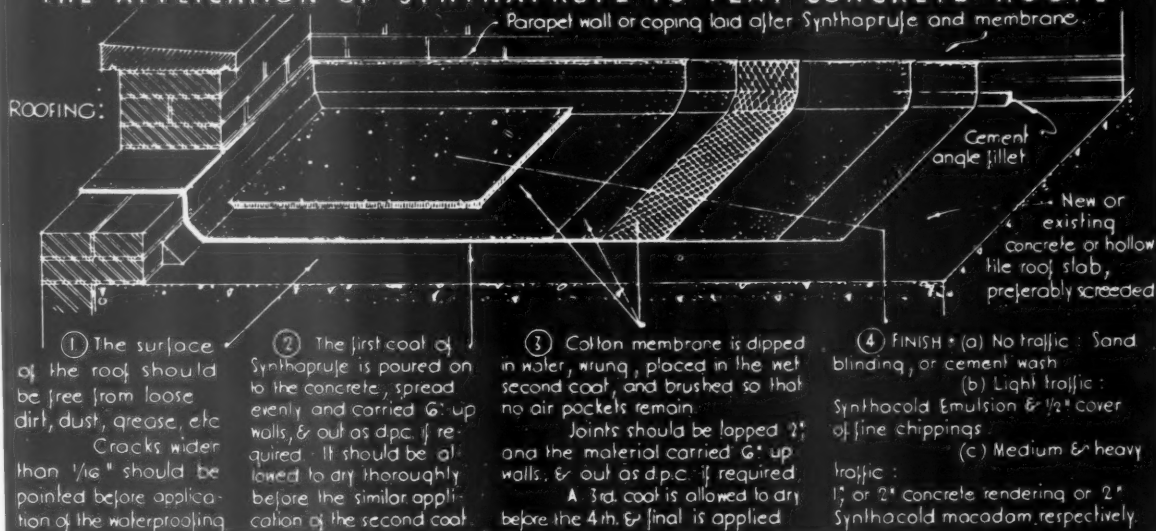


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## JOURNAL

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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, MAY 29, 1941.

NUMBER 2418 : VOLUME 93

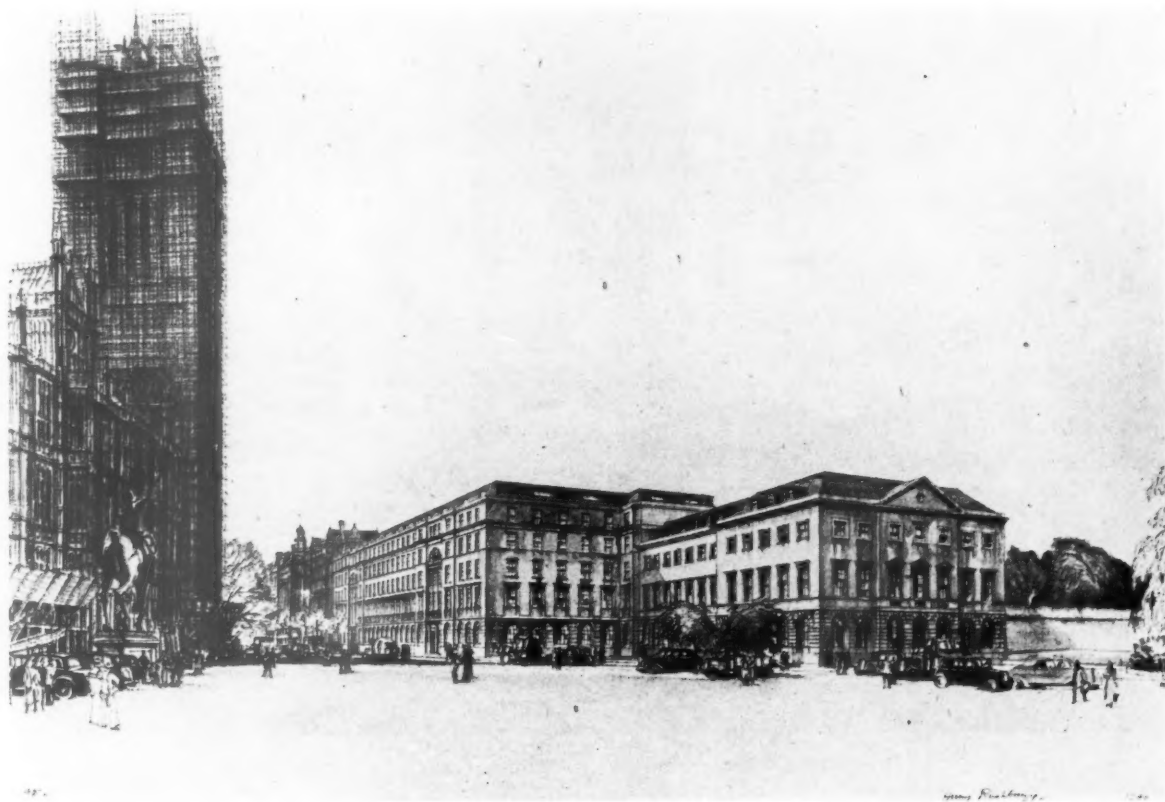
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Owing to the paper shortage the JOURNAL, in common with all  
other papers, is now only supplied to newsagents on a "firm  
order" basis. This means that newsagents are now unable to  
supply the JOURNAL except to a client's definite order.

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

## ABINGDON STREET REBUILDING SCHEME



*Abingdon Street, Westminster, rebuilding scheme.  
View from Palace Yard. By A. E. Richardson,  
A.R.A., in conjunction with Messrs. E. Culpin  
and Son (From the Royal Academy Exhibition).*

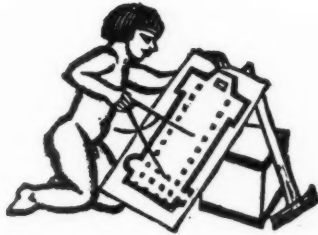


## DAMAGE TO WESTMINSTER ABBEY

*During a recent raid on London bombs struck Westminster Abbey. The damage was not serious and was confined to roof and splinter damage elsewhere.*

*The photograph was taken from just west of the crossing, looking towards the Sanctuary and High Altar. The portions of the Abbey shown are the oldest now visible and were built by Henry III (1216-72). The altar and reredos were designed by Sir Gilbert Scott in 1867.*





## SHOPS AND PLANNING

**I**N this issue the JOURNAL publishes an important letter by Mr. F. J. Osborn. It is a letter about shopping facilities at Welwyn Garden City and explains why those facilities assumed their present form.

At first glance architects may not see the connexion between architecture and the number and kind of shops at Welwyn. It is, however, a close connexion. In his letter to Lord Reith in March the President of the R.I.B.A. claimed the right of architects to take part in the planning of post-war redevelopment and stated that the profession contained men familiar with all the main problems which will have to be solved in guiding redevelopment. It is generally admitted that one of the first aims of this guidance will be to cut down the daily movements of all who live in or near towns. The primary cause of daily movement by urban inhabitants is the need to return from work: but next to this shopping probably causes the largest movement.

Welwyn Garden City is a town planned from the beginning to supply within itself all the common needs of its inhabitants, and before the war 85 per cent. of its citizens derived their incomes from Welwyn. If, therefore, this fully controlled town has largely succeeded in preventing the first kind of unnecessary movement but has failed in the apparently much easier task of preventing the second kind, the reasons for this failure are of great consequence to all who will take part in planning post-war redevelopment.

Mr. Osborn's letter is in reply to a note by *Astragal* in which it was contended that the Welwyn housewife has a much smaller choice of shops and shop service than is obtainable in other places around London. And it is obvious that if this is so it encourages shopping journeys to London and puts a severe handicap on the efficient housewife who cannot afford such journeys. Mr. F. J. Osborn is a director of Welwyn Garden City and one of the country's foremost experts on the establishment and administration of planned communities. His explanation of why Welwyn's shopping facilities assumed their present form is therefore authoritative, and throws a bright and somewhat sinister light on the ways in which such facilities are obtained in unplanned new housing developments.

Although patronage is gradually moving away from small independent shops to multiple shops and department stores neither of the latter type of shop will usually consent to set up a branch until a shopping centre is well established. Thus pioneer shops in new housing estates are nearly always small shops which

have not the capital to offer the wide range of goods and efficient service which would enable them to build up a faithful clientèle before the multiple shops begin to arrive. But once a shopping centre *does* offer an attractive turnover, multiple shops buy up or drive out the little men or so reduce their turnover that they are unable to do more than wobble along, representing a few precarious islets of independence among their slicker and bigger neighbours.

Welwyn Garden City did not wish this cycle of events to take place at Welwyn. It was prepared to limit, and in fact does limit, the number of shops of each kind in order to ensure a turnover for each shop large enough to enable it to give good service. But despite this powerful inducement independent shopkeepers possessing sufficient capital were not forthcoming, and multiple shops were reluctant to open branches. This latter reluctance seems inexplicable unless the absence of any opportunity to speculate in site values was the cause of it.

Welwyn, therefore, looked for a Department Store or Co-operative Society which was willing to provide a large range of goods from the very beginning, and which would rely on a protected "bread and cheese" turnover, to carry unremunerative departments for the first years. It was unable to find such a store or society. And it seems worth noting that Co-operative Societies—so boosted as the vanguard of a newer and better retail system—were as reluctant as their competitors to touch a virtual monopoly which carried with it some public safeguards. The directors of Welwyn had therefore no option but to set up their own Welwyn Stores and to safeguard its "bread and cheese" turnover in order to set up store branches as quickly as possible throughout the town. They have not done this because they wanted to, but because they had to.

This story makes plain one aspect of the multitudinous difficulties which will face those who desire to change any of the usual methods in establishing new communities after this war. It is no part of the architects' duty to master the details of all such difficulties: but it does seem necessary that they should know that they exist and should understand, in broad outline, the effects of alternative solutions to them on actual physical planning.

And it seems probable that the study of all the difficulties encountered in the establishment and development of Welwyn Garden City, and of the solutions adopted, would be a most valuable training for all those who will plan post-war Britain.



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

## NOTES & TOPICS

MEIKLE v. MAUFE

**T**HE hearing of *Meikle v. Maufe* came to an end in the Chancery Division last week, and Mr. Justice Uthwatt has reserved judgment.

That judgment cannot fail to be of importance to all architects, for it may set up a legal ruling on two points of the greatest consequence to the profession. The first is the extent to which a building owner, having employed architect A to design a building for him, is debarred from having that building extended by another architect in close conformity with A's design until A's copyright expires. The second conceives at what point close conformity, without infringement of copyright, changes into a reproduction which does infringe copyright.

### THE BORDERS CASE.

The House of Lords has said the last word in English law on the famous Borders case, and the final verdict has gone against the equally famous Mrs. Elsie Borders.

It is no reflection on the building society concerned to say that most architects will be sorry. Mrs. Borders maintained that she was grossly deceived concerning the structural condition and workmanship of the house she agreed to buy; and by the long and costly battle which she and those who helped her fought in the High Court and Court of Appeal she called public attention to serious evils in the system of small house purchase.

Unfortunately for her particular case she was unable to convince the Lords that the Bradford Third Equitable Building Society either inspired or had any knowledge of the statements made by the builder from whom she bought her house; and the name of a well-known society is thus freed from a very grave imputation.

### ... AND SMALL HOUSES

The evil system to which public attention was attracted by its general discussion in the Borders' case was that of "collateral security." This system arose in the following way.

When the market for houses costing over £1,000 began to be exhausted early in the thirties, speculative builders

and building societies began to turn their attention to houses costing £600 and upwards. Competition was keen, the margin for profits smaller, and the type of purchaser usually attracted was not always above planning a quarter-day flit. Building societies had to protect themselves and some of them did so by the system called "collateral security." By this system a builder who built 100 houses in collaboration with a building society did not receive the full agreed cost price of, say, £500 cash from the society; he received £475 each and the society retained the outstanding £2,500, either permanently or for a term of years, as protection for itself against bad building—not, it will be noted, as protection for the purchaser.

The builder thus advertised that a well-known building society was so convinced of the structural perfection of the builder's houses that it was prepared to advance to tenant-purchasers 80, 85, or even 95 per cent. of the cost price on the security of the houses. Quite large numbers of people fell for this apparently very attractive proposition and its accompanying baits of "no solicitor's fees" and "free survey by building society's surveyor;" and found themselves saddled with the repairs of very badly built houses. Only when purchasers went bankrupt or ran for it, did the society have to draw on its "collateral security" pool—of whose existence purchasers were ignorant.

Legislation has now declared that "collateral security" is legal, but that the amount of any such security must be disclosed in the agreement between purchaser and society.

This is a step forward, but after this war it would seem worth investigating a very much bigger one, namely, the maintenance by building societies, or by an organization set up by them, of all houses on the security of which they have advanced money.

### JOBS AND THE MAN

A fortnight ago it was suggested on this page that architects who had applied for Government appointments through the Central Register and had not received notice of any vacancies during the past two months, should send in details of their applications and relevant dates.

## HOME OFFICE ARCHITECTURAL APPOINTMENTS

*The Home Office announces that architects who desire to apply for any of the architectural appointments under the Home Office and Ministry of Home Security are at liberty to apply direct to*

THE ESTABLISHMENT DIVISION,  
HOME OFFICE,  
WHITEHALL, LONDON, S.W.1

*This procedure is supplementary to, and does not supersede, the normal procedure of application through the Central Register.*



*New Friends' Meeting House, Liverpool. By Hubert Lidbetter. (From the Royal Academy Exhibition.)*

The object of this suggestion was to try to find out whether an apparent bottleneck in the Central Register system of appointment does or does not exist in fact; and a number of replies have now been received.

★

All of the architects concerned have had their names on the register for over two months without being notified of suitable vacancies and one has had no offer since November last year. But the evidence received so far cannot be regarded as indicating more than a possible failure of the register to tap all its resources.

★

One of the first aims of a successful register must be to recommend the right man for the right job. And although most of my correspondents appear to be men of considerable experience, there is no point in the registry offering a department a choice of more than a dozen of the men who seem to possess the most suitable qualifications—providing, of course, that the supply exceeds the demand. But if, as appears now to be happening, demand grows equal to the supply, there is a plain duty on the register to scrutinize the qualifications of all men who are on their index as wanting jobs. For we may soon reach a point where every architect must be used.

#### SINGLE STOREY WAR FACTORIES

Wartime Building Bulletin No. 15\*, issued by the Building Research Station of the Department of Scientific and Industrial Research, brings up to date and extends information given in earlier bulletins on the design of wartime factories. The modification of earlier designs are put forward mainly as a result of experience of air raids. The bulletin is divided into two parts.

★

Part I, which is a review of standard factory types, has been written in consultation with the Ministry of Works and Buildings, Ministry of Home Security, Iron and Steel Control, and representatives of the Constructional Steelwork Industry. The revised designs should be highly resistant to demolition by bombing. They are intended for use, during the war, without roof glazing, but provision is made for the addition of glazing after the war,

or during the war if need be; daylighting curves are given. Two new types are introduced. One uses a range of rolled steel sections which may assist towards a better distribution of the demand on steel mills, and the other is a design developed by the Ministry of Aircraft Production.

★

Several of the designs are completely interchangeable, so that factories can be planned to an advanced stage pending a decision on the exact type of structure most suitable for the work at the time when construction is started. Two types provide protection against incendiary attack and these are to be preferred wherever the occupancy of the building involves an appreciable fire hazard. Notes on fire protection are given, and a list of occupancies presenting a serious fire hazard is given in Appendix I. Detail drawings of the types can be obtained on demand, and a list of the drawings available is given.

★

A general discussion in Part II on how to conceal factories by camouflage, and how to make them less vulnerable, shows that these problems are complementary. Some of the information on camouflage has, I believe, been published before, but it has not previously been shown how siting and arrangement can make factories less vulnerable.

★

A solid block of regularly shaped and arranged buildings is very vulnerable and difficult to conceal, and a hollow plan is only slightly better. *The best lay-out is one where the buildings are arranged along a curved line.* Random distribution of groups of factories making the same products does not necessarily secure the greatest protection, and sometimes it is better that interconnection between production lines for one type of product should be possible. This "lattice principle" can be combined with camouflage, and several examples are given in the bulletin for factories of 10,000-80,000 sq. ft. On application to the Building Research Station, an analysis of the vulnerability of any vital project can be arranged.

#### BLITZ GREED

Notice on a bombed London restaurant :

**MORE OPEN THAN USUAL**

ASTRAGAL

\* Wartime Building Bulletin No. 15—Standard Designs for Single Storey Factories for War industries, with notes on Siting and Layout—H.M. Stationery Office price 1s. 0d. net.



## NEWS

### REGISTRATION ACT: PROSECUTION AT TORQUAY

At Torquay, Mr. William Phippen Puddicombe, of 9, The Strand, Torquay, was summoned for contravening Section 1 of the Architects' (Registration) Act, 1938, on or about 1941.

Mr. P. H. W. Almy, on his behalf, pleaded not guilty.

Mr. F. C. Lansdell, for the prosecution, said it was illegal for a person to practice as an architect since 1938, if he was not registered under the Architects' Registration Act.

Mr. Puddicombe was placed on the Register and had not paid the fees since 1939. Despite repeated demands by letter and registered post no notice was taken of the applications for payment, and his name was eventually removed from the Register. *The Estates Gazette* of March 22 last stated that Puddicombe was an architect.

Mr. Pembroke Wicks, Registrar of the Architects' Registration Council of the United Kingdom, said Puddicombe was registered under the Act in 1931, and a retention fee of 10s. 6d. was paid. Witness had sent notices to defendant at 9, The Strand, Torquay, and had received no notice of removal. In all four notices of renewal were sent, but no fees or penalties were paid and Puddicombe had not applied to have his name restored to the Register. The name was removed on November 20.

In reply to Mr. Almy, witness said the fees payable to the Institute of Registered Architects did not include fees to the Council.

Defendant, in evidence, said he was a member of the firm of Smith & Son, estate agents, of 9, The Strand, Torquay, and had formerly held appointments as surveyor to the Oystermouth Urban Council, Sheerness Urban Council, and the Borough of Aberystwyth and assistant borough surveyor of Swansea. He was a Fellow of the Surveyors' Institution and a member of the Council of the Institution of Municipal and County Engineers. He came to Torquay in 1936 and had done no architectural work of any kind since the war. The advertisement quoted in the *Estates Gazette* was one which appeared annually. He had been a member of the Institute of Registered Architects since 1935, and he always paid a fee of £1 1s. to that organization, and he considered a portion was paid to the Registrar of the Architects' Registration Council. He had not received a registered communication from the Council. He understood there was a certain amount of friction between the two organizations.

Replying to Mr. Lansdell, defendant said the fee was paid to the Institute in May after the issue of the summons. The Institute of Registered Architects was no small affair and it would shortly have its charter. The removal of his name from the Register came as a bolt from the blue.

Mr. Lansdell said there was not the slightest suggestion of any professional breach.

Mr. Wicks, recalled, said the procedure of paying the Council's fees through the Institute of Registered Architects was carried out until 1939, but the Council deprecated the practice.

Mr. Almy said his client was always led to believe that the fee paid to the Institute covered the Council's fees. They had, he contended, no evidence when it was discontinued. At the worst defendant had been under a misapprehension. The offence was trivial and technical, and there was a grave doubt as to whether an offence had been committed.

The Chairman (Mrs. V. F. Gresham), said a fine of £2 would be imposed, the Bench being satisfied that an offence had been committed.

On the application of Mr. Lansdell costs of £3 3s. were allowed.

### I.A.A.S. WAR DAMAGE LECTURE

A lecture on the War Damage Act, 1941, which was to have been given by the Hon. Dougall Meston (Barrister-at-Law), at the Headquarters of the Incorporated Association of Architects and Surveyors, 75, Eaton Place, Belgrave Square, on Thursday, May 22, has been postponed until Friday, June 20, at 6 p.m. Architects and surveyors, including those who are not members of the Association, are invited. Admission will be by ticket only, which may be obtained free and post paid on application to the Secretary, I.A.A.S., 75, Eaton Place, London, S.W.1.

### INSTITUTION OF STRUCTURAL ENGINEERS

The following members were elected on April 24:

*Studentship*.—Barron, E. T. C., of Walsall, S. Staffs.; Garvey, G. E., of Middlesbrough; Martinade, H., of Billingham, Co. Durham; Mendis, A. H., of Moratuwa, Ceylon; Rawson, E. F., of Bradford.  
*Graduateship*.—Carlson, P., of Salford, Lancs.; Loganathan, K., B.Sc., of Colombo; Lucas, H., of Stockton-on-Tees; Lucas, F. P., of Stockton-on-Tees; MacDonald, A. P., of Reading, Berks.; Maynard, D. G. G., of London.  
*Associate-Membership*.—Harrop, E., of Manchester; Lingard, R., of Stafford; Mitchell, J., of Halesowen, Birmingham; Morgan, H. S., B.Eng., of Rochester; Simmonds, F. V., of London; Stammers, J. E., of Heston, Middlesex.  
*Associateship*.—Morgan, G., F.R.I.B.A., of Fetcham, Surrey.  
*Memberships*.—Carlike, H. G., of London; Fleming, W. A., of Glasgow; Henderson, G., B.Sc., of Barbados, B.W.I.; Johnston, G. B., of London.

### THE COUNTRYSIDE AFTER THE WAR

Mr. Wesley Dougill, M.A., A.R.I.B.A., read a paper on "The Countryside after the War" before the Sheffield and Peak Branch of the C.P.R.E.

Could it be doubted that the war-time evacuation of women and children and decentralisation of industry amounting to a veritable upheaval of the country would have repercussions of a permanent character on the countryside? Of all the changes tending towards a coalescence of town and country, evacuation would probably prove to be one of the most potent, and it might well be that out of this great shifting of the population we should get an entirely new conception of both. Parallel with this development would be the return of the Service men and women, accustomed, as they would be, to open-air life.

There could be no doubt, too, that the numbers of holiday camps at the seaside and in the country would be greatly increased, that the breaking up of the large estates would continue, and that the phenomenal growth in motoring that had taken place would develop, despite the set-back caused by the war.

Then there were the suggested National Parks. The criterion as to whether any particular area was suitable for a National Park and was needed as such, was not simply the present use of the area. This factor must be related to the general trends of the past ten or twenty years, and to what were likely to be the requirements in the future. If these were taken into consideration, the case for National Parks would very quickly be established. The danger was that in the meantime wrongful development might rob the areas of their most valuable characteristics, for in no other parts of the country was it so easy for even a small amount of unsuitable building to destroy irrevocably the possibility of public enjoyment. Moreover no other areas were so likely to attract certain types of development.

Another important matter concerned architecture. Standardisation of design and materials, and cheaper, less permanent buildings, seems to be inevitable on grounds of economy and of speed in construction. One hoped that if and when standardisation was practised to any great extent, it would be done with discrimination, and at least on regional as against national lines, so that adaptations could be made to suit the various localities. Concerning temporary and semi-permanent buildings, we should get rid of the idea that they were any less amenable to good design and appropriate colour than were permanent ones, or that cheapness was synonymous with shoddiness. Nothing could so effectively mar a landscape or cast a blight over it as a badly designed and wrongly situated temporary building.

It might easily be found when the time comes, that the greatest of all factors operating against spoiling of the landscape would be the revival of agriculture. The war had already produced great changes and a revival in the industry. One hoped that, through a long-term policy, this would be carried forward into the peace era, and that through it we should get a more equal balance between agricultural and building values, and thus less inducement to sell without first counting the cost in other directions. A flourishing agriculture would re-act not only on the land itself, but also on the villages, hamlets and farm buildings, for they were all closely inter-connected.

## LETTERS

F. J. OSBORN

Director of Welwyn Garden City

Hon. Sec. Town and Country Planning Association

L. L. DUSSAULT, F.R.I.B.A.

### The Welwyn Experiment

SIR,—I much appreciate Astragal's comment on my letter, and agree very cordially that the chief task of planning is to cut down daily movements. In view of the probability that other new towns will be built as part of our reconstruction policy, it is very important that the value of Welwyn as a demonstration should be understood. The main point is that here is a complete industrial town, in which most of the factories and businesses are private enterprise, yet the lay-out, placing and architectural design of every building has received careful consideration. If the demonstration is to have value for the future, the reasons for the decisions taken on the innumerable issues that arose should be understood, and their results weighed in all their aspects. As in the design of a house, an apparent defect may be an inevitable corollary of some shining merit or some special requirement of the client. But, when all is said, in a piece of development on this large scale, extending over 20 years, some obvious mistakes will appear—while on some important issues differences of judgement will persist as to whether what was done was right or wrong.

This matter of policy in the development of a shopping centre for a new town (or for a large redevelopment area) is a case where difference of opinion is likely to be widest. In most towns there are, by common consent, far too many shops with a turnover insufficient to maintain either adequate stocks or good service; but it can be argued that each little struggling shop has value as a point of freedom and independence in an over-organised world. On the other hand it is evident that in recent years a vast volume of trade has left the small shopkeeper for (a) the co-operative societies; (b) the multiple traders, like Boots and Sainsburys; and (c) the big departmental stores of the Selfridge type. The public show in practice a preference for the larger shops. The suburban or small-town branch of a multiple firm holds its own against a more distant departmental store. With a few exceptions the independent private trader seems to have lost ground; and even where he succeeds, he often sells out to the multiple shop. Many economic thinkers and most social idealists assume that the trend is inevitably towards the larger business; but clearly the trend towards the departmental store (including the co-operative store, as one type of this) is not the same as, and carried to a

conclusion conflicts with, the multiple shop with branches.

In a new town where the site is in single ownership, those who plan its development cannot in practice be "neutral" as to the trend in the organisation of shopping. The lay-out, and still more the method of building and leasing shop sites or premises, cannot but affect the local trend. A well-arranged estate, concerned for efficiency and economy, cannot deliberately encourage the development of a lot of cheap temporary shops, which is the "natural" form of growth. It is the policy of most multiple shop companies not to go to a new centre until a certain minimum turnover for a branch shop is assured—which really means that many private traders who can serve a new area in its early days must expect to be pushed out or have their trade reduced by multiple shops as soon as a turnover sufficient for a good service is reached. Welwyn found that the same policy of waiting for an adequate turnover was followed by the Co-operative movement

The Welwyn Company decided that, in a new centre expected to grow gradually, the only way to give a good shopping service from the start was to build a Departmental Store and, at the expense of the estate, to keep its development well ahead of what could be justified by current turnover. In effect, this enabled the retail trades which do not appear in a small shopping centre to be maintained out of the profits on the "bread-and-cheese" trades—so that an all-round service was possible at a much earlier stage of population-growth. On the other hand, this policy was open to criticism on the ground that it held back the entry of competitive shops in the "bread-and-cheese" trades.

There was much local controversy as to whether, given that the policy was the best for a new town, the departmental store was run as efficiently as it could have been run. Public opinion, focussing on a local matter as vital as this, is a formidable factor making for efficiency and against any exploitation of a monopoly. I will not pronounce on the controversy, except to say that the system certainly has a great many local enthusiastic supporters as well as a great many critics. For good or ill, the Store is now accepted as an integral and permanent part of the town's economy.

The policy of the Estate company is understood to be to continue the development of the Stores alongside the admission of further private traders and branches of multiple shops, which compete with it and with each other. The trade to be carried on by any shop is strictly delimited, and the number of admissions controlled, on the principle that every shop shall be able to secure sufficient turnover to be a good shop. Speculation in shop

sites and premises is completely barred, and this has probably checked the entry of some multiple firms who in other areas combine retail trading with site exploitation. The methods of the Estate in this respect are worth careful study by any municipality considering large-scale development or redevelopment. Up to now most municipalities have made a present to retail firms of much of the increment of land value due to their costs of development—including their state housing subsidies. It is not an inherent part of the policy that the Estate or the municipality should itself manage a departmental store; it could work in close association with a Co-operative Society or with a retail trading company open to adapt itself to the great possibilities of planned retail development. Welwyn could not find such a Society or Company.

Great incidental advantages of the Central Store system, seized upon by Welwyn, are: that it makes it possible to provide branches, selling a wide variety of goods, at conveniently placed points all over the town; that an excellent unified delivery service can be organized, for which orders can be taken at the branch stores; and that a really first-rate central building, with all sorts of facilities and amenities, can be provided at a relatively early stage of population.

Whether these advantages outweigh those of having more obvious local competition, and the influence in the town of a larger number of free and independent traders, will continue to be a matter of judgement. I admit, in this totalitarian age, a shade of doubt about a society in which we are all becoming either form-filling bureaucrats or no less form-filling myrmidons of great monopolies or co-operative societies. But I should not be enthusiastic, as an estate developer, in pinning my faith to the private trader so long as he is free, when he makes good, to sell out to a multiple firm. As between the multiple firm and the local departmental store I think I should prefer the latter if it could hold its own. It makes for more local variety as between town and town—architectural as well as economic and social variety. It may be we shall end up with standardised departmental-multiple stores, all alike in all towns. But we are not there yet, and estate-developers and planners have still to choose the road immediately ahead.

F. J. OSBORN.

Welwyn Garden City.

*This letter is referred to in the Leading Article on page 349.—ED. A.J.*

### Tired

SIR—Just a line to say how tired I am of this stunt so-called modern architecture and stunt photography, it is a waste of good paper in these days.

L. L. DUSSAULT

Stratford-on-Avon.

## FLASHBACK

*THE THIRTIES have now joined the Nineties in history—they have become a PERIOD. We are still too close to the Thirties to sum up their essential character, but we can, in moments of relaxation, look back at aspects of them with a certain stupefied delight. This is what Mr. Hugh Casson is doing—doing for the architectural profession before others do it for the larger world.*

## HANDLES FOR BARCHESTER

By Hugh Casson

THE heat in the little office was appalling. The July sun glared with blistering ferocity through the tightly shut window, and seared with its touch the faded serge curtains. The air within was thick, heavy and silent, disturbed occasionally by the fretful buzzing of a bluebottle against the pane, or the distant rattle of clapping from Big Side, where a House Match was in progress.

Mr. Oswald, clerk of works at Barchester, sat hunched at his desk turning over with suspicious fingers a letter which had arrived by the afternoon post. He knew without opening it that it was from Mr. Tennant, the recently appointed school architect, and he knew, too, that it would contain some ridiculous notion or instruction about the library addition—a job of which he was beginning to weary.

Now Mr. Oswald, who was an elderly little man wearing steel-rimmed glasses and boots, had nothing against architects. During his thirty years as clerk of works he had known a good many of them, and he flattered himself he could handle them without difficulty. The right mixture of deference and disdain, some penetrating but respectful chaff, an occasional display of the obstinate (but of course admirable) loyalty of the old college servant was usually enough, he had found, to get them eating out of his hand. And if this treatment failed, there was always his trump-card—to be played when a scheme of which he disapproved could not otherwise be prevented. It was a simple but unfailingly successful ruse, and consisted of the withholding of some essential information about the site of which he alone was aware. Mr. Oswald had, and was careful to keep to himself, an encyclopædic knowledge of the school buildings and their peculiarities, of the thicknesses of walls, the potential strengths of floors, or the whereabouts of long-forgotten flues and watercocks. Much of his knowledge was inaccurate, and some of it was frankly fabricated, but as there were few drawings in existence, his word



and opinion were perforce accepted as fact. Thus if an architect showed signs of inflexibility, Mr. Oswald was wont to recall, at the last minute, some very unhelpful site condition, such as a run of disused soil drain, which would cause enough temporary confusion for the mutilation of the architect's scheme, and with any luck the substitution of one of his own.

He recalled with particular satisfaction the great battle of the Fives Courts. Sir Arthur Severn, college architect at the time, had sited them near the gymnasium and changing rooms, whereas anyone could see that the best place for them was just west of the Sewage Farm. Things had looked black for a time—Sir Arthur had been most self-opinionated in the matter—but eventually Mr. Oswald had drawn attention to the fact that a prefect's right-of-way—"one of Barchester's oldest and most treasured privileges"—ran right across Sir Arthur's site, and victory was snatched from defeat. Admittedly they were now having a little trouble in the courts with damp from the outflow, but the floors were being treated with "Wipit" and they should be usable again next term—that is, if "Wipit's" salesman was to be believed.

With the toe of his boot Mr. Oswald switched on his electric fire. Funny how the air seemed to chill after midday even at this time of year. The temperature rose a few more degrees to furnace heat, and the bluebottle, overpowered, sank into a silent torpor.

Slowly Mr. Oswald began to open the letter. Mr. Tennant had been a nuisance ever since his appointment last year by the new headmaster—incidentally another very unsatisfactory person. They were both young men and seemed to have little respect for tradition. Mr. Oswald recalled with acerbity the struggles and disputes of the past few months, the demand for record plans of the school buildings and equipment, the removal from him of the authority to order school furniture and fittings—a responsibility he had held for over twenty years—and finally the trouble over the library addition. The affair had started over the question of facing bricks. Mr. Oswald had favoured the product of a local yard—a good hard-burnt brick, nicely smooth, and a fine full-bodied red colour. Mr. Tennant, on the other hand, had chosen some fancy biscuit shade, and had had the bricks sent on the site before Mr. Oswald realized what was up. He had to admit it was a smart piece of work on Mr. Tennant's part, but revenge was secured by the losing of a very ladylike full-size detail of the architect's for the window heads, and arranging for the erection of a number of the usual school type of lintels before Mr. Tennant could next visit the site. Throughout the job the battle had gone on. There had been skirmishes over the skirtings, the wall tiling and the parapet coping. Mr. Oswald on the whole had got the best of it, as he was fighting, so to speak,

on his home ground, but Mr. Tennant had had his victories too—there was that tiresome affair of the flush doors, for instance. Mr. Oswald shook his head in self-reproach. He hadn't handled that business too well—nor the question of the insulation of the Quiet Room, with all that high-faluting nonsense about quilting and such. It was obvious that this letter meant a new encounter.

Mr. Oswald unfolded the sheet and scanned it. Just as he thought. Mr. Tennant had chosen some door handles. Lever handles, too, and finished in satin chromium. Mr. Oswald smiled pityingly. What did he think the place was—a night-club? He read the letter through, his spirits rising as he realized that the handles had not yet been actually ordered. He leant back in his chair to ponder a course of action.

As he brooded, his eye wandered vaguely round the room. It was a pleasantly familiar scene, and his glance rested with affection upon the assortment of objects which surrounded him—the varnished, mass-handled plan chests with their cargo of dusty samples and the fossil from the science lab. footings, the shiny-seated, horsehair-sprouting chairs, the threadbare carpet taken from the study of the last headmaster but two, and the bookshelves laden with out-of-date catalogues and yet more samples. Mr. Oswald was fond of pictures, and his walls were crowded, principally with framed school groups, in all of which he was to be found, cloth-capped, dignified, balancing with wooden precision the cricket professional at the other end of the line. Over the fireplace hung an etching of the chapel by an Old Boy—he'd got the ivy just right, but he'd left out one of the R.W.P.'s. That had always been an annoyance. How on earth did he think they drained the vestry flat? Careless. Mr. Oswald's eye clouded a little in reproof as it passed on to the photograph of the Hilary Memorial Pavilion, a clumsy, over-detailed little erection, with a stiff constipated expression. It had been built in 1904 when he was still a "brickie," and Mr. Oswald still regarded it as his favourite. How well he remembered cutting the soft red bricks for the clock surround—and then the day it was opened, and being presented to Lord Danvers, the chairman of the Governors; the pearl tiepin and pale, bloodshot eye of his lordship, the lavender-gloved hand and the throaty, "Good work, Oswald," the band in the distance playing "H.M.S. Pinafore" and the hot, hard cramping of his new bowler hat. That had been a great moment in his life—emphasized only by the day three years later when he was appointed clerk of works. The Revd. Llangollen had been head at the time. He was a rare man for bricks and mortar, and they had had a fine time together knocking through windows, building partitions, pulling down chimneys, replacing the sash-windows with leaded lights—"so much more suitable for a school," the Rev'd. had said—and demolishing that

useless little stone pavilion in the park to make way for a rifle range. Happy days, sighed Mr. Oswald. For six years no architect had been near them. He and the Rev'd. had been inseparable companions, and there was hardly a building which did not bear witness to their mutual handiwork.

Then the Rev'd. had died, and his successor had brought in an old college friend as architect, and ever since he had been badgered by one or other of the breed. This Mr. Tennant was the worst of them all—nicely spoken, of course, but very obstinate.

Mr. Oswald re-read the letter slowly. Door handles, eh? he muttered to himself. Foreign-looking things too, to judge by the photograph. He remembered a job like that on the bedroom door of his hotel during that Easter trip to Paris in 1912. Very flimsy affair it was—just like the French of course—and to make certain he had jammed a chair beneath it every night. Just as well he did, too.

Mr. Oswald jerked himself back from the memory of that unaccountable holiday. Door handles. Now where had he got those handles for the new labs. from?

He rummaged about in a drawer. Here it was, Messrs. Grudge's catalogue. "The Boeotian door knob. Heavy-gauge metal, with or without ornamental brass escutcheon. Suitable for institutions and educational establishments." As though to prove this last claim, a wood engraving was appended showing the "Boeotian" being turned with every appearance of ease and elegance by a heavily moustached figure in cap and gown. Mr. Oswald gazed at the picture approvingly. Nice strong-looking job, he thought. Just as well he had a few of them still in stock. He reached for some notepaper and started his reply to Mr. Tennant.

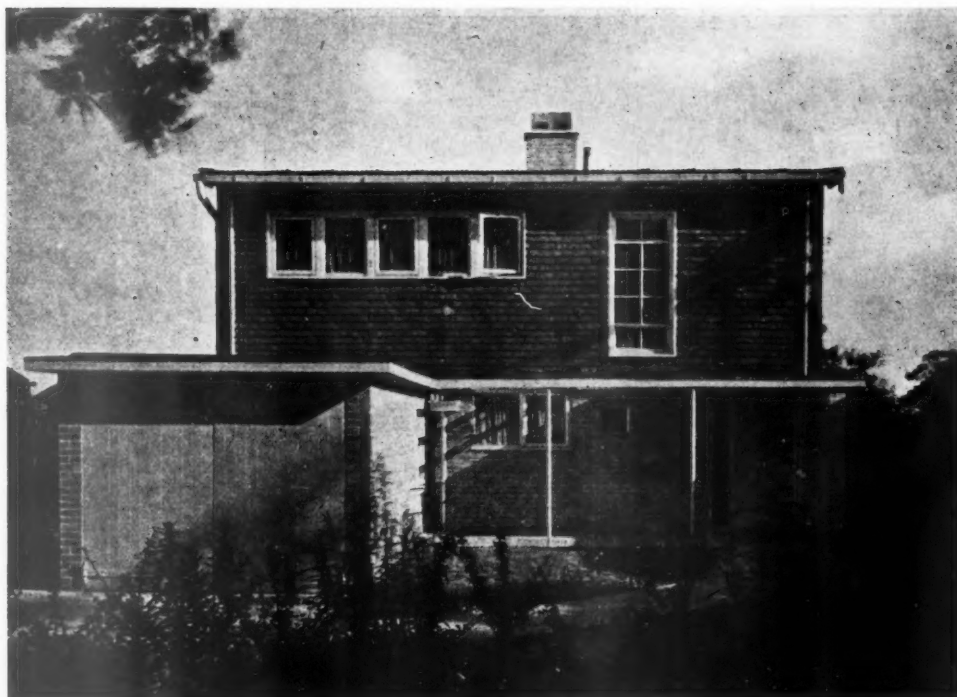
"Dear Sir," he began, in his thin sloping hand, "yours of the 18th inst. to hand and contents noted. I regret we shall be unable to order the door handles as reqd. by your good self as we still have some in stock for the job. I remain, etc., Arthur Oswald."

"Satin chromium," he muttered, as he licked the envelope—what would the Rev'd. have said to that?

He placed the letter in the tray, and to soothe his irritation, pulled down from a nearby shelf Flowing's catalogue of sanitary goods. He never tired of poring over the glossy pages of this publication, and found it an unfailing antidote to ill-humour. Mr. Tennant and his door handles faded from his mind as his fingers flicked happily over the pages.

Ah, there was a nice job—"the Silent Queen"—self-cleaning, P. or S. trap, vitreous finish, choice of six colours. Beautiful. Mr. Oswald's eyes gleamed as he groped once again to switch on the second burner of his fire.

It got quite parky towards evening . . . quite parky.

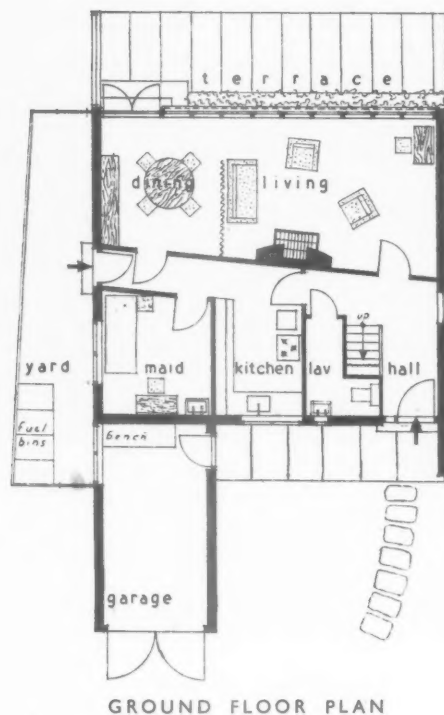
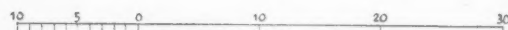
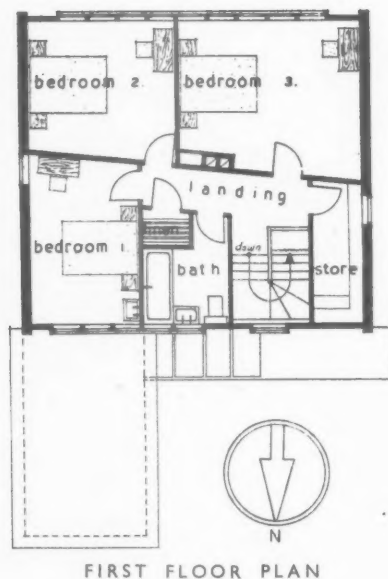
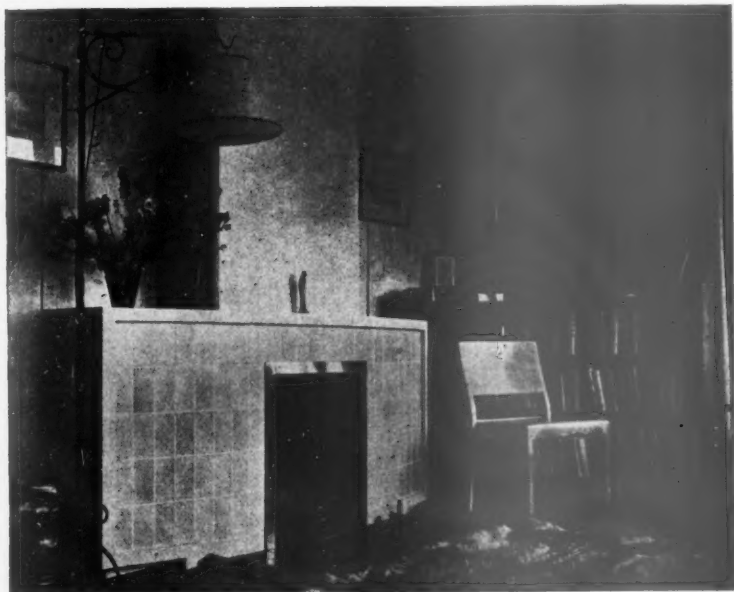


**PLAN**—The client desired on the ground floor a large combined living-dining-room, small well-equipped kitchen with maids' room adjoining, lavatory and garage; and on the first floor, three bedrooms, bathroom and storeroom. The local authority required the house to be set back 39 ft. from the road and that a minimum space of 5 ft. should be provided at each side of the building. This left a width of only 29 ft. for the house. To provide the required accommodation economically the spine partition is set at an angle on plan. While reducing the width of the living-room at the dining end, where the space is less required, this enabled more space to be allotted to the maids' room and kitchen. Upstairs, the splayed partition enabled more room to be given to the front bedroom without causing any apparent loss of space in the other two rooms. The effect in the living-room is one of spaciousness, created partly by the perspective of the splayed wall and partly by the large amount of window space.

*Above : The north front. Left : The house under construction, showing the timber frame and diagonal boarded walls before the addition of the tile hanging.*

## HOUSE AT HARROW WEALD

D E S I G N E D B Y  
F R E D E R I C K M A C M A N U S



**CONSTRUCTION**—Brick, upper part timber framed; south wall, wholly timber framed on account of window space, the base up to ground floor window-cill level being faced with  $4\frac{1}{2}$  in. brickwork in front of framing; side walls, brickwork, full height, at request of local authority; spine partition, both floors, brick; partitions, ground floor brick, upper floor timber. The external brick walls are 9 in. thick, and are battened out on the interior face to leave an air space to receive the finishings. The roof and the framed external walls are covered with 1 in. rough boarding, laid diagonally to act as bracing. Facing bricks are dun-coloured concrete, and the framed walls are covered with red sandfaced roofing tiles. Roof-covering: corrugated asbestos-cement sheeting, laid on felt. Floors: hall, kitchen and maids' room, linoleum laid direct on an underlay on the concrete; other floors, wood joists and narrow-width deal boarding for close carpeting. Internal walls and ceilings: kitchen, plastered; remainder,  $\frac{1}{2}$  in. thick insulating fibre boards.

*Top: Living-room. Above: The dining end of the living-room.*

HOUSE AT HARROW WEALD, MIDDLESEX

B



EQUIPMENT—Doors, flush type; casement windows, light-section timber, sashes provided only opening sections, glazing elsewhere fixed direct to frames; central heating to all rooms, radiators fixed clear of floors and extending whole width of window openings. Hot water is provided on the indirect system by a calorifier, fitted with an electric thermostatic immersion heater to supply hot water in summer. Kitchen equipment includes a sink with double drainers of stainless steel and a large gas-operated refrigerator. The bathroom towel rail incorporates a radiator.

The general contractors were Messrs. William Shurmur and Sons, Ltd. For list of sub-contractors, see page xvi.

*Above : The garden front.*

BY FREDERICK MACMANUS





## HOUSE IN MASSACHUSETTS

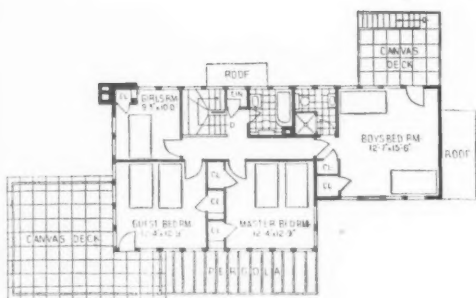
DESIGNED BY COOLIDGE  
SHEPLEY, BULFINCH, AND ABBOTT

**PROBLEM**—Summer house for Mr. Henry R. Shepley, a partner in the firm of architects who designed it. The arrangement of rooms is informal, the main requirement being the provision of a comparatively large amount of well-equipped accommodation at low cost.

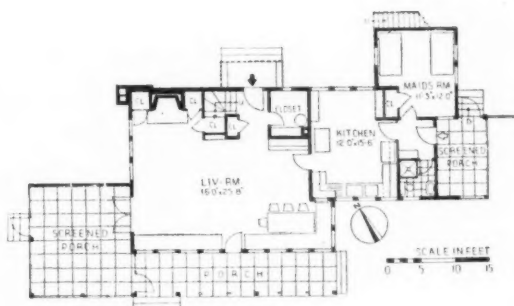
**CONSTRUCTION**—Foundations: reinforced concrete posts. Structure: 4 in. × 2 in. studs, 3½ in. width fir flooring boards inside and out as sheathing. Floors: 8 in. × 4 in. joists, ½ in. celotex fir finish flooring. Windows: standard wood double-hung sashes. Roofs: ½ in. composition, elsewhere Ruberoid, canvas finished. Flashings: leaded copper.

*Above: General view from the south.*





GROUND AND FIRST FLOOR PLANS

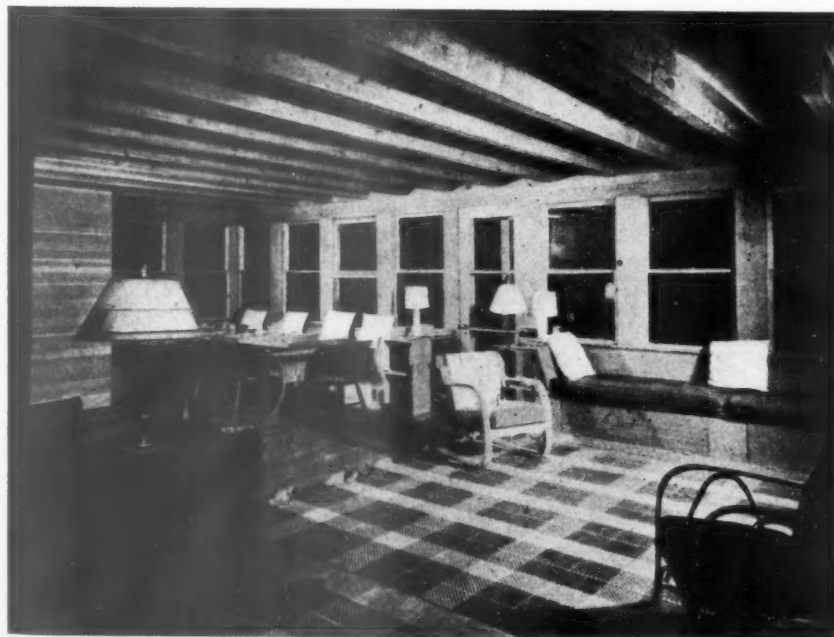


**INTERNAL FINISHES**—The internal sheathing is left natural colour as internal finish to rooms. Joists and fibre board ceiling insulation are also left natural colour. Windows are painted white.

**COST**—About 1s. 10d. a cubic foot: a very low cost for the U.S.A., and roughly equivalent to 1s. or 1s. 1d. in this country.

*Below: General view of living-room.*

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



## SOME QUESTIONS ANSWERED THIS WEEK:

★ *WHAT can be done to clean and disinfect a timber storage shed?* - - - - - Q 715

★ *HOW can I, a quantity surveyor, find out whether I am being called up in my trade capacity?* - Q 717

★ *HOW can I paint over bituminous paint?* - Q 718

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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 715

COMPANY ARCHITECT, ESSEX.—*In the course of erection of work, under licence, for my company, my foreman has discovered that a recent load of new timber taken from our store shed to the site contained a few 7" by 2" and 4" by 2" B.C. pine timber affected by dry rot; a thorough inspection of all the remaining timber in the sheds has been ordered, with instructions to destroy any further timber affected. What can be done to clean and disinfect the storage shed?*

"Toritna," made by the Dry Rot and Fire Prevention Co. Ltd., of 20-21, Harp Lane, London, E.C. 3, and "Cuprinol," made by Messrs. Jenson and Nicholson Ltd., Goswell Works, London, E. 15, can both be recommended for the prevention of dry rot. Alternatively, ordinary creosote can be used. This can be sprayed on, but is most likely to be successful if applied under pressure.

It is unusual to find stored timber affected by dry rot unless the store shed is unsuitable for its purpose or the timber has been used previously in places conducive to dry rot.

If you are not certain that your diagnosis is correct, we should advise you to send a sample to the Timber





## THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

## FILLET WELDS: THEIR APPLICATION AND PERMISSIBLE STRESSING

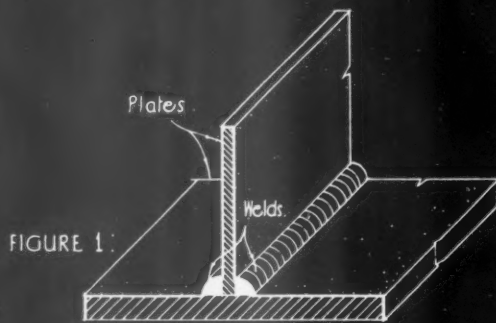


FIGURE 1:

## FILLET WELD FOR PLATES AT RIGHT ANGLES.

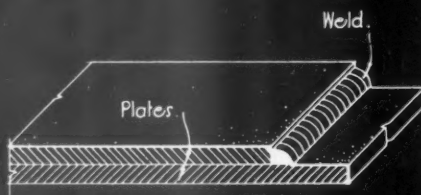


FIGURE 2: FILLET WELD FOR PARALLEL PLATES.

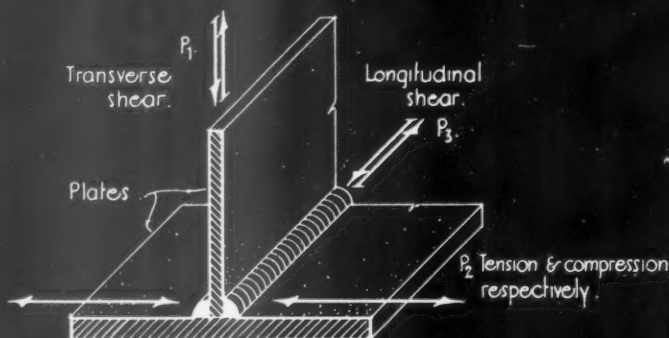


FIGURE 3: DIAGRAM ILLUSTRATING POSSIBLE TYPES OF STRESSES IN FILLET WELDS.

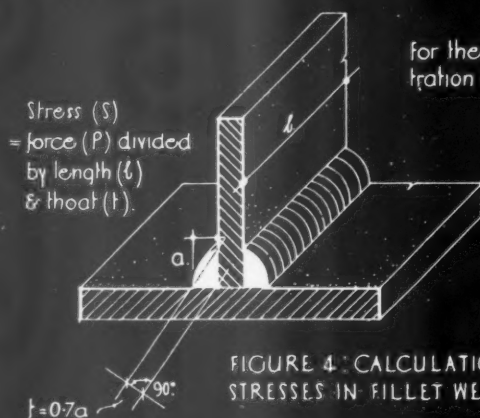


FIGURE 4: CALCULATION OF STRESSES IN FILLET WELDS.

for the sake of clarity the penetration of each weld has been omitted.

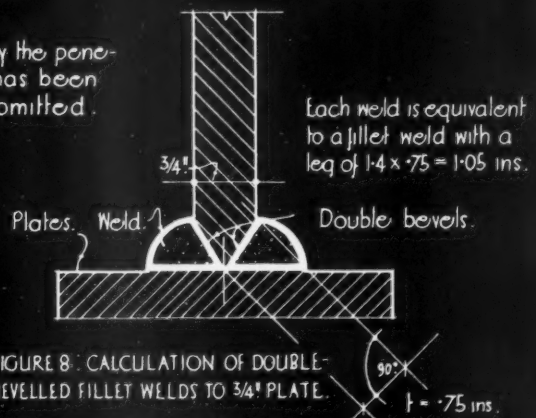


FIGURE 8: CALCULATION OF DOUBLE-BEVELLED FILLET WELDS TO 3/4" PLATE.

## PERMITTED LOADS IN END FILLET WELDS:

Fillet size, ins.	1/4	1.05	Tons per linear inch of weld.
	5/16	1.31	
	3/8	1.57	
	7/16	1.84	
	1/2	2.10	
	5/8	2.62	
	3/4	3.15	
	7/8	3.68	
	1	4.20	

FIGURE 5:

## PERMITTED LOADS IN SIDE, DIAGONAL &amp; TEE FILLET WELDS.

Fillet size, ins.	1/4	0.87	Tons per linear inch of weld.
	5/16	1.09	
	3/8	1.31	
	7/16	1.53	
	1/2	1.75	
	5/8	2.19	
	3/4	2.62	
	7/8	3.06	
	1	3.50	

FIGURE 6:

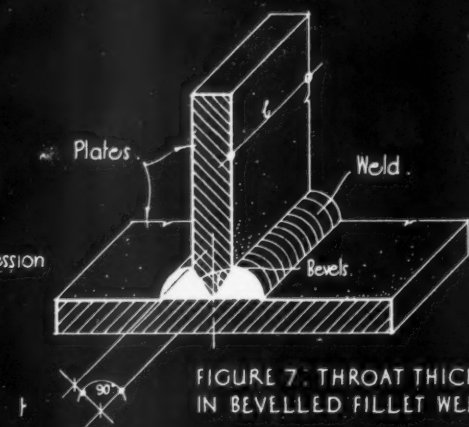


FIGURE 7: THROAT THICKNESS IN BEVELLED FILLET WELDS.

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INFORMATION SHEET: STEEL FRAME CONSTRUCTION 51: WELDING N°7  
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1



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INFORMATION SHEET

• 828 •

STRUCTURAL  
STEELWORK

**Subject:** Welding 7: Fillet Welds, their Application and Permissible Stressing.

**General:**

This series of Sheets on welded steel construction is a continuation of a preceding group dealing with riveted and bolted construction, and is intended to serve a similar purpose—namely, to indicate the way in which economical design as affected by general planning considerations may be obtained.

Both the principles of design and the general and detailed application of welded steel work are analysed in relation to the normal structural requirements of buildings. The economies in cover and dead weight resulting from the use of lighter and smaller steel members and connections are taken into consideration in the preliminary arrangement of the building components in order to obtain a maximum economy in the design of the steel framing.

This Sheet is the seventh of the welding group, and illustrates the application and permissible stressing of fillet welds.

**Fillet Welds:**

Fillet welds are arranged in a corner between two plates. These plates can either stand normal to each other, as in Figure 1, or parallel to each other, as in Figure 2.

**Stresses:**

Fillet welds can be stressed by forces in any direction, as was the case with butt welds (see isometric drawing in Figure 3). If a force acts parallel to the direction of the weld it is called longitudinal shear. If a force acts parallel to the plate but at right angles to the weld, it is called compression or tension. If it acts normal to the plate, it is called transverse shear. (The latter case is very rare.) These definitions have been taken as for butt welds (see Sheet No. 6 of this group), although for fillet welds, in the case of compression and tension, the action is a rather complicated one, and the stresses involved are not purely direct stresses.

**Stress Limits and Calculations:**

The permitted stresses in fillet welds are, for compression and tension, 6 tons per sq. in., and 5 tons per sq. in. for shear. Where the force acts

diagonally to the direction of the weld, the smaller permitted stress of 5 tons per sq. in. should be taken as a basis for computation. The stress in the weld is calculated as force divided by the length and the throat thickness.

$$s = \frac{p}{lt} \text{ (see Figure 4)}$$

where  $s$  = stress,  $p$  = force,  $l$  = length of weld, and  $t$  = throat thickness.

The throat thickness is taken as 0.7 of the leg of the weld ("a" in Figure 4). If a fillet weld has two different lengths the smaller one is taken. The permitted stresses in fillet welds of different leg sizes in shear and compression are given in tables in Figures 5 and 6.\*

**Use:**

Fillet welds are very important for the connection of different members of a truss, for the connection of different joists, and furthermore, for joining stiffeners and flange plates to the web plates of plate girders. Sometimes a slot is arranged to connect two plates together, as in Figure 7 of Sheet 5, and this is considered as a fillet weld of twice the length of the slot.

**Bevelled Welds:**

It is often necessary to bevel the ends of the plates, even in connection with fillet welds (see Figure 7). Such an arrangement gives a better flow of stresses if there is tension or transverse shear in the fillet. In such a case the height of the triangle inscribed into the weld can be taken as the throat thickness, and the weld can be considered as a fillet weld with a leg of 1.4 times the throat thickness—in Figure 8 a  $\frac{3}{4}$ -in. plate is double-bevelled and welded by two fillet welds to another plate. The depth of the weld is found by calculation or measurement to be  $t = 0.75$  in., and each weld is equivalent to an ordinary fillet of  $1.4 \times 0.75 = 1.05$  in., which means (see Figure 6) both welds together can carry about 7 tons per linear inch. As the bevelling is expensive, it is not worth while except where transverse forces are concerned.

**Previous Sheets:**

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

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\* The tables given in Figures 6 and 7 on the front of this Sheet have been taken from "Building Design and Construction," Volume I, by F. J. Samuely and C. W. Hamann, and are reprinted here by permission of the publishers, Messrs. Chapman and Hall.

Development Association Ltd., 75, Cannon Street, London, E.C. 4, who will recommend the necessary treatment for the particular disease.

# Q 716

ARCHITECT, LONDON.—Recently I applied to the Ministry of Works, etc., for a permit to be allowed to erect a building exceeding £500, and the form that has to be filled in includes, amongst a host of other questions, the following:

Q.

10. Requirements in terms of specified materials.

Note: If an architect has been appointed approximate estimates should be furnished of the quantities of materials required . . .

A.

(a) For erection of Building Construction (including heating and lighting).

Steel	...	tons.
Softwoods	...	standards.
Hardwoods	...	cu. ft.
Bricks	...	thousands
Cement	...	tons.

Without having to take off detailed quantities (the size of the job does not warrant this), are there any reliable and rapid RULES BY WHICH TO CONVERT:

1. 30° pitch TRUSSES by span INTO TONS weight OF STEEL?
2. A super measure of floor joists (8" by 2", 12" apart in clear, plus boarding one side) into ft. cube and thence, dividing by 165, into standards?
3. Ditto, ditto, of 4" by 2" rafters, plus boarding into ditto, ditto?
4. A super measure of 2" doors, plus frames into standards?
5. A super measure of a known thickness of brickwork (e.g., wall 4½", 9", 4", and 18") into thousands of bricks?
6. A cubic measurement of 4:2:1 concrete into tons of cement?

I mentioned the point to a builder friend, and he said that for query 5 above I could work on the assumption that a sq. yd. of 4½" brickwork contains 50 bricks. And for query 6, a quarter of the cube measurement of concrete would be its cement content, and that 1 cu. yd. of cement would be 1 ton—e.g., 4 cu. yds. concrete would have 1 yd. of cement and, therefore, 1 ton.

Little books of memoranda give one the weight of a gallon of water, but I have still to find one that tells one at a glance the weight of the cement in a 6" concrete floor, using a 4:2:1 mix.

We give below the answer to your enquiry. In each case a reasonable amount of waste has been included,

such as would be expected for a straightforward job.

1. It is not possible to give a reliable guide for the weight of steel per foot of span of trusses, but a typical truss of 30' span would probably weigh about 3 cwt.

2. 8" by 2" joists 12" apart contain approximately 10' cube per square (10' by 10' sup.). 1" boarding contains about 9' cube per square; this should be adjusted for the thickness of the boarding required.

3. 4" by 2" rafters 12" apart contain about 5 ft. cube per square. Boarding as last.

4. An ordinary single door (2" solid) with a 4" by 2" frame and no architraves, contains about 5½ cub. ft. of timber—i.e., about 2½ cu. ft. per yard of door; double doors will contain slightly less per yard.

5. A yard super of 9" brickwork contains approximately 100 bricks, and other thicknesses of wall are in proportion—e.g., 200 bricks for 18" brickwork.

6. A yard of 4:2:1 concrete contains about ¼ ton of cement.

# Q 717

SURVEYOR, SOUTHAMPTON.—I am a Building and Quantity Surveyor, 20 in August. In your issue dated March 6, 1941 (Q. 662), you stated that QUANTITY SURVEYORS are reserved from 18, and those below 23 can be called up in their professional capacity. In your issue dated March 27, 1941, a correspondent (Q. 676) stated that he was informed at his local Labour Exchange that there was no reservation for Quantity Surveyors at 18, your reply said that, according to the latest Schedule of Reserved Occupations, Quantity Surveyors are still reserved from 18 upwards, a fact which I have confirmed by a schedule in front of me. The schedules which I have inspected at two local Exchanges, which, by the way, are dated prior to my schedule, give the age, however, as 23, with no mention whatever of 18.

I have enquired at the Labour Exchange if I am being CALLED UP IN my TRADE CAPACITY, but they could give me no information. I am due to take my medical examination in two weeks; I am most anxious to continue in the Services at my job. Would you kindly advise me what I should do?

We do not know of any way in which we can assist you, and it seems doubtful whether you can make any complaint until it becomes certain that you are not being used in your professional capacity. If you care to, you could write an official letter to the Labour Exchange drawing

their attention to the latest Schedule of Reserved Occupations, and mentioning that the schedules used at the Exchange appear to have been published before that date. As you are probably aware, a new Schedule of Reserved Occupations has now been published, which may very well alter the situation.

# Q 718

ARCHITECT, LONDON.—Will you please inform me with whom I can get in touch to advise me concerning PAINTING the inside of a concrete shelter that has been treated with black BITUMINOUS PAINT.

White paint for painting direct over a black bituminous paint can be obtained from the Leyland Paint and Varnish Co. Ltd., of 75, Great Newman Street, London, W. 1. This is similar to the paint used for white lines on roads, etc., and is very quick-drying. Most paint manufacturers can supply special sealers, etc., over which ordinary paint can be applied.

# Q 719

ARCHITECT, LONDON.—Some time ago an advertisement appeared in the Press for YOUNG MEN of 17 or 18 TO JOIN THE ROYAL ENGINEERS for specialist training, including some time at a University.

Can you tell me to whom application should be made for information regarding this, as local recruiting offices do not seem to know anything about it?

The information you require is contained in "Requirements for Special Army Examinations," published by H.M. Stationery Office, Kingsway, London, W.C.

# Q 720

ARCHITECT, SCOTLAND.—In connection with a proposed Communal Feeding Centre in Hawick, I should be obliged if you can give me the names of one or two makers of COOKING APPARATUS suitable FOR dealing with approximately 250 PEOPLE.

We give below\* the names and addresses of some of the firms who manufacture suitable cooking apparatus for communal feeding centres.

\* Gas and Solid Fuel Cookers: Falkirk Iron Co., Ltd., Falkirk, Scotland. Solid Fuel Cookers: Aga Heat Ltd., Coalbrookdale, Shropshire; Smith and Wellstood Ltd., Bonnybridge, Stirlingshire, Scotland; O'Brien Thomas and Co., 17, Upper Thames Street, London, E.C. 4; Benhams and Sons, Ltd., 66, Wigmore Street, London, W. 1. Electric Cookers: General Electric Co. Ltd., Magnet House, Kingsway, London, W.C. 2; Carron Co., Carron, Falkirk.

# THE WAR DAMAGE ACT, 1941

By O. A. DAVIS, F.S.I.

**W**RITING about an Act of Parliament is full of dangers; there is the danger of over-simplification, of ignoring serious pitfalls; and there is also the danger of playing for safety and of presenting a comprehensive treatise only slightly less complicated than the Act itself.

Fortunately space absolves me from the latter, as it must be plain that an Act of nearly one hundred pages cannot be dealt with comprehensively in a matter of fifteen hundred words. I hope it is equally obvious that my remarks only apply to normal procedure, which may be varied to meet special circumstances.

I have confined my remarks to the First Part of the Act which deals with "Buildings and Other Immovable Property" as it is in connection with this Section that architects are most likely to be called upon for professional advice. It should not be forgotten, however, that the Act does deal with "Goods"—in the form of a "Business Scheme" and a "Private Chattels Scheme."

Briefly, I have tried to set down the sort of questions an architect might be expected to ask and to answer them in a straightforward manner, as one would verbally. Anyone looking for a full interpretation of the Act must seek elsewhere.

*Who is entitled to claim compensation when a property becomes damaged?* Any one holding an interest in the property may make a claim, such as the freeholder, leaseholder or mortgagee, or alternatively anyone who will be bearing the cost of making good the damages. The holder of a lease originally granted for seven years or less is not considered to hold an interest in the property.

*How is the amount of compensation arrived at?* In two ways; it may take the form of a "Payment of Cost of Works" or a "Value Payment."

*What, then, is a "Cost of Works" payment?* Normally a Cost of Works payment is the actual cost of reinstatement, providing this does not include any work which could have been omitted without detracting from the value of the property and also, does not include any work, the omission of which would have increased the value of the property.

*And what is a "Value" payment?* A value payment is equal to the depreciation in the value of the property caused by the damage, i.e., the difference between the value of the property immediately before and immediately after the occurrence of the damage.

The "value" is the amount which the fee-simple (freehold) might have been expected to realize on sale, in the open market, with vacant possession, subject

to any restrictive covenants, easements, etc., that there may be.

In order to obtain a just comparison of values (which would not be possible if wartime or post war values were taken into account) reference is to be made in all cases to prices current on March 31, 1939, i.e., it must be assumed that the sale of the premises both in its damaged and undamaged condition, took place on March 31, 1939.

*When is a "Cost of Works" payment allowed and when is a "Value" payment allowed?* Normally a "cost of works" payment is allowed unless the damage involves a total loss. To be rather more precise, if the difference between the value of the property properly repaired and the value of the property in its damaged state is less than the cost of reinstatement, a "value" payment will be made.

It is easy to visualize cases where a value payment might be made although total loss is not involved—an urban site, ripe for development, where old buildings of comparatively little value sustained heavy damage, or a large and undesirable country mansion, where the value in the open market might well be less than the cost of partially rebuilding.

There are undoubtedly exceptional cases where the clearance of obsolete buildings would actually enhance the value of the site. It must not be assumed, however, that the payment in such cases would necessarily be nil as there are special provisions to deal with sites of exceptional value.

There are other exceptions to the general rule, for instance it may be decided that it is in the public interest to reinstate property, which would not otherwise be reinstated, and vice versa.

*In cases where a "Cost of Works" payment would normally be made, must an owner reinstate the property even if he does not desire to do so, in order to get some payment?* No. This is another exception to the general rule given above. In cases where the owner does not wish to repair the property a "value" payment may be made instead, but the amount of the payment will be limited.

*Suppose the owner wishes to make alterations or additions during the reinstatement; how does this affect a "Cost of Works" payment?* The owner will not be prevented from doing so, but he will only receive the proportion of the actual cost as falls within the "permissible amount," i.e., the amount which would have been paid if the property had been reinstated in the form in which it existed immediately before the occurrence of the damage.

*Is compensation paid for the cost of first-aid or temporary repairs carried out by the owner?* Yes, normally the cost of temporary repairs is allowed, in addition to the "Cost of Works" or "Value" payment. The cost of temporary repairs will not be allowed if such repairs were carried out after notification had been given that compensation will take the form of a "Value" payment. Incidentally it is as well to note that interested parties must send a written request for notification.

It is also well to note, here, that there is an obligation on the part of the owner or other interested parties to take steps to preserve the property and to minimize the damage.

*Is compensation also granted for first-aid repairs carried out by Local Authorities?* No. The enactment whereby repairs carried out by Local Authorities became a charge upon the property, has been repealed. No compensation is, therefore, necessary.

*Are Architects' fees included in compensation?* Architects' fees for supervising the work (when necessary) will be included in "Cost of Works" payments. Architects' fees will not be included when a "Value" payment is made and in no circumstances will the architects' fee for preparing a claim be allowed.

*What is the position if premises sustain repeated damage?* Compensation will be paid for all damage sustained. Compensation may ultimately take the form of a "Value" payment, but even so any "Cost of Works" payments already made will not be recoverable and will be taken into account when determining the amount of the "Value" payment.

*What is the procedure in making a claim?* The new C.I. Forms can now usually be obtained from the local authorities and must be completed and sent to the War Damage Commission. It is really a notification of damage rather than a claim for compensation and the form itself is self-explanatory. If there is any difficulty in obtaining the forms, the old V.O.W.I form can be used.

*If a claim has already been submitted on a V.O.W.I Form is there anything further to do?* No. In due course a C.2 V Form, on which certain questions are set out, will be received. The builders' account for temporary repairs (if any) is asked for, as this, certified by the builder or by an architect or surveyor, forms the basis of the claim for work done. Questions are also asked about salvage, as money received for salvaged materials will be deducted from the cost of repairs.

*When will compensation be received?* In the case of "Cost of Works" or "Temporary Works" payments, payment should normally be made on completion of the work, but reasonable time is given to the

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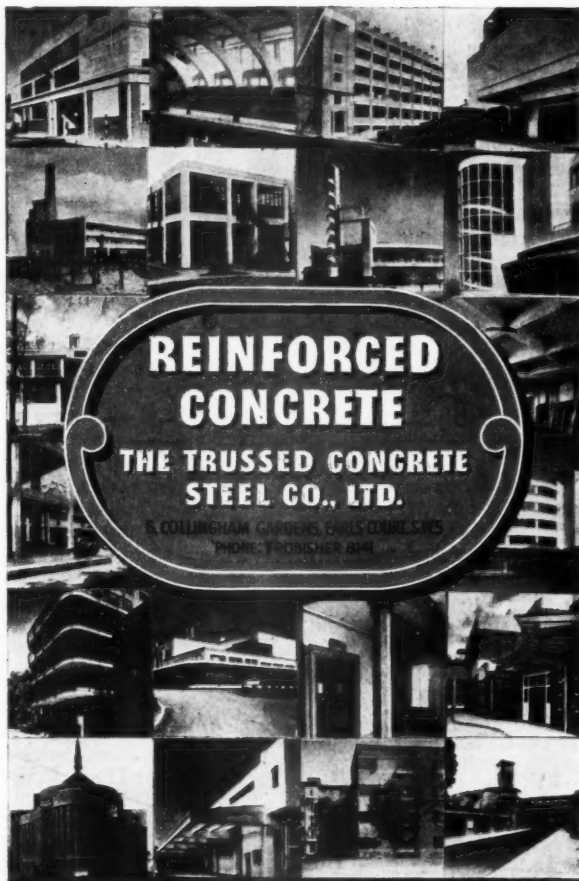
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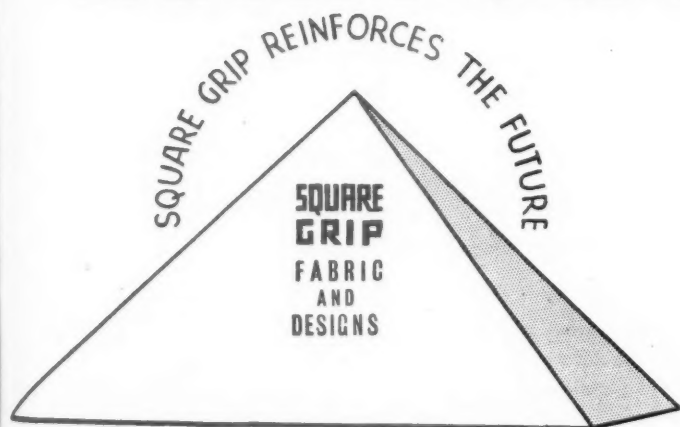
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Commission for checking the proper cost, etc., no doubt there will be a good deal of unavoidable delay.

In the case of "Value" payments, the time of payment will be decided and made known by the Treasury, but this will probably be after the war.

There are provisions for making advance payments in order that a person can secure housing accommodation for his family on premises for his business.

*Is any interest allowed on outstanding payments?* As "Cost of Works" payments are, or should be, made on completion of the work, no interest is allowed. In the case of "Value" payments, interest is allowed at the rate of 2½ per cent. from the time of the occurrence of the damage.

*To whom is the compensation paid?* In the case of "Cost of Works" or "Temporary Works" payments, compensation is paid to the person who incurred the cost of executing the work.

In the case of a "Value" payment, compensation is paid to the owners of the various interests in the property in the proportion in which the various interests suffered.

Payment may be divided between the freeholder and the leaseholder (if the lease originally was for more than seven years). If the property is mortgaged payment will be paid to the mortgagee who will retain enough to pay off the

mortgage and pass on the balance to the mortgagor. The mortgagor must then pay the proper share to other interested parties.

*What Insurance Contributions must property owners make and what advice should one give about insurance, generally?* There is no need to advise about procedure. Contributions will automatically become due for payment in five annual instalments on July 1; the amount of each instalment being, normally, two shillings in the pound, calculated on the Schedule A assessment.

There are certain exceptions, however, notably in the case of agricultural land and buildings, when the amount of each instalment will be sixpence in the pound.

The person who has the right to the possession of the whole property is primarily responsible for paying the contribution, but there are provisions whereby he is entitled to be indemnified to varying extents by the mortgagee, landlord, etc., and can deduct the amount of the indemnity from instalments of rent or payments under the mortgage.

#### CHANGES OF ADDRESS

Building Industries Services Ltd., The Clay Products Technical Bureau of Great Britain Ltd., and Oscar Bayne and Cotterell Butler (London office), have removed to 115, Ebury Street, S.W.1

(opposite to their old offices). The telephone number remains as before, SLOane 9801.

Messrs. Robert Adams Ltd. announce that they have had to vacate their offices at 3 and 5, Emerald Street, W.C., and that emergency accommodation has been secured at 139A, Staines Road, Hounslow (telephone Hounslow 5714), to which all communications should be addressed.

## THE BUILDINGS ILLUSTRATED

HOUSE AT HARROW WEALD (pages 355-357). Architect: Frederick MacManus. The general contractors were William Shurmur and Sons, Ltd., who were also responsible for the joinery. Among the subcontractors and suppliers were the following: Dunbrik, Ltd., facing bricks; R. W. Steele and Co., Ltd., heating installation; Ideal Boilers and Radiators, Ltd., boilers and radiators; J. A. Eggleton, electrical installation; J. H. Tucker, Ltd., electric switches; M. K. Electric, Ltd., electric plugs and sockets; Builders Merchants (London), Ltd., sanitary fittings; A. Johnson and Co., Ltd., stainless kitchen sink; Bratt Colbran, Ltd., fireplace interior; Designed Productions, Ltd., door furniture; Taylor, Pearce and Co., Ltd., cupboard door furniture; Electrolux, Ltd., refrigerator; Gas Light and Coke Co., Ltd., supplied and fixed the Electrolux refrigerator; Catesbys, Ltd., linoleum flooring; John Garlick, Ltd., curtains and carpets; "Dap" Manufacturing Co., curtain tracks; Mander Bros., Ltd., paints and distempers; Konkerwind, Ltd., anti-down draught chimney pot; Tentest Fibre Board Co., Ltd., fibre wall boards.

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