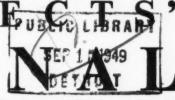
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enery issue does not necessarily contain all these contents, but they are the regular features which continually recur.

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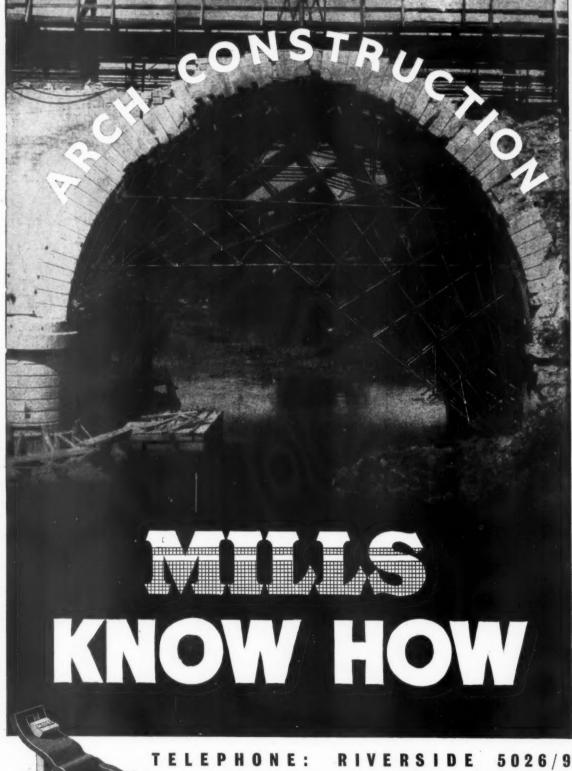
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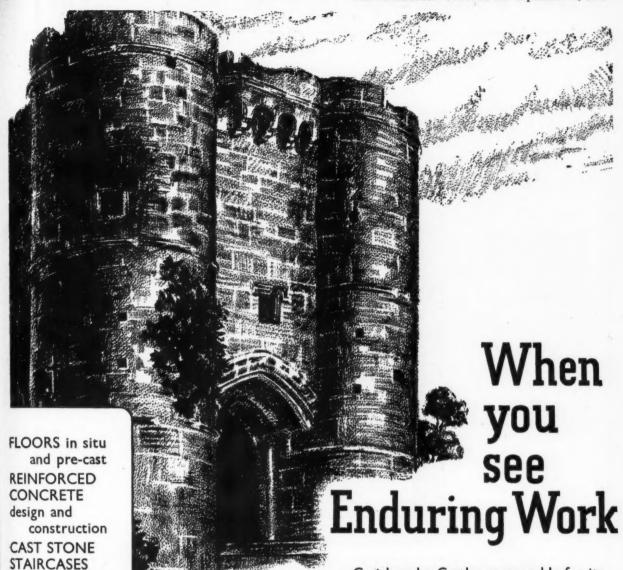
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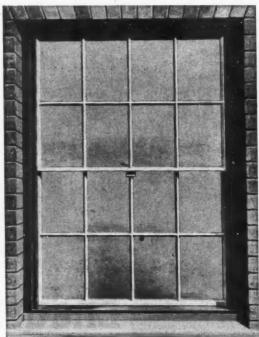
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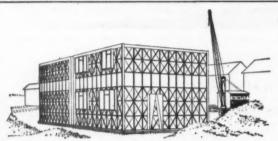
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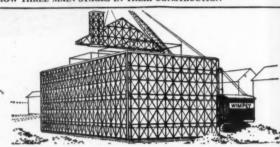
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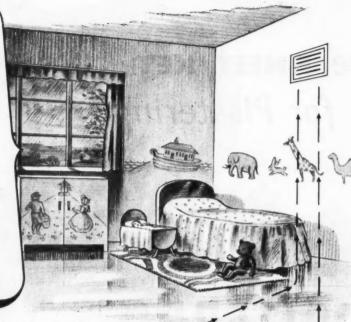
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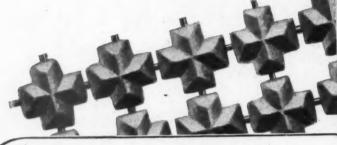




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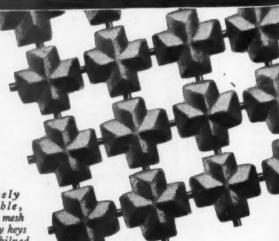
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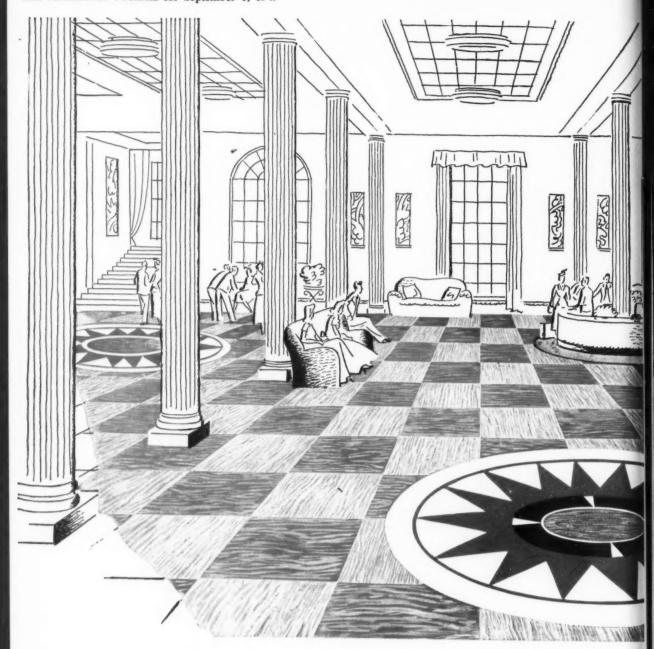
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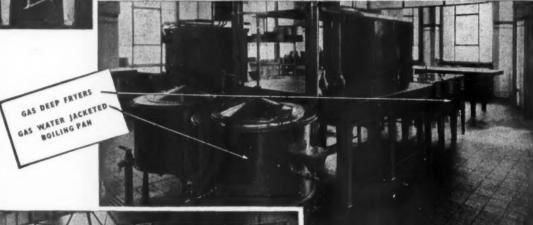
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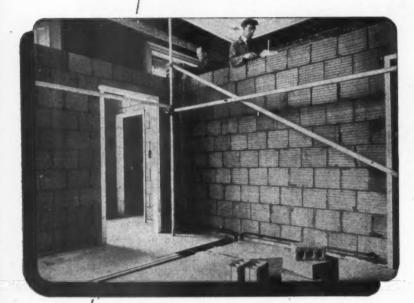


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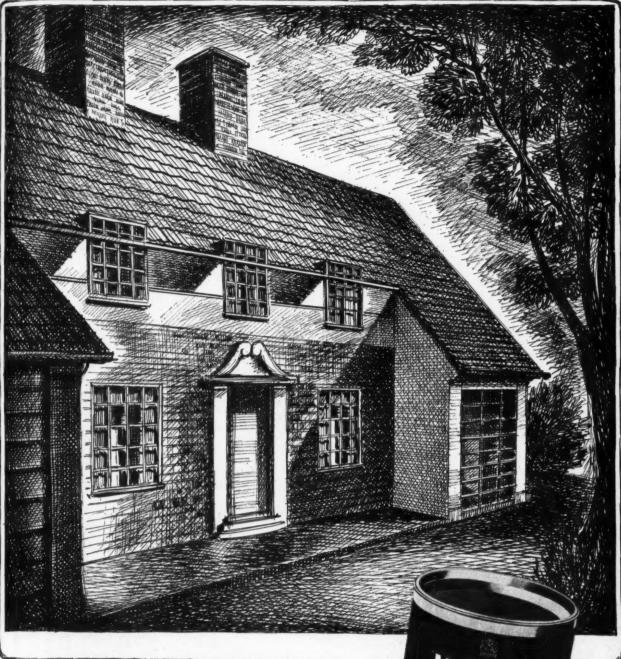
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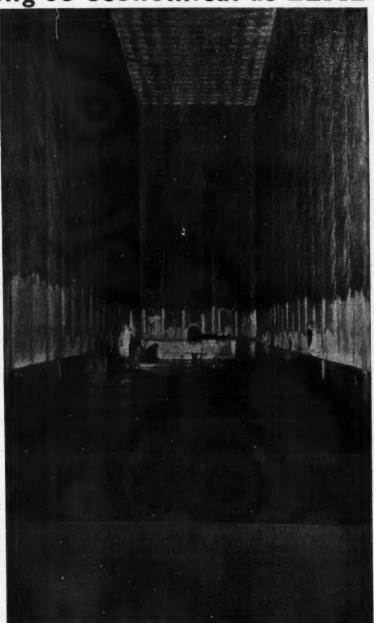
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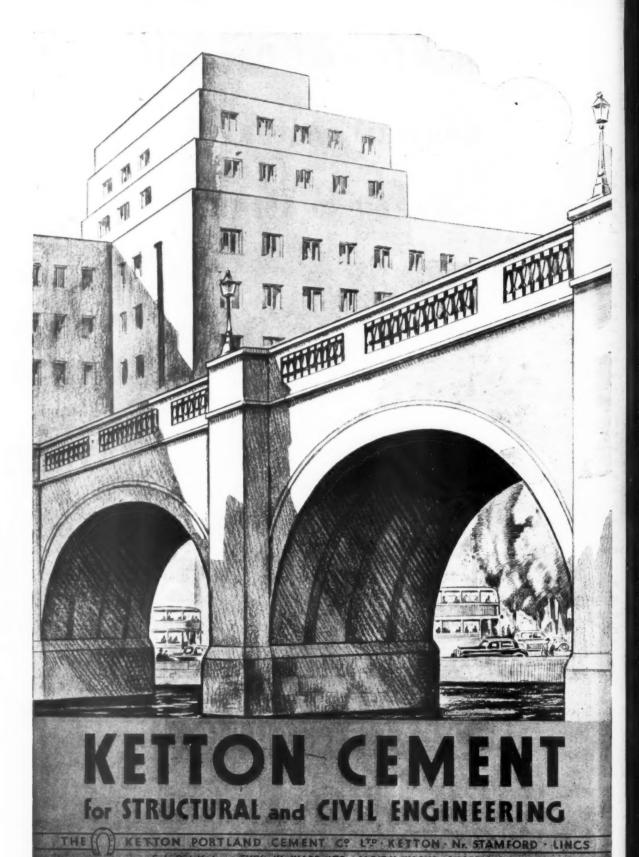
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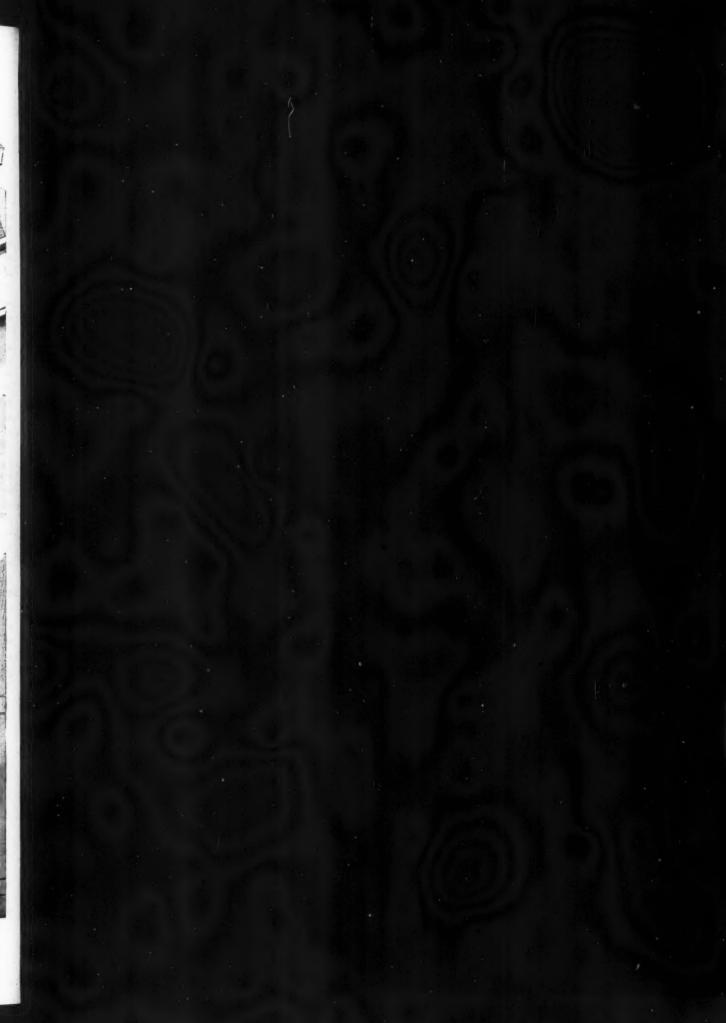


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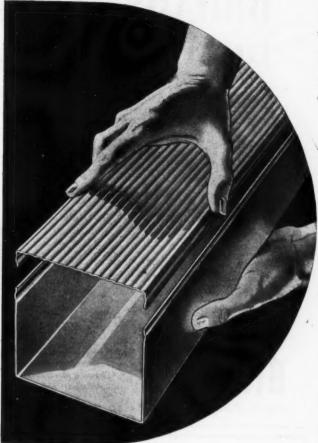
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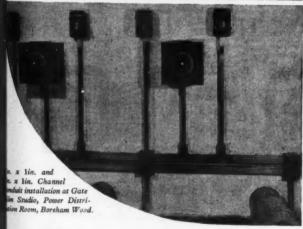
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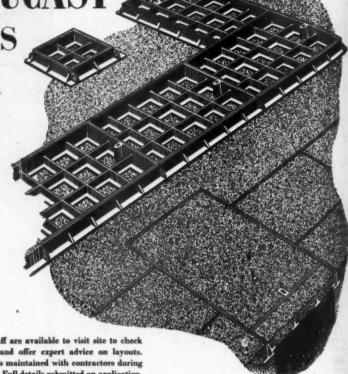
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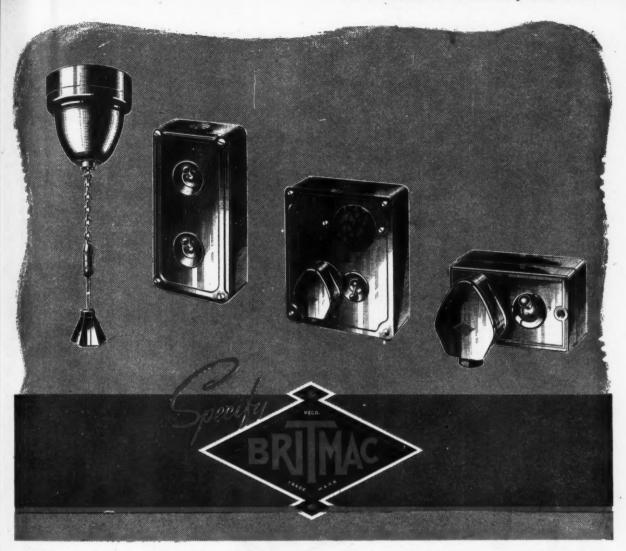
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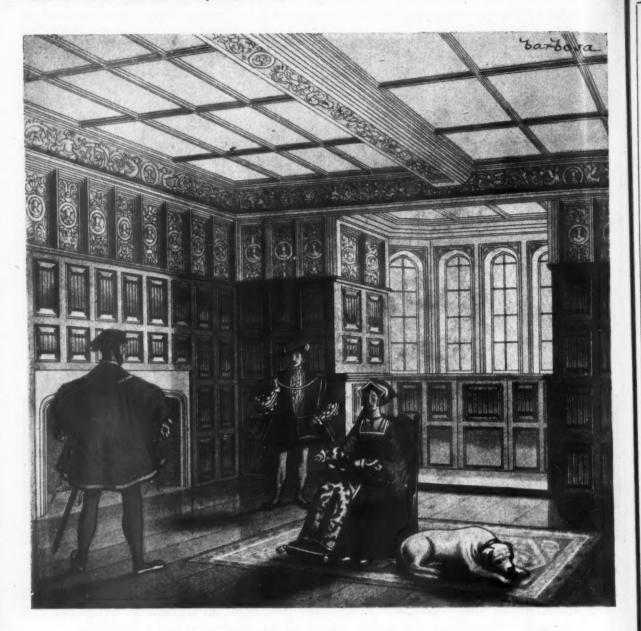
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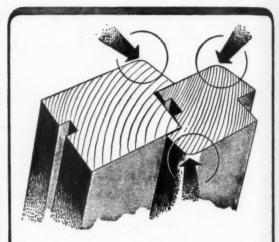
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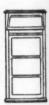


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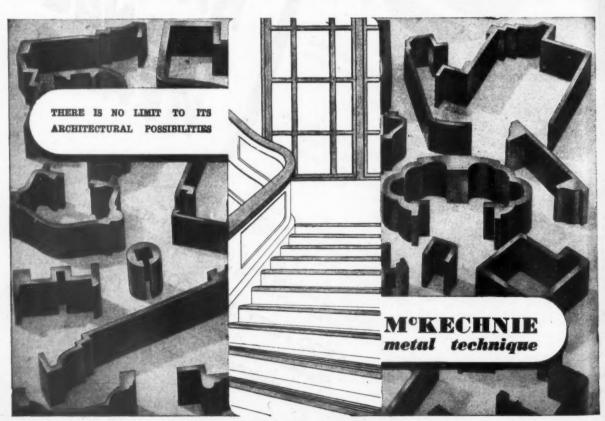
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Described & illustrated in this issue pages 223-225

Other contracts completed or in progress for Middlesex County Council are:

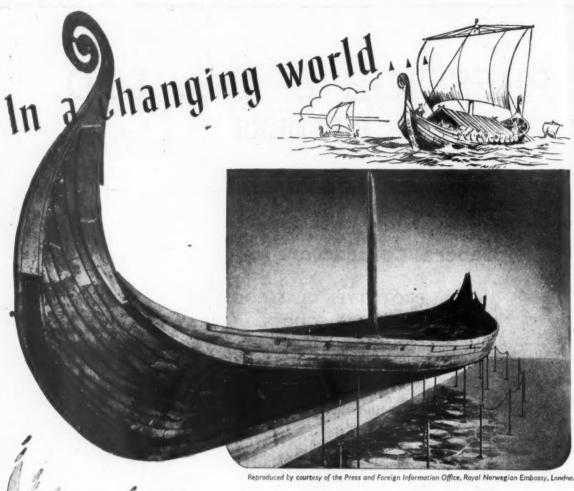
Lascelles Secondary Modern School Porlock Avenue Harrow

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# DIARY FOR SEPTEMBER AND OCTOBER

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 given in the glossary of abbreviations on the front cover.

BRADFORD. Design Week organized by the Council of Industrial Design. Details to be announced locally. SEPT. 12-17

G LASGOW. Electrical Appliances Exhibition. (Permanent.) Electrical Section, Scottish Building Centre, 425 and 427, Sauchiehall Street, Glasgow, C.2.

Scottish Industries Exhibition. Kelvin Hall. (Sponsor, the Scottish Council.) 10 a.m. to 10 p.m. daily, except Sundays.

SEPTEMBER 1-17

L ONDON. Background to Design Exhibition. (Sponsor, CID.) Rayon Design Centre, 1, Upper Grosvenor Street, W.1. Weekdays, except Saturday, 10 a.m. to 4 p.m. Closing date not announced.

Symposium on Painting, Sculpture and the Architect. At the RIBA, 66, Portland Place, W.1. Speakers: Members from the CIAM Congress at Bergamo, Graham Sutherland, Maxwell Fry, F. McWilliam and Patrick Heron. (Sponsors: The Mars Group and the Institute of Contemporary Art.) 6 p.m.

SEPT. 2

Bedford Square Party. Exhibitions of Paintings in No. 12, Sculpture in No. 21, Architecture in No. 7, and Dancing in No. 53. Tickets: 10s. each, or 17s. 6d. for two. From ICA, 6, Fitzroy Street, W.1, or Mars Group, 7, Bedford Square, W.C.1. (Sponsors: ICA and Mars Group.) 9 p.m. SEPT. 6

Engineering and Marine Exhibition.
Olympia, Monday to Saturday, 11 a.m. to 9 p.m.
UNTIL SEPT. 10

Dry Rot Exhibition. Building Centre, 9, Conduit Street, W.C.1. (Sponsor, DSIR.) FROM SEPT. 12

T UNBRIDGE WELLS. Building Week. (Sponsor, MOW.) SEPT. 19-24

#### COMPETITIONS

Festival of Britain Competitions. (1) "Vertical Feature" competition. This will be the dominant vertical element in the exhibition. It may be completely abstract in conception or related to the theme of the exhibition. Height should relate to adjoining buildings. Overall area of site is 40 ft, square, excluding surrounding promenade area which may be used for guying. Steel and timber employed should be restricted to a minimum. Assessors: Presentation Panel of the Festival of Britain. Premiums: First

prize, £300; second prize, £150; third prize, £100. Further fees will be payable for preparation of detailed working drawings if prize-winning design is constructed.

(2) Restaurant competition. Qualities looked for will be suitability for purpose, character, originality and inventiveness. It will be in the extreme south corner of the exhibition. Site area: 14,800 ft. super; half of this may be given up to garden. Ingenious use of canvas and similar temporary materials will be an advantage. Assessors: R. Furneaux Jordan, Mischa Black, Hugh Casson, Mark Hartland Thomas and Ralph Tubbs. Premiums: First prize, £250; second prize, £200; third prize, £150. Further fees will be payable for working drawings if prize-winning design is constructed. Closing date: November 1 for "vertical feature" and November 7 for restaurant. Enquiries to Secretary of Presentation Panel, "Festival of Britain, 1951," 2, Savoy Court. W.C.2, the envelope being marked "Competition."

Competition for Design of Strip Carpet. IAAS competition open to architects and architectural students in the United Kingdom and the Commonwealth. Divided into three sections: hotels, cinemas and theatres and ships. In each section a first prize of 75 guineas and \*a second prize of 25 guineas will be awarded. Closing date, October 31, 1949. The last day for questions, September 1, 1949. Assessors, Kenneth J. Lindy, E. C. Leach, and Hurley Robinson. Technical Advisers, John Anderson and J. P. Glass. Details from the General Secretary, 75, Eaton Place, Belgrave Square, S.W.1.

Design of Community Centre. The Incorporated Association of Architects and Surveyors. Two prizes, £150 and £75, for Urban Design. Two prizes, £100 and £50, for Rural Design. Open to all architect members of the IAAS, and to any architect, whether principal or assistant, in the United Kingdom, Northern Ireland and Eire. Closing date, February 1, 1950. Applications to General Secretary, 75, Eaton Place, Belgrave Square, S.W.1.

Design for Public Hall and Restaurant. The Whitehaven Corporation invite architects resident in this country to submit designs in competition for the Public Hall and Restaurant which they propose to erect in Whitehaven. Assessor: Mr. Harold A. Dod. Premiums: £300, £250, and £175. The last day for submitting designs, March 15, 1950. A deposit of £2 is required from competitors. Conditions may be obtained on application to the Town Clerk, Town Hall, Whitehaven, Cumberland.

### NEWS

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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.

\* 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.

The Executive Committee of the UNION INTERNATIONALE DES ARCHITECTES met at Gothenberg and Stockholm from May 23 to 31, under the presidency of Sir Patrick Abercrombie. All the members of the Committee were present, and ten full meetings were held and several meetings of sub-committees. The report of M. Pierre Vago, the Secretary-General, was unanimously approved.

The Committee has accepted the offer of the Minister of Reconstruction and Urbanism of the French Government to provide office accommodation in Paris for the permanent secretariat. All national and regional sections were asked to send to the Secretary-General before November 30, a report on their organization.

Secretary-General before November 30, a report on their organization.

It was agreed to admit provisionally Hungary and Austria to membership. Regarding the request of Iran for admission, the Secretary-General was instructed to ask for further information. The Committee decided unanimously that a Spanish section and a German section could not be envisaged.

The Committee approved the actions of the Secretary-General in relation to recognition by the United Nations and UNESCO, and instructed him to continue the necessary negotiations. It was agreed to send representatives to various conferences, one organized by UNESCO in Paris, two at Geneva, and one in New York.

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### From AN ARCHITECT'S Commonplace Book

THAXTED CHURCH. [From Essex, by Phoebe Fenwick Gaye (Paul Elek. 15s.).] Much has been heard of Thaxted as the show church of Essex. Ever since the "red vicar," the late Conrad Noel, was associated with it, a kind of aura has overhung both church and village; and many strangers who could not name a single other feature in the county can talk of Thaxted church. Possibly the sense of faint disillusion was due to the fact that, by the time she arrived there, this traveller suffered from a plethora of churches and church architecture; possibly it is because she is better attuned to the low than the high church atmosphere. However this may be, at least there is no complaint to be made, visually, of Thaxted church. This thirteenth-century building stands like a beacon above its village. Its walls—that familiar mixture of flint, mortar, brick and stone—have mellowed through the years to a delicious warm tint much like that of ripening wheat. Seen with its 181-ft. spire against a summer-blue sky, it puts all your grey churches in the shade. The north porch, added later, is its peculiar pride and joy. If this is Gothic craftsmanship at its best, no wonder William Morris and John Ruskin loved the style above all others. Thaxted church is further graced by a fine copper beech in its churchyard; under which, in spring, bloom aconites thicker than the fallen leaves they lie amongst. Such a juxtaposition was an inspiration on someone's part—whose?

### The CLYDE VALLEY REGIONAL PLAN has been published by HMSO.

This plan, which was prepared by the Clyde Valley Regional Planning Advisory Committee for Sir Patrick Abercrombie and Mr. Robert H. Matthew, contains the following recommendations:—

The diversification of industry in the region by the attraction of new industries and the creation of strategically-sited industrial estates. The reduction of population densities and clearance of overcrowded areas by the building of new towns and the planned grouping of existing and new housing communities. "Green belts" to separate the main communities and safeguard agriculture; transport co-ordination, including the electrification of railways; segregation of fast-moving road traffic by means of a system of motorways, arterial and sub-arterial roads. The creation of national and regional recreation centres and provision of adequate open space and improved amenities for each town. The adoption of specific standards of layout and

design coupled with improved architectural treatment.

The Clyde Valley Regional Planning Committee was set up in 1943 because it was recognized that the planning problems of the local authorities of the Clyde Basin had grown beyond the point at which they might still be overcome by piecemeal action, and that with the end of the war the need for a common plan for the further development of the area would be inescapable. Representative of all the planning authorities in the Clyde Basin, the committee assumed the task of preparing an outline plan into which the individual local authorities' detailed plans could be fitted without detriment to the common good. The consultants' plan was completed and issued in an abbreviated form to the local authorities in 1946.

The establishment of the committee and preparation of the plan were timed to coincide with the spurt in post-war development

ment.

An important recommendation made by the committee is summarized in the following words: "The regional inquiry that has taken place has shown unmistakably that the present system of local government, with its watertight compartments of local

government areas, is altogether inadequate and unsuited to the problems that face the development of the area in its best sense. We are convinced, for the reasons stated, that a regional administration for the Clyde Basin in respect of certain functions is not only desirable but necessary, and that a regional authority should be established representative of the various local authorities and under a suitable constitution defining its functions, powers and responsibilities. These functions would include the acquisition and control of the land required for the "green belt"; regional parks; conservation of water resources; the establishment of new towns; the oversight in an advisory capacity of the local planning schemes in the Conurbation; the supervision and control in an advisory capacity of the regional plan; it would act as an advisory body in connection with the distribution and location of industry within the Conurbation; other powers and duties could be added if desired."

The Clyde Valley Regional Plan, 1946.

The Clyde Valley Regional Plan, 1946, which contains 250 pages of text, 92 pages of photographs, maps, and diagrams, and ten separate maps and a master map, is published by HMSO, price £4 4s.



This dining-room suite has been designed and produced by Neil Morris of Glasgow. It is made in three kinds of wood: walnut, natural mahogany, and oak, with sycamore edging and cupboard lining. The suite costs fifty-one guineas.





### A Dying La

The trees and forests which were the outcome of the landscape-gardening movement, England's unique contribution to European art, are now fast disappearing. Decay, indifference and the power-saw are clearing the English countryside, and the question of what should replace the deciduous trees of the Midlands and the south is discussed in the September number of *The Architectural Review* by a professional forester, J. D. U. Ward. In this photograph

### Landscape

can be seen the two rivals for the place of the old, widespreading hardwoods whose dying hulks can still be found in the older parks and forests. On the one side stand the tall close-grown deciduous trees of the modern forest. On the other are the conifers, which, with present demands for soft woods and quick financial returns, threaten to cover the gentle hills of the southern counties with the jagged silhouettes appropriate only for wilder scenery.

### THREE VILLAGES NEAR DURHAM are being built for miners.

The three villages, estimated to cost £3 m., are being built by the Durham Rural Council with the object of ridding miners and their families of the "undesirable dwellings" they have occupied for years. One of the villages will take 20 years to complete. The site, on which workmen are now laying roads and sewers, is about four miles south-east of the city, on agricultural land bordering the main Durham-Stockton-on-Tees road. It will be named North Bowburn, and it will be the largest of the three villages with a population of 5,000, a shopping centre, three schools, four nursery schools, four public-houses, four churches, a cinema, and a community youth centre.

a cinema, and a community youth centre. The reason it will take so long to complete the 1,200 houses planned there is that large coal deposits beneath parts of the site are, as yet, unworked. Meanwhile, the council is progressing rapidly with the building of two other villages: at Sherburn, four miles east of Durham City, and at Framwellgate Moor, on the city's northern outskirts. At Sherburn, the centre of a large mining district, the first 100 of 800 houses that are planned have just been completed and occupied. The Framwellgate Moor project a for 600 dwellings, and here again completion of the first 100 has almost been reached. The combined population of the three units will be 11,000—half that of Durham City.

### NEWS IN BRIEF

Professor F. E. Towndrow has been appointed to the Chair of Architecture at the New South Wales University of Technology, Australia, which has been established this year.

Bury St. Edmunds Cathedral, under the direction of Mr. Dykes Bower, has been cleaned and the modern hammer beam roof painted. The stained stone walls have been whitened.

A dam to serve the Black Country is under construction in the valley of the river Blithe. Fifty feet high, the dam will hold 4,000,000.000 gallons of water.



Mr. F. E. Green, who has been appointed Head of the Department of Architecture at the Brighton College of Arts and Crafts. For the last 22 years Mr. Green has been a lecturer at the Northern Polytechnic, London,

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### THE ANNUAL REPORT OF THE CENTRAL LAND BOARD

THE first Annual Report of the Central Land Board has now been published. It covers the period which ended on March 31 last and so deals with no more than the first nine months, in effective operation, of the 1947 Act. It is very much an interim report, since the period under survey does not even include the date by which all claims on the  $f_{300}$  million Compensation Fund were due to be lodged. The Board can report that its organization is well established, that it has completed the preparation and publication of the regulations under which it operates, and of their explanatory pamphlets. It can report a fair measure of publicity for its work and its purposes, and it has made a start both on the collection of development charges and on its plans for protecting the public against having to pay that development charge twice, once to an owner of land who attempts to obtain his former price for his land and once in cash to the Board. But, equally, it has to report that the effect of the 1947 Act, so far, has been to restrict development: "Much building land has been taken off the market," it says, "or is available only to purchasers who will pay the full development value." As in other fields of activity, the fact that a solution to a particular problem must be a political one induces many people to hope that it is worth waiting for the pendulum to swing the other

The Report also gives the figures for development charges paid in this period. The Board has assessed charges totalling £1,328,552, of which £731,517 has been set off against claims on the Compensation Fund and £597,035 paid in cash. Dwelling houses have formed the major part of development, so far. £987,897 has been assessed over 6,812 cases, giving an average of £145 per case. The highest average payment per case is in respect of special factories (£406), closely followed by offices (f,301), but many of the averages are very low and look as though they reflect abnormal conditions. For instance, it is unexpected to find that there were 205 applications in respect of warehouses and yet that the average development charge over the 205 was no more than £90. On the other hand, the geographical distribution of development conforms to what was to be expected. Most development is still taking place in the Midlands and Southern England, so that Scotland produced no more than 897 applications, compared with 1,180 in the Southern Region of England alone.

The statistics published by the Board will, over the years, come to be the most valuable part of the Board's Reports. The Board is the only body which obtains, for the country as a whole, full information on development and on the financial factors which precede development. In the past, the financial aspects of the control of planning have been the dominant consideration, often enough to everyone's detriment; the 1947 Act is a consequence of that fact. The importance of

the Board in the future will depend not so much on its routine activities. It will depend on the information which it extracts, and publishes, from its records. It is those figures which will show the effect of the 1947 Act on actual development, as distinct from its effect on plans for possible development. It is those figures which will prove the best guide to the authorities on how and where to exercise their positive powers under the Act, for, in the long run, it is the practical effect of the Act which will have most influence on public opinion. The public would not tolerate for ever a planning system if that system, while ensuring that all plans for development were admirable, increased the obstacles in the way of their translation into reality.



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NOTES

### THE END OF TEMPORARITY

Driving along Whitehall the other day, I was surprised to see a pile of rubble between Gwydr House and Richmond Terrace, where formerly a large "temporary" office building stood. This building, of peculiarly gloomy appearance, was, if my memory serves, erected shortly after the 1914-18 war as a temporary structure. It has disgraced the heart of the Empire (Commonwealth) for nearly thirty years and now is to make way for further instalments of that old-fashioned building now under construction behind the Banqueting Hall. It would be interesting, in view of the fact that the country is now littered with "temporary" buildings, to know which is the oldest such building. I am told that there are several temporary ones erected for the Boer War still in use.

Perhaps at the bi-centenary of 1851, admiring visitors will be able to inspect estates of 1945 temporary pre-fabs. Will there be admiring gasps at the longevity of our temporary buildings, or horror at the remnants of our "mining camp civilization"?

#### STONE-WALLING

Mr. A. R. Collins, the technical director of the Cement and Concrete Association, takes me to task for suggesting that concrete soon becomes grimy. His letter (see p. 219) states the case fairly, but I'm not sure that I'm properly converted. I know that artificial stone or reconstructed stone, or whatever you care to call it, is from some points of view better than the genuine article, and I suppose that by ingenious shuttering it would be possible to apply an artificial stone face to a concrete building and control the texture and porosity as required. But could one be sure that it would never flake off? No doubt it is partly the fault of the designers, but there are far too many buildings which we admired when they were new and smart in 1939, and which now look unbearably scruffy after ten years of war-time neglect.

My quarrel with concrete is not so much that it becomes grimy, for in the London atmosphere it can't possibly help it, but that when it is grimy it is unattractive. Imagine, for instance, the columns of the western portico of St. Paul's made in concrete. The sooty parts would possibly look much the same, but the driving south-westerly rains wash the Portland stone clean and leave it with a beautiful pearly texture which concrete, to my old-fashioned eye, sadly lacks. Can Mr. Collins give us a concrete which will weather like Portland?

#### THE NEW TPR

The first two issues of the new version

of the Town Planning Review have now appeared and have made us realise how much they were needed. I said "the first two" issues advisedly, for nothing is easier in any field of journalism than to publish a good, or even a brilliant, first issue of a new periodical; the difficulty, of course, is to keep up the standard. In this case, it has been maintained with ease.

British planners badly need a journal which, with four or five erudite articles every quarter, will help them to keep a grasp on what is really significant in the vast welter of information now available on present-day town and country planning. These few articles every quarter are quite sufficient to make the Town Planning Review the pivot of planning in this country. The most pessimistic practitioners will be quite ready to believe that Professors Stephenson, Holford and Frederick J. Adams (of the Massachusetts Institute of Technology), when they exert their combined editorial pressure, will be able to extract with ease this number of worthwhile contributions out of the planners of the world. I think that eminent planners, from California eastwards round to Wellington, may as well get their pieces ready now. They will be called.

#### LIEBER-MEISTER

After twenty-five years Frank Lloyd Wright has written a study of Louis Sullivan with whom he worked for seven years. The book is called "Genius and the Mobocracy" and

 Genius and the Mobocracy, Duell Sloan & Pearst, New York, \$5.



Dr. Calvert's Digestive Chair. Astragal's comment.



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Designs by Louis Sullivan. Left, a continuous plaster band for the proscenium of McVickers Theatre, 1890-91. Right, a study for terra cotta, 1885. See Astragal's comment.

adds largely to an understanding of Wright and Sullivan. It has become a commonplace to acknowledge the significance of Louis Sullivan in the development of the architecture of the twentieth century but very few people seem to have read "Kindergarten Chats" or "The Autobiography of an Idea," and fewer still have examined his book called "A System of Ornament," the last work to come from his pen and pencil before he died.

While, to many, Adler and Sullivan's "Carson Pirie Scott" is still their most interesting work, it may well be possible that Sullivan's researches into integral decoration will, in the future, be regarded as equally significant. I reproduce on this page two drawings from Wright's work, and these, I think, show how fresh and original was Sullivan's conception of ornament. As Wright points out, he preferred materials that had little character of their own, and many of his designs were for terra cotta, a material well suited to reproduce the exuberant patterns and flowing lines of "Lieber-Meister's" drawings.

#### CHELSEA'S RICCI

Intrigued by last week's frontispiece of Sebastiano Ricci's fresco, I hastened down to the Royal Hospital, Chelsea, to have a look at it in its cleaned and restored state. Although on the notice at the entrance it said that it would be open, the Chapel was locked up, but a kindly inmate came to my assistance.

It would be interesting to know whom it was who paid for this interesting decoration, for it may be assumed that no percentage was included in the building contract for decorative painting, and, according to Walpole, an altar-piece was also included.

Sebastiano Ricci was a skilful painter with a facility for working to the taste and requirements of his clients. He came to England early in the 18th century to join his nephew Marco, a painter of distinction, landscape attracted by the lavish orders of wealthy patrons. Although some of his work has since been destroyed, as at Norfolk House, examples remain at Burlington House, Chiswick Houseat last being restored-and at other great houses in the country. In Italy he painted in Florence in the Palazzo Pitti, at Venice, Palma, and particularly at Bergamo, both before and after his stay in England. I wonder whether his work met with the approval of those who attended the recent CIAM Conference there?

#### FURNITURE PUBLICITY

"Neil Morris, young, spectacled and energetic"—gushes fair, petite, not-as-old Timmie O'Brien in her fussy, precious press hand-out—intends to bring the experience gained from ship-fitting, aeronautical construction, and experimenting with wood technique to the problems of making domestic furniture." The result, despite its name (the "Cumbrae"), is as good in appear-

ance as the last design (the "Allegro"), which is now a permanent exhibit in the New York Museum of Modern Art. Photographs of the furniture appear elsewhere, I understand, in the JOURNAL. What a pity publicity people cannot produce a hand-out as straightforward and simple as the furniture.

The little illustration on the opposite page has been sent to me by another well-known furniture designer, Ernest Race. The chair is not made of aluminium, but of iron, and bears a brass label with the inscription: "Dr. Calvert's Digestive Chair." It was exhibited in the 1851 Exhibition, an age which had the opportunities to need furniture of such a specialist nature. There's something rather familiar about the style of the chair, to put it mildly; but if the exhibits for 1951 are up to this homely standard I'll not complain.

ASTRAGAL

### LETTERS

A. R. Collins

### Concrete versus Stone

SIR,—I was interested to read Mr. Harrison's letter and Astragal's remarks on the subject of the L.C.C. Concert Hall in the JOURNAL of July 28.

Journal of July 28.

I agree with Astragal that there is no asthetic objection to the intelligent use of Portland stone facing on a reinforced concrete building and there is no reason why Astragal should not prefer it to concrete but, if he does so, I think it ought to be for a better reason than that concrete soon becomes grimy.

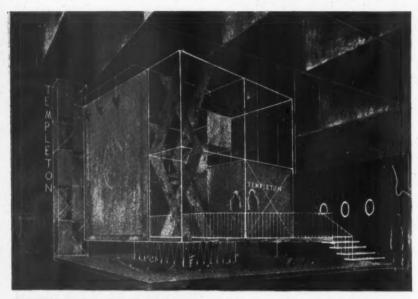
The rate at which a facing material on a building becomes dirty depends on its texture and porosity and on the way in which the design of the building allows rainwater to run over the surface as well as on the dirtiness of the atmosphere. Concrete can be made with a wide range of textures and porosities including those similar to Portland stone and in equivalent conditions of exposure it does not become dirty any quicker. What does happen, however, is that many architects consider that because they are building in a comparatively new material they can abandon all those architectural details which over the course of a long period of time have been found necessary to protect the face of a building from the weather. The unsightliness of some concrete buildings is not the fault of the material but is the result of bad design.

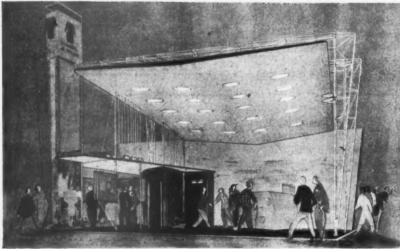
is the result of bad design.

I am not quite sure what Astragal imagines to be the right character for the finish of a public building but it does seem that it should not be a monotonus repetition in the use of one particular building material. Surely, most of us would agree with Mr. Harrison that the use of a variety of finishes for public buildings would give a liveliness of appearance to our big towns without necessarily any loss in harmony in composition.

A. R. COLLINS, Technical Director, Cement and Concrete Association.

### SCOTTISH INDUSTRIES EXHIBITION





Today, the Queen opens the first big Scottish Industries Exhibition in the Kelvin Hall, Glasgow. On this page are shown some of the stands which have been designed for the exhibition by Basil Spence & Partners. The exhibition authorities have allowed for two types of stand; an open type, the plans of which had to be submitted to the Architect for the Exhibition, and the booth type, the design for the interior of which was left to the discretion of the exhibitors. The exhibitors were advised to use a colour chart of eight colours. Top, a stand for Messrs. Templetons, Ltd., assistant architect: Gordon Steele. Above, a stand for Messrs. Babcock & Wilcox, Ltd., assistant architect: Peter S. Ferguson. Right, a general view of the exhibition: a false ceiling hides the roof of the hall, consisting of an eg crate pattern of blue and white muslin in 19 st. squares. Bottom, a stand for British European Airways, assistant architect: J. M. McLachlan.







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Speeches and lectures delivered before societies, as well as reports of their activities are dealt with under this title, which includes professional societies, trade associations and government departments. To save space they are represented by their initials—see front cover. Lectures cannot usually be reported in full.

### TPI

### Professor V. G. Childe

August 22. Paper on SOCIAL ASPECTS OF COMMUNITIES, read to members of Town and Country Planning School, St. Andrews.

### Professor V. G. Childe:

That man is by nature a social animal is a hackneyed saying. But it has been given varied meanings. I mean that men have always lived in groups larger than the "natural family" of parents and heipless children and would not have been men otherwise. This sociality is not the result of any "gregarious instinct" any more than of a social contract made between fictitious human nomads, but rather of man's bodily nature or its defects. The prolongation of helpless infancy no doubt imposes upon the human family unit an exceptional size and stability. But the absence of bodily equipment for dealing with the environment for obtaining food and warmth, and for avoiding dangers compels men to co-operate, and it is this necessity of co-operative action that creates the community. I do not mean that the primitive community was formed by an aggregation of families. It would be just as true to say that families were formed by segmentation of the community. The first communities recognizable archæologically and simpler communities preserving today a comparably primitive equipment are indeed very like families, held together by the same forces and co-ordinated by the same unconsciers sanctions.

This domesticity is sometimes expressed concretely by community of residence. The earliest "men" known to archeology, those odd creatures technically designated Sinanthropus pekinensis, shared a common cave

at Chou-kou tien. Several thousand centuries later the oldest known constructed houses include communal dwellings. Mammoth-hunters in the Ukraine during the last ice age dug loug hollows in the loss and covered them with skins as do Polar peoples today. The excavations may be as much as 30 metres long by 5 metres wide and contain under the one roof, 3, 5 or 7 hearths. Ten thousand or so years later still the earliest farmers known in Central Europe inhabited equally spacious joint houses. Those at Koln-Lindental might measure 30 m in length by 8 in width.

Similar communal long houses have been described by modern ethnographers among the Iroqueis in North America, in the Pacific and elsewhere. An Iroqueis long house sheltered a whole clan or lineage comprising several generations and several natural families. Among the Kayan of Borneo, whose material culture is no longer in the least "primitive," the joint house is on an average 200 yards long and accommodates forty to fifty families or two to three hundred persons.

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But ethnography shows clearly enough that a kindred need not sleep under one roof to retain its kinship solidarity. Archæologically it is easy to recognize this sort of solidarity in the six one-roomed cabins of the neolithic hamlet of Skara Brae in Orkney. Even if each cabin housed only a simple natural family, all lived, if not under one roof, at least under one midden. The several cabins were linked up by covered passages so that you could pass from one to another without ever going out of doors. Indeed the whole subterranean complex was entered through a door that could be barred just like the doors to individual rooms. It is a matter of taste whether you call Skara Brae a complex of six houses or one house divided into six apartments. Similar clusters of one roomed cabins in Witremberg, closely juxtaposed and some built on a common platform though not joined together by roofed passages, belong ust as clearly to a single clan or lineage. Such joint houses or house-clusters do not

nerally stand isolated. Even among the generally stand isolated. Even annous inc Ukrainian mammoth-hunters two or more houses lay side by side. At Köln-Lindental a dozen or more long houses were juxtaposed to form the village. So an Iroquois village comprised several long houses. Even in Borneo the average Kayan village com-prises 7 or 8 houses. Again while Skara Brae was a single cluster, the comparable clusters of one-roomed huts in Würtemberg stand in groups within a common fortified area. Hence the community does not in fact consist of a single clan or enlarged That does not impair the reality of kinship ties between the community's mem-On the contrary, since clans are normally exogamous, the residence of several clans in the same village, allows the local community to be an endogamous unit, and its several households are in fact usually united by marital ties involving interchange

of services and goods.

In temperate Europe the several dwelling units of a neolithic village were generally scattered about with spaces between them where animals might roam and various outdoor activities be conducted. It seems to have been the same in the neolithic village of Merimde in Egypt and is of course the rule in peasant villages in eastern Europe, Africa and the Pacific today. Hence the units are easily distinguishable. In Greece and Hither Asia and in Iraq buildings are likely to be closely packed and backed up one against the other in the earliest extant village plans as today. As only foundations of early settlements survive, their ruins appear as complexes of small compartments, bounded by narrow lanes or alleys. For all we can tell each island might represent a single communal house belonging to a clan or joint family. Yet at Hassuna, the oldest etiment in Mesopotamia so far described, complete farm-houses, each comprising

several rooms and a yard, can plausibly be distinguished. Such would not differ in kind from the components of any rural village in the area today.

The really decisive archæological evidence for the community's solidarity is provided by public works rather than domestic architecture. Köln-Lindental was from the first fenced in and was eventually defended by a ditch and stout rampart. Round the Alps, villages were built on piles along lake-shores or on log-platforms resting on peat. In Mesopotamia cobbled streets were observed at Arpachiya, a substantial shrine or chapel at Tepe Gawra. All such public works must nave been carried out by collective effort. The drains were dug, the streets cobbled or corduroyed, the timber for platforms felled, transported and placed, the bricks moulded, the fortifications or sanctuaries built by voluntary communal labour. They are concrete, durable expressions of the group's solidarity which must equally have been expressed in the observance of common rules of hygiene and of logic. The mere fact of living together imposed on all neighbours a certain degree of conformity which needs no external power for its enforcement. But living together was, as we said, necessitated by man's physical structure though the fact of, or belief in, kinship gave a sentimental sanction to that necessity. From the comparative ethnographic evi-

From the comparative ethnographic evidence we should expect this sentiment to be reinforced by some common ritual activity focused upon some central material object like a totem pole, shrine or tomb. But from the same evidence we have reason to fear that such would be of a perishable or not obviously recognizable nature. We have, as stated, recognizable shrines or embryo temples occupying a central position in very early Mesopotamian villages. In Britain I like to assign such a role to the long barrows or cairns, erected with enormous labour on the brows of hills where they would be conspicuous from villages below, but I have to admit that the villages have not yet been located. The tombs, these ideological foci, were more substantial and hence more easily discovered than the habitations of the living community.

hence more easily discovered than the habitations of the living community.

The communities I have been considering were, or are, all minute. The numbers who can live together in one place are rigidly limited by the food supply or rather by the techniques of food production and transportation. Quite large areas are required to support a couple of dozen individuals on a wild food economy, and its exploiters are liable to be nomadic. Even when exceptional opportunities for fishing, as in British Columbia early last century or in the Dordogne in the Ice Age, do allow substantial communities to settle in one spot, these generally break up into smaller bands for part of the year.

Farmers may be nomadic too if they know no better method of avoiding the effects of soil exhaustion than clearing a fresh patch of virgin bush. Most modern illiterates whose equipment and general economy resembles that of neolithic groups in temperate Europe and the Near East are in fact hoe-cultivators practising what is called slash-and-burn or humming. Such generally shift the whole village every few years. Even the great long houses of the Kayan, so elaborately constructed, were never inhabited for more than a generation; for owing to this rural economy the community generally moves away after fifteen years or even less. (Yet the Kayan have water transport and so can work fields farther from the village than most tribes and transport the crops thence.) Normally you can only cultivate land within walking distance of your dwelling—indeed near enough to be able to transport home comfortably the bulky products of your labours, and without roads and wheeled vehicles or navigable rivers a couple of miles would be a limiting radius. The population is then limited to what that will feed. If it exceeds that limit, the excess

must hive off and found a new community. Hence a neolithic village in Europe consisted of from twenty-five to fifty-five small houses of one or two rooms.

But what most of all distinguishes a "primitive" community, a consequence, but also a cause of its small size, is the absence of internal articulation, of real functional differentiation, of social division of labour. All members of the community, not disqualified by age, actively participate in getting their own food or rather actively contribute to the communal food supply. So there can be no true or full-time specialists nor professional craftsmen. At least in theory every man or woman makes the few essential implements he or she has to use—traps, fish-hooks, axes, hoes, knives, pots—just as cloths in a peasant village are homemade out of home-grown wool or flax.

In practice this condition may never be fully realized. Even among tribes on the level of palæolithic societies individual talent for craftsmanship is recognized and rewarded, as for instance in Tierra del Fuega. There, all Ona men must spend most of their time hunting so that no one can set up as a professional artisan. But some men are experts, for instance, in making flint arrow-heads, and are honoured by a special appelation. Such masters have no regular customers, but they are rewarded by appropriate gifts for doing delicate work. In farming societies such specialist craftsmanship is more common and tends to be hereditary in particular clans. But normally it is exercised in the intervals of gardening or fishing; such a craftsman earns for his skill prestige and some luxuries, but is not dependent for his livelihood on exchanging his products or nis services for tood produced by others. There is thus no industrial class with economic interests distinct from those of the primary producers.

from those of the primary producers. Similarly there is no ruling class. There may indeed be differences of rank. Chiefs exist in relatively primitive communities and are expected to take the lead and initiative in war, hunting, gardening or any other communal activity. They receive a larger share in the produce of the chase than others and in one way or another can accumulate a small surplus of food. But they do not thereby escape work in the gardens or in the chase. Prowess in hunting as in war or industry in cultivation are essential qualifications for chieftainship without which hereditary authority would

soon melt away.

In the long run it is this absorption of all its members in one common vital activity which guarantees the solidarity of a "primitive" community and which is inevitably reflected in identity of language, logic, cult and sentiment. (For the kinship bond may be palpably fictitious since adoption is permitted by an appropriate ritual.) But this solidarity, due to similarity, is, as Durkheim puts it, "mechanical." Yet in the existence and recognition of differences in skill and capacity even the most primitive community contains within it implicitly the rudiments of an "organic" solidarity based on the differentiation of mutually complementary functions, a true social division of labour.

That can only be realized in a larger unit. But the requisite enlargement cannot be effected by a mechanical addition of primitive communities one to another whether by a voluntary federation, like the League of the Iroquois, or by an amalgamation imposed by external force. On the other hand effective differentiation within a primitive community is likely to disrupt its solidarity. Craft skills, like the habit of leadership, are liable to become hereditary. Practical technical lore is taught most naturally to one's children—natural or adoptive—and so is the supposedly essential magic. Manipulative technique and magic spell and rite are indissoluble constituents of a mystery which becomes the property of the clan. Technical proficiency and habitual authority

appear as mana, as mystical potencies innate in the clan's members as such.

But no primitive community of hunters or farmers with a primitive technology can afford a full-time professional crattsman or chief, still less a clan of such; there just is not enough food to support them. The primary producers cannot or will not produce a surplus above domestic needs large enough to feed permanently a family not contributing directly to the food supply. But even a primitive community is not isolated; somewhere there are others. So the skilled artisan may break away from local ties and, by wandering about exchanging his products or his services for the surplus food of many communities, earn a livelihood as a full-time specialist.

In such modern neolithic societies as the Maori tattooers, woodcarvers and canoe-builders might be full-time but itinerant craftsmen of this type. In archæology such cannot be recognized with certainty till the Metal Age. Then in the earliest Bronze Age of temperate Europe metal-wear was certainly fabricated and distributed by perambulating smiths. The tinkers and other itinerant craftsmen who are just dying out in Britain may well illustrate the pattern of the first professional crafts. But such have broken away from the local community. They may indeed form communities of their own; craft clans are familiar in ethnography and may recruit their membership by adoption. In the sequel the craft clan becomes a guild, and adoption gives place to apprenticeship which in its mediæval form was a temporary adoption. On the other hand such specialists may be incorporated in a local community on condition that it change its structure. But such incorporation of specialists in a local community requires an increase in the food supply available to it.

It was first in the alluvial valleys of the Nile the Tigris-Euphrates and the Indus that such an increase became possible. There, irrigation maintained perennially the fertility of the soil; its yield was generous and reliable. Rivers and canals are moving roads for the ready transport of even bulky foodstuffs; the alluvial plains are easily negotiated by pack animals while in Mesopotamia and India wheeled carts were available and serviceable. On the other hand dependence on water supply restricted the habitable areas and imposed communal control on the water's use. Under such circumstances the village community could expand, and did. Its growth cannot yet be followed in detail. By the time complete settlement plans become available quantitative change has produced a qualitative novelty; we are confronted with a new kind of unit the urban community.

of unit, the urban community.

The city differs from the primitive village not only in size, but also in physical form, in content and in social structure. Mesopotamian cities by the IIIrd millennium not were incomparably larger than any known neolithic village, though ridiculously small by modern European or American standards. Just before 2000 nc, Ur of the Chalders covered 150 acres; Kish and Uruk probably a good deal more, other cities substantially less. Populations can be reliably estimated: Ur, then an imperial capital, beasted 24,000 inhabitants; Lagash some 19,000; Umma 16,000; Khafaje 12,000; Eshnunna only 9,000.

But the city was girt with a substantial wall shutting out raw nature to provide a purely human environment. Naturally it was drained by sewers and watered from the river or a canal on which quays and a boatharbour had been constructed. And it was dominated by enormous buildings, the first examples of monumental architecture. These are the temples of the gods, raised upon a vast artificial platform where generally stood also the palace of a ruler.

The community consists of different sorts of citizens too. Most at first were still

farmers, cultivating fields in the immediate vicinity, and fishermen, harvesting the river and lagoons. But in addition there were all kinds of full-time specialists and professionals who did not produce their own food nor contribute directly to the city's supply. There were specialist copper-smiths, potters, wheel-wrights, weavers, leather-workers and other craftsmen, professional merchants and boatmen, and finally rulers, priests, clerks, and officials. Thanks to the land's fertility and the regular water supplied by the irrigation system the primary producers can extract from the soil more food than they need for their domestic consumption—a social surplus—which supports the new professional classes.

On the whole it reaches them only in-

Ressional classes.

On the whole it reaches them only indirectly. The bulk of the surplus is paid, and glady paid, as tithes to the god or as taxes to their earthly steward, and is garnered in conspicuous granaries attached to temple or palace. So most of the professionals and specialists are supported, directly or indirectly, by the temple or the palace. That is the key to the city's solidarity. The urban community is held together by dependence on the temple or the court which controls the social surplus and the irrigation system on which its production depends. Yet, if the co-operation of all these heterogeneous elements be secured under the restraint of this dependence, the fact of harmonious and productive co-operation generates an organic solidarity. The substantial guarantee of the urban community's solidarity is the functional interdependence of all its members.

Its ideological reflection, however, is not so different from that of the more primitive mechanical solidarity. The temple community is very like a great household. The sacred granary to which all farmers contribute and from which artisans, priests, the ruler and even the god are nourished is the counterpart of the communal food-store in a clan or joint-household. All the temple's dependents, farmers and clerks, artisans and priests, are called "the god's people." They all believe faithfully that the god created the land which their ancestors did in fact reclaim from swamp and desert, and that his constant interposition is essential to maintain its fertility. It is, of course, that faith which is reflected in the monumental temples.

A city, such as I have described, did constitute a community to which specialized craftsmen could really belong and in which their special skills could be integrated. has proved very durable; the less indus-trialized cities of Hither Asia, India and China today exhibit unmistakable simi-larities. For instance, Aleppo and Damas-cus today have roughly as many houses to the acre as Ur and Eshnunna 4,000 years ago. Physically the rural elements represented by farmers and fishers remained prominent and at first, perhaps, predominant. Ideologically its solidarity remained largely mechanical and reposed on homogeneity of language, custom and faith. Yet that homogeneity was constantly threatened by the presence of alien elements-merchants and slaves. the urban economy involved, from the first, foreign trade while war was endemic in early Mesopotamia. But trade introduced not only foreign materials but also foreign merchants who might form temporary or permanent colonies in each city. These would, of course, practise their own cults as hap-pens today. Nor could captives taken by regular armies or procured by raids be assimilated so easily as the domestic slaves whom a barbarian warrior had acquired by sparing their lives in battle.

At the same time ideological cement or lubrication was badly needed. For the economic foundation for organic solidarity was imperfect. No doubt all members of the community benefited substantially by their co-operation. But the distribution of material benefits at least was very unevea. A small ruling class—the immediate ministers of the god or the king—monopolized the bulk of the social surplus, leaving very little to the producing masses. That is physically illustrated by the contrast between the houses of the higher clergy within the temple oval at Khafaje and those in the lower town. The contrast between the workman's barracks and mercantile or official residences at Harappa in India is still more striking. Similarly there was a dearth of public buildings, Laymen were excluded from the greater part of the vast temple enclosures. I know no counterpart to the assembly house of a neolithic village nor to colonnaded markets and gymnasia of a classical city.

classical city.

Hence mechanical solidarity had to be sanctioned by force—by economic dependence on the temple or the court and if need be by civil power. As a consequence the community's potentially most useful members could elude integration in it or escape from it. The cleverest and most energetic craftsmen and merchants could live better as itinerants, just as they had under barbarism. Labour in the Orient is notoriously mobile today and has been since the dawn of history. Such itinerants would owe allegiance to no urban community, but may have retained their old primitive organization as craft-clans or guilds.

So by the 6th century we encounter already urban communities of a distinctive type. Even in magnitude these were not inferior to Mesopotamian cities of the IIIrd millennium. Miletus covered 222 acres of which 52 were occupied by parks and gardens; the walled area of Samos comprised some 400 acres, not all built up. The population of Athens in the 5th century is estimated at 300,000. Yet their solidarity was greater and even the material structure distinctive. Of course they were fortified and provided with water supply and, if near the coast, with harbours. The classical city was also dominated by monumental temples to the gods, but these were not the residences of a numerous professional priesthood access was open to the laity. Still more dis-tinctive were truly public buildings—an agora or market-place used also for public assemblies, a theatre, a gymnasium, a fourtain supplying a constant stream of water to a basin, as well as official buildings. I have tried to outline in a very abstract way the historical evolution—but not, please note, the history—of local communities from the primitive village to the classical

not stages which replace one another. The rural village has persisted side by side with the city and has generally retained more or less its primitive mechanical solidarity. has indeed been argued quite cogently that the city is a new kind of unit superimposed upon the village and actually parasitic upon Historically I think that this is less the half-true. The city grew out of the village and only slowly separated from it completely. And it has reacted upon it. The most obvious advances in domestic architecture-second storeys, chimneys-were developed to meet the conditions of urban life. Rural housing even in Europe, save in so far as it has been modified by urban developments, has undergone little change in the last four thousand years.

I should again insist that these are

In any case the relation of city to village, of town to country, of industry to agriculture, is a major problem. I am afraid I have ignored it today. On the other hand I have tried to suggest how the physical structure of a settlement has at different times reflected its ideological solidarity. It would be fun to go on to consider from the same angle how an archæologist of interture will interpret the ideological solidarity of Detroit or Pittsburg. He should easily get it right, but I shrink from anticipating his verticet.



Detail of the overhead lighting.

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### PROTOTYPE CLASSROOM

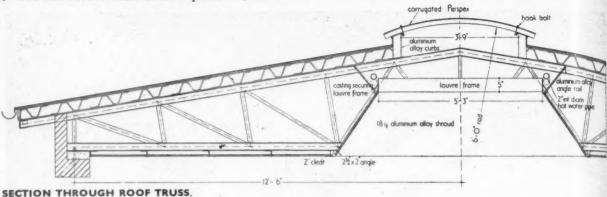
FOR THE MIDDLESEX COUNTY COUNCIL

DESIGNED BY C. G. STILLMAN, COUNTY ARCHITECT

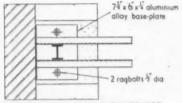
Prototype classroom showing windows.



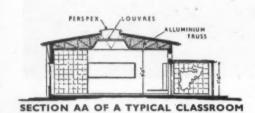
GENERAL. — This classroom, which the Ministry of Education are at present examining, has been designed to improve lighting conditions, and to attempt to solve the problem of glare by the introduction of overhead lighting to give more evenly distributed light over the working plane. The use of this type of lighting allows of a more domestic character in teaching rooms, as they are lower in height, with smaller side windows, which are needed only for vision and ventilation. The top lighting gives greater freedom of orientation, as it is not concerned with angles of light from adjoining buildings or trees, nor with any aspect except for vision. The ceiling height of 9 ft. 9 in., instead of the usual 11 ft. or 12 ft., reduces the cubic content and lowers the cost of the building, which has a



SECTION THROUGH ROOF TROSS.



PART PLAN OF ROOF TRUSS.



built-up roofing

1 threboard

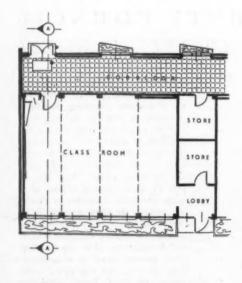
asbestos-cement decking

aluminium alloy angle providing fixing for fascia 6 stop for decking

(1-6)

3 25-0 span

**DETAIL OF EAVES TREATMENT** 

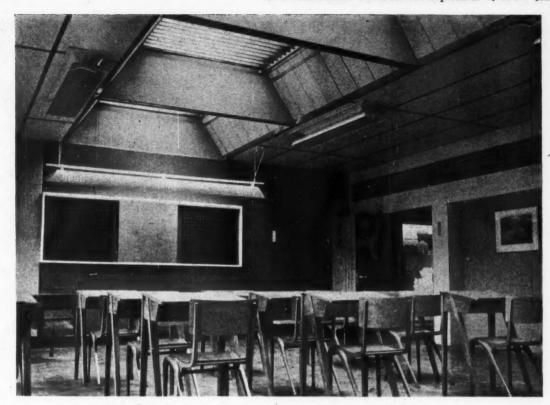


PLAN OF TYPICAL CLASSROOM

simpler wall construction. The light intensity is governed by shutters, which can be controlled to give a maximum daylight factor of 5 per cent., or a dim-out sufficient for a cinema show.

STRUCTURE.—Aluminium roof trusses are supported on 13½-in. brick piers at 8 ft. centres. External walls are rendered, having a

movable louvre in one wall, and a sash window in the other, with painted corrugated asbestos above. Internally, the asbestos is faced with fibre board, and covered with wallpaper. The roof covering is asbestos sheeting in 8-ft. lengths, fastened on to the truss and covered with fibre board and two layers of bituminous material with roof lights of corrugated Perspex



sheeting. The underside of the trusses are covered with painted insulation boarding.

INTERNAL FINISHES.—One wall is plastered, with the others painted pale pink, buff, or beige. Acoustic tiles are used on the blackboard wall for decoration and

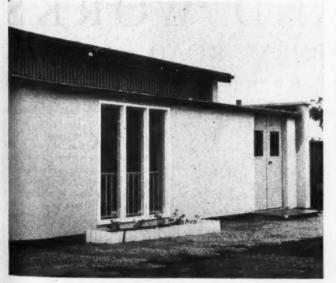
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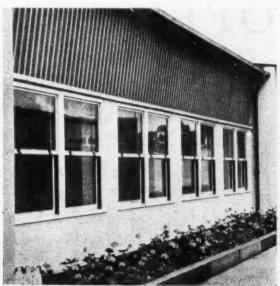
all, and er, with a above. s faced with ering is lengths, as and two ial with Perspex

acoustical purposes. The floors are of wood blocks. A map of the county painted on acoustic tiles serves to decorate the corridor.

The general contractors were Messrs. Prestige & Co., Ltd. For list of sub-contractors see page 238.

Top, the classroom showing roof trusses and 80 watt fluorescent lighting fittings; below, external views of the classroom unit.



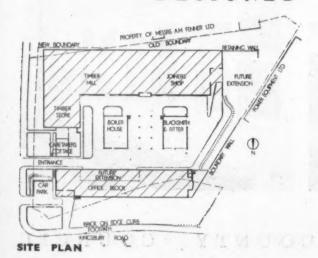


OR THE MIDDLESEX COUNTY COUNCIL



### OFFICES AND WORKS

AT KINGSBURY ROAD, LONDON
DESIGNED BY BRIAN O'RORKE



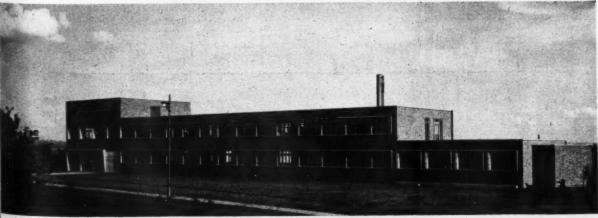
GENERAL.—A firm of builders, Messrs. Charles R. Price, having outgrown their original premises in Stoke Newington, required new offices, together with a timber mill, joiners' shop, garage, blacksmiths' shop, plant store and ancillary buildings. These new buildings were completed last year on their new site at Kingsbury Road, N.W.9.

case:

SITE.—The site falls sharply from north to south, and the original awkward shape was rectified following negotiation with the Middlesex County Council and the adjoining owners. After examining foundation problems and the question of access roads, it was



Opposite page, the works envance, with the caretaker's cottage on the left. Right, the landing on one of the staircases in the main office block. Below, the office block from the north-west.



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The works' manager's office; right, the entrance hall.

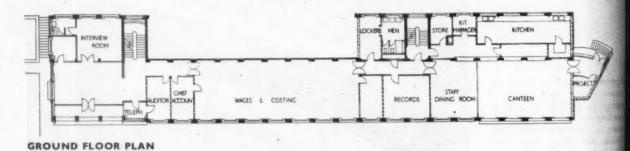
decided that it would be an economy to excavate over the whole of the site, from the office block to the rear boundary, to an average depth of 6 ft.

CONSTRUCTION. — Following excavation of the site, the first operation was the building of a

reinforced concrete retaining wall the full length of the spine wall of the office block to act as its foundation. The retaining wall was poured in sections into movable steel shuttering mounted on rail tracks.

The office block was constructed with a reinforced concrete frame.

The main beams were precast of the floor slab and hoisted interposition. Hollow, precast, floobeams with part of their upper surfaces cut away were laid on the edges of the main beams, as in situ concrete converted the into T beams and completed the connection between beams and the situation of the situation of



STORE STORE STORE STORE STORE OFFICE STORE STORE

LOWER GROUND FLOOR PLAN OF OFFICE BLOCK

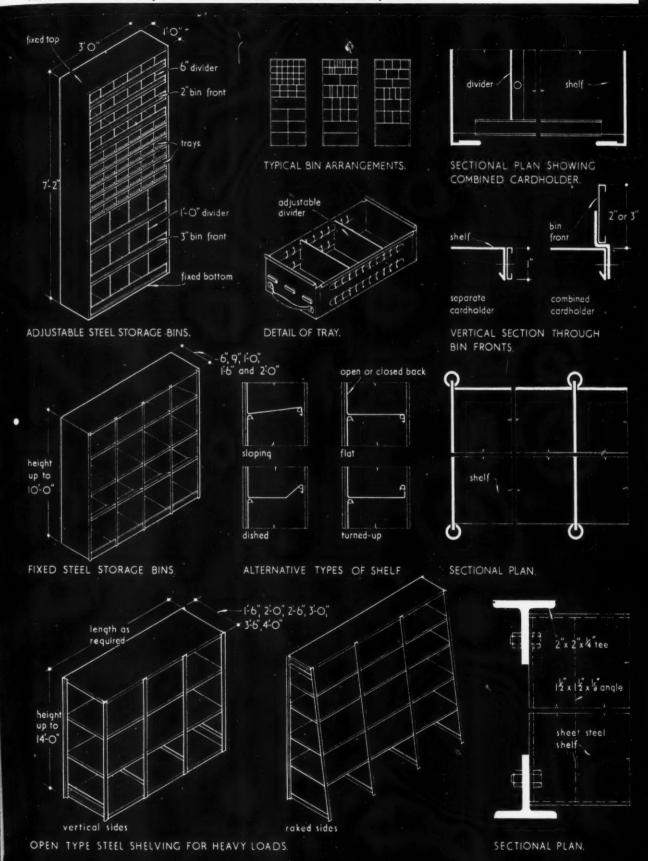
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The Architects' Journal Library of Information Sheets 201. Editor: Cotterell Butler, A.R.J.B.A.



#### 42.C1 STEEL STORAGE BINS, RACKS AND SHELVING

This Sheet describes a range of standard adjustable and fixed steel storage bins and shelving. Typical arrangements showing how these units may be built-up into tiers and rows are given on Sheet 42.C2. Details of lighter types of shelving are shown on Sheet 42.C3.

#### Adjustable Storage Bins

These may be arranged to form a stack giving accommodation exactly as required. The horizontal shelves and vertical dividers are adjustable on 1 in. centres and the bin fronts, card holders and vertical dividers are interchangeable.

#### Fixed Storage Bins

These are available with the alternative types of shelf shown and with compartments in the following sizes:-

Depth (in.)	6	9	9	12	12	18	18	18	24
Width (in.)	6	9	9	12	12	12	18	18	24
Height (in.)	41	6	9	9	12	12	12	18	24

#### Open Type Steel Shelving for Heavy Loads

The examples illustrated are typical only and the positions of shelves can be arranged to suit requirements. The shelving is free standing and can be dismantled and re-erected in other positions as required.

#### Material and Finish

The bins and shelving are constructed from cold rolled and close annealed patent flattened steel sheet with rolled section supporting members where necessary. They are designed to accommodate the variety of stores and loads required. The standard finish is olive green stove enamelled. Other colours are available if required.

#### **Further Products**

Tyre and bar racks, lock-up stores and works offices, lavatory partitions, clothes-lockers, transporter platforms.

This Series of Sheets deals with tanks, cisterns, bins, bunkers, cycle-racks, non-ferrous metal mouldings, perforated and embossed metals, woven wire screens, steel partitions and furniture, railings, fencing, gates, manhole covers, rainwater goods and ventilators.

Compiled from information supplied by:

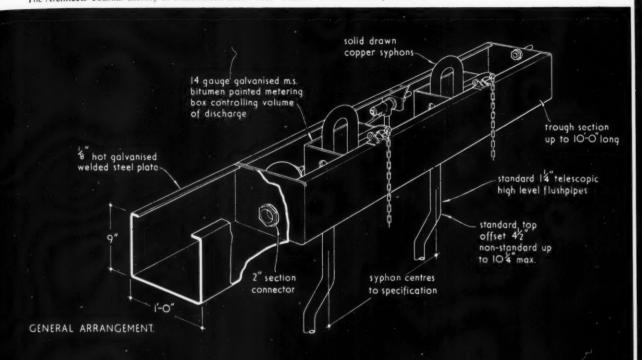
G. A. Harvey & Co. (London), Ltd.

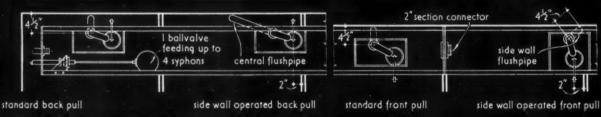
Head Office: Greenwich Metal Works, London, S.E.7.
Telephone: Greenwich 3232 (20 lines).
Telegrams: Cheaper, Wol, London.
London Office: 58, Victoria Street, S.W.1. Telephone: Victoria 4963.



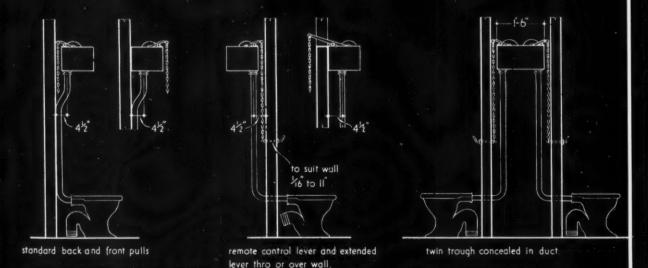


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PLAN OF TROUGH SHOWING ALTERNATIVE POSITIONS OF PULLS.



STANDARD ARRANGEMENTS FOR HIGH LEVEL TROUGHS.

# 33.Q3 FLUSHING TROUGHS FOR W.C'S

This Sheet describes flushing troughs for w.c's.

### Construction

Troughs: The troughs are constructed from  $\frac{1}{8}$ -in. steel plate welded into complete sections from 5 ft. to 10 ft. long hot galvanised after manufacture.

Each section is a complete trough and is connected to its fellow section by a 2-in. brass union water way thus greatly simplifying erection.

Covers: These are fitted when specified and are supplied in overlapping sections.

Syphons: The syphon units are of patented solid drawn copper construction actuated by brass levers. They are mechanically silent and positive in operation and can be supplied to flush 2,  $2\frac{1}{2}$  or 3 gallons. It has been found that one  $\frac{3}{4}$ -in. ballvalve to every 4 or 5 syphon units is sufficient to cope with the average frequency of operation.

Ballvalves: \(\frac{3}{4}\)-in. high pressure or low pressure ballvalves are supplied fitted with silence pipes and solderless copper balls. They may be fixed in the trough ends or in any position along the trough sides.

Overflow: 1-in. overflow is supplied suitable for connection to lead or copper pipe. It may be fixed in any position in the trough above the water level.

Drain cocks: These can be supplied when required.

# Operation

The syphons may be operated by chain pulls or combined chains and remote control levers.

Remote control operating levers can be positioned at any convenient height above floor level.

### Fixing

Troughs can usually be carried on top of w.c. partitions. They may, however, be suspended by hangers from roof joists or alternatively be supported on cast iron brackets fixed to the wall.

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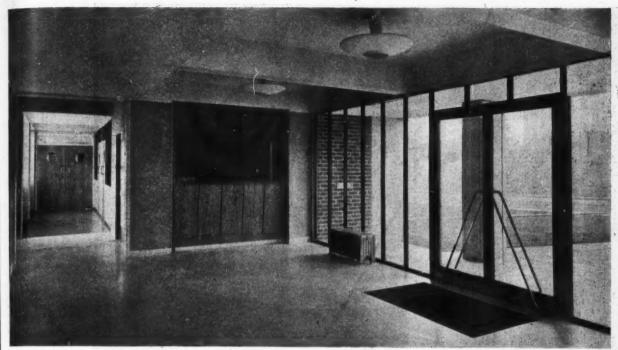
Fordham Pressings Limited.

Address: Melbourne Works, Dudley Road, Wol-

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verhampton. Telephone: 23861/2.

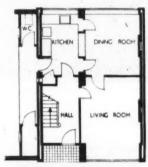
Telegrams: Fordham, Wolverhampton.



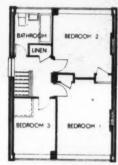
The entrance hall and enquiry office.

columns. As no common bricks were available at the time, the wall panels were constructed in "nofines" concrete behind the facing bricks. This provided good thermal insulation, resistance to moisture penetration, and a key for plastering.

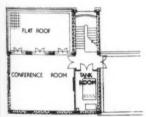
The mill, joinery shop and timber store are steel framed, with 65-ft. roof trusses. Walls are of "no-fines" concrete which was



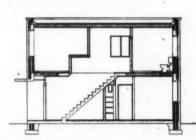
GROUND FLOOR PLAN



FIRST FLOOR PLAN



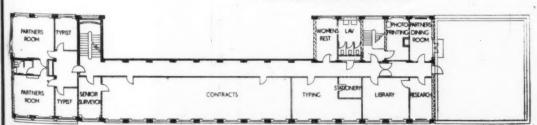
SECOND FLOOR PLAN



SECTION [Scale: 1/0"]
THE CARETAKER'S COTTAGE

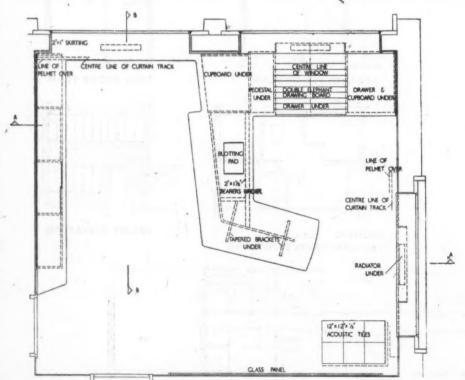


FRONT ELEVATION



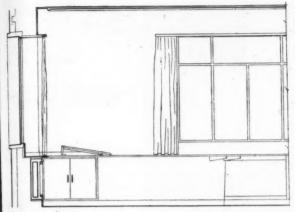
FIRST FLOOR PLAN OF OFFICE BLOCK



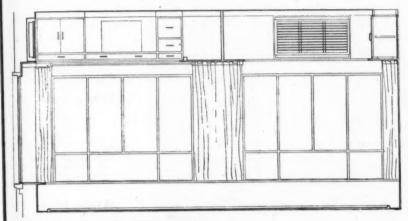


PLAN OF PARTNER'S OFFICE

[Scale: }" = 1'0"]



SECTION BB



SECTION AATOF PARTNER'S OFFICE

poured into movable, framed-up, expanded metal shuttering which allowed quick drying out and enabled the shuttering to be struck within twelve hours of pouring. The inside face of the walls is finished in plaster, the outside rendered in a coloured cement with a spatter finish. The roof is of 2-in. wood wool slabs, covered with bituminous roofing and white chippings. The T bars carrying the wood wool slabs were spot welded to the purlins.

INTERNAL FINISHES.—The ceiling and walls of the mill and joinery shop are painted pale blue and buff. The steelwork is painted bright red.

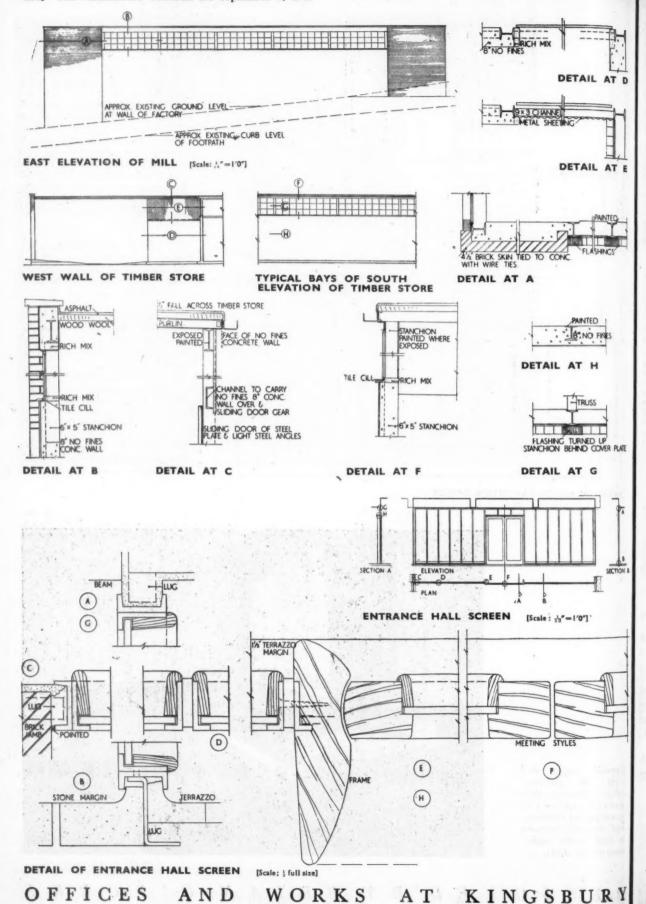
SERVICES.—Sawdust and shavings from the machines are collected into overhead ducts and pass through the cyclones to feed an auxiliary boiler.

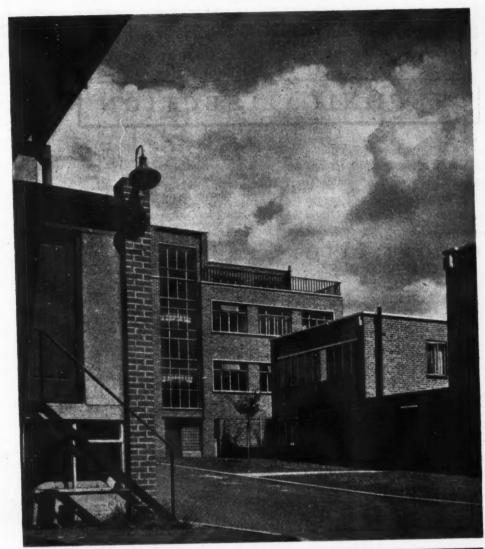
The consulting engineers for the reinforced concrete were Dr. Hajnal-Konyi and Sydney Myers, and for the mechanical services Messrs. G. H. Buckle & Partners.

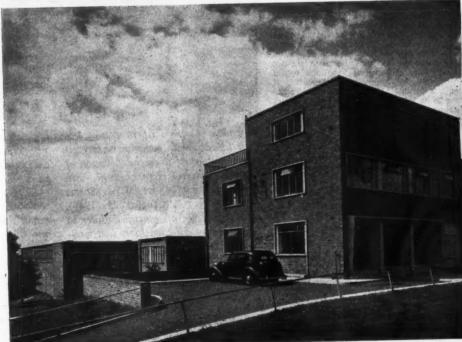
The general contractors were Messrs. Charles R. Price. For list of sub-contractors, see page 238.



Opposite page, and right; the partners' offices. The large tables provide space for spreading out drawings, and allow the partners to hold works conferences at their desks.







Right, the main entrance to the office block.

Above, the office block from the south-west.

H

UP OVER PLATE

URY

INFORMATION CENTRE OUESTIONS AND ANSWERS · CURRENT TECHNIOUE THE INDUSTRY · PRICES · TECHNICAL ARTICLES

INFORMATION SHEETS

TECHNICAL SECTION

A digest of current information prepared by independent specialists; printed on one side of the paper only, to allow readers to cut out the items for filing and paste them up in classified order. Headings below.

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# 17.61 construction: general ELEMENTARY CONSTRUCTION

Building Illustrated. W. (Chas. Griffin & Co. Ltd. Terry Smith. (Chas. Grif 1949. 24s.)

Elementary construction. Well illustrated but very traditional, and of little value to architects.

The author deliberately restricts the scope of this book to domestic construction and appears to be writing primarily for craftsmen and building students. Even so, much of the information is less up to date than could be wished for, and fundamental reasons for the methods described are not given. It is doubtful if the book would given. It is doubtful if the book w be of value to architectural students. seems unfortunate that others should constinue to be instructed by means of examples without adequate explanation of the requirements which are meant to be satisfied. It is also unfortunate that quite normal present-day developments are glossed over.

# 20,140 construction: complete structure SECTIONAL PRESTRESSED COLUMNS

Prestressed Sectional Columns. Builder, Aug. 12 and Aug. 19, 1949, pp. 192-5 and p. 244.)

First large-scale use in Great Britain of prestressed concrete columns cast in separate sections.

The extension to the existing works at Alexandra Docks of South Wales Board Mills, Ltd., has several interesting structural Mills, Ltd. features. The new building occupies an open strip of 58 ft. 6 in. width and about 800 ft. length between two older structures, whose brick walls form its boundaries for the full length on either side. The brick walls are 16 ft, high to the eaves and both have piers at 15 ft, centres. The roof of the new building is supported on prestressed precast

columns set 62 ft. 6 in. apart over the outer faces and recessed into the brickwork of the old walls, placed midway between the brick piers to avoid imposing additional load on the existing foundations. The columns are approximately 37 ft. high and carry also the rail for a large hand-operated crane as well as three smaller elec-trically-operated ones. Altogether there are 104 precast prestressed columns incor-porated in the structure. They are of two types, one hollow and one solid. Both types of approximately 6 tons weight each. but those of hollow section are far stronger and were used where no stiffening inter-mediate floors occur. The solid columns, of which there are 58, have a cross section of 12 in. by 30 in. They contain five 12-wire cables of 0.2 in. dia. wires, encased in 30 gauge sheaths, anchored at the ends into Freyssinet concrete cones. The hollow columns vary from 16 in. by 21 in. at the top to 16 in. by 50 in. at the bottom. They were precast in 7 separate segments, each with 3-in. thick side walls and 5-in. thick Four longitudinal holes in each segment were formed for the passage of the prestressing cables and four Freyssinet precast concrete cones were cast in the end segments for the anchorages. For prestressing, the segments were first assembled end to end on prepared platforms and the four 12-wire cables were threaded through. A 1 in thickness of stiff mortar was then applied to the abutting surfaces and 24 hours later the cables were stressed with

Freyssinet jacks and grouted in.

It was found that casting in segments greatly simplified the moulds and made it possible for the work to be carried out under cover and close supervision. All work on the solid columns was performed in the open.

The prestressed columns were all provided with special holes for lifting and handling and were placed, grouted and concreted into socket housings formed in all foundations.

The 60-ft. span roof trusses are in aluminium alloy and are approximately a quarter of the weight of steel. They require no painting or maintenance. The purlins and wind bracing are also of aluminium alloy, the roof being finally covered with corrugated asbestos cement sheeting.

# 22.35 sound insulation and acoustics THEATRE ACOUSTICS

On the Acoustics of Grecian and Roman F. Canac. (JRIBA, July, 1949, p. 142.)

Study of intelligibility and the causes of clarity and confusion. Important for modern design. Illustrated.

This is a good account of excellent studies directly bearing on modern theatre design.

Mr. Canac studied two ancient outdoor theatres seating 8,000 to 9,000 people, and was able to deduce causes for good intelli-gibility, which he was able to confirm gibility, which he was able to confirm reasonably reliably by laboratory tests. His main conclusions were



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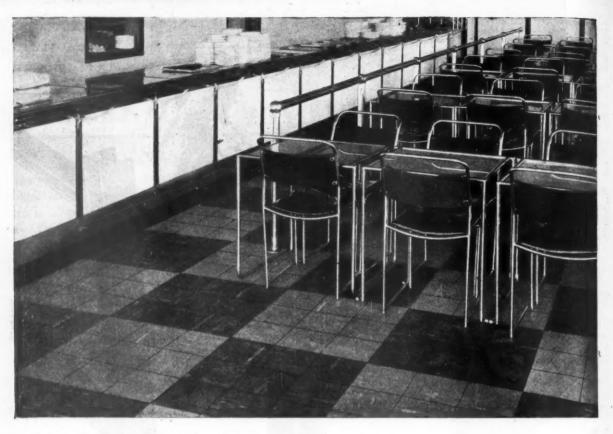
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THE WESTERN TRINIDAD LAKE ASPHALT CO. LTD.,
Asphalt House, St. Mary Street, Cardiff

(a) It is important to screen outside noises

(a) It is important to screen outside noises (especially for open-air theatres).
(b) Reflection from behind causes intelligibility to suffer by back echoes. A very uneven wall scatters reflections and is better than a plain wall.

(c) Reflections from the sides, opposite the

actors, can also cause reduced clarity.

(d) Reflection in front, i.e., the stage floor, helps to equalize the distribution of sound. (e) The circular seating avoids standing

waves and gives homogeneous audition. There are several lessons for today Outstanding is the reduced clarity which can result from important reflections following the main sound, even very closely. This affects cyclorama design and the flanks of the proscenium arches in theatres.

# 23.110 heating and ventilation ELECTRIC WATER HEATING

Electric Water Heating Handbook. (The British Electrical Development Association.

A book giving in small space information concerning water supply and the layout and equipment of electrically heated domestic hot water services

This book is largely concerned with small installations, and as such is of particular interest to architects who may have to design and supervise such an installation with-out the assistance of a skilled engineer, which is normally available in the case of larger ones. Further, the high cost of eleclation is properly laid out and thoroughly insulated. The advice given in this book should be of the greatest assistance in achieving this.

The form printed below is to assist readers requiring up-to-date information on building products and services. Complete and post it to The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.I, and the advertisers listed will be asked to supply information direct.

# ENOUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal."
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BLOCK LETTERS, Please

A.J 1.9.49.

Conditions of water supply are briefly covered, and thermo-dynamics and hydrocovered, and thermo-dynamics and hydro-statics, in so far as they apply to hot water installations; a section on heat losses emphasizes the importance of careful layout and insulation. A further chapter deals with the basic requirements, by way of quantities, temperatures and the like, of hot water in the home. In this, the estimated quantity required weekly for a family of four is parsimonious; it is unlikely that families having a constant hot supply will limit themselves to one bath a week, in spite of exhortations. The layout of piping and pipe sizes is then considered, and this is followed by a description of the various types of electrical water heaters available: both all electric, new and converted coal-electric systems are covered. In the latter case it is satisfactory to note that conversion methods relying on valves for their economical operation are avoided, for their proper use is all too frequently neglected. The Ministry of Works' temporary bungarlow heat service unit is properly quoted as an example of bad combined layout leading to waste of electricity. A chapter deals with electric wiring and faults; and appendices give useful data in connection with pipe sizing, British Standards, heat losses. and water supplies for various districts.

The only major criticism of an otherwise excellent book is upon that chapter which deals with comparative costs. Comparison is made between the most up-to-date elec-trical generating plant and water heating systems, and obsolescent solid fuel systems. in a manner more worthy of a politician than an engineer. A sketch entitled "Com-bustion Comparisons" shows clouds of smoke coming from a domestic boiler flue and a gasworks, but none at all from the stack of the generating station. Many who live near generating stations would have another tale to tell.

The value of electric water heating properly applied is such that such devices of comparison are quite unnecessary. in all other respects this is an excellent little book with much information in a small compass.

# 24.117 lighting SUNLIGHT CALCULATIONS

Sunshine and Shade in Australasia. R. O (Commonwealth Experimental Station [Australia]. Document Phillins. Building No. 23.)

Principles, solar charts, protractor. Heliodon; example of treatment. Moderately interesting. Illustrated.

The solar charts and protractors add something to existing methods of computation, but in this country there is generally felt to be enough of these and a dearth of information about the criteria of design, i.e., the importance people attach to it, when it is most wanted or unwanted, and what standards can usefully be used. Unfortunately the report does not go so far.

# 24.118 lighting LIGHTING TEXTILE MILLS

Lighting for Woollen and Worsted Textile Mills. Report of IES (America) Study Com-mittee. (Illum. Eng. [USA], June, 1949. p. 369.)

List of all operations; recommended intensities and preferred arrangements; colour: data on increased production. Useful, detailed. Illustrated.

This is for the factory specialist, who should examine it in detail if he is handling a mill for textile manufacture. It can only

be reviewed in its general aspects.
Unfortunately, despite its valuable detail, it falls far short of the best American sensitivity to glare and other causes of dis-

comfort. There is too much engineering, too little of the vision side. There is a valuable list of every major operation in manufacture, with recommended intensities and preferred arrangement of sources. A useful emphasis is placed on using moderate rather than high reflection colours on wall and machines. For walls 50 to 60 per cent. is suggested, for machines 25 to 50 per

# 26.51 services and equipment : miscellaneous GAS INSTALLATIONS

BS C of P for Gas Installations. Volume 1. Codes of Practice Committee. (British Gas Council, March, 1949. 15s.)

Codes of Practice covering gas installations, with particular reference to domestic supplies and equipment.

A handbook, in which are gathered under one cover ten codes of practice relating to gas installations.

Gas Service Pipes, Gas Metering and Con-umers' Control. Gas Installation Pipes, sumers' Flues for Gas Appliances, Gas Lighting for Single Family Dwellings, Domestic Hot Water Supply by Gas, and Space Heating by means of Independent Gas Appliances for the same, Gas Cooking Installations, Gas operated Refrigerators, and Gas Equipment for Laundering and ancillary domestic purposes

This book, taken in conjunction with the British Gas Council's recent publication, Domestic Gas Handbook for Architects and Domestic Gas Handbook for Architects and Builders (see 23.106: 21.7.49), should be invaluable to architects who wish to specify for domestic gas installations: they will find their task thereby greatly simplified. Though sufficiently technical, it is clearly and simply written and well illustrated with sketches and diagrams.

It is proposed to issue companion volumes at a later date dealing with the installations and equipment for larger buildings.

This feature answers any question connected with building confidentially and free of charge. Questions Technical Editor, to the Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.I.

# OUESTIONS ANSWERS AND

THERMAL TRANSMISSION: AIR SPACES

I have heard that the resistance of Q an air space is somehow influenced by the surfaces bounding it, yet in most calculations a resistance value of 1.0 seems to be taken. Can you explain this?

It is normal practice to take a resist-A ance value of 1.0 for air spaces whether horizontally inclined or vertical. The subject has not yet been fully explored, but it would seem that with surfaces having an emissivity of 0.9 this is a safe figure, and the majority of structures involve emissivity of this order.

REFERENCE BACK

Q and A 2995. 4.8.49. We understand that the RIBA no longer arranges the issue of "Building Science Questions and Answers," 4th Series, No. 3, entitled "The Cure of Smoky Chimneys." Readers requiring this publication should therefore apply direct to the Building Research Station, Garston, Watford, Herts.

# Furniture for Special Needs

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English walnut boardroom furniture, recently designed and made by Heal's Contracts Ltd. for Bayliss, Jones & Bayliss Limited, the well-known makers of Railway Equipment, Telegraph Ironwork, Gates, Fencing, etc. The table can be extended when required for a full Board Meeting to accommodate sixteen people. The chairs are covered in brown and off-white Welsh wool tweed; fitted carpet in nigger brown and curtains of ivory colour satin.

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# BUILDING MATERIALS' PRICES

By Ian Bowen

# INDEX FOR THE THIRD QUARTER

In August, 1949, just ten years after the base year date, the index of prices for 44 building materials stood at 208.4. Thus the figure for the middle of the third quarter of 1949 showed a slight reduction as compared with the second quarter, when it stood at 210.6. On this showing the level of building materials' prices has, for the time being, settled down at just over twice the pre-war level. Like all such index-numbers, this figure has to be calculated from regularly available information, such as trade price lists, or Government statements in the case of controlled prices. The prices of materials to the builder may have risen more (or less) steeply than this owing to such factors as changes in the discounts allowed on the non-availability of materials of the precise specifications required. In general, as the evidence to the Girdwood and Laidlaw committees suggests, from the contractor's point of view, at least, until 1948 the prices of materials moved up more steeply than any index of trade prices could reveal.

e table

# CAUSES OF THE DECLINE IN PRICES

Now at last, and perhaps only temporarily, there is some weakening in prices, though this is not the first occasion when the rise has been halted. (There were temporary declines in the index between February and August, 1948.) The main immediate cause of the decline has been the downward movement in the quoted prices for lead and for paint. The former went down by nearly 20 per cent. In one quarter, and paint by 12.7 per cent. Raw materials, more affected by the international market position than goods produced and consumed mainly at home, have been weakening in price ever since the American trade recession set in, but the effect of this on the British market was not felt at once. The delayed-action effect of this reduction has now been substantial.

### LEAD

Lead is, of course, used for storage batteries, cable coverings, the chemical industry, and for many purposes other than building. It has, to some extent, become a scarce, strategic material, especially as world production has been persistently below the prewar level. Prices rose to an extremely high figure in the United States by January, 1949, but by March there were signs of a break in prices; in fact, there was a break in prices on the free markets of the world. There were bitter complaints that the British controlled price did not come down as fast as the American market price. Bulk buying had protected the British user of lead from the full effects of the inflated prices of the winter of 1948/9, but was now under fire for failing to bring the prices down as violently as (on the open market) they had gone up.
Thus bulk buying was attacked from two
sides. The Ministry of Supply was condemned for making a profit when prices were rising, and for not making a bigger loss when they were rapidly falling; the critics never admitted that there might be some virtue in smoothing out the most violent peaks and troughs of price fluctuation. After about July of this year, the Ministry appears to have been in a strong enough position to let official prices come down at the same rate as foreign market prices. It is the consequences of this now much happier situation that the building industry enjoys. These fluctuations in base metal prices may not be without their effect on building materials' supply, since a continued relatively low price for lead would make it a com-petitor with a wide range of copper commodities.

### GROUPS OF COMMODITIES

The present weakening of raw materials' prices slightly improves the index for "imported commodities," which on a base of August, 1939, stood at 327.6 in August, 1949, as against 344.8 the previous quarter. For each of the four groups the figures are:—

			B	ase.	
III.	Imported Metal Quarried Primary			August, 1939, 327·6 226·5 205·6 159·7	August, 1945 169·2 147·4 133·8 107·7
All commodities				208 · 4	129 - 9

Even now, as the table shows, homeproduced heavy building materials, and quarried products, show relatively the least increase in price. To speak of home-caused factors as the main or sole reason for the alleged "high structure of costs" of British

industry is evidently a travesty as far as the building materials' industries are concerned. In several of the heavy industries improved efficiency, better plant, and production at a level near to capacity have, to a considerable extent, evidently offset such unfavourable factors (from the costs' point of view) as steadily rising wages.

### OTHER MOVEMENTS IN PRICES

Apart from the fall in the prices of lead and paint, one or two other items (such as putty, taps, cisterns and tanks) have gone down in price. On the other hand, cast-iron rainwater goods rose slightly, and there was a quite substantial rise in the price of steel. On the whole, the comparative absence of movement among the quotations used does suggest some hesitancy on the market. though the long-term outlook for building demand is good, it is hardly surprising that the supply industries are uncertain of the effects on capital investment of the present This is certainly not a time when the producers of building materials can afford to neglect watching for signs of any policy decisions to alter the size or nature of the building programme; should any substantial change in that programme be contemplated it is to be hoped that it will be done in an orderly way, and not in an atmosphere of panicky decisions. If the programme continues at about the same level as at present, on a more or less even keel, then it may well be that prices of materials can gradually be brought downwards; and it is to be hoped that any savings due to improved manufac-turing efficiency will be fully passed on to the consumer, and not lost on the way in rising returns to distributors.

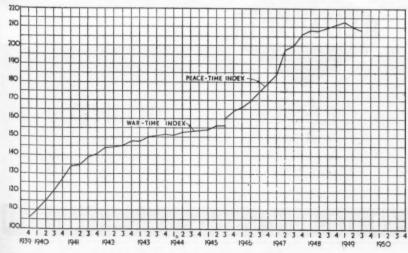
# Announcements

Prices of copper, lead and zinc in Britain were recently reduced. The reductions in the selling prices, taking into account freight, delivery charges and other factors, bring our prices for copper, lead and zinc into line with those current in the USA. Announcing this, the Ministry of Supply states that for forward purchases, a new arrangement has been approved. Under this users can continue to buy forward up to six months' requirements for copper and zinc, and three months in the case of lead. The buyer will, however, have to pay a premium as an insurance against a rise in prices. The new prices (per ton delivered) are: Electrolytic copper, £104; good soft pig lead, £75 10s.; good ordinary brand zinc, £58. Discounts and premiums remain unchanged. The Ministry's buying price for rough copper in slabs of from 2 cwt. to 3 cwt. has been reduced from £80 to £70 per ton.

The prices of zinc oxide have also been

reduced to the following figures for lots of not less than 2 tons, delivered buyers' premises: Red seal, £58 15s.; green seal, £60 5s.; white seal, £61 5s. Additional charges will be made on orders booked for forward delivery as follows:—For delivery in second and third calendar months after month of order: Copper, per ton, £2 10s.; lead, per ton, £2; zinc, per ton, £2. For delivery in fourth, fifth and sixth calendar months after month of order: Copper, per ton, £5: lead, not applicable owing to rationing scheme; zinc, per ton, £4. Orders for copper and zinc will not be accepted for delivery more than six months after the end of the month of order, or for lead for more than the period of the quota (at present three months) under the rationing scheme. Sales for delivery in any one calendar month will be limited to a quantity which does not exceed, or does not substantially exceed, the customer's normal monthly consumption.

The Education Architects' Section of the Borough Engineer's Department, Crossley Street, Halifax, would be pleased to receive



Graph showing price index for the third quarter of 1949.

238]

trade catalogues relating to building materials and finishes suitable for educa building

tional buildings.

The Yorkshire Educational Association for the Building Industry have published a booklet, "A Retrospect," giving an account booklet, "A Retrospect," giving an account of its work during the 25 years from 1922 to 1947

The Ministry of Supply announces that the price of virgin aluminium in ingot form has been increased from £90 to £93 per long ton, delivered into consumers' works, with ton, delivered into consumers works, with the addition of £2 10s, per ton for metal in notch bar form. The new price will apply to metal of a purity of 99 to 99.5 per cent. inclusive, and the existing premiums for higher purities will be payable in addition.

Maximum prices of certain iron and steel products have been altered by a Order.

products have been altered by an Order made by the Minister of Supply. Principal alterations are: Reductions in the prices of galvanized sheets, tubes, wire nails, terne-plate and alloy steel black bars; and an increase in the price of alloy steel bright bars.
Copies of the Order—the Control of Iron & Steel (No. 73) Order, 1949—can be obtained from HMSO or from any bookseller.

Messrs. Laurence M. Gotch, F.R.LB.A., and Partners, architects and surveyors, have recently opened an office at 23, Old Steine, Brighton, Sussex. Their old office at 10, Albion Street, Lewes, is now the address of Mr. F. W. Davey, A.R.I.B.A., who is practising on his own account.

tising on his own account.

Following a further decrease in the cost of raw materials, the MOW has confirmed a reduction equivalent to 2½ per cent. of the basic prices of galvanized tanks and cisterns manufactured by members of the Associated Tank Manufacturers. The new plusage is 65 per cent, on hasic list prices. plusage is 65 per cent. on basic list prices and concerns all deliveries made on and after August 15.

Mr. G. H. Rolt has been appointed a director of Sealocrete Products, Ltd.

Mr. T. R. Gibson, A.R.I.B.A., A.M.T.P.I., has assumed official duties as senior town plan-ner for Canberra, Australia, with the Com-monwealth Department of Works and Housing for the Australian Capital Territory.

Messrs. Gough Cooper & Co., Ltd., announce that one of their Directors, Mr. W. R. Thomson, will be leaving shortly to visit their Associated Company in South Africa, Gough Cooper (Pty.), Ltd., Jubilee House, Simmonds Street, Johannesburg.

# Buildings Illustrated

Prototype classroom for the Middlesex County Council (pages 223-225). Architect: C. G. Stillman, Architect to the Middlesex County Council. General contractors: Messrs. Prestige & Co., Ltd. Sub-contractors: aluminium roof trusses, Perspex lights, roof shutters false ceilings asbestes roof decking shutters, false ceilings, asbestos roof decking, Perspex finger plates, Roberts Adlard & Co., Ltd.; aluminium windows and pelmets, louvre ventilation, ironmongery, James Gibbons, Ltd.; Lenscrete windows, Lenscrete, Ltd.; Batco floor tiles, British Art Tile Co.; acoustic Celotex tiles, H. W. Cullum & Co.. Ltd.; wood block floor, Stevens & Adams, Ltd.; cupboard, Rippers, Ltd.; metal door trims Henry, Hone & Sons, Ltd.; metal door trims, Henry Hope & Sons, Ltd.; metal door frame, Crittall Mfg. Co., Ltd.; heating, Fretwell Heating Co. Ltd.; fluorescent lights, Colston Electrical Co., Ltd.; precast Hopton stone shelves, F. Bradford & Co., Ltd.; mat frames and grating, Camber & Co., Ltd.;

blackboard, North of England School Furnishing Co., Ltd.; plastic paint, Fleetwood Paint Co.; decorative paints, Leyland Paint & Varnish Co., Ltd.

Offices and Works at Kingsbury Road, London, N.W.9 (pages 226-233). Architect: Brian O'Rorke, A.R.A., F.R.I.B.A. General contractors: Messrs, Charles R, Price. General foreman: S. Hatton. Consulting engineers for reinforced concrete work: Dr. K. Hajnal-Konyi and Sydney M. Myers. Consulting engineers for mechanical services: Messrs. G. H. Buckle & Partners. Sub-contractors: demolition, H. Sabey & Co., Ltd.; excavation, H. W. Truslove; stone and stonework. tion, H. W. Truslove; stone and stonework, The South-Western Stone Co., Ltd.; roofing felt, Everseal Products, Ltd.; glass, James Clark & Eaton, Ltd.; patent flooring, cork flooring by Mundet Cork Products, terrazzo floors by Art Payements & Decorations floors by Art Pavements & Decorations, Ltd.; central heating, gasfitting, boilers, Z. D. Berry & Sons, Ltd.; electric wiring, electric light fixtures, Electric Installations, Ltd.; plumbing, water supply, Messrs. W. H. Gastelland, C. Ltd.; equitary fittings. coigne & Co., Ltd.; sanitary fittings, Messrs.
Doulton & Co., Ltd.; door furniture, Messrs. Dryad, Ltd.; casements, C. E. Welstead, Ltd.; telephones and clocks, Dictograph Telephones, Ltd.; rolling shutters, Messrs. Dennison Kett: sunblinds, Messrs. J. Avery Ltd.; marble, Messrs. Grant, Ltd.; metalwork, Messrs. S. W. Farmer & Son, Ltd.; marble, Messrs. Fenning & Co., Ltd.; tiling, Messrs. Carter & Co., Ltd.; textiles, Messrs. Furdecor, Ltd.; wallpapers, Arthur Sanderson & Sons, Ltd.; furniture, office fittings and cloakroom fittings, Charles R. Price; shrubs and trees, Westwood (Gardens), Ltd.; lifts, Bennie Lifts, Ltd.; water supply, Messrs. W. H. Gascoigne & Co., Ltd.; water-softening plant, Permutit Co., Ltd.

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the Prototype Classroom at Lascelles School, Harrow for Middlesex County Council, Architect: C. G. Stillman, Esq., F.R.I.B.A. was produced by the undermentioned firms in conjunction

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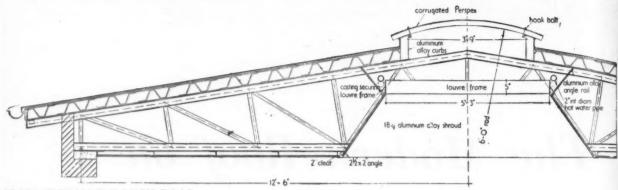
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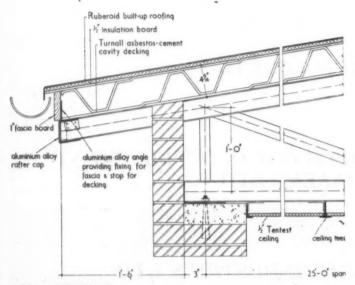
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for full details see over



CROSS SECTION THROUGH ROOF

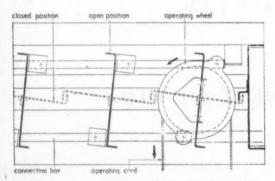


7 % x 6 x 4 aluminium alloy base plate

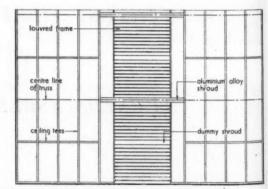
2 ragbolts 4 dia.

PLAN OF TRUSS AT WALL

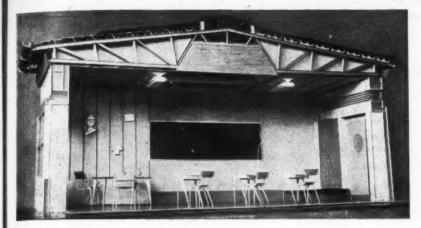
**DETAIL AT EAVES** 



PART SECTION THROUGH LOUVRED FRAME



CEILING PLAN LOOKING UPWARDS (Scale \$in. = Ift/



Sectional model of classroom showing detail of roof construction

# DESCRIPTION OF ROOF CONSTRUCTION.

# Trusses

The roof trusses are of the "Alframe" type, built up from Alminal W.10.B aluminium alloy extruded sections. The span between walls is 24ft., the rafters being carried on 1ft. 1½ in. beyond the external wall face.

The trusses are spaced at 8ft. centres and are fixed to concrete padstones with ½in. dia. ragbolts.

### Decking

plate

dia.

Ift /

This consists of "Turnall" Asbestos-Cement Cavity Decking in units 8ft. long by approximately 4½in. overall depth. The units are laid longitudinally, considerable strength being obtained from the deeply corrugated centre section of the units in combination with the underlapping and overlapping wings of adjoining members, forming a particularly lightweight cellular construction with high thermal insulating properties. Butt joints occur over each truss and the units are bolted direct to the truss rafters.

### Deck Covering

A layer of ½in. insulation board is bedded down to the asbestos-cement decking with bituminous compound and this covered with an underlay of Ruberoid "Astos" asbestos roofing. This is followed with a layer of Ruberoid compound and a cap sheet of Ruberoid mineral surfaced roofing.

### Eave

An aluminium alloy angle fixed to the top of the rafters

provides a stop for the decking and a fixing for the fascia board. The ends of the rafters are covered with aluminium alloy angle-shaped caps.

### Ridge

This takes the form of a continuous run of curved corrugated "Perspex" acrylic sheet fixed with hook bolts to aluminium alloy curbs.

### **Louvred Frames**

These are of aluminium alloy positioned symmetrically about the roof centre line, and fixed between each truss at approximately 2.7. above ceiling level. The louvres are cord controlled and all louvres in the classroom may be opened or closed from one point. The degree of opening may be varied at will by the usual cleat anchorage. Each louvre blade can be removed by springing it out of position to allow for cleaning the underside of the "Perspex."

# **Aluminium Alloy Shrouds**

These are used to mask the central part of each truss below the louvred frames.

### Ceilin

This is of ½in. Tentest supported by extruded aluminium alloy tees.

General internal view of ceiling, showing louvred frames and aluminium alloy shrouding to trusses.



the individual contributions to this modern roof were as under

# Roberts Adlard & Co., Ltd.

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Roofing Specialists. Responsible for supplying and fixing the whole roof unit. Consultative and advisory services to the Middlesex County Council throughout.

# Structural & Mechanical Development Engineers Ltd.

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Aluminium Alloy Roof Trusses, adjustable louvres, fascia rails, ceiling framing, dummy shrouds, curb members.

# Imperial Chemical Industries Ltd.

London, S.W.1.

Curved Corrugated "Perspex" Sheets.

# Tentest Fibre Board Co., Ltd.

(Specialised Construction Dept.)

75 Crescent West, Hadley Wood, Barnet, Herts.

Supplying and fixing ceilings.

# Turners Asbestos Cement Co., Ltd.

Trafford Park, Manchester, 17

"Turnall" Asbestos-Cement Cavity Decking.

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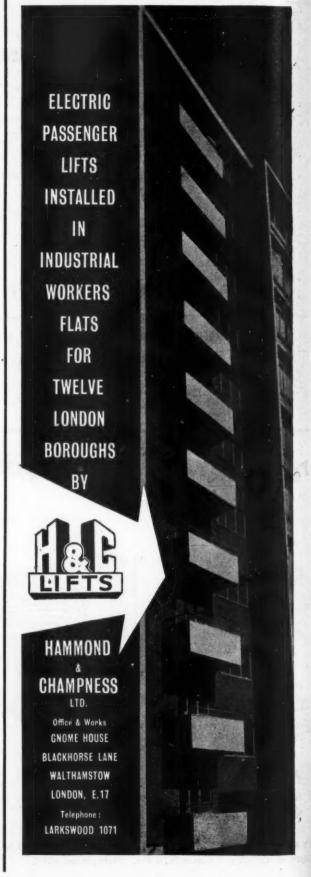
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These flush mounting switches occupy minimum space in the hollow type metal door jambs and are ideally situated for convenient operation.

The switch movement embodies the well known TUCKER arcquenching "flashproof" features with self-aligning conical contacts

> and a fully enclosed porcelain base which obviates the need for the usual box.

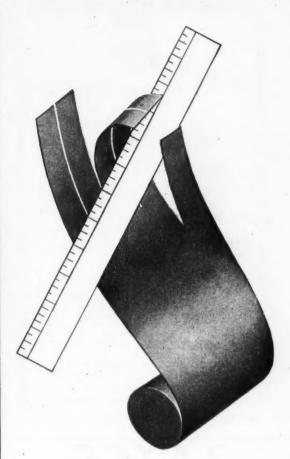


A.C. "Architrave" Switch



# J. H. TUCKER & CO. LTD.

Kings Road, Tyseley, Birmingham, II Makers of First Grade Electrical Accessories since 1892 Specialists in A.C. Switching Technique since 1935 London Office: 2 Newman Street, W.1.



# THE LONG AND THE SHORT OF IT

Trying to make all the IBECO the world wants with the little raw material available has been like measuring a mile with a foot rule . . . Today, however, we have something more like a yard-measure for the job; so that we may quite possibly find a way of measuring up to your requirements.



— World's finest waterproof concreting paper for use wherever concrete is laid over a porous sub-soil.

C. Davidson & Sons Ltd. (Dept K 80) Bucksburn, Aberdeen.



# CROFT ADAMANT

HYDRAULICALLY PRESSED



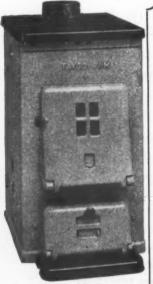
# ART AND TERRAZZO FINISHES IN ATTRACTIVE COLOURS

Your enquiries are invited

CROFT GRANITE, BRICK & CONCRETE CO. LTD., CROFT, Near LEICESTER. Tel.: Narborough 2261-2-3

London: 7, Victoria Streat, Westminster, S.W.I. Tel.: ABBey 4802 Branch Office and Works: West Bank, Widnes. Tel.: Widnes 2656-7 Prestatyn, Flints. Telephone: Prestatyn 715

# TAYCO New Series DOMESTIC BOILERS



No. 41M (Illustrated)

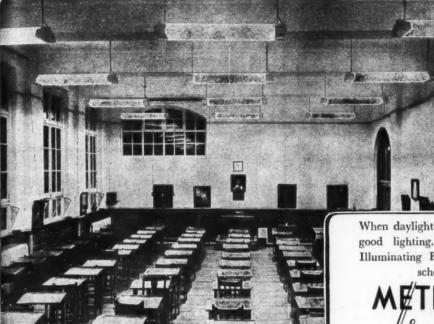
 Designed in accordance with British Standard No. 758

- Patented hinged hotplate cover
- Vibratory type shaking grate
- Constant hot water
- Low fuel consumption
- Durable enamel finish
- Easy clean surface
- Made in 4 capacities from 21,000 to 41,000 B.T.U's.
- Approved by Fuel Efficiency Dept. of Ministry of Fuel and Power.

R. TAYLOR & CO. (Ironfounders) LTD.

Muirhall Foundry, Larbert, Stirlingshire
London Office & Showrooms: -66, Victoria Street, S.W.I.
Also at Building Centre, 9, Conduit Street, W.I.





School lighting, St. Helens, Lancs.

When daylight fades young eyes need good lighting. Consult Metrovick Illuminating Engineers-specialists in school lighting.

METROPOLITAN-VICKERS ELECTRICAL CO., LTD. ST. PAUL'S CORNER, 1/3 ST. PAUL'S CHURCHYARD, LONDON, E.C.4



For protection and fine finish. A long-oil Enamel of extreme durability and gloss retention, in 20 attractive permanent shades.

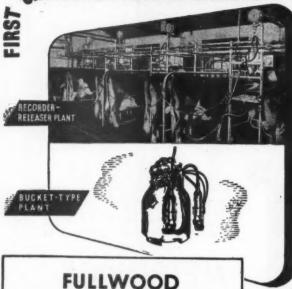
Particularly resistant to Sea Atmosphere.

Made in England by

NORMAN, SMEE & DODWELL LTD. Phone: Mitcham 0866 2501

stand, Mitcham, Surrey

# CHOICE FOR MODERN DAIRIES....



STANDARD LAYOUTS AND PLANS AVAILABLE TO ARCHITECTS

\*R. J. FULLWOOD & BLAND LIMITED
ELLESMERE, SALOP, & 31 BEVENDEN ST., LONDON, N.I
Ellasmara 29 & 169
Ne connection with any other British or Foreign Manufacturers of Milking Machinese



MILKING

THE SIGN OF GOOD WELDING



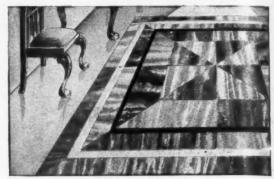
JENKINS
Welcleck
STEEL
BOILERS

EXPORT ENQUIRIES INVITED We are exhibiting at the Engineering and Marine Exhibition, Olympia. Aug.25 to Sept.10, 1949.

Robert Jenkins & Colld.

Telephone: 4201-6 (6 lines)

Boot Boiler with intersecting flue.



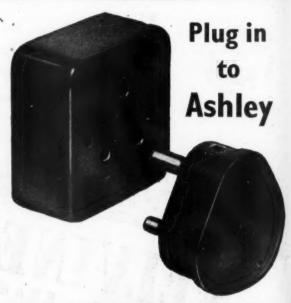
# One of many distinctive designs

For a really comfortable floor covering of distinctive appearance, safe and hardwearing, silent and hygienic, the name is Britannia Rubber Flooring. Made in a wide range of colours and designs, Britannia Rubber Flooring is also backed by an expert laying service and 95 years' experience.

# Britannia Rubber & Kamptulicon Co. LTD.

Bridgewater Road . Alperton . Wembley . Middlesex Established 1854 Telephone : Wembley 2961 (5 lines)

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15 AMP. SHUTTERED SOCKET and PLUG SK 71 and PG 71

Ashley

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Telephone : ULVERSTON 3333

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# Planning for the Future

Today . . . Today industry is being re-equipped and houses are being built on a large scale. For the many schemes in hand (and those still to be carried out) electricity is specified because of its efficiency, cleanliness and convenience. And so the demand for electricity increases and will continue to increase.

. and tomorrow To meet these needs, a vast £400,000,000 scheme is in progress. It will provide new plant, power stations and transmission lines. After that, there will be further electricity schemes, to keep pace with the needs of still more housing and industrial development.

Electricity—
the power behind
production

BRITISH ELECTRICITY



Modern factory for the manufacture of drugs and fine chemicals - Midlands

# ermacoust Channel Reinforced

ROOFING WOOL

Ashton Vale Primary School, Bristol. J. Nelson Meredith, F.R.I.B.A., City Architect: Laying roof with Thermacoust reinforced Slabs to receive tiles.

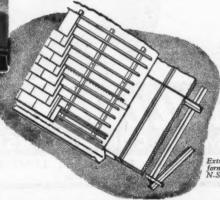
ANCS.

TON



THERMACOUST Channel-reinforced Slabs help to speed up building construction. They keep that building warm in winter, cool in summer. They are large in unit size, light in weight, easily handled and can be worked with ordinary wood-working tools. They are being extensively used for roofs, flat or pitched, in schools, factories, office buildings, shops, etc. Limited quantities supplied without a steel authorisation. Standard slabs 6ft. long; 6ft. 8in. and 7ft. slabs made to order.

- \* FOR Pitched or Flat Roofs.
- NO purlins needed at less than 6ft. centres.
- \* NO timber rafters needed for tiled roofs.
- NO other insulating material has greater structural strength.



Extract from In-formation Sheet N.S.5. (T.5.

For Information Sheets and prices write to: THERMACOUST LIMITED, 39 VICTORIA STREET, LONDON. S.W.I. (ABBey 2738)



'BULLDOG'
TIMBER CONNECTORS
ARE SIMPLE TO
USE

While the members are held temporarily in place by nails, a bolt hole is bored through the assembly.

2 The members are lifted apart and the toothed connectors are placed between the adjacent faces of the members to be connected.

3 The members are then drawn together by means of the bolt until the projecting teeth of the metal plates are completely embedded in each contacting timber surface.

The 'Buildog' timber connector consists of a metal plate with the edges turned off at right angles to form sharp triangular teeth projecting evenly from both sides of the plate.

In use, these connectors are embedded firmly between the lapped members, thus greatly increasing the small bearing area provided by a bolt alone, and enabling the stresses to be distributed over practically the entire cross section of the Timbers involved.

'Bulldog' connectors put timber construction on a sound engineering basis and the consequent increase in efficiency results in an amazing saving of timber, time and material.

Full details and technical advice are available to everyone interested.



W. F. HOLLWAY & BROTHER, LIMITED,



Ade Vana 13. Quahouli morni paper Res sare o given Ava Contr

Pub

# A THING OF BEAUTY and a joy for ever..

clean lines, with their bright enamel finish—joy in the quickly regulated temperature control, the lavish oven space, the large hotplate and the continuous burning system.

COOKING. Ample hotplate and oven space with easily regulated oven heat to cook for six to ten people.

HOT WATER. Supplies forty gallons a day at a temperature of 140° F.

CONTINUOUS BURNING. Daily fire lighting is eliminated and the range is always warm.

ECONOMY. Only three tons of fuel a year are needed and any type of solid fuel may be used.

MODEL No. 31 — has a Raducer fire box, heat retaining covers on the hotplates and a separate boiler flue. Finished in a stone coloured vitreous enamel.

MODEL No. 35 — is a simpler model with the same cooking capacity. Finished in Radar grey porcelain enamel.

# **EAGLE**

Advance RANGE

EAGLE RANGE & GRATE CO., LTD



A S T O N BIRMINGHAM 6

Product of Radiation Ltd

# CLASSIFIED ADVERTISEMENTS

detertisements should be addressed to the Advt. suager. "The Architects' Journal," 9, 11 and Queen Anne's Gate, Westminster, S.W.1, and build reach there by first post on Friday eraing for inclusion in the following Thursday's

seper. Replies to Box Numbers should be addressed use of "The Architects' Journal." at the address the above.

Available only to applicants excepted from the entrol of Engagement Order, 1947.

# Public and Official Announcements 21s. per inch; each additional line, 2s.

Public and Official Announcements

Als. per inch; each additional line, 2s.

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SOLVENDES Maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public asthorities and private practitioners having staff researcies. Address: Employment Rousers, West Park, Whyteleart. Tel.: Uplands 0935. 991

LONDON COUNTY COUNCIL.

Applications are invited for unestablished positions of (i) ARCHITECT, Grade III (salaries up to 2700 a year) and (ii) ARCHITECTURAL ASSISTANTS (salaries up to 2580 a year), in the Housing and Valuation Department. Commencing salaries in either grade will be determined according to qualifications and experience. Engagement will be subject to the Local devernment Superannuation Acts, and successful candidates will be eligible for consideration for appointment to the permanent staff on the securence of vacancies.

Successful candidates will be required to undertake the design, layout and preparation of working drawings for housing schemes (cottages and mili-storey flats), and will be employed in the Housing Architect's Division. Preference will be given to candidates holding a recognized protessional qualification.

Forms of application may be obtained from the Director of Housing, The County Hall, Westmister Bridge, S.E.I (stamped addressed envelope equired, and quote Ref. G.R.3). Canvassing disqualifies. (2269)

LONDON BLECTRICITY BOARD.

IONDON ELECTRICITY BOARD.

LONDON ELECTRICITY BOARD.

Applications are invited for the following appointments in the Architect's Section of the chief Engineer's Department in Central London.

(a) ASSISTANT ARCHITECTS. Commencing sary will be from £550 per annum, dependent son qualifications and experience.

Applicants should preferably be Associate Kenbers of the E.I.B.A. They should be capable of preparing working drawings and specifications, and should have had good general experience in design and construction.

(b) ARCHITECTURAL ASSISTANTS. Commencing salary will be from £500 per annum, dependent upon qualifications and experience.

Applicants should be studying for or have passed the Intermediate Examination of the E.I.B.A., be capable draughtsmen, and have had several years' experience in an Architect's office.

(c) DRAUGHTSMEN. Commencing salary will be from £350 per annum, dependent upon ability and experience.

Applicants should be neat draughtsmen, and preferably have had several years' experience in an Architect's office.

The salaries for the above posts are provisional, and the salaries and conditions of employment will be in accordance with those laid down from the successful candidates will be required to pass a medical examination.

Applicants of the Af4T, New Broad Street, London, R.C.2, to whom they should be returned, day completed, within 14 days of the publication of this notice.

CITY OF MANCHESTER.

APPOINTMENT, OF CHIEF ASSISTANT LONDON BLECTRICITY BOARD

Of this notice.

CITY OF MANCHESTER.

APPOINTMENT OF CHIEF ASSISTANT ARCHIPECT.

(HOUSING DEPAREMENT).

Applications are invited for the appointment of Chief Assistant Architect, Housing Department.

Applicants must be members of the Royal Institute of British Architects and must have had considerable experience of the development of large housing estates, block residential flats and suclilary buildings.

The appointment is classified within A.P.T. Grade X of the National Scales, i.e., £850-£50 to £1,000 per annum, and the starting salary will be commensurate with qualifications and experience.

perience.
The appointment is subject to the National Serience.
The appointment is subject to the National Selme of Service Conditions, and the Standing Orders of the Council. The successful applicant will be required to pass a medical examination and to contribute to the Manchester Corporation Superannuation Fund. Canvassing in any form is Superannuation Funds, and other particulars may be obtained from my office, and the form when completed must be returned to me, together with copies of three recent testimonials, not later than Friday, 18th September. 1949.

Town Hall, Manchester, 2.

Town Hall, Manchester, 2. August, 1949.

Applications are invited for the following whole-time appointments on the staff of the City Architectural Department:—

(a) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., VI, commencing at £635 per annum and rising to £710 per annum.

(b) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., V, commencing at £520 per annum and rising to £710 per annum.

(c) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., IV, commencing at £400 per annum and rising to £525 per annum.

Applicants for (a), (b) and (c) should be Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications.

Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications.

(d) ONE ASSISTANT AECHITECT. Salary on Grade A.P.T., III, commencing at £450 per annum and rising to £495 per annum. Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects.

(e) ONE ASSISTANT AECHITECT. Salary on Grade A.P.T., II, commencing at £420 per annum and rising to £485 per annum.

(f) ONE ASSISTANT QUANTITY SURVEYOR. Salary on Grade A.P.T., III, commencing at £430 per annum and rising to £450 per annum (g) ONE ASSISTANT QUANTITY SURVEYOR. Salary on Grade A.P.T., II, commencing at £430 per annum and rising to £455 per annum.

(h) ONE HEATING AND VENTILATING ENGINEERING ASSISTANT. Salary on Grade A.P.T., IV, commencing at £520 per annum and rising to £450 per annum and rising to £450 per annum and rising to £570 per annum.

Applicants should preferably be over 25 years of age and be Associate Members of the Institute of Heating and Ventilating Englacors.

(j) ONE HEATING AND VENTILATING ENGINEERING ASSISTANT. Salary on Grade A.P.T., III, commencing at £450 per annum and rising to £495 per annum.

Applicants should preferably be graduate members of the Institute of Heating and Ventilating Engineers.

In certain circumstances, housing accommodation may be made available for the successful applicants in the cases of (a), (b) and (h). Salary increments are subject to one month's notice

Salary increments are subject to satisfactory service.

The posts are subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act, as amended in regard to annuitiee to widows by the Coventry Corporation Act, 1936, and a satisfactory certificate will be requisite from the Council's Medical Referee. The successful male applicants will be required to contribute to the Municipal Officers', Widows' and Orphans' Pension Pund.

Applications for all the above appointments must be made on the forms obtainable from the undersigned, and should be returned completed, together with copies of not more than two recent testimonials, or names of two persons to whom reference may be made, not later than 12th September, 1949.

Canvassing, directly or indirectly, will be a disqualification.

D. B. E. GIBSON, City Architect. 1a. Warwick Row, Coventry. 11th August, 1949.

KENT EDUCATION COMMITTEE.
BROMLEY DIVISION.
BROMLEY COLLEGE OF ART DEPARTMENT
OF BUILDING.
Bequired in September Part-time EVENING
LECTURERS in Building Construction.
Applicants should possess professional qualifications and have a wide experience of modern framed construction. Remuneration in accordance with the Committee's scale, plus travelling expenses.

expenses.
Applications by letter giving full particulars to:
Head of Department of Building,
Wharton Road, Bromley, Kent. 1836

NORTH-EASTERN DIVISION,
NATIONAL COAL BOARD,
Applications are invited for the following appointments in Doncaster:—
ARCHITECTS. Salary on scale:—Grades I and III

ARCHITECTS. Salary on scale:—Grades I and II.

Grade I.—£700×£25—£275 a year (men).

£550×£25—£725 a year (women).

Grade II.—£460×£25—£700 a year (men).

Applicants should be A.B.I.B.A. or equivalent, have considerable experience in preparation of sketch plans, working drawings and specifications for works of magnitude (Ref. E.4/5/A).

ARCHITECTURAL ASSISTANTS. Salary on scale:—Grades I and II.

Grade I.—£400×£20—£550 a year (men).

£340×£15—£445 a year (women).

Grade II.—£300×£20—£440 a year (men).

£247×£15—£353 a year (women).

Applicants should be at least students B.I.B.A., or equivalent, have a sound knowledge of construction and able to prepare working and detail drawings (Ref. E.4/5/A).

Apply in writing, giving full particulars (in chronological order) of age, education, qualifications and experience, with dates, to National Coal Board, Establishments Branch, North-Eastern Division, Ranmoor Hall, Belgrave Road, Sheffield, 10.

Original testimonials should not be sent.

Original testimonials should not be sent.
Applications to be received not later than 19th
September, 1949.

KENT COUNTY COUNCIL.

Applications are invited from Members of the Royal Institute of British Architects for two appointments as SENIOR ASSISTANT ARCHITECT, each at a salary in accordance with the A.P.T. Division, Grade VI (£596-£660) These appointments offer interesting and varied work in the design and erection of Fire, Health, Police and School Buildings.

Candidates should have good experience in the design and supervision of both large and small building schemes, excluding housing, and should be capable of taking charge of such schemes. Previous experience with a Local Authority is not essential.

The posts are superannuable and the successful candidate will be required to pass a medical examination.

candidate will be required to pass a medical examination.

Applications, on forms obtainable from the County Architect, Springfield, Maidstone, should be delivered to him not later than fourteen days after the date on which this advertisement

which this advertisement

W. L. PLATTS.

Clerk of the County Council.

1th August, 1949.

BOROUGH OF ILFORD, ESSEX.

APPOINTMENT OF ARCHITECTURAL

ASSISTANT—GRADE IV.

Applications are invited for the following appointment on the permanent staff of the Borough Engineer's Department.

Architectural Assistant. Salary in accordance with A.P.T., Grade IV (£510—£15—£555. £10 p.a. less if under 26).

Candidates should be critical.

Architectural Assistant. Salary in accordance with A.P.T., Grade IV (2510-216-2555. 210 p.a. less if under 26).

Candidates should be suitably qualified and have general Architectural experience in municipal buildings, particularly with regard to the preparation of contracts and working drawings. The Council is prepared to consider, if necessary, the question of housing accommodation in connection with this appointment.

The appointment will be whole time (private practice being prohibited) and subject to one month's notice on either side, to the provisions of the Local Government Superannuation Act, 1937, the National Conditions of Service, and to medical examination.

Forms of application may be obtained from the Borough Engineer, Town Hall, Ilford, and should be returned to the undersigned not later than the 10th September, 1949.

K. F. B. NICHOLLS.

K. F. B. NICHOLLS Town Clerk.

COUNTY BOROUGH OF ROTHERHAM.
SENIOR ARCHITECTURAL ASSISTANT.
Applications are invited for the above appointment in the office of the Borough Engineer in accordance with Grade VI of the A.P.T. Division of the National Scale of Salaries, namely, £95 to £660 per annum, commencing at an incremental point within the Grade according to qualifications and experience of the successful candidate.

mental point within the Grade according to qualifications and experience of the successful candidate.

Applicants must be Associate Members of the Royal Institute of British Architects.

The architectural work in the department is very varied and consists of Educational, Housing, Health and other types of Local Authority Buildings, and the volume of work is rapidly expanding.

The post is superannuable and the candidate selected for appointment will be required to pass a medical examination. The appointment will be subject to the conditions of service adopted by the Council and based on the National Scheme of Conditions of Service. It will be determinable by one month's notice on either side.

Applicants must state whether they are related to any member or officer of the Rotherham County Borough Council. Deliberate omission to disclose any such relationship will disqualify any candidate. Canvassing of Members of the Council. whether direct or indirect, will disqualify Applications, endorsed "Senior Architectural Assistant," stating age, qualifications and experience, accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than the 15th September, 1949.

Housing accommodation will be made available for the successful candidate if married.

JOHN S. WALL.

Town Clerk.

Municipal Offices, Rotherham.

Municipal Offices, Rotherham. 12th August, 1949.

Municipal Offices, Rotherham.

12th August, 1949.

BERKSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT.

Applications are invited for above appointment on a salary commencing within the range of £1.460-£1.760, subject to adjustment when the findings of the Negotiating Committee on Chief Officers' salaries are known.

The department is responsible for maintenance and erection of all County Council buildings, schools and police premises.

Applicants should be Members of the R.I.B.A., with good architectural experience covering a wide field and the ability to organize and manage staff engaged on a rapidly expanding programme. Further particulars regarding the appointment and an application form can be obtained on receipt of a stamped addressed envelope from the undersigned, to whom applications for the appointment should be delivered by not later than Thursday, 15th September, 1949.

H. J. C. NEOBARD.

H. J. C. NEOBARD, Clerk of the Council.

Shire Hall, Beading.

COUNTY BOROUGH OF DEWSBURY. BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT.

BOROUGH ARCHITECT AND BUILDINGS
SURVEYOR'S DEPARTMENT.
Applications are invited for the following appointments in the Borough Architect and Buildings Surveyor's Department:—
Education Section.
(a) QUANTITY SURVEYOR—Grads A.P.T., VI. Salary £595—£660 per annum.
(b) ARCHITECTURAL ASSISTANT—Grade A.P.T., VI. Salary £520—£570 per annum.
(c) ARCHITECTURAL ASSISTANT—Grade A.P.T., IV. Salary £400—£525 per annum.
(d) ARCHITECTURAL ASSISTANT—Grade A.P.T., VI. Salary £520—£570 per annum.
The appointments will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act. 1937. The successful candidates will be required to pass a medical examination.
Applications, stating age, qualifications and full particulars of training and experience, together with copies of two recent testimonials, should be sent to the undersigned not later than 10 a.m. on Monday, 5th September, 1949, in envelopes suitably endorsed.

A. NORMAN JAMES,

A. NORMAN JAMES, Town Clerk.

Town Hall, Dewabury. 11th August, 1949.

CITY OF BATH.

CITY ENGINEER'S DEPARTMENT.

ARCHITECTURAL SECTION.

Applications are invited for the appointment
TWO GENERAL ARCHITECTURAL ASS
TANTS on the permanent staff of the City En
neer, salary A.P.T., III or IV (£450-£495
£480-£225), according to qualifications as

Experience.

Preference will be given to candidates who are Associate Members of the Royal Institute of British Architects or hold equivalent qualifications, and who have had experience in the design and supervision of housing estates or domestic buildings.

tions, and who have not cape states or domestion and supervision of housing estates or domestion and supervision of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications and experience, together with names and addresses of three referees, should be sent to the City Engineer, Guildhall, Bath, not later than Saturday, 10th September, 1949.

JARED E. DIXON,
Teur Clerk.

11th August, 1949.

METROPOLITAN BOROUGH OF
SOUTHWARK.
PERMANENT APPOINTMENTS—BOROUGH
ENGINEER'S DEPARTMENT.
Applications are invited from suitably qualified
persons for the following appointments:—
(a) ONE ARCHITECTURAL ASSISTANT.
A.P.T. v or va. £550-£660 or £580-£640 (£10 less
if under 26).
(b) TWO ARCHITECTURAL ASSISTANTS.
A.P.T., v or va. £550-£660 or £680-£640 (£02 less
if under 26).
(c) ONE JUNIOR ARCHITECTURAL ASSISTANT. A.P.T., III, £480-£525 (£10 less if under
26).

TANT. A.P.T., III, £480-£525 (£10 less if under 26).

Appointments (b) and (c) are required to fill vacancies in design groupe engaged on the preparation of new housing schemes.

Appointment (a) is required for work in connection with the alteration and improvement of public buildings.

The appointments are subject to the Council's Conditions of Service, to the provisions of the Shoreditch and Other Metropolitan Borough Councils' (Superannuation) Acts, 1922-37, to the passing of a medical examination and to one month's notice on either side.

Applications should be made on forms obtainable from me and returned not later than the first post on Monday, 19th September, 1949.

The Council is not in a position to provide housing accommodation for successful applicants. Canvassing in any form will disqualify.

D. T. GELFFITHS,

Town Hall, Walworth Road, S.E.17.

\*\*LONDON COUNTY COUNCIL\*\*

LONDON COUNTY COUNCIL\*\*

LONDON COUNTY COUNCIL.
PLANNING STAFF.
Vacancies in the following grades (some per-

manent) :PLANNING OFFICER, Grade I, £840 to £960 year. PLANNING OFFICER, Grade II, £700 to £840

PLANNING OFFICER, Grade III, £550 to

£700 a year. TECHNICAL ASSISTANT (a), £440 to £580 B Year. TECHNICAL ASSISTANT (b), 55s. to 167s. 6d.

TECHNICAL ASSISTANT (9), bos. to asis. bu. a week.

Candidates for Grade III positions and above should possess architectural, surveying or town planning qualifications, and will be engaged on either (a) Research; (b) Development Plan, and Survey; (c) Development applications, or (d) Reconstruction Areas and detailed planning.
Full particulars and forms of application obtainable from the Architect to the Council (AR/P/P), The County Hall, Westminster Bridge, S.E.1 (enclose stamped addressed foolscap envelope). Canvassing disqualifies. (193)

CITY OF PETERBOROUGH.
CITY ENGINEER AND SURVEYOR'S
DEPARTMENT.
Applications are invited for the appointment of
an ARCHITECTURAL ASSISTANT at a salary
in accordance with Grade III, A.P.T., i.s., 2450,
rising by annual increments to 2495 per annum.
Applicants should be good draughtamen, possess
a sound knowledge of building construction, and
be capable of preparing working drawings under
supervision.

a sound knowledge of building construction, and be capable of preparing working drawings under supervision.

The City Council have adopted the National Scheme of Conditions of Service. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required a pass a medical examination.

Mousing accommodation is not immediately available, but the Council will, if necessary, assist so far as they are able the successful applicant to obtain accommodation, but it must be distinctly understood that the Council do not guarantee to find either a house or living accommodation.

Applications, stating age, qualifications and experience, accompanied by copies of not more than three recent testimonials, and suitably endorsed, must be delivered to the undersigned not later than 16th September, 1949

Applicants must disclose whether they are related to any senior official or member of the authority.

ARTHUR J. REEVES,

ARTHUR J. REEVES, Town Clerk.

Town Hall, Peterborough. August, 1949.

LONDON ELECTRICITY BOARD.
Applications are invited for the following appointment in the Architect's Section of the Chief Engineer's Department in Central Lon-

QUANTITY SURVEYOR. Commencing salary QUANTITY SURVEYOR. Commencing same 2500 per annum.

Applicants must be qualified in the Quantities Sub-division of the R.I.C.S. and have had considerable experience in a Quantity Surveyor's Office.

suderable experience in a Quantity Surveyor's office.

Applicants should be competent to take responsibility for the preparation of Bills of Quantities, Stimates, Measurement of Works on site, preparation of Interim Certificates and checking of final accounts.

The salary for the above post is provisional, and the salary and conditions of employment will be in accordance with those laid down from time to time by the appropriate negotiating body.

The successful candidate will be required to contribute to a Superannuation Scheme, and may be required to pass a medical examination.

Applications should be made on forms obtainable from the Establishments Officer, 46/47, New Broad Street, E.C.2, and returned duly completed by 9th September, 1949, quoting reference EST, V/302.

CITY OF CARDIFF.
QUANTITY SURVEYING ASSISTANTS.
Applications are invited for the appointment of Quantity Surveying Assistants as follows:
(1) 2 No. Quantity Surveying Assistants, A.P.T., Grade 5a.
(2) 3 No. Quantity Surveying Assistants, A.P.T., Grade 5a.
(3) 1 No. Quantity Surveying Assistants, A.P.T., Grade 5.
A.P.T., Grade 4.
Preference will be given to Candidates who are Corporate Members of the Royal Institute of Chartered Surveyors.
The Council will assist in finding housing accommodation for successful applicants, who are married and have children.
Applications, endorsed "Quantity Surveying Assistant, Grade —, as the case may be, should be delivered to the undersigned not later than Friday, 9th September, 1949.
Details of the Conditions and Duties may be obtained from the City Surveyor, City Hall, Cardiff.

9. TAPPER-JONES.

9. TAPPER-JONES.

City Hall, Cardiff. 19th August, 1949.

SURREY COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of ARCHITECTRAL ASSISTANT, Grade II, at a commencing salary of £420 per annum, rising by annual increments of £15 to a maximum of £465 per annum, plus London allowance of up to £30 per annum, according to age.

Applicants should be of good general training and give full details in their applications. It is desirable that applications should be accompanied by a small sample of the applicant's work.

accompanied by a small sample of the applicant's work.

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

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-on-Thames, not later than the 17th September. 1949. Kingston-on-Thames, low-record of the Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

DUDLEY AUKLAND,

Clerk of the Council.

County Hall, Kingston-on-Thames.

ARCHITECTURAL ASSISTANTS (GENERAL),
Applications are invited from experienced
Architectural Assistants for the following

Architectural Assistants for the following appointments:—

(1) Architectural Assistant, A.P.T., Grade 6.
(2) Architectural Assistant, A.P.T., Grade 6.
(3) Architectural Assistant, A.P.T., Grade 6.
(4) The Council will assist in finding housing accommodation for successful applicants, who are married and have children.

Details of the Conditions and Duties may be obtained from the City Surveyor, City Hall, Cardiff.

Applications

Cardiff.
Applications, endorsed "Architectural Assistant, Grade — (General)," as the case may be should be delivered to the undersigned not later than the 9th September, 1949.

S. TAPPER-JONES,

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City Hall, Cardiff. 19th August, 1949.

19th August, 1949.

CITY OF CARDIFF.

ARCHITECTURAL ASSISTANTS
(EDUCATION).

Applications are invited from experienced for the following appointments:

(1) Architectural Assistant, A.P.T., Grade 6.

(2) Architectural Assistant, A.P.T., Grade 5.

(3) Architectural Assistant, A.P.T., Grade 6.

The Council will assist in finding housing accommodation for successful applicants, who are married and have children.

Details of the Conditions and Duties may be obtained from the City Surveyor, City Hall, Cardiff.

Applications, endorsed "Architectural Assistant, Grade — (Education)," as the case may be, should be delivered to the undersigned not later than the 9th September, 1949.

S. TAPPER-JONES,

S. TAPPER-JONES. City Hall, Cardiff. 19th August, 1949.

THE CO-OPERATIVE WHOLESALE SOCIETY,
LIMITED, ARCHITECT'S DEPARTMENT,
LONDON.

FOUR ASSISTANT ARCHITECTS. Salary
£490-£555 per annum. Applicants should have
a sound knowledge of building construction and
architectural design, capable of preparing working drawings and details under supervision.
TWO ASSISTANT ARCHITECTS. Salary
£420-£485 per annum. Applicants should be
good draughtsmen, having a sound knowledge of
construction.

good draughtsmen, having a sound knowledge of construction.

WORKERS-UP with thorough knowledge of Abstracting and Billing required in Quantity Surveyor's Section.

These appointments are permanent and offer prospects of Up-Grading.

Successful candidates will be required to undergo a medical examination for a compulsory Superannuation Scheme. Applications, stating age, experience and qualifications, to be addressed to the Chief Architect, Co-operative Wholesale Society, Ltd., 99, Leman Street, London, El. 2002.

Society, Ltd., 99, Leman Street, London, E.1. 200

COUNTY BOROUGH OF BRIGHTON.

BOROUGH ENGINEER AND SURVEYOR'S

DEPARTMENT.

APPOINTMENT OF CHIEF CLERK OF

Applications are invited for the appointment of

Chief Clerk of Works, salary to be in accordance
with Grade A.P.T., Division V (£520-£570), plus

car allowance.

Applications are an extensive knowledge of

all building trades and be competent to supervise the erection of large scale housing contracts
and other public buildings. Experience in Direct

Labour Building Schemes would be an advantage.

The appointment is an established post on the

permanent staff and is subject to the provisions of

the Local Government Supersanuation Act, 137.

The appointment will be terminated by one

month's notice on either side, and the successful
applicant will be required to pass a medical
examination.

Applications stating age, qualifications and ex-

examination.

Applications stating age, qualifications and experience, and the names and addresses of three persons to whom reference may be made, must be sent to the Borough Engineer and Surveyst. D. J. Howe, Esq., M.I.C.E., M.I.Mun.E., 26/38. King's Road, Brighton, not later than Monday, 19th September, 1949.

19th September, 1949.

THE CO-OPERATIVE WHOLESALE SOCIETY, LIMITED, ARCHITECT'S DEPARTMENT, Applications are invited for the following:

Applicants should have a sound knowledge of building construction and Architectural design, capable of preparing working trawings and details under supervision.

Applicants should be good draughtsmen, having a sound knowledge of construction.

These appointments are permanent and offer prospects of Up-Grading.

Successful candidates will be required to undergo a medical examination for a compulsor Superannuation Scheme. Applications, staining affects of the Chief Architect, Co-operative Wholesale Society, 99, Leman Street, London, E.1, who will interview applicants in Bristol.

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METROPOLITAN BOROUGH OF FULHAM.

PRINCIPAL ASSISTANT ARCHITECTS AND
ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the following appointments in the Housing and Public Buildings Department:

(a) Two Principal Assistant Architects, A.P.T., Grade VII (£635×£25—£710, plus London veighting).

(a) Two Principal Assessment (b) plus London (rade VII (£635×£25-£716, plus London weighting).
(b) Assistant Quantity Surveyor, A.P.T., Grade (VIV (£460-£570, plus London weighting).
Applicants for (a) should be Registered Architects, experienced in the planning and design of large schemes of blocks of flats and capable of carrying out the duties of a Section Leader.
Applicants for appointment (b) should note that the duties will consist mainly in "Taking off" for large blocks of flats in new schemes, and experience in a similar capacity is essential.
Applications on the official form, which may be chained from me, must be returned not later than 8th September, 1949.

CYRIL F. THATCHER,
Tents (Clerk. 1986)

CYRIL F. The Citera.

Town Hall, Fulham, S.W.6.

BOROUGH OF MANSFIELD.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.

Applications are invited for the appointment of TWO ARCHITECTURAL ASSISTANTS at a slary of 2390×215-2435 (A.P.T., I).

Applications, on forms which will be supplied a application to the Borough Engineer, Carr Bank, Mansfield, must be delivered to the undersigned not later than Monday, 12th September, 1949. Canvassing will disqualify.

A. C. SHEPHERD,
Town Clerk.

Carr Bank, Mansfield.

Carr Bank, Mansfield. 1949.

1978

COUNTY BOROUGH OF NORTHAMPTON. DEPARTMENT OF BOROUGH ARCHITECT AND TOWN PLANNING OFFICER. Applications from Associates of the E.I.Ba. for the undermentioned permanent posts, stating age. qualifications, experience, past and present appointments and salary, whether related to any sember or senior officer of the Council, and giving the names of two persons to whom wiference can be made, should be delivered to I. I. Womersley, A.E.I.B.A., A.M.T.P.I., Borough Architect and Town Planning Officer, Guildhall, Northampton, appropriately endorsed, set later than 7th September, 1949. Canvassing will disquality. SENIOR ASSISTANT ARCHITECT, GRADE VI. A.P.T. (2595—2660).

The successful applicant will be required to take charge of the General Section of the Department, which deals with all architectural building and maintenance work of the Health, Baths, Estates, Markets and Town Hall and Watch Committees. Candidates must have considerable experience in design and construction and be capable of carrying contracts through to completion. Previous experience in Local Government work is not essential.

ASSISTANT ARCHITECT, GRADE V, A.P.T. (£259—£570).

Candidates should have sound design ability and be experienced in the preparation of working drawings and estimates. The successful applicant will be engaged in the Education Section of the Department, but previous experience on Schools is not essential.

C. E. VIVIAN ROWE, Town Clerk.

COUNTY BOROUGH OF SOUTHAMPTON.
BOROUGH ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:—
(a) SENIOR ASSISTANT ARCHITECT (EDUCATION), Grade VII (£635—£710),
(b) SENIOR ASSISTANT ARCHITECT (EDUCATION), GRADE VI (£936—£660).
(c) ASSISTANT ARCHITECTS, GRADE VI (£936—£525).
(d) ASSISTANT ARCHITECT, GRADE IV (£486—£525).
(e) ASSISTANT ARCHITECT, GRADE IV (£486—£525).

(d) ASSISTANT ARCHITECT, GRADE III (£480-£525).

(e) ASSISTANT ARCHITECT, GRADE III (£49-£495).

(f) ARCHITECTURAL ASSISTANTS, GRADE I (£390-£435).

(g) JUNIOR ARCHITECTURAL ASSISTANT, GENERAL DIVISION (£135-£335).

Applications on forms obtainable from L. Berger, Dip.Arch., A.R.I.B.A., Borough Architect, Civic Centre, Southampton, should be returned not later than 19th September, 1949.

COUNTY BOROUGH OF GREAT YARMOUTH.
BOROUGH ENGINEER'S DEPARTMENT.
Applications are invited for the appointment
of a GENERAL ASSISTANT ARCHITECT,
mary A.P.T., Grade IV (2480/£525).
Applicants should have passed the Intermediate
Examination of the R.I.B.A.
Applications, detailing experience and giving
the names of three persons to whom reference can
be made, should reach the undersigned not later
than Monday, the 12th September, 1949, Envelopes
should be endorsed "General Assistant Architett."

FARRA CONWAY, Town Clerk.

Town Hall, Great Yarmouth. 19th August, 1949. 1975

BEDFORDSHIRE COUNTY COUNCIL.

ASSISTANT COUNTY ARCHITECT.

Applications are invited for the post of Assistant County Architect, at a consolidated salary of £850 to £1,000 p.a. (A.P.T., X). The duties will primarily be in connection with the Educational Building programme, and will include the commissioning of privately practising Architects. Candidates should be Registered Architects and members of the R.I.B.A. They must have had extensive organising and administrative experience, be able in School design, and competent to handle building contracts.

The Council have adopted a scheme of providing rented flats for staff, or alternatively, to pay special allowance if unable to find accommodation for family.

Forms of application to be obtained from the undersigned and returned not later than 17th September, 1949.

Canvassing, either directly or indirectly, will disqualify.

J. B. GEAHAM.

disqualify.

J. B. GEAHAM,

Clerk of the County Council.

Shire Hall, Bedford.
22nd August, 1949.

1992

WEST SUSSEX COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of
a JUNIOR ARCHITECTURAL ASSISTANT at
a salary in accordance with Grade I, Miscellaneous Division (2315 to 2560 per annum), of
the Consolidated National Scales.
Applicants should be capable of assisting in the
preparation of schemes for architectural work,
including surveys of sites and existing buildings,
and the preparation of working and detail
drawings.

including surveys of an of working and ucound the preparation of working and ucound and the preparation of working and ucound the preparation of working and ucound from F. R. Steele, F.R.I.B.A., F.R.I.C.S., M.T.P.I., County Architect, County Hall, Chichester, to whom detailed applications must be submitted not later than the 14th September, 1949.

T. C. HAYWARD,

Clerk of the County Council.

County Hall, Chichester.

24th August, 1949.

SERVICE COMMISSION, DUBLIN.

(Established),

24th August, 1949.

CIVIL SERVICE COMMISSION, DUBLIN. ASSISTANT ARCHITECTS (7) (Retablished), Office of Public Works, Dublin. Approximate salary scale: Man: 2465 to 2885; Woman: 2390 to 2715, with higher initial salary in certain circumstances. Maximum age limit: 40 years, with extensions in certain cases. Essential: University Degree, or equivalent, in Architecture, and satisfactory experience of Architectural work. Further particulars obtainable from the Secretary, Civil Service Commission, 45, Upper O'Connell Street, Dublin. Latest time for accepting completed application forms: 5 p.m. on 22nd September, 1949.

O'Connell Street, Dublin. Latest time for accepting completed application forms: 5 p.m. on 22nd September, 1949.

NATIONAL COAL BOARD—
SOUTH WESTERN DIVISION.

Applications are invited for the following posts in the Divisional Architect's Department:—
(a) ONE SENIOR ARCHITECT.

Salary £850×£35—£1,150 per annum (Male);
£700×£35—£1,000 per annum (Female).

Applicants should be Corporate Members of the Royal Institute of British Architects, with extensive administrative and supervisory experience and be capable of taking charge of a section of Architectural work.

(b) ONE ARCHITECT, GRADE I.

Salary £700×£25—£875 per annum (Male);
£550×£25—£725 per annum (Female).

Applicants should be Associate members of the Royal Institute of British Architects and have had considerable experience in the preparation of sketch plans, working drawings and specifications, for large works.

(c) ONE ARCHITECT, GRADE II.

Salary £450×£25—£700 per annum (Male);
£453×£15—£575 per annum (Female).

Applicants should be Associate Members of the Royal Institute of British Architects and have had considerable experience in the preparation of sketch plans, working drawings and specifications for large works.

(d) FOUR ARCHITECTURAL ASSISTANTS GRADE II.

Salary £410×£20—£550 per annum (Male);
£240×£15—£445 per annum (Female).

Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects, and have had at least five years' office experience and be able to prepare sketch plans and working drawings.

The appointments are subject to the provisions of the Board's Superannuation Scheme.

Applicants should have passed or be studying for the Intermediate Examination of sketch plans and working drawings.

The appointments are subject to the provisions of the Board's Superannuation Scheme.

Applicants should have passed or be studying for the Intermediate Examination of sketch plans and working drawings.

The appointments are subject to the provisions of the Board's Superannuation Scheme.

Applicants should bav

COUNTY COUNCIL OF THE COUNTY OF

LANARK.

Applications are invited for the following appointments on the permanent establishment of the County Planning Department.

(a) PLANNING ASSISTANT—Grade VI, A.P.T. (£958—£660 per annum).

Applicants for this appointment should have had wide experience in architecture, landscape design and preparation of schemes relating to derelict land, and must possess suitable professional qualifications. Preference will be given to Corporate Members of the Town Planning Institute.

(b) PLANNING ASSISTANT—Grade IV, A.P.T. (£480—£235 per annum).

Applicants for this appointment should have wide experience of development, control and preparation of planning schemes. Preference will be given to Corporate Members of the Town Planning Institute.

The appointments will be subject to the provisions of the Local Government Superannuation (Scotland) Act, 1937, and the successful candidates will require to pass a medical examination.

Canvassing, directly or indirectly, will be a disqualification.

Applications, on forms to be obtained from the County Planning Officer. "The Orchard," 19, Auchingramont Road, Hamilton, must be returned not later than 23rd September, 1949.

WM. C. BROWNLIE,

County Clerk.

WM. C. BROWNLIE, County Clerk.

Lanarkshire House. 191, Ingram Street, Glasgow, C.1. 20th August, 1949.

191, Ingram Street, Glasgow, C.1.

20th August, 1949.

BRECONSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following permanent appointments (Male or Female) in the County Architect's Department.

(a) ONE ASSISTANT ARCHITECT, Grade V.
£520-£250 per annum.
(b) ONE ASSISTANT ARCHITECT, Grade IV.
£480-£525 per annum.
(c) TWO ARCHITECTURAL ASSISTANTS,
Grade III. £450-£465 per annum.
(d) TWO ARCHITECTURAL ASSISTANTS,
Grade III. £420-£465 per annum.
(e) ONE LAND SURVEYOR, Grade III.
£450-£495 per annum.
(f) ONE LAND SURVEYOR, Grade VII.
£535-£710 per annum.
Applicants for the appointment under (a) above must be registered Architects.
The appointments will be subject to (i) the National Scheme of Conditions of Service, (ii) the Provisions of the Local Government Superannuation Act, 1937, (iii) the passing of a satisfactory medical examination, and (iv) one month's written notice on either side.
Canvassing, directly or indirectly, will definitely disqualify the candidate for the appointment.
Applications must be made on a form to be obtained from the County Architect, Mr.
H. C. W. Strickland, F.R.I.B.A. Watton Offices, Brecon, South Wales, and must be received by the undersigned not later than 24th September, 1949.
No housing accommodation can be provided by the Council for the successful applicants.

No housing accommodation can be provided by the Council for the successful applicants.

C. M. S. WELLS.
Clerk of the County Council. County Hall, Brecon.

CITY OF CARDIFF.
ARCHITECTURAL ASSISTANTS (HOUSING).
Applications are invited from experienced Architectural Assistants for the following appoint-

tectural Assistants for the following appointments:—

(1) Architectural Assistant—A.P.T., Grade 6.

(2) Architectural Assistant—A.P.T., Grade 4.

(3) Architectural Assistant—A.P.T., Grade 5.

The Council will assist in finding housing accommodation for successful applicants, who are married and have children.

Details of the Conditions and Duties may be obtained from the City Surveyor, City Hall, Cardiff.

Applications, endorsed "Architectural Assistant, Grade — (Housing)," as the case may be, should be delivered to the undersigned not later than the 9th September, 1949.

S. TAPPER-JONES, Town Clerk.

City Hall, Cardiff. 19th August, 1949.

ESSEX EDUCATION COMMITTEE.
SOUTH-WEST ESSEX TECHNICAL COLLEGE
AND SCHOOL OF ART, FOREST ROAD,
WALTHAMSTOW, E.17.
Required, SENIOR ASSISTANT IN ARCHITECTURE, to assist in the supervision of the
full-time day and evening Courses for the
Examinations of the Royal Institute of British
Architects.

Examinations of the Royal Institute of British Architects.

Salary £700×£25 to £800 per annum, plus London allowance and the usual allowances for recognised full-time training and degree qualifications.

Applications (no forms), stating full particulars of training, qualifications and experience, should be submitted to the Clerk of the Governors at the College within two weeks of the appearance of this advertisement.

D. N. BUNGEY, Acting Chief Education Officer. County Offices, Chelmsford.

CANTERBURY EDUCATION COMMITTEE.
COLLEGE OF ART.
School of Architecture.—Required as soon as possible, two full-time STUDIO MASTERS for work in connection with the Finals Course. The College is approved by the R.I.B.A. as a Listed School. Candidates must be Associates or Fellows of the R.I.B.A., preferably school trained and with some professional experience in Architecture. Previous teaching experience is desirable but not essential. Salary scale: £300×£15 to £555, together with appropriate additions for training or degree; up to ten increments may be allowed for snitable professional experience.
Applications, giving full particulars of training, qualifications and experience, should be sent to the Principal as soon as possible.

N. POLMEAR,
Chief Education Officer.
78, London Road, Canterbury.
1988

N. FOLMEAR,
Chief Education Officer.

78, London Road, Canterbury. 1988

HERIOT-WATT COLLEGE, EDINBURGH.
BUILDING DEPARTMENT.
The Governors invite applications from British subjects under 45 years of age holding recognised qualifications in Building, Architecture or Structural Engineering, with teaching and practical experience, for the appointment of HEAD of the BUILDING DEPARTMENT, to take up daty as early as possible in 1960. Salary, £900×255

—£1,050. Forms of application, which may be obtained with further particulars from the College, must be submitted on or before 23rd September, 1949.

J. CAMERON SMALL.

J. CAMERON SMAIL, Principal.

MIDLANDS ELECTRICITY BOARD.

BIRMINGHAM AND DISTRICT SUB-AREA.

APPOINTMENT OF ARCHITECTURAL

ASSISTANTS.

Applications are invited for positions as Architectural Assistants in the Sub-Area Engineer's Department.

Applicants should have received a recognised architectural training and should be conversant with the design and construction of industrial and commercial type buildings.

The provisional salary, according to qualifications and experience, will be within the range of Scale "A" of the National Joint Council (Administrative and Clerical Electricity Supply Industry, 2270/2469 per annum, or Class "O," Grade 10c-10 of the National Joint Board, 2436/2524 per annum, in ether case subject to negotiation with such organisations as are appropriate. Applications, giving full details of experience, professional and technical qualifications, present salary and position held, should be endorsed "Architectural Assistant," and forwarded within 14 days to:—Mr. A. C. Evans, Sub-Area Manager, Midlands Electricity Board, 14, Dule End, Birmingham, 4.

A. STEPHENS, Secretary.

Midlands Electricity Board, 14, Dale End, Birmingham, 4.

A. STEPHENS,
Secretary.

24th August, 1949.

2016

IMPERIAL WAE GRAVES COMMISSION.
Applications are invited from suitably qualified candidates for the post of ASSISTANT DIRECTOR OF WORKS in the India and Pakistan District. All candidates should be under 50 years of age, Members of the Institution of Civil Engineers or the Royal Institute of British Architects, and have had experience in carrying out constructional work abroad. A knowledge of the country essential. Preference will be given to exservicemen. Salary scale £750/£25/£275 per annum for a married man unaccompanied by his wife, or £860 per annum for a married man unaccompanied by his wife, or £860 per annum for a married man accompanied by his wife, or £860 per annum for a married man accompanied by his wife. Emoluments as above are net.
Applications to be addressed to Appointments Officer, Imperial War Graves Commission.
Woodurn House, Woodurn Green, Bucks.

2004

CUMBERLAND COUNTY COUNCIL Applications are invited for the following appointments on the permanent establishment of the Architect's Department:—

(a) SENIOR ASSISTANT ARCHITECT—Grade VIII, A.P.T. Division £635—£760 p.a.).

(b) SENIOR ASSISTANT ARCHITECT—Grade VIII, A.P.T. Division £635—£760 p.a.).

(c) ARCHITECTURAL ASSISTANT—Grade III, A.P.T. Division £450—£495 p.a.).

(d) JUNIOB ARCHITECTURAL ASSISTANT—Grade III, A.P.T. Division £450—£495 p.a.).

Applications for posts (c) should have passed, or attained the equivalent standard of the R.I.B.A. and capable of a high standard of design. Preference will be given to those candidates who have had experience in the control of staff.

Applications for posts (d) should have passed, or attained the equivalent standard of the R.I.B.A. and capable of a high standard of design. Preference will be given to those candidates who have had experience in the control of staff.

Applications for post (d) should have passed, or attained the equivalent standard of the R.I.B.A. The appointments will be ter

The Railway Executive invite applications for the post of ASSISTANT ARCHITECT. Eastern Region. Candidates must be Associates of the Royal Institute of British Architects and have had practical experience in a responsible position, and possess ability to direct a large staff of Assistants. They must be able designers, with a keen interest in contemporary architecture. Candidates from outside the Railway service will be in competition with architects already employed by British Railways.

The commencing salary offered is in the region of £850–£950 per annum according to the qualifications of the successful candidate, who will be eligible for "membership of a Superannuation Scheme subject to the requirements of the Rules. Applications, giving full particulars of education, experience and age, should be sent within 14 days to The Secretary, Railway Executive, 222, Marylebone Read, London, N.W.1. It is emphasised that any approach except in the form of a direct and written application from candidates themselves will disqualify an applicant.

# Partnership and Financial

6 lines or under, 10s.; each additional line, 1s. 6d. PARTNERSHIP for sale in young but progressive Architect's practice in Eastern Counties. Box 1991.

# **Tenders for Contracts**

6 lines or under, 10s.; each additional line, Is, 6d.

PEMBROKESHIRE COUNTY COUNCIL.

EDUCATION COMMITTEE.

NEW SECONDARY SCHOOL, FISHGUARD.

PRELIMINARY SITE WORKS.

Public Works Contractors are invited to tender for the Preliminary Site Works for the Proposed New Secondary School at Fishguard, and are requested to submit their applications to Walter Barrett, M.B.E., A.R.I.B.A., County Architect, County Offices, Haverfordwest, Pembrokeshire. The works include the removal of hedges, approximately 30,000 yards cube of excavation to reduce levels, and the construction of approximately 240 yards lineal 9-in. cust iron sewer, and sundry other works.

General Conditions and Bills of Quantities will be supplied on receipt of £5 5s. 0d. deposit, returnable upon receipt of a bone fide Tender. Drawings can be inspected at the office of the County Architect during the usual working hours. Contractors will be required to state the Mechanical Earth Moving Equipment they have available for the work, and to provide proof that they are in a position to provide proof that they are in a position to provide proof that they are in a position to provide in the endorsed envelope provided for the purpose and forwarded to the Clerk to the Education Committee, County Offices, Haverfordwest, Pembrokshire, to reach him not later than 12 noon on Thursday, 8th September, 1949.

D. T. JONES, Clerk to the Education Committee.

D. T. JONES, Clerk to the Education Committee.

County Offices,
Haverfordwest, Pembs.
15th August, 1949.

Haverlordwest, Pembs.

15th August, 1949.

COMMONWEALTH OF AUSTRALIA.

DEPARTMENT OF WORKS AND HOUSING.

Tendera, closing with the Director-General,
Department of Works and Housing, 271, Collins

Street, Melbourne, C.1, Victoria, Australia, are

invited for — LY

(a) SUPPLY AND SHIPMENT TO

AUSTRALIA ON WHARF at FREMANTLE

(Western Australia), ADELAIDE (South

Australia), MELBOURNE (Victoria) and

SYDNEY (New South Wales) (numbers for each

port in accordance with the specification), com
plete with all materials, components, fittings and

equipment necessary for the erection and com
pletion of One Thousand (1,000) single storey

pre-cut or prefabricated houses. TENDERS

CLOSE 4 P.M., PRIDAY, 7th OCTOBER, 1949.

(b) SUPPLY ON BOARD SHIP AT PORT OF

SHIPMENT complete with all the materials,

components, fittings and equipment necessary for

the erection and completion of One Thousand

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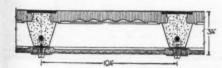
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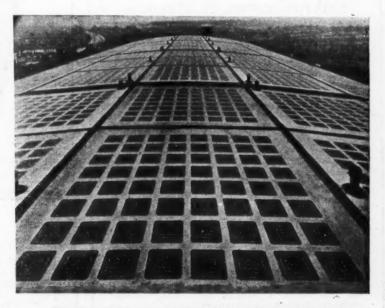
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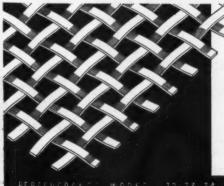
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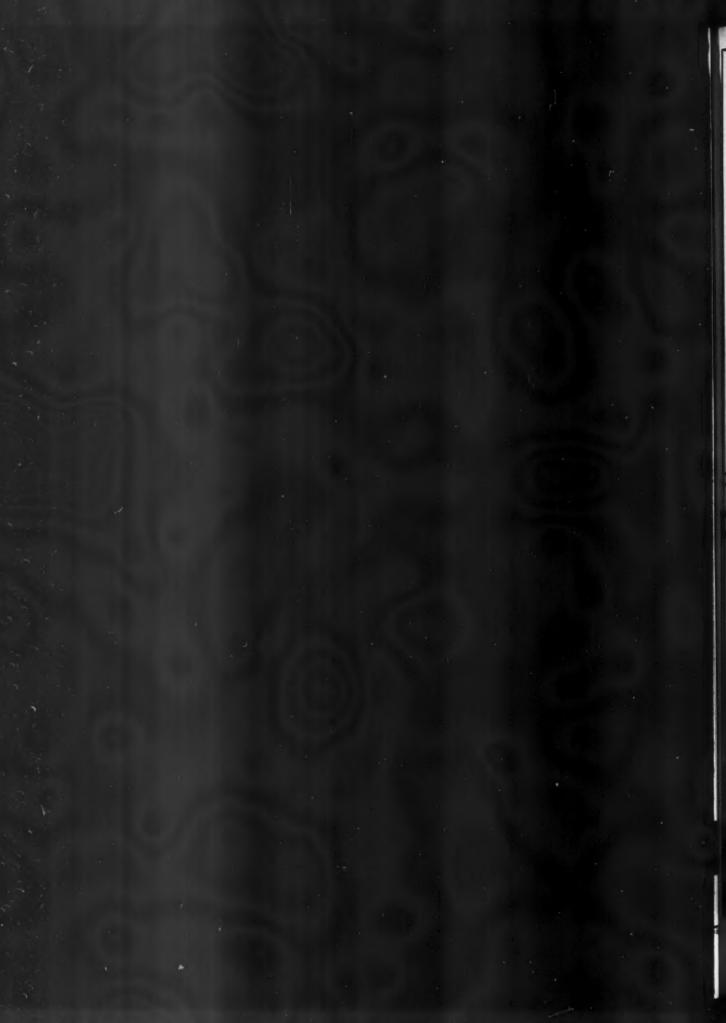
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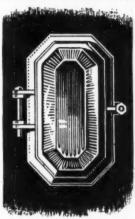
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