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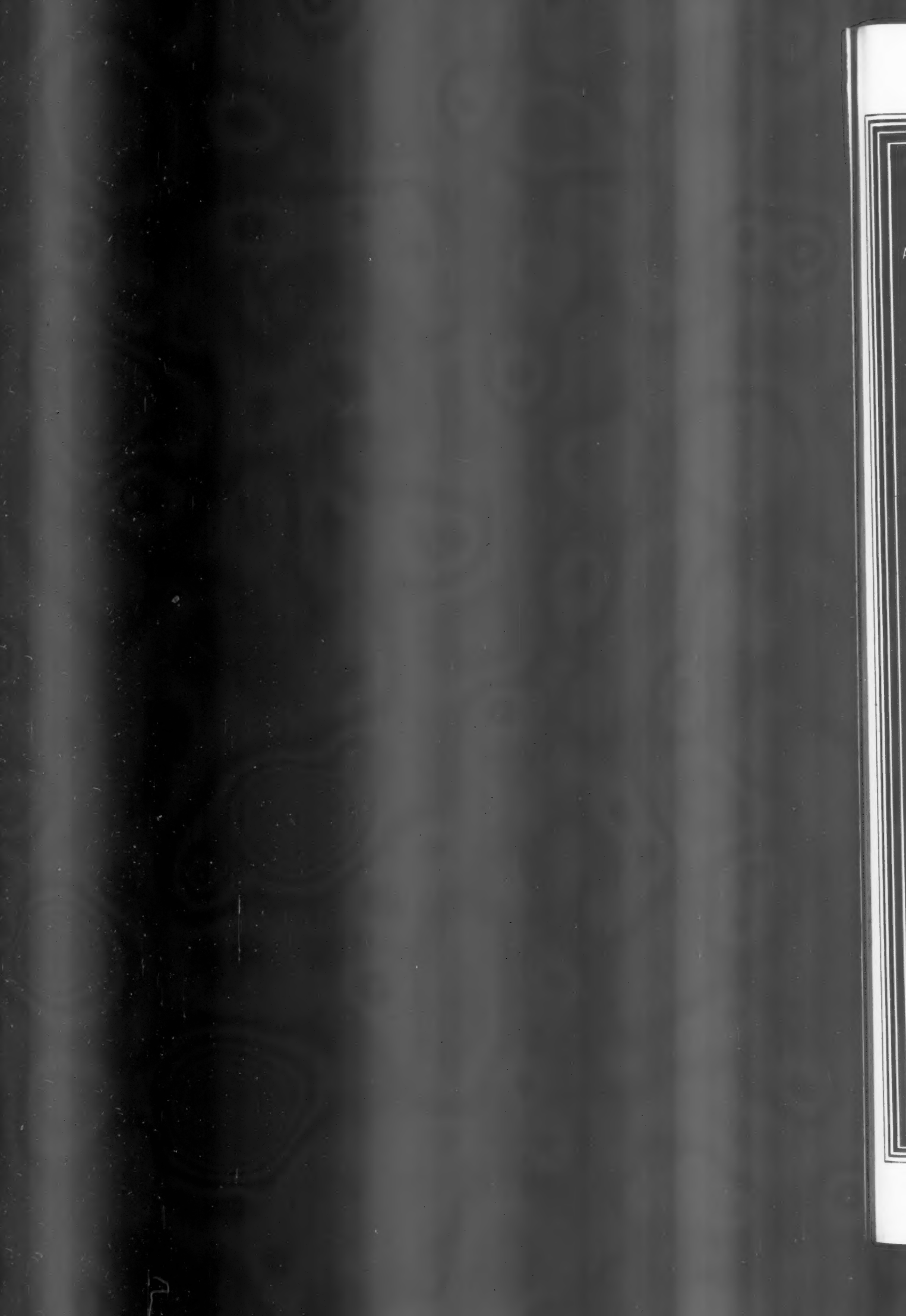

THE ARCHITECTS' JOURNAL

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

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

THURSDAY, SEPTEMBER 25, 1941. NUMBER 2435: VOLUME 94

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.*

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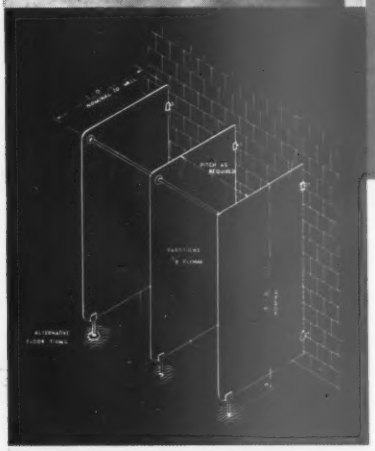

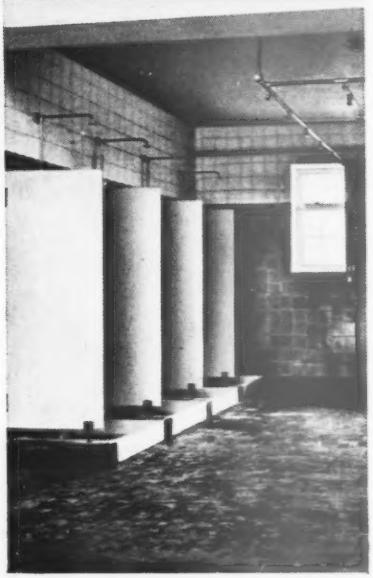

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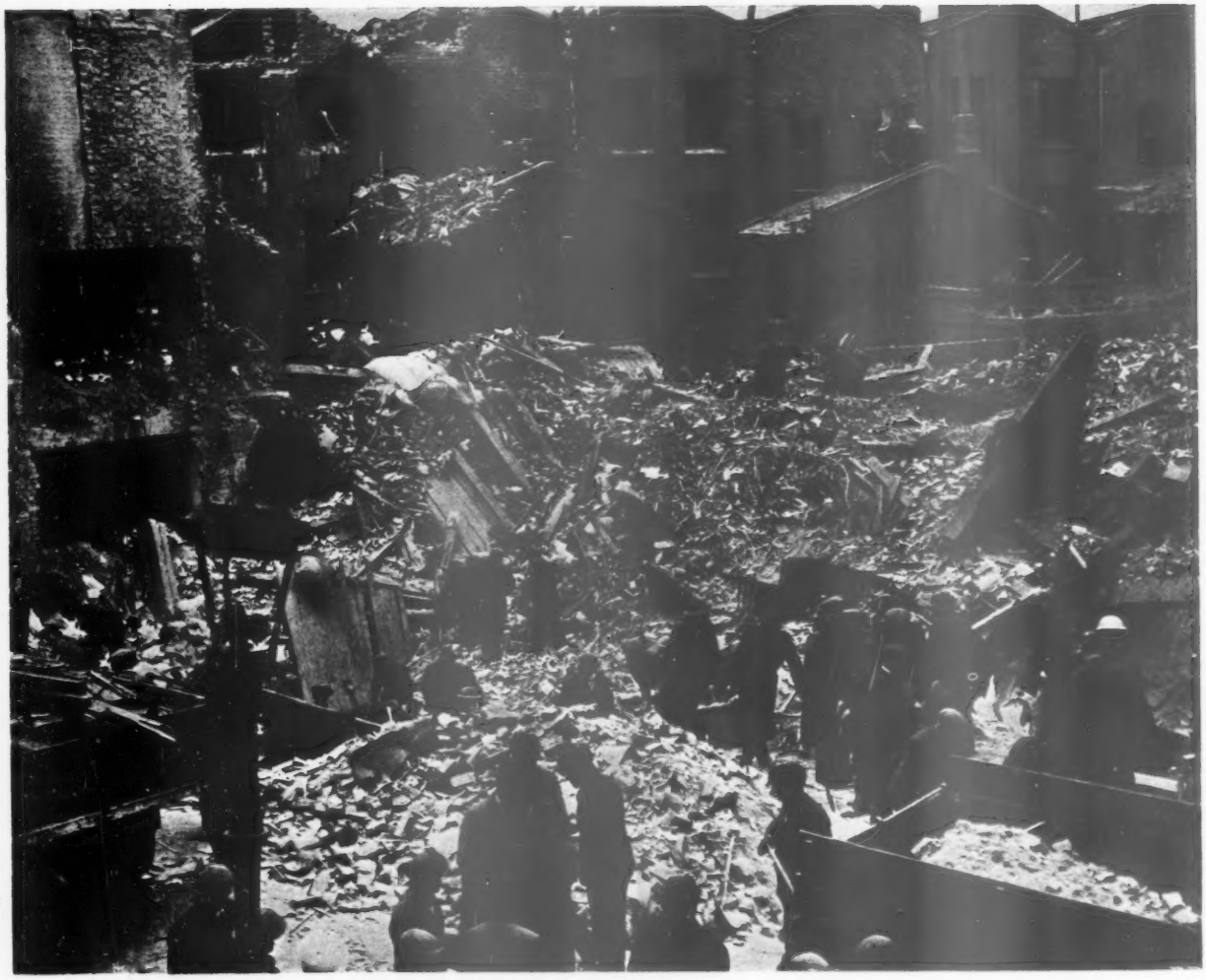
The Benedictine Abbey School at Engelberg, Switzerland, four thousand feet above Lake Lucerne. It was founded in 1120 and rebuilt in 1729. The central block contains the library and the church. The school is arranged round quadrangles, the corner buildings being linked together by walls to complete the enclosure.



AIR RAID DAMAGE

(Above): Wrecked buildings at the Elephant and Castle and (on the left) in the Cut, Blackfriars. Demolition workers starting to clear the site and sort out materials which can be re-used elsewhere.

THE PRIVATE ARCHITECT AND AFTERWARDS

THE private architect has not had an enjoyable time in this war. When it began his practice almost wholly vanished save for clearing up outstanding items. For almost exactly a year no one wanted him, and he suffered from a financial stringency as acute as that during the previous war. Nor was this suffering lessened by his increasing knowledge of the sums of public money that were being wasted by his not being employed on the vast schemes being carried out by the War Office and Air Ministry.

In the second year of the war the situation from a financial point of view has improved. There are not enough architects for the jobs that need doing, although the responsibilities attached to these jobs are often less than those which private architects have been accustomed to bear and the salaries offered impose severe hardships on older practitioners who are asked to leave their own localities.

Friends and acquaintances have become accustomed to express to all architects their envy of the mass of work which will await the profession when the war is over. And there certainly seems no reason to suppose that any architect will lack work of some kind for a decade after peace comes. But in what form this work will become available is a problem to which private architects should give attention even at this stage.

All the tendencies in this war have been for building to be controlled, planned and executed in bigger and bigger lumps. This may be only a temporary necessity and may cease when war ceases. On the other hand there are distinct signs that it may not. Materials will have to be controlled after the war for several years and housing, industry, public utilities and communal service buildings will receive priority. It therefore seems probable that the City Architects' Departments of large cities, the Ministry of Building and other official departments must receive the bulk of available materials.

Simultaneously it seems that novel constructional methods will be used to eke out more familiar materials during the first post-war years. These methods will almost certainly include prefabrication and mass production which in turn require large scale use.

Finally, if Central and Regional Planning Authorities are set up, these authorities working in conjunction with departments charged with the execution of national policy for industry, agriculture and housing will be forced to take decisions about building and the form of buildings : and all of them will need on their staffs a considerable number of architect town planners and architects who are not town planners. These authorites will be grappling, whole time, with very big and most complex problems. They may ask the opinions of private architects, individually or collectively, on certain isolated points; they may occasionally entrust a firm of private architects with the execution of a particular building; but on the whole they will arrive at their decisions concerning building by taking the advice of their own building experts. And these decisions may affect the design of a considerable proportion of post-war buildings.

Private architects may therefore be faced when this war is over with a difficult choice. Either many of them, including some of the best of them, will have to give up their independent status and enter the employment of public authorities as whole time advisers, or else private architects in general will run the risk of being able to exert little or no influence over post-war building.

There will be a temptation to take the lazier course. However much public works may receive priority over private building private buildings will go on being built; and although a public architects' department share of building may grow much larger there cannot fail to be enough left to keep private architects busy for years, if they are content to let others decide everything except the final plan structure and appearance of individual urban buildings. But if private architects do take this lazier course they will forfeit the right to influence—and to criticize—all larger decisions.

But if they decide that, at whatever cost, the most capable architects in the profession, private or official, must take a full share in all decisions concerning physical reconstruction, they should not forget that the cost may be a big one, and may include the surrender for several years of independence and of the pleasure of designing individual buildings. Reconstructions can be steered down the right architectural paths only by able and wholetime architectural guidance : never by the resolutions of professional societies.

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

NOTES & TOPICS

PART HOUSES

WHEN I had examined the illustrations of Mr. L. H. Keay's Part Houses in the JOURNAL, I couldn't help wishing someone had explained more fully what they are to be used for.

★

One presumes that each house is intended to be occupied by only one bombed-out family ; but that in extreme circumstances one Part House may be occupied by two or more families.

★

Mr. Keay, a famous Housing Director, is bound to possess considerable knowledge of social psychology. As Director of Liverpool's Housing, he is certainly an expert in post-blitz pyschology. And one, therefore, wonders whether—post-war usefulness apart—he does not regard the plan of his Part Houses with some misgiving.

★

A multitude of people have to share houses in war-time and a multitude of people are therefore aware that wartime is a very difficult time in which to share a house successfully. Mrs. Watson's husband is in the Army and Mrs. Boyd's is not, and there you are. . . .

★

And the situation is very much worse for bombed-out families, who are apt to be dirty, overtired, short-tempered and carrying with them their dearest possessions. To ask two, or even three, such families to share a Part House in which there is no room to put things in and in which cooking has to alternate with bathing, is to ask for qualities beside which heroism becomes mere routine stuff.

★

The essentials of emergency housing are surely a blast-proof bed-living room for each family (if possible with gas ring, sink and shelves adjoining), a shed at least 6 ft. square for dearest possessions, and communal feeding and washing arrangements. If such accommodation cannot be planned to have a post-war use it would seem best to build two-roomed self-contained houses whose occupancy can be restricted, after the war, to single persons or childless couples.

BRAINS RELAYED

Successors as top-rank radio stars to Haw-Haw and J. B. Priestley are the members of the B.B.C. Brains Trust, who meet every Sunday afternoon to answer "Any Questions." Thus, those people who used to worry Selfridge's Information Bureau or Aunt Mabel with their problems, can now write to ask what Professor Huxley thinks about it and can Commander Campbell explain this.

★

So successful has been the feature that its session time has been extended, and the Trust members, wearing those confident expressions so reminiscent of election posters, have been photographed in their shirtsleeves for *Picture Post*.

★

First architectural question to be fired at them came recently from a listener who wished to know whether it was better, from the point of view of health and comfort, to live in a two-storey house or a bungalow. It is not, you will agree, a very profound question, and it was polished off with careless ease by the Trust's double-act stars—Cyril Never-at-a-loss Joad and Julian Never-at-a-loss-either Huxley.

★

Joad got in first by remarking that for him bungalows had unpleasant associations with ribbon development, and that another trouble about them was that if you wanted to live in a terrace, as he did, a terrace of bungalows would be such a very long one. Huxley, preferring facts to fancies, stated that the question of whether to live in a one- or two-storeyed house was entirely a question of accommodation required and of expense. If, for instance, you wanted a two-roomed house in the country, it would be silly, uneconomical and ugly to place one room above the other. After someone had passed a sotto voce remark about falling out of windows, the Trust then passed serenely on to discuss how a fly lands on the ceiling.

★

Architects will not complain of tnese answers, and will, therefore, I hope, not support the suggestion, made by Timothy Sly in the *News Chronicle*, that the brains of the Trust should be taken up and re-laid.

WARTIME BUILDING BULLETIN NO. 15a

A new Bulletin 15A* has just been issued. This contains modifications to two of the factory designs given in No. 15 and two new factory types. One of the new types and the modifications to the existing types have been devised to help their camouflage treatment. The other new type, designed by the Directorate of Constructional Design, Ministry of Works and Buildings, is intended to save steel. A table is given showing the weights of steel used in various factory types. As usual, working drawings may be obtained (2s. a sheet).

*Wartime Building Bulletin No. 15a (Supplement to Bulletin No. 15) published by H.M. Stationery Office, price 6d. net.

TRAINING OF BUILDERS

The education of recruits for the Building industry is to be taken in hand. As Mr. George Hicks has said, the industry has been depleted by 50 per cent. and an early scheme of training is essential.

★

The problem has three aspects. It is necessary to train operatives, to train managers and to train research workers.

★

The methods of training building operatives have been unsatisfactory since the decline of the guilds. Indenture has replaced apprenticeship and that has meant that education had become dependent on the fortunes of a particular firm. No arrangements have been made for transferring trainees when work is slack.

★

Polytechnics and day trade schools provide an alternative to indenture, but their work needs co-ordinating. Builders have often testified to the value of this type of education but it is only available in certain areas at present.

★

Special training is also necessary for management. Candidates could and should be taught how to handle men and get the best out of them ; they should also be given a sound practical training as it is difficult to inspire respect among men where it is lacking.

IF WINTER COMES

The Record of Buildings is now being speedily compiled. Urged by American insistence and made possible by generous financial aid, gentlemen upholstered with permits to photograph a Martello tower with impunity are daily producing these documents in country lanes, cathedral close, or somewhere in the City, to zealous guardians of security. Thus vouched for they may snap the local weather-cock, town hall or other structures of architectural interest.

★

This photography is a risky occupation for one never knows when an aeroplane will traverse the blameless sky or a barrage balloon peep through the clouds, or a soldier walk into the picture. If any of these accidents happen the law is broken and the penalty is a fine or durance vile—or both.

★

Some of my acquaintances have spent half an hour in the charge room waiting for the inspector. One of these, seated in a hardwood chair, tells me that he reflected that he had warned his wife he would be late for lunch. Moreover he felt a martyr's pride in his blamelessness ; confident that liberty would be renewed even should his films be developed. The sensation was pleasant. The profound silence only broken by the constant telephone messages from YU. Then in came the Inspector, heard the tale, apologised so profusely that the victim wondered if he hadn't some title to compensation from the funds—for illegal detention. He decided he hadn't, since he hadn't put the matter to the test by attempting to leave.

ASTRAGAL

B R I C K S

The Minister of Works, with the agreement of the industry, has appointed a committee, under the chairmanship of Mr. Oliver Simmonds, M.P., to advise him on the steps to be taken for increased efficiency and economy in the manufacture of bricks. The committee is representative of all interests concerned and its terms of reference are, in particular, to advise on steps to be taken to secure adequate output, maximum co-ordination, pooling of resources and information, economy of manufacture, introduction of more scientific methods and on labour and transport problems.

On the formation of the Ministry of Works a Directorate of Bricks was set up in October, 1940, to deal with questions of manufacture, supply and demand of all classes of bricks, excepting glazed and enamelled, and with wages questions in England, Scotland and Wales. A register of manufacturers was prepared which is the most comprehensive yet compiled. As a result the Directorate can estimate brick production accurately.

Inquiries sent to 910 manufacturers showed 907 working 1,184 yards at the outbreak of war, and 634 working 825 yards at July 31 last. 420 were members of associations or brick sections of local chambers of commerce and 214 were non-federated. The estimated output for 1941, based on production in the first five months, is 4,500 million bricks.

The Simmonds Committee will consider the substantial variation in production capacity per man, in methods of manufacture and drying, types of kiln, standards of equipment and organization of yards ; difficulties in supply of labour and fuel ; and which firms or yards should be scheduled under the Emergency Work Order.

Practice in many parts of the country is based on local and family traditions, and the industry, with notable exceptions, has not taken sufficient advantage of modern scientific knowledge and research facilities. Fuller research would facilitate accurate selection of the most suitable type of brick for each purpose. This would tend to limit commercial competition to comparable products and to stimulate technical competition.

The Committee will also consider problems arising from prospective withdrawals of men for the fighting services and their bearing on urgent war-time problems of efficiency and output.

LIST OF MEMBERS

CHAIRMAN.—*Oliver Simmonds, M.P.*

NATIONAL FEDERATION OF CLAY INDUSTRIES.—*Horace Boot, M.Inst.C.E., M.I.Mech.E., M.I.E.E., Messrs. Eastwoods, Limited ; E. ffinch Mitchell, The Sussex & Dorking United Brick Companies, Ltd. ; E. Gwynne Vevers, C.E., The Cattybrook Brick Co., Ltd. ; J. H. B. Dixon, Messrs. Hough & Co., Ltd. ; H. Halliday, F.C.I.S., The National Federation of Clay Industries.*

PRESSED BRICKMAKERS ASSOCIATION.—*Colonel C. W. D. Rowe, London Brick Co., Ltd. ; F. H. Parrott, F.C.A., The Pressed Brick Makers Association, Ltd.*

SANDLIME BRICK MANUFACTURERS ASSOCIATION.—*R. S. Barringer, Mansfield Standard Sand Co., Ltd.*

NON-ASSOCIATED FIRMS.—*C. Trollope, The Gatwick Brickworks ; Major G. H. Alletson, Castle Fire Brick Co., Ltd.*

SCOTTISH EMPLOYERS' COUNCIL FOR THE CLAY INDUSTRIES—*Thomas R. C. Hurll, B.Sc., Messrs. P. & M. Hurll, Ltd.*

SCOTTISH COALMINE BRICK MANUFACTURERS.—*Gilbert Morrison, Niddrie & Benhar Coal Co., Ltd.*

COLLIERY BRICKWORKS.—*F. N. Ross, The Hartley Main Collieries, Ltd.*

———

A. T. Green, F.I.C., The British Refractories Research Association ; Dr. F. M. Lea, D.Sc., F.I.C., Building Research Station ; Dr. J. G. King, Fuel Research Station ; L. H. Pearmaine, The Transport & General Workers' Union ; H. L. Bullock, National Union of General & Municipal Workers.

SECRETARY.—*A. Miller, B.Sc., A.R.I.B.A.*

NEWS

★ Members of the Simmonds Committee on Bricks page 209

★ Prefabrication for German Housing page 212

BRITISH WAR VICTIMS.

Help from American Building Industry

In America the Building Products Committee is making every effort to augment the funds of the British War Relief Society so that there may be no delay in getting vital aid of the kind most needed to the bombed-out civilian population of Britain and the families of men killed in action. The Committee, under the chairmanship of Mr. Herbert Abraham, President of the Ruberoid Co. of New York, is carrying out its plan by seeking the help of all American manufacturers of building products in three ways, (1) a contribution from each corporation; (2) contributions from executives; and (3) contributions from employees.

A.A.S.T.A. FILM SHOW

Friday, October 3rd, at 7 p.m. at Holborn Hall, Gray's Inn Road, W.C. 1. Film Show by the A.A.S.T.A. Films include "Face of Britain," "Housing Problems," "War and Order," "Harvest Festival." All are sound films. Tickets 1/6 from A.A.S.T.A., 113, High Holborn, W.C.1, or pay at the door.

LETTERS

T. H. C.

DUNCAN McCULLOCH

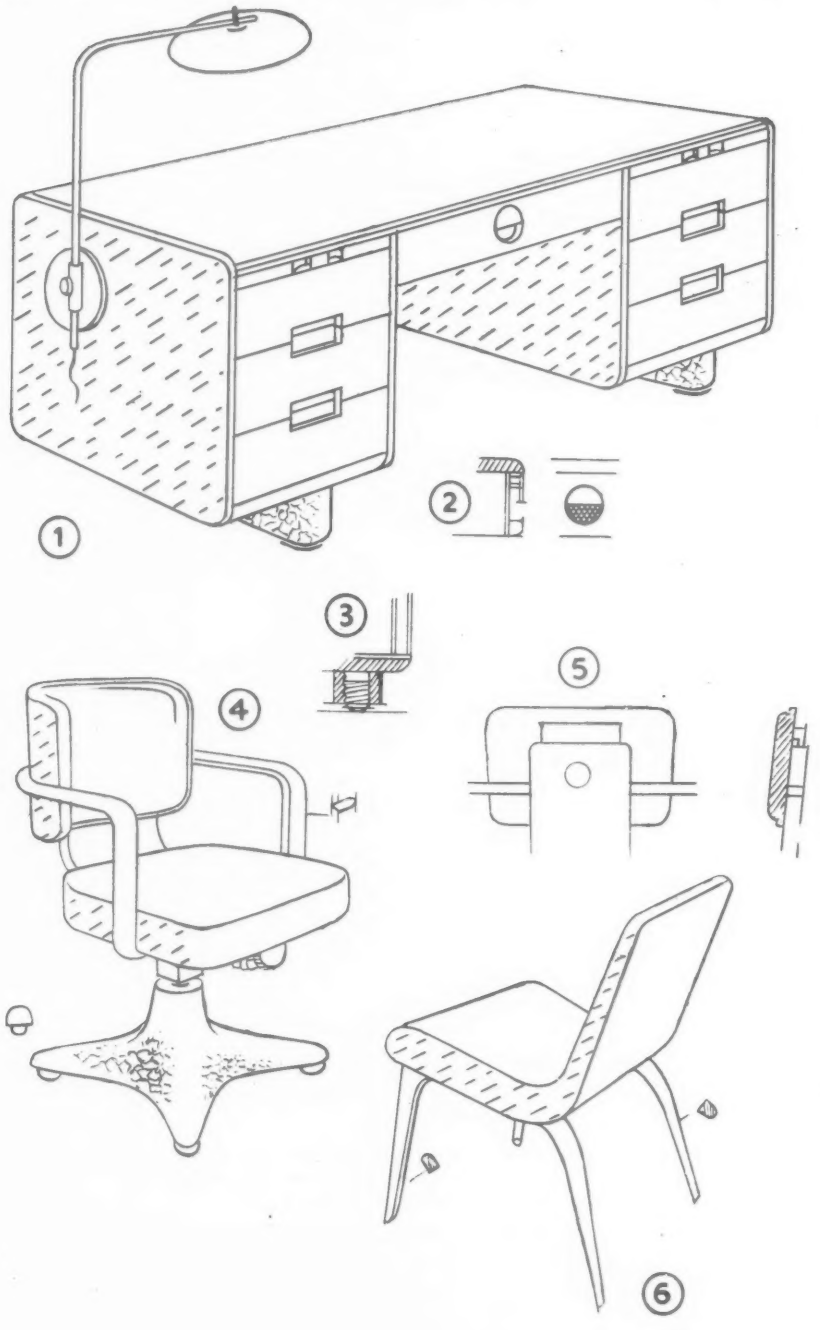
Collaboration with Russia

SIR,—The letter in your issue for September 4 on collaboration with Russia had such a galaxy of signatories that it is with considerable trepidation that I offer the following criticism.

The essence of successful development lies in the preservation of the native culture. Ideas imported from other countries, whether they be French, Turkish, Russian or Chinese, or whether they emanate from the U.S.A. or the Latin-American countries, are all *foreign*, i.e., they are native only to their own nationals.

General principles of foreign origin may be adopted to suit native or local requirements, but the wholesale adoption of foreign techniques will merely

ALUMINIUM FUR-



Mr. Michael Rachlis, the architect and industrial designer, who was born in Moscow and has carried out important work in most of the capital cities of Europe, has joined the group of experts who are helping the aluminium industry to formulate plans for using the special properties of aluminium in new ways when peace is achieved.

Mr. Rachlis has visualised the office furniture of the future and has designed desks and chairs made of aluminium alloy with the directness and functional clarity which the use of this metal permits. This is the first time, it is believed, that metal furniture has been designed in a practical form which is not tubular in its general lines. The light weight of aluminium, the ease with which it may be cast and worked and the fact that anodised finishes can provide every colour of the rainbow, are qualities, in Mr. Rachlis's opinion, which will recommend themselves to the furniture designer of the future. In transport, for instance, aluminium furniture on ships because of its lightness will increase the pay-load in proportion to the weight it saves. On trains and aircraft it will save weight and consequently power.

N I T U R E

WRITING DESK (1)

Front : No projecting handles. All handles are sunk in as detail diagram (2)

Base Supports : Covered with aluminium with an impressed pattern to give surface variation and to increase resistance to wear. Screws are provided with a screwing hole for adjustment.

Detail drawing (3)

Sides : Aluminium with an impressed pattern.

Top : Covered with leather.

SWIVEL ARMCHAIR (4)

Designed with adjustable back (see detail diagram (5) *and made to tilt and also to rise and fall. The base is provided with ball-bearing castors.*

Base and Arms : Cast aluminium.

Supporting Back-plate : Flat sheet formed to box-section.

Upholstered seat and back.

SINGLE CHAIR (6)

Legs designed as complete frame from two cast units and linked under the seat, which is provided with separate fixing-plate. See detail diagram (7)

TYPIST'S CHAIR (8)

Base : Cast aluminium provided with steel sleeve inside casting to receive threading of adjustable fitting.

Back-rest : Adjustable on same principle as swivel chair. See detail diagram (9)

Seat : Upholstered.

Back : In cast aluminium.

result in exotic and hybrid growths which will be speedily repudiated by the peoples on whom they are forced, not, however, before doing damage to their culture.

The greatest architect of modern times, Frank Lloyd-Wright, has spent most of his working life in proclaiming the supreme importance of organic growth from the soil, and in deprecating the employment of European and English techniques in America, and American techniques (and his own in particular) by the European and English peoples, for this very reason. "You may adopt my principles, but as for technique, every man his own."

I therefore urge that the experiences of Russians in planning for Russia will not necessarily be of value to Englishmen as Englishmen. The Eskimo's igloo is not native to the Sahara desert, neither is the Arab's tent native to the polar regions. Both are probably eminently suited for the purpose for which they are intended in their respective terrains, but an interchange (if such were possible) would merely result in two utterly useless curiosities.

It may be that any attempt to exploit foreign ideas in this country would result in something equally unacceptable and equally foolish.

T. H. C.

Post-War Planning

SIR,—A very great deal of thought has been given in the past to the ever-present problem of replanning, not only towns and cities, but the country itself as a whole. Theories and ideals have been expounded and exploded, but seldom exploited. In recent months, as is natural when considering the vast amount of damage which has been done and which may unfortunately still be done, this field of thought has attracted many more theorists and idealists than ever before, and the general public also have been forced into a sudden realization of the tremendous possibilities which are to be presented to the country generally and to the leaders of the architectural and town-planning bodies in particular.

Hence the opportunity presents itself for the architectural profession, by virtue of its training and abilities, to concentrate every atom of its energies on the pursuit of an improved standard of living and housing conditions *for the present generation.* The grand conceptions produced by planning bodies and institutes ignore the one essential factor : the responsibility of the planner, is now, and always must be, the provision of improvements in the homes of the people. Not only is this one of the few aspects of the replanning and rebuilding programme which is attainable *in our time*, but it remains the basis of the architect's contribution to the progress of civilization.

Let this fact be but once pressed home to the rising generation of architects, and let them but concentrate on this pursuit of better housing, forgetting meantime all the grand theories and ideals which can be poured out on national and regional planning, and realizing the tremendous nature of this call in the interests of human happiness and health, and the first great step will have been taken towards overcoming one of the greatest problems the profession has ever been called upon to face. Let them dedicate themselves to the task of relieving the housewife of drudgery, or of providing the children with healthier and happier surroundings ; let them concentrate even upon the possibilities of improving the domestic hot water supply, and they will be fulfilling their most useful and important function, for that is the field upon which the average architect can display his powers, and where he can most ably and most quickly add his contribution to the well-planned future we hope to see.

Let him, according to his position and opportunity, consider the needs of the family first. Then let him consider the needs of the group of family dwellings forming a small district. What do they require, as a group, to give them happiness and health. Then let him consider the needs of a number of groups forming a small community, and its relationship to the group and to the town or city of which it forms a part. Then, and only then, need he consider the intricacies of town and regional planning. Until these smaller entities, all with their own individual and peculiar requirements, have been satisfactorily and completely planned, he should leave the larger and more idealistic schemes to those who are appointed to their consideration.

It becomes apparent, therefore, that the architect, be he in a position of eminence in a large city, or comparatively unknown in a small country town, can, by dint of study of every detail of family needs within the home, contribute enormously towards the well-planned future. Once *every* architect, however obscure or limited in his field of activity, realises this essential fact and the opportunity which it presents, we are well on the way towards our goal. No one will deny the urgent importance of the large-scale vision which must be applied, and applied now, to the vast national and regional schemes. But the small man must realise that he *can* add, now, to the country's welfare. We cannot all be appointed to the high places, but we can serve faithfully and well in the appointed place which is ours.

Having assumed this responsibility towards the betterment of living conditions the architect must then look towards his responsibility to his art. During the past fifty years or so, and particularly in the past ten years, there

has been an ever-increasing tendency towards the assumption that all modern architecture, to be up to date and smart, must conform to the almost universally adopted Continental cubist freakism that has spread like a rash over town and country alike. Indeed, in writing on the subject of Town as against Regional Planning in the "Architectural Review," Mr. J. M. Richards goes so far as to say that "Modern architecture belongs to the metropolitan culture, and tends to be international in style." He also points out that there should be a "vernacular approach that is an expression of the difference of places, local customs and traditions," and herein lies the real cause of the undoubted decline in the architectural profession within the last decade or so. There has been no such expression of vernacular in much of the modern architecture with which this country has been cursed for a number of years, with the natural result that architecture, particularly domestic architecture, has become more or less mass-produced.

There, again, is an obvious call to the architect of to-day, especially the young architect. On every hand there is ample evidence of the dying out of our traditional styles, with no indication of a natural evolution of a new tradition. Our towns, cities, villages even, are becoming rapidly devoid of any trace of vernacular expression, and it needs no evidence to convince the discerning mind that, deplorable as this fact undoubtedly is, there is little but apathy in both the lay and the professional attitude, to prevent its continuance until all trace of local or national tradition disappear altogether. It is essential, therefore, that the architect, faced with the vast amount of rebuilding which must be done, and the unequalled opportunity which that rebuilding presents, should expend all his energies upon the intensive study of all our many traditional methods, based on climatic and local conditions. These could, indeed must, be resuscitated if we are to achieve a progressive programme of living.

Clydebank. DUNCAN MCCULLOCH

A.A. LECTURERS TO THE FORCES

The Council of the Architectural Association, in response to a request from the London Regional Committee for Education among His Majesty's Forces, has formed a panel to be known as the Architectural Association Panel of Lecturers to His Majesty's Forces, of which the following have become members :—E. J. Carter, A.R.I.B.A., A.A. DIPLOMA ; R. A. Duncan, A.R.I.B.A. ; Major E. Maxwell Fry, F.R.I.B.A. ; F. R. Hiorns, F.R.I.B.A. ; E. R. Jarrett, A.R.I.B.A. ; Brian H. Peake, A.R.I.B.A., A.A. DIPLOMA ; Capt. T. F. Reddaway, M.A., F.R.HIST.S. ; R. H. Sheppard, A.R.I.B.A., A.A. DIPLOMA ; Prof. Eva G. R. Taylor, D.SC., F.R.G.S., F.R.HIST.S. ; F. R. Yerbury, HON. A.R.I.B.A.

A series of lectures entitled "The Rebuilding of London" has been arranged.

IN THE

RANKS OF OUR ENEMIES

no less than in our own, propaganda for *Reconstruction* goes on. The theme of building continually recurs, and from time to time their more illuminating statements are quoted here for the benefit of those who take an interest in the architectural psychology

OF

THE OTHER CAMP

PREFABRICATION FOR GERMAN HOUSING

Professor Rudolf Stegemann, the President of the German Academy for Building Research, writes about the post-war German building programme (in *Das Reich*), that the building industry will not be able to master all the tasks it will be entrusted with after the war unless a complete change is made in its technical and economic conditions. It is impossible to provide the gigantic number of houses required if the old method of building by artisans continues to be practised. It is not surprising, therefore, that Dr. Ley,* as Commissar for the Social Building Programme, has formulated a clear demand to give up the old methods *and to start the mass production of houses in factories.* This means, of course, that individualistic tendencies have to be given up, and ground plans as well as the various parts will have to be standardised.

Dr. Ley's idea is to have a supply of houses manufactured and stored, so as to be able to have them delivered to the place where they are to be erected whenever required. *Under these conditions brick buildings will be out of the question,* and *only two building materials will be suitable—wood and steel.* As regards wood, there is not enough of it in Germany to make it possible to use it for the bulk of the German building programme ; besides, wooden buildings will have to be avoided in the future with a view to protection from air attacks. In practice that leaves only steel. But although steel is eminently suitable for buildings of four storeys or more, it is unsuitable and uneconomical in the construction of low buildings for which wood remains the only suitable material known so far.

Source: Das Reich.

*Ley is the tough boss of German labour and the Nazi party machine, and now one of the Big Four with Goering, Himmler and Ribbentrop. There *were* six but Goebbels has lost rank and Hess isn't there any more.

NEW ROME STATION

Rome will have the largest, the most beautiful, and the most unique main railway station in the world, it is claimed here. This station was to have been completed for the world fair in 1942. It rises at the back of the terminus station and its most peculiar feature will be that it will have a subterranean Roman Catholic church. There will even be a separate chapel where corpses arriving by rail may be deposited. The whole station will consist of three large buildings. The central section will have a breadth of 332 metres. One wing will be 482 metres long, the other 731 metres long. Two gigantic halls with pillars will form the front of the station. There will be altogether 52 pillars 19 metres in height, two metres in diameter. The underground railway of Rome which is being built with great speed will also have a station in this main railway station. Plans for Rome provide for the connection of this city with the sea. New "Via Imperiale" will have a length of 26 kilometres. There will be gardens, parks and new living quarters along it. Rome's population is expected to have doubled in 30 years' time. It will then have 3,000,000 inhabitants and the city by then will extend down to the sea.

Source : Transocean News Agency.

FARM BUILDING PROGRAMME IN GERMANY

The Reich Minister of Food has organized a competition for plans for German farm buildings. The size of the prizes offered is stated to show how deeply interested the Reich Government is in providing up-to-date living conditions for the farming community. Special attention is to be paid to labour-saving devices for the farmer's wife. Generally speaking a synthesis of sound old farm traditions and healthy progress is to be aimed at.

The Reich Commissioner for Social Building and Counsellor Beruttau of the Government Building Office, writing in the periodical *Der Soziale Wohnungsbau in Deutschland*, makes the point that houses in the country should not be inferior either in size or in equipment to the standard laid down in the Führer's programme for communal buildings. An attempt should be made to improve as much as possible the living conditions of the whole farming community. Although final instructions for the building programme in the country have not yet been issued, a limited number of houses will be built during the war and a programme prepared which will be put in hand immediately after the war. Some 5,000 houses are stated to be already on order and a further 10,000 under consideration.

Source : N.D.Z.

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GENERAL CONSIDERATIONS & PRINCIPLES OF DESIGN IN WELDED STEEL, No. 5.

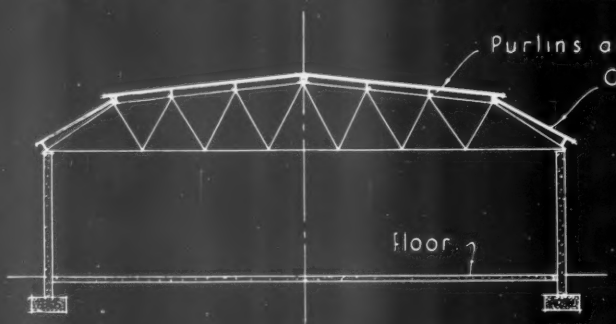

FIGURE 1: TRIANGULATED TRUSS.

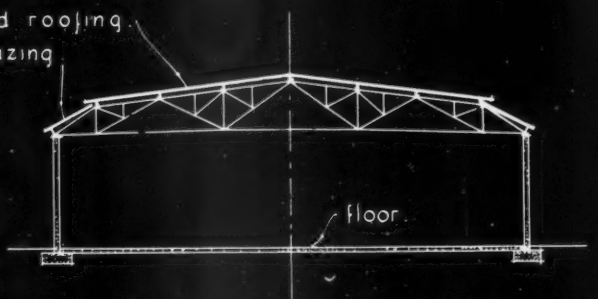

FIGURE 2: DOUBLY TRIANGULATED TRUSS.

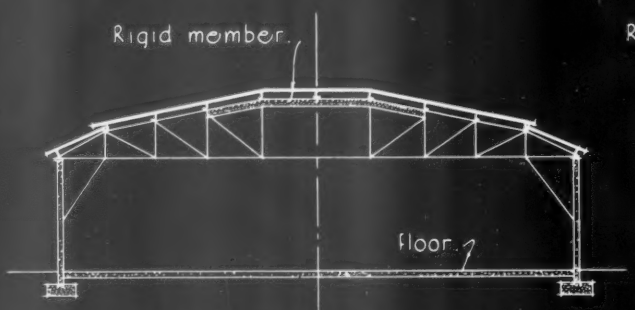

FIGURE 3: TRUSS WITH PARTLY RIGID CHORDS.

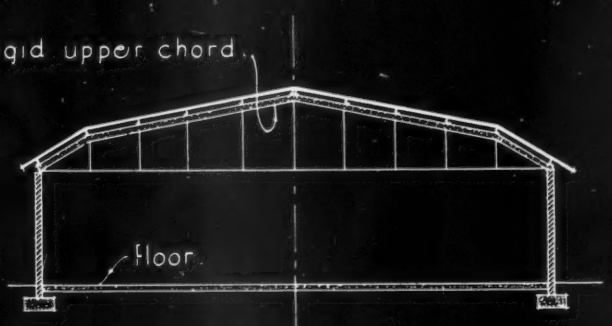

FIGURE 4: TRUSS WITH FULLY RIGID CHORDS.

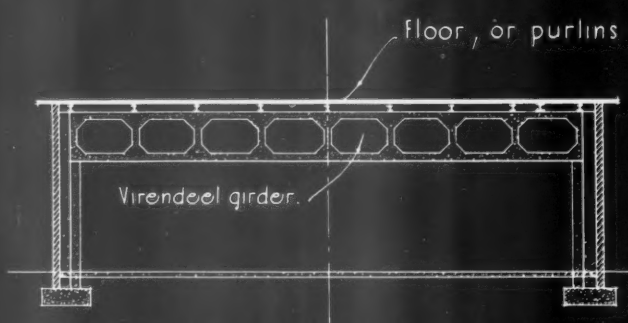

FIGURE 5: FULLY RIGID TRUSS SYSTEM (a).

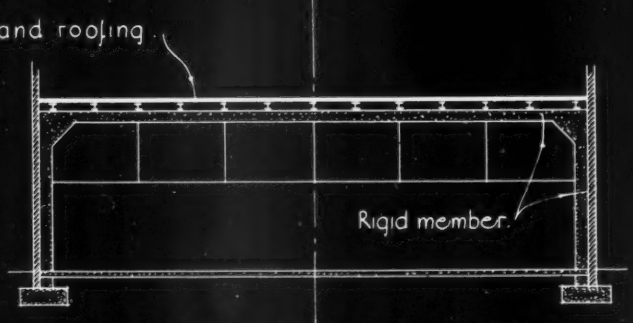

FIGURE 6: FULLY RIGID TRUSS SYSTEM (b).

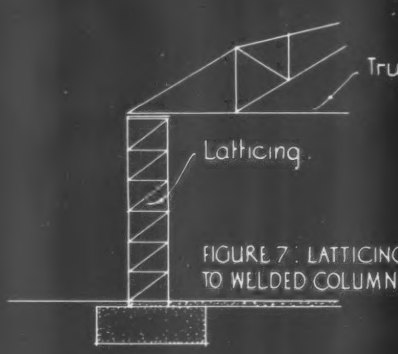

FIGURE 7: LATTICING TO WELDED COLUMN.

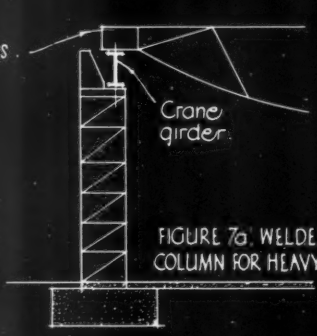

FIGURE 7a. WELDED LATTICE COLUMN FOR HEAVY LOADING.

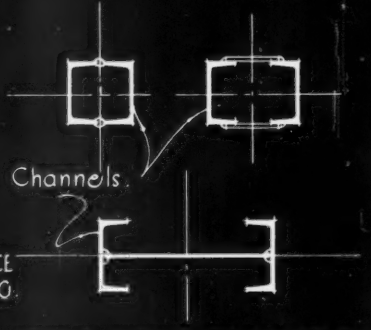

FIGURE 8: TYPES OF COLUMNS FOR WELDING.

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INFORMATION SHEET: STEEL FRAME CONSTRUCTION, 59: WELDING No. 15.
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STRUCTURAL STEELWORK

Subject: Welding 15: General Considerations and Principles of Design in Welded Steel: No. 5, Industrial Buildings and Large Single-storey Construction (continued).

General:

This series of Sheets on welded steel construction is a continuation of 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 in buildings. The economies in cover and dead weight, resulting from the use of lighter and smaller steel members and connections, are taken into consideration in the preliminary arrangement of the building components in order to obtain a maximum economy in the design of the steel framing.

This Sheet is the fifth of the section dealing with general considerations and principles of design in welded steel frame construction, and illustrates typical roof truss and column sections for industrial buildings and large single-storey construction.

Economy:

All structural members of one-storey buildings can be economically welded, and in many instances amenities can be arranged which are difficult to provide in riveted construction.

Non-rigid Construction:

These consist of trusses, purlins and columns. Trusses can either be triangulated as with riveted trusses (see Figure 1); doubly triangulated, which requires less labour than the corresponding riveted systems (see Figure 2); have partly rigid chords (see Figure 3); fully rigid chords (see Figure 4), or finally, a fully rigid system can be adopted (Virendeel Girder, see Figure 5). Details of these trusses will be explained further in Sheets Nos. 17, 18 and 19 of this series.

Roof Form:

The systems shown in Figures 2 and 4 may be chosen for economy, particularly if the form of the roof is similar to that shown in the Figures. The advantage of the other three systems lies mainly in the fact that they provide a varying number of open panels, and this is important where suspended floors are concerned, or where ducts and pipelines have to be carried through along the roof, e.g., in theatres and cinemas.

The systems illustrated in Figures 5 and 6 would provide an extra storey without entailing the use of additional structural members.

Columns:

The use of special sections, see Figure 8, allows columns to be constructed so that the amount of material provided to prevent buckling is reduced to a minimum.

In such cases, latticed columns are used more in welding than in riveting (see Figure 7), and this permits them to take bending moments with comparatively little material. Where bending moments are to be taken by the foundations, a large anchored base is required, which can be suitably welded. The same type of construction can be applied where cranes are to be carried (see Figure 7a).

Bracing:

Bracing in horizontal or vertical planes should never be welded, as the bolting on of such bracing usually provides support during erection, whereas welding would present complications.

Previous Sheets:

Previous Sheets of this series on structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 754, 755, 759, 763, 765, 769, 770, 772, 773, 774, 775, 776, 777, 780, 783, 785, 789, 790, 793, 796, 798, 799, 800, 801, 802, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 816, 819, 821, 822, 823, 824, 826, 827, 829, 830, 832, 836, 837, 838, 839 and 840.

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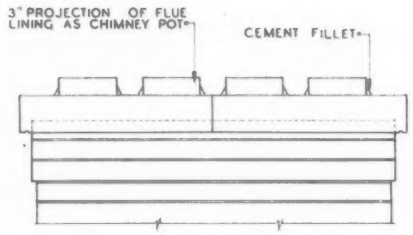
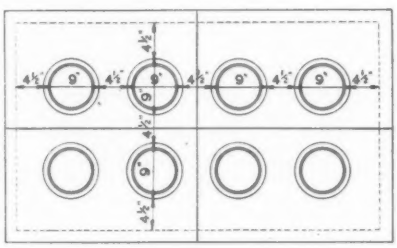
HOUSING SCHEME AT HAYDOCK

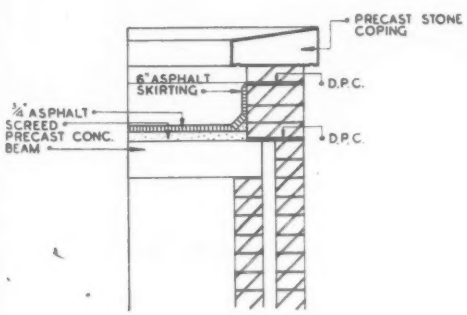
DESIGNED BY R. MAIN



ELEVATION OF CHIMNEY STACK



PLAN OF PRECAST CHIMNEY CAPPING



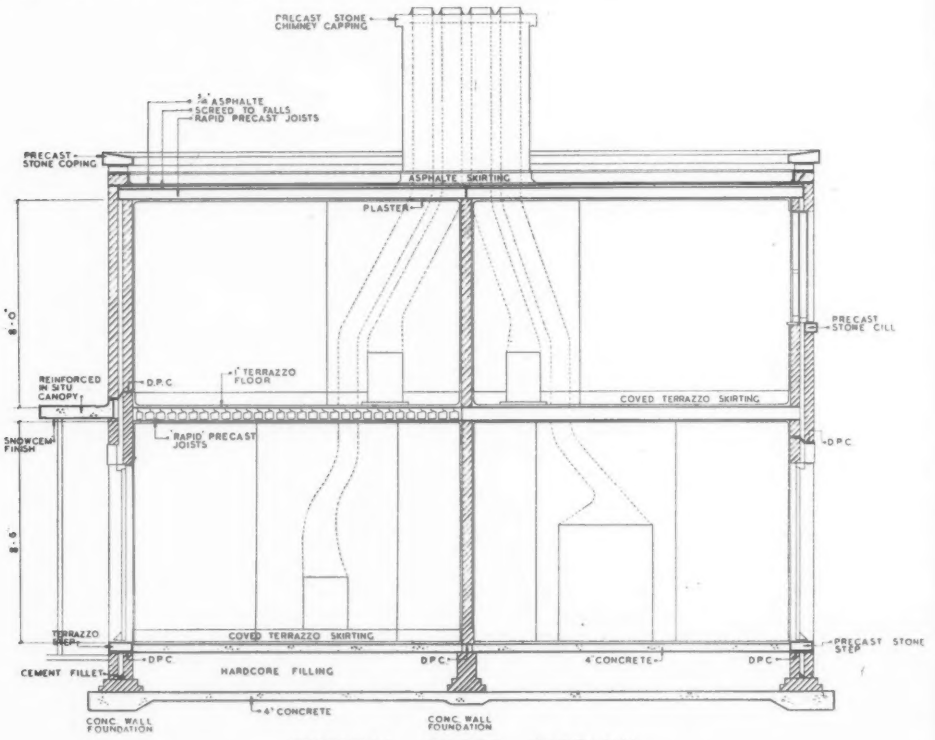
SECTION THRO PARAPET

DETAILS OF PARAPET AND CHIMNEY STACK

GENERAL—This scheme, which consists of 90 two-storey and 6 one-storey houses, was commenced before the war, but was suspended. Later there was a demand for housing, and it was decided to proceed with the work. At this stage, the road lay-out was complete and some of the houses were partially constructed. In addition, most of the joinery work, windows, doors, etc., was already on the site and the problem

Top : hoisting the pre-cast concrete beams ; Above : a roof under construction, and showing the formwork used for the canopy over the front door and the projecting bay window on the ground floor.

HOUSING SCHEME AT



TYPICAL CROSS SECTION

GROUND FLOOR PLAN FIRST FLOOR PLAN

PLANS OF THREE-BEDROOM NON-PARLOUR TYPE HOUSE

HAYDOCK

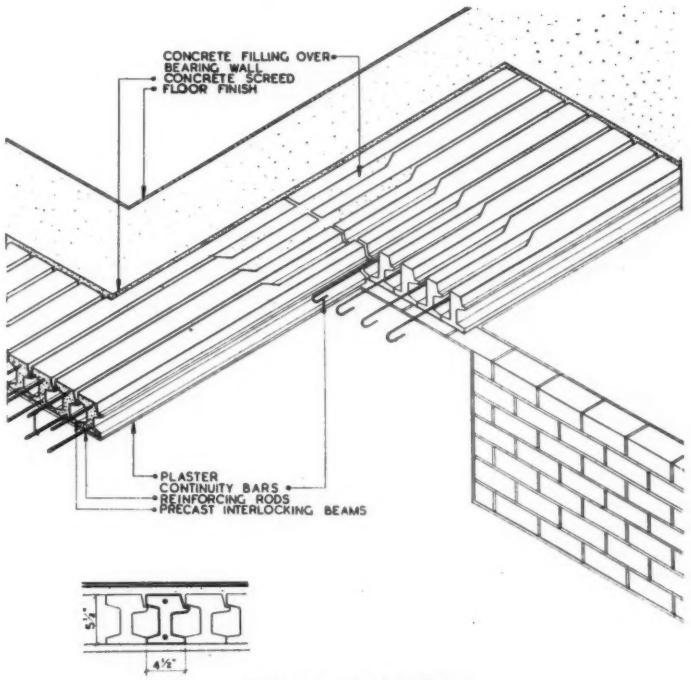
DESIGNED BY

R. MAIN

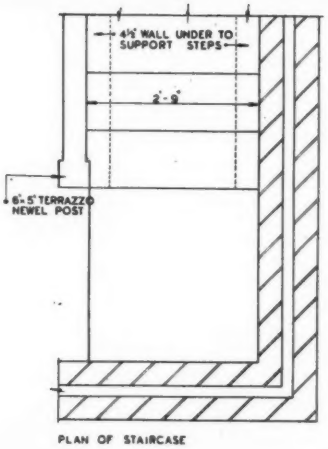
that confronted Mr. R. Main, Surveyor to the Haydock Urban District Council, was to complete the houses, using concrete instead of timber for staircases, floors and roofs. It is for this reason that the scheme, as far as design is concerned, must be regarded as a compromise, since existing layouts, plans and even joinery had to be used.

PLAN—All the houses are built in pairs ; and there are no terraced blocks of four or six houses. The reason for this is twofold ; first, there is a local dislike for the through-

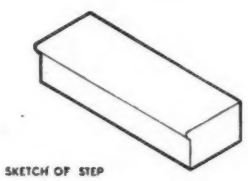
The photographs show : above, two different elevational treatments of the three-bedroom non-parlour type house ; right, the pre-cast concrete beams being placed in position.

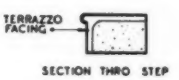


DETAILS OF FLOOR



PLAN OF STAIRCASE

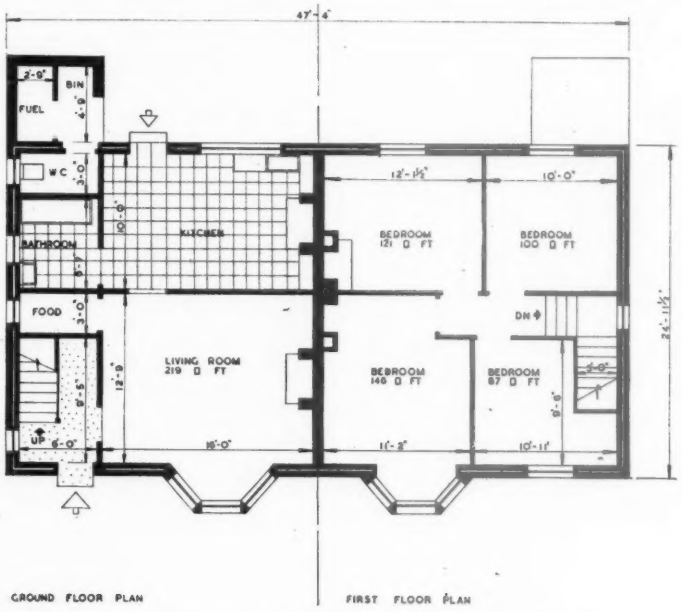




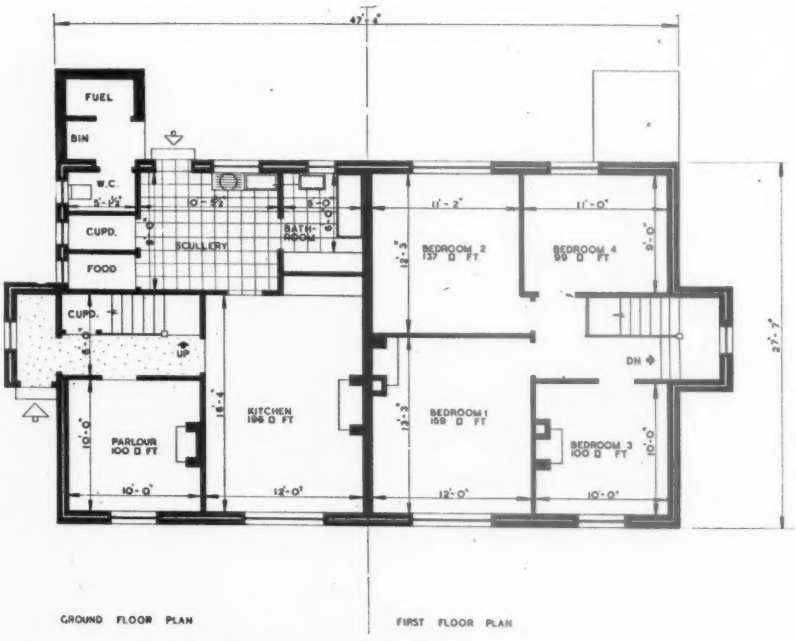
STAIRCASES

DETAILS OF STAIRCASE

HOUSING SCHEME AT HAYDOCK



PLANS OF FOUR-BEDROOM NON-PARLOUR TYPE HOUSE



PLANS OF FOUR-BEDROOM PARLOUR TYPE HOUSE

passage required in terraced housing work, and, secondly, the whole of the region in which this housing scheme is situated is liable to subsidence, due to the extent of the underground workings.

CONSTRUCTION—Foundations, raft; walls, 11 in. cavity brickwork, pointed or rendered; ground floor, hardcore, 4 in 1 : 2 : 4 concrete; first floor, Rapid concrete joists, screed to level; roof, Rapid concrete joists, screed to falls and asphalt; staircase, chimney cappings and parapet copings, precast concrete; cills, external, precast concrete, internal, terrazzo; lintels, precast concrete; canopies, in situ concrete. Ground floor, entrance hall, terrazzo, elsewhere, quarry tiles; first floor and staircase, terrazzo.

DESIGNED BY R. MAIN

REINFORCED BRICK WALLS FOR SHELTERS

The Ministry of Home Security Research and Experiments Department in Bulletin C 20, on the Construction of Reinforced Brick Walls for Surface Shelters and Similar Protective Buildings, just issued, states that an objection sometimes raised against the use of reinforced brickwork for surface shelters is the difficulty of erection. No difficulty arises if the reinforcement is properly supported while the building is in an early stage.

Home Security Circular No. 290/1940 introduced a design for a surface shelter using vertically reinforced brickwork walls in place of ordinary brickwork. The brickwork of this design was in English bond and the reinforcement was not connected to any foundations or floor slab, the walls being built on a sliding course.

Experience has shown, however, that the extra cost involved in providing the shelter with its own floor is amply justified by the increased protection afforded. The principal of a sliding course is maintained, but the course is now placed below the floor of the shelter, so that the shelter forms a complete box and has therefore much greater lateral strength than the earlier portal form.

The designs given in bulletin C 20 simplify the placing of the wall reinforcement. With English bond the positions of the vertical reinforcing rods cannot be varied as they are fixed within very narrow limits by the bonding system and some other form of bond giving more latitude in placing was necessary to facilitate continuity between floor and wall. The bonding of the brickwork is chosen so that there can be some small tolerance in the placing of the floor reinforcement allowing room for the bars coming up from the floor to be lapped over the bars in the wall.

Since brick sizes differ in different parts of the country, care must be taken to space the floor reinforcement to suit the brick size used.

It is often urged as an objection to the use of reinforced brickwork that it is difficult to hold the reinforcement in position during the erection of the brickwork. Two methods are described, adaptable to any length of wall for supporting the reinforcement while building is in progress. The equipment can be re-used indefinitely.

NEW STANDARD FOR GLAZING

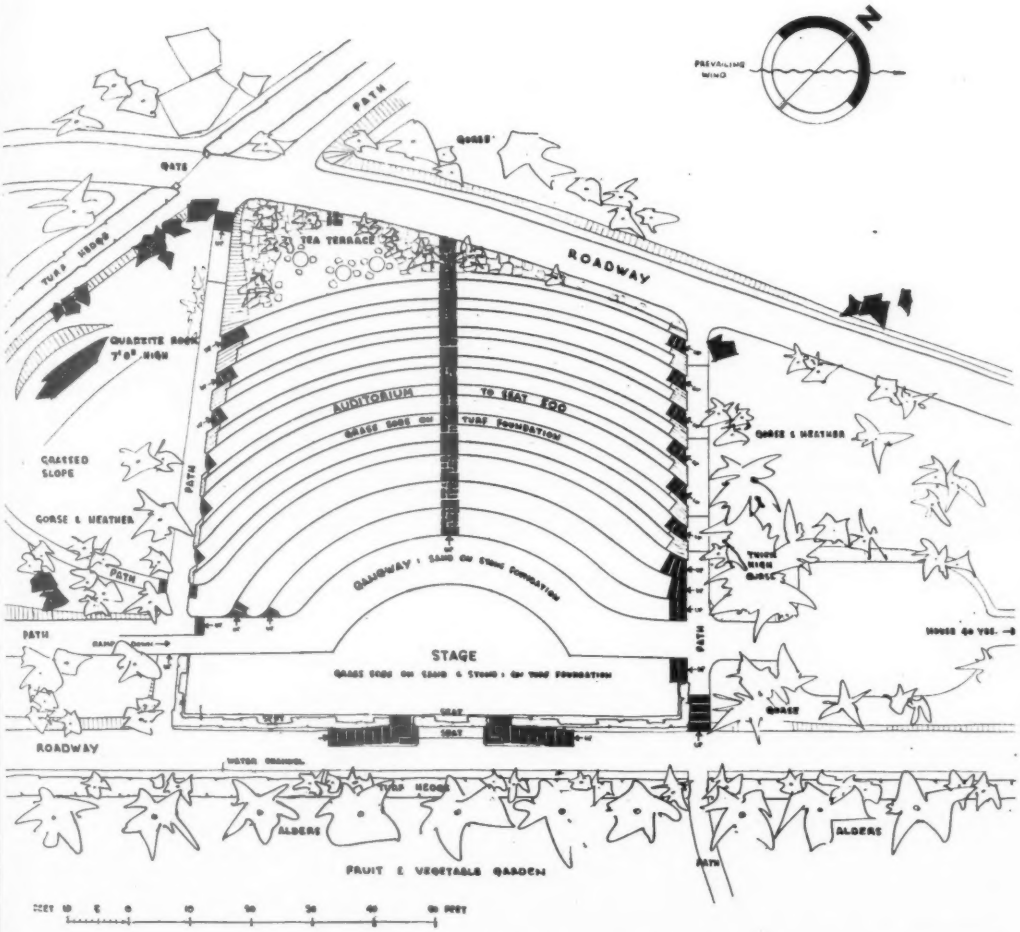
The British Standards Institution has just issued a Code of Practice for the Glazing and Fixing of Glass for Buildings (B.S.973, 1941).

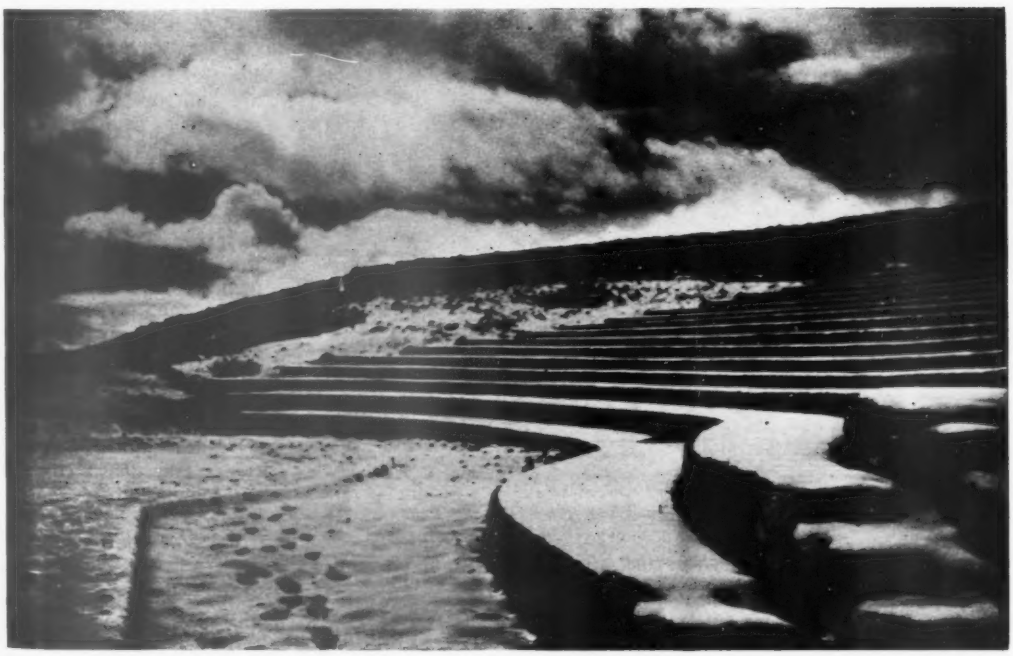
The preparation of this code was authorized by the Building Divisional Council in response to a request received from the manufacturers. The code of practice recommends that the work should be carried out by skilled and qualified craftsmen and that the method of glazing or of fixing adopted should be such that any movement of the structure to which the glass is secured does not transmit any strain to the glass itself.

It is also pointed out that if the glass is so rigidly or tightly fixed to a structure that temperature strains set up in the glass cannot be relieved, or if the vibration or subsidence of the building is transmitted to the glass, breakage will undoubtedly occur.

OPEN-AIR THEATRE

DESIGNED BY NOEL MOFFETT





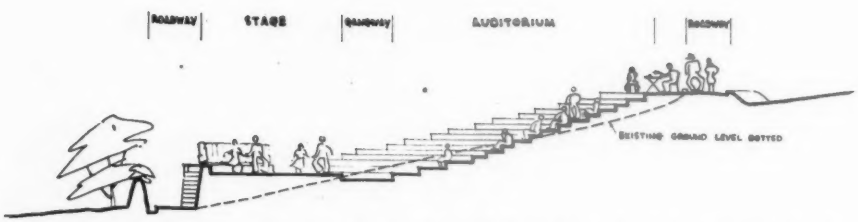
GENERAL—The theatre is situated on Achill Island, in County Mayo, and was commissioned by Major D. J. Freyer, of Corrymore House, a large guest-house which it adjoins, for the following reasons : (1) To promote local interest in native dancing, singing and drama, and to counteract the influx of modern dance-music into Achill and County Mayo. (2) To provide a suitable centre in the West for the encouragement of Irish native culture. (3) After the war, to arrange visits of teams of folk-dancers from other countries. Major Freyer is a member of the International Folk-Dance Committee, and a proficient folk-dancer himself. And, lastly, to provide a charming and practical example of modern landscape architecture.

SITE—The bogmoor on which the theatre has been built forms a natural amphitheatre, so that very little excavation or building-up had to be done.

BACKCLOTH—When seated in the theatre one's eyes are drawn to the calm stretch of bogmoor reaching from sea to mountain to the east. Far enough away to form a firm but not distracting background are the towering cliffs of Minaun, and beyond that the Mallaranny hills. To the south are Connemara and the Twelve Bens, and in between the surging spray - smudged Atlantic, sown with islands. A three-foot hedge of flowering evergreen shrubs is planted on top of a turf dwarf wall at the back of the stage, and forms an immediate backcloth for the players. This hedge, and the alder trees shown on the plan, act as a wind-break and enhance the views described above, as seen from the tiers of seats.

Left : the seating of the theatre under snow.

OPEN-AIR THEATRE IN COUNTY MAYO



Top: the backcloth to the theatre, with the village of Dooagh on the left; above: the lowest tiers of seats.

LAY-OUT—Based on the old Greek conception, but the rigid semi-circular plan has been varied to meet the client's requirements and the exigencies of the site.

BUILDING MATERIALS—Bog turf for main construction, grass screes for covering to stage and seats, sand for gangways and paths, and local quartzite for the steps.

STAGE—The central part of the stage is semi-circular. The lateral extensions were provided to give a total length of 80 ft., necessary for certain folk-dances. The back part of the stage is supported by a battered wall built of turf bricks. This is 5 ft. 6 in. high, above the level of the roadway behind the stage. The bricks were cut on the mountain-side adjoining the theatre by local turf-cutters. The front of the stage is protected by a layer of thin flag-stones placed immediately under the grass screes. It is possible for actors to come from the house direct to the steps at the back of the stage, without being seen from the auditorium, by way of the roadway. The stage is drained by three French drains of rough stone.

SEATS—Seating is for 500 people. Most of the seats are cut out of the hillside, but three rows at the back are built up of turf bricks in a manner similar to the back of the stage. The seats are of two types: at the top of the theatre the access gangway to one row of seats acts as the back to the row in front. The front rows are 4 ft. 6 in. wide, the back portion acting as access gangway. The gangways are approached by rough-hewn stone steps from the side paths. Gangways and seats are finished with thin grass screes laid direct on the turf foundation. A central gangway of stone runs from top to bottom of the theatre and gives access to the central seats.

DESIGNED BY NOEL MOFFETT

FACTS ABOUT GLASS FOR ARCHITECTURAL STUDENTS

No. 4—Wired Glass

A glass reinforced by a wire mesh embedded in the middle of the glass. Valuable as a safeguard against accident, burglary, and as an efficient fire retardative.

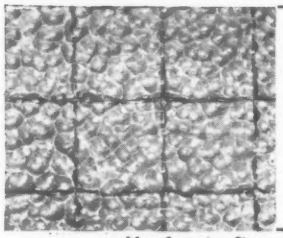
THICKNESS
Approx. : ¼"

WEIGHT
Approx. : 3¼ lbs. per sq. ft.

QUALITY
One quality only.

TRANSLUCENT TYPES—*Light Transmission about 80%*

GEORGIAN WIRED CAST



A rough-cast double rolled glass reinforced with fine ½" square mesh wire electrically welded at intersections.

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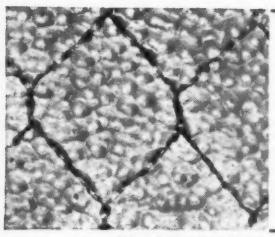
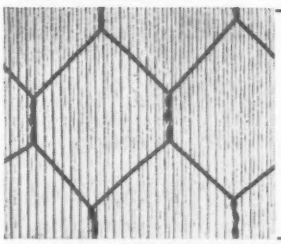
WIRED CAST



A rough-cast double rolled glass with a ⅞" hexagonal mesh wire reinforcement.

Manufacturing Sizes: 120"×40" or 144"×26".

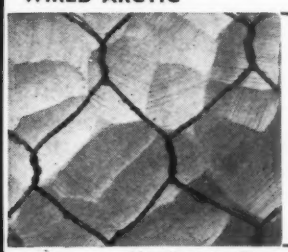
WIRED ROLLED



A rolled ribbed glass with a ⅞" hexagonal mesh wire reinforcement.

Manufacturing Sizes: 120"×40" or 144"×26".

WIRED ARCTIC

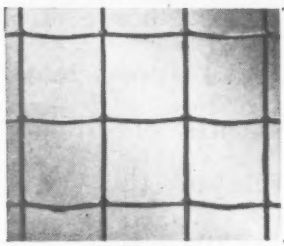


A figured rolled glass with a ⅞" hexagonal mesh wire reinforcement.

Manufacturing Sizes: 110"×42" or 120"×24".

TRANSPARENT TYPES—*Light Transmission about 85%*

POLISHED GEORGIAN WIRED



Glass with a polished plate finish reinforced with fine ½" square mesh wire electrically welded at intersections.

**Manufacturing Sizes: 110" long × up to 36" wide.*

POLISHED WIRED

Glass with a polished plate finish having a ⅞" hexagonal mesh wire reinforcement.

**Manufacturing Sizes: 110" long × up to 40" wide.*

** Greater widths can be supplied specially.*

GLAZING SIZES This type of glass is largely used for roof and factory lighting in patent glazing bars, either vertical or horizontal, and in suitable sizes specified by the trade.

USES Wired glass is used for rooflights, lantern lights, and vertical glazing in public buildings, warehouses, factories, workshops, etc., where maximum protection is needed against shocks and risk of spreading fire. The transparent types are valuable for partitioned offices, counting houses, stores, etc., where clear view is desired, together with protection against breakage, fire and burglary.

SPECIFICATIONS In preparing specifications, the following clauses should be included for glazing :—

(1) General Clause : All glass to be of the type, quality, and substance specified and to be of British manufacture. The glazier must be prepared to produce at the completion of the job invoice or voucher from the manufacturer to show that the glass supplied is of the specified standard.

(2) Glasses should be described by the recognised trade terms, thicknesses and qualities.

This is published by PILKINGTON BROTHERS LIMITED, of St. Helens, Lancashire, whose Technical Department is always available for consultation regarding the properties and uses of glass in architecture.

LONDON OFFICE AND SHOWROOMS AT 63 PICCADILLY, W. 1. TELEPHONE : REGENT 4281

WOMEN of EMPIRE

BEHIND the far-flung bastions of the British Commonwealth of Nations, and backing the dauntless men who fight the Battle for Freedom on Land, Sea and in the Air, lies a vast reservoir of mental and physical strength of a nature undreamed of in past centuries. We refer to the women of the British Empire who are doing yeoman service, in Auxiliary Fighting Services, in Munition factories, on the land, in transport, or carrying on uncomplainingly on the "home front." Ladies, we salute you all. History may not record all your individual acts of undaunted courage — but in the weft of the World's weaving the threads of your gallantry will have done much to "hold together" the fabric of a new and better World."

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SOME QUESTIONS ANSWERED THIS WEEK:

THE ARCHITECTS' JOURNAL

INFORMATION CENTRE

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

Enquirers do not have to wait for an answer until their question is published in the JOURNAL. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential; and in no case is the identity of an enquirer disclosed to a third party.

Questions should be sent by post to—

THE ARCHITECTS' JOURNAL
45 THE AVENUE, CHEAM, SURREY

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

VIGILANT 0087

The reply will come by post.

Q 793

ARCHITECT, SURREY.—*I registered for Military Service in the 27 age group in May, 1940, as a qualified architect (A.R.I.B.A.), and was medically examined in the following month, being placed in Grade IIa. The interviewing officer told me my calling up papers would be posted within the following weeks. Over a year has elapsed without my calling-up papers arriving and I have since obtained employment as a building surveyor in the office of the district valuer, on war damage assessments. I am still on this work, and informed the Ministry of Labour and National Service accordingly at the time of taking up duties. I understand that my present occupation as surveyor will decide my OCCUPATION FOR RESERVATION PURPOSES and not my actual qualifications as an architect?*

According to the Schedule of Reserved Occupations and Protected Work (Revision April 10, 1941), a building surveyor is reserved at 23 but the age is raised to 25 at Stage C. The date at which Stage C will be reached has not been published but the Schedule states that men de-reserved at Stage C will not, as a rule, be

required to join their units before October 1, 1941.

For the purposes of the Schedule a man's age is his age at the date when his age-class was required to register, so it is clear that building surveyors of your age are reserved and will not become de-reserved under the provisions of the present schedule.

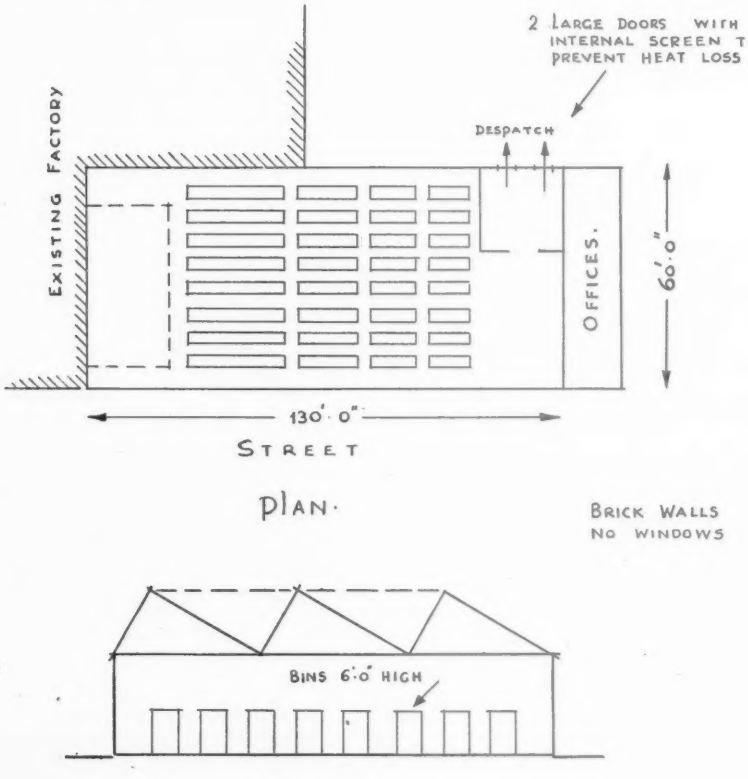
There is nothing to prevent a man changing his occupation after registering, but he will only gain reservation in his new occupation if his change of occupation is notified to the allocation office at which he was registered, before the issue of an enlistment notice. The allocation office is that stated on your certificate of registration (Form N.S.2).

If you wrote to the Ministry of Labour (Head Office), notifying them of your change of occupation we suggest that it would be a safeguard for you to notify your local office as mentioned above, unless the Ministry has already informed you that this has been done.

Q 794

ARCHITECTS, STAFFS. — *Immediately before the war, we constructed a warehouse, having dimensions* 130 *ft. by* 60 *ft. and being* 13 *ft.* 6 *in. from floor to underside of tie beam. The roof is spanned by a Warren girder type truss in three north light sections, as sketch, the south slope being covered with Big Six asbestos Trafford tiles. It was our clients' intention that this warehouse should be used solely for the purpose of storing nuts and bolts in steel bins. War conditions, however, have caused them to occupy* 23 *ft. of the WAREHOUSE at one end for the purpose of sorting, there being some* 20 *girls employed in this area. Having regard to the purpose for which the building was intended, it was not deemed advisable at the time of erection to instal apex or any other kind of ventilator. The heating is by means of multi-ray blower unit heaters, which during the summer can be used as internal fans. Recently the factory inspector casually observed that the conditions do not satisfy the Factories Act, as there is INSUFFICIENT VENTILATION. Considering the internal dimensions of the building, and the type of construction employed, we are not altogether sure that this is correct.*

According to Section 4 (1) of the Factories Act, 1937, "Effective and suitable provision shall be made for securing and maintaining by the circulation of fresh air in each workroom the adequate ventilation of the room and for rendering harmless, as far as practicable, all fumes, dust and other impurities that may be injurious to health generated in the course of any process or work carried on in the factory." Section 4 (2) empowers the Secretary of State to prescribe a standard of adequate ventilation but according to the latest list of S.R. & O. at H.M. Stationery Office, the Minister has not exercised this power; there is little doubt, therefore, that the factory inspector is basing his remarks on Section 4 (1). As you mention the internal dimensions of the building and make no reference to windows, etc., we would like to remind you that lack of ventilation must not be confused with overcrowding, which is dealt with in Section 3 of the Act; as far as we can judge there is no question of this part of the factory being overcrowded.



Ventilation of a warehouse. See Question No. 794.

Q 795

ENQUIRER, LONDON.—*Is it necessary to apply for a BUILDING LICENCE in connection with bomb damage?*

All building work, which is not of national importance, requires a licence if the cost is to exceed £100 except in the case of purely maintenance work, etc. Temporary first-aid repairs which are required to prevent or minimise further damage are regarded as maintenance work and no licence is required. Repairs or reinstatement of war damage, however, is not considered as maintenance work and a licence will be required if the work exceeds £100.

Q 796

ENQUIRER, OLDSWINFORD.—*What accommodation, building materials and equipment will be required for a WORKS CANTEEN for* 80 *to* 120 *workpeople, both sexes?*

You should consult an architect as the nature of the building and equipment will depend upon the site and services available.

Should you wish to form a preliminary opinion we advise the study of:—

Canteens in Industry.—Published by the Industrial Welfare Society, 14, Hobart Place, London, S.W.1. Price 1s. 0d.

Messrooms and Canteens at Small Factories.—(Home Office Welfare Pamphlet No. 2), H.M. Stationery Office, Kingsway, London, W.C. Price 4d.

Planning the Canteen in War-time.—Radiation, Ltd., 7, Stratford Place, London, W.1.

Electricity and Communal Feeding.—The British Electrical Development Association, 2, Savoy Hill, London, W.C.2.

INFORMATION CENTRE

TEAK CAN TAKE IT

Railway coach of Teak built for the Flying Scotsman of 1888.

In 1938 these coaches were reassembled for a jubilee run from London to Cambridge and back—the journey was made in comfort and at good speed, judging both considerations by to-day's standards.

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Finally, and then only because it has become old-fashioned in design, it is scrapped . . . after thirty, forty, fifty years of service. But the Teak of which that coach was built has neither snapped, cracked, warped or split. It is as good as on the day it was put in. TEAK can TAKE it.

No architect or builder would ask that a house timber should suffer such harsh treatment as a railway coach.
But just because Teak has such great durability and stability, because it is so dependable and trouble-free, it is the ideal building timber.

The only true Teak is Tectona Grandis—see the "British Standard Nomenclature of Hardwoods." BURMA TEAK is Tectona Grandis.

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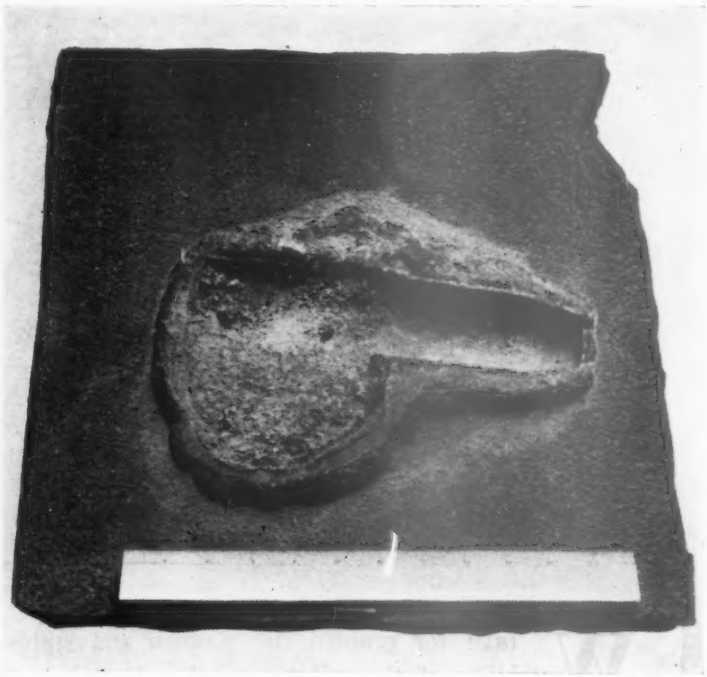
TRADE NOTES

Asphalte Mastics and Incendiary Bombs

Before the outbreak of war, experiments were carried out by the Natural Asphalte Mine-owners and Manufacturers Council, to ascertain the probable effect of incendiary bombs upon mastic asphalte surfaces. These tests convincingly established that when laid on a firm foundation there was every reason to expect that asphalte would be very little affected by the burning of the kilo magnesium (electron) bomb. Since the commencement of night bombing by the enemy, these conclusions, judging from the illustrations in a brochure just issued, are amply confirmed. But there is further evidence of the confirmation of these conclusions in the fact that a sample of roofing asphalte submitted by the Council to the Fire Testing Station, passed British Standard A.R.P. Specification No. 47, the standard test for protective materials against incendiary bombs. The illustrations show a number of asphalte roofs after incendiary bombs had fallen and completely burned out, and there is no damage other than the imprint of the bomb. In each case, it is claimed, the asphalte was not penetrated either by heat or impact, and its waterproof properties were unaffected. In these circumstances it would seem to be a wise precaution to use asphalte to cover vulnerable flat or sloping roofs and in the construction of temporary flat roofs for damaged buildings. Another use for asphalte in connection with fire precautions in war time that will readily occur to mind is the lining of static water tanks.



"An area of asphalte cut out from a roof showing the imprint made by a kilo incendiary bomb. The asphalte was not penetrated either by heat or impact."

CHANGE OF ADDRESS

Mr. Denis Poulton, Dip. Arch., L'pool, A.R.I.B.A., Chartered Architect, has moved to 148, Dorset House, Gloucester Place, N.W.1. Telephone : Welbeck 8898.

Messrs. Elcock & Sutcliffe, Architects, through the courtesy of the Anglo-Iranian Oil Co., Ltd., are temporarily accommodated in Britannic House, Finsbury Circus, London, E.C. 2, to which address all communications should be sent. Telephone : Central 7422.

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

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B. E. LAWRENCE, M.A., Ph.D.
Chief Education Officer.
696

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.

JUNIOR ARCHITECTURAL ASSISTANT for Central London Office, knowledge of working drawings, measuring up buildings, etc. Reply, stating age and salary required to Box 310.

JUNIOR ASSISTANT required in London Architect's West End Office. Good opportunity for keen youth aged 14-17. Slight experience preferable but not essential. Write for interview, Box 315.

QUANTITY SURVEYORS, SURVEYORS AND ARCHITECTS required for work in London. Salaries from Seven Guineas per week. Box 316.

QUANTITY SURVEYOR required by Liverpool firm of Quantity Surveyors. Applicants please state age, experience and salary required to Box 321.

Architectural Appointments Wanted

SENIOR ARCHITECT'S ASSISTANT, A.R.I.B.A., above military age, requires responsible position in West Riding of Yorkshire or district. Experienced in all branches of the profession, including Factories, Hospitals, A.R.P. Work, preparation of quantities, etc., Salary by mutual arrangement. Box 240.

ARCHITECT AND SURVEYOR prepared to accept part-time work at own office, quantities, working drawings, details, tracings, etc. Box 283.

CHARTERED SURVEYOR AND REGISTERED ARCHITECT (Associate of Allied Society) requires part or full time work in Lancs., Yorks., or Midlands. Trained Building and Valuation Surveyor with special experience in Estate Development, Valuation, Compensation, Compulsory Acquisition and Rating. Salary by arrangement based on £400. Box 281

SURVEYS and Schedules for war damage compensation Senior Assistant offers part time services. Box No. 284.

LONDON ARCHITECT-SURVEYOR seeks whole or part time employment. Age 45. (Prizeman Building Construction, Prizeman Decorations). Estate Developments. Factories, Camps, Hospitals. Prefabricated units in wood, steel and concrete. Vibro-consolidated concrete works. War Damage Assessments. Representative, Liaison Officer. Box 273.

ARCHITECT AND SURVEYOR, P.A.S.I. (40), seeks whole or part-time appointment, Oxon, Bucks, Warwick areas preferred; conversant with W.D. claim procedure; wide general experience in all branches; used to responsibility; car. Box 288.

DRAUGHTSMAN, 4 years Polytechnic School of Architecture. Interm. Exam. this year. 5 years' practica experience as draughtsman. Neat and quick. Friendly alien on work of national importance. Holder of auxiliary War Service Permit. Seeks work in architect's office. Salary by arrangement. Box 301.

ARCHITECT (QUALIFIED), wishes to assist other architects in his home by preparing ½ in. scale on detail drawings, specifications, tracings, etc. (The latter can be done very quickly as he has two tracers collaborating). Perspectives can also be prepared, and the advertiser has had such works exhibited in many Architectural Exhibitions. Accustomed to all types of works from initial stages to completion. Box 303.

ASSISTANT (20 years), good architectural experience, capable Draughtsman, spare time studying for Inter R.I.B.A., seeks position in Architects' or Structural Engineers' Office. Exempt from military service. Box 306.

FULLY QUALIFIED ARCHITECTURAL ASSISTANT requires spare-time work. Sketches, working drawings, details, perspectives. Fees moderate. Box No. 307.

ARCHITECT (29), R.I.B.A. Diploma. Friendly alien desires employment, office or site, excellent references, South West England preferred. Box 312.

SENIOR ARCHITECTURAL ASSISTANT engaged on Air Ministry and on Local Government A.R.P. work, seeks change. Central or North London preferred. Box 309.

SENIOR ASSISTANT offers part-time services for general architectural work including War Damage Surveys, Schedules, Checking Accounts, etc. Box 311.

Classified Advertisements continued on page xxiv.

JUNIOR ARCHITECTURAL ASSISTANT (21) requires position in architect's office; three years' architectural course at Technical College and Art School. Intermediate Exam. R.I.B.A. Box 313.

ARCHITECT (40) offers services as Works Architect on Government work or as Assistant in office on similar work. Full knowledge Ministry requirements and procedure. Capable man. Livewire. London district or will consider provinces. Industrial specialist, Wartime Building, A.R.P., Ministry Forms and requirements. Box 314.

A.R.I.B.A., 20 (Final, awaiting election), desires post as Assistant in any part of England. Box 317.

JUNIOR ARCHITECTURAL AND SURVEYING ASSISTANT (21), seeks position in an architect's office. Three years at Technical College; three years office experience with architect. Exempt from military service. Box 318.

PROBATIONER, R.I.B.A. (18), good education (London Matric. with credit in drawing), seeks post in architects' office, London or Eastern Suburbs, with view to obtaining practical experience in connection with study for Diploma. Salary nominal.—J. H. Muswell, 62, Woodcote Road, Wanstead, London, E.11. 319

YOUTH, just leaving Secondary school (age 16), seeks position in Architects' office. At present taking R.I.B.A. course.—Write L. Prichard, 54, Swinburne Road, Roehampton, S.W.15. 320

Other Appointments Wanted

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

QUANTITY SURVEYOR offers services in preparation of quantities, schedules, surveys, estimates, accounts, and the supervision of contracts. Box 689.

EXPERT TYPIST, wife of Architect now called up in the Army, would like typing to do at home. Accustomed to specifications, etc. Charges supplied on application to Mrs. I. L. Curry, 56, Regents Park Road, London, N.W.1. 686

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: (1914-1919) 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.**

Miscellaneous

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

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.

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WANTED. COPY OF "SITE PLANNING IN PRACTICE," by L. Thompson, published at 16s. new or second-hand. Allister, Sturrock. Box 253.

WANTED TO PURCHASE copy of ARCHITECTS' JOURNAL dated November 27th, 1929. Box 290

WANTED. LEICA CAMERA & ACCESSORIES. Particulars and prices to Box No. 694.

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