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of the Company and its Associates.

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*The Largest Producers of Asphalt in the World*

THE VAL DE TRAVERS ASPHALTE PAVING COMPANY LIMITED  
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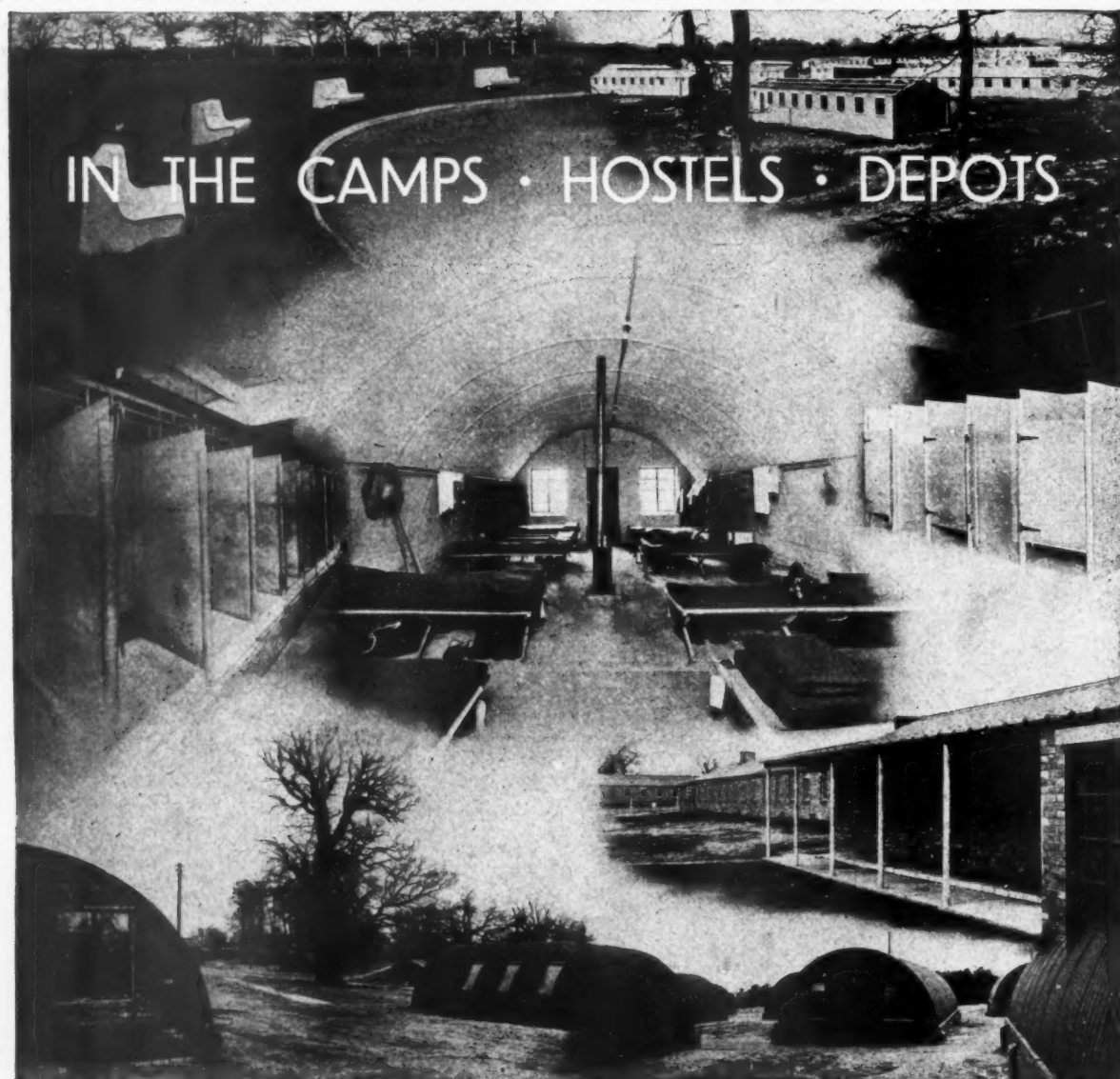
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THE BUILDING MATERIAL THAT FOUGHT THE WAR



At the outset of the war the call-up of the millions of men and women for the Services demanded the rapid construction of Camps, Hostels, and Depots, and Asbestos-cement was the ubiquitous material that solved the problem, providing the necessary cladding, finishings, roof and soil drainage, service mains, and in addition many parts of the equipment for the many thousands of buildings.

The large stocks of Asbestos-cement that were always maintained in peace time soon disappeared and production had to be stepped up to meet the situation.

What was achieved and it is now exemplified all over the world, testifies to the contribution to the war effort from the Asbestos-cement Industry.



**TURNERS ASBESTOS CEMENT CO. LTD.**  
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G.G.114



**ADAPTABILITY**

**ONE THING** about Warerite Panels and Veneers which interior decorators find so satisfying is their wide adaptability. The wide range of colours admits of walls, doors, screens, built-in furniture and table tops being treated as elements in a co-ordinated scheme, while providing at the same time the fullest possible scope for individuality in design.

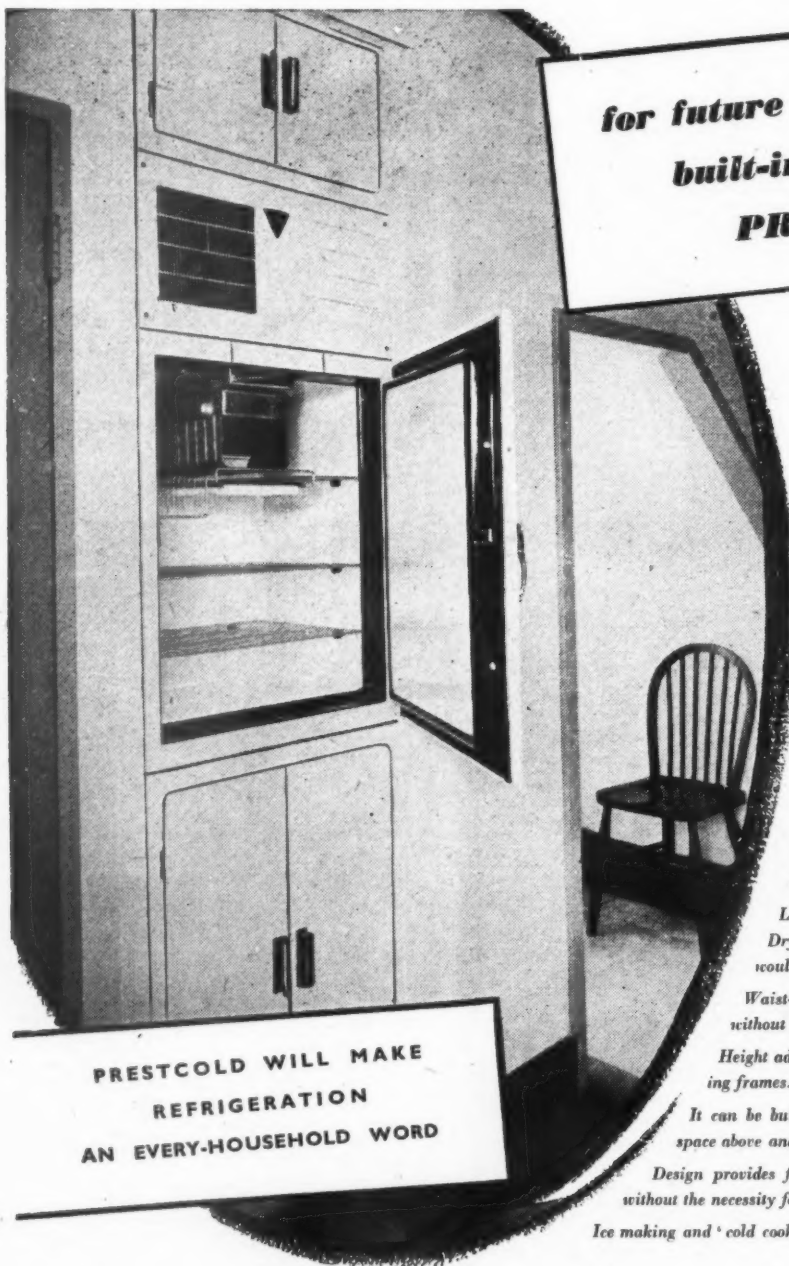


*In Mr. Hugh Casson's design, reproduced above, for a modern hotel entrance hall, Warerite surfacing is suggested for walls, doors, window reveals, screen, table tops and counter.*

**WARERITE**

LAMINATED PLASTICS MADE BY  
**WARERITE LTD. WARE, HERTS.**  
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**PRESTCOLD WILL MAKE  
REFRIGERATION  
AN EVERY-HOUSEHOLD WORD**

This built-in Prestcold refrigerator, as shown, installed in the kitchen of the "Bryant" house in Birmingham, has the following important advantages:

*Storage capacity of approximately 4½ cubic feet, which will hold all the perishable foodstuffs for a family of four.*

*Larder space rendered unnecessary. Dry goods and non-perishable foodstuffs could be kept in kitchen cupboards.*

*Waist-high door, allowing access to interior without stooping.*

*Height adaptable by varying position of supporting frames.*

*It can be built into kitchen fittings with cupboard space above and below it.*

*Design provides for adequate ventilation of mechanism without the necessity for special air-bricks or ducting.*

*Ice making and 'cold cooking' facilities.*

**M**OST important too, is the fact that this Prestcold refrigerator provides the food storage temperatures necessary for the proper safeguarding of perishable foods—for instance 35°F for fresh fish and poultry; 40°F for milk—

and even the lower temperatures needed to store the frozen foods which will be available later on. In addition, it will be most economical in current consumption, using only one unit a day.

## **PRESTCOLD** *Refrigeration*

A PRODUCT OF THE PRESSED STEEL COMPANY LIMITED • COWLEY • OXFORD



# PROGRESS REPORT

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*If it were not for the ice, an Architect competent to design a large entertainment hall or a roller skating rink might tackle an ice skating rink with confidence, but the design of an ice floor calls for special knowledge and the mere presence of the large sheet of ice gives rise to surprising effects, liable to cause very serious and unexpected troubles. We know what these are, how they may be avoided, and Architects will find us willing and satisfactory collaborators.*

The innumerable applications of

# REFRIGERATION

in Department Stores, Retail Shops, Factories, Office Buildings, Hospitals, Laboratories, Schools, Restaurants, Cafés, Theatres, Cinemas, Hotels, Dairies, Breweries, &c., often present Architects with unfamiliar problems of a highly technical nature, which are best solved by obtaining the expert assistance and co-operation of

## J. & E. HALL

LIMITED

REFRIGERATING ENGINEERS

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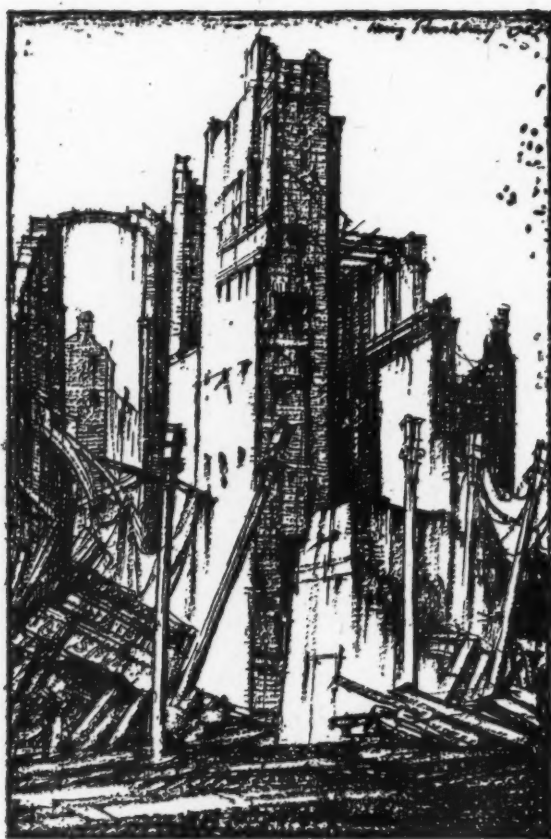
Established 1785

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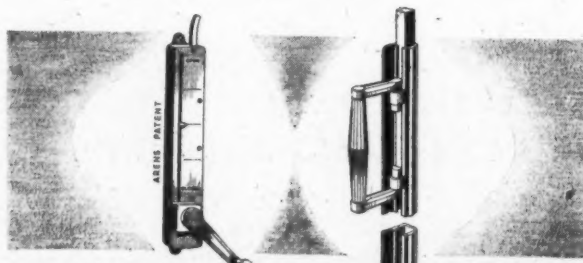
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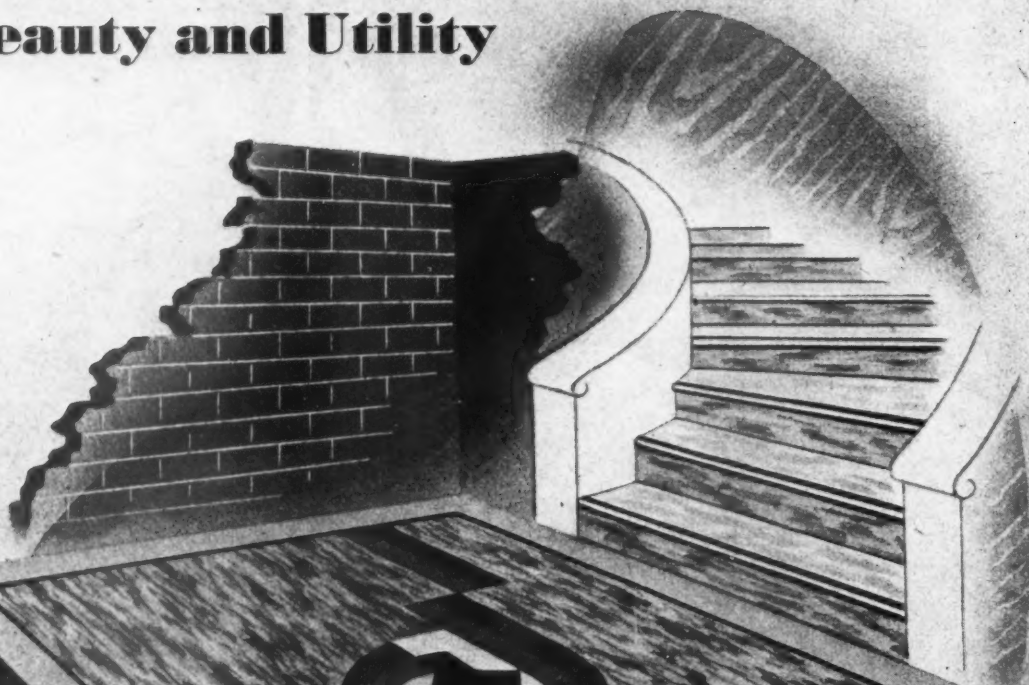
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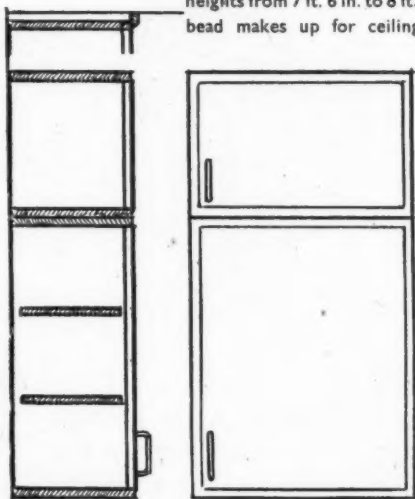
# NORTH BRITISH RUBBER FLOORING

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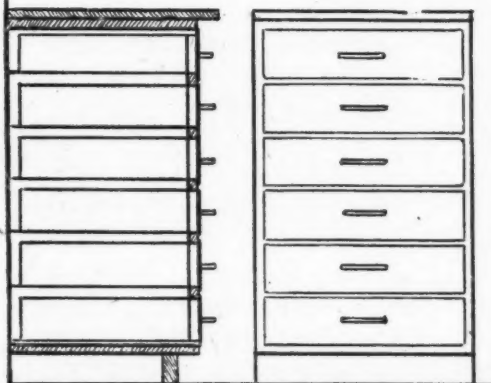


## STANDARD KITCHEN UNITS

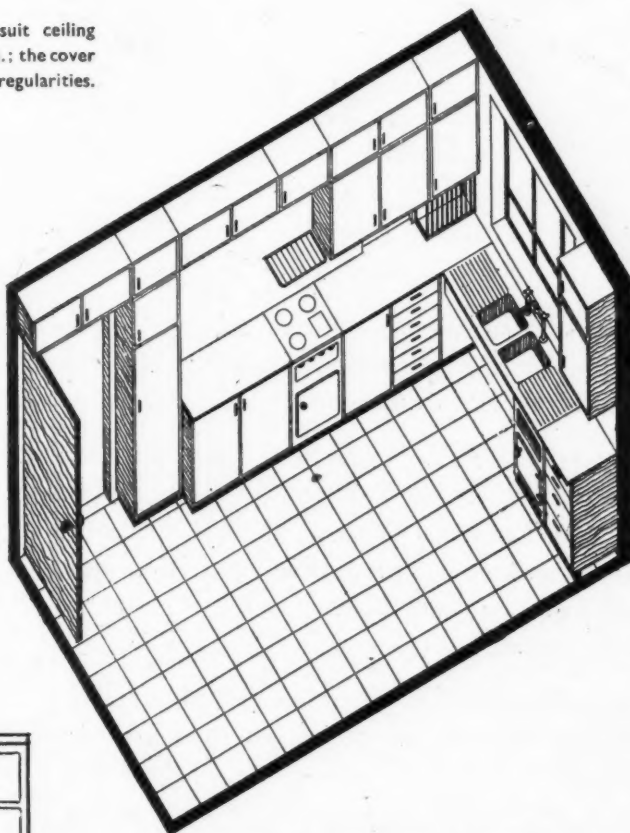
Top cupboards are made to suit ceiling heights from 7 ft. 6 in. to 8 ft. 6 in.; the cover bead makes up for ceiling irregularities.



Cupboards fixed to the wall leave a clear work space and the work top is in one piece level with cookers, sinks, etc.



Continuous toe space 3 inches high by 2 inches deep

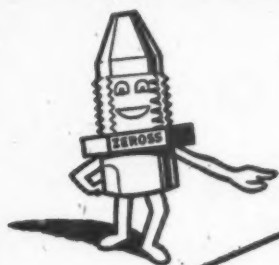


Any of the twenty single or double wall or floor units can be combined to equip a new kitchen, to replan an old one, or to add to existing equipment.

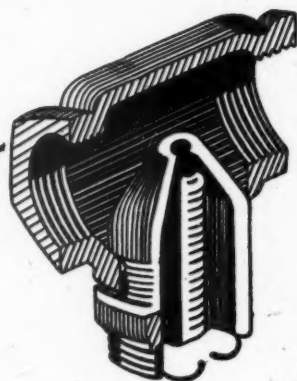
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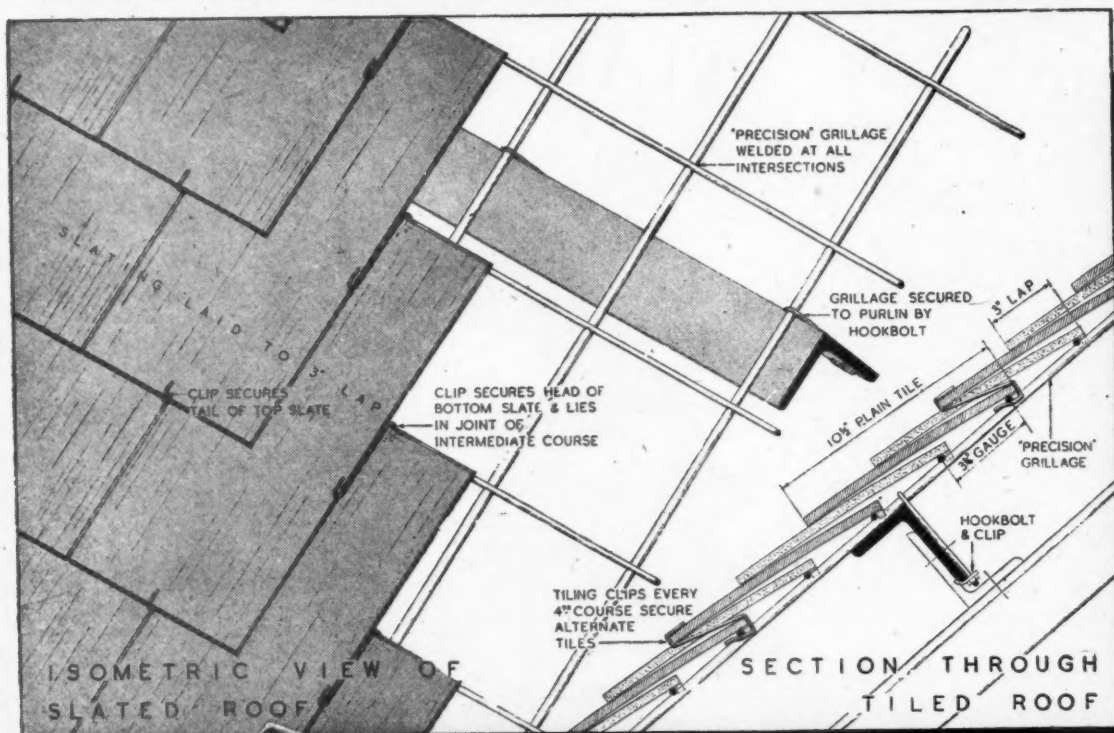
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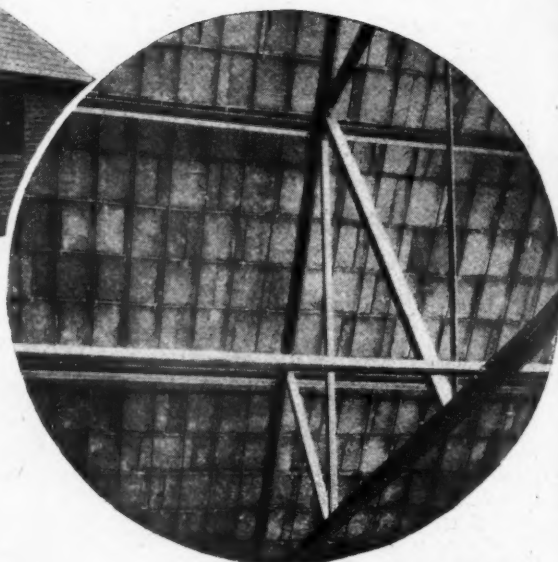
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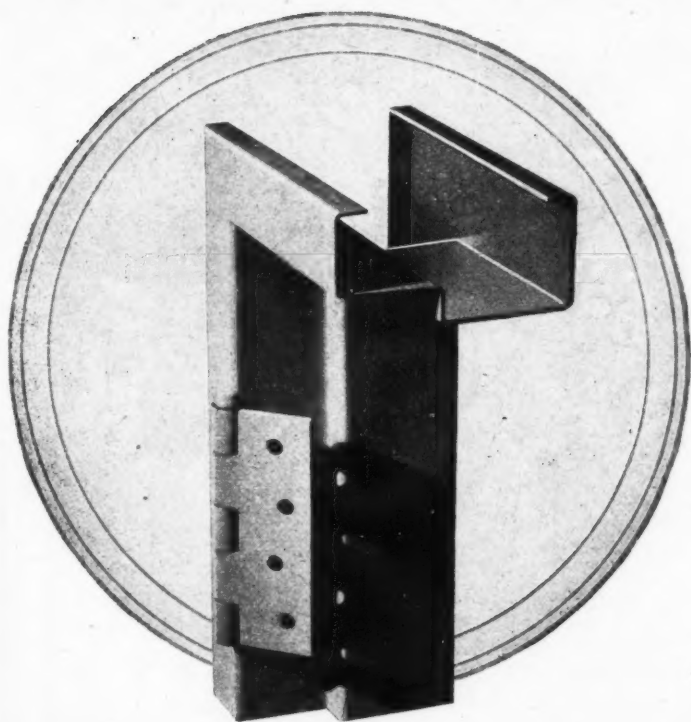
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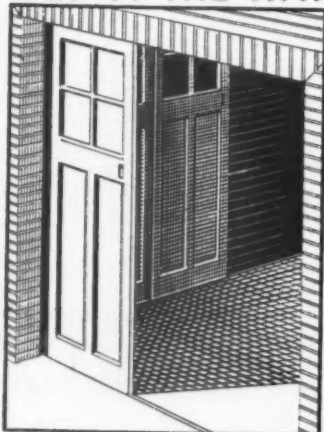
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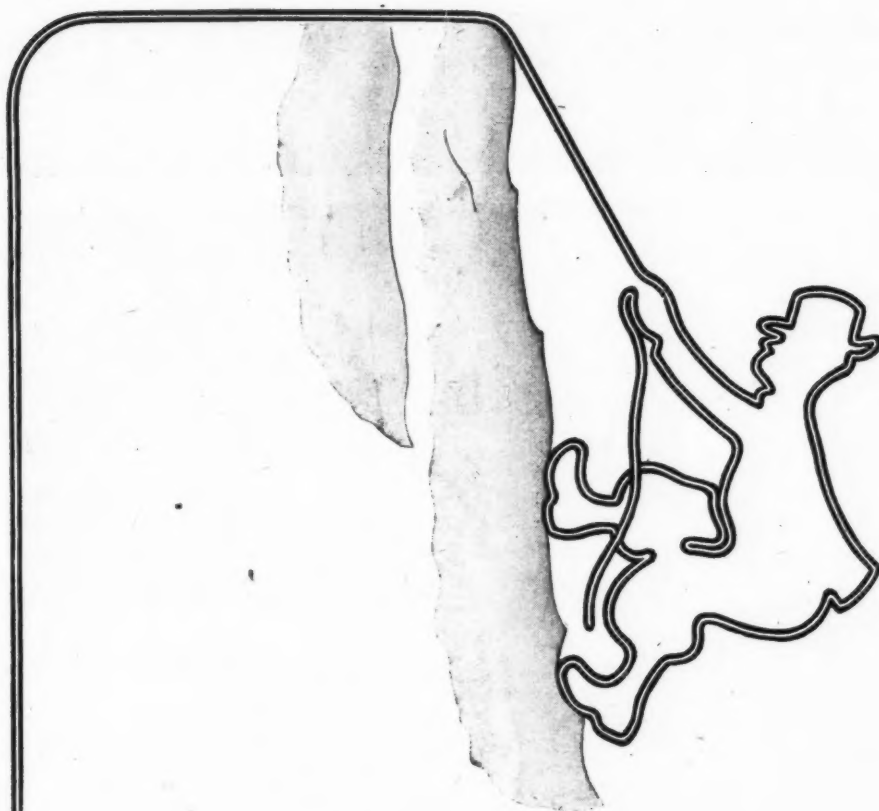
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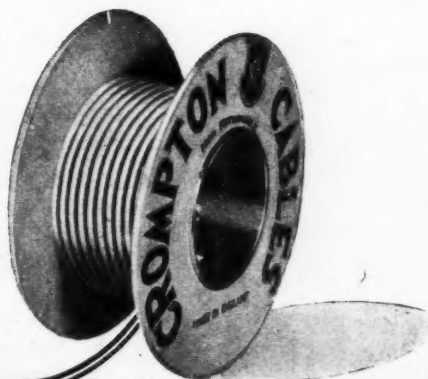


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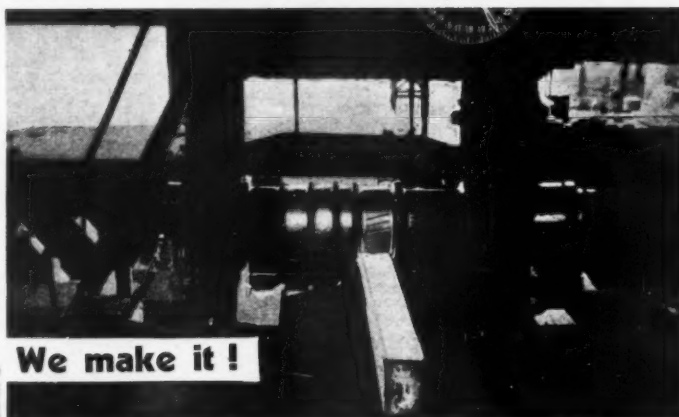
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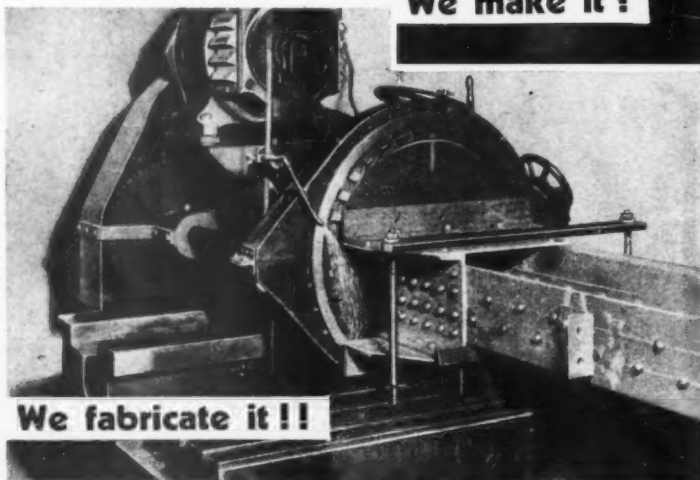
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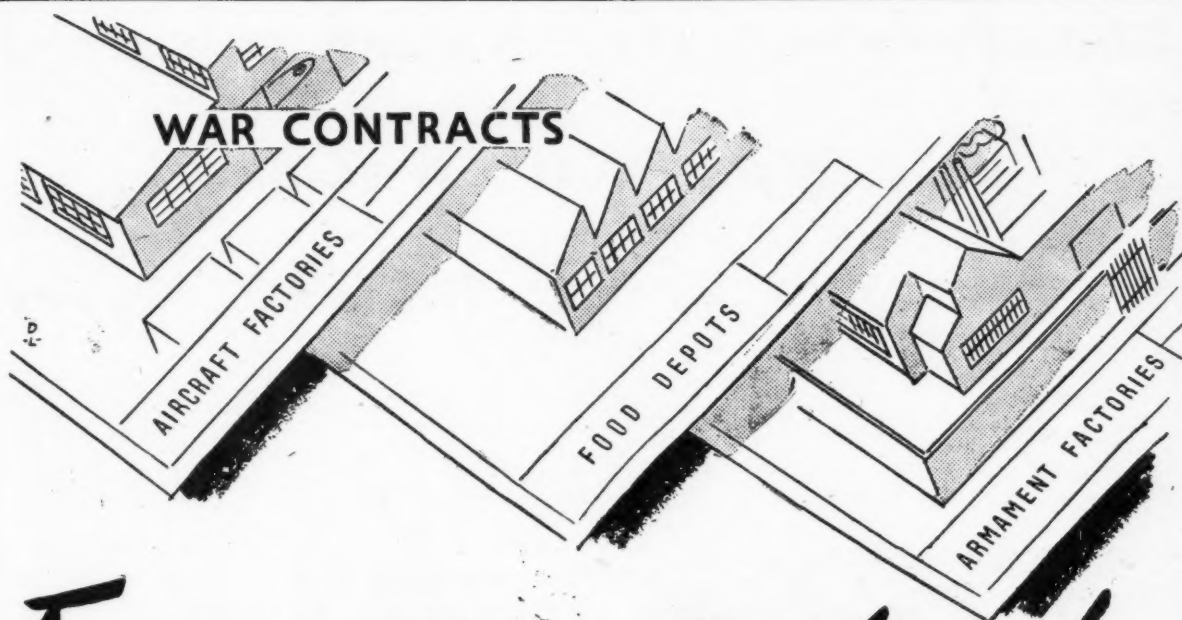


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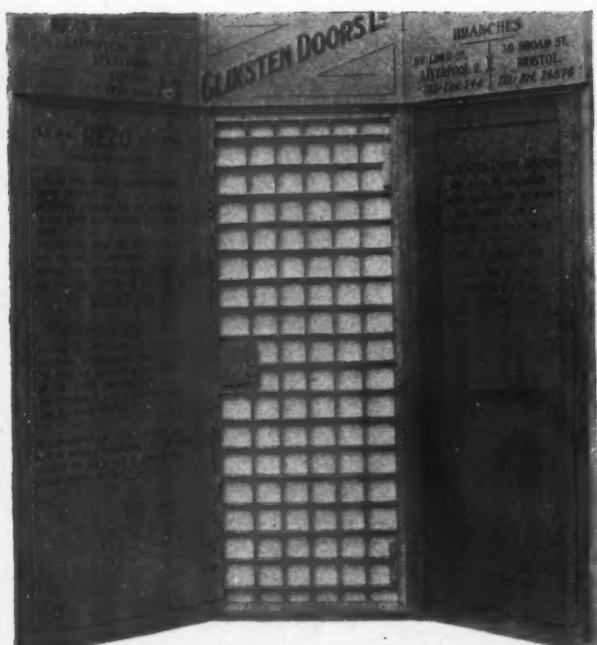
← Note the Big Business end to the Franki Piles.

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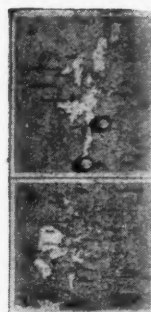
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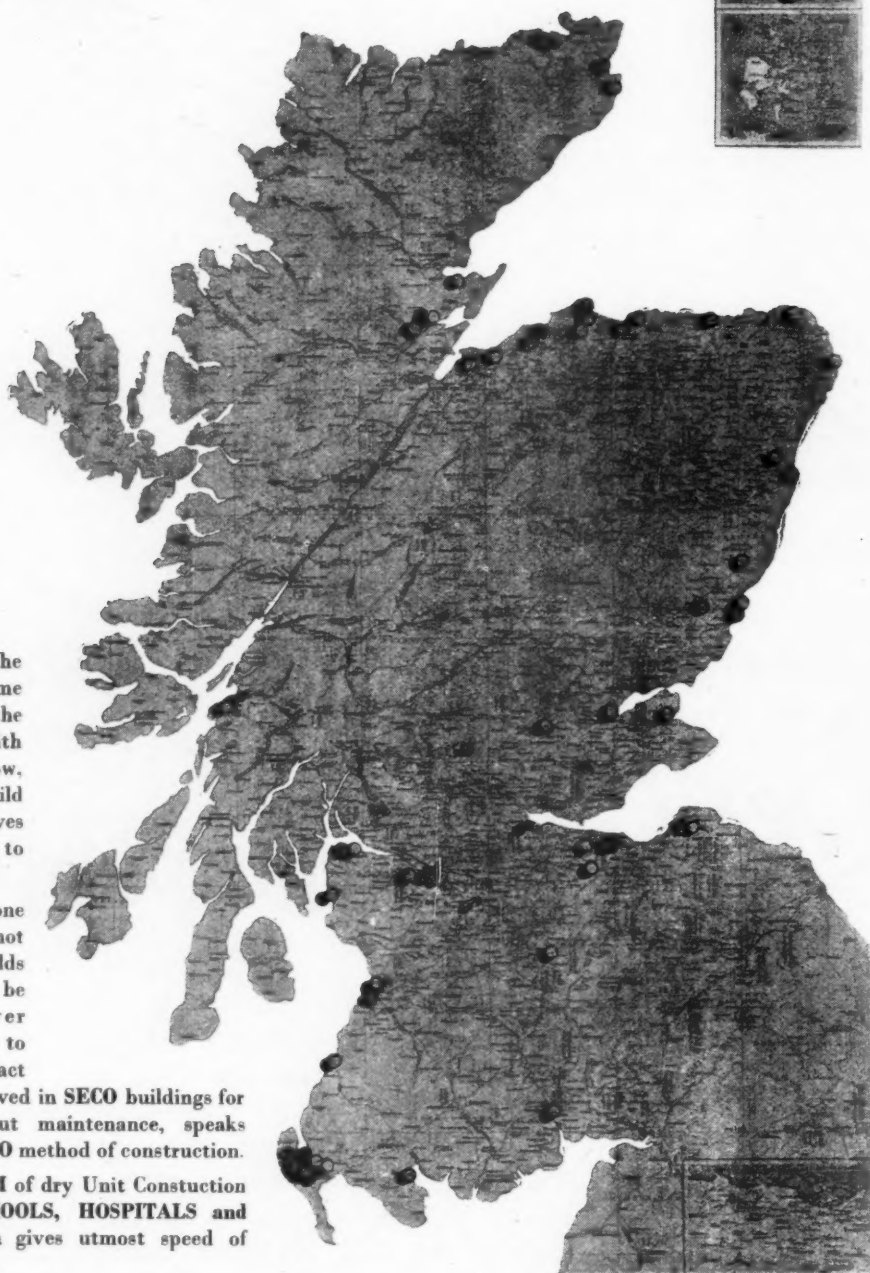
can take it



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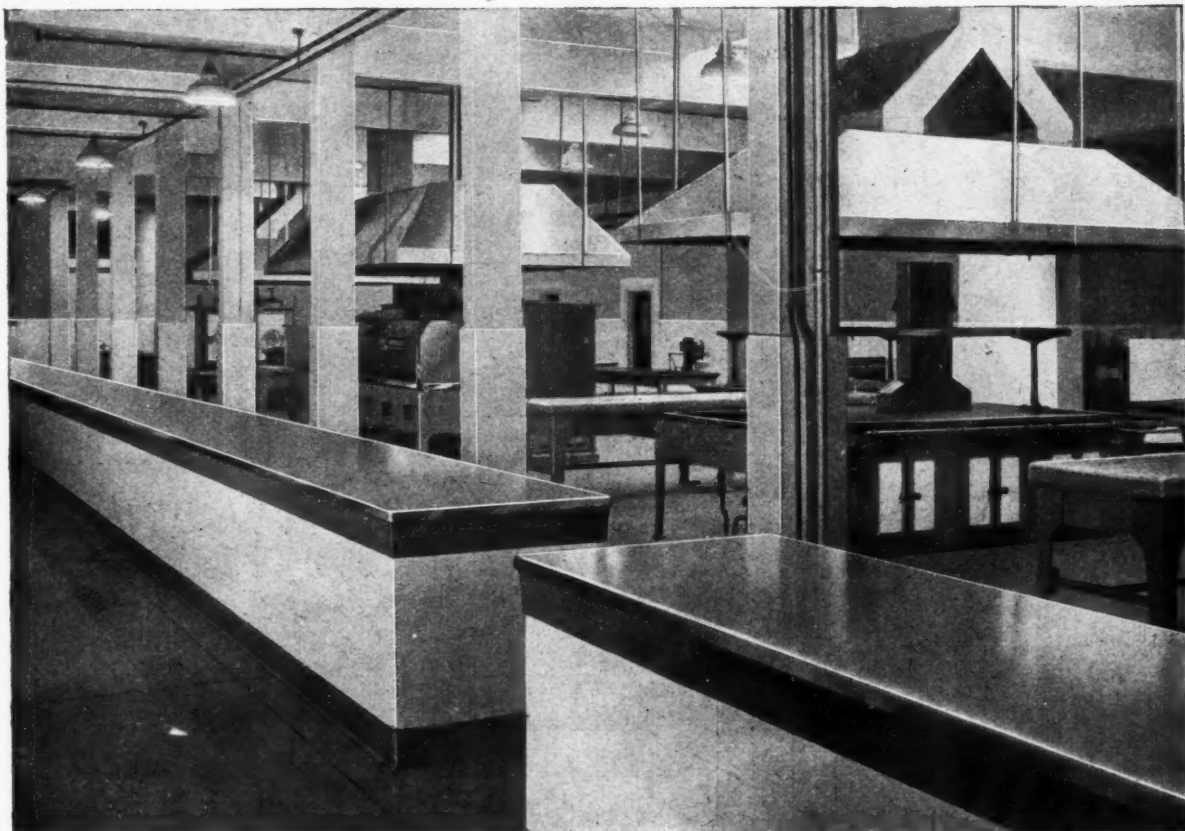
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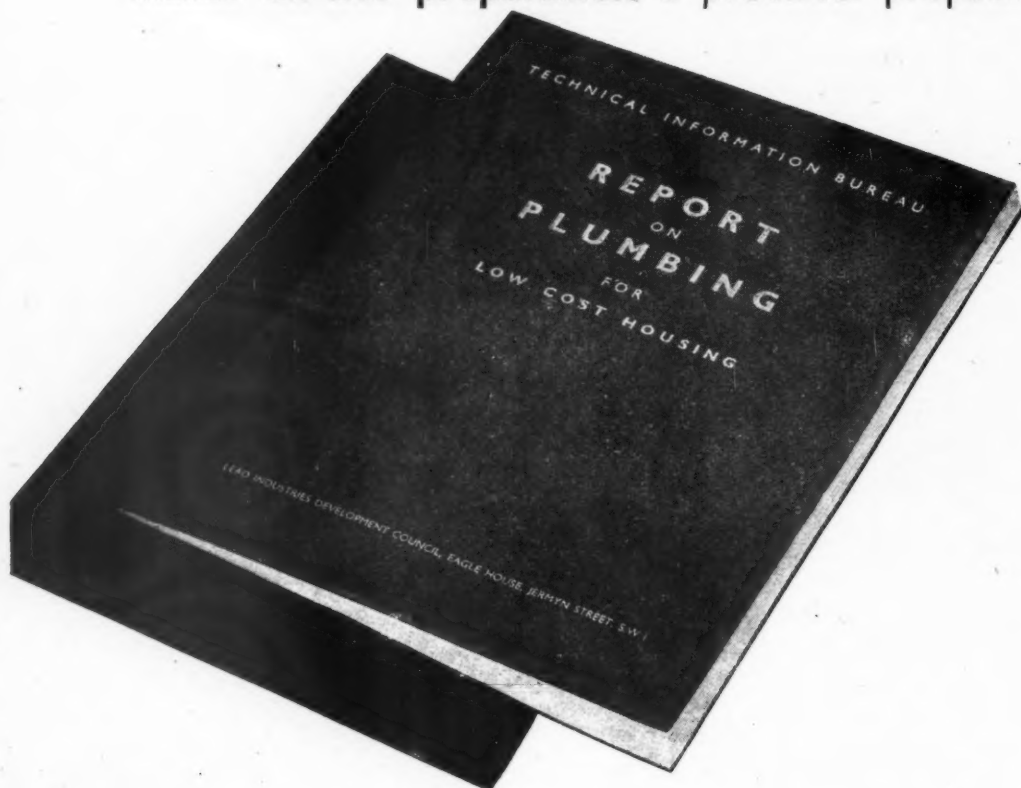
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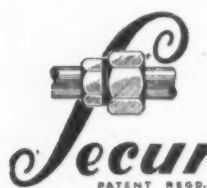
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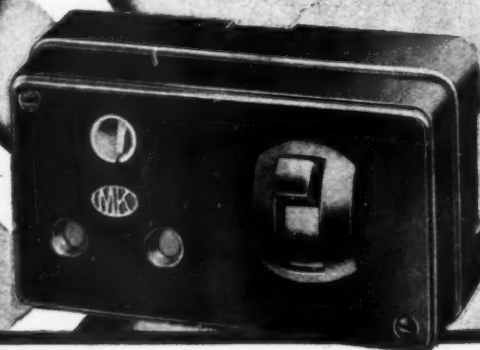
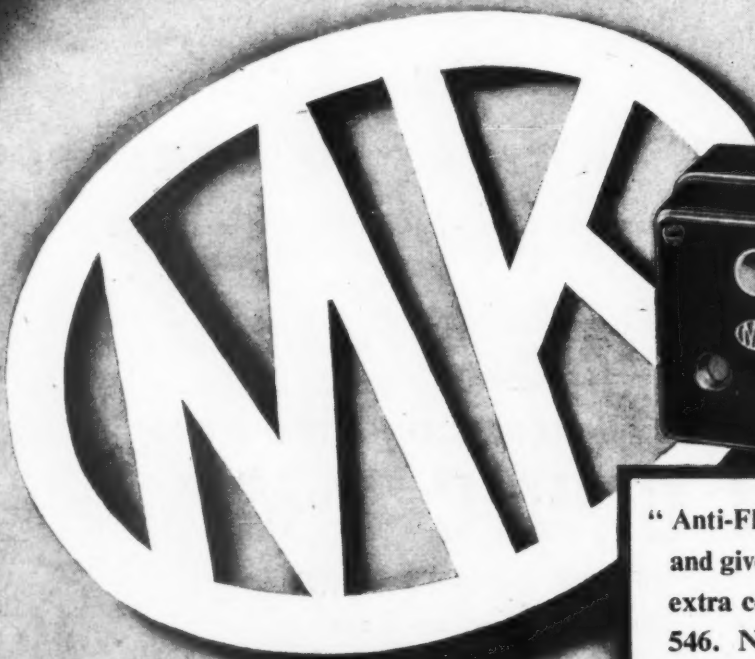
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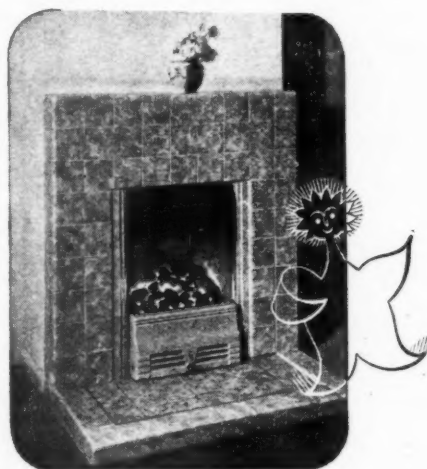
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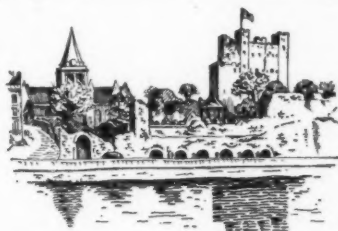
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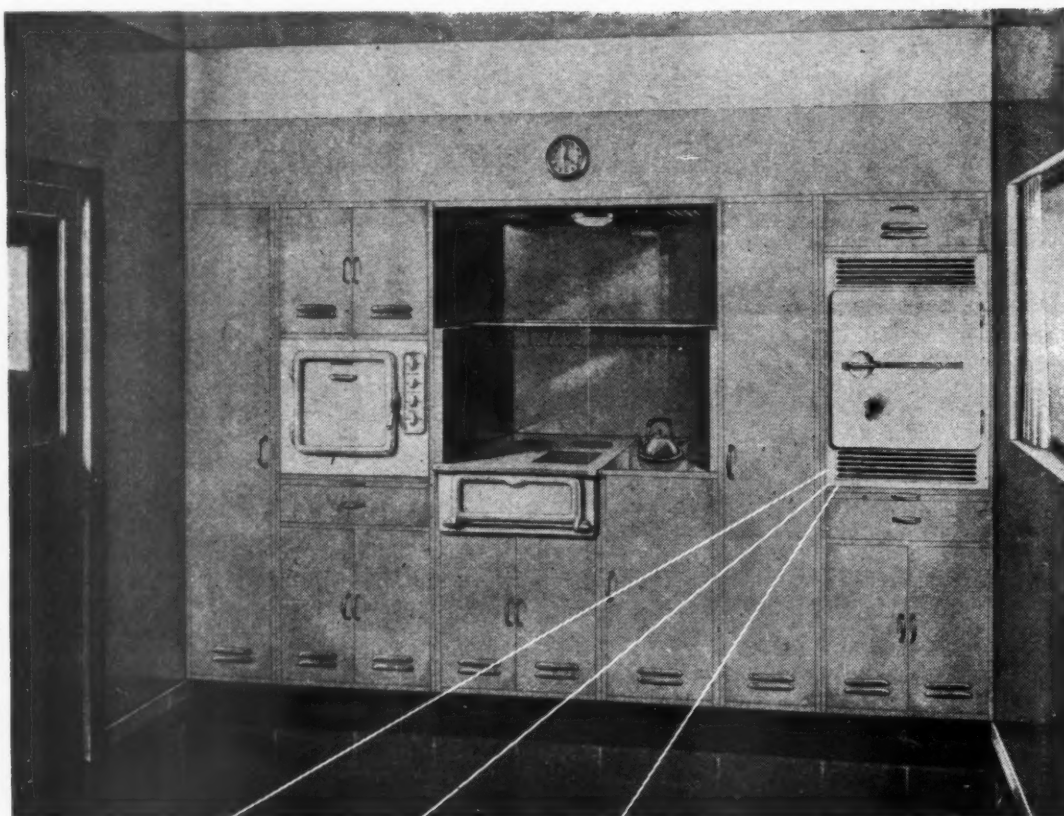


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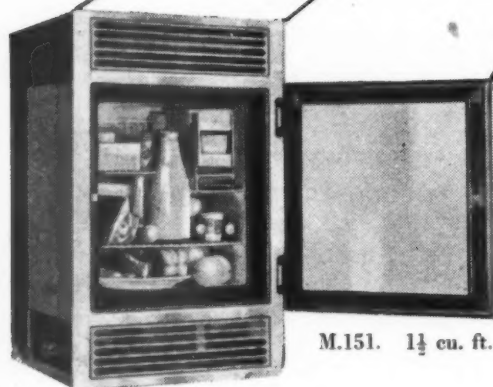
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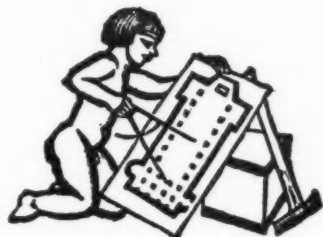
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## DIARY FOR JANUARY FEBRUARY AND MARCH

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first. Sponsors are represented by the initials as given in the glossary of abbreviations on the front cover.

**BLACKPOOL.** *Annual General Meeting of the Federation of Master Builders.* FEB. 25-27

**CHATHAM.** *NALGO Exhibition.* At the Technical School for Girls, Fort Pitt. (Sponsor, BIAE.) JAN. 2-28

**DARTFORD.** *NALGO Exhibition.* At the Public Library. (Sponsor, BIAE.) JAN. 24-26

**FLETCHING.** *NALGO Exhibition.* At Sussex Parsonage Farm. (Sponsor, BIAE.) JAN. 25-31

**LONDON.** *Two Day Conference. The Family and Its Needs.* At BMA House, Tavistock Square, W.C.1. Speakers include F. J. Osborn, Miss E. E. Halton, Professor F. A. E. Crewe, and Sir Montague Barlow. Conference fee 5s. (Sponsor, TCPA in conjunction with the British Social Hygiene Council.) JAN. 24-25

*R. L. Nicholas. The Manchester Plan.* At the Town and Country Planning Association, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1.15 p.m. JAN. 24

*W. H. Hamlyn, LMS Railway Company's Architect, J. L. Martin, Principal Assistant Architect, and R. Llewellyn Davies, Development Assistant. The Development Work of an Official Architects' Office.* At the AA, 34-36, Bedford Square, W.C.1. A film of the assembly of an experimental station will be shown. (Sponsor, AA.) 6 p.m. JAN. 29

*National Federation of Building Trades Employers' Dinner.* At The Dorchester Hotel. Guest of honour, Mr. Aneurin Bevan, Minister of Health. JAN. 30

*Kenneth Holmes, Principal of the Leicester College of Arts and Crafts. The Place of the Art School in the Life of the Community.* At the Royal Society of Arts, John Adam Street, W.C.2. (Sponsor, RSA.) 1.45 p.m. JAN. 30

*Hugh Casson. A Visual Policy for Town Planners.* At the International Arts Centre, 3, Orme Square, Bayswater Road, W.2. (Sponsor, IAC.) 8 p.m. FEB. 1

*Federation of Master Builders. Luncheon Meeting preceding Annual General Meeting.* At the Connaught Rooms, Great Queen Street, W.C.2. Guest of Honour, the Rt. Hon. G. Tomlinson, M.P., Minister of Works. (Sponsor, Federation of Master Builders.) 1 p.m. FEB. 4

*H. M. Llewellyn, of the Building Research Station. Painting Plastered Surfaces.* ASB Lecture at the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA.) 5.45 p.m. FEB. 6

*Mrs. M. D. Gillies. American Domestic Architecture.* At the Housing Centre, 13,

Suffolk Street, S.W.1. (Sponsor, HC.) 4 p.m. FEB. 8

*Professor J. D. Bernal, Science in Architecture,* at the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. FEB. 12

*Professor G. I. Finch, Scientific Adviser to the Ministry of Home Security. The Need for Scientific Research into the Prevention and Extinction of Fires.* At the Royal Society of Arts, John Adam Street, W.C.2. (Sponsor, RSA.) 1.45 p.m. FEB. 13

*Frederick Gibberd. Design and Prefabrication.* At the London School of Hygiene, Gower Street, W.C.1. (Sponsor, DIA.) 7 p.m. FEB. 13

*Annual Luncheon of British Refrigeration Association.* At Connaught Rooms, Great Queen Street, W.C.2. Principal Guest, Rt. Hon. John Wilmot, M.P., Minister of Supply. 12.45 p.m. for 1.15 p.m. FEB. 14

*A. G. G. Thompson, Medical Officer of Health for Lambeth. Land Utilization in Relation to the Public Health.* Chadwick Public Lecture. At the Royal Society of Tropical Medicine and Hygiene, 26, Portland Place, W.1. 2.30 p.m. FEB. 19

*Max Lock. Surveys and Their Practical Application to Planning.* At the Livingstone Hall, Broadway, Westminster, S.W.1. (Sponsor, TPI.) 6 p.m. FEB. 21

*Miss Jacqueline Tyrwhitt. Planning in Canada.* At the Town and Country Planning Association, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1-15 p.m. FEB. 21

*J. F. Bickerton and Petros Protopapadakis. Layout of Passenger Stations.* At the Institution of Civil Engineers, Great George Street, S.W.1. (Sponsor, ICE.) 5.30 p.m. FEB. 26

*Solid Smokeless Fuel Appliances for Domestic Heating Services.* Exhibition. At the Horticultural Hall, Vincent Square, S.W.1. The exhibition is being designed by Ian Jeffcott. (Sponsor, Solid Smokeless Fuels Federation.) MARCH

*Stormont Murray. Eric Gill; His Life and Work.* At the International Arts Centre, 3, Orme Square, Bayswater Road, W.2. (Sponsor, IAC.) 8 p.m. MAR. 1

**PUTNEY.** *NALGO Exhibition.* At the High School. (Sponsor, BIAE.) JAN. 24-28

**WINCHESTER.** *Englishman Builds Exhibition.* At Hampshire Guildhall. (Sponsor, BIAE.) JAN. 29-FEB. 3

*Rebuilding Britain Exhibition.* At Hampshire Guildhall. (Sponsor, BIAE.) JAN. 29-FEB. 3

**YORK.** *NALGO Exhibition.* At Holgate Hill Settlement. (Sponsor, BIAE.) FEB. 10-23

## NEWS

THURSDAY, JANUARY 24, 1946  
No. 2661. VOL. 103

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*Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL's starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.*

★ means spare a second for this, it will probably be worth it.

★★ means important news, for reasons which may or may not be obvious.

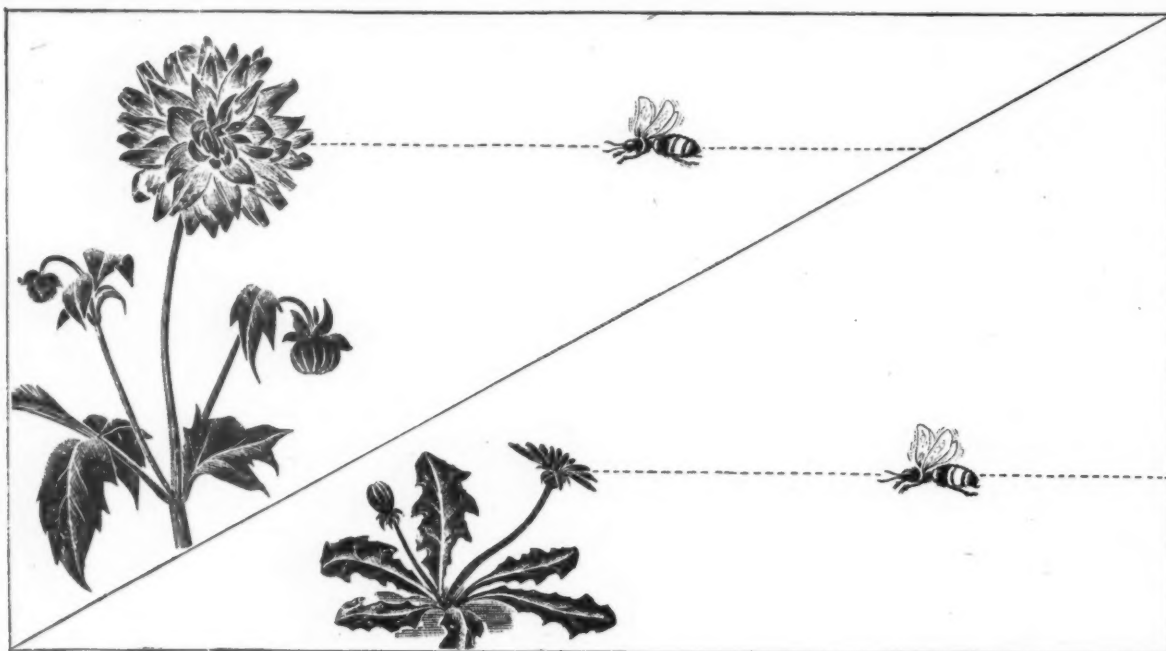
Any feature marked with more than two stars is very big building news indeed.

### To assist industry and Ministries, the Department of Scientific and Industrial Research HAS SET UP A MATHEMATICS DIVISION in the National Physical Laboratory.

The Division is at present organised in three sections dealing respectively with computing, statistics and the development of calculating machines. Mr. J. R. Womersley has been appointed Superintendent. The staff of the Division will also be available for consultation in the field of applied mathematics, particularly on those aspects allied to industrial research. The Division is now open for inquiries.

### The Ministry of Health states that in consultation with the WAR DAMAGE Commission, the following relaxations of procedure have been agreed:

(1) Local Authorities undertaking work of war damage repair in excess of £250 are no longer required to obtain the prior approval of the War Damage Commission before commencing work. (2) The issue of licences to private owners applying to do work of war damage repair which fits in with the Local Authority's programme of work, should not be withheld pending prior consultation with and the agreement of the War Damage Commission. When issuing licences in the future, however, Local Authorities are asked to remind the licensee (a) in his own interests he should consult the War Damage Commission before commencing work and (b) the value of the work licensed is not necessarily the amount which the War Damage Commission will agree to pay.



## THE DAHLIA AND THE DANDELION

Is true beauty an inevitable outcome of efficient design? The flowering weed is certainly as efficient as the prize bloom in its function of attracting the pollinating insect, yet although the bee selects both, the gardener cherishes one—and rejects the other.

In the design of heating appliances, a variety of equally efficient forms for a particular purpose is sometimes available, presenting a challenge to the taste and skill of the designer. How well Bratt Colbran Limited are meeting that challenge in their forthcoming post-war models can be readily anticipated by those familiar with the firm's record of achievement in technique and design. That tradition continues.

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# From AN ARCHITECT'S Commonplace Book

ON COMPETITIONS. [From An Autobiography by Frank Lloyd Wright (Faber and Faber).] The world has gained no building worth having by competition because: (1) The jury itself is necessarily a hand-picked average. Some constituency must agree upon the jury. (2) Therefore the first thing this average does as a jury, when picked, is to go through all the designs and throw out the best ones and the worst ones. This is necessary in order that the average may average upon something average. (3) Therefore any architectural competition will be an average upon an average by averages in behalf of the average. (4) The net result is a building well behind the times before it is begun. This might seem democratic if mediocrity is democratic ideal in architecture. No. Competitions are only opportunity for inexperienced youth to air precocious propensity. Moreover, to further vitiate the competitive objective every architect entering any competition does so to win the prize. So he sensibly aims his efforts at what he conceives to be the common prejudices and predilections of the jury. Invariably the man who does this most accurately wins the competition.

★

*Any organization wishing to submit evidence about the development of NEW TOWNS to the New Towns Committee, under the chairmanship of Lord Reith, which has been appointed jointly by the Minister of Town and Country Planning and Secretary of State for Scotland, should write to the Joint Secretaries, New Towns Committee, Ministry of Town and Country Planning, 32, St. James's Square, London, S.W.1.*

★

*The Minister of Health, Mr. Aneurin Bevan, has sent the following letter concerning HOUSE TENDER PRICES to Mr. G. W. C. Buchanan, President of the National Federation of Building Trades Employers:*

Dear Mr. Buchanan,—You told me when we met the other day that house building contractors who tender for houses for local authorities were very concerned because they were being blamed for high tender prices for which they were not responsible. I certainly have no intention of blaming them: on the contrary. I am deeply appreciative of the co-operation which I am receiving from the members of your Federation in starting our national housing drive under conditions which I know are exceptionally difficult for housebuilding. I am sure our interests are the same in this matter. I want large numbers of houses and I am sure the members of your Federation want to build them. To ensure the success of our programme we must get a reduction in the present high cost of building, and I am glad to know, as I believed would be the case, that you are equally anxious to get this reduction. On this question of prices I can put my position quite shortly. I must withhold my approval when the tender seems to me too high. Tenders may be too high because the tenderer has taken too pessimistic a view of his capacity to build houses, or because he has been asked to build too elaborate a house. Sometimes it may be a combination of the two reasons. I am confident that as more experience is gained, that pessimism will be vanquished and that the standards to which houses can be built

will be more accurately gauged before tenders are obtained. I have already advised local authorities that, while I want good houses, extravagance must be avoided. The inclusion of frills gives unnecessary work for all concerned and results in delay at a time when speed is essential. I shall continue to emphasise this point. There are bound to be some growing pains at the start, but the fact that tenders have been approved for over 30,000 houses and tenders for only 3,000 houses have been rejected is, I think, good evidence that throughout the country in general my department, the local authorities and builders are co-operating well and making a good start under conditions which are none too easy for any of us. We shall get on faster and more easily as we go along and I am grateful to your Federation for the help they are giving me. I am sure, as I have already said, that in the execution of this national housing programme the builders and I have a common purpose, and if at any time you think that further discussion would be helpful I should be only too pleased to see you. I mentioned when we met the concern I felt about the absorption of building labour on unessential repairs and maintenance, and the difficulty of attracting such labour in sufficient numbers to new house building. We are already experiencing this difficulty, and unless action is taken it will

be much more serious when the outdoor building season really begins and the number of houses in approved tenders is stepped up, as it will be, very materially, in the course of the next two or three months. I am sure that your Federation will share my views that it is essential that an adequate quota from the building force should be available for new house building, and apart from any action which the Government may find it necessary to take, I think you may wish to consider what action can be taken within the industry to facilitate our common object. I shall be glad to have any suggestions you would care to make.—Yours sincerely, Aneurin Bevan.

*The appointment of Mr. Denis Senior, A.R.I.B.A., as DEPUTY COUNTY ARCHITECT OF ESSEX has been confirmed by the County Council. Mr. Senior was previously Chief Assistant Architect in the County Architect's Department.*



*Sir Patrick Abercrombie, to whom the King, on the recommendation of the RIBA, has awarded the Royal Gold Medal for 1946. On the left of the photograph is Sir Patrick Abercrombie's daughter, on the right his daughter-in-law.*





## *They Learn as They Earn*

Boys at Watford working under the new apprenticeship Learn As You Earn scheme for the building industry. The boys are trained for four or five years, and while they are learning their craft they are paid a starting wage of £1 3s. 3d.

which increases as the boys go on. Top, welding. Below left, bricklaying; centre, learning to prepare materials for pointing brickwork; right, leadwork. This scheme is attracting world-wide interest, especially in the Dominions.

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*In connection with the establishment of a COUNTY ARCHITECT'S DEPARTMENT FOR HERTFORDSHIRE, the County Council has recently appointed the following Architects to the Staff of Mr. C. H. Aslin, F.R.I.B.A., M.I.Struct.E., County Architect.*

*Deputy County Architect. S. A. W. Johnson-Marshall, B.A.R.C.H. (HONS.) (L'pool) A.R.I.B.A., ex. R.E., formerly Deputy County Architect to the Isle of Ely County Council. Chief Assistant Architect. G. Newell, A.R.I.B.A., A.M.I.STRUCT.E., formerly Senior Assistant Architect to the Hertfordshire County Council. Senior Assistant Architects. F. K. Hicklin, A.R.I.B.A., ex. R.E., formerly Assistant Architect to the County Borough of Derby, and S. Morrison, A.R.I.B.A., ex. R.A., formerly Assistant Architect to the Warwickshire County Council. Assistant Architects. O. Carey, A.R.I.B.A., A.A.HONS.DIPL. and D. L. Medd, A.R.I.B.A., A.A.HONS.DIPL. Both are at present serving in the Forces. Junior Assistant Architect. C. A. G. Beacher, A.R.I.B.A., at present serving in the Forces.*

*Six houses built by building apprentices at East Herringthorpe, Rotherham, have been opened by Mr. George Tomlinson, M.P., Minister of Works, and two houses BUILT BY APPRENTICES at Aperfield Road, Erith, by Mr. Charles William Key, M.P., Parliamentary Secretary to the Ministry of Health.*

The lads who have built these houses are training under the Apprentice Master Scheme, adopted early last year by the Ministry of Works on the recommendation of the Building Apprenticeship and Training Council (Chairman: Sir Malcolm Trustram Eve, Bart., K.C.). The scheme, which aims at speedy recruitment and training of building craft apprentices in order to build up as soon as possible a strong and efficient building industry, has attracted world-wide interest. The Dominions, the United States of America, and the Allied Control in Germany have all followed the scheme closely. The basic principles of the scheme are that boys trained to be apprentices are given an opportunity to earn and build while they learn under the guidance of an apprentice master nominated by the Local Joint Apprenticeship Committee. The LJAC applies to the local authority for permission to adopt this scheme in their area. If building by boys costs more than normal building, the local authorities who build under the scheme are reimbursed by the Ministry of Works, who finance and administer the scheme in co-operation with the Ministries of Labour and Health. The service of the boys counts towards their period of apprenticeship and they are transferred to normal apprenticeship in the industry as soon after six months' training as employers are ready to receive them. The boys receive normal apprenticeship wages under the scheme and are enabled to undertake building work under sound instruction from the start of their training. All boys working under the scheme are registered as approved apprentices by the Building Apprenticeship Training Council. Arrangements have now been made for the carrying out of building work by apprentices in about forty areas in different parts of the country. (See facing page.)

## PROFESSIONAL CONDUCT

A new code of Professional Conduct was finally approved by the Architects' Registration Council of the United Kingdom on December 14, and will be issued to all architects as soon as it is printed. The Council may, therefore, be congratulated on the completion of a long and arduous task. Although a Code has been in existence since 1936, this new version is a far worthier and more comprehensive document and its issue most timely in view of the rising tide of entries to the profession.

The Code consists of a number of principles of conduct, each of which is illustrated by several examples. The object of the rules, as stated in the preamble, is "to provide a general standard of professional conduct" and not "to lay down hard and fast lines." In other words, it is to act as a guide and not a legislator, any infringement being judged on its merits by the Discipline Committee. This elasticity is particularly appropriate at the present time when the scope and variety of an architect's work is being so greatly widened. Owing largely to the current lull in actual building work and to the imminent rebirth of peacetime commercial production, the architect is finding, at least temporarily, many new fields for his activities remote from the normal pre-war routine of professional practice. A clear understanding of the basic ethics of professional conduct is all the more essential though the application of the rules should be kept sufficiently fluid to meet the altered circumstances.

Broadly speaking, the whole Code may be summarised as the architect's duty towards the public and towards his profession. Principle III of the Code, one of the most comprehensive, is written down for the first time and states that "the growth of an architect's practice should depend on merit. He must not advertise or tout for business. . . ." Though by the cynical this might be paraphrased as "Be good, sweet maid, and let who will be clever," yet it is a pious hope well worth emphasising. "By their works ye shall know them," but who among the public can put a name to the works of any architect? Apart from snowball recommendations of satisfied clients, the most healthy method of practice building, and an occasional name in the news, the architect in this country remains anonymous. Above all he must not "tout"—an excellent word impossible to define yet easily intelligible, suggesting vulgar solicitation yet equally applicable on a high or low level or not even on the level at all.

It will be generally agreed that this is a wise and fundamental principle, but if the architect is expected to remain, as he certainly should, a worthy member of an honourable profession, and if his capacity is to be employed to the full, surely it is up to his union in the shape of the constituent bodies of the Registration Council to lend a hand. If merit goes unrewarded, it is for these bodies to rub the public's nose in it. "An architect may not tout," then let them do the touting for him. The time is ripe, building is in the headlines, and the Government themselves are sympathetic. Let

the ruling bodies of the profession pocket their pride and beat the drum.

This same Principle III suggests that they have two urgent jobs to do—to maintain and improve the quality of their goods and to sell them to the public—the first means a higher standard of education and a narrower entry to the profession and the second a thorough overhaul and tuning up of public relations. These twin jobs go hand in hand, since it would be equally disastrous for the architect to be weighed and found wanting as that he should be left at the post.

Let them be warned by the disservice which is being rendered to the community by representative bodies in other walks of life who, unlike the old guilds, think only of the prosperity of their members and nothing of the quality of service which these members have to offer to the public.



*The Architects' Journal*

War Address: 45, The Avenue, Cheam, Surrey

Telephone: Vigilant 0087-9

N O T E S

&

T O P I C S

#### FLEET STREET CENTENARIAN

This month the *News Chronicle* is a hundred years old. Sir Joseph Paxton and the proprietors of *Punch* were among those who joined together in 1846 to found the *Daily News*, its first title, as "a morning newspaper of Liberal politics and thorough independence," and the first number appeared on January 21, 1846. Peel's government was about to fall. Free Trade was upon us. Income tax was 7d. in the pound. A new electric telegraph was used to catch an escaping thief. Sir Henry Bessemer was starting on his career of inventions which ranged from stamp-perforators to blast-furnaces, and from a process for embossing velvet to advice for curing sea-sickness. It was the dawn of an age of "opulence and order and serviceable gear, of colour and horseflesh and national property."

As the *Daily News* (that is until 1909) it was the mouthpiece of vigorous and uncompromising Liberalism, carrying on the battle for freer education, better pay in sweat shops, better conditions in prisons, old age and unemployment insurance and other reforms which in time have been achieved. During the Boer War it was boycotted by advertisers because of its "unpatriotic" attitude, and in 1876 it won from Mr. Gladstone a tribute for its part in disclosing the Turkish atrocities against Bulgarians. In more recent times its firm stand for progress and liberty has not been shaken.

The first editor was Charles Dickens, then aged 33. He only stayed three weeks, however, and the great names of the *Daily News'* career are those of Sir John Robinson, Sir E. T. Cook, A. G. Gardiner as editors, and of Archibald Forbes, the famous War Correspondent of the Franco-Prussian War. The present editor is Mr. Gerald Barry. He is no relation to Gerald de Barri, who flourished as a journalist some five centuries ago. He shares, however, de Barri's interest in building, and lives in a house which has been remodelled by F. R. S. Yorke.

Architecture, like roof climbing in the universities, has always been associated with liberal principles but it is perhaps due largely to Mr. Barry's personal enthusiasm that the cause of good contemporary design has in recent years been so vigorously and intelligently championed by the *News Chronicle*. Better still, the paper has given active and practical support to

architects. In 1936 came the famous *News Chronicle* schools' competition, for which nearly 250 architects competed, and which, apart from its wider influence, had an immediate practical result in that the winner, Mr. Denis Clarke-Hall, was given a school at Richmond to design. In 1938, *The Star*, which is associated with the *Chronicle*, produced in its jubilee year a scheme by Spence, Sales and Bland for the reconstruction of the South Bank. In 1945 the *News Chronicle* announced its latest architectural venture—the replanning of Knutsford by a team of architects and planners. This is a splendid record, and it is not surprising that the *News Chronicle* adorns many a drawing board every morning.

The *News Chronicle* is almost alone among the dailies in not ignoring or farcically misrepresenting architecture, and for that reason alone it deserves the congratulations and good wishes for the next century from every architect.

#### THEY GELD HORSES, DON'T THEY?

If you had passed down the dreary institutional corridors of the Directorate of Works recently and followed your nose to the canteen, you would have found something to bring a little colour to jaundiced cheeks—some imaginative Christmas decorations by a group of young architects and draughtsmen employed at the Ministry.

The first reaction would have been one of pleasant surprise at finding a touch of rococo gaiety in this wasteland of officialdom. But then would have followed quickly a feeling of pathos on realising that after months and perhaps years of resigned frustration, here a few servants of the state had at last had some fun.

These decorations provide another example to show that the dull neutrality of most things which issue from a state department, especially in architecture, is not necessarily due to its staffs. There is potentially plenty of talent, imagination and enthusiasm, for example, among the architectural personnel of the Ministry of Works. Why does it so rarely find official expression? A still unresolved question which it would be foolish to try to



answer in a few lines. Nevertheless, it is one that becomes ever more important to answer as *laissez faire* gives way increasingly to state control.

I refuse to believe that officialdom is in its very nature opposed to individual creation. If such a semi-public body as the LPTB, to quote a hackneyed example, can produce so relatively high a general standard of design, why not a Government body? Or must the insignia of the official architect for ever be, as one of the captions below the satirical heraldry of the canteen decorations read, "the dead hand of the past gripping the controlling reins through a safety first sign, a broken T-square bound in convolvulus and

three caltrops (the mediaeval device for maiming horses)"?

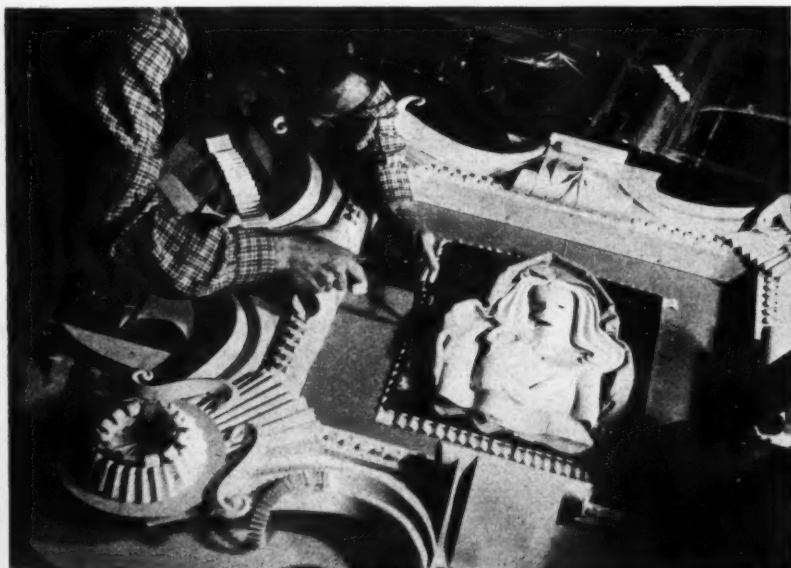
#### NEVER REALLY BAD?

As a young Ministerial architect, still flaunting the student's *panache* of a bright woolly tie, remarked to me, "The designs the Ministry produces are never really bad, but they are never really good. They are just dead." No doubt this is so in general, but sometimes design is really bad. Look, for instance, at the picture on the left.

It is the bedroom of one of the Swedish timber houses, adapted by MOW for this country, which has now been completed near Watford. Is there any excuse for fitting a cupboard in that way? Is there any excuse, either, for what you can't see in the picture—the myriad, ill-considered bits and scraps of fidgety fillet that cover the wallboard joints, which are not merely unsightly and dust collecting but must enormously increase the site man-hours on what is otherwise mainly a speedy prefab job.

No private architect building one house for a single client could get away with this sort of thing. If the Watford example is to be standard, a Ministry can apparently get away with it five thousand times.

ASTRAGAL



Top, the bedroom of one of the Swedish timber houses. Below, at work on the Christmas decorations at a MOW canteen on which Astragal comments. (See also the following page.)



## LETTERS

Ernest Hillson

Frederick McManus, F.R.I.B.A.

G. B. J. Athoe

Secretary, the Incorporated Association of Architects and Surveyors.

### Prefabrication

SIR,—I was most interested to read your leading article on this much abused subject and trust I may be permitted to put forward some constructive views on the subject.

It has been suggested that the term Prefabrication is to some extent a misnomer and is calculated to give a somewhat erroneous impression of what is intended. The term Precision perhaps conveys a different line of thought.

As you rightly say the majority of systems which depart from the traditional are sponsored by large contractors, who have at their disposal mechanical means of hoisting and handling factory produced units. What are required are smaller units which can be handled easily by large and small contractors alike, and designers would do well to bear in mind this important factor.

Although many such designs have been produced to deal with walls, floors, and other features, little attention has been devoted to roofs. It may not be generally known that it is possible to produce prefabricated steel roof units, which can be fixed without mechanical devices and which can be covered with traditional roofing materials—slates or tiles. In other words a happy combination of prefabrication and tradition, which is an ideal and novel combination.

Sheffield

ERNEST HILLSON

### British Standard Flush Doors

SIR,—I would like to correct a misleading impression created by the advertisement of Messrs. Gliksten Doors, Ltd., in your issue



## DECORATIONS WITH A BITE AT MOW CANTEEN



At Christmas time the Arts Society of the Ministry of Works instigated some canteen decorations in Abell House, the building which houses the Directorate of Works. These decorations were the collective effort of various younger members of the architectural staff including Messrs. Braven, Berks, Beesley, Findlay, Carpenter, Lambert, and Stoddard. Paper was the chief material used and Mr. Lipski's paper sculpture was the inspiration. The centre piece consisted of the Madonna and Child in white paper on a background of silver and terra cotta, the cloak being of yellow fabric, and the general star-spangled background of blue (see photo on left). Other features were pilasters of terracotta colour and a number of heraldic shields with satirical texts, three of which are shown above. Left, arms of Works General: "First Quarter, Finance Division, symbolized by the £ sign scattered on a field of gold with two Adders tied in a knot. Second Quarter, an all-seeing eye surmounting an attendance book surcharged with an ear on two pens bound in red tape." The Third Quarter represents Temporary Housing and Progress Information. Centre, the Treasury: "An eagle—symbol of power . . . backed by a vulture grasping an income tax form. The two support a Shield of Pretence on which a hand empties gold pieces from a cornucopia of plenty. The talons holding this Shield of Pretence, however, also tightly hold the purse strings. Above, the handcuffs symbolizing the Essential Works Order and the Geddes Axe." Right, Establishment: "First Quarter, the Iron Hand in the velvet glove grasps the scales (weighted to the sinister) over a personal file . . . Second Quarter, Assistant Secretariat—the pen caught on a field of darkness symbolizing the

assistant secretariat and surcharged with the symbol of infinity, their name being legion. Third Quarter, Method and Organization, symbolized by two hands (the left hand does not know what the right hand is doing since it is obscured by the arms of the Treasury) grasping a divining rod bound in red tape. Fourth Quarter, Contracts, the six contract sections symbolized by six binding knots . . ." The Engineers have three elephants supporting a house of cards symbolizing the "at least three-fold safety factor so familiar in all their work." The Architects have a broken T-square bound in convolvulus denoting the strangling of initiative, together with three caltraps (a mediaeval device for maiming horses) on a field rather blue. Astragal comments on the decorations this week.

of December 27, regarding British Standard Flush Doors.

The advertisement states that "B.S.S. 459 puts severe limits to the amount of timber and plywood that can be used in a flush door." This statement would be correct if it referred to B.S.S. 459: 1941, which was a war emergency standard.

It should be pointed out, however, that this specification has now been revised and consists of two parts—B.S. 459 Part 1: 1944 for Panelled and Glazed Wood Doors, while B.S. 459: Part 2: 1945, covers Flush Wood Doors. The specification for construction and materials for both of these types are up to pre-war standard; in fact they show an improvement, while the latter specification does not restrict the quantity of timber so as to prevent the production of a good standard Flush Door.

London.

FREDERICK MCMANUS,

### Application for Public Appointments

SIR,—You may care to note a decision reached by the Architects' Registration Council at its last meeting. It arose from a motion I had tabled at the previous meeting of the Council, resulting in the appointment of a special committee to advise the Council on Public Announcements. The Committee reported back in favour of my motion in which attention was drawn to the fact that it was a frequent practice of public authorities when advertising vacancies for architects or architectural assistants to insist that applicants must be members of one specified body.

I urged that this distinction was invidious, that such advertisements should, rather, insist on an applicant being a registered

architect, and that, though many registered architects were members of the RIBA, the majority were either members of other bodies or of no body at all. It was as if a Medical Officer of Health was required somewhere, and advertisements stipulated that applicants had to be Guy's men or Bart's men. How would the medical profession react to that? A vote was taken on the Committee's Report, and it was decided (by 21 votes to 14) to circulate a request to all public authorities—municipal councils and so on—to draft their advertisements on the lines which I had suggested. I am convinced that the matter is of importance to the public. By the old method the best man for the job was quite possibly debarred from it.

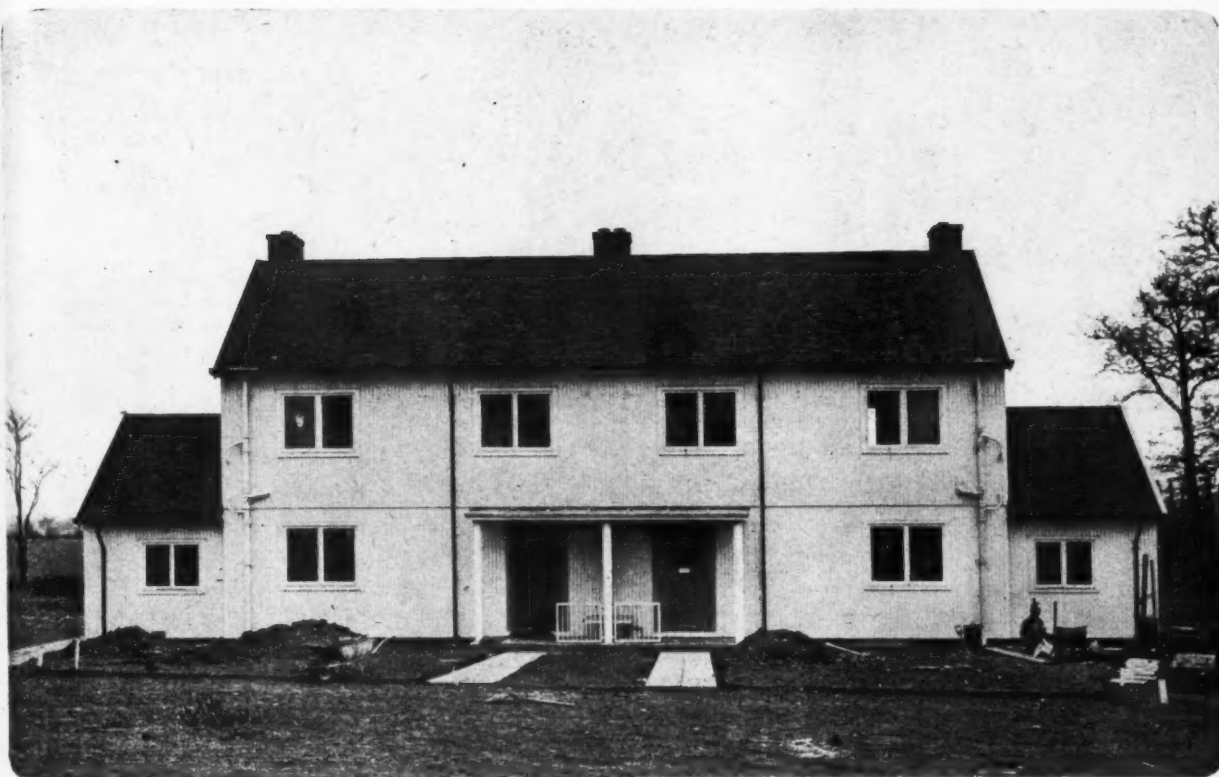
G. B. J. ATHOE,

Secretary,

The Incorporated Association of Architects and Surveyors

London





# SWEDISH TIMBER HOUSES AT ABBOTS LANGLEY DESIGNED BY MOW

A few samples of the 5,000 timber houses from Sweden have now been erected at Abbots Langley, Herts, for demonstration to local authorities and others interested in housing. These houses are of four different types, though all are of two storeys and have three bedrooms. The differences between the various types lies in the arrangements of the rooms to suit different needs and localities. Types A and D are illustrated here.

The houses are of permanent construction and have been ordered by the Ministry of Works from the Swedish manufacturers. The houses have been adapted from normal Swedish standards in order to speed up supply, but in other respects have been altered by MOW to conform with British requirements. Thus plinths and party walls, with fireplaces and chimneys, are in brick. The brick construction is the only part which requires scaffolding. Height of all rooms is 8 ft. The houses are lit by electricity and there is a solid fuel system for heating water. Roof tiling, glazing and painting will be done by local authorities. MOW will supply fireplaces, cookers, washing and plumbing fixtures.

The prefabricated wall units are



Top, Type A front elevation. Below, Type A back elevation.

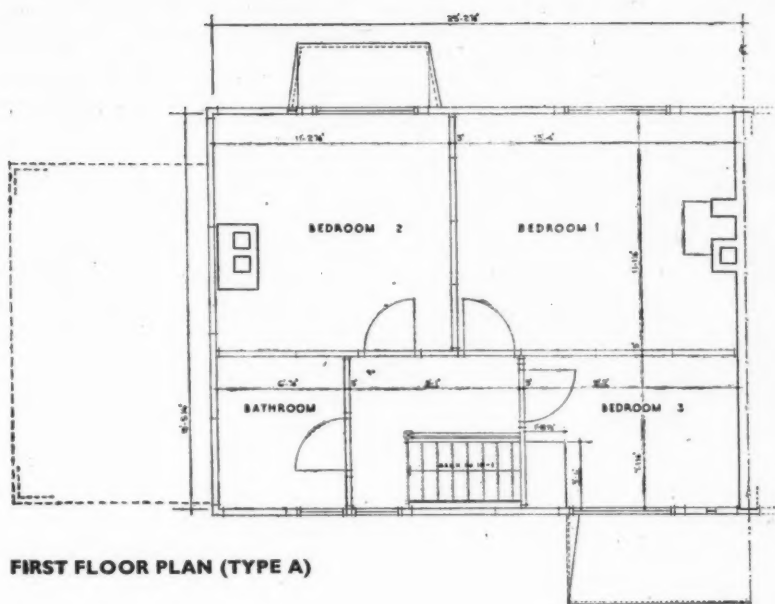


## SWEDISH TIMBER HOUSES

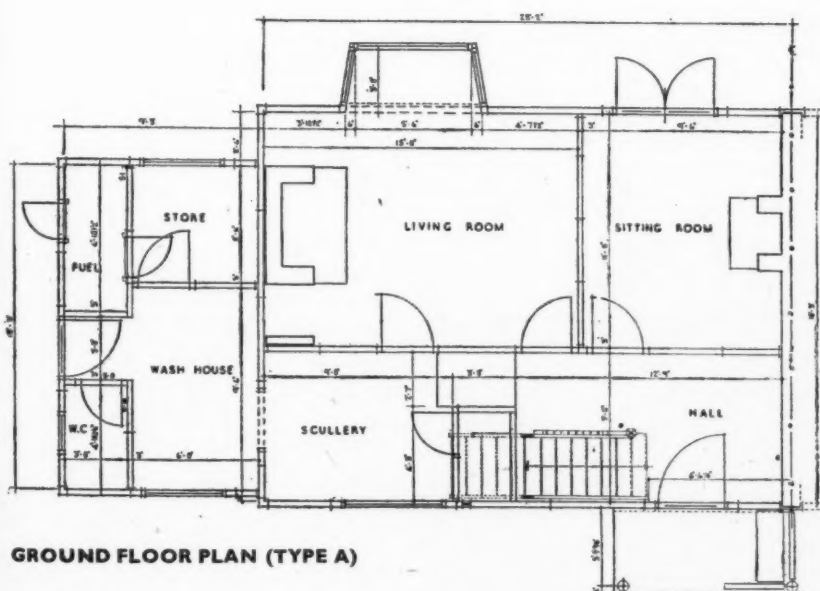
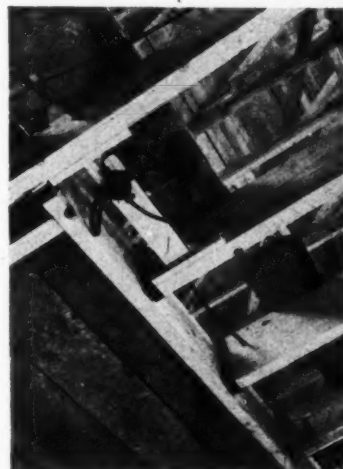
*Extreme left, ground floor joists are laid for one of the pairs of semi-detached houses, while the wall panels are being erected for the other. Left, fixing the first floor joists. Below, erecting wall panels to the first floor. All views apply to Type A.*



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*Below top, looking up at the stairwell trimming; the iron brackets allow thinner trimming joist. Below centre, close-up of a strengthening bracket at a window corner; the hinge is a lift off type. Below bottom, the waterproof paper under the boarding of each panel is being folded together by the Swedish foreman; the gap will be filled with a cover board.*



[Scale 1/4" = 1' 0"]

about 4 in. thick including the interior wallboarding which, with covering fillets, is supplied by MOW. The exterior of the units is of lapped vertical boarding on impregnated paper; the interior is of tongued and grooved boarding also on paper, the core being of solid timber. Vertical boards are added at the joints of the units, under which the waterproof paper is lapped. Wall panels are hoisted to position by hand on a slide of a pair of smooth planks.

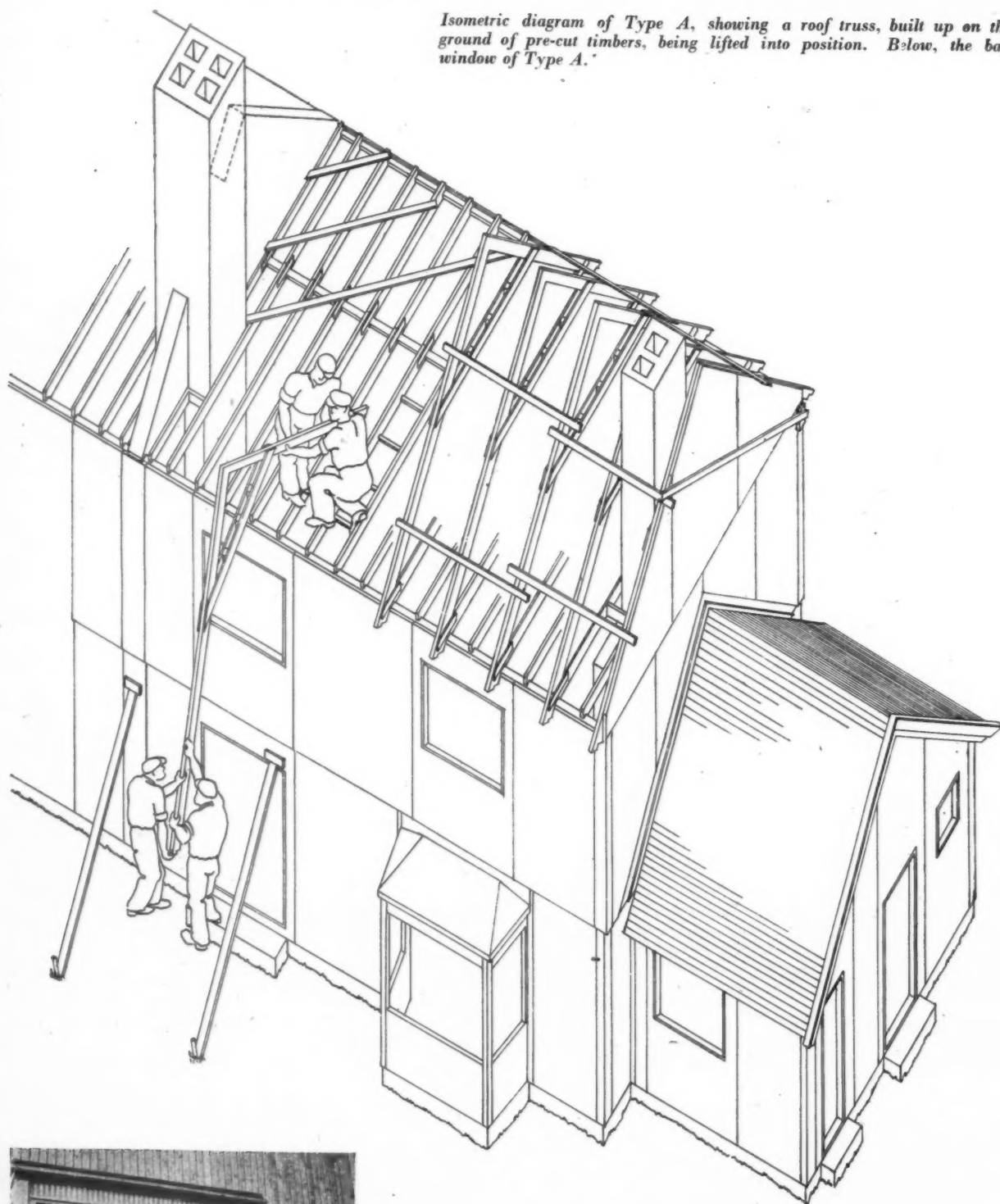
All joists and other timbers are delivered pre-cut in suitable bundles. Roof trusses are built

up on the ground.

Floor joists are at 18-in. centres; the ends which abut on one of the sleeper walls on the ground floor and on the wall on the first floor of Type A are tied with short lengths of splicing battens nailed to both sides. Ends of every third first floor joists are tied to the wall plates with metal straps. Ceilings are of 1/2 in. fibreboard. 4 in. by 1 in. diagonal bracing strips at 3-ft. centres are nailed to tops of first floor ceiling joists. Roof covering is of 3/4 in. boarding with battens and tiles. In type A the roof pitch is 40 degrees and in type D, 50.

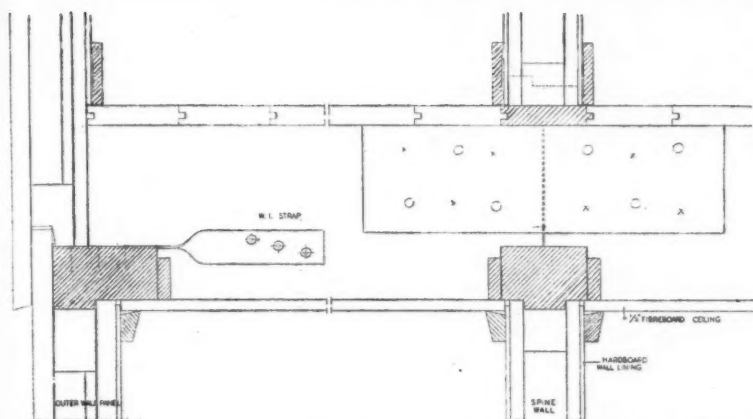


*Isometric diagram of Type A, showing a roof truss, built up on the ground of pre-cut timbers, being lifted into position. Below, the bay window of Type A.*

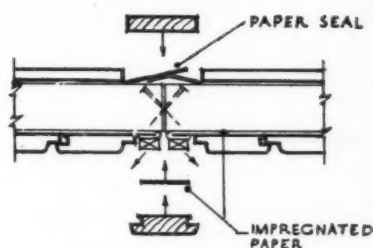


SWEDISH TIMBER HOUSES

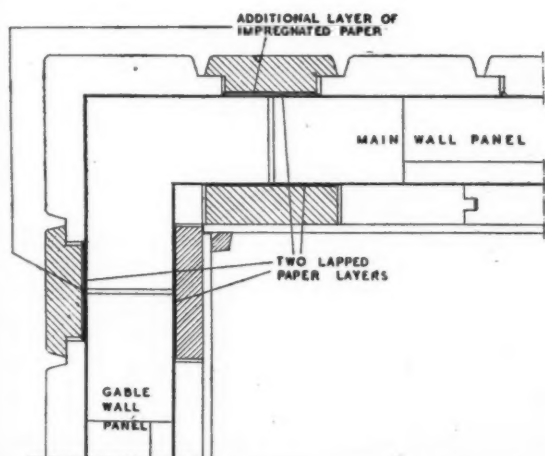




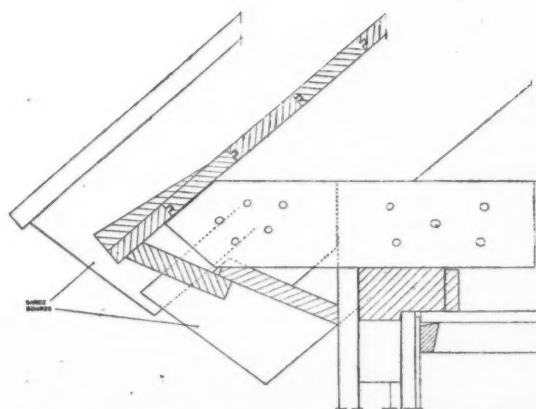
SECTION THROUGH FIRST-FLOOR JOIST BEARING (TYPE A;  $\frac{1}{2}$  FULL SIZE)



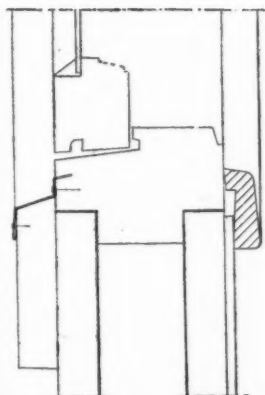
JUNCTION OF MAIN WALL PANELS (STAGES I AND 2;  $\frac{1}{2}$  FULL SIZE)



PLAN OF MAIN EXTERNAL ANGLE TO GROUND FLOOR WALL PANELS (TYPES A, D;  $\frac{1}{2}$  FULL SIZE)



SECTION THROUGH EAVES (TYPE A;  $\frac{1}{2}$  FULL SIZE)



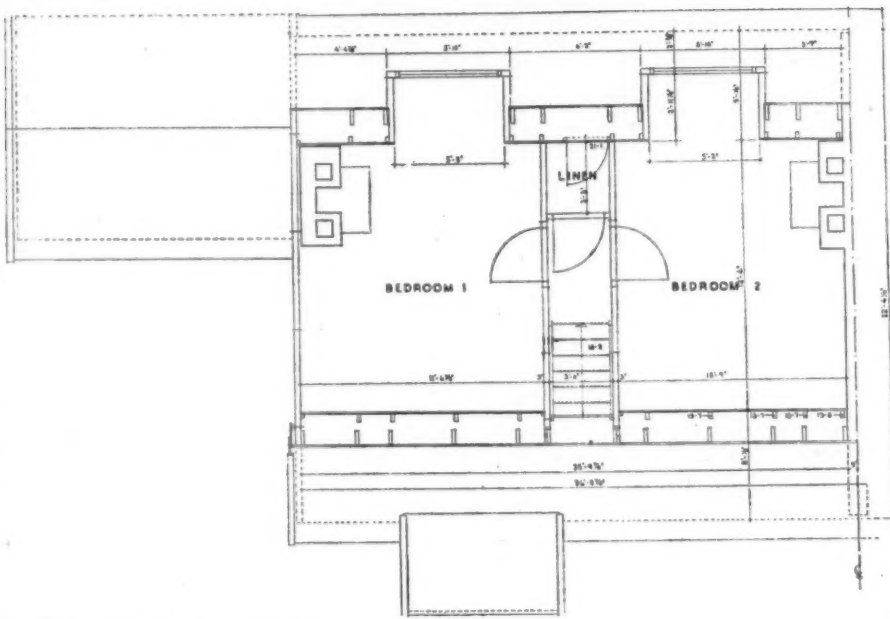
SECTION OF WINDOW SILL (TYPES A, D)



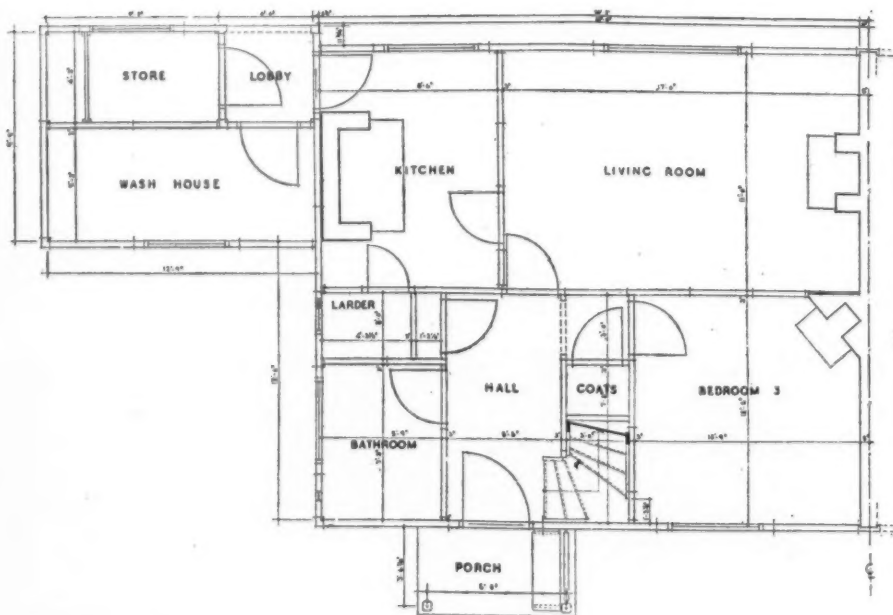
Above, details of construction. Right, Type A seen from the back almost complete except for tiling.

# SWEDISH TIMBER HOUSES

*Plans and photographs of Type D. Below left, front view. Below right, back view with its row of dormers.*



FIRST FLOOR PLAN (TYPE D)



GROUND FLOOR PLAN (TYPE D)

[Scale 1/4" = 1' 0"]



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# PRICES

Rates of Wages rose on January 1, 1946, and are now as follows:—

LONDON DISTRICT				Craftsmen.	Labourers.
Within 12 miles radius				2s. 7½d.	2s. 1½d.
From 12-15 „ „				2s. 7d.	2s. 1d.

## GRADE CLASSIFICATIONS

	A	A <sup>1</sup>	A <sup>2</sup>	A <sup>3</sup>	B	B <sup>1</sup>	B <sup>2</sup>
Craftsmen..	2s. 6d.	2s. 5½d.	2s. 5d.	2s. 4½d.	2s. 4d.	2s. 3½d.	2s. 3d.
Labourers..	2s. 0d.	1s. 11¾d.	1s. 11¼d.	1s. 11d.	1s. 10½d.	1s. 10d.	1s. 9¾d.

*Ed Davis*

F.S.I., F.I.Arb

## CURRENT MARKET PRICES OF MATERIALS

BY DAVIS, BELFIELD AND EVEREST,  
Chartered Quantity Surveyors.

Prices vary according to quality and the quantity ordered.

Those given below are average market prices and include delivery in the London area, except where otherwise stated, but do not include overhead charges and profit for the General Contractor.

### CONCRETOR

Cements

† All delivered in paper bags (20 to the ton) free.

\* Paper bags or non-returnable jute sacks charged at 7/- extra per ton.

	6 Tons and over	In 80-ton freights F.A.S. Safe Wharf In River Thames, London Area.
*Portland .. ..	per ton 57/-	54/6
"417" Ultra rapid .. ..	per ton 78/6	—
hardening .. ..	per ton 63/-	60/6
*Rapid hardening .. ..	per ton 88/6	—
*Water repellent .. ..	per barrel —	6 ton upwards
Atlas White (1 barrel 376 lb.) .. ..	per barrel —	6 ton upwards
*Colorcrete rapid hardening, buff and red .. ..	per ton 98/6	98/6
*Colorcrete rapid hardening khaki .. ..	per ton 98/6	98/6
*Colorcrete rapid hardening dark .. ..	per ton 98/6	98/6
†Colorcrete non-rapid hardening .. ..	per ton from 176/- to 400/6	—
†Snowcrete .. ..	per ton 226/6	—
*Ciment Fondu, delivered Central .. ..	1-9 10-19 1 ton and	—
London area .. ..	per cwt. 16/8 16/2 per ton 254/-	—

### Aggregate and Sands (Full Loads)

*Unscreened ballast .. ..	per yard cube 12/4
†(Down) Washed, crushed and graded .. ..	per yard cube 13/1
shingle .. ..	per yard cube 14/1
†(Down) Ditto .. ..	per yard cube 14/6
*Broken brick .. ..	per yard cube 16/-
†Ditto .. ..	per yard cube 9/6
Washed pan breeze .. ..	per yard cube —
Coke breeze 1" to dust .. ..	per yard cube 14/7
†Sharp washed sand .. ..	per yard cube 40/-
White Silver Sand for white cement (one ton lots) per yard .. ..	—
(For Sands for Bricklaying and Plastering see respective trades)	

### Pavings

Brick hardcore .. ..	per yard cube 6/-
Concrete ditto .. ..	per yard cube 2/6
Clean furnace clinker and boiler ashes .. ..	per yard cube —
Coarse gravel for paths .. ..	per yard cube —
Fine ditto .. ..	per yard cube —
Clean granite chippings (full loads) .. ..	per ton 36/7

### CONCRETOR—(continued)

Pavings—continued

Red quarry tiles, 6" × 6" × ¾"	per yard super 8/11
Ditto 6" × 6" × ¾"	per yard super 7/11
Buff ditto 6" × 6" × ¾"	per yard super 10/-
Ditto 6" × 6" × ¾"	per yard super 8/11
Hard red paving bricks, 2"	per 1,000 245/-
Ditto 1½"	per 1,000 225/-

Reinforcement

Home trade maximum basis price for mild steel rods, ½" diameter and upwards, ex mills delivered to station or siding .. .. per ton £16 19 6

Extras for:—

Under ½" to ¾" diameter .. ..	per ton 10/-
Ditto ¾" and over ¾" diameter .. ..	per ton 15/-
½" and over ½" diameter .. ..	per ton 20/-
¾" and over ¾" diameter .. ..	per ton 25/-
1" and over 1" diameter .. ..	per ton 30/-
1½" and over 1½" diameter .. ..	per ton 35/-
2" diameter .. ..	per ton 40/-
Under 1" to 1½" .. ..	per ton 60/-
Lengths over 40 ft. to 45 ft. .. ..	per ton 10/-
" " 45 ft. to 50 ft. .. ..	per ton 15/-
" " 50 ft. (as 50 ft. plus per ft.) .. ..	per ton 1/6

Sundries

Retarding liquid, in 5-gallon drums (for exposing aggregate) .. ..	23/-	} Ex Warehouse, Southwark Bridge. Drums chargeable and credited, if returned.
Ditto (for obtaining a bond) .. ..	per gallon 14/4½	

### BRICKLAYER

Common Bricks

†Rough stocks .. ..	per 1,000 —
†Third stocks .. ..	per 1,000 —
†Mild stocks .. ..	per 1,000 —
Sand limes .. ..	per 1,000 —
†Phorpres pressed Flettons .. ..	per 1,000 63/-
†Phorpres keyed Flettons .. ..	per 1,000 65/-
Blue Staffordshire wirecuts .. ..	per 1,000 306/9
†Lingfield engineering wirecuts (ex works) .. ..	per 1,000 100/-
Firebricks, best Stourbridge 2½" .. ..	per 1,000 410/-
Firebricks, best Stourbridge 3" .. ..	per 1,000 520/-

Facing and Engineering Bricks

Sand Limes, No. 1 .. ..	per 1,000 —
Sand Limes, No. 2 .. ..	per 1,000 —
†Phorpres rustic Flettons .. ..	per 1,000 83/-
† At King's Cross (Maiden Lane) Stn. For delivery in W.C. district add 10/- per 1,000.	

## BRICKLAYER—(continued)

## Facing and Engineering Bricks—continued.

Midhurst Whites .. .. .	per 1,000	—
†Hard stocks, firsts .. .. .	per 1,000	—
†Hard stocks, seconds .. .. .	per 1,000	—
Sand-faced, hand-made reds .. .. .	per 1,000 from	227/6
Sand-faced, machine-made reds .. .. .	per 1,000 from	—
Red rubbers (9½-in.) .. .. .	per 1,000	—
Uxbridge Flints (white) .. .. .	per 1,000 from	99/-
Uxbridge Flints (creams, light greys, etc.) .. .. .	per 1,000 from	130/-
†Dunbriks (concrete), greys or Commons .. .. .	per 1,000	80/-
†Dunbriks (concrete), various colours .. .. .	per 1,000	—
†Southwater engineering No. 1 (first quality red pressed) .. .. .	per 1,000	160/-
†Southwater engineering No. 2 (second quality red pressed) .. .. .	per 1,000	140/-
Blue pressed .. .. .	per 1,000	334/3

† Price ex works, delivery extra.

## Limes and Sand

	1-ton lots	6-ton lots
Lime, grey-stone .. .. .	per ton 67/-	—
Lime, chalk .. .. .	per ton 67/-	—
Lime, blue Lias (including paper bags) .. .. .	per ton —	—
Lime, hydrated (including paper bags) .. .. .	per ton 73/-	—
Washed pit sand .. .. .	per yard cube	13/6

(For cements, see "Concrete.")

Hire of jute sacks charged at 1/6 and credited at 1/6. If left charged at 1/9.

## Sundries

Wall ties, self coloured .. .. .	per cwt.	—
Wall ties, galvanized .. .. .	per cwt.	—
D.P.C. slates, size 14" x 9" .. .. .	per 100	39/9
D.P.C. slates, size 14" x 4½" .. .. .	per 100	10/9
†Lekore D.P.C. Grade A .. .. .	per foot super	8½d.
†Lekore D.P.C. Grade B .. .. .	per foot super	10½d.
†Lekore D.P.C. Grade C .. .. .	per foot super	1/-

† Trade discount 5 per cent. and cash discount 5 per cent. Prices include delivery on minimum of £5 orders.

Airbricks:	9" x 3"	9" x 6"	9" x 9"	12" x 9"	14" x 9"
Red and buff terra cotta .. .. .	each 1/-	2/1	4/7	—	12/7
Black cast iron, School .. .. .	9" x 3"	9" x 6"	9" x 9"	12" x 6"	12" x 9"
Board pattern airbricks .. .. .	per doz.	—	—	—	—
Galvanized ditto per doz. .. .. .	—	—	—	—	—
Black hit and miss cast iron ventilators .. .. .	per doz.	—	—	—	—
Galvanized ditto per doz. .. .. .	—	—	—	—	—
Buff terra cotta chimney pots .. .. .	each 4/1	4/10	7/-	9/4	21/4
Fireclay .. .. .	per ton	75/-	—	—	36/5
Wall reinforcement supplied in standard rolls containing 25 yards lin.					
*2" wide black japanned .. .. .	per roll	2/5	} Greater widths pro rata 2½" price carriage paid on orders of £5. Discounts for quantities.		
*2" wide galvanized .. .. .	per roll	—			
*2½" wide black japanned .. .. .	per roll	3/-			
*2½" wide galvanized .. .. .	per roll	—			

## Partitions, etc.

	2"	2½"	3"	4"
Clinker .. .. .	per yard super	2/11	3/4	3/10
Pumice .. .. .	per yard super	5/6	6/6	—
Hollow Block .. .. .	per yard super	2/10	3/1	3/8
Plaster .. .. .	per yard super	4/10	5/6	6/8
†1" Wood-wool Slabs .. .. .	per yard super from	4/2	to 4/10	—
†2" Wood-wool Slabs .. .. .	per yard super from	6/7	to 7/6½	—
†3" Wood-wool Slabs .. .. .	per yard super from	8/6	to 9/8½	—

† Prices according to quantity ordered. 2½% Cash Discounts.

## Gas Flue Blocks

	Single Flues	Double Flues
Straight blocks .. .. .	each 1/8	2/9
Backing block .. .. .	per set of 3 4/-	7/4
Cover blocks .. .. .	each 2/5	4/7
Raking blocks 45° .. .. .	each 3/9	6/-
Raking blocks 60° .. .. .	each 2/8	4/-
Offset blocks .. .. .	each 4/6	6/4
Closer blocks .. .. .	each 1/8	2/9
Closer flashing blocks .. .. .	each 1/3	2/2
Straight flashing blocks .. .. .	each 1/3	2/2
Terminal and cap .. .. .	per set 8/7	14/4
Middle terminal and cap .. .. .	per set 8/4	13/8
End terminal and cap .. .. .	per set 8/7	14/3
Corbel block .. .. .	each 6/3	13/-
Gathering block .. .. .	each —	6/9

## DRAINLAYER

## Land Drain Pipes

	2"	3"	4"	6"
Pipes in 12" lengths .. .. .	per 1,000 92/6	120/-	157/6	330/-

(Delivered in full loads Central London Area.)

## Salt Glazed Stoneware Pipes and Fittings

	4"	6"	9"
Pipe (2' lengths) .. .. .	each 1/8	2/6	4/6
Bends, ordinary .. .. .	each 2/6	3/9	6/9
Single Junction, 2' long .. .. .	each 3/4	5/-	9/-
Yard Gully, without grating .. .. .	each 6/3	6/10½	11/3
Ordinary round or square Grating, painted .. .. .	each -7½	1/3	2/6
Ordinary round or square Grating, galvanized .. .. .	each 1/0½	2/1	4/4½
Extra for Inlets, horizontal .. .. .	each 1/6	1/6	1/6
Extra for Inlets, vertical .. .. .	each 2/3	2/3	2/3
Intercepting Trap with Stanford Stopper .. .. .	each 17/6	22/6	37/6
Grease and mud interceptor with bucket for removing silt and grease for 6", 9" and 12" drains, with iron grating, painted .. .. .	each 20/-	—	—
Ditto, with iron grating galvanized .. .. .	each 21/10½	—	—

The above prices to be varied by the following percentages for the different qualities given. All subject to 2½ per cent. cash discount.

	British Standard	British Standard Tested
Orders for 2 tons and over .. .. .	Plus 15%	Plus 40%
Orders under 2 tons, 100 pieces upwards .. .. .	Plus 32½%	Plus 57½%
Orders under 2 tons, less than 100 pieces .. .. .	Plus 42½%	Plus 67½%
	Best	Seconds
Orders for 2 tons and over .. .. .	Plus 7½%	Subject to 15% off the price of best quality for all sizes.
Orders under 2 tons, 100 pieces upwards .. .. .	Plus 25%	—
Orders under 2 tons, less than 100 pieces .. .. .	Plus 35%	—

## Cast Iron Drain Pipes and Fittings

Socket and Spigot Pipes:—	Weight (per 9 ft.)	Size	9 ft.	6 ft.	4 ft.	3 ft.
1. 1. 8	4" per yard	8/7	9/7	15/4	11/7	—
1. 1. 17	4" per yard	8/11	9/11	15/8	12/-	—
2. 0. 1	6" per yard	13/3	15/9	25/5	20/3	—
3. 3. 21	9" per yard	24/-	31/6	54/7	41/7	—
			2 ft.	18 ins.	12 ins.	9 ins.
1. 1. 8	4" each	9/7	8/1½	7/6	6/9	—
1. 1. 17	4" each	9/10	—	—	—	—
2. 0. 1	6" each	15/3	—	—	—	—
3. 3. 21	9" each	—	—	—	—	—

## Tonnage Allowances:—

Orders up to 2 tons nett.

Orders 2 to 4 tons less 2½%.

Orders 4 tons or over less 5%.

	4"	6"	9"
Bends (short radius) .. .. .	each 8/5	17/6½	53/11
Single junctions .. .. .	Fig. No. 18 each 14/10	30/4	93/-
Intercepting traps .. .. .	each 40/5	67/5	165/9
Gulleys ordinary trapped "P" .. .. .	each 19/6½	—	—
Extra for inlet 4" .. .. .	each 10/1	—	—
Grease Gully trap .. .. .	each 160/8	—	—
H.M.O.W. large socket gully trap with 9" gully top and heavy grating and one back inlet .. .. .	each 35/4	63/-	—

## Channels in Brown Glazed Ware

	4"	6"	9"
Half round straight channels 24" long .. .. .	each 1/3	1/10½	3/4½
Half round straight channels 30" long .. .. .	each —	—	4/2½
Ditto, short lengths .. .. .	each 1/3	1/10½	—
Half round ordinary channel bends .. .. .	each 1/10½	2/9½	5/0½
Ditto, short .. .. .	each 1/10½	2/9½	—
Ditto, long .. .. .	each 3/9	5/7½	10/1½
Three-quarter round branch bends .. .. .	each 5/-	7/6	—
		6" x 4"	9" x 6"
Half round taper channels 24" long .. .. .	each 3/9	6/9	—
Half round taper channel bends .. .. .	each 4/8½	8/5½	—

The above prices are subject to the same discounts as those given for "Best" quality salt glazed stoneware pipes.

## Manhole Covers, etc.

	Black Galvanized
†24" x 18" single seal for foot traffic. (Weight 0.03 in lots of 24) .. .. .	each 19/3
†24" x 18" single seal for light car traffic. (Weight 2 cwt. in lots of 24) .. .. .	each 49/7
†24" x 18" Wood Block pattern. For road traffic. (Weight 3 cwt.) .. .. .	each Coated 79/3



**DRAINLAYER—(continued)***Manhole Covers, etc.—(continued)*

	Fine Cast	Galv.
Cast iron steps, 13½" long, 6" wide, 9" in wall, approximate weight 5½ lb. each	per dozen 17/4	28/11
Galvanized fresh air inlets with cast brass fronts (L.C.C. pattern) .. each	4" 7/7	31/-
These prices are subject to 7½% advance.		

**MASON***Yorkstone*

Building quality Robin Hood and Woodkirk Blue Stone.	
Blocks crapped, random sizes .. per foot cube	6/6½
Add for blocks to dimension sizes .. per foot cube	8½d. (each dimension)
Templates with sawn beds, edges rough (up to 4 ft. super and not over 2' 6" long) .. per foot cube	7/3
Templates with sawn beds, sawn one edge, per foot cube	8/8½
Templates with sawn beds, sawn two edges, per foot cube	10/1½
Price f.o.r. Yorkshire, railway rate to London Station per ton. (Minimum 4-ton loads.)	29/1

*Artificial Stone*

6" x 3" Copings and sills .. per foot run	2/6
6" x 6" Copings and sills .. per foot run	3/10
9" x 3" Copings and sills .. per foot run	3/-
9" x 6" Copings and sills .. per foot run	5/6
12" x 3" Copings and sills .. per foot run	3/10
12" x 6" Copings and sills .. per foot run	6/7
Cornices according to detail, per foot cube (from)	11/10

**SLATER, TILER AND ROOFER***Best Bangor Slates*

	£	s.	d.
24" x 12" .. per 1,000 actual	—	—	—
20" x 10" .. per 1,000 actual	—	—	—

Prices include for delivery to site in lots of 1,000 and upwards.

*Tiles*

	£	s.	d.
Hand-made sandfaced 10½" x 6½" red roofing tiles	—	—	—
Machine-made sandfaced 10½" x 6½" red roofing tiles	—	—	—
Berkshire rustic pantiles .. per 1,000	—	—	—

*Asbestos-cement*

6" corrugated sheets, grey .. ..	per yard super	3/5	
Standard 3" corrugated sheets, grey .. ..	per yard super	3/1½	
Slates ( <i>Manufacture temporarily suspended</i> ) —			
• 5½" × 7½" grey .. ..	per 1,000	£7 6	0
• 15½" × 15½" diagonal, grey .. ..	per 1,000	£14 12	0
• 15½" × 15½" diagonal, russet or brindled .. ..	per 1,000	£23 12	6
Pantiles ( <i>Manufacture temporarily suspended</i> ).			
• Large russet brown .. ..	per 1,000	—	
Prices are for minimum two-ton loads, and are subject to 5% trade discount.			

**WALLBOARDS, Etc.**

½" Insulating board .. per yard super	2/4½
Building board .. per yard super	2/0½
Standard hard board .. per foot super	-/4½
Do. .. per foot super	-/5½
Tempered hard board .. per foot super	-/5½

*Laminated Wallboard*

½" Thickness (standard) :	
1 bundle up to 2,500 sq. ft. .. per foot super	-/2½
2,500 sq. ft. to 5,000 sq. ft. .. per foot super	-/2½
5,000 sq. ft. and over .. per foot super	-/2

*Asbestos-cement and Asbestos Products*

½" Semi-compressed flat building sheets, grey	per yard super 1/6½
½" Ditto .. per yard super	1/7
½" Ditto .. per yard super	2/3½
Prices are for orders of two tons and over and are subject to 5% trade discount.	

1" Asbestos wallboard (in sheets 8' 0" x 4' 0").

½" Ditto .. per foot super	-/5
½" Ditto .. per foot super	-/4
Asbestos wood (in sheets 8' 0" x 4' 0") .. per yard super	2/6½

Price are for orders of 2 tons and over.

The following asbestos prices are for minimum 1-ton lots and are subject to 10 per cent. trade discount :-

Asbestos-cement stipple glazed sheets (in sheets 8' 0" x 4' 0") .. per yard super	8/8
Marble glazed sheets (in sheets 8' 0" x 4' 0") (Manufacture temporarily suspended) .. per yard super	—

**WALLBOARDS, Etc.—(continued)***Asbestos-Cement and Asbestos Products—(continued)*

½" Asbestos Insulating Board .. per foot super	—
	25-75 150-300 Over
	yards yards yards
½" Fireproof plaster board .. per yard super	2/7 2/3 1/11
½" Ditto .. per yard super	2/5 2/1 1/9
Joint tape .. per 100 yard roll	— 7/6
Joint filler .. per lb.	— -/4

*Sundries*

Slaters or sarking felt .. per yard run	-/10
Roofing felt (1-ply bitumen) .. per yard sup.	1/1½
Bituminous hair felt .. per roll	58/-

All rolls 25 yards long by 32" wide.

Building paper, 50" wide (B.I. 20) .. per yard run	1/1
(K. 40) .. per yard run	-/5½
"Cabots" Quilts :—(Ex Works) Twenty roll lots delivered carr. free	
Double ply .. per roll	per half roll —
All rolls 28 yards long by 36" wide. Special terms for quantities.	
Cut steel clasp nails .. 1" per cwt.	40/3
" floor brads .. 2" "	33/-
Bright oval wire nails .. 1" "	46/4
Galvanized wire staples with slice cut points	1" x 12 gauge per cwt. 52/-
Scotch glue .. per cwt.	—

**STEEL AND IRONWORKER***Steelwork*

£ s. d.

Basis price for rolled steel joists sections	
5" x 3" to 16" x 6", in 10 ft. to 50 ft. lengths	ex mills
	per ton 15 10 6

**PLASTERER***Plaster and Cement*

	1-ton loads
Sirapite (coarse) .. per ton	91/6
" (fine) .. per ton	99/6
Victorite No. 1 (White) .. per ton	—
" No. 2 (Buff) .. per ton	—
Thistle (browning) .. per ton	91/6
Thistle (haired) .. per ton	—
Pink plaster .. per ton	85/6
White plaster .. per ton	94/6
Keene's pink .. per ton	142/6
Gypstone .. per ton	70/6
Glastone .. per ton	73/-
Paristone (haired) .. per ton	70/6
Cullamix (Tyrolean Finish) 1 ton lots and upwards	per ton from 149/- to 182/6

*Sundries*

Sharp washed sand .. per yard cube	14/7
Cow hair .. per cwt.	70/-
Goat's hair .. per cwt.	100/-
Expanded metal lathing, 9' 0" x 2' 0" ½" mesh	
x 26 gauge .. per sheet	3/-
Wire Slate nails (galvanized) 1½" x 15 gauge	per cwt. 66/11
" " (bright wire) " "	per cwt. —
½" Plaster board (plaster base) .. 25-150 yards	150-300 Over
per yard super	yards yards 600 yards
1½" Galvanized nails .. per cwt.	2/2 1/10 1/8
Scrim cloth in 100-yard rolls	per roll 4/6

*Wall Tiles*

The following prices are subject to 75 per cent. addition :

Commercial quality.	
Ivory, white, etc., glazed 6" x 6" x ½" .. per yard super	10/1
Angle beads (1½" wide) .. per yard run	1/2½
(1" ) .. per yard run	-/10
Rounded edge tiles .. per yard run	2/6½
Coloured enamelled bright glazed,	
6" x 6" x ½" .. per yard super	14/3
Angle beads (1½" wide) .. per yard run	1/4½
(1" ) .. per yard run	-/11½
Rounded edge tiles .. per yard run	2/7
Eggshell gloss enamelled, 6" x 6" x ½" .. per yard super	15/-
Angle beads (1½" wide) .. per yard run	1/7½
(1" ) .. per yard run	1/0½
Rounded edge tiles .. per yard run	2/8½
Special rates for quantities	

**PLUMBER***Lead*

3½ lb. and upwards milled sheet lead in quantities of 5 cwts. to 1 ton in sheets .. .. .	per cwt.	51/9
Lead ternary alloy, No. 2 quality extra over sheet lead or lead pipe .. .. .	per cwt.	7/-
Allowance for old lead delivered to merchant or manufacturer .. .. .	per cwt.	33/-

*Cast Iron Goods*

Percentage Adjustment.  
on List No. 3100 A.B.  
1/2/40

Rainwater Goods (painted or unpainted) ..	Plus 45%
Soil goods (coated or uncoated) .. .. .	Plus 45%

*Mild Steel Rainwater Goods*

The following prices for Pipes and Fittings are subject to 42½ per cent. addition, and Gutters are subject to 35 per cent. addition.

24 gauge rainwater slip jointed pipes.	2"	2½"	3	3½"	4"
Galvanized round pipes with ears .. .. .	per 6' 0"	2/7½	3/1½	3/9	4/3
Painted round pipes with ears .. .. .	per 6' 0"	2/4½	2/9	3/1½	3/7½
Painted or galvanized short lengths with ears, extra each	-/6	-/6	-/6	-/6	-/6
18 Gauge gutters.	3"	3½"	4"	4½"	5"
Galvanized half round gutters .. .. .	per 6' 0"	2/-	2/3	2/4½	2/9
Painted half round gutters .. .. .	per 6' 0"	1/6	1/9	2/-	2/3
Painted or galvanized short lengths extra .. .. .	each	-/3	-/3	-/3	-/3

*Asbestos-Cement Rainwater Goods*

The following prices are subject to 12½ per cent. trade discount. Orders over £30 are subject to 17½ per cent. trade discount.

*Rainwater Pipes.*

Prices are for 6' 0" lengths, 10' 0" lengths available in 2", 2½", 3", 3½" and 4" diameters. Short lengths up to 2' 0" are charged as 1 yard. From 2' 0" to 4' 0" charged as 1½ yards. From 4' 0" to 6' 0" charged as 2 yards. Over 6' 0" charged as 10' 0".

*Round pipes*

2"	per yard run	2/3½
2½"	per yard run	2/6½
3"	per yard run	3/1
3½"	per yard run	3/7½
4"	per yard run	4/2½
4½"	per yard run	6/-
5"	per yard run	7/1½
6"	per yard run	8/10½

*Gutters.*

Short lengths of gutter up to 2' 0" charged as 1 yard; from 2' 0" to 4' 0" as 1½ yards, and over 4' 0" as 2 yards.

Half round gutters .. .. .	3"	4"	4½"	5"	6"	8"
per yard run	1/7½	1/11½	2/-	2/4½	3/3½	4/1
Ogee gutters per yard run	—	2/4½	2/6½	3/1	3/9	4/10½

**INTERNAL PLUMBER**

Lead pipe in coils, 5 cwts. and upwards .. .. .	per cwt.	53/3
Lead soil pipe .. .. .	per cwt.	56/3
Add if ribbon marked .. .. .	per cwt.	-/3
Lead ternary alloy, No. 2 quality extra over lead pipe .. .. .	per cwt.	7/-
Plumber's solder .. .. .	per cwt.	132/6
Tinman's solder .. .. .	per cwt.	168/6
Drawn lead traps with brass screw eye, 6 lb.		

S. trap .. .. .	each	2/5	2/9	3/5	4/11
P. trap .. .. .	each	2/1	2/3	2/10	4/-
Extra for 3" deep seal "S" trap each	-/6	-/7	-/8	-/10	-/10
Extra for 3" deep seal "P" trap each	-/4	-/5	-/5	-/7	-/7

*Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.*

Tubes.						
Tubes 2 ft. long and over .. .. .	per ft.	-/5½	-/6½	-/9½	1/1	1/4½
Pieces 12" to 23½" long .. .. .	each	1/1	1/5	1/11	2/8	3/4
Bends .. .. .	each	-/11	1/2	1/7½	2/7½	3/2
Fittings.						
Elbows, square .. .. .	each	1/1	1/3	1/6	2/2	2/7
Elbows, round .. .. .	each	1/2	1/5	1/8	2/4	2/10
Tees .. .. .	each	1/3	1/7	1/10	2/6	3/1
Crosses .. .. .	each	2/9	3/3	4/1	5/6	6/7
Socket, plain .. .. .	each	-/4	-/5	-/6	-/8	-/10½
Socket, diminished .. .. .	each	-/6	-/7	-/9	1/-	1/4

**INTERNAL PLUMBER—(continued)***Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.—(continued)*

Flanges .. .. .	each	1/-	1/2	1/4	1/9	2/-	2/9
Caps .. .. .	each	-/5	-/6	-/8	1/-	1/3	2/-
Plugs .. .. .	each	-/4	-/5	-/6	-/8	-/10	1/3

Fittings and flanges and tubes ordered in long random lengths are subject to the following trade discounts:—

	Tubes	Fittings	Flange
"Light Weight" .. .. .	48½%	34½%	22½%
"Heavy Weight" .. .. .	41%	26½%	6½%

**COPPERSMITH AND ZINC WORKER***Copper*

Hot rolled copper sheeting in 1 cwt. lots, all gauges to 24 wire gauge (3 cwt. lots and over) .. .. .	per lb.	1/1½
Basic for light gauge copper tube, solid drawn .. .. .	per lb.	1/1
Basic for copper tube, solid drawn screwing sizes .. .. .	per lb.	1/1
Copper wire, 10 and 12 gauge .. .. .	per lb.	1/1
Copper nails, 1" and up .. .. .	per lb.	1/3

**GLAZIER***Sheet Glass cut to size (ordinary glazing quality)*

18 oz. clear sheet .. .. .	per foot super	3½d
24 oz. ditto or "R" quality .. .. .	" "	5d
26 oz. ditto .. .. .	" "	6½d
32 oz. ditto .. .. .	" "	8½d
½" figured rolled and cathedral glass (white) .. .. .	" "	6½d
½" ditto, approved tints .. .. .	" "	9½d

*British Polished Plate Glass cut to size*

Ordinary ½" Substance	Glazing for Purposes	Selected Glazing Quality	Silvering Quality
In Plates not exceeding			
2 ft. super .. .. .	per foot super	2/2	2/10
3 " .. .. .	per foot super	2/6	3/6
5 " .. .. .	per foot super	2/9	3/3
*45 " .. .. .	per foot super	3/3	5/-
*100 " .. .. .	per foot super	4/1	6/6

\*Plates exceeding 100 ft. super or 160 in. long or 100 in. wide at higher prices.

Special quotations should be obtained for other qualities and thicker substances.

*Wired Glass Cut to Sizes*

½" Wired cast .. .. .	per ft. super	9½d
½" Georgian wired cast .. .. .	per ft. super	10d
½" Polished Georgian wired glass .. .. .	per ft. super	3/2

† For cutting to allow for wires in adjacent pieces to be "lined up," add 4d. per foot super.

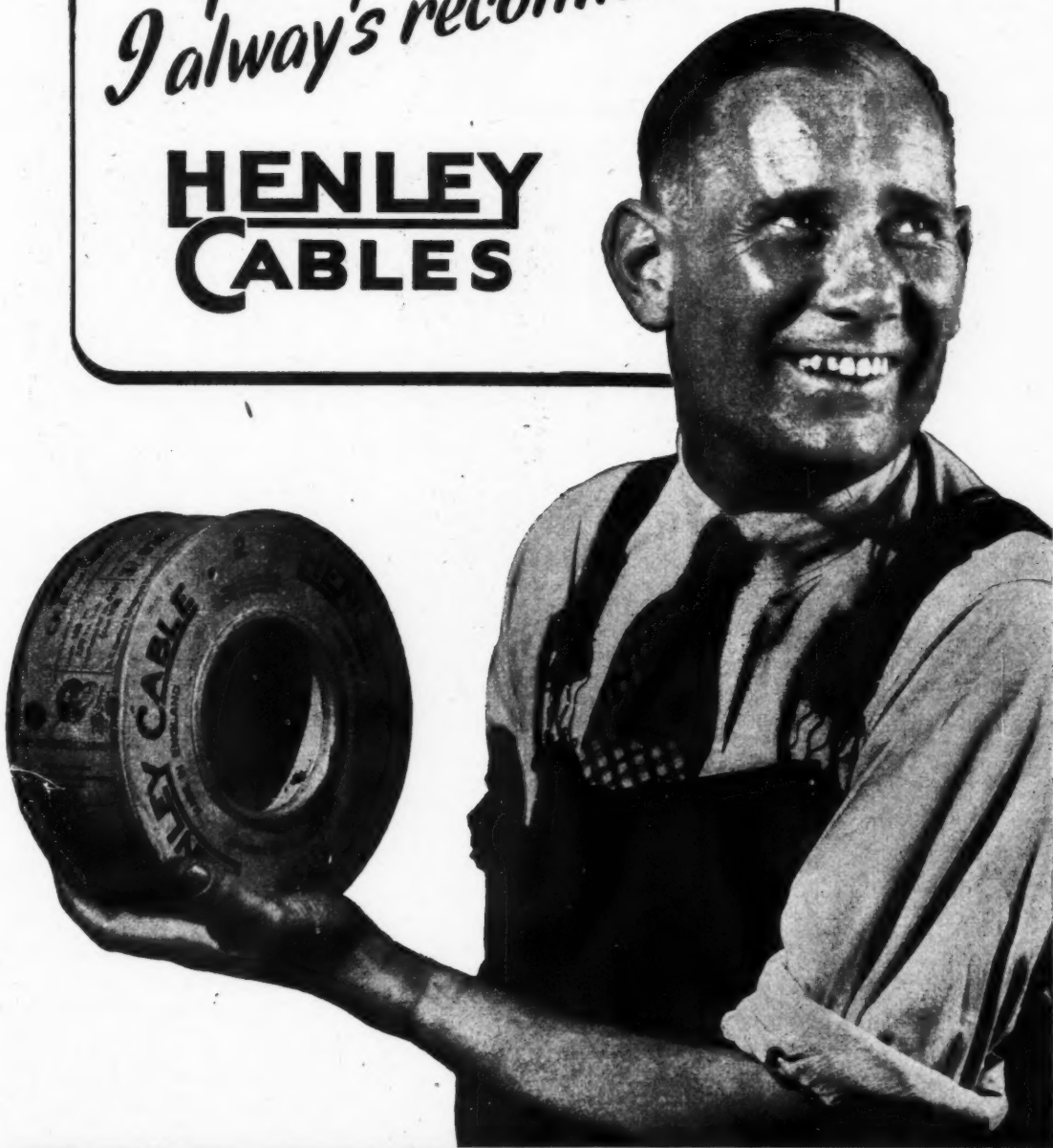
Supplied in sizes up to 110 in. long and up to 36 in. wide.

**PAINTER**

Snowcem paint .. .. .	per cwt.	56/-
White ceiling distemper .. .. .	per cwt.	22/-
Washable distemper .. .. .	per cwt.	55/- to 70/-
Ready mixed white lead paint (best), semi-gloss, per 28 lb. .. .. .		25/3
Aluminium paint (best quality) .. .. .	per gallon	32/-
White enamel .. .. .	per gallon	—
White enamel paint .. .. .	per gallon	27/-
Stiff white lead (genuine English stack process, 1 ton lots, 1 cwt. kegs) .. .. .	per cwt.	76/6
Liquid driers .. .. .	per gallon	22/-
Linseed oil raw (5-gallon drums) .. .. .	per gallon	7/10
" " boiled (5-gallon drums) .. .. .	per gallon	8/-
French polish .. .. .	per gallon	20/-
Knotting .. .. .	per gallon	24/-
Oil stain (scumble) .. .. .	per lb.	3/-
" " red oxide .. .. .	per cwt.	64/-
" " middle Brunswick green .. .. .	per cwt.	102/-
" " dark umber .. .. .	per cwt.	110/-
" " golden ochre .. .. .	per cwt.	106/-
Varnish (outside quality) oak .. .. .	per gallon	22/-
" " " copal .. .. .	per gallon	24/6
" " " flattening .. .. .	per gallon	26/-
Turpentine, genuine American 5-gallon lots .. .. .	per gallon	—
substitute .. .. .	per gallon	3/6
Creosote, 1-gallon lots .. .. .	per gallon	1/9
Linseed Oil Putty .. .. .	per cwt.	28/3
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# INFORMATION CENTRE

The function of this feature is to supply an index and a digest of all current developments in planning and building technique throughout the world as recorded in technical publications, and statements of every kind whether official, private or commercial. Items are written by specialists of the highest authority who are not on the permanent staff of the Journal and views expressed are disinterested and objective. The Editors welcome information on all developments from any source, including manufacturers and contractors.

## PHYSICAL PLANNING

### 2330 Shops

**SHOPS: THEIR NUMBER AND DISTRIBUTION.** Rachel Caro. (*Architects' Journal*, April 9, 1945, pp. 295-298.) Description of methods to determine acreage to be set aside for shops in neighbourhood of 10,000 persons. Calculations based on various types of surveys which, linked together, provide basis for local adjustments. Conditions studied include: grouping of shops; survey of shops; survey of budgets; estimate of turnover; persons per shop; types of shops.

### 2331 War Sites

**CONVERSION OF WAR SITES.** (*Architects' Journal*, April 26, 1945, pp. 313-316.) Summary of book *Adapting Wartime Sites to Post-War Uses*, prepared by Association for Planning and Regional Reconstruction for private circulation. Proposals for post-war treatment of sites chosen for industrial wartime purposes and for methods of survey in selecting industrial sites. Typical wartime site is taken to demonstrate.

### 2332 Voronezh

**VORONEZH REPLANNED.** L. Rudnev and I. Tkachenko. (*Architects' Journal*, February 15, 1945, pp. 133-136.) Survey of historical growth of Voronezh. Replanning proposals for almost completely destroyed town based on modern requirements for zoning of industrial and residential areas. Relocation and separation of industrial area from residential districts by protective park zone. Widening of main roads and squares retaining radial pattern of main thoroughfares. Creation of huge architectural ensembles to enhance sky-line. Ample provision of housing accommodation to relieve densely populated areas, together with generous open spaces.

### 2333 Regional Planning

**REGIONAL REPLANNING: AN OUTLINE FOR A SURVEY AND PLAN.** D. Dex Harrison, P. Whiting, K. Smith. (*Architects' Journal*, June 28, 1945, pp. 477-482.) Simple illustrative method of procedure and presentation to show various planning stages be-

tween initial and final proposals for any region. London region taken as example demonstrating method by means of 17 planning diagrams from industrial pattern to final plan of region.

### 2334 Wolverton

**WOLVERTON URBAN DISTRICT: THE TOWN AND COUNTRY PLAN.** G. A. Jellicoe. (*Architects' Journal*, October 18, 1945, pp. 277-286.) Illustrated report on survey and plan for Wolverton Urban District to remedy main problems of area, namely, insufficient variety in population, and lack of harmony between urban features and rural setting. Planning proposals include limited immigration with large-scale tree planting linking new parks with new housing schemes.

### 2335 Gorhambury

**AN ESTATE REPLANNED: STUDY OF GORHAMBURY IN THE COUNTY OF HERTFORDSHIRE.** (*Architects' Journal*, November 22, 1945, pp. 375-380.) Survey of 1,800 acres country estate near St. Albans prepared by Association for Planning and Regional Reconstruction as basis for future development proposals. Investigations and suggestions mainly concerned with: Requirements of good farming; best possible use of land; estate development in relation to surrounding district; incorporation of outstanding

features of historical significance in general development scheme; requirements of farmworkers, and provision of recreational facilities for people of St. Albans. Summary of findings includes list of survey maps and sources of information.

### 2336 Gravesend

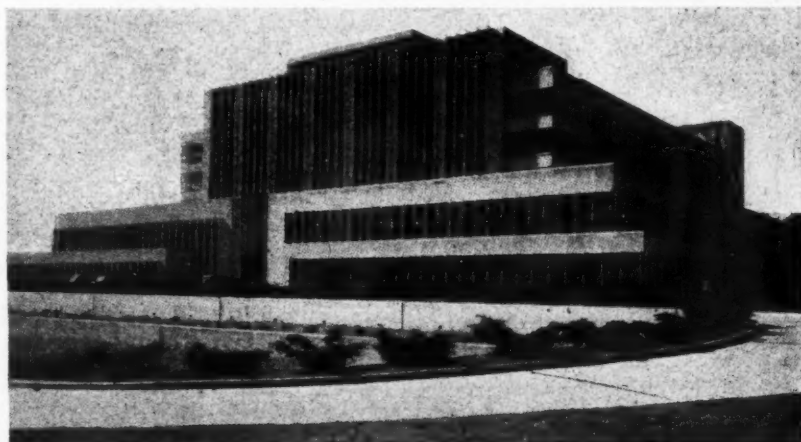
**GRAVESEND REPLANNED.** Redevelopment Plan by G. E. Hill, M. Fuller and D. H. E. Hockley. (*Architects' Journal*, December 13, 1945, pp. 429-432.) Draft development plan for town centre prior to final report to be published later. Proposals include division of new centre into four main parts—municipal centre, river front development, new recreation centre, industrial area. Provision of ringroad around town centre with adequate transport and parking facilities for inner core together with independent pedestrian network. Housing development, suggested in vicinity of commercial centre, to be grouped in self-contained units with own communal facilities.

## MATERIALS

### 2337 Timber Research

**TIMBER PRODUCTS RESEARCH SECRETS.** (*Engineering News-Record*, November 15, 1945, pp. 678-680.) Latest technical developments resulting from timber-products research during the war. Possible peacetime applications.

The US Forest Products Laboratory at Madison, Wis., with a staff of 700, played an important role during the war. Improvements in packaging overseas shipments saved over one thousand million board feet of critically scarce lumber per year. Improved resins and new methods in the curing of glued laminated timbers was a great contribution to shipbuilding. Advancement in the fire-retardant treatment of timber decreased the loss from fire. Among the several new products developed were improved plywood, wood plastics, "sandwich" construction, and a host of modified woods. One of the most promising developments is a paper-base laminate termed Papreg. It is about half as heavy as



US Forest Products Laboratory at Madison, Wis., where great advances in timber research were made during the war. See No. 2337.

aluminium, yet has a tensile strength of 35,000 to 50,000 lb./sq. in. Four new modified woods show widespread possibilities for commercial use. They have been termed Impreg, Compreg, Stappak and Stabwood (see No. 1838:15.3.45). Impreg is one of several species of wood which has been treated with resin forming chemicals followed by curing of the resin without compressing the wood. It may be used as facing for ordinary plywood. Compreg is compressed under heat and pressure to a specific gravity of .9 to 1.4, and is a suitable material for furniture and flooring. Both Impreg and Compreg are more brittle than the original wood. To meet the demand for a compressed product tougher than Compreg, a material named Staypak has been developed, which is a compressed wood containing no resin. Staypak is not so water resistant as Compreg, but it is twice as tough and has higher tensile and structural properties.

The cheapest and simplest method of imparting dimensional stability to wood is to heat the wood under conditions that just avoid charring. This product is called Stabwood. It is produced by heating the wood for a few minutes under molten metal. The wood becomes dark brown, loses about one half of its original toughness, together with moderate losses in other strength properties.

Two types of experimental dwelling houses in plywood, on the stressed skin principle, were developed at the laboratory in 1937. Some of their design and constructive innovations were incorporated in wartime housing. The laboratory has also developed special panels 16 by 32 in., to be attached to conventional frames.

## STRUCTURE

2338

The B-J House

THE B-J HOUSE. J. H. Markham (*Architectural Design and Construction*, November 1945, pp. 262-265.) Steel framed structure clothed externally with prefabricated panels.

The steel skeleton of the house is formed by two façade frames and a ridge frame, connected by the first floor beams and roof trusses. Wood flooring units of standardised design and light frames with plaster board surface to provide a ceiling are supported on the floor beams. The ceiling under the roof is similar. The roof is covered with asbestos and no thermal insulation is provided under it.

All the water services are kept below the ceiling. Most of the partitions are formed by cupboards, the small remainder is made of a light-weight material of a novel type which is not further described. The external cladding consists of prefabricated panels of 3 ft. 6 in. and 3 ft. width. These are formed as a light steel frame extending from ground floor to eaves level. The panel filling may be of any thin sheet material. For the prototype corrugated asbestos has been selected. It is proposed to apply to the back of the asbestos sheets a  $\frac{1}{2}$ -in. layer of sprayed asbestos after erection, to provide adequate thermal insulation. The inner surface may be formed of panels similar to those in the ceiling. The thermal insulation is higher than that of an 11-in. brick cavity wall and exceeds the minimum requirement in housing.

## QUESTIONS

### and Answers

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. 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.

2339

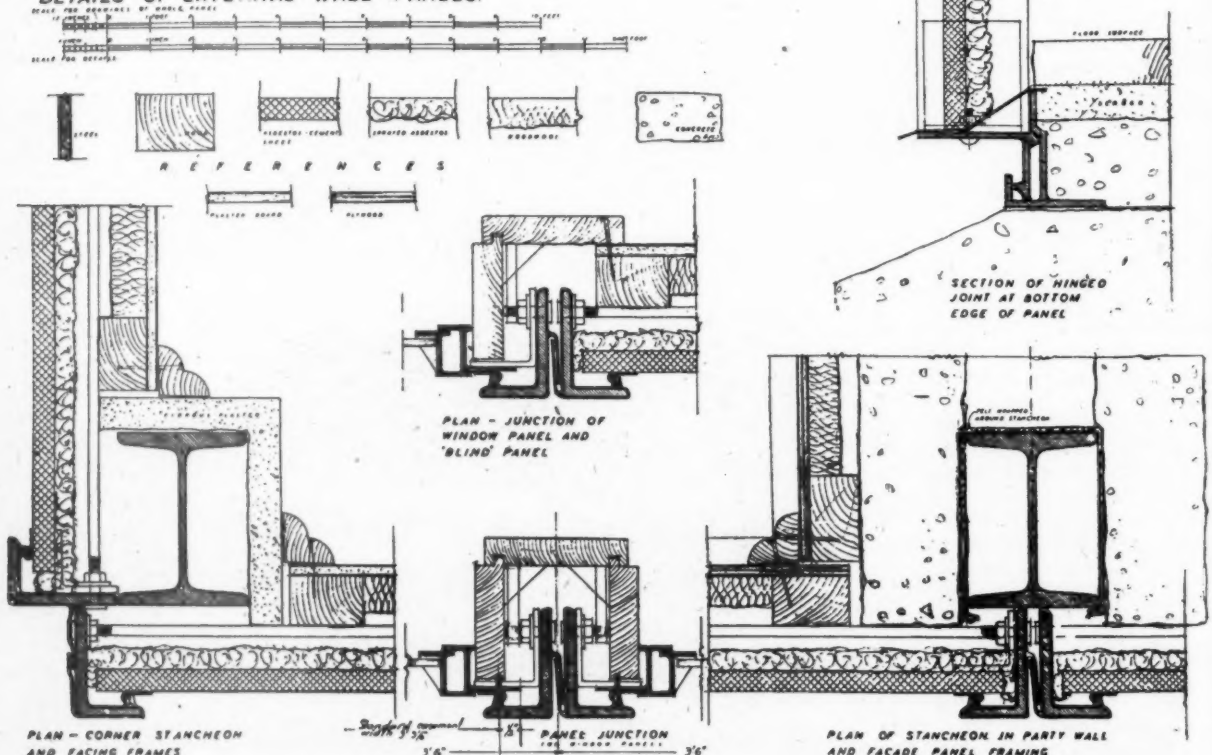
Fluorescent Tubes

Q Can you give me some information on a lighting problem in our drawing office? The lighting is by fluorescent tubes 5 ft. long overall, run off single-phase 50-cycle A.C. and fixed about 3 ft. 6 in. to 4 ft. 0 in. above drawing board level. The light is good but most of the staff complain of eyestrain and headaches.

A In our opinion 3 ft. 6 in. to 4 ft. 0 in. above the drawing board is too low. Trouble is sometimes experienced with fluorescent lighting, due to the flicker at the end of the tubes. One method of avoiding this trouble is to cover up the ends, but a more effective way is probably by means of a special condenser fitted to the circuit.

We would suggest you get in touch with the General Electric Co., Kingsway, W.C.2.

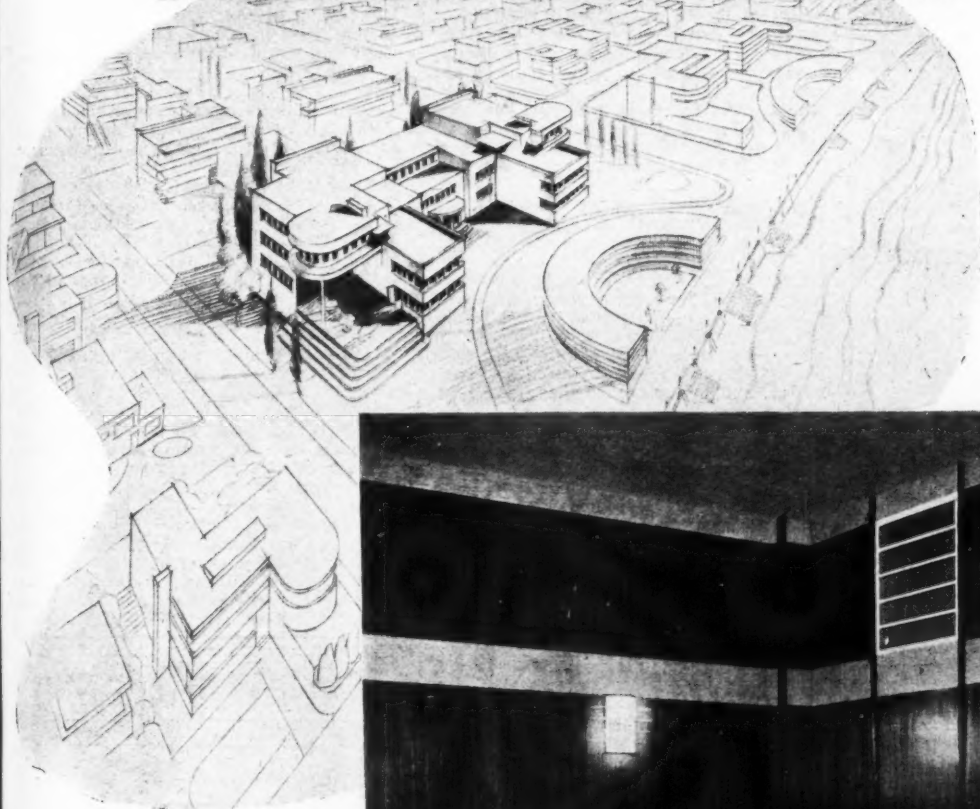
### DETAILS OF EXTERNAL WALL PANELS.



The B-J House; details of the external wall panels. See No. 2338.

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Architect: Oliver Hill, F.R.I.B.A.

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ADDRESS .....

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A.J. 24.1.46

## Announcements

Mr. T. Munthe, of 2, Carlisle Mansions, Carlisle Place, London, S.W.1, who is acting as UK representative of the Swedish Timber-House Export Association of Stockholm, the group of leading manufacturers, informs us that Mr. O. Forssell, the Chief Architect of their Association, has arrived in London on a month's visit. He is accompanied by two of their Engineers, Messrs. P. Herrmann and H. Sandström. The object of the visit is to study at some of the sites in Britain the erection of and other matters connected with the timber houses now being imported by the Government from Sweden.

Capt. Alan L. Booth, A.R.I.B.A., has been released from the Services and will be glad to receive general trade catalogues, etc., at 33, Arlow Road, Winchmore Hill, London, N.21.

Messrs. Matthews & Son (incorporating John Farrer & Sons), Architects and Surveyors (M. K. Matthews, F.R.I.B.A., F.S.I.; H. G. May, B.Sc., F.S.I., A.M.T.P.I.; W. Stuart Smith, F.S.I.; D. M. B. Wood, F.S.I.), have removed their offices from 72, Tottenham Court Road, W.1, to 91, Gower Street, W.C.1 (Euston 8511).

Mr. Peter H. Caspari, M.INST.R.A., Registered Architect, has been released from war service, and has re-opened the practice he carried on at 102, Baker Street, W.1, before the war, at temporary premises, 7, Abercorn Mews, Violet Hill, N.W.8, where he would like trade catalogues to be sent.

Mr. Stanley F. Ashby, A.R.I.B.A., has been appointed Surveyor to the Baptist Union Corporation, Limited, and will be pleased to receive trade catalogues, information sheets and data relating to the availability of materials at his office, the Baptist Church House, 4, Southampton Row, London, W.C.1.

Messrs. Andrews & Winton-Lewis, A.R.I.B.A., Chartered Architects and Surveyors, of 37, West Street, Brighton, Sussex, announce that they have taken additional offices at 12, City Road, Finsbury Square, London, E.C.1. They will be pleased to receive catalogues.

Captain G. E. Bright, R.E., A.R.I.B.A., Architect for the Cathedral of the Holy Trinity, Gibraltar, having been released from H.M. Forces, has opened temporary offices at No. 28, Great Castle Street, Oxford Circus, London, W.1. Telephone: Mayfair 4761/2.

Mr. Naim Barzel, A.A.D.P., Architect, is now in private practice and would like to receive manufacturer's literature at Kreimat, Baghdad.

Mr. G. W. Lacey, C.B.E., B.Sc., A.R.I.C., General Sales Manager responsible for the Sales Division of The British Aluminium Co., Ltd., has been appointed a member of the Board of Directors. Mr. E. A. Langham, recently returned from India, has taken up his appointment as Sales Manager in the Sales Division. On the appointment of Mr. E. A. Langham as Sales Manager, Mr. A. W. Langham, who has been Acting Sales Manager and responsible for the Sales and Sales Planning Departments, has taken up his appointment as Sales Planning Manager.

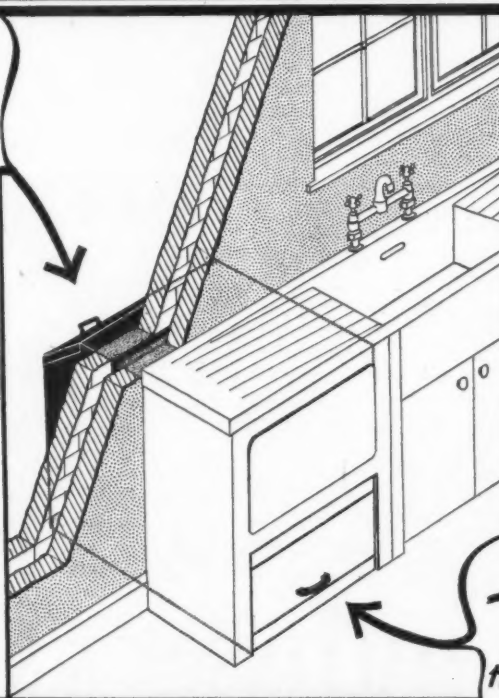
Mr. F. J. Meekins, F.I.A.S., announces that Mr. Francis L. Rourke, P.A.S.I., has joined the firm of F. J. Meekins & Partners, Oxford Circus House, 245, Oxford Street, London, W.1, as partner. Mr. Rourke has for some time held the position of Superintending Surveyor in the firm and will remain in sole charge of the department that he previously supervised.

The Cement and Concrete Association has appointed Mr. Francis Meynell to be the Director of the Association. It will be recalled that Mr. Meynell is amongst those designated for the honour of a knighthood in the New Year's Honours List.

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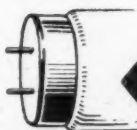
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Replies to Box Numbers should be addressed care of "The Architects' Journal," War Address: 45 The Avenue, Cheam, Surrey.

## Public and Official Announcements

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THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: 75, EATON PLACE, LONDON, S.W.1. TEL.: SLOANE 5615, 991

## BOROUGH OF ILFORD.

## APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant in the Borough Engineer and Surveyor's Department.

Applicants must have had previous experience of school work, and should be Registered Architects, and preference will be given to Associates of the Royal Institute of British Architects.

The commencing basic salary will be up to £400 per annum, depending upon the experience and qualifications of the candidate. The salary is subject to the addition of a war bonus, at present amounting to 23s. per week.

The appointment is temporary, but is likely to be for a minimum period of two years in the case of a suitable candidate, and will be subject to the provisions of the Local Government Superannuation Act, 1937.

Applications, stating age, present and previous positions and experience, must be delivered to the undersigned not later than first post on the 30th January, 1946.

CHARLES N. ROBERTS, Town Clerk.

Town Hall, Ilford. 7th January, 1946. 577

## BOROUGH OF LUTON.

## BOROUGH ENGINEER'S DEPARTMENT.

## APPOINTMENT OF TECHNICAL STAFF.

Applications are invited for the following appointments:—

(1) CHIEF PLANNING ASSISTANT. Salary £600 per annum, rising by annual increments of £25 to £750 per annum. (Previously advertised at £500—£25—£600 per annum.)

(2) ESTATES AND MAINTENANCE ASSISTANT. Salary £500 per annum, rising by annual increments of £25 to £600 per annum. (Previously advertised at £420—£20—£480 per annum.)

(3) ARCHITECTURAL ASSISTANT. Salary £420 per annum, rising by annual increments of £20 to £480 per annum.

(4) ARCHITECTURAL ASSISTANT. Salary £310 per annum, rising by annual increments of £15 to £355.

Appointment No. 1 will be on the Council's permanent staff, and the remaining appointments will be temporary in the first instance, with prospects of transfers to the permanent staff. A temporary cost-of-living bonus of £59 16s. per annum will be paid in respect of each appointment, and all appointments will be subject to the provisions of the Local Government Superannuation Act, 1937.

The persons appointed to the vacancies Nos. 1 and 2 will be required to provide and maintain a car, for the use of which an allowance will be paid on the basis of the Ministry of Home Security Scale, or such other scale as may be adopted by the Council.

Applicants for appointment No. 1 must have had extensive experience in the preparation and administration of planning schemes, and be suitably qualified; for appointment No. 2, extensive experience in maintenance of buildings of all descriptions and estate work, including valuations, and be A.R.I.B.A. or P.A.S.I.; for appointment No. 3, have had extensive experience and be A.R.I.B.A.; and for appointment No. 4, have made specific progress in obtaining a recognised professional qualification.

Applications, stating age, qualifications, and experience, together with copies of not more than three recent testimonials, should be delivered, suitably endorsed, to the Borough Engineer, Town Hall, Luton, not later than Friday, 8th February, 1946. Canvassing will be a disqualification.

W. H. ROBINSON, Town Clerk.

Town Hall, Luton. 8th January, 1946. 585

## MONMOUTHSHIRE COUNTY COUNCIL.

## COUNTY ARCHITECT'S STAFF.

## APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of six permanent Grade 1 Architectural Assistants in the County Architect's Department, at a salary of £400 per annum, increasing by annual increments of £25 to a maximum of £500 per annum, plus cost of living bonus, at present £59 16s. per annum. Applicants must have a knowledge of design and construction, particularly in relation to schools, public buildings, police stations, etc., and must be Associate Members of the Royal Institute of British Architects.

The appointments will be subject to the Local Government Superannuation Act, 1937, and to the Regulations of the Council in force from time to time governing their administrative, technical and clerical staff, and will be determinable by one month's notice on either side. The successful candidates will be required to pass a medical examination.

Forms of application and conditions of service can be obtained from the undersigned. Applications, stating age, experience, and qualifications, together with copies of three recent testimonials, must be delivered to Mr. Colin L. Jones, F.R.I.B.A., County Architect, Queen's Hill, Newport Mon., not later than first post on the 4th February, 1946.

VERNON LAWRENCE,

Clerk of the Council.

County Hall, Newport, Mon. 570

## COUNTY BOROUGH OF TYNEMOUTH.

## BOROUGH SURVEYOR'S DEPARTMENT.

## TECHNICAL STAFF.

Applications are invited for the following positions:—

TWO SENIOR ARCHITECTURAL ASSISTANTS (Permanent), at a salary of £420 per annum, plus war bonus, who must be Associate Members of the Royal Institute of British Architects.

ONE QUANTITY SURVEYING ASSISTANT (Permanent), at a salary of £420 per annum, plus bonus, who must be a Professional Associate of the Surveyor's Institution (Quantities Section). Applicants for the above position must be experienced in the preparation of Specifications and Bills of Quantities, etc.

ONE JUNIOR ARCHITECTURAL ASSISTANT (Temporary), at a salary of £315, rising to £360 per annum, plus bonus, who must have passed part of the final examination of the Royal Institute of British Architects.

ONE JUNIOR ENGINEERING ASSISTANT (Temporary), at a salary of £315, rising to £360 per annum, plus war bonus. Applicants must have passed A and B Sections of the Civil Engineers' examination, or part of the Testamur of the Municipal and County Engineers.

THREE DRAUGHTSMEN (Tracers) (Temporary), at a salary of £240, rising to £270 per annum, plus war bonus, preferably with experience in Housing and Sewerage Schemes.

The persons appointed will be required to contribute to the Council's Superannuation Act, 1937, and to pass the required medical examination. The Ministry of Labour and National Service have given permission under the Control of Engagements Order, 1945, for the advertisement of the position of Junior Engineering Assistant above No. E.2068X.

Applications, stating age, experience and qualifications, and accompanied by copies of three recent testimonials, must be delivered to Mr. D. M. O'Herlihy, B.Sc. (Eng.), M.I.C.E., Borough Surveyor, Howard Street, North Shields, not later than the 2nd day of February, 1946. Canvassing, either directly or indirectly, will be deemed a disqualification.

Dated this 18th day of January, 1946. 602

## BOROUGH OF BARNES.

## APPOINTMENT OF PERMANENT ARCHITECTURAL ASSISTANT.

Applications are invited for this appointment in the Borough Engineer's Department from candidates who are Associates of the Royal Institute of British Architects, or who hold an equivalent qualification. Previous local government experience is not essential.

The salary will be £505 per annum, rising, subject to satisfactory service, to £525 at the end of one year. Cost-of-living bonus, at present £59 16s. a year, will be paid in addition.

The appointment will be subject to the Local Government Superannuation Act, 1937, to the successful candidate passing a medical examination, and to one month's notice on either side.

Applications, giving age and particulars of past experience and accompanied by copies of two recent testimonials, should be sent to the Borough Engineer of Barnes, Borough Engineer's Office, 289, Sheen Road, Richmond, Surrey, so as to reach him not later than 2nd February, 1946.

Canvassing will disqualify.

ARTHUR C. FOX, Town Clerk.

7, Orchard Rise, Richmond, Surrey. 612

## BOROUGH OF PRESTWICH.

## BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

## APPOINTMENT OF ARCHITECT.

Applications are invited for the appointment of Architect in the Borough Engineer and Surveyor's Department, at a commencing salary of £200 per annum, rising by annual increments of £20 to a maximum of £460 per annum, subject to satisfactory service, plus the cost-of-living bonus at present £59 16s. per annum.

Applicants should hold suitable qualifications, and have had previous architectural experience. The work involves the preparation of post-war municipal housing schemes, including the laying out of estates, the design of houses, and the preparation of drawings, specifications, and bills of quantities in connection therewith.

The appointment is a temporary one, terminable by one month's notice from either side. It is anticipated that the work will cover a period of two years.

Applications, stating age, qualifications and experience, etc., and accompanied by copies of two recent testimonials, to be sent to the undersigned not later than Thursday, 31st January, 1946.

Canvassing, either directly or indirectly, will be deemed a disqualification.

F. W. ASHTON, Town Clerk.

Town Clerk's Office, Town Hall, Prestwich. 18th January, 1946. 611

## COUNTY BOROUGH OF WEST BROMWICH.

## BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

## APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the following appointments:—

(a) Architectural Assistant. Salary £450 per annum, rising by annual increments of £15 to £510 per annum, plus cost-of-living bonus.

(b) Architectural Assistant. Salary £370 per annum, rising by annual increments of £15 to £470 per annum, plus cost-of-living bonus.

(c) Architectural Assistant. Salary £355 per annum, rising by annual increments of £15 to £430 per annum, plus cost-of-living bonus.

The cost of living bonus is at present at the rate of £59 16s. per annum.

Preference will be given to candidates who are Registered Architects and/or Associate Members of the Royal Institution of British Architects.

The appointments are subject to the provision of the Local Government Superannuation Act, 1937, to a satisfactory medical examination, and to the termination of each appointment by one month's notice in writing on either side.

Applications, stating age, qualifications, and full particulars of training and experience, accompanied by copies of three recent testimonials and endorsed "Architectural Assistant," must reach the undersigned not later than Monday, the 11th February, 1946.

Canvassing will be a disqualification.

JOHN G. JEFFERSON, M.Inst.C.E.

Borough Engineer and Surveyor.

Town Hall, West Bromwich. 10th January, 1946. 611

## COUNTY BOROUGH OF HUDDERSFIELD.

## APPOINTMENT OF TOWN PLANNING ASSISTANTS.

Applications are invited for the following appointments:—

(a) CHIEF TOWN PLANNING ASSISTANT.

(b) SECOND TOWN PLANNING ASSISTANT.

Candidates for the appointment of Chief Assistant should have had considerable experience in the preparation and administration of Statutory Planning Schemes, including the redevelopment of built-up areas, and preference will be given to those who are Associate Members of the Town Planning Institute and have in addition either architectural, engineering, or surveying qualifications. Applicants are asked to state what salary they require. Cost-of-living war bonus, which will be paid in addition, is at present £59 16s. per annum.

Candidates for the appointment of Second Assistant should have had experience in the preparation of general development plans and estate layouts, including the design and construction of roads and sewers. Preference will be given to those having accepted qualifications. The salary for this appointment is £350 per annum, rising by annual increments of £25 to £400 per annum (plus cost-of-living war bonus, at present amounting to £59 16s. per annum), and the commencing salary may be fixed above the minimum of the scale, depending on the experience of the candidate.

The persons appointed will be required to pass a medical examination and to contribute to the superannuation fund.

Applications, giving full particulars of age, qualifications and experience, and accompanied by copies of not more than three recent testimonials, should be forwarded to the Borough Architect, High Street Buildings, Huddersfield, not later than the 11th February, 1946.

HARRY BANN, Town Clerk.

Town Hall, Huddersfield. 612



## BOROUGH OF MACCLESFIELD.

## APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, at a salary of £400 per annum, rising by two annual increments (subject to satisfactory service) to £450 per annum, plus current war bonus.

Candidates should be A.R.I.B.A. or have an equivalent qualification. A Surveying or Town Planning qualification and previous experience in municipal housing schemes would be an advantage.

The post will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, stating age, experience and qualifications, and accompanied by a copy of a recent testimonial, and giving the names, etc., of two referees, should reach the undersigned not later than Saturday, the 2nd February, 1946.

WALTER ISAAC.

Town Hall, Macclesfield.  
10th January, 1946. 604

## COUNTY BOROUGH OF CROYDON.

## ARCHITECTURAL ASSISTANT.

## BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited from qualified persons for the post of Architectural Assistant on the established staff. The person appointed will carry out his duties under the direction of the Assistant Architect. Applicants must have had a good general knowledge of the architectural work undertaken by a local authority (excluding schools).

Salary, £340-£385 (grade B), plus war bonus (at present £59 16s. per annum).

If the successful candidate is unable to obtain reasonable living accommodation the Council will endeavour to assist.

Form of application may be obtained from the Borough Engineer, Town Hall, Croydon, and should be returned to him not later than 9th February, 1946.

E. TABERNER.

Town Clerk.  
610

## WEST MIDLANDS JOINT ELECTRICITY AUTHORITY.

## APPOINTMENT OF ARCHITECTURAL DRAUGHTSMAN.

The above-named Authority invite applications for the position of Architectural Draughtsman on the permanent staff of the Authority, at a salary of £420 per annum, subject to adjustment for variations in the cost of living.

The appointment will be subject to the Authority's Superannuation Scheme under the Local Government Superannuation Act, 1937, and the selected candidate will have to pass a medical examination.

Experience in the preparation of working drawings, detailed specifications, estimates, and quantities is essential.

Possession of an architectural degree or diploma will be an advantage.

Applications, stating age, education, experience, and present occupation, accompanied by copies of three recent testimonials, and endorsed "Architectural Draughtsman," should reach the undersigned not later than the 4th February, 1946.

Canvassing, either directly or indirectly, will disqualify.

H. F. CARPENTER.

Clerk and Manager.  
Phoenix Buildings, Dudley Road,  
Wolverhampton.  
10th January, 1946. 613

## COUNTY BOROUGH OF SOUTHAMPTON.

## TOWN PLANNING AND DEVELOPMENT DEPARTMENT.

Applications are invited for the appointment of TECHNICAL ASSISTANT, in the Town Planning and Development Department of the Corporation, at a salary of £390 per annum, rising to £435, plus a cost-of-living bonus. Appointment will be temporary in the first instance.

Applicants should have good experience in a town planning office, and professional qualifications will be an advantage.

Applications in writing, accompanied by copies of two testimonials, should be made to the undersigned at the Civic Centre, Southampton, not later than Saturday, the 23rd February, 1946.

R. R. H. MEGGESSON.

Town Clerk.  
616

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**ARCHITECTURAL ASSISTANT** wanted in London office of Staff Architect to large industrial company; well trained, good draughtsman, able to handle large and small jobs from sketch plans to finish; salary, £400 to £500, according to qualifications. Apply Box 605.

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**LIEUTENANT** (age 27), awaiting early release from Army, capable most kinds of work, working drawings, specifications, etc., and continuing studies, seeks progressive position in London district; keen and prepared to take any kind of position, with responsibility and prospects. Box 241.

**DIPL. ARCH.** (Regent Street Polytechnic), registered architect, Austrian nationality, seeks position with Local Authority or in progressive office; London only; at present with County Council. Box 246.

**ARCHITECT, A.R.I.B.A., A.M.T.P.I.** (31), single, with scattered interests but no set practice, just returned from three years service East, wishes to contact Lady Architect (single) with a view to establishing a settled practice, and should interests prove mutual, life partnership. Box 253.

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**REGISTERED ARCHITECT** (35), just released from Forces, efficient draughtsman, experienced in housing, hotel work, and alterations; Midlands or North office preferred; salary, £7 per week. Box 259.

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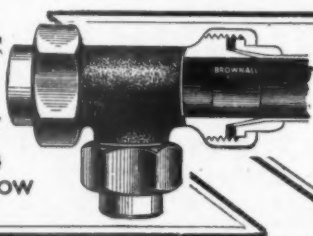
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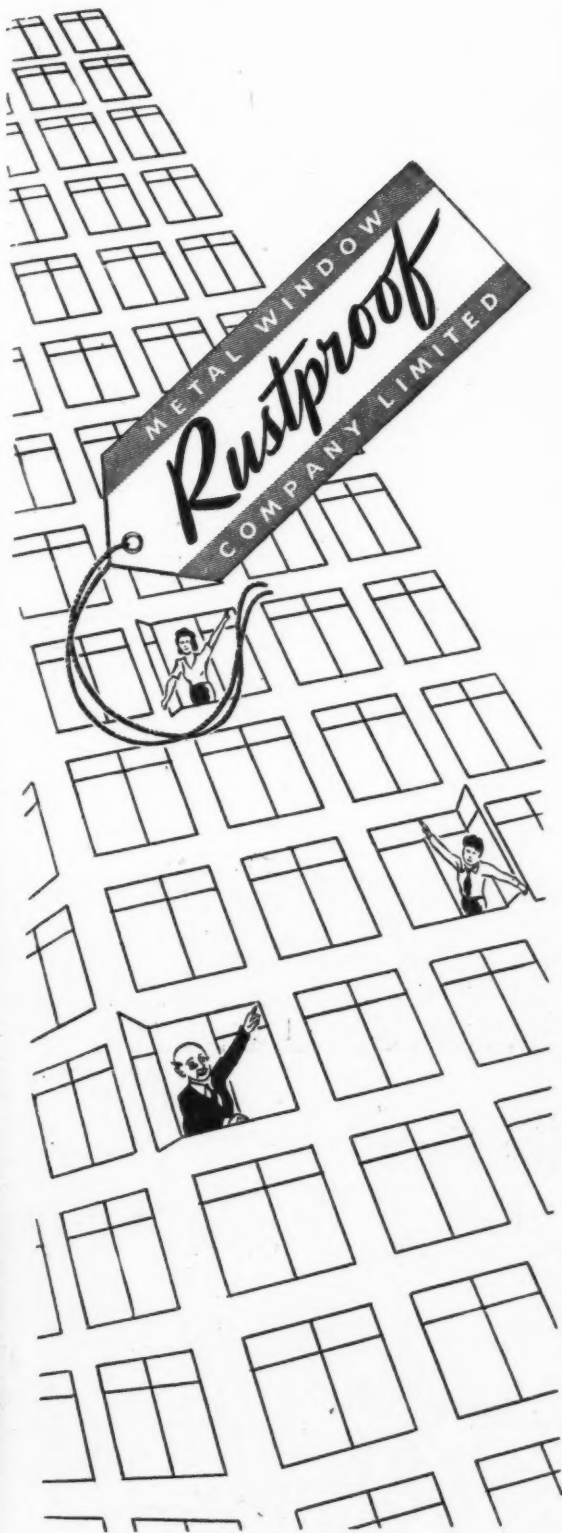


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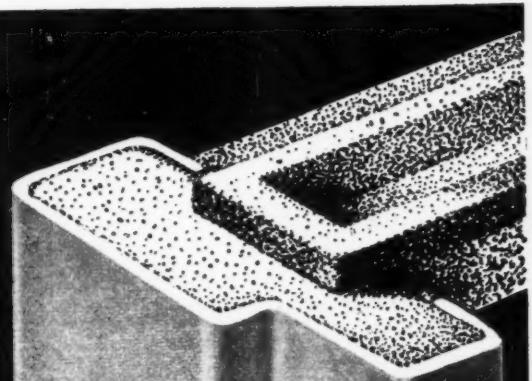
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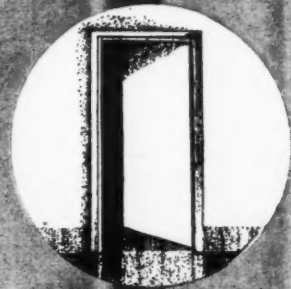
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