 Market Square, WESTERHAM, Kent

Electrical Contractors:
Messrs. F. G. Edey & Co. Ltd., 11 St. Bride Street, LONDON, E.C.4



(Photos by courtesy of "The Architects' Journal")

The layout of this sanatorium building has been planned to facilitate the isolation of infectious cases, whilst in the general treatment a pleasing airiness has been achieved by the careful choice of colours and materials for the decorations as well as by the use of light brown bricks for external facings and bright sand-faced pantiles for the roof.

• • •

Experience proves that for every class of installation it is safe to specify

HENLEY CABLES

This sanatorium is one of the many hundreds of hospitals and kindred buildings in which Henley Cables have been used exclusively for the electrical installations because for such work reliability in service is essential.

W. T. HENLEY'S TELEGRAPH WORKS CO. LTD.
MILTON COURT · WESTCOTT · DORKING · SURREY
Telephone—Dorking 3241 (10 lines) Telegrams—Henletel Dorking
London Office—Holborn Viaduct, E.C.1 Telephone—City 3120 Telegrams—Henletel Cent.

SOME QUESTIONS ANSWERED THIS WEEK:

★ *WHEN assistant Quantity Surveyors are called for service with the Forces, is it possible for them to keep in touch with their job?* - - Q676

★ *WHAT is the remedy for condensation in "above ground" brick shelters?* - - - Q677

★ *WHERE can I find the layout of wood-working machinery to comply with Factory Regulations or Welfare Orders?* - - - Q678

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. Samples and descriptive literature sent to the Information Centre by manufacturers for the use of a particular enquirer are forwarded whenever the director of the Centre considers them likely to be of use.

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.

Q676

SURVEYOR, LEEDS.—*I am an assistant QUANTITY SURVEYOR, but I shall not be 20 until next September. I have passed Part 1 of the Intermediate Examination of the Surveyors' Institution AND I wanted to sit for the next part a year this March. As things are now, it looks as if the 19's will be called up soon, and therefore I could not get postponement long enough to sit for the exam. I noticed in one answer you stated that Quantity Surveyors are exempt from GENERAL SERVICE at 18 and from service in a trade capacity at 23. But pupil Quantity Surveyors are not exempt from either until 25; a Quantity Surveyor cannot be more than a pupil or junior assistant at 18, so am I exempt from General Service or not? According to the local Ministry of Labour there is no exemption for Quantity Surveyors at 18 whatever. If that be the case I still have to serve in the Forces. I don't mind that, but I don't want to get out of touch with my job. Therefore, if possible, I should want to get in a position where I could use my knowledge in Quantity Surveying, etc., so have you any idea whether that would be possible at all in the Forces?*

According to the latest Schedule of Reserved Occupations published, Quantity Surveyors are still reserved from the age of 18 unless they are required in their professional capacity and are fully reserved from the age of 23. In judging whether a person is a "Quantity Surveyor" or not the Ministry of Labour is guided by particulars furnished by the employer—obviously the term is intended to include assistants as well as fully qualified Surveyors.

As far as we are aware, all Quantity Surveyors' Assistants below the age of 23 have been called up, as "required in their professional capacity," which may extend to service in the Engineers, Artillery, or any other branch of the Services where surveying, in its broadest sense, is required.

The Engineers and the Artillery have both been recommended by the Chartered Surveyors' Institution for Surveyors, and no doubt the Institution would give you further advice.

Q677

ARCHITECT, LANCASHIRE.—*I was asked to advise about brick shelters being erected for factory employees some time ago and afterwards received complaints that the SHELTERS were cold AND damp. Having investigated the matter, I am convinced that the dampness is due to CONDENSATION, but there is no doubt that conditions are unpleasant.*

As this must be a fairly common problem, you can probably help me without much difficulty and I should be glad to have a reply as soon as possible.

The shelters are of the "above ground" type, and are of normal brick construction with concrete roofs.

If the shelters are reasonably full when in use, it is probable that the heat given off by the bodies of the occupants will be sufficient to keep them warm, provided the shelters are insulated, and we suggest that the walls and ceilings should be lined with ½ in. fibre board (such as Tentest or Celotex) fixed on battens to provide an air space at the back. This insulation will also eliminate or minimize condensation.

We cannot give you any figures without knowing the relevant factors, but we suggest that you read "Shelter Insulation," which appeared in THE ARCHITECTS' JOURNAL for November 21, 1940. Here it is shown that if the desired temperature inside is 60° F. and the outside temperature is 30° F., it would be necessary to provide against an hourly heat loss of 25,095 B.T.U. in the case of a normal brick surface shelter for fifty persons, whereas if the walls and ceilings were insulated with fibre boarding the heat loss could be reduced to 14,196 B.T.U. The article goes on to show that as the heat given off by the occupants may be expected to be between 15,000 and 20,000 B.T.U. per hour, the desired temperature can be maintained in this case without artificial heating.

The same article explains the effect the insulation will have on condensation. Further information can, of course, be obtained from The Tentest Fibre Board Co., Ltd., 25, Crescent West, Hadley Wood, Barnet, Herts.

Q678

BUILDING SUPERVISOR, STAFFS.—*Can you give me any information on the LAYOUT OF WOODWORKING MACHINERY in respect of Factory Regulations or Welfare orders? I am concerned about a large circular saw which is fixed very close to, and faces and rotates towards, a large sliding door situate in main walls of the building. A roadway 10 ft. wide runs parallel with sliding door.*

Although I have searched my copy of Factories Act 1937-38, nothing is stated to my advantage.

Some years ago I read a Journal which gave some data on this point in question, which causes me to seek definite rulings. I regret with removal I have lost literature required. Any information, names of books, or bulletins, etc., will be greatly appreciated.

The information available is too extensive to be included in this answer, but it is probable you will find everything you require in Home Office Safety Pamphlet, No. 8 (Fencing and Other Safety Precautions for Woodworking Machinery), price 1s. 6d., obtainable from H.M. Stationery Office, Kingsway, London, or through any bookseller.

REFERENCE BACK

[*This section deals with previous questions and answers.*]

Q667. *March 13, 1941*

In the reply to this quession the JOURNAL stated incorrectly that the salary of a Regional Architect was £5–£6 a week. The salaries of Regional Architects appointed by the Ministry of Home Security vary with the experience of individuals and the responsibility of their duties in various areas, but are in no case much less than £600 a year.

Q642. *January 30, 1941*

The Information Centre regrets that in recommending a booklet called "Canteens in Industry," published by the Industrial Welfare Society, it stated incorrectly the address of this Society.

The right address of the Industrial Welfare Society is 14 Hobart Place, Westminster, S.W. 1.

INFORMATION CENTRE

TRADE NOTES

The "Baillie" Indoor Shelter

I am not surprised to find that public interest is turning more and more to the indoor shelter—well constructed indoor shelters do seem to have many advantages over those built out of doors, freedom from dampness or flooding and adequate ventilation being chief amongst these.

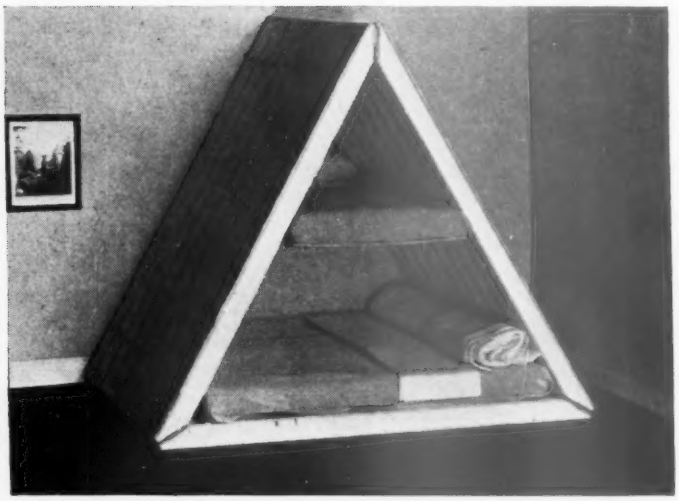
The inconvenience of turning out on a wet and cold night and traipsing down to the end of the garden is distasteful to all who cherish a warm night's slumber . . . and who doesn't? The "Baillie" shelter is no "four-poster," but it looks pretty good to me, as the illustration at the head of this note will bear witness.

Triangular in section, it is built up of precast reinforced concrete units secured at the angles by bolts and bound together lengthwise by stout wires. It is designed to give protection against splinters, blast and a debris load of 200 lbs. per square foot, thus fulfilling the standard of protection required by the authorities.

The open ends give easy access; a separate triangular section, sandbag filled, is supplied which provides protection at the end—as a general rule one only of these cover sections is required, one end being placed up against a suitable interior wall as shown in the illustration. The shelter can be erected in any room with a floor strong enough to take its weight, and one of the advantages of the design is that the length can be extended according to the household requirements. The illustration shows how additional bed space can also be obtained by suspending a bed frame by strong wires from the apex bolts.

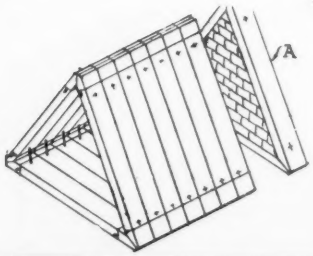
In exceptional cases strutting of floor joists may be necessary, or, alternatively, some of the floor joists could be taken up and the shelter erected on the site concrete.

The "Baillie" shelter is being made in two sizes: An equilateral triangle of 8-ft.-long units which gives a height of 7 ft.; this will accommodate four adults at floor



level and two children in the suspended bed.

The units of the small size are 5 ft. 3 in. long, giving a height of 4 ft. 7 in. and providing accommodation for two adults; this smaller shelter hardly allows space for the extra suspended bed.



Manufacture is being arranged in several parts of the country, and I understand that delivery can be undertaken at short notice. Simple instruction for erection will be supplied by the designers, the Kleine Company, Ltd., New Oxford House, Bloomsbury-way, London, W.C. 1.

It is interesting to note that the pre-cast units of this shelter can be utilized after the war for floor and roof construction—their market value will thus not completely vanish with the wailing of the last siren.

THE BUILDINGS ILLUSTRATED

PRESS ASSOCIATION BUILDING, FLEET STREET, E.C. (pages 209-213). Architects: Sir Edwin Lutyens, K.C.I.E., P.R.A., and Messrs. Smee and Houchin, FF.R.I.B.A. General contractors: Ashby and Horner, Ltd. Subcontractors and suppliers included: Avon Rubber Co., Ltd., rubber flooring to staircases; Accordo Blinds, Ltd., blinds; Automatic Telephone Electric Co., private telephone system; Birmingham Guild, Ltd., staircase balustrades; Brown and Tawse, Ltd., staircases; Crittall Manufacturing Co., Ltd., steel windows, lantern lights, air raid shelter doors; Richard Crittall and Co., Ltd., kitchen equipment; Catesby, Ltd., linoleum; Chubb and Sons Lock and Safe Co., Ltd., strong-room doors; John Edgington and Co., Ltd., flagstaff; John Freeman and McLeod, Ltd., Hopton wood stone; Goodman Price, Ltd., demolition; J. W. Gray and Son, Ltd., lightning conductors and wireless masts; R. J. Goddard and Co., Ltd., asphalt; Higgins and Cattle, Ltd., electric lighting and power installations, under-floor duct systems; Harcourts, Ltd., electric lighting fittings; Haywards, Ltd., pavement lights; Walter W. Jenkins, traverline; Lamson Engineering Co., Ltd., pneumatic tubes; Magneta Time Co., Ltd., electric clocks; Rosser and Russell, Ltd., low-pressure hot-water heating, ventilation, domestic hot water, etc.; Siemens-Schuckert (Great Britain), Ltd., automatic tube post system; Sovex, Ltd., "Sovex" carrier; Smiths (London), ironmongery and door furniture; Stitson and White (Metalworkers), Ltd., plumbing and sanitary work; Sturtevant and Co., Ltd. vacuum cleaning plant; D. E. Smart and Sons, Ltd., sound treatment; W. Sugg and Co., Ltd., incinerator; T. T. Trading Co., Ltd., "Insulwood" ceilings; Waygood-Otis, Ltd., passenger and service lifts.

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 45 The Avenue, Cheam, Surrey, and should reach there by first post on Monday morning for inclusion in the following week's paper.

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

Public and Official Announcements

Six lines or under, 8s.; each additional line, 1s.

The Incorporated Association of Architects and Surveyors maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Address: **75 Eaton Place, London, S.W.1. Tel.: Sloane 5615** 991

CITY OF COVENTRY
CITY ARCHITECTURAL DEPARTMENT
BUILDERS' CLERKS

Applications are invited for posts as temporary **BUILDERS' CLERKS** at a salary of £5 10s. per week, plus war bonus.

Applicants should be conversant with the preparation and checking of builders' accounts.

Applications, stating age, qualifications, experience and salary required, together with the names of two references, should be addressed to the undersigned.

D. E. E. GIBSON, M.A., A.R.I.B.A., A.M.T.P.I.,
City Architect. 596

1a, Warwick Row Coventry.
20th March, 1941.

CITY OF COVENTRY
CITY ARCHITECTURAL DEPARTMENT
QUANTITY SURVEYORS

Applications are invited for posts as temporary **QUANTITY SURVEYORS.**

Applicants should be conversant with the measuring and valuing of building works, the checking of builders' accounts, and the process of technical audit.

Applications, stating age, qualifications, experience and salary required, together with the names of two references, should be addressed to the undersigned.

D. E. E. GIBSON, M.A., A.R.I.B.A., A.M.T.P.I.,
City Architect. 595

1a, Warwick Row, Coventry.
20th March, 1941.

Architectural Appointments Vacant

Advertisements from Architects requiring Assistants or Draughtsmen, and from Assistants and Draughtsmen seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice. Other "Appointments Vacant" and "Wanted" will be found under later headings, and are subject to the charges given under each heading.

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

ARCHITECTURAL ASSISTANT required. — Write stating age, experience and salary required to Box 214.

WORKER UP REQUIRED. Building Company, now fully engaged on Government Housing and Camps, requires the full-time services of a good Worker Up in Quantity Surveyor's Office. Some experience of architectural draughtsmanship and a knowledge of building construction is essential.—Applications, giving full particulars of age, experience, salary required, to Box 599.

ARCHITECT REQUIRED. Building Company, now fully engaged on Government Housing and Camps, requires the full-time services of a fully qualified architect. Applicants must be conversant with and have experience of planning, designing, specifying, and laying-out, etc., of considerable schemes of small houses. Experience of Camp Schemes an advantage but not essential.—Applications, giving full particulars af age, qualifications, experience, salary required, to Box 600. Any documents sent in support of applications will be carefully considered and returned.

SURVEYOR'S DEPARTMENT of large firm requires Lady Draughtsman. Write stating age and experience to Box 566.

Architectural Appointments Wanted

QUANTITY SURVEYOR prepares quantities, schedules of building work, alterations, additions and repairs; experienced in various types of construction. Box 592.

ARCHITECT'S ASSISTANT, 26 years old, has done four of the five years required to obtain a degree in the "Royal Academie of Bruxelles." Had some experience in an architect's bureau as well as in practical work in buildings. Please write T. Kisselov, 26, Netherhall Gardens, N.W. 3. 215

SURVEYING FOR NOMINAL SALARY. Experienced Architectural Draughtsman, 23, friendly alien (any permit easily obtainable), seeks to improve surveying knowledge by working full time in London area (*i.e.*, theodolite, quantities, etc.). Nominal salary, but good opportunity required.—Apply "R," 5, Stanley Avenue, Wembley, Middlesex. 216

ASSISTANT ARCHITECT, nearly 23, passed R.I.B.A. Intermediate, requires post in Northern England or Scotland. Has just been discharged from Army on medical grounds in no way affecting civil employment. Has served 4 years Articles and also had 4 years' evening school training. Prior to war held post as assistant in Royal Engineers drawing office. Quick, accurate draughtsman with sound knowledge of construction and design; able to prepare working drawings and details to all scales; also experienced in surveying and the design of roads and sewers. Salary about £300 p.a. or by arrangement. Box 213.

Foreign **ARCHITECT.** Elderly man with great experience, first-class planner and draughtsman, good English, being seven years in U.S.A. offices. Own office abroad for number of years, wants adequate position. Box 212.

WAR DAMAGE CLAIMS prepared. Other part-time work required, surveys, reports, plans, detail drawings, specifications, quantities from Architects or others by Surveyor, A.A.I., A.I.Hsg. Box 211.

YOUTH (15) wishes to enter Architect's Drawing Office as learner. Quiet, keen, determined. Healthy. Good asset to good Firm. London and Kent district. "Hopeside" 9 Lynmouth Rise, St. Mary Cray, Kent. 207

FOREIGN ARCHITECT requires post in London area. Long and varied experience in designing, detailing and supervising construction and restoration of commercial and domestic buildings and various types of shelters. 5 years in partnership with English Architect. Box 205.

MINING SURVEYOR (B.Sc., A.R.S.M.) would undertake War Damage work with firm of professional Quantity Surveyors on salaried basis, London only. Sound knowledge construction, quantities etc. £416 p.a. Box 204.

ARCHITECT AND SURVEYOR (25) requires executive appointment with industrial concern, with full priority; accustomed to having control of building work, A.R.P. organization, equipment layout and maintenance; energetic and ambitious. Capable of getting quick results. Salary £500 to £600 p.a. according to nature of appointment. Apply Box 189.

R.A. EXHIBITOR, who specializes in perspectives of stone jobs, invites commissions for this year's Academy. Fees remitted if work not hung or otherwise acceptable. Frank Andrews, L.R.I.B.A., 18 Helen Road, Oxford, 192.

ARCHITECTURAL STUDENT, 24 (refugee, perfect English), four years' studies at Polytechnic and office activity, accurate draughtsman, excellent designer, also used to all office work, seeks progressive position in architect's or builder's office. Box 201.

CLERK-OF-WORKS AND BUILDING SURVEYOR requires an appointment, in Birmingham or the Midlands; over military age; rendered war service during the 1914-18 Great War; over 20 years' sound practical and theoretical; general and varied experience, and knowledge of all branches of the building and allied trades, on all classes of large and important contracts, reinforced concrete, steel, and brick structures, etc., measuring, etc.; architects' municipal engineers' and surveyors' testimonials, etc. Salary to mutual arrangement. Box 200.

ASSISTANT ARCHITECT, requires position. Eight years' experience in London and provinces. Experienced in A.R. Shelter work. Any part of British Isles. Box 195

ARCHITECT'S ASSISTANT, 22, good knowledge of Construction; exempt from military service. London preferred. Box 196.

Classified Advertisements continued on page xxxii.

Classified Advertisements continued from page xxxi.

Other Appointments Vacant

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

JUNIOR INSTRUCTOR, Male or Female, in Architecture and Building subjects, required by large London Correspondence College. Previous teaching experience not essential.—Write stating age and experience to Box W179, Willing's, 362, Gray's Inn Road, W.C. 1. 597

LARGE FIRM, situated in Home Counties, requires a person with technical experience in architectural or building industries. Good salary.—Apply, giving fullest particulars, to Box E2365, T. C. Scott & Son, Ltd., 63, Ludgate Hill, E.C. 4. 598

Chief Managing **QUANTITY SURVEYOR** required by firm of Civil Engineering, Building and Reinforced Concrete Contractors. Salary upwards to £1,000 per annum, according to qualifications and experience. Full details (in confidence) to Box 593.

Other Appointments Wanted

Four lines or under, 2s. 6d.; each additional line, 6d.

The Proprietors of **The Architects' Journal** have placed this space at the disposal of the **British Legion Officers' Association, Employment Bureau,** 20 **Grosvenor Gardens, London, S.W.1** (Tel.: Sloane 2315), to whom all replies should be addressed, quoting number of advertisement, date of insertion, and the name of this paper.

MASTER BUILDER (M.Inst.R.A.); assistant architect and surveyor; general foreman or clerk of works; age 40; married. 3249/A/AEN

EX-OFFICER, wounded last war, requires indoor employment, any capacity; architect and surveyor by profession, F.R.I.B.A., F.S.I., but with good knowledge of book-keeping, office correspondence, etc.; highest references. Dis. 502

EX-OFFICER (1914-19); aged 43; general building knowledge; 10 years' contact with councils, architects, builders; reinforced concrete and scale model specialist; controlled own and other works; desires progressive post of responsibility. Dis. 456

In addition to the above-mentioned, the Officers' Association Employment Bureau has on the Register a large number of ex-officers of various qualifications, and the Secretary would be very grateful if Employers would kindly notify to him at 20 Grosvenor Gardens, London, S.W.1, particulars of any vacancy they may have available. Telephone: **Sloane 2315.**

To Let

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

QUEEN ANNE'S GATE. Two adjoining houses in Queen Anne's Gate to be let. Opening between the houses have been made at all floor levels so that the two houses form one office. Accommodation comprises about 24 rooms. Full particulars from Box 43.

For Sale

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

FOR DISPOSAL. Architects' cameras, 2¼ by 3¼ ins. Soho Precision folding plate camera, all movements, two Zeiss lenses, normal and W.A., 35 mm. Zeis Tenax 1, cases, accessories, good condition, particulars. Box 594.

Miscellaneous

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

MACHINE TOOLS. Urgently required, Lathe up to 3 ins. Box 203.

A. J. BINNS, LTD., specialists in the supply and fixing of all types of fencing, tubular guard rail, factory partitions and gates. 53, Great Marlborough Street, W.1. Gerrard 4223-4224-4225.

SPECIFICATIONS AND BILLS OF QUANTITIES, etc., expeditiously and accurately typed or duplicated. Translations and Facsimile Typewriting. All work treated confidentially. Miss G. Saunders, Typewriting Bureau, 17 Dacre Street, Westminster, S.W.1. Telephone: Whitehall 2605.

Educational Announcements

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

R.I.B.A. AND TOWN PLANNING INST. EXAMS, Courses of instruction, personal or by correspondence, arranged by Mr. L. Stuart Stanley, M.A., F.R.I.B.A., 161 West Heath Road, N.W.3. Tel.: Speedwell 6745.

R.I.B.A. AND T.P.I. QUALIFYING EXAMS. Mr. C. W. Box, F.R.I.B.A., M.R.San.I.

Short Term Wartime Tuition Arranged.

Courses by Correspondence and Personal in Studio. 115 Gower St., London, W.C.1. Telephone: Euston 3906.

60
NS
ES
C.1
R