THE ARCHITECTS' JOURNAL

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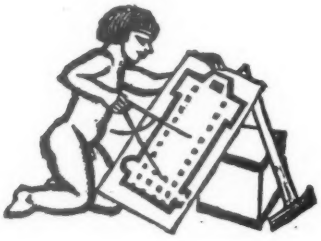
The Editor will be glad to receive MS. articles and also illustrations of current architecture in this country and abroad with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

PRINCIPAL CONTENTS

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

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

In common with every other periodical and newspaper in the country, this JOURNAL *is rationed to a small proportion of its peace-time requirements of paper. This means that it is no longer a free agent printing as many pages as it thinks fit and selling to as many readers as wish to buy it. Instead a balance has to be struck between circulation and number of pages. A batch of new readers may mean that a page has to be struck off, and conversely a page added may mean that a number of readers have to go short of their copy. Thus in everyone's interest, including the reader's, it is important that the utmost economy of paper should be practised, and unless a reader is a subscriber he cannot be sure of getting a copy of the* JOURNAL. *We are sorry for this but it is a necessity imposed by the war on all newspapers. The subscription is £1 3s. 10d. per annum.*



from AN ARCHITECT'S *Commonplace Book*

" Who many a sturdy oak has laid along
Fell'd by Death's surer hatchet, here lies John Spong,
Post oft he made, yet ne'er a place could get
And lived by railing, tho' he was no wit.
Old saws he had, although no antiquarian ;
And stiles corrected, yet was no grammarian.
Long lived he Ockham's favourite architect,
And lasting as his fame a tomb t'erect,
In vain we seek an artist such as he,
Whose pales and piles were for eternity."

Epitaph to an Architect at Ockham.

NEWS

APPOINTMENTS

The following have accepted the invitation of Lord Portal, Minister of Works and Planning, to become members of the Consultative Panel on physical reconstruction : The Rt. Hon. the Viscount Samuel, G.C.B., C.B.E ; Alderman F. Marshall, M.P. for Brightside Division, Sheffield ; and Mr. J. H. Forshaw, M.C., F.R.I.B.A. (Architect to the L.C.C.).

PREMIER CHALLENGED

Lord Portal made his first public appearance as the new Minister of Works and Planning when he attended a luncheon arranged by the National Federation of Building Trades Employers at the Savoy Hotel, London, on Wednesday of last week. Full report of his speech is printed on pages 282-285 of this issue. Mr. Thomas Howarth, President of the Federation, during the course of his speech, challenged the Prime Minister and Mr. George Hicks, M.P., Parliamentary Secretary, MOWP, to a " switching match "—a north country term for a race between bricklayers—to see who can lay the most bricks. He said he had been prompted to make this challenge after seeing a photograph in a daily paper of Mr. Churchill laying bricks at an A-A battery site. He suggested that the stake should be £20, and that the losers should give this sum to Mrs. Churchill's Aid to Russia Fund.

INSTITUTE OF REGISTERED ARCHITECTS

The offices of this Institute have been reopened in London and are situated at 47, Victoria Street, London, S.W.1. Mr. Vincent Burr has been re-elected President of the Institute for the second successive year. The Annual General Meeting will be held at 29, Lincolns Inn Fields, W.C.2, on Saturday, April 25, at 3 p.m.

COMMITTEE ON PLUMBING

Some months ago the Building Research Station of the Department undertook, so far as time and opportunity permitted, to make a survey of plumbing practice following discussions which indicated that it would be timely. More recently the Ministry of Works and Planning as indicated in a recent press announcement about inquiries on post-war building invited the Station to arrange for recommendations to be made on plumbing for post-war building. Accordingly, the Building Research Board have appointed the present Committee with the following personnel and terms of reference.

Members of Committee. Chairman : Mr. Sydney Tatchell, F.R.I.B.A., F.R.SAN.I. *Members:* Messrs. W. Mumford Bailey, M.R.SAN.I., M.INST.H.V.E., Major Henry Clay, R.A.M.C., F.R.SAN.I., F.I.S.E., F. J. Gayer, F.I.O.B., G. H. Harris, R. G. Hetherington, C.B., O.B.E., M.INST.C.E., J. W. Laing, F.I.O.B., F.A.R.P.I., A. Longworth, F.R.SAN.I., A.M.I.S.E., F.I.O.P., F. Lorne, F.R.I.B.A., H. J. B. Manzoni, C.B.E., M.INST.C.E., J. H. Markham, F.R.I.B.A., W. M. Lloyd Roberts, M.ENG. (Liverpool), M.INST.C.E., A. Scott, M.B.E., F.R.I.B.A. M.I.STRUCT.E., R. S. Sidle, F.R.SAN.I., Dr. Charles F. White, M.D., D.P.H., D.T.M. and Mr. J. Wilson, O.B.E., F.R.I.B.A., F.R.S.E.

Terms of Reference.

(i) To review existing scientific information and practice in this country and abroad on plumbing (including the underground drainage forming part of normal building works) with particular references to the supply of cold and hot water in buildings and the removal of soil, rainwater and waste therefrom.

(ii) To make recommendations for practice in post-war building.

(iii) To make such recommendations for further research as may suggest themselves in considering (i) and (ii).

Many suggestions have been made for the advance of plumbing practice, such as : plumbing arrangements to prevent frost trouble, economy in plumbing for war-time and post-war construction, planning of buildings to facilitate economical and efficient plumbing, prefabrication of plumbing work, standardization, more extended use of the " one-pipe " system, scientific approach to anti-syphonage venting, more exact definition of health hazards—so that precautions may be adequate and yet not wasteful, noise reduction, selection of adequately durable materials for pipes, cisterns, fittings, etc., according to specific requirements. These are among the problems which will be considered.

The Committee will be glad to avail itself of the experience of experts throughout the country on the above, and other plumbing questions. Letters conveying constructive ideas for making plumbing practice more efficient and

Sir Geoffrey Whiskard

At the time of his appointment last year as Permanent Secretary to MOWP, Sir Geoffrey Whiskard had just completed his five-year term of office as British High Commissioner in Australia. Five months elapsed before he returned to this country to take up the position and the Deputy Secretary acted for him in his absence. Born in 1886, he was educated at St. Paul's School and Wadham College, Oxford. He entered the Home Office in 1911 as Assistant Private Secretary and subsequently became Principal Private Secretary to successive Secretaries of State from 1915-20. Other appointments then followed: Assistant Secretary, Chief Secretary's Office, Dublin Castle (1920-22); Colonial Office (1922-25); Dominions Office (1925-29). He accompanied the Secretary of State for Dominion Affairs on his visit to Canada, Australia, New Zealand and South Africa (1927-28); was Vice-Chairman of the Overseas Settlement Committee (1929-35) and, in addition, Assistant Under Secretary of State, Dominions Office (1930-35). He was appointed High Commissioner for United Kingdom in Australia in 1935.

economical will be welcomed. They should be addressed to the Director, Building Research Station, Garston, Nr. Watford, Herts.

BUILDING IN RUSSIA

A lecture, arranged by the AASTA House Branch in the Ministry of Works and Planning, was given recently by Mr. David Percival, A.R.I.B.A., at St. John's Hall, Westminster.

The lecturer began by saying that through the study of town planning and building it was possible to derive a better insight into the aims of the Soviet Government, and the degree of their fulfilment, than from almost any other field. The immense problems involved in building had resulted in failures, as well as successes, and we could get enormous help by understanding the part played by the Soviet building industry in the reconstruction of Russia during the last 25 years.

"In the Soviet Union," he said, "planning is not control over mere visual orderliness; town planning is a cog in the complete organization of economic resources brought about by socialism."

The development of industry in relation to mineral resources, power facilities and trans-

port, vast schemes for social welfare, education and culture, had made limitless demands on a limited building trade whose response, great as it was, had fallen short of the requirements. Why? Before 1917 even Moscow was only half paved, and of that half 2 per cent. was of modern surfacing and 98 per cent. cobble-stones. Only eighteen cities had sewerage systems. Housing was of a shockingly low standard, and disease and mortality rates, particularly in the colonial territories, were very high.

The last War and the Civil War had ruined industry, and its repair took until 1927 to complete. This should be remembered by the advocates of the immediate preparation of cut-and-dried reconstruction schemes.

Building labour had been largely seasonal; and in the country logs, axes, saws, hammers and some nails were the raw elements of building. The aristocratic building introduced by Peter the Great in 1700, with his importation of foreign architects and craftsmen, had provided the basis for an eclectic approach to architectural design, but not the large-scale mechanized and mobile industry needed for present-day construction. So the industry built up since the revolution had been largely recruited from peasants, and had trained its own technicians.

Besides housing basic industry, it had provided 230 new towns for 30 million people, and by 1938 40 per cent. of the total housing accommodation in the U.S.S.R. had been built since 1917.

Mr. Percival showed and commented on a number of lantern slides illustrating recent buildings, and went on to describe the organization of the planning apparatus which had produced them; with its central planning institutes, regional offices and local executive departments. He explained how the Commissariat of Building created in 1938 was superseding the separate building organizations maintained by the various industrial Commissariats and Trusts. The Commissariat of Building, he said, had as its chief responsibility the development of local materials supply and regional building organizations. The job of local (Municipal) Works Department was usually confined to street works, parks and sewage; housing was primarily a trades union responsibility, the local Soviet controlling planning standards and elevations through its architectural office.

Research played a big part in determining architectural design, which was based on the level of craftsmanship and materials available. Under the stimulus of the war the development of prefabrication had been greatly speeded up. "Nothing," concluded Mr. Percival, "illustrates the closeness of the people's interest in building better than the completion of the 180-mile Ferghana Canal in Central Asia, by 160,000 volunteer collective farmers, in 45 days; or the amazing story of the factory built in 14 days to house plant evacuated from the regions occupied by the Nazis. The spirit that inspires work at such a pitch is unconquerable. That is real democracy, as I understand it."

SALVAGE APPOINTMENT

Mr. G. B. Hutchings, the Director of Salvage and Recovery of the Ministry of Supply, has joined the Board of the Waste Paper Recovery Association.

This non-profit making Association was formed for the purpose of stimulating the salvage of waste paper, cardboard, etc., and the economy in its use. The Directors are representatives of the newspapers, the periodicals, the board mills and the paper mills.

The appointment of Mr. Hutchings is for the purpose of ensuring the closest possible liaison between the Association and the Salvage Department of the Ministry, and is made with the approval of Sir Andrew Duncan, Minister of Supply.

BLACK MARKET IN LAND

MR. Osborn* deserves great credit for at last putting the issues raised by "this compensation business" in a way that can be understood not only by ordinary M.P.'s and noble Lords but also by straphangers in the rush hour.

"In general," he says "the owners of the land, in deciding what to do with it, devote it to what they think the most advantageous use from their own point of view. If they build on it, they put up the sort and size of building that has the highest value to them, and usually this means the greatest financial value. Of course, there are lots of exceptions for qualifications to a statement as sweeping as this. Not all owners act strictly in accordance with simple business principles . . . . Now what *is* Town and Country Planning in the sense that we use the term? It means simply that a public authority takes some part, over the head of the landowners, in deciding the way in which their lands should be used. . . . It does not actually describe or design the uses of the land. What it essentially does is to place a more or less definite or drastic restriction on the uses to which the owner can put it. . . . It is easy to see, therefore, that this sort of planning greatly affects the values of individual pieces of land.

"It increases the value of this piece and reduces the value of that. On balance it can hardly reduce the total value of all the pieces of land; indeed in most cases it probably increases that value. But then as a rule the different pieces of land are owned by different people. Some owners therefore benefit and others lose by planning. Those who benefit may be secretly grateful, but publicly they minimise the advantage they have received. Those who lose feel, very

**The Land and Planning: Elements of the Problems of Compensation and Betterment and Land Values.* By F. J. Osborn. With an introduction by Mr. Justice Scott. Rebuilding Britain Series, No. 7. London: Faber & Faber. Price 1/-

naturally, that they ought to have a claim on the public purse for the loss that planning has imposed on them." Mr. Osborn then suggests that the difference between the total that can be raised by taxing betterment and the total likely to be claimed as compensation ought to be made up out of general taxation—a most remarkable suggestion considering he himself maintains that planning is likely to increase the money value of land as a whole. He excuses it by saying that benefits in the form of improved environment will be so great that it is unnecessary to be mean about compensation. In fairness to the general public, however, it should be mentioned that the cost of carrying out these improvements is met out of taxation as a matter of course and that in spite of this they usually result in rents going up. If compensation for loss of possible profit has also to be paid to the landlord out of general taxation John Citizen will be paying for what he gets two or three times over. Though Mr. Osborn's solution does not satisfy, his clear and untechnical statement of the problem suggests some interesting comparisons. It has come to be regarded as an agreed principle of national policy that those few people who hold up to auction essentials of life that are in short supply and are necessary to every one of us in a more or less equal measure should be condemned out of hand. Racketeering or the black market, as it is called, is profitable for individuals—nobody disputes that—but from the point of view of the community the transactions are not profitable. Suppression of abuses involves restrictions which may cause a loss of income to some people and may even reduce total profits on the total turnover for a whole class of property owners—a possibility which should not be overlooked in relation to land. Such restrictions have recently been imposed and accepted in other spheres without question. Compensation has never been suggested and would clearly be impracticable. Surely these developments should influence our attitude towards land?

Land ranks with food as one of the essentials of life. In the past its use has largely been determined by market values left to find their own level. Individually and collectively we have suffered from this policy, which has created something approaching a land famine in towns. The main object of town and country planning is to regulate land use on a rational basis; to secure priority for public services, a fair share of space for each individual and to prevent waste. Mr. Osborn suggests that those who suffer from restrictions designed to achieve these ends should be compensated—not for ascertained loss but for loss of possible profits—and that their claims should be interpreted liberally. While it seems fair and reasonable to equalize losses and gains due to public control as between one landowner and another, it is difficult to see why landowners *alone* should be compensated out of taxation in so far as they are merely prevented from acting against the public interest.

The Architects' Journal
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NOTES & TOPICS

MR. PEVSNER REMEMBERS MACKMURDO

Mr. Arthur H. Mackmurdo, who died last month, stood half-way between Morris and Voysey. The part he played in the development of the modern movement was for years overlooked, but it has since been recognized, thanks largely to Nikolaus Pevsner, the architectural historian who gave me the following account of how he himself became aware of Mackmurdo's importance.

★

"About ten years ago," he said, "when I first met Voysey, then over 70, he told me that the man who had influenced him most was Mackmurdo." Mr. Pevsner continued: "I tracked Mackmurdo down to a cottage in Essex, and found a man of 81 with long white hair and glittering light blue eyes wearing a blouse of butcher blue—the kind of blue blouse which William Morris wore. He no longer practised architecture, but was passionately engaged on social and economic research which led him to advocate a system of State socialism with wages and pensions fixed by the State and a monetary system founded on food values.

★

"Before retiring in 1904 he built for himself the large house of Great Ruffen, Wickham Bishops, having chosen to live there after discovering

by scientific means that it was the healthiest place in England. Unfortunately, shortly after his retirement he invested most of his money in a speculation to get salt from the sea—and lost it. He then had to move to a tiny cottage in which I found him, but he seemed equally happy living with his devoted wife in two tiny rooms : one a bedroom where he used to rest in a scarlet dressing gown (scarlet was good for the health), and one living room, enriched by an original Alfred Stevens mantelpiece and pictures by Brangwyn.

★

" Brangwyn, he told me, was one of his discoveries. About 1880 he came across him one Sunday in the City—a young bank clerk without training—painting wildly on a huge canvas. Mackmurdo, who was a wealthy man at that time, offered him a studio in his house in Fitzroy Street, assisted him with his training, and afterwards placed him as an apprentice with his friend Morris.

★

" The connection between Morris and Mackmurdo was a close one. When Morris started the Kelmscott press the only existing piece of printing which can have helped him to achieve the high standard he wanted to realize was Mackmurdo's *Hobby Horse*, started six years before. Mackmurdo himself was largely responsible for persuading him to embark on the undertaking. In a less serious mood he greatly enjoyed rowing May Morris up the river.

★

"Morris and Mackmurdo, however, differed on many things and had heated arguments. The difference between them showed itself clearly in the early days of the Society for the Protection of Ancient Buildings, founded in 1877. Morris's interest came primarily from what he had seen of Gilbert Scott's misdeeds in restoring cathedrals; Mackmurdo's from the danger with which the development of the City of London threatened Wren's churches.

★

" While acquiring his professional equipment Mackmurdo read much, attracted particularly by works on social problems. In this way he stumbled on Ruskin, and felt so profoundly moved by his books that he decided to graduate at Oxford in order to attend his lectures there. Ruskin took him with him on his travels, inducing him to sketch wherever he went and to pay as much attention to nature as to the works of man. Guided by Ruskin, he developed a passionate, but not slavish, admiration for the musical element in Renaissance design and architecture." (Examples of his work are reproduced on pages 276-277).

Arthur H. Mackmurdo, who died last month, is the subject of Astragal's notes this week.

★

" He was also fortunate in knowing a man of very different calibre—Herbert Spencer, the positivist philosopher who happened to be a friend of his father. To Spencer no doubt must be attributed the scientific bias of his mind and the fearless progress of his later years.

★

" Other celebrities with whom he was more or less closely connected were the D'Oyly Carte family. For them he designed the Savoy Hotel, and he was present when they arranged for Oscar Wilde to make a tour of America. With Whistler, Mackmurdo discussed that first Whistler exhibition in London, at which for the first time pictures were hung with spaces between in light frames against a light background—a *very* un-Victorian arrangement : Mackmurdo also had a collection of old musical instruments and the Dolmetch family gave their first English concert in his house."

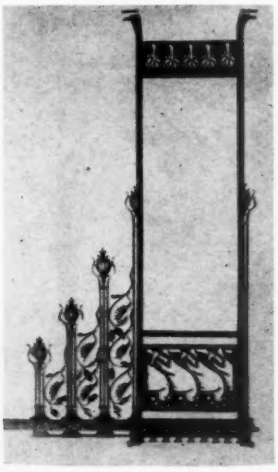
EASTBOURNE IN WARTIME

How odd it is that in English seaside towns the "front" exists purely for visitors. Even on a fine day most local inhabitants shun their own front as though it were a slum area. In the absence of holiday crowds that in greater or lesser degree have never failed to throng it till now, it loses its *raison d'être*. And in its utter desertion Eastbourne is far more Early and far less Mid-Victorian than you would think ; when the perambulating foreground is lacking, the whole expanse of esplanade has a certain solid dignity, hitherto unsuspected.

★

There were no " attractions of the week " in Devonshire Park. I saw next to no damage. This seemed somehow to increase the melancholy of my companion, who had had to spend many involuntary years in Eastbourne in his early youth.

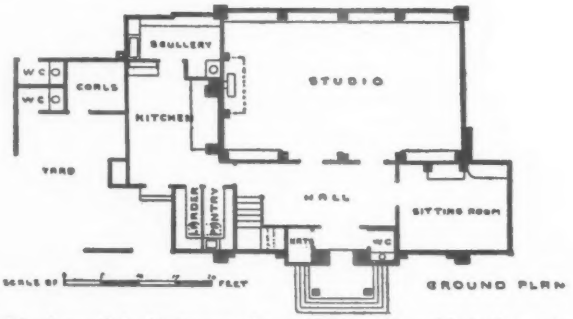
ASTRAGAL



Examples of the early decorative work of Arthur H. Mackmurdo. Left, the sign of the Century Guild*—an organization started in* 1880 *by Mackmurdo and a group of artists and craftsmen to produce what they regarded as good quality work and to offer it to the public. Right, jacket of his book,* Wren's City Churches, *published in* 1883.

House at 25, *Cadogan Gardens, Chelsea, designed by Mackmurdo for Mortimer Menpes in* 1899.

One of Mackmurdo's first buildings, a house at Bush Hill Park Enfield (right), built about* 1873 *shows the impression which Norman Shaw's early works had made on him. Five years later he designed another house at Enfield (above), in which he found a style all his own.

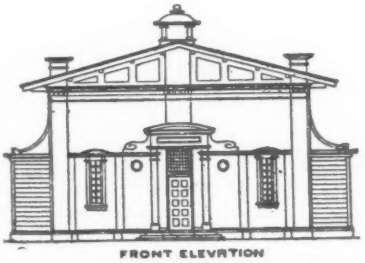


Plan of Mackmurdo's "House for an Artist," published in the first issue of Hobby Horse. *This magazine was started by him in* 1884 *and was a pioneer in its particular field. Never before had modern printing been treated as a serious art. Left, the exhibition stand designed for the* Century Guild *at the Liverpool International Exhibition of* 1886.

WORK OF ARTHUR H.

The riverfront of the Savoy Hotel, Victoria Embankment, London, designed by Mackmurdo in partnership with Herbert Horne in 1889. *Here and in other works of the same period he preferred a richer decoration to the simplicity of the earlier period. However, it must be stressed that at no time was he a purist.*

The gymnasium built for the Gordon Institute for Boys in Liverpool about 1890. *The building, which measured* 110 *ft. by* 56 *ft., was to cost only* £1,000. *The area is spanned by ten semi-circular wooden arches rising on either side directly from the ground. They carry the roof as well as the gymnastic apparatus, an ingenious arrangement, as the curves of the arches distribute all strains, and the elimination of all angular joints makes the construction ideally safe.*



Front elevation of his design for a "House for an Artist." Plan is on facing page.

MACKMURDO

LETTERS

ARTHUR WELFORD, A.R.I.B.A.

Mrs. A. V. PENN,
(Acting Secretary, I.A.A.S.)

DAVID POPE

Pick and Portal

Sir,—In *The Times* of March 24 and 25 appears an article entitled "World Trade after the War," which is complemental to the Leading Article in your issue for March 26. *The Times* says :

In war-time the only limits on production are those set by the available man power and raw materials. It is financed by credits which, although they are issued by the banks in the form of loans, are really national credit owing their value not to any stocks of bullion held by the banks, but to the capacity of the country to provide the goods and services for which its currency constitutes a claim. We should, it is argued, avoid nightmares of depression and unemployment if we frankly adopted this principle in peace as well as in war, and made the consequential changes in our financial system.

The Times is right; in fact, this truth that the Bank of England and the Joint Stock Banks create credit, and therefore create money, by book entry as a debt against the public has been well known for twenty years past, and the inimical effects of such a system have been seen and felt in slumps, unemployment, so-called surplus goods for sale with no possible buyers, and general human frustration and poverty.

So it would be a pity if, as seems to be suggested in your Leader, profits of industry and business were wrongly to be made whipping boy; for profits are an incentive and—if distributed—are purchasing power.

But with a system of costing which includes wages, salaries, profits and overheads (the chief of which are interest and repayment of bank loans) in price whilst distributing only wages, salaries and dividends, it is inevitable that purchasing power is chronically short.

Finance—and by that I mean the creation and assumption of ownership together with the power of destruction of credit by the only medium legally competent to do these things, the banking system—must be made to serve the community and not be allowed to curtail its activities and to frustrate the consumption of their results. As *The Times* says :

We are not likely to solve our post-war problems unless we make up our minds to treat money as a book-keeping technique to facilitate the production and exchange of goods and services, not as something the supply of which sets a fixed upper limit to our productive activities.

If " . . . and consumption " be added to the proposed facilities this statement is true and puts real things before bank finance in proper order and perspective.

I hold no brief for the big business of which your Leader speaks, but until the existing fundamental error as to the beneficial ownership of bank created credit be rectified, neither big nor small business will prosper, and planners will find themselves in the undignified position of being planned by the credit monopoly with its great money illusions.

ARTHUR WELFORD

Suffolk.

Salaries

Sir,—Recently the Association of Architects, Surveyors and Technical Assistants made a survey of salaries paid to professional and technical staffs in the building industry.

One's first reaction after a study of the returns might be of despair and then probably of anger, for many points have been revealed which, in a progressive industry, should not exist. Outstanding amongst them is the naked fact that most firms are under-paying their professional and technical staff.

Taken at random : one finds surveyors underpaid to the amount of £71 per year, assistants £66 per year, juniors £51 per year, not forgetting managers, whose salaries are lower than the tradesmen's they control, civil engineers, architects and others whose incomes are below minimum scale.

These figures speak for themselves, and by no means can they be called an inducement to enterprise, but rather as against the better interests of the industry and National Service.

Another interesting point is the number of hours worked. Taking 34 firms, the average proves to be 43 hours per week, not including overtime, which in some cases is considerable and without pay. Compared with standard hours for operatives, one concludes it is not unfavourable (to the employers).

Why this state of affairs exists one is left wondering; that it does is proved beyond all doubt, also it is general.

Ministries, professional bodies, local authorities, builders and contractors, etc., all seem to think alike on this one subject.

The Association are making a drive to increase efficiency, and hence production, in the building industry, and maintain that satisfactory salary and working conditions are of primary importance to this end.

Anyone who wishes to support this purpose should get in touch with the Secretary, A.A.S.T.A., 113, High Holborn, W.C.1.

E. V. PENN (MRS.),
Acting Secretary.

Ideal Housing

Sir,—The phrase " An Englishman's home is his castle " has been used for so long as a barrier in the path of civic progress, that it is time we stopped to examine it. When we do so we discover it to be quite empty of real meaning—a flapping scarecrow with which to alarm the public mind, and make more difficult the experiments of those dangerous architects and planners who have " ideas."

It appears from Mr. Curtis' letter, in the March 19 issue, that he would like us all to shut ourselves up in our twelve-to-the-acre castles, rendered inviolate by innumerable privet hedges and wooden fences and then, in splendid isolation, to cultivate the striking National qualities of which we are so proud. One can almost picture him swelling into patriotic pride at the thought of the original Becontree Estate in the happy days when it was free from the perverting influence of any community centres, etc.

Individuality is certainly an essential of true civilization, and the idea of the home as a place of refuge is a valued one, but why should these ideas be regarded as exclusive of a full communal life? A balanced personality demands both, and we can see that those who can afford to, enjoy both. They have their " castles " (more close to their prototype in size and cost than the suburban " castle " in which the vast majority have to live) and when the bosom of their family becomes irksome, they have their clubs, race meetings, Freemason gatherings, etc., where they can satisfy their gregarious instincts. I would beg Mr. Curtis to compare their lot with that of the poorer inhabitants of a housing estate devoid of any communal amenities.

National culture is dependent on a full communal life for *all* sections of society, and it is this belief that causes the majority of planners to welcome the people's restaurants, residential clubs and other war-time innovations as a portent of the lines along which post-war reconstruction may evolve.

DAVID POPE

Bromsash,
Near Ross-on-Wye.

HOUSING

SCHEME IN SHROPSHIRE

DESIGNED BY J. BRIAN COOPER

ARCHITECT'S REPORT.—*For a number of years, the continual spread of the suburbs, reaching out along the main roads from our towns, and devouring the countryside, has been viewed with apprehension and horror. Legislation has been introduced to deal with the menace, but with little avail. Indeed, it is the method of enforcement of our Town Planning Acts and Regulations which has been near the root of some of the evil. Now, with the fresh determination that has come to us to deal with the old and worn-out cores of the industrial towns, and to check the ever spreading mass of dormitory suburb, we are likely to see in the improved character of future housing estates certain features, by no means new, but which have been pitifully neglected in recent years. It is to be hoped that the new housing schemes of the future will be more decisively articulated. Instead of suburb giving place to dreary suburb, without any sensible change to mark the boundary, each will be more tightly knotted around its own centre ; each will be clearly marked from its neighbour, each will have its own individuality. This means that there must be stronger action by the Planning Authorities in deciding upon the area of country which must not be built upon, and in developing the belts or swathes of agricultural or park land which must intersect the housing. There must be an equivalent relaxation of the permitted density of housing within the area actually built upon, and there must be insistence on the grouping and arrangement of each housing scheme round a centre which will provide architecturally and socially for those needs of the individual as a citizen of the community which have been so much forgotten. In planning this new estate, these were the principles borne in mind and an effort has been made to carry them out in practice within the limitations imposed by special conditions. In considering this scheme, it has to be remembered that it has been designed and built since the outbreak of war to fulfil a war-time function. It is, however, a permanent housing scheme and is intended equally to fill a peace-time need.*

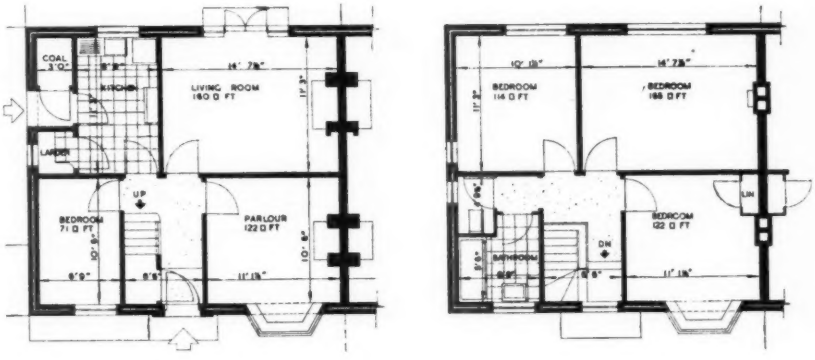
GENERAL—This housing scheme in Shropshire is one of the largest of the war-time housing schemes. The whole scheme is under the direction of Mr. J. Brian Cooper, F.R.I.B.A., of Birmingham. The new community is to a very high degree self-contained, and in its general lay-out, is grouped round a communal centre comprising shops, an Institute with provision for adult and youth activities, an inn, a cinema, schools, a children's clinic, a doctor's house, a church and non-conformist chapels. The estate roads are in concrete. There were three reasons for this decision. First, to reduce the amount of transport which would have been necessary to bring stone for pitched roads; secondly, to produce as quickly as possible clean roads to serve the houses as they were completed; thirdly, to carry a heavy amount of builder's material to less advanced sections of the estate. The site was rather characterless with no trees or other features to help in the grouping, but several open spaces have been formed and other needs met, such as a children's playing field and a number of spaces for lock-up garages.

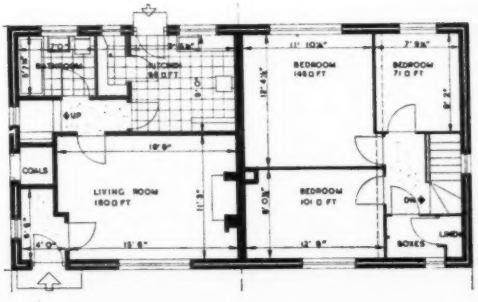
The scheme was commenced shortly after the outbreak of war and the houses were at that time of normal brick and timber construction. Successive restrictions on the use of timber, however, necessitated the use of concrete, at first for the roofs only and later for the roofs and the first floors. The completed scheme will comprise approximately 1,000 houses. Of these, contracts have been let for a total of 850, 166 three-bedroom, non-parlour types; 600 three-bedroom, parlour types and 84 four-bedroom, parlour types.

CONSTRUCTIONAL OUTLINE. STRUCTURE — Foundations, normal concrete. Walls, normally 11 in. cavity brickwork. Partitions, 4½ in. brickwork where load-bearing; 2½ in. breeze where non-load-bearing. Damp-proof Courses, two courses slates, slate seal round window openings. Ground Floors, 4 in. concrete on 6 in. hard core over filling. First floors and roofs, Flats: "Bison" precast concrete beams. Houses: "Myko" and "Silpor," part precast (on site), part *in situ* construction; "Rapid," precast construction; "Hy-rib" *in situ* construction. Staircases, precast concrete in houses; *in situ* concrete in flats.

Lintels, precast concrete. Door frames, external—mainly wood, some rust-proofed steel; internal —pressed steel. Windows, stand-

Main elevation and ground and first floor plans of B 3a type house.





Ground and first floor plans of B 4a (top) and A 3a type houses. In the latter type the partitions of the ground and first floors do not coincide and it was therefore necessary to introduce concrete beams in the ceiling of the first floor to carry the concrete roof.

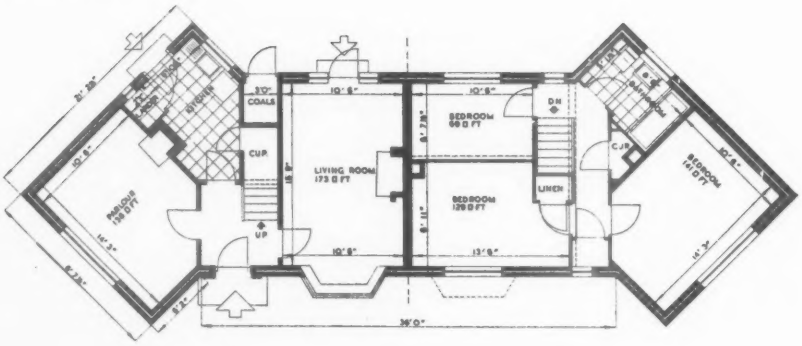
ard steel. Window surrounds, precast concrete—cast stone. Window sills, external (where not concrete surrounds), tile ; internal, some cinnamon quarry tile, some Parian plaster on cement backing. Canopies, precast concrete. Projecting eaves, *in situ* concrete, rendered. Parapet copings, precast concrete. Balcony balustrades, shops and flats—precast moulded concrete (cast stone). Shop front surrounds, cast stone. Chimney pots, clay. Guttering and rainwater pipes, cast iron.

FINISHES—Floors, ground floors, granwood and heather brown quarry tile ; first floors, linoleum. Skirtings, granwood. Walls, plaster. Ceilings, plaster and plasterboard, with skim coat for "Myko" and "Silpor." Roofs, constructional roof screeding laid to fall ; waterproof membrane either asphalt or two or three layers of bituminous felt bedded in bitumen, crushed slate finish. Insulation, foamed slag concrete in structure ("Myko") or as screeding (with "Rapid" beams), ½ in. Tentest above slab (with "Hy-rib"), ½ in. Tentest below slab (with "Silpor"), 2 ¶ in. "Gypklith" above," in flats (with "Bison").

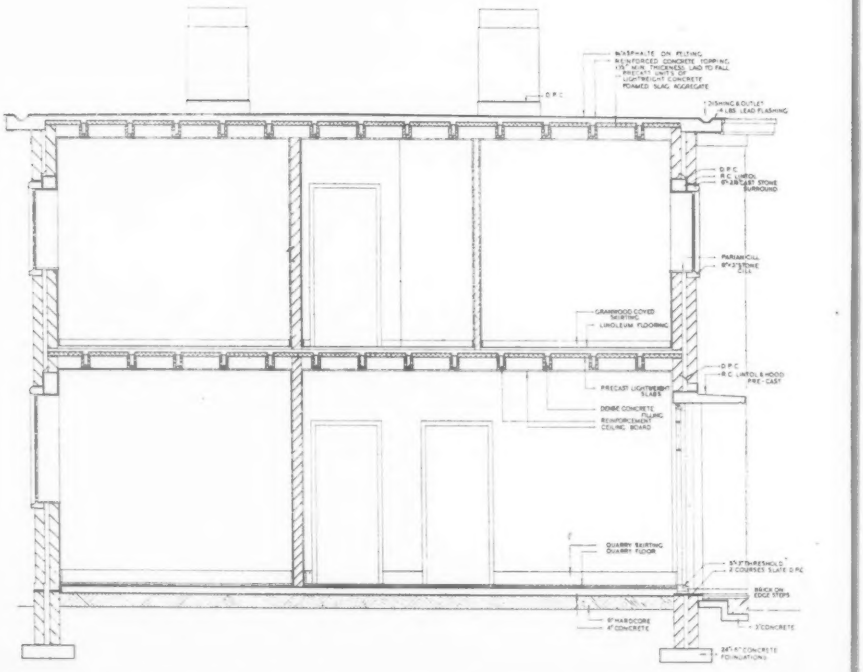
FIRST FLOORS AND ROOFS—Many different types of concrete construction were used in the scheme. The top of the first floor is finished with a screed to receive the final floor finish and the undersides of the first floor and roof are finished by plastering direct on to the "Rapid," "Bison" and "Hy-rib" floors and by scrimmed plasterboard finished with a skimming coat of plaster in the case of "Myko" and "Silpor" floors. In the flat roofs, care has been taken to apply thermal insulation to the exterior surface of the roof. In cases where the "Myko" floor has been used for the roof construction, the structural concrete topping is laid to falls and the foamed slag construction is, in itself, a sufficient insulation. Where "Rapid" beams are used, a screed of 3 in. average thickness of concrete, with a foamed slag aggregate, is laid to falls. Where "Hy-rib" or "Silpor" construction is used, the roof insulation is provided by means of ½ in. Tentest board and where "Bison" floors are used, by means of 2 in. "Gypklith." *Staircases.*—Precast concrete stair-unit is standard throughout the scheme.

RENTS—13s. 7d. to 17s. 9d. per week.

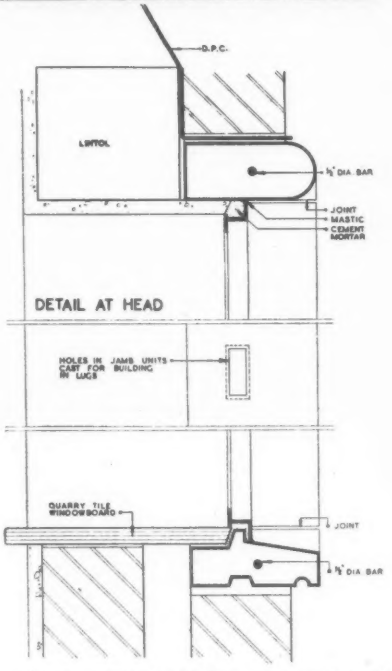
AIR-RAID SHELTERS—Throughout the scheme, the air-raid shelters are so planned and positioned that they can serve as post-war tool sheds or garden stores.



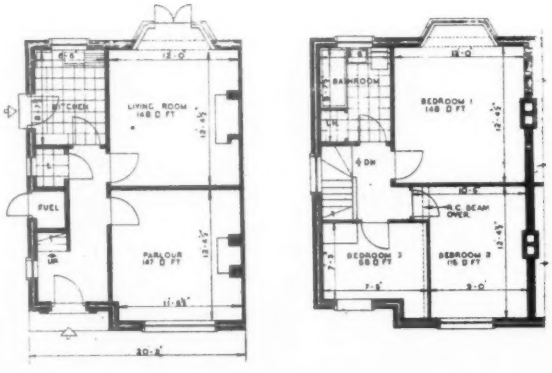
Above, ground and first floor plans of the B 3c (three-bedroom) parlour type house and, left (top) general view of a pair of these houses. Left, group of B 3b type houses. Below, typical section which shows the type of construction adopted.

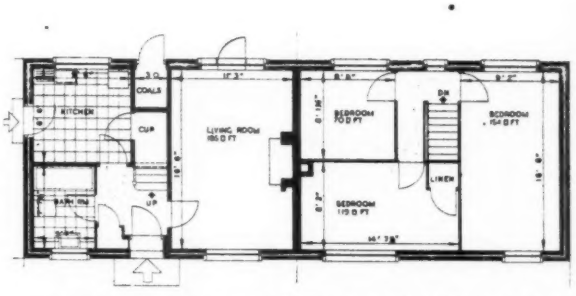


HOUSING SCHEME IN



Above, typical window surround under construction and drawing showing construction. Right, typical entrance doorway.





Ground and first floor plans of B 3d (left) and A 3c type houses.

SHROPSHIRE: *DESIGNED BY J. BRIAN COOPER*

Lord PORTAL makes his first SPEECH as the new Minister of Works and Planning

The first public appearance of Lord Portal as Minister of Works and Planning was at a luncheon held by the National Federation of Building Trades Employers at the Savoy Hotel, London, on Wednesday of last week. Verbatim report of Lord Portal's speech is printed below.

I have to thank you for your courtesy and hospitality in inviting me to meet you to-day and in giving this lunch in my honour. I am very glad to have the opportunity of this meeting. In view of the close and vital connection between the building industry and my Ministry, and our heavy responsibilities in regard to the industry, it is not only desirable but essential that we should get to know each other as soon as possible. I am well aware of the valuable work of your Federation. I also know of the co-operation we have had both from individuals and from the Federation. I would like to take this opportunity to refer to the work accomplished by Lord Reith in initiating the difficult task of planning in our Ministry.

I know that there are times when you feel that your advice has been disregarded. I know by experience that one always considers that one's own views are the only sound views. But there must be occasions on which different people come to different conclusions on the same facts; and in addition to that, a Government has many factors to take into consideration in reaching decisions. There may indeed be occasions when I myself or my department might be in entire agreement with you, but where there are over-riding considerations that dictate otherwise. I would like to assure you that your advice has in the past been given the closest consideration, and so it will continue.

I believe, in fact, that there are many more points where the industry and the Ministry see eye to eye than where they disagree. In the comparatively short time that I have held office, I have been struck with the extent and loyalty of the co-operation that the Ministry has received from all sides of the industry, and not the least from the N.F.B.T.E. I would like to add that I am certain that no small part of this co-operation is due to the presence in the Ministry as Parliamentary Secretary of my old friend, Mr. George Hicks.

People now realize that the building industry is a vital link in our war effort. The Ministry of Works and Planning has done a great deal in the past year to put the building industry, so to speak, "on the map."

Now, the first thing before us all is the war, and I feel bound at the outset to emphasize that the final criterion to me, as to you, in any and every matter that is discussed, must in present circumstances be the immediate effect of any proposal or problem on the war effort. The Ministry of Works and Planning is a war Ministry, and I would just like to emphasize the extent of its war activities. It has grown immensely in the last few years. The value of the new works that it is dealing with at the present moment is approximately £42 million. The expansion started some time before the war while we were still the Office of Works. But it has been since we became a Ministry that the growth has been so considerable.

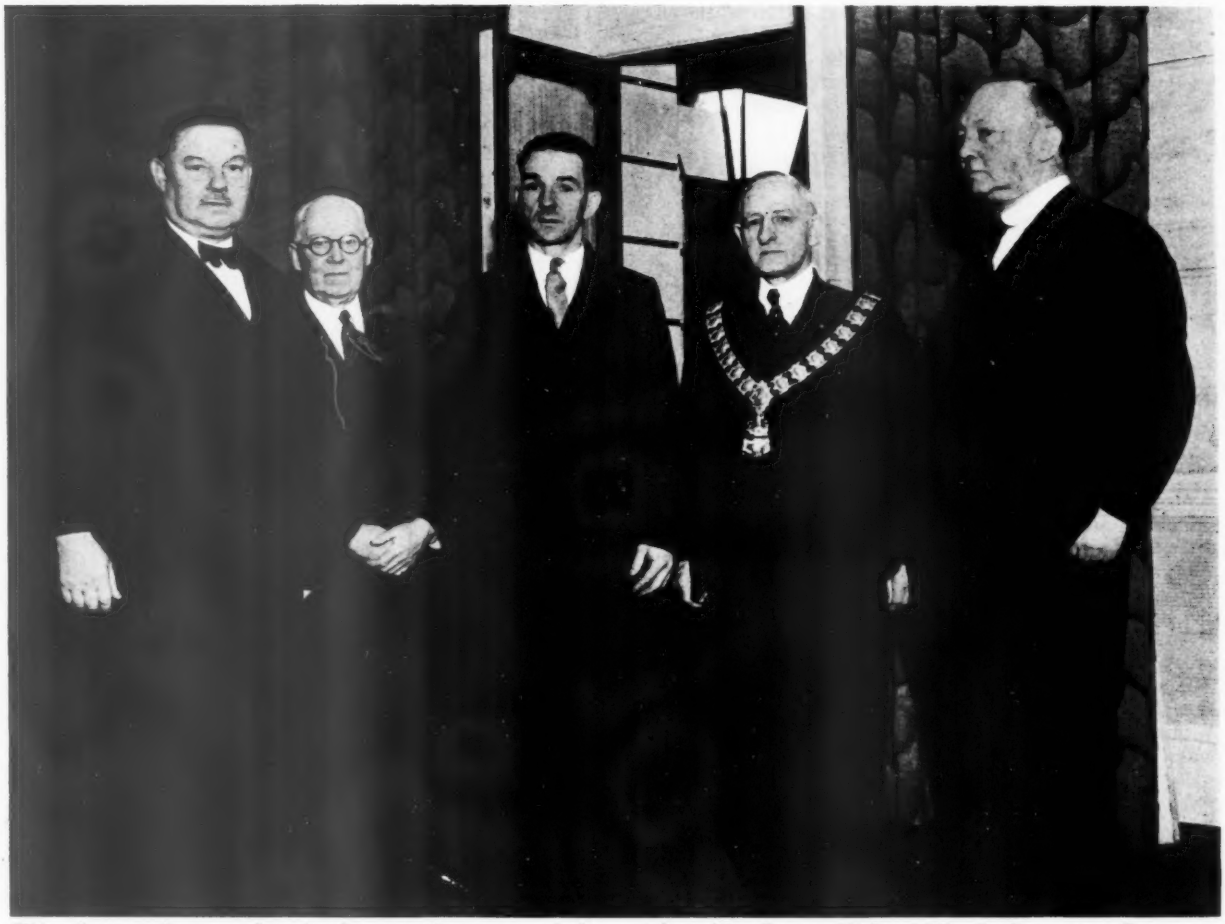
When the Ministry was created, it was the declared intention of the Government that it should be *the* building department. It necessarily takes time to arrive at such a position; it would have been imprudent in the extreme to attempt a precipitate change of horses in mid-stream.

We are already the largest building department (and incidentally we have, in course of time, acquired a very wide knowledge of the capabilities and qualities of most building and civil engineering firms).

A number of new duties were put upon us on becoming a Ministry—the control of building priorities and of the Government Building Programme generally, the control of design and methods of construction, and the control of building materials. On the question of Government Building Programme, there is, and will always be, a great deal of criticism. The plain fact that everyone must remember is that we have been forced to attempt in three years, in war-time conditions, and with an ever decreasing labour force, an amount of construction comparable with what had been absorbing the concentrated activities and attention of the Nazis for seven years before the war. It has been inevitable that the various departments have attempted to put in hand more work than was really practicable with the labour force available. All of it was of war importance, all of it was urgent; and you will appreciate the impossibility of deciding priorities between such competing projects as aerodromes or submarine bases, explosives and munition factories or gun factories, aircraft works or tanks, hostels and houses, services, power to run them, and so forth. It was for this reason that a system of the allocation of building labour was adopted, by means of which the departments received a definite proportion of the labour available, according to the importance of their programme generally: and it was then left to them to make the best use they could of it. Any new scheme takes time to work out in actual practice, and, although the allocation system was instituted early last year, it is only comparatively recently that it may be said to have begun to work efficiently. There are still more works in hand than can be fully manned, and that, to some extent, is inevitable. None of us in pre-war days would have ever realized the extreme difficulty of adjusting the labour force to an immense building programme, when there is no reserve of labour. Complete success could only be secured by the perfect synchronization of every job in the country and absolute mobility of labour—neither of which is possible.

So far as this generation is concerned, we have never had, in the building industry, other than a heavy unemployment figure which, in fact, acted as a balancing factor in adjusting labour demands over the country. This new technique, with which we are now faced, of operating without any such balancing reservoir, is being slowly worked out; one of the recent Orders for instance, to this end, for which the Ministry of Labour, in consultation with ourselves, has been responsible, namely, the Transfer of Labour Order, was directed towards improving the mobility and circulation of labour. One thing that has made immense strides as a result of war experience is the consideration given to welfare. This, and the official arrangements for labour site officers are a happy sign to the recognition of the increasing part that labour should and must play in war-time and post-war building policy. Many of you have shown great interest in such matters, and your Federation as a whole is to be congratulated on the agreement that I am very glad to learn you have now reached, to cover paid holidays throughout the industry.

The needs of munitions and the Services will make ever increasing demands on the man-power of the country, and the building industry is bound to give up a large proportion of its numbers over the next eighteen months. The building programme is already itself reduced; but there is



This photograph was taken in the reception room of the Savoy Hotel, on Wednesday of last week, when the National Federation of Building Trades Employers gave a luncheon to two hundred members of the building trade to meet the new Minister of Works and Planning, Lord Portal. Left to right: Mr. George Hicks, M.P., Parliamentary Secretary, Ministry of Works and Planning; the Mayor of Westminster; Mr. Albert W. Fielding (Charlie, the bricklayer, in the Ministry of Information's film Building*); Mr. Thomas Howarth, President of the Federation; and Lord Portal.*

still a great deal to be done, and it is essential to get a still greater output than we have yet achieved. Success in this direction must depend equally on the departments who require the work and their technical officers, the contractors and builders who carry it out, and the operatives. In all three directions I have no doubt there is still considerable improvement possible.

I recently called for reports of the effect of the introduction of payment by results, and I have been concerned to find such a limited extent of actual use. In view of its proved success where properly applied, it is essential that it should be extended to the maximum possible. Special steps are being prepared to secure this, but I feel confident that I can rely on your full support. The assistance that has been received from the Joint Panel that deals with payment by results deserves special notice. From what I am told, there is no industrial body that is operating more efficiently or more happily. This whole scheme—at least for the war period—has produced something that must be more satisfactory to all sides than the state of uncertainty that existed before, on the vexed question of bonusing.

I referred to the control of building materials. It has been possible for the first eighteen months of the Ministry's existence to avoid the establishment of any statutory control. All the controls that exist at present have been on a voluntary basis, and have worked very satisfactorily under the general guidance of my Ministry. I am bound to say, however, that I think we may find in the near future that it will be necessary to have a change of policy. The reduction in demand, with the necessity of contraction of the various manufacturing industries, will bring in more difficult problems than any we have yet had to solve, inasmuch as we must at the time see that contraction, as it takes place, will leave an industry capable of rapid expansion, to meet post-war demands.

There are still far too many federations and associations and interests in the industry that all have, or claim, their own independent or semi-independent representative organizations. But some means must surely be found to co-ordinate all these to better effect, if we are to get a really efficient building industry.

It was for this reason that my predecessor gave a great deal of thought to strengthening and extending the position of the Building Industries National Council, and I hope to be able to complete the work that Lord Reith put in hand in this respect. I feel that, while on the one hand the representative federations and associations must exist for their own specific purposes, yet some such centralized body as BINC would provide, would be of great value to the industry.

A first step in our policy with regard to the building industry has been the registration of builders, by which we have in the first place obtained accurate information of the size and shape of the industry.

But, apart from the collection of information, there was in the registration of builders included a condition of

registration requiring the recognition by all builders of standard conditions of employment. In order to take disciplinary action against builders who fail to keep such conditions, a Registration Panel has been established, and already the first cases have been considered by it. I view this as an initial step of great potential value.

I would like here to mention the other proposals that have been made with the same object—that is to say, first of all the compulsory sub-contracting of a portion of all major contracts, so that, even where the size, speed and difficulty of the contract necessitates its being placed with one of the larger firms, it may still be possible to bring in a number of smaller firms on part of the work. That has been adopted by my Ministry, and I have hopes that other departments will equally support it. In this, the recently published Standard Schedule of Prices will be of valuable assistance. It provides a ready means for the placing of contracts of the type of war-time construction—particularly hostels, camps, etc. I have no doubt that, as it is more known and used, the value of the Schedule will be increasingly appreciated, and its use extended to many classes of jobs.

Here I would like to refer to the regional organizations that we have established, which are now known as the Works and Buildings Emergency Organizations. Their scope, their functions and their constitution have been laid down by my predecessor in a statement of policy which was drawn up after full discussion with a special committee appointed by your Federation and the Federation of Civil Engineering Contractors. I am very glad to see in your annual report that you confirm your Federation's unreserved agreement with the scheme as it now operates. I consider that it is of great value, and not only for the immediate purpose for which it was originally designed. There is no doubt that there will be increasing devolution in the future organization of Government, and regionalization in various forms will, as I see it, be a permanent part of our set-up and organization in the future. I look, therefore, to these Regional Advisory Committees—whether they themselves continue in their present form or not—as a step along the road of regionalization which Government Departments and the Government of the country is following. I want the members on the Advisory Committees to realize the importance of the work that they have to do in present conditions, and I know that I can rely on your Federation's full support in making the maximum use of them.

It is sometimes thought that the creation of groups of contractors should be encouraged, so as to take works beyond the capacity of the individual constituent firms. There have been quite a number of instances of such grouping. It is not an easy technique, particularly for Englishmen, who are first and last individualists. To be effective, to be able to compete with a large well-organized single firm, a group must be exceedingly well organized; there must be some head, whose absolute direction is accepted by the others—some person of enthusiasm, enterprise and push, to carry the group over and through all the difficulties that are to be found in the direction of policy of any number of allies, whether in the building industry or, I may add, in war. So far as my Ministry is concerned, it would certainly in no case refuse to consider a tender from a group. I want that to be quite clear. We would welcome any efficient body, be it a firm or a group.

Meanwhile, the steps that we have taken are, if I may repeat:

1. The policy—which, to a large extent, is an old policy with many departments—of using smaller builders for maintenance and smaller construction works.

2. The placing regionally of all contracts below a certain figure, unless there are very strong reasons for the contrary, using for this purpose the Works and Buildings Emergency Organizations. The figure fixed for this of £25,000 has, I may say, been much criticized in the provinces, but you will remember that it is your own recommendation that for the time being we accept.

3. The extension of sub-contracting in all large contracts.

4. Consideration, where possible, to the splitting up of large jobs into separate contracts.

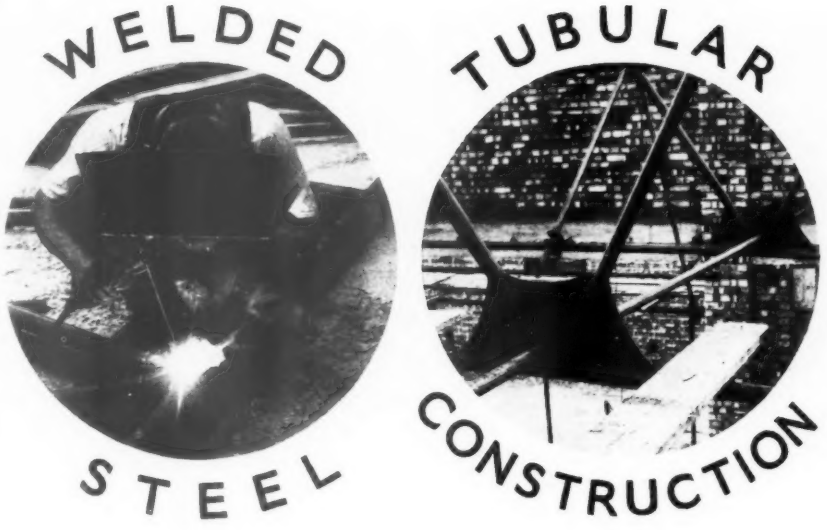
5. The ear-marking of a number of builders and contractors under the Garrison scheme.

We are, as I have said, indebted to your Federation for advice in many directions. Your views, for instance, in regard to the control of the call-up of labour from the building industry has received our closest attention. It is not possible, in the last resort, to apply any criterion other than the national advantage; and, therefore, the call-up or deferment of building labour must primarily depend on the work on which the men are engaged, or should, or will be engaged.

I am very glad to learn that your Federation is proposing to investigate the whole present and future set-up of the building industry. It is essential for all parts of the building industry to consider well their functions, their circumstances and their future—and what can be done to improve the organization and efficiency. Many of the other interests in the building industry are already taking similar steps to that now proposed by your Federation, and all of this will be valuable in contributing towards the solution.

In this, the Central Council for Works and Buildings is also doing a considerable amount of work. Some of the most important action that has already been taken by the Ministry has been either suggested by, or discussed with, the Central Council. But it is probably in the long-range investigation that they will be of the most value. The Central Council now has in hand a comprehensive study of the whole question of education

Photograph taken during the luncheon held by the National Federation of Building Trades Employers, at the Savoy Hotel, last week. Left to right: Mr. H. G. Strauss, M.P., Additional Parliamentary Secretary to the Minister of Works and Planning; Mr. F. Leslie Wallace; Lord Portal; and Mr. Thomas Howarth.



THAT tubular scaffolding superseded the older traditional methods was in large measure due to the ingenious coupling devices incorporated ; rigidity of structure was effected by the turn of a single set-screw, whereas with the older method rope lashing demanded much skill on the part of the scaffolder and the slipping, slackening, fraying or cutting of the rope was an ever-present danger. In scaffolding practice it was frequently necessary to sheet the structure in order to render it wind and weatherproof either temporarily or permanently and to do this effectively was not a simple operation owing to the projections that occurred at the angles where the tubes were connected together. This disability was not insuperable; indeed where tarpaulins were employed for the sheeting, as was quite often the case, the structure was satisfactorily enclosed without very much difficulty. Nevertheless, it was a "snag," a disadvantage to be overcome if possible, and alternative methods of connecting and jointing the tubes were experimented with. After long experience by trial and error electric welding proved to be the ideal solution to the problem ; it eliminated all projections so that the whole scaffolding framework could be simply sheathed even with such rigid sheeting materials as corrugated iron or asbestos, and resulted in a structure of exceptional strength and rigidity.

The electric welding of tubular scaffolding sections led to further experiment and development. Welded tubular steel roof trusses were designed and tested, and standard trusses, ranging from 15 ft. up to 60 ft. spans, are now being fabricated and employed ; sectional wall frames, door frames, standard sections for domestic or hip roof assembly and a useful range of prefabricated standard tubular sections for such a variety of structures as bridges, pylons, gantrys and water towers have been made, submitted to all necessary tests, and are now being used by architects, engineers and building contractors in many parts of the country.

Welded tubular steel construction has these advantages : (1) Speed in erection. (2) Economy in steel—the hollow circle is a most economical section using the least material for the greatest resistance to stress. (3) Lightness of structure but great strength ; it is notable that the joints, usually the weakest parts in a structure, are the strongest parts. (4) Complete factory prefabrication or site welding—an alternative choice of importance and great convenience. (5) The circular section and welded joints are most simply protected against corrosion.

Thus, we have summarised briefly the principles of welded tubular construction. In following issues of "The Architects' Journal" the system will be described and analysed in a series of informative data sheets which have been planned as follows :

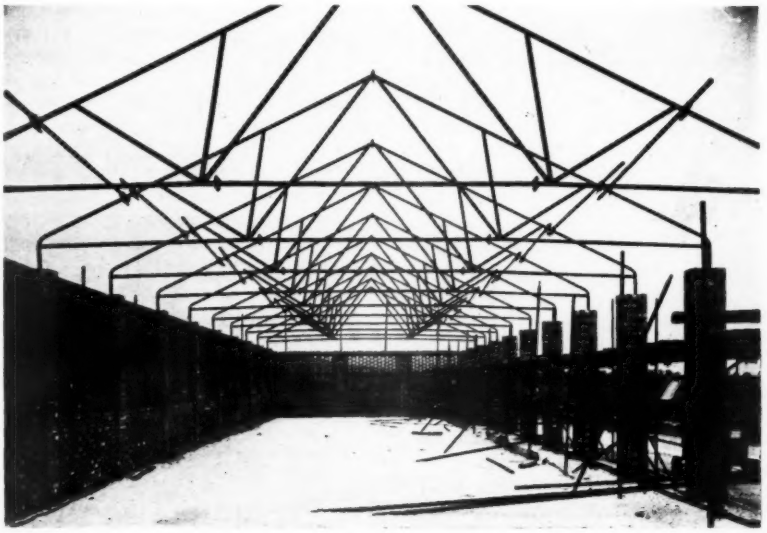
(1) An analysis of the various sections that comprise the system, with detail drawings of some of the principal sections.

(2) War-time construction—showing how the system meets to-day's demands and restrictions, with photographs and typical details of light frame construction roofed and walled with such materials as asbestos, plasterboard, insulating boards, etc.

(3) Factory fabrication and/or site welding—showing the importance and convenience of this alternative and what it might mean in economy of time, labour and cost.

(4) Permanent and post-war construction—being a series of typical details showing how the system is used with brick construction and with concrete construction.

As the completion of this series will be spread over a period of approximately twelve months, readers of the JOURNAL who might like to have the complete set of informative data sheets in advance of their publication are asked to send to us, on their business notepaper, requests to this effect. Scaffolding (Great Britain) Limited, 77, Easton Street, High Wycombe, Buckinghamshire.



Timber drying sheds in course of construction 30 ft. span welded tubular roof trusses are being used

THE DAY will come when the proud phoenix of a new and nobler Britain will soar from the ashes of War. When that day comes the men and materials will not be lacking to provide future generations with evidence that our triumph was deserved. Hopton-Wood Stone, the incomparable British marble, will be chosen then as in the past for its beauty, dignity and permanence.

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for the building industry; as well as some study of the industry itself and, in particular, the methods and placing and management of contracts. These are all vital matters, and the Council has shown real skill in dealing with difficult and controversial problems.

But the future of the industry rests ultimately with itself. You will recognize, as I do, that the future cannot be the same as the past. It is for you to organize accordingly. I am glad to learn from my contacts with your Federation's representatives, from what I have heard to-day, and from your annual report, how clearly the industry is itself impressed with the problems. I applaud the work you have done, and that you are doing, with regard to securing a higher standard of house building. It is essential that we should aim at higher ideals than we have accepted in the past. Those are ideals, not only as to standards, but as to methods, and our whole outlook. I am one who believes that there is always something to learn, and that many of our methods, many of our uses of materials, and many of our ideas in regard to design and planning, could be and must be improved. The building industry has a wonderful opportunity directly the war is over. We must not make the same mistakes as we did after the last war. We must be organized and prepared to set to work immediately. Men in the building industry must have permanent work and not be in the position of wondering whether they will be working one week and not working the next. It is our duty to work out a long-term policy which will not only be of the greatest service to the country but also ensure continuous work for the operatives in the building industry.

STANDARD SCHEDULE OF PRICES

The Minister of Works and Planning has sent a circular to the Councils of Counties and County districts drawing attention to the standard Schedule of Prices prepared for the Central Council for Works and Buildings which is now obtainable from H.M.S.O., price one shilling. The circular remarks that the Schedule covers the class of building work comprised in the Government programme of works and has been prepared with the following considerations in mind :—

(*a*) That such a Schedule would ensure that prices having a uniform margin over cost would be inserted in Bills of Quantities when issued ready priced to Contractors as a basis for making up tenders ;
(*b*) That it would tend to simplify the system of measurement governing the preparation of Bills of Quantities ;
(*c*) That a uniform basis of pricing would result in a saving of time by contractors in preparing their tenders ;
(*d*) That work would be lightened and time saved in the processes leading up to the acceptance of tenders ;
(*e*) That the Schedule might be used as the basis of contracts for works hitherto let on a cost-plus basis.

★ *COULD you give me an approximate price per foot cube for the replacement of an existing factory at present used for various manufactures* - - - Q 895

★ *I SHOULD like to obtain all the information possible regarding the general requirements, fitting up and equipment of British Restaurants* - - - Q 896

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 to—
THE ARCHITECTS' JOURNAL
45 THE AVENUE,
CHEAM, SURREY.
Telephone : VIGILANT 0087

Q 892

ARCHITECT, LONDON.—*In July last, the following statement attributed to Lord Reith, Minister of Works, appeared in the Press : " Before the war the strength of the building industry was about* 1,350,000. *To-day it is about* 750,000. *Many of the strongest workers being of military age are in the Services, so there is a decrease in output per man hour, and there has been wastage through causes normal and otherwise." From this, and other articles and opinions, there appears no doubt that not only decreased output of labour exists, but also this decrease and other incidental causes due to the war, increase LABOUR COSTS to a very considerable extent.*

Unfortunately the extent of the increase is nowhere published, and I shall be grateful, therefore, if you will give me definite data on this important matter, in the form of the percentage increase in cost since March, 1939, *at the end of every three months to the present date.*

We very much regret that we cannot answer your enquiry. It is well known that the calling-up of the younger workers and other factors have caused a decrease in output per man hour, but no statistics have been published which make it possible to form a reliable opinion.

Some indication of wartime output can be gained by a study of the Essential Work (Building and Civil Engineering) Order, 1941, which shows the normal output for various operations, which if exceeded will be paid for by bonus.

It should also be possible to obtain a reliable guide to present-day output by studying the new schedule of prices just issued by the Ministry of Works and Planning.* This schedule not only gives current prices for measured work, but states the rates of wages and prices of materials upon which the prices for measured work are based. An estimator can, therefore, arrive at the increase in labour costs (apart from the rise in the rates of wages) by comparing the prices with pre-war ones.

Q 893

ENGINEERS, LONDON.—*I have a small alteration job of forming a LIGHT TRAP ENTRANCE to dark-room from X-ray room, and propose using 2 in. breeze partition finished both sides with barium sulphate plaster.*

Can you please let me have a detailed specification for the barium sulphate plastering and list of firms undertaking this work in the London area ?

Barium plaster in ready-mixed form is not available and the material has to be made up of Portland cement with a suitable grade of barium sulphate as the aggregate. The mix advised is two parts of coarse barium sulphate to two parts fine to one part Portland cement.

The thickness of the plaster depends upon the degree of protection required and the additional protection provided by the partition, so we are giving (p. 286) a table showing the various thicknesses (in millimetres) which give equivalent protection to 1-4 millimetres thickness of lead. You will note that the figures vary according to the voltage used. The figures are

H.M.S.O. Price 1/-

taken from a paper by Dr. G. W. C. Kaye, published in the *British Journal of Radiology* Vol. 1, September, 1928.

	50 k.v.	100 k.v.	150 k.v.	250 k.v.	Lead Equivalent
	m.m.	m.m.	m.m.	m.m.	m.m.
Barium plaster	10	4	75	9	1
	—	9	18	25	2
	—	14.5	29	43	3
	—	20	41	65	4
Concrete (4 parts clinker, 1 part cement)	135	100	105	110	1
	—	200	210	220	2
Coke breeze ..	200	110	—	130	1
	—	220	—	270	2

Normally we would suggest as a supplier of barium sulphate, in London, the Imperial Smelting Corporation, but it appears that their present (war-time) organization is not certain of the requirements for this class of work and we should advise you to get in touch with the manufacturers direct. A suitable manufacturer is Orrs Zinc White, Ltd., Widnes, Lancashire.

As adequate insulation is a matter of very great importance, we would advise for your perusal :

1. Notes from the Information Bureau of the Building Research Station (3rd series, No. 4, February, 1936).
2. International Recommendations for X-ray and Radium Protection.
3. Fourth Revised Report of the British X-ray and Radium Protection Committee.

The last two can normally be obtained free of charge from the Director, National Physical Laboratory, Teddington, Middlesex. We would also draw your attention to the testing facilities available at the National Physical Laboratory.

Q 894

ENQUIRER, DEVON.—*Could you give me the ADDRESS of the Building Research Station?*

The address of the Building Research Station is Bucknalls Lane, Garston, Watford, Herts.

Q 895

SURVEYOR, LANCS.—*I should be glad if your Information Centre could give me an approximate price per foot cube for the REPLACEMENT OF AN EXISTING FACTORY at present used for various manufactures such as surgical dressings, small electrical equipment and for the storage of tea.*

The building would probably be of two storeys and of wooden materials. The price is wanted for insurance purposes.

The cost of replacing a two-storey factory constructed mainly of timber might well be between 2s. and 2s. 6d. per foot cube at the present time. It should be remembered, however, that a licence would almost certainly not be forthcoming, and if it was rebuilt of other materials the cost would probably be considerably less —perhaps from 1s. 6d. to 1s. 9d. per foot cube, according to the construction. No opinion of any real worth can be given without drawings or a knowledge of the actual building.

Q 896

ARCHITECT, DEVON.—*I should be glad to obtain all the information possible regarding the general requirements, FITTING UP and equipment of British RESTAURANTS, also to know of any governing rules and regulations which may be in force and from whom they can be obtained.*

Information regarding the requirements of British Restaurants can be obtained from the Wartime Meals Department of the Ministry of Food, Portman Court, Portman Square, London. Equipment is normally supplied by the Supplies Division of the Ministry of Works and Planning, Dean Bradley House, Westminster, London, S.W.1, but the Ministry of Food should give you all the information you require, and will no doubt direct you to apply to the Ministry of Works and Planning for any special information in relation to the equipment.

LITERATURE

PLANNING

The War and the Planning Outlook. By William A. Robson. Rebuilding Britain, Series No. 4. Faber & Faber, Ltd. (One Shilling Net.)

It is unfortunate that so many people who write about planning should suffer from the delusion that the general public is solidly behind them. To hear them talk about the overwhelming support for stronger Town and Country Planning, you would think Mr. Kingsley Martin edited every paper in Fleet Street and the City of London was populated by George Peplers and Patrick Abercrombies and their like. The truth, of course, is very different. The objects of Territorial Planning are so general and so long-dated, its theory so involved, its procedure so wrapped in bureaucratic conventions that few people outside professional, administrative and educated left-wing circles have any idea what it is all about. Yet few town-planning enthusiasts seem able to grasp this fact. It was, therefore, with a sigh of relief that I turned over the pages of Dr. Robson's short pamphlet. "The town and country planning movement in Britain," says Dr. Robson, "is at present in the hands of a relatively small elite." Their ideas have still to be "got across the footlights to the great body of citizens, and become transformed into a widespread popular demand." Otherwise, he warns us, we shall not be able to "work up sufficient pressure of steam in the body politic" to bring about substantial changes.

Dr. Robson, then, is a person who not only knows what he is talking about, but also what kind of people he has to talk to, which is even more important. Into the 28 pages of *The War and the Planning Outlook* he has packed more constructive ideas than are found in many full length books. He describes the regional consciousness which has received such stimulus from the emergency devolution of Government functions in war. His proposals for Regional Councils and Regional Planning Commissions deserve very careful attention. He writes about a National Financial Reconstruction Corporation to carry out the great financial operations which will be required, associated with Regional and Municipal Financial Reconstruction Boards; and a Building Corporation for carrying out building. All these would be organized on non-profit-making, public utility lines. He speculates on the possibility of such a Building Corporation developing out of the Central Council which was established by Lord Reith in 1941.

But we owe a special debt to Dr. Robson for reminding us that the idea of planning with its moral and political implications arouses all the prejudices built up over centuries of English thought and life. The story of social reform abounds with the names of men and women who have attacked the land problem with about as good a chance as a pikeman charging a tank. The difficulties are immense, and the first necessity is to measure them and to understand them. C.B.

B. S. I.

War Emergency British Standard for Red Lead Ready Mixed Paints (B.S. No. 1011/1942).

The above Specification, which has recently been published by the British Standards Institution, was prepared at the request of the manufacturers and forms an addition to the series of British Standards which are at present in existence for paints and paint materials.

The specification has been prepared on the basis of peace time requirements, but an amendment slip is included which indicates the relaxations that are permitted owing to the present scarcity of raw materials.

The specification provides for two types of paint, and appendices are included giving information with regard to the various methods of testing required.

Copies of this new British Standard may be obtained from the British Standards Institution, 28, Victoria Street, Westminster S.W.1., price 2/3, post free.

Sooner or later we shall need new houses...

Will the familiar 'Kozy Kot' and 'Mon Repos' be superseded by communal flats with a communal garden? Or will the suburban housewife insist on splendid isolation? Time alone will show. Either way, post-war housing is bound to be a very big job for architects and builders. What part Zinc will play in the new building programme we can only guess. Its lightness, long life and essential cheapness suggest that it will be a prominent part.★ For the time being we ask no more than that you should

...keep ZINC in mind

★ *Incidentally, it is noteworthy that Zinc has entered into the construction of millions of British houses and flats, including the most modern! If you would like to know more about Zinc and the Zinc Development Association, write to the Z.D.A., 15 Turl Street, Oxford.*

Zn

TRADE NOTES

Bicycle Grooves and Sheds.

In the JOURNAL for January 29, page 96, mention was made of the idea of replacing bicycle racks by neat grooves in a pre-cast concrete floor. Messrs. Stelcon (Industrial Floors) Ltd., of Cliffords Inn, London, E.C.4, inform us that people cannot make their own arrangements to insert the grooves in the floor. The bicycle block is protected by British patent No. 425,265 and this covers grooves let into a floor for parking bicycles. In view of the shortage of timber and steel, Messrs. Stelcon now supply material for the assembly of concrete sheds for housing bicycles. This consists of concrete posts, rafters and purlins, together with drawings showing assembly.

War Emergency Cable.

To economise in the use of rubber and by agreement with the Government the Cable Makers' Association have produced a war emergency cable to supersede the CMA grade and Nonazo class cables. Current ratings remain unaltered and the war emergency cable complies with the latest issues of the Government Department Electrical Specifications (GDES). The emergency cable is available in all finishes in which CMA grade cables have been available in the past. The Government also regret that tough rubber-sheathed cables and flexible cords should not be used where suitable alternative types are available.

Removal of Cable Insulation.

A device for the removal of cable insulation from single-core rubber insulated, tough rubber sheaths or taped and braided cables has been introduced by W. T. Henley's Telegraph Works Co., Ltd. It is called the Solon Electric Insulation Stripper and consists of a transformer with the secondary coil short-circuited by a resistance wire element which operates at a dull red heat. Severance is made by revolving the insulated conductors on the heated wire, the length of insulation to be removed being controlled by an adjustable guide, set according to requirements. It is claimed that the stripper has no cutting action and that the process of stripping cannot damage the conductors.

Glass

The Ministry of Home Security have issued a revised Bulletin (C.10), on Translucent substitutes for glass. This bulletin supersedes "Flexible Substitutes for Glass." It is pointed out that the breakage of glass, threatened or actual, by air attack has created a demand for substitutes. They range from makeshifts for keeping out the weather after a raid to strong durable materials intended to serve in place of glass till the war ends. In this bulletin substitutes are considered from two aspects—composition and use. It does not deal with special forms of glass. Bulletin states :—

"Ordinary glass is highly transparent, very durable, normally in good supply, easily fitted and comparatively cheap, but is brittle and dangerous when jagged pieces fall or are flung about. Substitutes should have some at least of the advantages, without the war-time disadvantages of glass. Ideally a substitute should yield to blast without splintering or tearing, and its fixing in the window frame should preferably be such that blast is not transmitted by the substitute to the frame. In short, something is wanted that can be harmlessly dislodged and readily put back intact, although where cheap materials are used for emergency repair work it may not be practicable to fulfil this condition. For many purposes transparency is not essential and a material that is only light-transmitting (i.e., translucent) will serve. Where obscuration is required, or where it is not important to admit light, an opaque material is useful. For external use the material should be weather-resisting; and in roof-lights, strength is necessary. Price is important, and also the availability of materials for making the substitute."

INSTITUTION OF STRUCTURAL ENGINEERS

Following candidates have been elected to membership of the Institution :

As students.—Harold Daintith, of Irlam, Manchester; Cyril Duxbury, of Didsbury, Manchester; William Hodgson, of Middlesbrough.

As graduates.—Sudhansu Kumar Chatterjee, of Leeds; Alexander Eugene Highfield, of Twickenham, Middlesex; Raymond Spencer Millard, B.SC., of Ashbourne, Derbyshire.

As Associate-Member.—Thomas Ian Hogg, of Stockport.*

As Associate.—John Joseph Cunningham, A.R.I.B.A., of London.

As Members.—Harry Brompton, B.SC., M.INST.C.E., of Darlington; Rudolph Hazzledine, Lieut.-Col., R.E., of Bath†; John Bisket Harvey, A.M.INST.C.E., of Corsham, Wiltshire*; Isaac Hopkins, of Walton-on-Thames, Surrey.

* Readmission. † Transfer from Associate-Membership.