TACK



standard contents

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

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ICE

glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ic one week, Ie to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	witiseum 0974
AAI	Association of Art Institutions. Secy.: W. Marlborough Whiteher	" "yneley,"
	Castle Hill, Avenue, Berkhampstead, Herts.	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Welbeck 5721
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction, 34, Gordon	n

Square, W.C.1. Euston 2158-9 ArchSA

Architectural Students' Association. School of Architecture, Manchester Municipal School of Art, All Saints, Manchester, 15.

Architects' Registration Council. 68, Portland Place, W.1.

Architectural Science Board of the Royal Institute of British Architects. Ardwick 3480 Welbeck 9738 ARCUK Association of Scientific Workers. 66, Portland Place, W.1. We!beck 5721

15, Half Moon Street, Piccadilly, W.i. **AScW** 

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Reliance 7611, Ext. 1706

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British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.
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British Gas Federation. 1, Grosvenor Place, S.W.1.
British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2. **BGC** Sloane 4554 BGF Sloane 8266 BIA

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Copper Development Association. Kendals Hall, Radlett, Herts. Radlett 5616
Central Institute of Art and Design. 41, 42, Dover Street, W.1. Regent 3074
Congrès Internationaux d'Architecture Moderne. Doldertal, 7. Zurich, Switzerland
Council of Industrial Design. Tilbury House, Petty France, S.W.1. Whitehall 6322
Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7.
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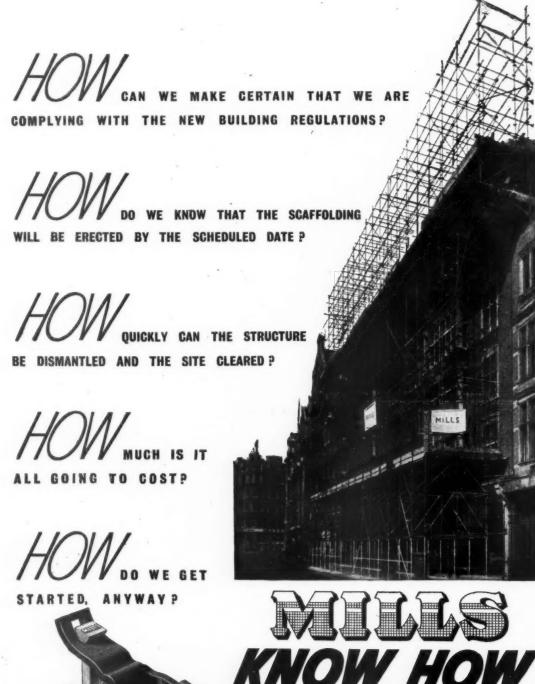
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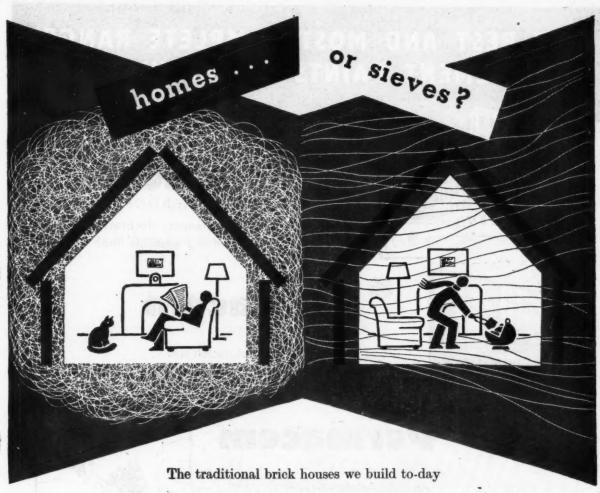
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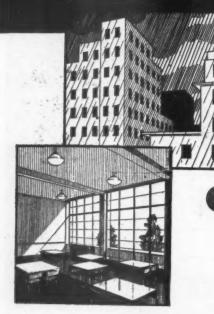
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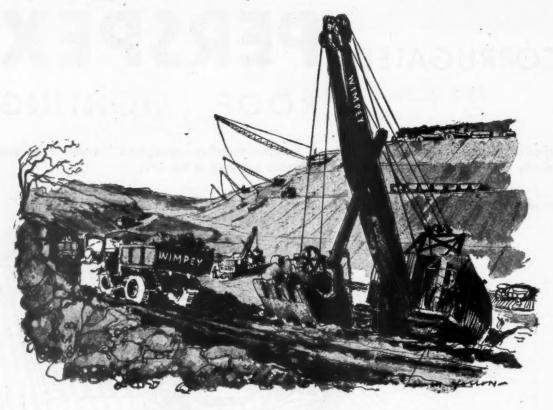




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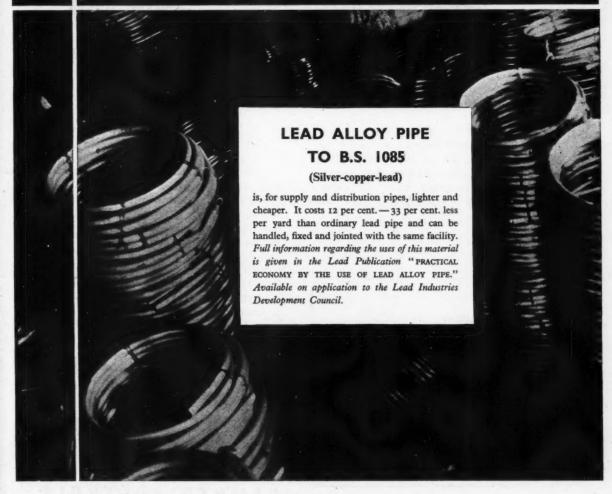
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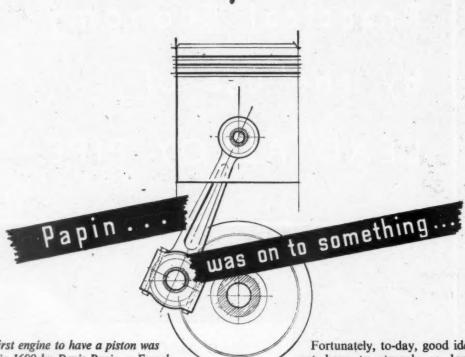


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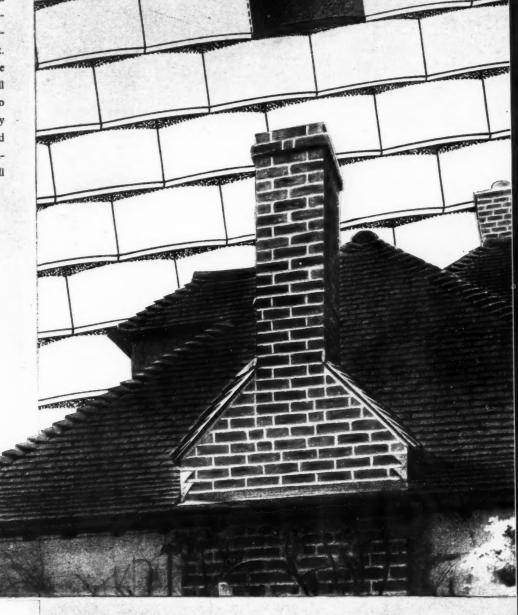


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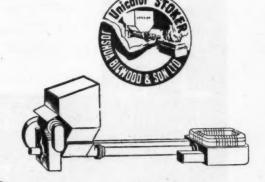
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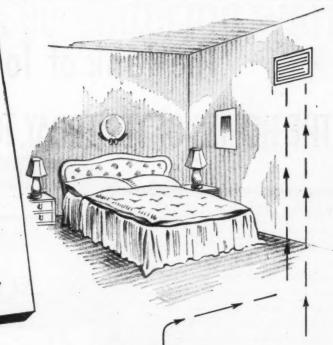
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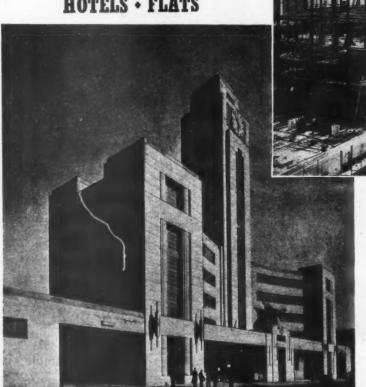
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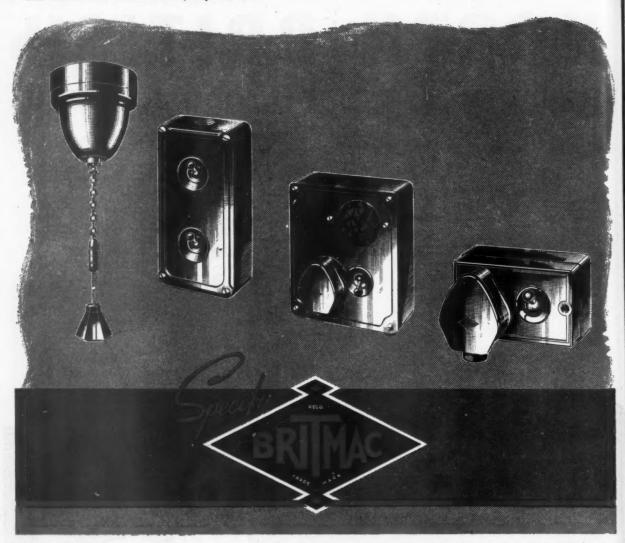


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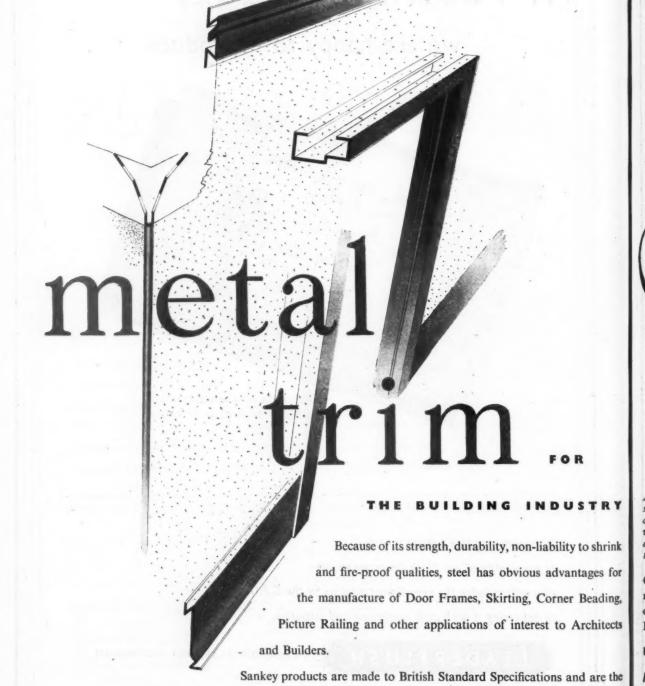
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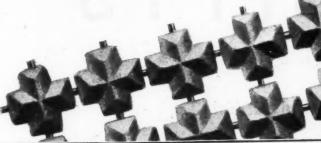


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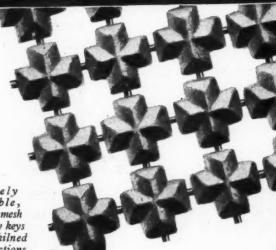
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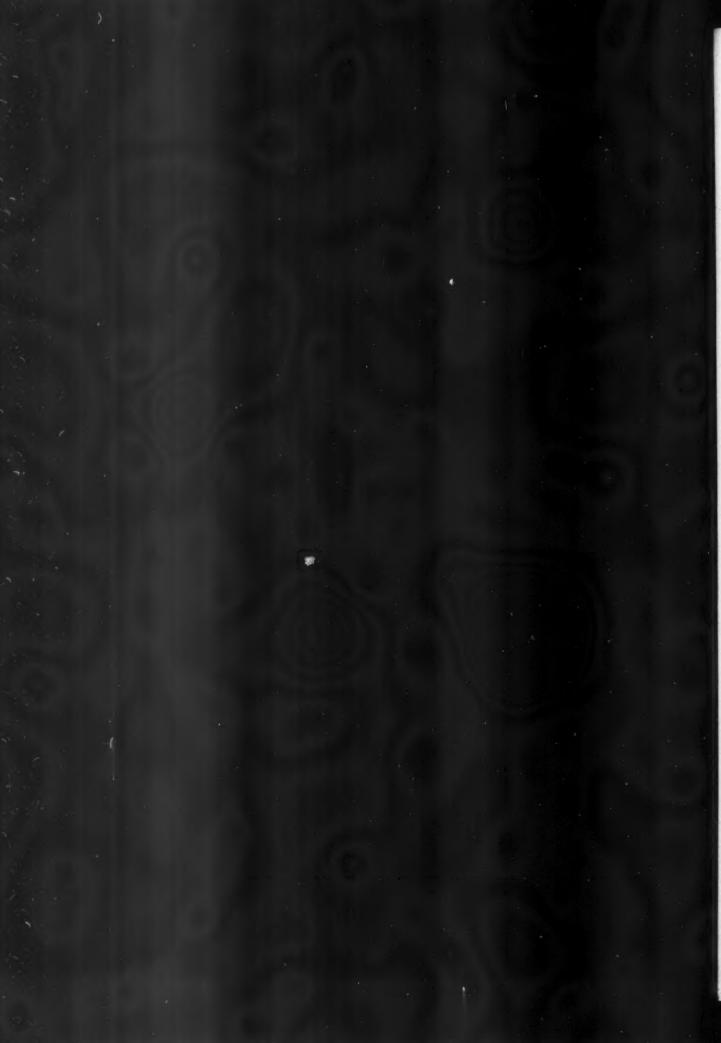
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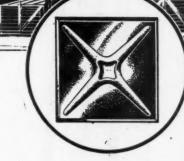




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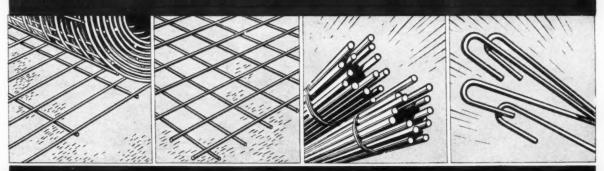
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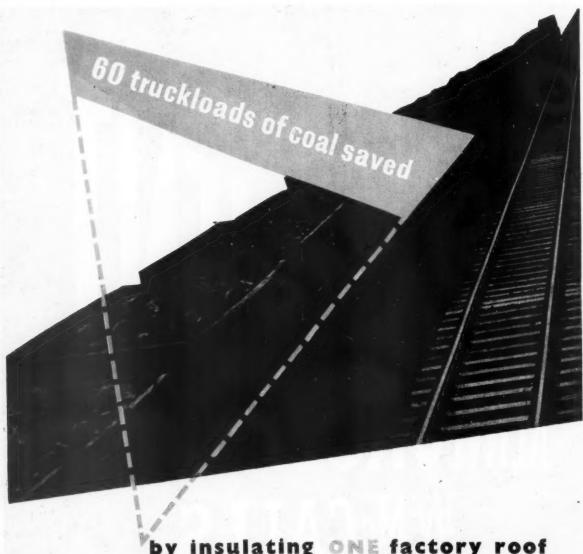


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#### IARY FOR MAY

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.

ABERDEEN. Trade Exhibition. At the Caledonian Hotel, Aberdeen. (Sponsor, D. Anderson & Son Ltd.) May 12

AMSTERDAM. International Exhibition of Industrial Design. Stedeljk Municipal Museum. (Sponsors of British section, British Council and Council of Industrial UNTIL MAY 20 Design.)

RIRMINGHAM. British Industries Fair. Castle Bromwich, Birmingham. UNTIL MAY 13

INVERNESS. Trade Exhibition. At the Caledonian Hotel, Inverness. (Sponsor, D. Anderson & Son Ltd.) May 17-19

L EICESTER. Leicester and Leicestershire Industries Exhibition and Trade Fair. At the Granby Halls, Leicester. May 19-28

L ONDON. The Royal Academy Summer Exhibition. At Burlington House, Piccadilly, W.1. UNTIL Aug. 7

London, Earls UNTIL MAY 13 British Industries Fair. Court and Olympia. Open-air Exhibition of Paintings in the Embankment Gardens. (Sponsor, LCC.) Embankment Gardens. (Sponsor, LCC.) Weekdays. UNTIL MAY 21

Exhibition of Packaging Materials at Murray House Exhibition Hall, Murray House, Petty France, S.W.1. (Sponsors, Institute of Packaging and Printing, in col-laboration with CID.) Exhibition of paintings by Giorgio de Chirico. Summer exhibition of Royal Society of British Artists, 6½, Suffolk Street, S.W.1.

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CPRE. Annual General Meeting at RIBA, 66, Portland Place, W.1. 2.30 p.m. MAY 12

Building and Engineering Exhibition (Equipment and Materials.) At the Horticultural Hall, S.W.1. (Sponsor, "Britain's Best" Exhibitions.) May 16-27

Open Day, Representatives of industrial organizations invited to visit National Physical Laboratory at Teddington, 2.30 p.m.-6.30 p.m. MAY 26

TPI Annual General Meeting. In the Assembly Room, Central Hall, Westminster. 5.30 p.m. June 23

M ANCHESTER. Exhibition of Design and Wallpaper. 19, York Street. Weekdays, 10 a.m. to 5 p.m.; Saturdays, 10 a.m. to 12 noon. (Sponsors, The Wall Paper Manufacturers Ltd.) UNTIL MAY 14

NOTTINGHAMSHIRE. RIBA New branch library, Stapleford. May 16.21 RIBA New Schools Exhibition. At the county branch library, Beeston.

UNTIL MAY 14 RIBA New Schools Exhibition. At county branch library, West Bridgford. MAY 23-28

British Architects' Conference. To be held at Nottingham. (Sponsor, RIBA.) JUNE 29-JULY 2

COMPETITIONS

Fleet Air Arm Memorial of the 1939-45
War, at Lee-on-Solent, for the Imperial War
Graves Commission. Premiums, £100, £60,
and £30. Assessor, Edward Maufe, R.A.
Conditions from the Secretary, Imperial War
Graves Compision 22 Computer Cardion. Graves Commission, 32, Grosvenor Gardens, London, S.W.1. Closing date, May 20, 1949.

Design of Community Centre. The Incorporated Association of Architects and Surveyors. Details to be announced by IAAS, 75, Eaton Place, Belgrave Square,

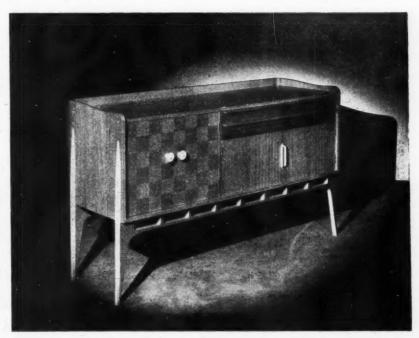
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Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis.

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

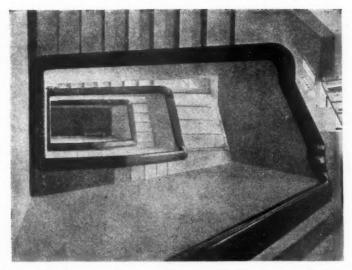
\*\* means important news, for reasons which may or may not be obvious.

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



This sideboard is part of a dining room suite designed by Basil Spence, which is on view at the BIF. It is made of laminations of Honduras mahogany and Canadian betula, bonded together under high frequency electrical pressure with phenoformaldehyde resin.

Right: Continuous handrail round three floors of an open well staircase. Its construction, as well as that of the interesting semi-circular flight of stairs shown below, involved many problems of craftamanship, which Sadds knew how to solve. At the same time, their works are equipped for economical production of long runs of staircases for housing schemes.



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#### From AN ARCHITECT'S Commonplace Book

FURNITURE AND MECHANISATION. [From Mechanisation Takes Command, by S. Giedion (Oxford University Press).]—How mechanisation is related to the furniture of the ruling taste on the one hand and to patent furniture on the other should no longer be hard to explain. Furniture also mirrors the dual ways of mechanisation we have already noticed in several other fields. The first, the easy way, seeks cheaper substitutes for handicraft work. By stamping, stencilling, turning, or other means of low-price production, machines could inexpensively turn out the profiling, the ornamentation, and every form of earlier periods. The mechanical dexterity, and sometimes a certain ornamental bent, cannot be denied. But all in all it was a trampling on the same ground, incapable of creating new types. . . . The second way of mechanisation in furniture led to solutions hitherto unknown. Here the mechanical was used to aid and support the human organism. The furniture was constructed by engineers, not designed by upholsterers. Its inventors are practically unknown and uncounted. Now they create a completely new type; now they devise a new and simple means of movability. They belong to the anonymous history of the century. The inventor's name heads each patent specification. But it is only a name among other names, drifting past one's eyes like the names and numbers of a telephone directory. In the agglomerate, they form a storehouse of ideas largely unused and of experience lost.

AN EXPERIMENT IN SCHOOL RECONSTRUCTION is being carried out at West Ham. In the Tidal Basin area of West Ham, which is now taking shape as a "garden city" following the war-time destruction of two-thirds of the area, the local education committee is introducing a scheme whereby it is hoped to develop among young people the sense of belonging to a community. The development plan for primary and secondary schools is based on the neighbourhood units scheme of the town planning and reconstruction committee. As the neighbourhood units, of which 16 are to be built, will be bounded by main roads, children will attend schools within these boundaries without having to cross busy thoroughfares. They will automatically transfer from primary schools to secondary schools in the same areas. It is thought that this system of school layout in the units will create a community spirit and lead to support for youth centres and community development" will be given in schools.

will be given in schools.

The housing and educational development of Tidal Basin is now about half completed. New houses are planned in crescents or bordering on squares with grass

lawns and open spaces. Each of the units will be self-contained. They will have their own schools and playing fields, open spaces, shops, community centres, libraries and churches. The average population of each unit will be about 10,000.

A BUILDING INDUSTRY
TEAM may visit the United States.
This was announced recently by Mr. Norman Longley, president of the NFBTE, who said that the team would study building methods there under the Anglo-American Productivity Council scheme. About 30 industries have applied for inclusion under the scheme.

Information about the DEVELOP-MENT OF THE NEW TOWNS was given in the House of Commons recently.

Mr. E. M. King, Parliamentary Secretary to the Minister of Town and Country Planning, gave the following list of new towns which have so far been designated, together with their proposed populations:—

Aycliffe (10,000), Basildon (50,000), Crawley (50,000), Harlow (60,000), Hatfield (25,000), Hemel Hempstead (60,000), Peterlee (30,000), Stevenage (60,000), and Welwyn Garden City (36,500). Mr. King explained that the seven new towns in the south were designed to attract populations from the congested areas of Greater London and said that detailed arrangements for associating particular new towns with particular congested areas were at present under consideration.

He went on to say that it would be appreciated that the early work of creating a new town was essentially that of surveying the ground, preparing plans and initiating basic services. Building had been begun, however, by most of the older established corporations.

Mr. J. A. Sparks (Lab., Acton) pointed out that local authorities in Greater London, including the LCC, were not now able to develop housing schemes outside their boundaries, and in view of this it was urgent and important that new towns in the Greater London area should be expedited.

Mr. King replied: "We are certainly hurrying this matter as much as possible. The considerations mentioned by the Member largely account for the conception of the new towns."









prefabricated A mobile house, constructed by Richard Thomas and Baldwins, Ltd., on behalf of Terrapin Dwellings, Ltd. This aluminium house, which was designed to provide industry with an immediate means of housing workers where traditional housing is not available, was assembled in two hours at Bushey, Hertfordshire, on its way to the BIF exhibition at Birmingham. Top, left, the selfcontained dwelling as a single unit for transportation. Below, left, the sides are opened on hinges, the floors let down on metal supports, and the roof rolled out of slots under the main roof. Top, right, the complete house. (See also page 439)



# The LCC Housing Exhibition

Mr. I. J. Hayward, Leader of the LCC, who replied to criticisms of LCC housing printed in the JOURNAL by offering to arrange an exhibition of the Council's work, is seen here at a pre-view of the exhibition, which was opened on May 4. On the right is Mr. S. Howard, the Council's Housing Architect, and on the left, Mr. C. H. Walker, the

Director of Housing and Valuer. In last week's JOURNAL readers were invited to visit the exhibition and send their views to the JOURNAL. There is still time to do this, as the exhibition will be open from 10 a.m. to 5 p.m. on Monday, Tuesday, Wednesday and Thursday of next week at the County Hall, Westminster.

#### STUDIES OF SCHOOL BUILDING PROBLEMS are being made by members of the American Institute of Architects. This is the result of a statement of policy adopted by the American Institute of Archi tects, under which members will share the benefits of new techniques and des.gns and try to establish adequate codes and standards The programme to undertake over-all studies of school building problems is the outcome of a report of the Institute's Committee on School Buildings, which recommends that architects take an active part, not only in planning buildings, but also in the study of long-range school building programmes, the strategy and tactics of a multibuilding programme and the programm ng of the physical facilities necessary to meet educational requirements. The institute educational requirements. The institute reaffirms that such studies are a proper function of the architect and should be considered as separate and in addition to the services customar.ly performed by the archi-

The committee found that codes and standards governing school building design are constantly being made and revised by governmental and other agencies, but are often inflexible while in force. The report says that they tend to prevent progress and discourage new thinking and new solutions. It recommends that architects offer to set up joint committees with governmental agencies to establish codes and standards for maximum improvement and utility.





Photographs, Crown copyright reserved.

As most of the housing in this country is of the semi-detached or terraced type, the properties of the party walls are of great importance. The new National Building Studies Special Report No. 5, "Party Walls Between Houses" (HMSO 2s.), discusses the problem in detail. These two illustrations from the report show, top, fire spread due to the failure to continue the party wall to the roof covering and, above, a properly constructed party wall which has prevented fire spread.

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#### THE RESULTS OF RESEARCH

THE recently published report of the MOW Advisory Council on Building Research and Development suggests, for the first time in an official statement, that there is something lacking in the application of the results of research to the actual practice of building. So far as "pure" research is concerned—the research which led one Fleming to discover the thermionic valve and another to the discovery of penicillin-nothing is more fatal than an urge to publish something which can be labelled "Results." But in the building industry we have, at the moment, side by side with several long-term investigations, a number of comparatively isolated technical problems, not necessarily of great complexity, but often involving lengthy routine measurements and examinations which are too expensive for an individual manufacturer. If the results of these investigations are to be of any value they must be applied to current building techniques, not merely left in ill-printed pamphlet form in some forgotten pigeon-hole. In its report the Advisory Council suggests that the results of research are, at the moment, presented in a way "likely to appeal mainly to the professions" and suggests that more should be done to present research "in a popular and practical form which will appeal to the smaller type of builder and civil engineering contractor, to the foreman and clerk of works."

We would go farther than this. The architect is the first link in the chain between research and the actual building and he must have the results presented to him in such a way that he can not only make the necessary changes in his drawings and specifications, but can, as well, explain to the builder, his foreman, and even the craftsman, just why a job should be done in a particular way, and convince them that the change is not merely a personal fad of his own.

Receiving, as we do, a multitude of reports each week, we believe that the majority of them are written by scientists to be read by other scientists, and that their language is by no means comprehensible to the architect. After accelerated weathering tests on a new roofing metal the scientist will be satisfied by a figure of weight lost in grams per square centimetre, and so will his friends. The architect wants to know whether this means a life of five, fifty or five hundred years, and he would also probably like to be told if the colour changes much during that time.

Now the architect is *not*, whatever he pretends, really mathematically minded, and he shrinks instinctively from any but the simplest formula, which he regards as an attempt to blind him with science. He knows, thanks to his coal shortage, that heat insulation is of growing importance, but although conductivity may quite logically be k it sometimes turns into a transmission factor, which is  $\frac{1}{k}$ , and then, in some mysterious way, the whole thing becomes "U," which is something a wall or a ceiling must have. He does not want to do the comparatively simple but rather laborious calcu-

lations; what he would like is a series of sections showing different constructions and the heat lost through them.

In a recent attempt to present the results of research in a comprehensible way the Ministry has started a series of bulletins and special reports on individual subjects. These are a beginning, but they are by no means enough. The problem is difficult in an industry where so many products are known by trade names, and a manufacturer may regard as libellous any statement that for certain purposes his product is unsuitable, but, at the receiving end, trade names and statements of fact we must have. We want plenty of diagrams and drawings, brief explanations in our own language, and a series of helpful do's and dont's. Let the scientists take Mr. Fitzmaurice's Principles of Modern Building Construction as a model and they can produce something for the "small contractor and country builder." Architects will then buy it in large quantities.



The Architects' Journal

9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1

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N O T E S & T O P I C S

LCC HOUSING

When I wrote about the LCC's housing exhibition at County Hall last week it hadn't yet opened. I have now been to see it and I hope all London architects will do the same—because this, as I said before, is the architect's chance of showing that he really meant it when he said (as he has been doing for a long time) that more public criticism of current architecture is needed. There need be no compunction because the invitation to criticize comes from the LCC itself. So go along and send your views to the Journal.

The exhibition is mostly of working drawings, with a few photographs and models. It includes some work done for the LCC by private architects in addition to the work of the LCC's Housing Department under the Valuer, which has been the subject of most of the criticism. But there is plenty of material for an assessment of the merits of the latter from the point of view of exterior design and general architectural character.

WHAT HAS HAPPENED TO THE LCC PLAN? Those who enjoy reading of lost chances, muddle and procrastination should see an article by Aileen Tatton Brown on London post-war plans in *The Architectural Review* for May. There is nothing that Astragal has read lately better calculated to cause the familiar reaction of blinding rage and fury followed by limp, dejected hopelessness.

It is pathetic to see so many good intentions on the part of Holford, Abercrombie and other planners, economists and sociologists all dissipated. Their plans are not being destroyed by the pre-war bogy, a capitalist non-planner, but by bumbling officialdom, by unco-ordinated makeshift methods, and by the pathetic inability of the men in power to grasp the opportunity given.

The troubles described in the article are the usual ones mentioned over and

over again by Astragal: building in the green belt—the inadequately controlled growth of population and industry in London—the lack of a road and rail policy — and rebuilding on potential open space in the London area.

The answer, as any ordinary bloke in the local on a Saturday night will agree, is that one cannot plan part without planning the whole. The faults to be seen in the LCC's planning of London reflect those of the Government's planning of the country.

ONE RAY OF HOPE

In case readers may think Astragal never offers constructive advice, I recommend a book by Walter Segal\* on the planning and layout of houses and flats. The book is not new, and certainly won't provide the solution to the problem I have just mentioned, but it is the best book yet available on this one aspect of the whole problem, and if architects (this includes the LCC staff) would crib from this book at least some imaginative designs might be made.

#### BIF AUX MILANESE

One of Astragal's spies holidaying in Italy tells us that he dropped in on the Milan Fair-the Italian equivalent of our BIF-which closed last week. Writing between sniffs of oxygen and bites of salami, some 20,000 feet above Geneva, he reports that exhibitions, whether in Earls Court or Milan, seem much the same-inside, a high proportion of the ugly or second-rate on show and a small proportion of good display by the bigger firms-(Breda, Fiat, Pirelli, Terni, Montecatini, Olivetti, etc.)—and outside, empty ice cream cartons, grey skies and pouring rain. (" Such heavy rain," he writes, "that it was no surprise to see a motor-boat parked among the puddles in one of the car parks.") Top display designers seem to be the brothers Castiglioni, Max Huber, M. Bianchetti and the old firm of Belgiojoso, Peressutti and Rogers. Public attendances seem to be enormous-up to 500,000 per day-and food is reasonably expensive.

"Milan," says the Air Line handout, is not a beautiful city . . . but the

 Home and Environment by Walter Segal, Leonard Hill Ltd. 37s. 6d. PROPRIE CARDEN

SERVICE CARDEN

MINISTER CARDEN

MINISTER

One of the many designs for houses and housing layouts illustrated in Walter Segal's book "Home and Environment." Top; right, perspective of the "patio" house; left, the site layout, showing the communal garden in the centre. Above, the plan. (See Astragal's comment)

intense activity of its inhabitants... entirely absorb the stranger, leaving him no time to realise that from an artistic point of view he could find much better elsewhere."

Ignoring such comments, our spy reports that he found time to whisk round the major monuments, stroke the still gleaming flanks of the Montecatini Building, look up a few friends, spend an evening admiring the architecture (but not the performance) of a Donizetti opera at the Scala and to note that some unorthodox entrepreneur had started an air line linking-of all improbabilities — Scotland, Luxem bourg and Athens. He concludes by stating that his powerful—and alas commercial-heart throbbed considerably at the sight of so many lovely girls, all dressed in different shades of grey (skirts shorter than in London) and very low flat-heeled shoes.

THE MODERN SCHOOL

Before 1939 the names of Stillman

(then of West Sussex County Council) and of the Middlesex C.C. were closely associated with the development of a new approach to the design of school building. Today, though Stillman and the Middlesex C.C. are one, there are yet no completed post-war schools emanating from this partnership. Mr. Stillman has, however, embodied his experience in a book\* which should be read by all members of education authorities. It is a brief survey of the many considerations affecting the design of schools under the new legislation.

Much has been talked and written during the last three or four years about the need for flexibility, economy, speed, standardisation and so on. It is therefore pleasant to find Mr. Stillman and his co-author attacking the classroom problem—or "teaching spaces" as some people prefer to call them. There

\* The Modern School, by C. G. Stillman and R. Castle Cleary. (Architectural Press, 21s.)

is no doubt that too many even of the more enterprising designers have come to regard the classroom as something pre-determined and relatively static, the designer's task being to clothe the spaces and link them together effectively. The aluminium prefabricated classroom epitomises this attitude.

Mr. Stillman points out that the classroom is the home of the class, and that all sorts of group activities should be possible in which the class of 30 or 40 could split up into smaller groups. The answer? Smaller classes or larger classrooms. Some interesting comparative figures are given of space allocation in classrooms in various countries. English practice does not come out very well. If councillors and directors of education, as well as architects, read this book they will be less complacent about their achievements. That is the first step towards better work.

#### OBSERVATION OVERRULED

Some few weeks ago it was reported in The Observer that the Universities of London and Birmingham were to combine, under the direction of Professor Solly Zuckerman, upon a course of research into domestic fatigue. A specially designed apparatus, said the report, strapped to the housewife's shoulders will register degrees of fatigue, and provide information which will enable recommendations to be drawn up upon hours of work, size and arrangement of furniture, etc. etc. Astragal (see this week's correspondence column) is sharply rebuked for commenting unfavourably in a publication " of some repute " upon this report which, apparently, is inaccurate. "No one in Professor Zuckerman's department "-it is nice to know-" has knowledge of the strapping apparatus."

All Astragal can say to Professor Solly is sorry: that the source of the news item, a newspaper of some repute, was given in his comment, and its contents quoted within quotes: that he is delighted to publish a correction: and that the next step would seem to be to design a special apparatus to be strapped to the shoulders of editors and columnists to register inaccuracy.

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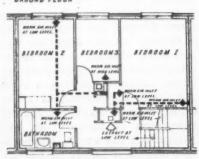
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Above, view of four houses built in a terrace on the experimental site of the Department of Scientific and Industrial Research at Abbots Langley for the investigation of warm air heating in connection with open planning. Below, living room. Bottom, left, double-glazed windows. Bottom, right, the heating equipment.

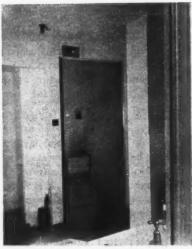
The air is warmed by a furnace burning bituminous coal and the heat is transferred from the flue gases to the air through a metal heat exchanger. Fresh air can be brought in from outside as required. Warm air is distributed by fan through systems of ducts concealed in the structure. The heated area totals 925 sq. ft.











# LETTERS

E. M. B. Clements, M.B., B.S.

" Adam "

#### Professor Zuckerman misrepresented

SIR,—If a matter is worth comment, it is worth accurate comment.

Referring to Astragal's column in The Architects' Journal of March 3, 1949, page 203, on Professor Zuckerman's work in this department, it is surprising that a professional publication of some repute should publish a comment which appears to have been based on a newspaper report which it has apparently not taken the trouble to check. That the comment should proceed to elaborate, criticize and advise about a technical matter which has not been seen or investigated, and pass this all off as professional comment, needs a protest.

fessional comment, needs a protest.

Work such as you describe is not being done by Professor Zuckerman or anyone else in this department here; in fact, no one here has knowledge of the apparatus described in such detail. As the use of anatomical knowledge in design seems to be a matter of general interest, it is essential that only truthful professional comment should be made.

In the absence of Professor Zuckerman abroad, you are asked to rectify this matter at once by publishing a correction.

E. M. B. CLEMENTS
Department of Anatomy,
The Medical School,
Birmingham.

#### LCC Housing

SIR,—Town planning has been described as the organization of space towards the creation of architecture. Architecture exists in the relationships of three essentials:

(1) The physical (planning); (2) the material (construction); (3) the spiritual.

Are these the underlying principles of the work of the Director of Housing and Valuer? Published excuses bear witness to a guilty conscience, I think. If the policy is quantity, stick to that; do not claim the quality "architecture." Architectural interest may exist to a lesser degree in any one of the three essentials. For the first, an excuse has been offered which, while not acceptable, renders the subject immune from criticism; the second lacks any imagination beyond the text book stage; and the third is generally absent. To enlarge on this latter point, "architectural" treatment is applied with some gusto and no imagination to such items as pavilion ends, centre lines, parapets, lift shafts, refuse chutes, pram sheds and similar excrescences which arise through lack of foresight (or architectural insight) in the essential number 1.

This is no overall conception, not a semblance of architecture. I know. I helped the Director to do his worst until recent months.

" ADAM

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THE 1949, ork in pro-hould have sich it ble to coceed out a seen s pro-

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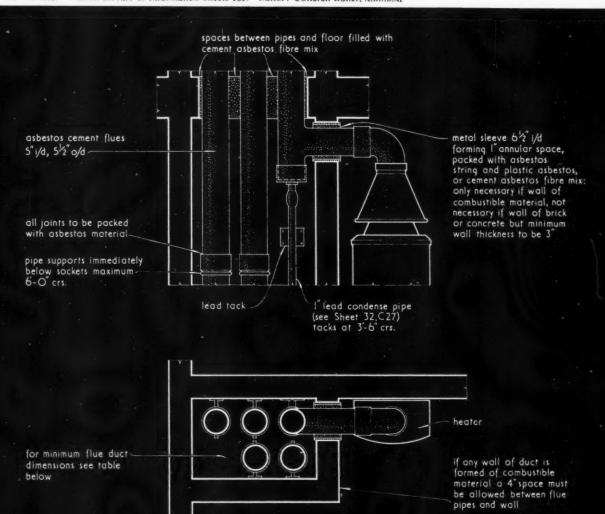
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The Architects' Journal Library of Information Sheets 169. Editor: Cotterell Butler, A.R.I.B.A.



GROUPED FLUE ARRANGEMENTS FOR HEATERS TYPE NEA 32/6 AND SG 32/1.

floor		minimum flu	e duct size	: [		
	Α	В	С	D	В	
4 th.	3'-2"	9"	1'-11"	l'- 4"		
3 rd.	2'-6"	- 9"	l'-4"	l'- 4"		
2 nd.	1'-11"	9"	1'-4"	1'- 4"		
l st.	1'- 4"	9"	9"	1'-4".		
grd.	9*	9"	9"	9*		

TABLE GIVING MINIMUM FLUE DUCT DIMENSIONS (WALLS OF INCOMBUSTIBLE MATERIAL).

#### 32.C28 ASCOT GAS WATER HEATERS—INSTALLATION DATA 2

This Sheet gives installation data for Ascot instantaneous gas water heaters where common gas and water and grouped flue services can be provided for numbers of heaters, and is complementary to Sheet 32.C27, which deals with installations where individual gas, water and flue services are required.

By virtue of their design and principle of operation, Ascot instantaneous gas water heaters only consume gas when hot water is being drawn off, consequently there are no storage or standby losses and a high overall operating efficiency is maintained in supplying the varying and intermittent hot water demands normally associated with flat dwellers. A further advantage of these heaters is that they require no floor or cupboard space either for the heater or fuel. Full multi-point or single-point service can be provided as required, the heaters being fitted either as alternative or auxiliary systems respectively, or they may be efficiently used as the sole means of hot water supply. See Sheet 32.C22, which deals with the selection of heaters for specific purposes.

Fixing. See Sheet 32.C27.

#### Gas Services

Sheet 32.C27 gives the size of gas piping normally required in respect of installation piping from meter to heater, and this information will apply equally to multi-storey buildings, but since the respective meters will generally be supplied from a common gas service pipe, the appropriate gas board should be consulted at an early stage with regard to the size of the common service. The following table shows the discharge in cu. ft./hour in straight horizontal pipes (steam weight) allowing three-tenths differential pressure drop with gas of specific gravity 0.4-0.5 (air = 1).

Length	Size of pipe in inches (nom. internal diameter)									
of pipe in feet	1	1	1	1‡	11/2	2	21 .	3		
10	108	225	470	930	1,300	2,640	5,055	8,240		
20	76	160	330	655	920	1,865	3,575	5,830		
30	62	130	270	535	730	1,525	2,920	4,760		
40	-	110	235	465	650	1,320	2,525	4,120		
50	-	100	210	415	580	1.180	2,260	3,685		
60	-	92	190	380	530	1,075	2,065	3,365		
70	-	_	175	350	490	995	1,910	3,115		
80	-	_	165	330	460	930	1,785	2,915		
90	-	_	155	310	435	880	1,685	2,750		
100	-	_	_	295	415	835	1,600	2,605		
125	-	-	_	260	370	745	1,430	2,330		
150	-	-	-	240	340	680	1,305	2,130		
175	_	-	-	220	310	630	1,210	1,970		
200	-	-	Consider	205	290	590	1,130	1,840		
250	-	-	-	185	260	530	1,010	1,650		

When using the above table the following allowances (in ft.) should be added to the overall length of piping to cover the increased resistances introduced by fittings.

Nom. dia. of pipe (in.)	Elbows	Tees	90° bends		
1-1	2	2	1		
11-11	3 5	3 5	1 2		
3	8	8	3		

Recommended practice allows the following pressure drop in any installation: one-tenth in the service pipe to the meter, two-tenths in the meter, and threetenths in the installation piping from the meter to the appliance. To find the size of piping necessary for a given discharge with a one-tenth pressure drop, multiply the gross length by 3, and using this equivalent length, read across the table to the column listing the required flow.

#### Water Services

Multipoint and bath water heaters types NEA 32/6 and SG 32/1 respectively are preferably supplied from a tank but where mains supply is used every precaution should be taken to ensure that variations in water pressure are reduced to a minimum. The following table shows the size of piping normally required when a common down service is used from tank supply, the sizes given being so calculated that the operation of one heater will be unaffected by the operation of any other heaters supplied from the same down service, this being essential in order to provide a satisfactory service to the consumer.

No. of floors	1st	1st or 2		1st to 2nd or tank*		2nd to 3rd or tank*		3rd to 4th or tank*		4th to tank*	
	a	Ь	a	b	a	b	a	b	a	b	
5	In.	In.	In.	In.	In.	In.	In.	In.	In. 1½	In 2	
4 3	1	1	1	11	111	11	11/2	2	_	=	
2	1	î	i	11	-				_	_	

a = one heater on each floor. b = two heaters on each floor. \* If insufficient head on top floor.

Sink heaters type R 12/4 and boiling water heaters type RS 52/1 should wherever possible be supplied from the mains as the hot water which they supply is normally used for culinary purposes. See Sheet 32.C27 for installation data.

The diagrams show details of built-in flues and the minimum size flue ducts required for various numbers of heaters type NEA 32/6 and SG 32/1 in accordance with British Standard Code of Practice CP.331.104.

Asbestos cement flues can either be terminated with individual upright terminals approximately 2 to 3 feet above the roof, adequate spacing being allowed, or connected to individual ventilating ridge tiles.

Compiled from information supplied by:

Ascot Gas Water Heaters, Ltd.

Head Office: 43, Park Street, London, W.1.

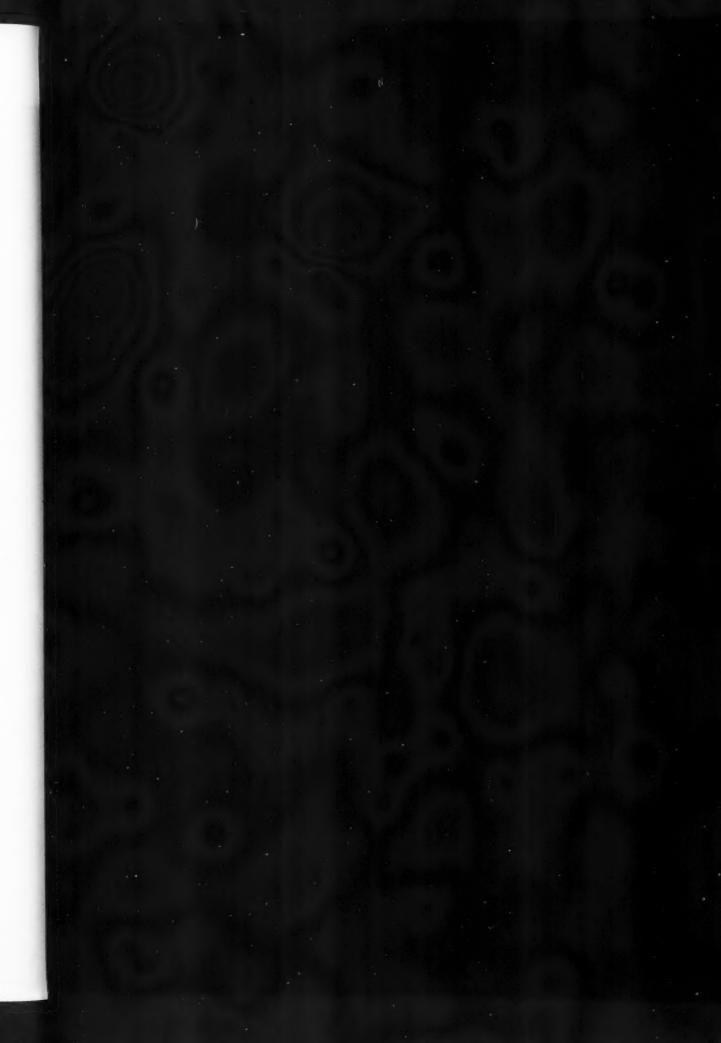
Telephone: Grosvenor 4491.

Works: Ascot Works, Neasden, London, N.W.10.

Telephone: Willesden 5121.

Telegrams: Gascot, Phone, London.

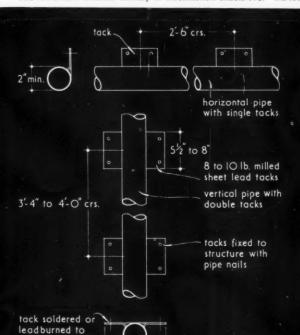
Branch Offices: Belfast, Birmingham, Bournemouth, Bristol, Cambridge, Glasgow and Manchester.



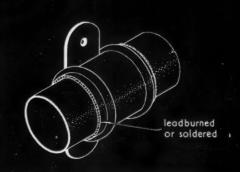


pipe

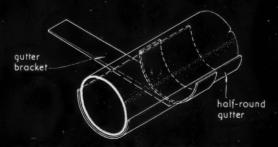
The Architects' Journal Library of Information Sheets 170. Editor: Cotterell Butler, A.R.I.B.A.



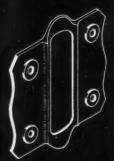
SIZES AND POSITIONS OF TACKS FOR FIXING HORIZONTAL AND VERTICAL PIPES.



TYPICAL CAST LEAD SOCKET FOR HORIZONTAL PIPES.



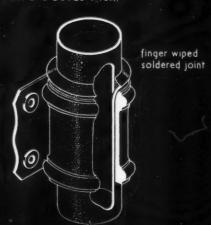
CONTINUOUS SUPPORT FOR HORIZONTAL PIPES CARRYING EXCEPTIONALLY HOT DISCHARGES



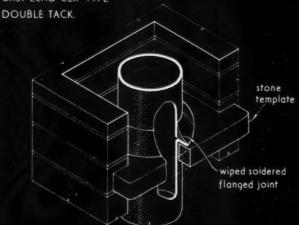
TYPICAL CAST LEAD DOUBLE TACK



CAST LEAD CLIP TYPE



CAST LEAD FIXING AND JOINTING SOCKET.



FLANGED JOINT GIVING COMBINED FIXING AND JOINTING.

FIXING LEAD SOIL, WASTE, VENTILATING AND RAINWATER PIPES.

Compiled from information supplied by The Lead Industries Development Council.

#### 33.C7 FIXING FOR LEAD SOIL, WASTE, VENTILATING AND RAINWATER PIPES

This Sheet summarises accepted methods and makes recommendations for the fixing of lead soil, waste, ventilating and rainwater pipes (pipes of 2 in. internal diameter and upwards).

Information on fixing methods for lead service and distribution pipes (pipes up to  $1\frac{1}{2}$  in. internal diameter) is given on Sheet 33.C10. The use of tinned steel clips as described on Sheet 33.C10 is common for waste and waste ventilating pipes of up to  $1\frac{1}{2}$  in. internal diameter.

#### Fixing Generally

Fixings should always be considered both as a means of holding pipes in position and to provide them with support. Inadequate support may result in shortening the life of a pipe and in interference with the efficient discharge of effluent through it.

#### Lead Tucks

The most commonly used fixings for lead soil, waste and rainwater pipes are lead tacks, soldered or leadburned to the back of the pipe, and secured to the structure with pipe nails which may be lead headed. For pipes running horizontally single tacks are used at 2 ft. 6 in. centres and the single tacks are either at the top of the pipe or above and below alternately.

For pipes running vertically, double tacks are used at 3 ft. 4 in. to 4 ft. centres, *i.e.*, three to each length of pipe. These dimensions are the maximum at which fixings should be provided. With pipework which includes a number of branches, such as to a range of basins or w.c.'s, fixings may most conveniently be regularly spaced between branches.

Milled sheet lead tacks, minimum weight 8 lb./sq. ft., are soldered or leadburned to the pipe at the back or front of the tack. Such tacks are made 5½ in. to 8 in. long according to the diameter of the pipe.

Cast lead tacks are supplied by lead manufacturers and founders or cast by master plumbers for their own use. Such cast lead tacks are made in a large range of sizes, which vary according to weight and use, and with varying degrees of ornamentation. Cast double tacks are supplied as one piece and soldered or leadburned to the pipe at the back of the tack. They are also made in the form of a clip.

#### Cast Lead Sockets

For fixing and jointing vertical lead soil and rainwater pipes a combined joint may be used. A cast lead socket is fitted at the junction of two lengths of pipe and the joint made with a finger wiped soldered joint.

Cast lead sockets are also supplied for fixing horizontal pipes. The socket is not used as part of a joint but is fixed to the pipe with a finger wiped soldered joint or by leadburning.

#### Flanged Joint Fixing

A method of fixing vertical internal soil and waste stacks where they are housed in a small duct is to form flanged joints at 5 ft. centres supported on a stone template or similar bridging.

#### Pipes Carrying Exceptionally Hot Discharges

Where a horizontal soil or waste pipe is required to carry exceptionally hot discharges, continuous support for the lead pipe is advisable. Examples of these conditions are discharges from sterilisers, bed pan washers, large kitchen boiling utensils and steamers, where the volume of water is great and well above 120° F.

A suitable support is provided by a length of cast iron half-round guttering. The joints in the gutter must be made flush and bolts countersunk. The cast iron gutter and brackets should be completely coated with red lead or similar protective paint.

#### Further Information

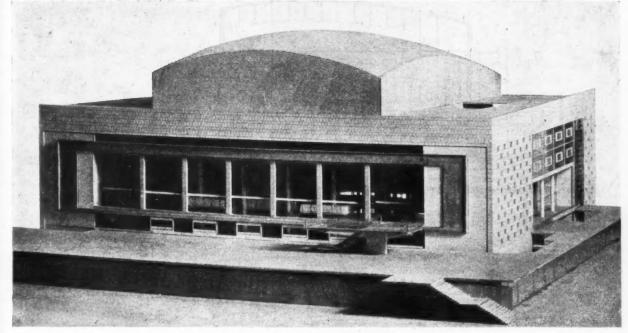
The Lead Industries Development Council maintains a Technical Information Bureau which is available to answer questions and advise on technical problems dealing with this subject generally.

#### Compiled from information supplied by :

#### The Lead Industries Development Council.

Address: Eagle House, Jermyn Street, London, S.W.1.
Telephone: Whitehall 7264.

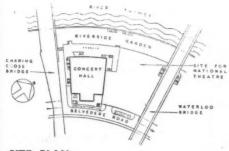
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Editor: Cotterell Butler, A.R.I.B.A.



Model of the proposed concert hall showing the main frontage to River Thames.

# LCC CONCERT HALL

BY R. H. MATTHEW, LCC ARCHITECT, AND J. L. MARTIN, DEPUTY ARCHITECT



SITE PLAN

EDWIN WILLIAMS, SENIOR ARCHITECT: STANLEY H. SMITH, PRINCIPAL ASSISTANT ARCHITECT: ASSOCIATED ARCHITECT, PETER MORO.

ARCHITECTURAL ASSISTANTS: B. A. LE MARE (CO-ORDINATOR),
T. W. BLISS, J. S. COUSINS, J. T. DANNATT, G. W. DUNTON,
W. E. GREAVES, A. J. HEPWORTH, M. H. KENCHINGTON,
R. A. LAKER, J. L. MAYO, P. K. NICOLL, F. PEATFIELD,
MISS B. M. PRICE, J. W. G. SMITH.

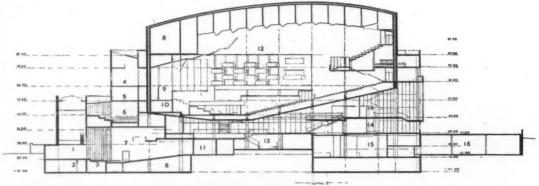
THE SITE.—The concert hall is sited between Hungerford Bridge and Waterloo Bridge, and its position at the Hungerford Bridge side of this area allows room for the development of the National Theatre building.

PLANNING.—The siting and the new levels created by the gardens vitally affect the general arrangement of the plan and make it possible for pedestrians to enter the building both from the Belvedere Road approach at low level, and from the high level Hungerford

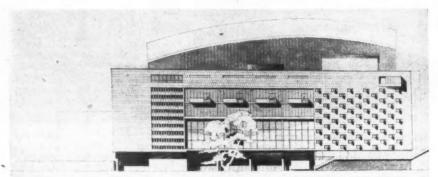
Bridge approach. It also provides, at terrace level, an extensive circulation and reception area which is centrally placed and convenient to all parts of the building.

This description gives the general position of the three main elements of the building: the concert hall, the reception foyer and the small hall. A building of this kind, however, must also provide a large amount of ancillary accommodation and this accommodation has been placed around the main concert hall itself. This not only

has advantages from the point of view of convenient planning, but the advantage of a surrounding envelope to the main concert hall plays a most important part in dealing with the problem of external noise. The concert hall itself becomes an inner core to the building, protected on all sides by its enclosing envelope, and above the main reception and circulating area. This arrangement of inner core and outer envelope, with the main foyer running under the main auditorium, makes it possible to have simple and direct access to



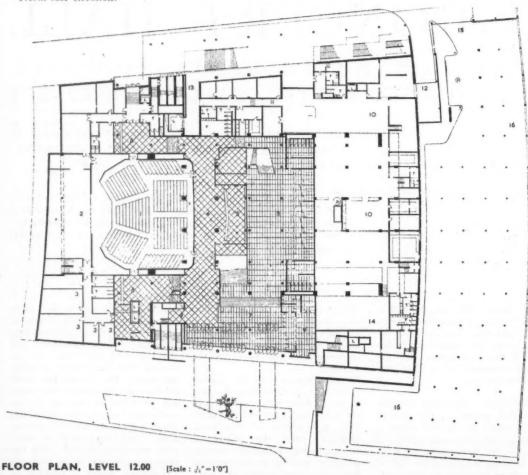
SECTION THROUGH CONCERT HALL AND THEATRE [Scale: 2,"=1'0"]



North-east elevation.

#### KEY TO SECTION

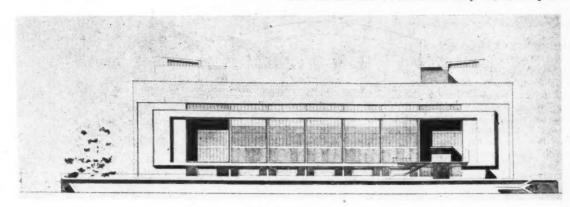
- Stage.
- Electrical shop. 2.
- 3. Stage basement.
- 4. Exhibition gallery.
- Changing room.
- 6. Orchestra practice room.
- Theatre.
- Ventilation.
- 9. Organ.
- 10. Practice room.
- 12. Auditorium.
- Lower foyer.
   Restaurant.
- 16. Car Park.



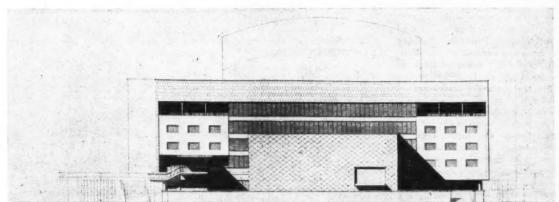
KEY TO PLAN

- I. Theatre.
- 2. Stage.
- 3. Changing rooms.
- 4. Theatre foyer.
- 5. Theatre cloaks.
- Theatre bar.
- Lower foyer.
- Concert hall cloaks.
- 9. Ticket Office.
- 10. Kitchen. 11. Kitchen staff.
- 12. Goods.
- 13. Instrument entrance
- 14. Plan and services.
- 15. Car park entrance.
- 16. Car park. T. Toilet.
- L. Lift.

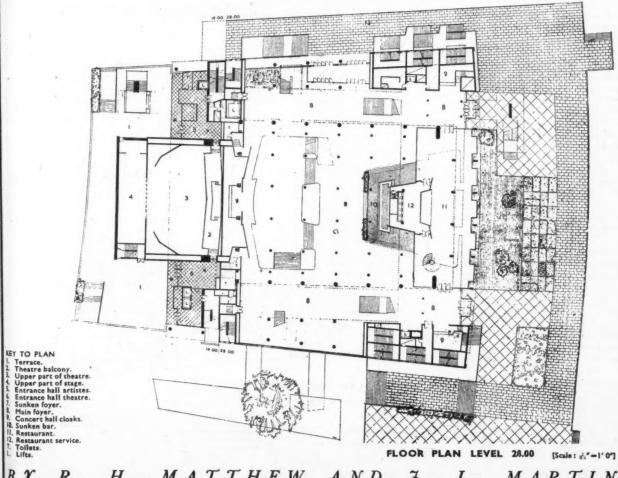
C N E H R T A L L



North-west devation.



South-east devation.



R. H. MATTHEW AND J. L. BY MARTIN

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KEY TO PLAN

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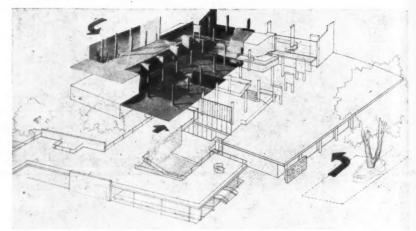
the auditorium from side galleries.

SOUND TRANSMISSION AND ACOUSTICS.-First, there is the problem of internal acoustics. which would arise in any large auditorium; second, there is the problem of dealing with internal room to room noise and external noise. With regard to internal acoustics, a shape has been chosen for the concert hall which is likely to give rise in the first instance to the least number of defects, and which includes a number of positive advantages, such as the raked floor, the special ceiling shape and the main orchestra reflector.

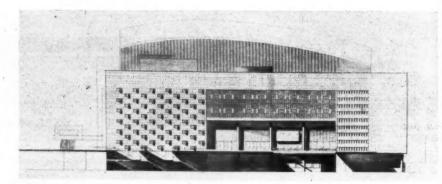
The second problem of sound transmission within the building has been approached in the following way. The main sections of the building—the large auditorium and the small auditoriumalthough part of a single unit, are structurally isolated from each other, thus preventing the internal transmission of sound between these parts of the building. Special rooms, such as the orchestra practicing rooms, meeting rooms, etc., are again isolated from the main structure. By surrounding the central hall with a very heavily built double-skinned wall and roof a barrier against sound has been provided.

ARCHITECTURAL TREAT-MENT.—The foregoing considerations of siting, internal planning and acoustics have given rise to a simple and direct architectural form. The main external shape contains a large window area overlooking the river so that views can be obtained from the restaurants and foyer. Side windows also give fine views across Waterloo Bridge to St. Paul's Cathedral. The whole of the structure will be of reinforced concrete, but will be faced externally with Portland

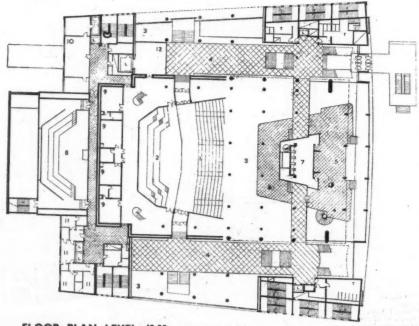
ACCOMMODATION. - A main feature of the plans is the ease with which sections of the building can be used for different purposes, and are complete with their own special entrances, lifts, lavatories, exits, etc. Another feature is the high standard of changing and rehearsal room accommodation for the performers. Much of the information used has been gleaned from questionnaires circulated to leading orchestras, and from consultations with leading figures in the musical world. The general accommodation is as follows :-- the main concert hall with seating accommoda-



Section of the model expanded to give a view of the main foyer level and circulation.



South-west elevation.



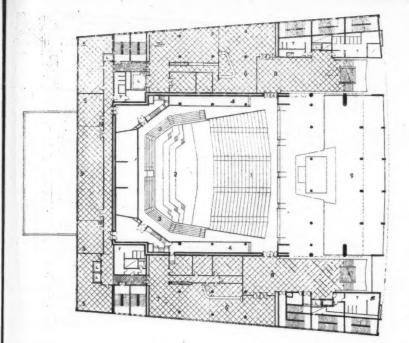
FLOOR PLAN LEVEL 40-00 [Scale: 10"]

KEY TO PLAN-LEVEL 40:00

- Auditorium. Platform Upper part of foyer. Promenade. Upper restaurant.

- 6. Balcony buffet.
  7. Restaurant service.
  8. Orchestra practice room
  9. Practice rooms.
  10. Library.

- II. Conductor and soloists
  I2. Instrument store.
  T. Toilet.
  L. Lift.



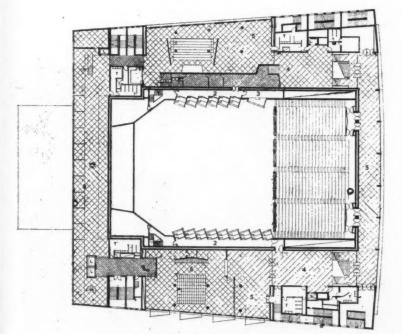
FLOOR PLAN LEVEL 53-00.

#### KEY TO PLAN-LEVEL 53'00

- 1. Auditorium.
- 2. Platform.
- 3. Choir sesting.
- Promenade. 5. Changing rooms.

l and

- 7. Orchestra and choir lounge or meeting room.
- 8. Upper foyer.
- 9. Upper part of restaurant.
- T. Toilets.
- L. Lifes.

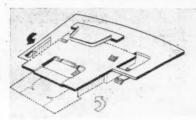


FLOOR PLAN LEVEL 64-00. [Scale: 34"=1' 0"]

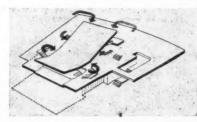
#### KEY TO PLAN-LEVEL 64'00

- I. Auditorium.
- 3. Royal box.

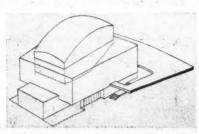
- 6. Meeting hall.
- 7. Exhibition gallery.
- 8. Balcony over exhibition.
- T. Toilet.



The upper and lower entrance levels to the building converging on to the main foyer and terrace level.



As above but with the floor of the auditorium showing access points.



The main block outline of the building and inner sound-resisting core to the building surrounded by its enclosing envelope,

tion for approximately 2,900 in two main tiers consisting of the main floor of the auditorium, which is ramped to provide ade-quate sight lines, side boxes and a gallery. In addition the choir seating for approximately 250 will be available to the public on many occasions and there is a standing space in the side galleries for approximately 300, thus giving total accommodation for 3,450.

The auditorium is constructed within an acoustic box with walls of double thickness surrounded by an envelope containing access stairs, galleries and foyers. The roof is also of double thickness and openings through the walls are limited to the necessary access and exit doors which are specially designed to exclude external noise. The platform provides for an orchestra of 100, a choir of 250 and a full concert organ. Backstage accommodation is planned with

practicing rooms.

The small hall has seating accommodation for 750 with separate access and is planned for chamber

music and cinema projection.

BY R. H. MATTHEW AND J. L. MARTIN

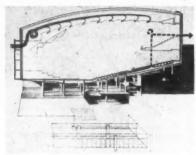


Diagram showing the circulation of air in the ventilation system of the concert hall.

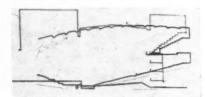


Diagram showing the comparison between the long tud nal section of the new concert hall (heavy line) and that of the Royal Opera House, Covent Garden.

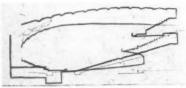
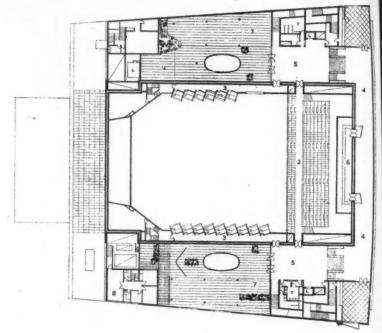


Diagram showing the comparison between the long:tud nal section of the new concert hall (heavy line) and that of the concert hall in Buffalo, USA.

CONSTRUCTION IN TWO SEC-TIONS .- Difficulties in regard to steel supplies mean that a large part of the building must be constructed in reinforced concrete, which will make completion of the whole building by May, 1951, impracticable. The plans therefore provide for the building to be constructed in two sections; the first section, comprising five-sixths of the total cubic capacity, will include the concert hall proper (with temporary changing rooms for performers), with its approaches, foyers and restaurant. The temporary changing rooms performers and accommodation for the administration will be located in areas which will, in the completed building, be allocated to refreshment bars and promenade foyers on the upper floors. The plans provide for a satisfactory architectural treatment of the temporarily unfinished end of the building. The small hall, stage block, dressing rooms, exhibition suite and permanent accommodation for the administration, changing rooms for soloists, orchestra and chorus, and

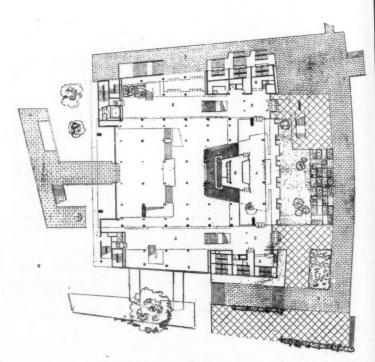


FLOOR PLAN, LEVEL 78-00

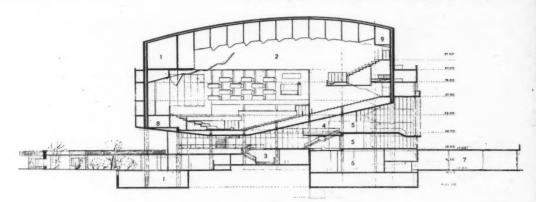
#### KEY TO PLAN-LEVEL 78:00

- I. Upper part of auditorium.
- 2. Auditorium balcony.
- 3. Boxes.
- 4. Promenade.
- 5. Foyer.

- 6. Cloaks.
- Terrace.
   Caretaker's flat.
- T. Tollets.
- L. Lifes.



FLOOR PLAN AS FINISHED IN 1951 AT LEVEL 28.00



SECTION AS FINISHED IN 1951 [Scale: 4"=1"0"]

KEYLTO SECTION

I. Ventilation.

2. Auditorium.

Lower foyer.
 Refreshment.

Restaurant.
 Wash up.

7. Car park.

8. Practice room

9. Projection.

the workshops for technicians, will all be comprised in the second or remaining section of the work which will have to be left for completion after the close of the Festival of Britain Exhibition towards the end of 1951.

ENGINEERING SERVICES.— The appropriate provisions for lighting, power, telephones, sound amplifications for speakers, emergency lighting and street lighting in the vicinity are being made, together with provision for BBC sound recording and television. The concert hall and small hall will be warmed and air conditioned by the downward discharge system and extracts under the auditorium floors and balcony. The foyers, exhibition space, and restaurants, etc., will be plenum heated with supplementary direct heating by radiators and floor panels.

COST.—The total cost of the completed building is approximately £1,800,000, of which £1,500,000 represents the estimated cost of the first section of the building. Provision has also been made for the following items of expenditure: concert organ, £50,000; equipment and furnishings (exclusive of the restaurant and bars), £100,000; and the estimated figure for the completely equipped

building is £2,000,000.

CONSULTANTS.—The following experts have provided assistance in the preparation of the scheme: Mr. Hope Bagenal and the BRS on all matters of acoustics and sound transmission; Messrs. Scott and Wilson on all structural engineering matters; Messrs. Frank N. Falkner and Partners, quantity surveyors; Mr. Ralph Downes, consultant for the organ. Sir Malcolm Sargent and others have also advised about special musical arrangements.

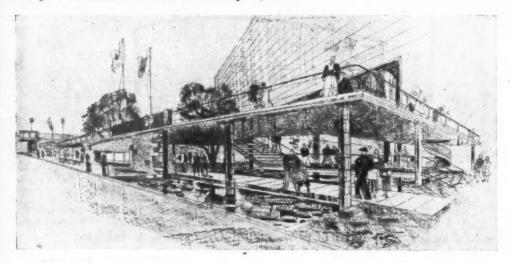
The Contractors for the Concert Hall are Messrs. Holland & Hannen & Cubitts, Ltd.



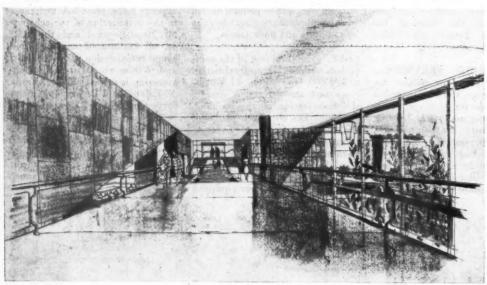
Approach to main entrance. Sketch by Gordon Cullen.

/EL 28.00

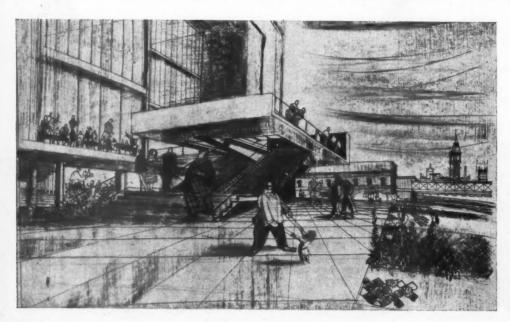
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The entrance for the 1951 Exhibition. Sketch by Joe Mayo.



View along a side promenade. Sketch by Joe Mayo.



The terrace staircase. Sketch by Joe Mayo.

This week, instead of the normal article on developments in the Building Industry, Brian Grant deals with some of the exhibits on view at the British Industries Fair, Birmingham.

# THE BRITISH INDUSTRIES FAIR

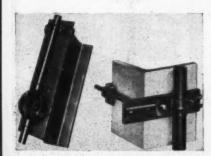
By Brian Grant

There is very little that can be described as new at the Castle Bromwich section of the BIF exhibition, which closes tomorrow. The quality of stand design remains about the same as last year. It is too much, of ccurse, to expect stand designers' names in the catalogue, but in any case there are barely a dozen stands worth looking at from the point of view of design. There are also far too many which have obviously been pulled out of store and dusted every year ince 1920 or thereabouts.

The outdoor section, which has been get-ting larger every year, not only in the area occupied, but also in the size of the exhibits, has now reached an astonishing size, even though the manufacturers of some of the largest earth-moving equipment are not exhibiting. Among the outside exhibits the Warry hoist, first mentioned in the JOURNAL two years or more ago, has now been equipped with extension members so that it will lift to a height of 80 ft. instead of 30 ft. It thus becomes suitable for work other than house building. In addition it has several technical improvements.

#### MOBILE HOUSE

Mobile dwellings of the type developed by the TVA have rarely been attempted in this country, but an aluminium house known as the Terrapin is on show. It is transported on a low load lorry, measures 22 ft. by 7 ft. 6 in., has wing rooms on each side measuring 14 ft. by 7 ft., and



The Rawlclip, an adjustable girder clip.



The British Wool Textiles stand at Earls Court, designed by Neville Ward and Austin Williams.

is made of aluminium. The price has not yet been fixed, and although it is likely to be expensive, it should provide more comfortable and spacious accommodation than even the most luxurious caravan. Since contractors are prepared to pay £2,000 or so for caravans for key staff on remote sites, a house of this kind may be quite useful even if the price is high.

A new type of light constructional system is shown by Dexion, who produce lengths of slotted angle which can be built up, Meccano fashion, to make a framework for

cano fashion, to make a framework for small temporary buildings or exhibition stands, or for storage bins and shelving.

There is a fair amount that is worth seeing in the building and electrical groups. Among the fixing devices is a new Rawlplug girder clip, a device which is available in two types and clips almost instantly to H or angle girders. It may be used with conduit saddles and for holding switchgear and pipe-work of all kinds. Fixings of this type are useful in that they enable pipe and conduit runs to be easily revised, and the same fix-ings can be used repeatedly. The clip is made in three parts: a carrier and a sliding made in three parts: a carrier and a stiding self-locking clip at each end. The sliding clips and carrier have interlocking indenta-tions which engage when the parts are assembled on the girder. There is a slot in the carrier of the clip in which the nuts and screws holding the saddle are inserted. One or more saddles can be fixed and slid along the slot in the carrier to any position.

The clips will carry loads up to 300 lb., and are suitable for girders from 3 in. to 6 ft. 6 in. in width. Conduits may be fitted at an angle to the girder by using a small back plate underneath the saddle.

#### A NEW STORAGE WALL

A new type of storage wall has been evolved by Stelcon, who are, perhaps, best known for their concrete slab and slot method of parking bicycles. pre-cast concrete uprights, which are placed side by side and have bolt holes cast in them for fixing any necessary shelving or bins, can be produced to any required height, and a corner unit can also be produced so that, with the addition of a door, a completely self-contained store can be

quickly set up in any part of a factory. the uprights are east with a broad foot, the wall is free standing. So far the units are made with an assymmetrical foot, and are intended for shelving on one side only, but a further unit will probably be produced which will be suitable for shelving on both sides. At first glance the units may seem somewhat heavy, but in most stores it is essential to prevent unauthorized access, and there is a good deal to be said in favour of any system which gives almost automatic protection from burglars.

An item of interest in the electrical section is the Lucas Freelite wind-driven generating plant for small houses and other buildings beyond the reach of mains supplies. In the years before the war various windmill units years before the war various windmin units were produced in the US under the name of Wincharger, but not very many of them were sold over here. The Lucas unit provides a 12-volt supply in conjunction with two 130 amp-hour accumulators. It costs £45 complete with switchboard fittings and



Stelcon storage wall made in standard heights of 5, 8 and 12 feet. Suitable for bulk storage as well as supporting bins and racks.

rcase. Mayo.

1951 h

side



The Lucas "Freelite" wind-driven dynamo lighting plant.

accumulators but without wiring, and is a useful piece of equipment for any building not large enough to warrant a petrol-driven set. The manufacturers suggest a total connected load of 110 watts, three 25 and three 12 watt lamps should be used. For a cottage occupied only at week-ends this load could probably be increased. Two parafin lamps of the Aladdin type would provide all the light required in the room normally occupied in the evening, and electricity would be most useful in kitchens, larders and the dark corners where candles would otherwise be needed. Twelve watts is surely adequate for a small larder, while 6 watts is enough for a bedside lamp of the Anglepoise or Bestlite type which can give direct lighting. Twelve-volt lamps can be obtained with BC caps suitable for domestic fittings.

#### **COOKING APPLIANCES**

Among the cooking appliances there are two new models by Parnall. Most readers

will remember their original model, first produced mainly for export. To this they have now added a small breakfast type called the Silver Grill, and a larger EC type made in two basic models, one with three boiling rings (EC/10), the other with four (EC/12). Design and finish are good and there is a useful drawer below the oven which can be fitted with a 500-watt element and used as a warming cupboard. The oven door is bottom hung and spring-loaded, and a two-step thermostat is used to give closer temperature control. Both these models use the top oven heating element for grilling, so that the top plate consists of boiling rings only. The manufacturers are doubtful of the popularity of this method in this country, and the cooker was originally intended for export only. It is now to be marketed here, however, and may be obtained within two or three months, according to the model. There is no reason why a griller in the top of the oven should be unpopular here. Incidentally, Parnall's, like so many other cooker manufacturers, offer Simmerstat controls as an alternative to the more usual 3-heat switch.

#### KITCHEN EQUIPMENT

CSA, of Warwick, showed a very full range of kitchen cupboards and other equipment. This firm has approached the whole system from a sensible angle and produces a series of units without sides, so that when the different pieces of equipment are ranged along a wall they are joined with cover strips and the side pieces are necessary only at the ends of the complete installation. As well as the usual range of cupboards and cabinets the firm also produces a boiler unit (45,000 BTU), a dual freeze unit with a 5 cu. ft. normal refrigerator and a zero temperature deep freeze. There is also a Flavel cooker to go with the cabinets and a Vent Axia fan unit to the same dimensions as the wall cupboards. This, it is suggested, should be fitted over the cooker. A full range of clocks, signalling systems, burglar alarms, telephones and similar devices are should be fitted over the cooker.

burglar alarms, telephones and similar devices are shown by Gents of Leicester. The firm has been producing goods of this type for seventy years, including their elaborate luminous call systems and fire alarms.

Aids for the builder, apart from those shown outside, are shown by Kwikform.

Their equipment includes formwork for walls and piers, unit frame scatfolding, and a cavity block-making machine. The standard floor shuttering, used in conjunction with the pier and wall shuttering, is on view on the stand. It is claimed to save up to 50 per cent, of the labour cost of timber shuttering, while the units can, of course, be used again.

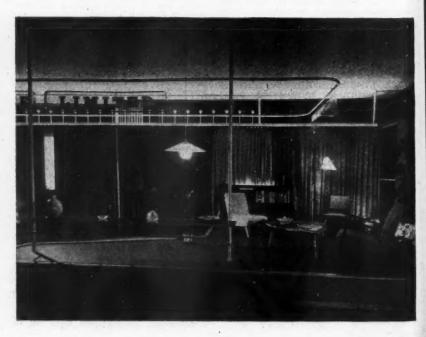




Top, the Parnall silver grill. Above, the Parnall EC12 electric cooker.



Two stands produced by the Design Research Unit. Above, a hexagon-shaped interviewing room designed for Monsanto Chemicals at Olympia by Kenneth Bayes. Right, stand for British Celanese, Ltd. at Earls Court, designed by Alexander Gibson. Chairs designed by Jacques Groag.



work for ding, and The stanonjunction is on view ave up to of timber of course.

Above, the

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INFORMATION SHEETS PRICES · TECHNICAL ARTICLES The publication concludes with an extensive bibliography and a combined index and check list of timber names.

#### 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.

#### INFORMATION CENTRE

I SOCIOLOGY. 2 PLANNING: General. 3 PLAN-NING: Regional and National. 4 PLANNING: Urban and Rural. 5 PLANNING: Public Utilities. 6 PLAN-NING: Social and Recreational. 7 PRACTICE, 8 SURVEYING, SPECIFICATION. 9 DESIGN: General. 10 DESIGN: Building Types. 11 MATERIALS: General.
12 MATERIALS: Metal. 13 MATERIALS: Timber.
14 MATERIALS: Concrete. 15 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Miscellaneous. 17 CONSTRUCTION: General. 18 CONSTRUCTION: 19 CONSTRUCTION : Details. STRUCTION: Complete Structures. 21 CONSTRUCTION: Miscellaneous. 22 SOUND INSULATION, ACOUSTICS. 23 HEATING, VENTILATION. 24 LIGHT-ING. 25 WATER SUPPLY, SANITATION. 26 SERVICES, EQUIPMENT: Miscellaneous. TINGS. 28 MISCELLANEOUS. 27 FURNITURE, FIT-

#### 2.81 planning: general 1947 ACT, GUIDE

Development and Rent Control. (Dawn Press, 1949. 1s.)

Concise popular guide to Town and Country Planning Act, 1947, and to rent control provisions, including rent tribunals, in England and Wales. Short notes on Barlow, Scott and Uthwatt Reports. Index.

#### 5.32 planning: public utilities CONCRETE ROADS

Roads-Modern Tendencies. Concrete W. P. Andre Assoc., 1949.) Andrews. (Cement and Concrete

Paper discussing present day trends in design and construction of concrete roads in England and abroad.

Review of recent practice. Design considerations concerning soil foundation, drainage, sub-base, concrete road slabs, reinforcement, and spacing of joints. Modern developments and methods of mechanized construction, including weight batching, mix spreading, compaction and curing. Short reference to concrete road

#### 7.20 practice BUILDING LICENSING

Building Licensing: Notes for the Guidance of Applicants for Building Licences. Ministry of Works. (The Ministry, 1949. Document P.1.49.)

Third revised edition. Control and authorization. Work requiring a licence. Financial limits. Calculation of cost of work. Licence application procedure. Lists of controlled materials and of MOW Licensing Offices.

#### 7.21 practice NFBTE ANNUAL REPORT

Seventy-First Annual Report, Dec. 31, 1948. NFBTE. (G. C. Lawrence, 1949.)

Report of National Federation of Building Trades Employers reviewing progress during 1948.

Relaxation of licensing controls. Supply, prices and distribution of materials. Housprices and distribution of materials. Housing programme, costs and progress statistics. Coming into operation of Town and Country Planning Act, 1947, Factories Act, 1948, and Building (Safety, Health and Welfare) Regulations. Labour relations, Apprenticeship position. Contract form revisions.

#### 10.49 design: building types INDUSTRIAL BUILDINGS

Industrial Buildings. (Architectural Design, Feb., March, 1939, pp. 28-43, 54-71.)

Description of 29 post-war industrial buildings in Great Britain,

The article contains a selection of British post-war industrial buildings. Both steel and reinforced concrete framed structures are represented by good examples. The frequent application of shell roofs is a characteristic feature of the latest development. Another woist of interest in these ment. Another point of interest is the use of "monitor" roof lights. The general impression is that of a high standard of

#### 10.50 design: building types SCHOOLS

Post-War Schools. New Materials and Methods of Construction. S. H. Loweth. Lecture to the Chadwick Trust on April 5. (The Builder, April 15, 1949, pp. 450-3.)

Comparison between old type multi-storey and open modern bungalow plan buildings. Fundamentals of the new plans. Some disadvantages of prefabrication. New materials. Examples of new types of construction for roofs and partitions.

#### 13.41 materials: timber SOFTWOOD IDENTIFICATION

Identification of Softwoods. E. W. J. Phillips. (Forest Products Research Bulletin 22. HMSO, 1949. 1s. 3d.)

Deals with the identification of commercial softwoods; intended primarily for the specialist, since the methods described generally require microscopic examination.

The contents include a description of the various anatomical and other features, most of which are illustrated by photographs, and a discussion of their diagnostic value. The latter half of the publication consists mainly of notes on the botanical groups yielding softwood timbers. Within each group the timber value of the various species is considered and the various species is considered and the preferred methods of distinguishing the timbers of the group as a whole and the individual species comprising it are described.

#### 16.47 materials: miscellaneous GLUES: ANIMAL

Animal Glue for Wood. (Brit. Standards Inst. 2s.) BS 745:1949.

Specification for animal glue for wood (joiners' glue). Section 1: Dry glue. Section 2: Jelly or liquid glue. Appendices dealing with sampling, testing, etc.

#### 17.52 construction: general ALUMINIUM: STRUCTURAL USE

The Structural Uses of Aluminium in Buildings. W. C. Devereux. Lecture to the Institute of Metals (London Section), March 10, 1949. (The Builder, April 8, 1949, p.

Development in this country and abroad. Resistance to corrosion. Choice of materials. Design considerations. amples.

The development which gave aluminium its greatest impetus in building in this country was the aluminium bungalow, of which over 69,000 have been built and erected since 1945. The examples given by

erected since 1945. The examples given by the lecturer show that great progress has been made during the last two years in a wide variety of light alloy building structures. In 1948 over a million sq. ft. of floor space were covered.

The lecturer dealt mainly with the question of resistance to corrosion of structural aluminium alloys. In all but the most exceptional cases painting of aluminium alloy structures is unnecessary. Aluminium produces a highly protective and insulating oxide film which prevents subsequent attack. subsequent attack.

Although a wide range of alloys is available, it has been found that one alloy known as AW10 offers the most favourable combination of properties for structural purposes.

purposes.

The great saving in weight against steel, is of particular advantage in handling. The lower modulus of elasticity has, of course, a very important effect on the strength of compression members and the deflection of members subject to bending. Roofs up to 84 ft. span have already been exerted, but this limit can be considerably. but this limit can be considerably exceeded.

#### 19.69 construction : details PRISMATIC THIN-SLAB ROOFS

Toitures Autoportantes en A et V. (Self-supporting A- and V-roofs). J. Mesnager. (Travaux [France], April, 1949, pp. 173-9.) Characteristic features, principles of design and details of construction of large-span prismatic thin-slab roofs.

This article is to be read in conjunction with the article by Peirani in the same issue of Travaux (see 20.126). It deals with the main features of this new form of construction, indicates the way in which the forces are transmitted, and contains several details.

#### 20.126 construction: complete structure RAILWAY SHEDS IN FRANCE

Grandes Surfaces Couvertes de S.N.C.F. (Halles-Ateliers). (Large-span sheds of the French railways.) P. Peirani. (Travaux [France], April, 1949, pp. 168-172.)

Railways sheds covered by prismatic thinslab construction in reinforced concrete. Interesting form of structure with favourable distribution of daylight.

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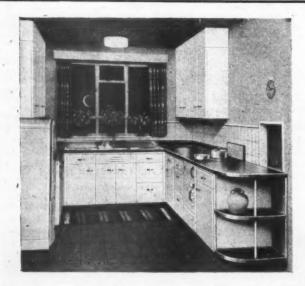
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The article describes a shed for cleaning carriages at Villeneuve-Saint-Georges, and one for loading and unloading goods at Avignon. The shed at Villeneuve-Saint-Georges is composed of three bays of 99 ft. 8 in., 60 ft. 2 in. and 80 ft. 9 in. in with respectively and 361 ft in length. The width respectively and 361 ft. in length. The shed at Avignon is 182 ft. wide and 795 ft. Both are framed reinforced concrete gructures, with roofs in prismatic-thin-slab construction.

span members of alternating A- and V-shaped cross section, with glazing connecting the bottoms of the A-s with the tops of the V-s. In addition, lantern lighter vided at the apex of the A-s. At Villeneuve-Saint-Georges the roof spans at right angles to the railway lines and forms a continuous system of three spans; at Avignon the span is parallel with the rails. Here the length is divided by expansion joints into 5 sections. Each section is supported on two rows of columns at 96 ft. centres and cantilevered 34

that both ends.
The system of daylighting in these buildings is known in this country as the "monitor" system, the advantages of which were much discussed at the RIBA conference on industrial architecture on March 3-4.

#### 20.127 construction : complete structure RC AT NEW LONDON STATIONS

Reinforced Concrete Construction at New London Stations. (Concrete & Cotional Eng., April, 1949, pp. 121-5.)

Shell roof construction at the extension of the Central Line of London Transport.

The article describes several interesting applications of shell roof construction at the extension of the Central Line of London Transport. A feature of the new work at Hanger Lane station is a shallow reinforced concrete dome of 44 ft. diameter. A similar dome has been constructed at South Ruislip. The island platforms of the new stations at Northolt, South Ruislip, Ruislip Gardens and West Ruislip vary in length from 176 ft. to 248 ft. and in width from 18 ft. to 30 ft. The roofs are of the "butterfly" type with transverse reinforced concrete beams projecting above the shell at 24 ft. centres. A central reinforced concrete column supports each beam. The cylindrical barrels are of

A roof over the covered part of the bus station at Newbury Park is a thin reinforced concrete vault 30 ft. high, 150 ft. long and

60 ft. span.

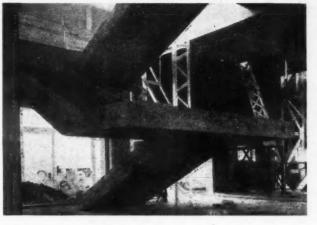
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The Brabazon Assembly Hall: reinforced concrete access-staircase to lower gallery, See 20.128.

#### 20.128 construction: complete structures BRABAZON ASSEMBLY HALL

The Brabazon Assembly Hall at Filton. C. B. H. Colquhoun. (J. of the Institution of Civil Engineers, March, 1949, pp. 4-49.)

History, details of design and construction, equipment, ancillary works.

The hall consists of 3 bays. The two outer bays have a span of 352 ft. 5 in, and are 250 ft. long, the span of the centre bay is 346 ft. 6 in., its length is 400 ft. The main components of the steel skeleton consist of cambered portal frames having a tie at haunch-level. These frames are made up of box section lattice girders which rest upon hinged bases at foundation level. The depth of the girders is uniform throughout at 13 ft. 9 in., whilst the width of the centre bay is 5 ft. 6 in., that of the outer bays 7 ft. 6 in. This arrangement makes it received to the control of the centre bays 7 ft. 6 in. This arrangement makes bays 7 ft. 6 in. This arrangement makes it possible to utilize the floor space to the best possible extent, since the upright sections of the girders between contiguous bays are nested one into the other. The main frames are at 50 ft. centres. They are connected by a series of lattice girders running parallel with the longitudinal axis of each bay and carrying subsidiary frames midway between the main nortal girders. of each bay and carrying subsidiary frames midway between the main portal girders. This system forms a framework lending itself to purlins and sheeting rails of a convenient span. Supports for a number of crane gantries and a walkway system at tie-level of a total length of approximately 2 miles are provided. miles are provided.

The external cladding of the hall is asbestos sheeting, with fibre-board insulation inside. The roof sheeting consists of a

patented form of pressed steel decking, covered by insulation board and roofing

The ground floor, which has to carry wheel loads of 29 tons consists of various layers.
The reinforced concrete galleries and and staircases show some interesting architectural features.

Of particular interest are the sliding doors on the south side. The opening enclosed is 65 ft. 9 in. high and 1,045 ft. long. The door is made in six sections, each compris-ing a self-supporting travelling structure which embodies its own power units. The leaves and the sheeting are all made from a heat treated aluminium alloy.

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

#### OUESTIONS AND ANSWERS

2988 LAW OF PROPERTY ACT— VARIATION OF RESTRICTED COVENANTS.

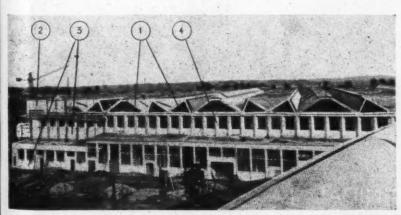
Can you tell me the County Court procedure and approximate costs involved when an application is made under

—I believe—the Law of Property Act—for
a variation of the rear building line where
this line is fixed by a covenant in the deeds of a property?

The procedure on application for variation of a covenant in a deed is for application to be made to the County Court. The County Court refers the matter to an Official Arbitrator, who decides whether or not the variation asked for is

whether or not the variation asked for is to be granted.

It is impossible to give an estimate of the costs involved, since at the hearing before the Official Arbitrator anybody claiming to be adversely affected by the proposed variation is entitled to be heard. If, for instance, the covenant is imposed as part of a building scheme, then there might be a number of people claiming to be adversely affected, and it may well be that the applicant would be ordered to pay the costs of the objectors, even if the application was successful. Not infrequently expert evidence is given on the hearing of these enquiries, and that, again, may add to the expense.



Detailed view of shed at Villeneuve-Saint-Georges showing: 1. A-V sections of the prismatic-thin-slab construction. 2. Prefabricated panel units. 3. The same units 4. Prefabricated columns. See 20.126. in position.

This regular feature, prepared by Davis, Belfield and Everest, Chartered Quantity Surveyors, summarises basic prices for materials and gives labour rates for the London District and Grade Classifications outside

London. Detail prices of materials are given quarterly.

BASIC MATERIALS	BASIC PRICES AND RATES OF WAGES, 1948		1949			*
BASIC MATERIALS	Nov.	Dec.	Jan.	Feb.	Маг.	April
Portland cement (6 tons and over) Paper bags 2-in. unscreened ballast per yd. cu. Fletton bricks (at station) per 1,000 Stoneware drain pipes (British Standard 2 tons and over). Standard list + Roofing tiles (ex works) per 1,000	60/6	60/6	60/6	60/6	60/6	60/6
	11/-	11/-	11/-	11/-	11/-	11/-
	14/5	14/5	14/5	14/5	14/5	14/5
	73/-	73/-	73/-	73/-	73/-	73/-
	42½%	42½%	42½%	42½%	42½%	42½%
	90/-+	90/-+	90/-+	189/-	189/-	189/-
Steel joists (basic sections ex mills) per ton Lime, greystone	£17 16s. 6d. 84/9 £130 15s.	110% £17 16s. 6d. 84/9 £130 15s.	110% £17 16s. 6d. 84/9 £142 10s.	£17 16s. 6d. 84/9 £142 10s.	£17 16s. 6d. 84/9 £142 10s.	£20 3s. 66 84/9 £124 10s.
White lead paint per gallon	70%	70%	70%	70%	70%	70%
	42/3	42/3	48/3	48/3	48/3	46/3
RATES OF WAGES (LONDON)— Within 12 miles radius Craftsmen	2/11	2/11	2/11	2/11½	2/11½	2/11½
	2/4	2/4	2/4	2/4½	2/4½	2/4½
	2/10½	2/10½	2/10½	2/11	2/11	2/11
	2/3¾	2/3½	2/3½	2/4	2/4	2/4

Prices of materials above include for delivery to site in the Central London Area, and the rate of wages are for London only.

Current rates of wages outside London are as follows. Liverpool and District, Craftsmen, 2/111;

GRADE CLASS	IFICAT	TIONS	A	A1	A <sup>2</sup>	A <sup>a</sup>
Craftsmen			 2/10	2/94	2/9	2/81
Labourers		0 0	 2/31	2/3	2/21	2/2

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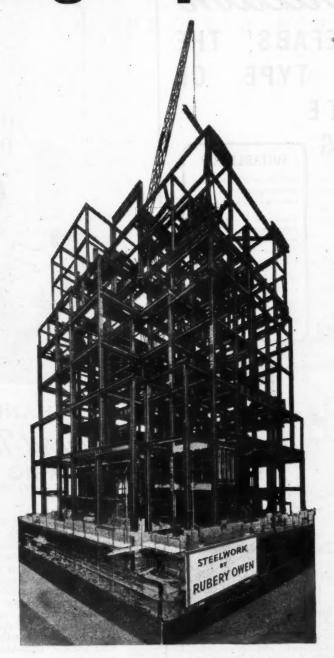
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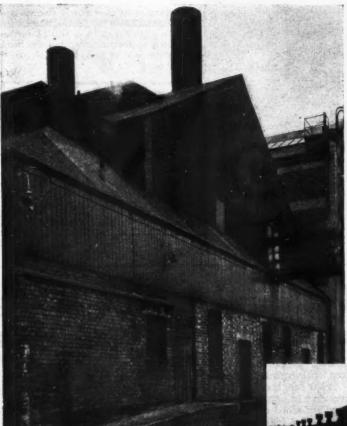
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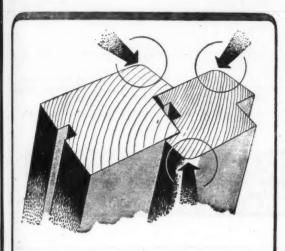
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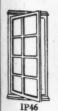
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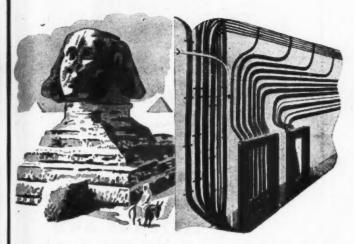
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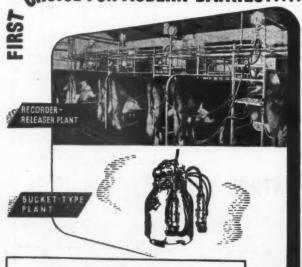
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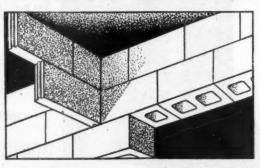
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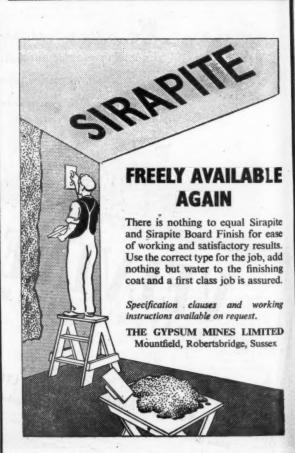
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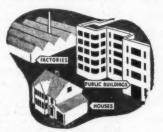
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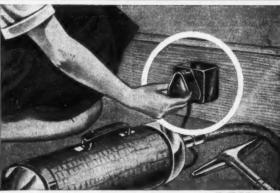
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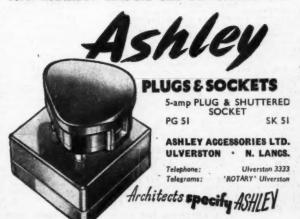
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Town Clerk.

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Town Hall. Prestwich, Lanes.

29th April. 1949.

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who is related to a member of, or a senior officer
of, the Council must disclose the fact in his
applications, stating age, present and previous

who is related to a member of, or a senior omcer of, the Council must disclose the fact in his application.

Applications, stating age, present and previous appointments, with dates, qualifications and ex-perience, accompanied by copies of three recent testimonials, should reach the undersigned not later than 18th May, 1949.

Town Hall, Bradford.

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hold the Testamur of the Institution of Municipal Engineers.

Applications, stating age, qualifications, experience, and present and previous appointments, accompanied by three recent testimonials, must be delivered to "the Borough Engineer. Maison Dieu House, Dover, not later than Monday, 16th May, 1949.

The Corporation is prepared to make a grant net exceeding 50 per cent. of approved expenditure in connection with household removal expenses.

JAMES A. JCHNSON.

JAMES A. JCHNSON, Town Clerk. New Bridge House, Dover. 29th April, 1949.

New Bridge House, Dover, 29th April, 1949.

BOROUGH OF WREXHAM.
HOUSING ARCHITECT'S DEPARTMENT—CHIEF HOUSING ARCHITECT.
BOROUGH OF WREXHAM.
HOUSING ARCHITECT'S DEPARTMENT—CHIEF QUANTITY SURVEYOR.
Applications are invited for the appointment of Chief Quantity Surveyor, in the Department of the Housing Architect, for work in connection with the Council's extensive post-war housing and neighbourhood development.
Candidates must be qualified and have had suitable experience in the preparation of Bills of Quantities, measuring and valuations for Interim Certificates and settlement of Final Accounts, and all work incidental to the handling of large Contracts.
The commencing salary will be between the range of £695 to £800, according to qualifications and experience, and the Council is prepared to offer to the successful applicant suitable housing accommodation if required and to pay reasonable removal expenses.
Further particulars and conditions of appoint-

accommodation if required and to per removal expenses. Further particulars and conditions of appointment may be obtained from the undersigned, to whom applications, with copies of two recent testimonials, must be delivered not later than first post on Friday, the 20th May, 1949.

PHILIP J. WALTERS,

Town Clerk.

Guildhall, Wrexham. 29th April, 1949.

Guildhall, Wrexham.

29th April, 1949.

LANCASHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments on the permanent staff:

(a) SENIOR SECTION ARCHITECT. Salary P860-2960. The appointment is in the General (Architectural) Branch of the Department, and the successful candidate will be responsible, under the Assistant County Architect, for supervising the design of all projects carried out by the Branch. Candidates should be especially experienced in contemporary design, with some knowledge of administration.

(b) SENIOR ASSISTANT QUANTITY SURVEYORS, Grade VI. Salary 2635-2710. Candidates must have a wide experience of the work of a Omanity Surveyor.

(c) ANNISTANT OHANTITY SURVEYORS, Grade VI. Salary 2596-2660.

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

Anolications should be forwarded on the forms to he obtained from the County Architect. G. Noel Hill. PR.I.Ba. M.T.P.I. Canniv Offices, Preston, to whom they should be returned, accompanied by cooles of three recent testimonials, to arrive not later than Monday, 23rd May, 1949.

R. H. ADOCOK.

arrive not later than Monday, 23rd May. 1949.

R. H. ADCOCK,
Clerk of the County Council.

County Offices, Preston.

2nd May, 1949.

LANCASHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments on the permanent staff:

(a) ASSISTANT HEATING ENGINEER, Grade
VI. Salary £595-£660 per annum. Candidates must be Cornorate Members.

appointments on the permanent staff:—

(a) ASSISTANT HEATING ENGINEER, Grade VI. Salary £595-£660 per annum. Candidates must be Corporate Members of the Institute of Heating and Ventilating Engineers.

(b) ASSISTANT ELECTRICAL ENGINEER, Grade VI. Salary £595-£660 per annum. Candidates should be Corporate Members of the Institution of Electrical Engineers and capable draughtsmen, with good experience in the preparation of schemes, specifications, and estimates for all classes of electrical installation work. The appointments will be subject to the provisions of the Local Government Superannation Act, 1377; to a satisfactory medical examination, and to the termination of each appointment by one month's notice in writing on either side. Applications should be forwarded on the forms to be obtained from the County Architect, G. Noel Hill. F.E.I.B.A., M.T.P.I., County Offices, Preston, to whom they should be returned, accompanied by copies of three recent testimonials, to arrive not later than Monday, 23rd May, 1949.

B. H. ADCOCK.

B. H. ADDOCK.

Clerk of the County Council.

3rd May, 1949.

BOROUGH OF WORTHING.

APPOINTMENT OF SENIOR ARCHITEC.

TURAL ASSISTANT.

Applications are invited for the appointment of a Senior Architectural Assistant, on the permanent establishment of the Borough Engineer and Surveyor's Department, at a salary in accordance with Grade A.P.T., VI, commencing salary £556, rising by three annual increments to £660 per annum.

ance with Grade A.P.T., VI, commencing salary £595, rising by three annual increments to £66 per annum.

Candidates should be Associates of the Royal Institute of British Architects, and should have a sound experience in the preparation of drawings and specifications for all types of building work carried out by a Local Authority.

The appointment will be subject to the National Scheme of Conditions of Service of Local Government Officers, to the Local Government Superanuation Act, 1937, and to the successful candidate passing satisfactorily a medical examination. The Council will assist the successful applicant to obtain housing accommodation, if necessary, Applications, endorsed "Senior Architectural Assistant, Grade VI," stating age, qualifications, present and previous appointments and experience with dates, and accompanied by copies of three recent testimonials, should be addressed to the Borough Engineer and Surveyor, Town Hall, Worthing, and should be received by him not later than 12 noon on Wednesday, 1st June, 199.

ERNEST G. TOWNSEND,

Town Hall, Worthing. 28th April, 1949.

COUNTY OF CORNWALL.

Applications are invited for the appointment on the Established Staff in the County Architect's Department of one ARCHITECTURAL ASSISTANT, on Grade V (£20-£570), and one on Grade IV (£480), rising to maximum of Grade V (£570).

Applicants for both appointments should have good sound experience in surveys of existing buildings, construction, preparation of sketch schemes and working and detail drawings. Experienced with a Local Authority will be an advantage.

perienced with a Local Authority will be an advantage.

Application, stating age, qualifications and experience, and clearly endorsed for the particular appointment applied for, accompanied by one recent testimonial and the names of two persons to whom reference can be made, should be received by the County Architect, County Hall, Truro, to reach him not later than Monday, the 23rd May, 1949.

Both appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination. Canvassing, either directly or indirectly, will disqualify.

E. T. VERGER.

E. T. VERGER, Clerk of the County Council.

County Hall, Truro. 28th April, 1949.

28th April, 1949.

CITY OF PORTSMOUTH.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—
(a) ASSISTANT SENIOR ARCHITECT. Grade VII (£635-£710).

Candidates should be Associates R.I.B.A. Capable of leading a section dealing with a large housing programme, including a new neighbourhood unit and redevelopment areas.
(b) TWO PRINCIPAL ASSISTANT ARCHITECTS. Grade VI (£595-\$660).

(c) ASSISTANT ARCHITECT. Grade V (£520-£570).

£570).

(b) and (c) Associates B.I.B.A., with good experience in housing, educational buildings, and (d) ASSISTANT ARCHITECT. Grade IV

(A) ASSISTANT ARCHITECT. Grade IV (£480-£525).
Intermediate R.I.B.A. standard, with adequate office experience, essential.
Applications, setting out in tabular form, name, ago, qualifications, present post and salary, previous posts with dates, and details of experience, with the names of three referees, must be dolivered to the undersigned not later than 10 s.m. Monday, 30th May, 1949.
Canvassing will disqualify.

V. BLANCHARD,

City Council Chambers, 1, Clarence Parade, Southsea. 29th April, 1949.

29th April, 1949.

BOROUGH OF KEIGHLEY.

BOROUGH ARCHITECT'S AND HOUSING DEPARTMENT.

Applications are invited for the following appointment on the permanent staff:—
Conditions of Service and salaries are in accordance with the National Joint Council Scheme for Local Authorities.

ASSISTANT ARCHITECT, Grade II. Salary scale £420 to £465.

Preference will be given to applicants who have passed the Intermediate examination of the Royal Institute of British Architects, and suitable housing accommodation will be offered to the successful applicant.

Applications to be made on a form to be obtained from the undersigned, to whom it must be returned, accompanied by copies only of two recent testimonials, not later than Monday, 23rd May, 1949.

E. G. FELGATE, A.R.I.B.A.

E. G. FELGATE, A.B.I.B.A.,

Borough Architect's and Housing Department,

College Street, Keighley.

G. ARCHITEC ointment of n the pernts to 2660

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B.A.. Architect. tmont,

SURREY COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of an ASSISTANT ARCHITECT, Grade V, at a commencing salary of £520, rising by annual increments of £15/£20 to a maximum of £570 per annun, plus London allowance of £30.

Preference will be given to applicants who are Associate Members of the Royal Institute of British Architects, and have had a good training and an adequate experience in the design and construction of modern buildings.

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-upon-Thames, not later than the 28th May, 1949.

May, 1949.

It is desirable that applications should be accompanied by a small example of the applicant'

secompanied by a small example of the applicant's work.
Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

DUDLEY AUKLAND.

County Hall, Kingston-upon-Thames.

914

NORTH EASTERN REGIONAL HOSPITAL
BOARD, SCOTLAND.

ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment on the staff of the Regional Architect's Department. Applicants should be suitably qualified and have a good general architectural experience and a sound knowledge of building construction and contemporary design.

Salary will be either on A.P.T. Grade III (2450-2495 per annum). according to qualifications and experience. The pest is subject to the provisions of the National Health Service (Scotland) (Superannuation) Regulations, 1948, and the successful, candidate will be required to pass a medical examination.

Applications, stating age and giving full particulars of qualifications and experiences.

candinate with the examination.

Applications, stating age and giving full particulars of qualifications and experience, present and previous appointments, and accommanied by copies of two recent testimonials and the names and addresses of two persons to whom reference may be made, should be lodged with the Secretary, North-Eastern Regional Hospital Board, Scotland, 1, Albyn Place, Aberdeen, on or before 31st May, 1349.

North-Eastern Regional Hospital Board, Scotland, Albyn Place, Aberdeen, on or before 31st May. 1849.

BRITISH ELECTRICITY AUTHORITY.

EAST MIDIANDS DIVISION.

DRAUGHTSMEN.

Applications are invited for Dositions as Barker Gate, Nottingham, from Dersons with the construction of Generatine Stations.

(a) ELECTRICAL ENGINEERING. General desirn, assembly and layouts of H.T. and Auxiliary Switchgear. Transformers Cables, O.H. Lines and Heavy Plant.

(b) MECHANICAL ENGINEERING. General desirn, assembly and layouts of modern Boiler and Fuel Handling Plant, Turbo-Alternators and Condensing Plant, Circulating Water, Steam and Peed Printg, Foundations, etc.

(c) CIVIL ENGINEERING. General design of Steel and Reinforced Concrete Structures, Foundations Retaining Walls, Tunnels, etc.

(d) ARCHITPCTURAL ASSISTANTS. Anolications are invited for men (preferably qualified) with experience in design of architectural work for modern Power Stations, Office and Welfare Buildings.

Posts will be subject to Superannuation deductions in accordance with the Authority's Superannuation Scheme.

Applications must be submitted on the official form, which may be obtained from Divisional Establishments Officer, at the under-mentioned address, and must be completed and delivered not later than Monady, 23rd May, 1949.

W.S. Burgge,

British Electricity House.

w. S. BURGE,
British Electricity Anthority,
British Electricity House,
Barker Gate, Nottingham.

DHB/IW/63/2/3/37.

29th March 1949.

DHB/IW/63/2/3/37.

29th March. 1949.

29th March. 1949.

HIS MAJESTY'S COLONIAL SERVICE.

An ASSISTANT TOWN PLANNING OFFICER
is required by the Government of Aden. The
appointment is on contract terms for two teurs
of duty covering five years in all including
leave). Salary 21.220×250—21.350 per annum,
point of entry dependent on age, qualifications and
experience. Candidates must be Associate
Members of the Town Planning Institute. and
preferably held architectural qualifications in
addition, and have had experience in the design
and execution of Town Planning Schemes.

Terms of Service include furnished Government
quarters at a maximum rent of £19-£125 per
annum, according to salary, free passages once
sach way each tour for the officer, his wife, and
up to four children under the age of 18. Home
leave on full pay after tours of 18-24 months at
the rate of 7 days per month of resident service.
Inrome tax at local rates.

Intending applicants should write at once to
the Director of Recruitment. Colonial Office,
Sanctuary Buildings, Great Smith Street. S.W.I.
for form of application, giving brief details of
age, qualifications and experience, quoting
Reference 27281/10.

NORFOLK COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.
Applications are invited for the follow

NORFOLK COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.
Applications are invited for the following appointments:

(1) FIVE SENIOR PLANNING ASSISTANTS.
Salary A.P. and T., Grade VI (£596-£660).
Applicants should have passed the Final examination of the Town Planning Institute, or of one of the following bodies: the Institution of Civil Engineers, the Royal Institution of Municipal Engineers, the Royal Institution of Chartered Surveyors, or the Royal Institution of Municipal Engineers, the Royal Institution of Chartered Surveyors, or the Royal Institute of British Architects, or hold a University degree in an appropriate subject. They should also have had good general experience in the administrative and technical work of a County planning department, including development control, survey, research, and development plan proposals.

(Four positions in Norwich; one position in King's Lynn.)

(2) ONE INTERMEDIATE PLANNING ASSISTANT. Salary A.P. and T., Grade III (2450-£495). Preference will be given to applicants who have passed the Intermediate examination of one of the professional bodies referred to in (1) above, and have had good general experience in the work of a planning department, including development control, survey, and Committee procedure (Norwich office).

Each person appointed will be required to provide and maintain a motor car, for which an allowance is payable in accordance with the County Council's scale. Facilities will be afforded, where desired, for the purchase of a car by means of a loan, repayable over a period of up to four years.

The appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination. Forms of application may be obtained from the Clerk of the Norfolk County Council, County Offices, Thorpe Road, Norwich, and must be completed and returned to him not later than 10 a.m. on Friday, 20th May, 1949.

Canvassing will be a disqualification.

### Council State Planting application and the council of the Council.

ADMINISTRATIVE COUNTIES OF EAST AND

Applications are invited for the following appointments, to serve jointly both the East and West Saffolk County Councils:—

(a) DEFUTY COUNTY PLANNING OFFICER. 2750×25-2850 per annum.

The appointment will be terminable by three months notice on either side, and will be subject to the provisions of the Local Government Superannuation Act, 1937. Applicants for appointment must have passed the Associate Membership examination of the Town Planning Institute, and preference will be given to those persons possessing additional qualifications in engineering, surveying or architecture.

Candidates should have had wide experience of all aspects of Town and Country Planning, and should have had recent experience in preparing development plans.

Housing accommodation will be available.

(b) PLANNING ASSISTANT. A.P.T., Grade III, 2456-2496 per annum.

Applications must have had planning experience, preferably on Factual Survey and Research in connection with the Development Plan. Preference will be given to those possessing the Intermediate examination of the Town Planning Institute.

Applications, endorsed "Deputy County Plan-

Institute.

Applications, endorsed "Deputy County Planning Officer," and "Planning Assistant," stating age, qualifications, experience, present and past appointments, present salary, and giving names and addresses of two persons to whom reference may be made, to be delivered to the undersigned not later than the first post, Thursday morning, 19th May, 1949.

Canvassing, directly or indirectly, will disconsify

Canvassing, directly or indirectly, will disqualify.

G. C. LIGHTFOOT,

Clerk of the East Suffolk County Council.

Solventy Hall, Ipswich.

COUNTY BOROUGH OF WALSALL.

FUBLIC WORKS DEPARTMENT.

CHIEF ASSISTANT PLANNER.

Applications are invited for the post of Chief Assistant Planner, at a salary in accordance with Grade VIII of the Administrative, Professional and Technical Division of the National Scale of Salaries (2685-225-2760).

The commencing salary will be in accordance with the qualifications of the applicant.

Preference will be given to candidates who are Corporate Members of the Town Planning Institute, the Institution of Municipal Engineers, or the Boyal Institute of British Architects.

Applicants must have had considerable experience in the preparation of planning and redevelopment schemes; have a thorough knowledge of the various Acts and Orders relating to Town and Country Planning; and be competent to undertake the administration and supervision of the Planning Office.

Consideration will be given to the provision of living accommodation for the successful applicant, if desired.

Applications, giving age, details of qualifications and experience, present and previous appointments, together with copies of three recent testimonials, should be reteived by the undersigned not later than Monday, 23rd May, 1949.

M. E. HABERSHON,

Borough Engineer and Surveyor.

Council House. Walsall.

COUNTY BOROUGH OF WEST BROMWICH.
BOROUGH SURVEYOR'S DEPARTMENT.
Applications are invited from suitably qualified
persons for the following appointments in the
BOROUGH SATEVEYOR'S DEPARTMENT.

(a) SENIOR ASSISTANT ARCHITECT. A.P.T.,
(frade II (£450-£495).

The appointments may be made at a point
within the scales, according to qualifications and
experience. The appointments are subject to the
Local Government Superannuation Act, 1937, and
the successful applicants will be required to pass
a medical examination.
Applications, appropriately endorsed, stating
age, qualifications, experience, present and past
appointments, together with the names of two
persons to whom reference may be made, should
be delivered to the Borough Engineer and Surveyor, Town Hall, West Bromwich, not later than
the Sist May, 1949.

H. SCHOFHELD, B.Sc.(Eng.),

H. SCHOFIELD, B.Sc.(Eng.),
A.M.I.C.E.,
Borough Engineer and Surveyor.
Town Hall, West Bromwich.
3rd May, 1949.

Town Hall, West Bromwich.

3rd May, 1949.

METROPOLITAN BOROUGH OF

WANDSWORTH.

ARCHITECTURAL ASSISTANT.

Applications are invited for the established appointment of Architectural Assistant, in the Borough Architect's Department, at a salary in accordance with Grade A.P.T. II, viz., £456-£495 per annum inclusive.

Candidates should have had professional training and experience in housing and general architectural work.

Forms of application may be obtained from the Borough Architect, and must be returned to the undersigned not later than 25th May, 1949.

R. H. JERMAN.

Town Clerk.

Municipal Buildings, Wandsworth, S.W.12.
3rd May, 1949.
LIVERPOOL REGIONAL HOSPITAL BOARD.
Applications are invited for the following appointments in the Regional Architect's Department:—
SENIOR 448078

ment:—SENIOR ASSISTANT ARCHITECT. Grade A.P.T. VIII, £665 × £25 to £760 p.a.
Applicants must be Associates of the Royal Institute of British Architects, and preferably have had experience in the design and construction of hospitals, and must be capable of carrying out and advising on large building contracts.
ASSISTANT ARCHITECT. Grade A.P.T., VI, Applicants should

out and advising to ASSISTANT ARCHITECT. Grade A.P.T., vi. ASSISTANT ARCHITECT. Grade A.P.T., vi. 2595 to £660 p.a. Applicants should be Associates of the Royal Institute of British Architects, and must have a good general experience and ability in design and construction.

The appointments are pensionable, and the successful candidates will be required to pass a medical examination.
Applications, stating age, education, qualifications, experience, present and previous appointments, salary, war service, together with the names and addresses of three referees, should be sent to the undersigned, c/o Alder Hay Hospital, Eaton Road, Liverpool, 12, to be received not later than 27th May, 1949.

VINCENT COLLINGE, 378

Soft April, 1949.

STAFFORDSHIRE COUNTY COUNCIL
EDUCATION COMMITTEE.
Applications are invited for the following appointments on the permanent establishment of the Architect's Department:

(a) SECTION ARCHITECTS. Grade VII,
APT. Division (£535×£25-£710 per annum).

(b) ASSISTANT ARCHITECTS. Grade VI,
A.P.T. Division (£595×£20×£20×£25-£660 per annum).

(b) ASSISTANT ARCHITECTS. Grade VI. A.P.T. Division (£595×£20×£20×£22-£60 per annum).

(c) SENIOR ASSISTANTS. Grade V. A.P.T. Division (£520×£15×£15×£20-£570 per annum).

(d) JUNIOR ASSISTANTS. Grades I to IV. A.P.T. Division (£530-£525), according to qualifications and experience. Applicants for post (a) are required to be Associate Members of the R.I.B.A. and caoable of a high standard of design. Preference will be given to those candidates who have had experience in the control of staff.

Applicants for post (b) are required to be Associate Members of the R.I.B.A. Preference will be given to candidates having a sound knowledge and experience in the construction and design of all types of school buildings.

The appointments will be subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1937, and successful examination. The appointments will also be subject to the Scheme and Conditions of Services of the National Joint Council for Local Antiorities' Administrative, Technical and Clerical Services.

ties' Administrative, Technical and Conservices.
Applications, endorsed according to the particular post in respect of which consideration is desired, should be addressed to The Director of Education (A), County Education Offices. Earl Street. Stafford, stating age, qualifications and previous experience, and should be accompanied by copies of three recent testimonials.
All applications are required to be received not later than the 28th May, 1949.
T. H. EVANS.

T. H. EVANS, Clerk of the County Council.

COUNTY BOROUGH OF GRIMSBY.

ARCHITECTURAL ASSISTANTS.

Applications are invited for the following Architectural appointments in the Borough Engineer and Surveyor's Department.—

Grade A.P.T., VII (£635, rising to £710 per

A.P.T., V (£520, rising to £570 per Grade A.P.T., III (£450, rising to £495 per

Grade A.P.T., III (£450, rising to £490 per anum).

Housing accommodation will be made available to successful married applicants.

Preference will be given for the Grade A.P.T., VII. appointment to candidates with experience in New Schools and other Public Buildings.

The appointments are terminable by one month's notice on either side, and are also subject 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 details of experience, together with copies of two recent testimonials, must be suitably endorsed and delivered to the undersigned not later than 10 a.m. on Saturday, the 23th May, 1949.

J. V. OLDFIELD.

J. V. OLDFIELD, Borough Engineer and Surveyor.

Municipal Offices, Town Hall Square, Grimsby. April, 1949.

April, 1949.

COUNTY BOROUGH OF WEST HAM.

Applications are invited for the following from those prepared to work on the immediate Reconstruction Programme, including completion of Development Plan, large Housing Schemes, and Permanent School Buildings.

Applicants should have energy and vision and be prepared to take responsibility. The Council is the Planning, Housing, and Education 20 minutes from Central London.

Preference will be given to those who hold the necessary professional qualifications for the posts for which they are applying.

TWO SENIOR ASSISTANTS (PLANNING). Grade A.P.T., VIII (£868 × 255 – 2760).

ONE ASSISTANT (PLANNING). Grade A.P.T., VIII (£635 × 255 – 2670).

ONE ASSISTANT ARCHITECTS.

Grade A.P.T., VIII (£635 × 255 – 2760).

ONE ASSISTANT ARCHITECT.

Grade A.P.T., VIII (£635 × 255 – 2760).

THREE SENIOR ASSISTANT ARCHITECT.

Grade A.P.T., VIII (£635 × 255 – 2760).

ONE ASSISTANT ARCHITECT.

Grade A.P.T., VIII (£635 × 255 – 2760).

THREE ARCHITECTURAL ASSISTANTS.

GENERAL ASSISTANTS (TECHNICAL).

General Division, Grade (age 21, £230 p.a., rising to £385 at age 33).

London allowance payable on above, as follows:—21-25 years and over, £30 p.a., 26 years and over, £30 p.a.

Application forms (returnable by 24th May,

£30 p.a.
Application forms (returnable by 24th May,
1949) may be obtained from Thomas E. North,
F.R.I.B.A., Borough Architect and Planning
Officer, 70, West Ham Lane, E.15.

B. E. KING, Town Clerk

B. E. KING,
Town Clerk.

West Ham Town Hall, Stratford, E.15.
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GLOUCESTERSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of
A8818TANT ARCHITECT (SECTION LEADER)
on A.P. and T. Grade vIII (£685-£760), in the
above Department.
The successful applicant will be in charge of
a section of the County and will be responsible
for all work carried out in that section.
Applicants should be qualified Members of the
R.I.B.A., and have wide experience in projects
usually dealt with by a County Council, i.e.,
Education, Police and Health Buildings.
Applications should be sent to B. E. Urwin,
F.R.I.B.A., County Architect, Shire Hall,
Gloucester, not later than Monday, the 16th May,
1949, stating (1) name and address, (2) married
or single, (3) ago, (4) qualifications, (5) present
position, salary and date of appointment, (6) previous positions with dates and salaries, (7) particulars of experience, and accompanied by two
recent testimonials and the name and address of
one person to whom reference may be made.

GUY H. DAVIS,
Clerk of the County Council.
22nd April, 1949.

22nd April, 1949

22nd April, 1949.

CITY OF WAKEFIELD.

CITY ENGINEER'S DEPARMENT.
QUANTITY SURVEYING ASSISTANT.

Applications are invited for the permanent appointment of One Quantity Surveying Assistant, at a salary in accordance with Grade A.P.T., II (2420-2465). Applicants should be capable of working up quantities and measuring works in progress.

working up quantities and measuring works in progress.

Applications, stating age, qualifications, present and previous appointments and experience, should be sent to the undersigned not later than Saturday, 21st May. 1949.

Copies of two testimonials should be enclosed, and applicants must state whether to their knowledge they are related to any member or senior officer of the Corporation.

The successful applicant will be required to undergo a medical examination, and the appointment will be subject to the Local Government Superannuation Act, 1937. Canvassing will be a disqualification.

W. S. DES FORGES,

W. S. DES FORGES. Clerk DEVON COUNTY COUNCIL.

Applications are invited for the following appointments on the permanent establishment of the County Architect's Department. at consolidated salaries, in accordance with the grades of, and subject to the scheme of conditions of service of the National Joint Council for Local Authorities' Administrative, Professional and Technical Services. Applications from suitably qualified disabled persons will be considered.

(a) ONE ASSISTANT ARCHITECT. Grade A.P.T., VII. Commencing salary \$635 per annum, rising by three annual increments of £25 to £710 per annum.

(a) ONE ASSISTANT ARCHITECT. Grade A.P.T., VII. Commencing salary \$655 per annum, rising by three annual increments of £25 to £710 per annum, (b) THREE 'ASSISTANT ARCHITECTS. Grade A.P.T., V. Commencing salary £520 per annum, rising by three annual increments (£15×£10×£20) to £570 per annum, rising by three annual increments (£15×£10×£20) to £570 per annum.

(c) ONE ASSISTANT ARCHITECT. Grade A.P.T., IV. Commencing salary £420 per annum, rising by three annual increments (£15×£15×£15) to £525 per annum.

(d) ONE ASSISTANT ARCHITECT. Grade A.P.T., III. Commencing salary £450 per annum, rising by three annual increments (£15×£15×£15) to £625 per annum.

(e) ONE ASSISTANT ARCHITECT. Grade A.P.T., III. Commencing salary £450 per annum, rising by three annual increments (£15×£15×£15) to £465 per annum as for (d).

Candidates for (a) and (b) must be Associates of the R.I.B.A., and possess a sound experience in the design and maintenance of all types of buildings carried out by a large Local Authority; they must be fully conversant with the Building Regulations of the Education Act, 1944, and the Regulations for Police Buildings and Fire Stations; and possess organizing ability and experience in the management of buildings contracts. For (c) and (d) candidates must have a good training in architecture, and preference will be given to those who have passed the Intermediate examination of the Royal Institution of Charlered Surveyors (Quantities Subdivision), and be capable of undertaking preparation of detailed estimates, taking off quantities from drawings for variations; preparation and settlement of final accounts, and the general technical duties in the Estimating Section of the Department.

Applications, stating age, qualifications and experience, accompanied by not more than three recent testimonials, should be sent to the County Architect, 97, Heavitree Road, Exeter, not later than Friday, the 27th May, 1949.

The appointments will be subject to one month's notice on either side, and to the provisions of the Loca

H. A. DAVIS, Clerk of the County Council. The Castle, Exeter.

The Castle, Exeter.

WEST SUFFOLK COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of
QUANTITY SURVEYOR. in the County Architect's Department, on A.P.T., Grades VI-VII
(£995-£710), position on scale according to qualifications and experience.
Travelling allowance in accordance with the
National Joint Council's Scales and Conditions of
Allowances.
Applicants should have had experience in the
preparation of Bills of Quentities, interim valuations, settlement of final accounts, and estimating
for all classes of building work, including new
works and improvements to existing County
buildings. Preference will be given to those who
are Associates of the Royal Institution of
Chartered Surveyors (Quantities Division).
The appointment will be terminable by one
month's notice in writing on either side, and will
be subject to the terms and conditions of service
of the National Joint Council, and the provisions
of the Local Government Superannuation Act,
1337. The successful candidate will be required to
pass a medical examination.

Forms of application may be obtained from the
undersigned, by whom applications, together with
the names of two referees, should be received not
later than Tuesday, the 24th May, 1949.

L. G. H. MUNSEY.

L. Gerk of the County Council.

Let than Tuesday, the 24th May, 1949.

L. G. H. MUNSRY,
Clerk of the County Council.

Shire Hall, Bury St. Edmunds.
2nd May, 1949.

EAST ANGLIAN REGIONAL HOSPITAL
BOARD.

Applications are invited for the appointment of
QUANTITY SURVEYOR on the Beard's Headquarters Staff. Candidates should be Members
of the Royal Institution of Chartered Surveyors
(Quantities Sub-Division), and have had considerable experience in the preparation of bills of
quantities sub-Division). Salary Grade VIII,
A.P.T. Division (2655×225-2760). The appointment will be subject to the National Health
Service (Superannuation) Regulations, 1947.
Applications, stating age, qualifications, experience, and present appointment, with the names
of three referees, should reach the undersigned
not later than 26th May, 1949.

K. V. F. MORTON.

K. V. F. MORTON Secretary. 117. Chesterton Road, Cambridge. 27th April, 1949.

CITY OF BIRMINGHAM EDUCATION
COMMITTER.
Applications are invited for permanent appointment to the following vacancies in the Architects Branch of the Birmingham Education Department (Architect to the Committee: Mr. Aiex. Steele, A. R. I. B. A.).
CHIEF ASSISTANT ARCHITECT. Salary 2760 × 220 – 2850.
Candidates should be qualified Architects, with experience in all types of educational buildings. The successful applicant will be responsible for the control of Drawing Office Staff and the supervision of major contracts.
ARCHITECTURAL ASSISTANTS. A.P.T., III, 2450-2495.
Candidates should have passed the Intermediate

ARCHITECTURAL ASSISTANTS. A.P.T., III, 2450-2495.
Candidates should have passed the Intermediate examination of the R.I.B.A. or hold similar qualification, and should be experienced in the practation of working drawings and details. Application forms, which may be obtained from the undersigned on receipt of a stamped addressed envelope, must be returned not later than a fortnight after the appearance of this advertisement.

ment.

E. L. RUSSELL.

Chief Education Officer.

Education Office, Margaret Street,

Birmingham, J. 866

CITY OF NOTTINGHAM.

CITY ENGINER'S DEPARTMENT.

Applications are invited for the following pesi-

Applications are invited for the following positions:

(a) TOWN PLANNING ASSISTANT. Grade
A.P.T., VI (£955 × £20 × £20 × £25 − £560).

(b) TOWN PLANNING ASSISTANT. Grade
A.P.T., IV (£400 × £15 − £525).

(c) TOWN PLANNING BASISTANT. Grade
A.P.T., IV (£300 × £15 − £455).

Applicants for positions (a) and (b) must have
had good experience in the Town Planning Office
of a Local Authority.

Applicants for position (c) must be capable
draughtsmen, with good experience in the office
of an architect, surveyor, municipal engineer, or
town planning officer.

The appointments are subject to the Local
Government Superannation Act, 1937, and to the
passing of a medical examination.

Applications are to be on forms to be obtained
from R. M. Finch, O.B.E., M.I.C.E., City
Engineer and Surveyor, Guidhall, Nottingham,
to whom they should be returned not later than
3rd June, 1949.

J. E. RICHARDS, Town Clerk. Guildhall, Nottingham,

Guildhall, Nottingham.

Town Clerk.

Town Clerk.

Gouldhall, Nottingham.

CAERNARVONSHIRE COUNTY COUNCIL.

COUNTY PLANNING DEPARTMENT.

Applications are invited for the following appointments:—

(a) SENIOR PLANNING ASSISTANT, A.P.T.,

Grade V. £520 to £570 per annum.

(b) TWO PLANNING ASSISTANTS. A.P.T.,

Grade III to IV. £450 to £525 per annum.

(c) TWO DRAUGHTSMEN. Miscellaneous II, £375 to £420 per annum.

(d) TWO DRAUGHTSMEN. Miscellaneous II, £375 to £420 per annum.

(d) TWO DRAUGHTSMEN. Miscellaneous II, £375 to £420 per annum.

(d) TWO DRAUGHTSMEN. Miscellaneous II, £375 to £420 per annum.

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(d) TWO DRAUGHTSMEN. Miscellaneous II & £375 to £420 per annum.

(d) TWO DRAUGHTSMEN. Miscellaneous II & £375 to £420 per annum.

Applicants for (a) should be Corporate Members of the Town Pisannidered an advantage.

The persons appointed for (b) will be required to assist in the preparation of Basic Surveys and Development Plans, and should have had previous experience in the work of a Planning Authority; a professional qualification by examination will be considered an advantage.

Applicants for (c) and (d) should be neat and expeditious draughtsmen, with experience in the preparation of maps and plans relating to planning.

Knowledge of Welsh is desirable.

The appointments will be terminable by one month's notice on either side. They will be subject to the provisions of the Local Government (Superannation).

Applications should be delivered to the undersigned (from whom forms of application may be obtained) not later than 4th June. 1949.

GWILLYM T. JONES.

Clerk of the County Council.

County Offices, Caernaryon.

4th May, 1949.

GWILTM T. JONES.
Cierk of the County Council.
County Offices, Caernarvon.
4th May, 1949.

SOUTHERN ELECTRICTY BOARD.
NO. 1. (SOUTHALL) SUB-AREA.
APPOINTMENT OF QUANTITY SURVEYOR.
Applications are invited for the position of quantity Surveyor at Sub-Area Engineering Headquarters at Waterloo Road, Uxbridge.
The commencing salary, which is provisional and subject to adjustment by the appropriate negotiating machinery, will lie within the range £500-£700 per annum, at a point dependent upon qualifications and experience.
Candidates must be fully experienced in the writing of specifications, the working up and preparation of Bills of Quantities for Industrial type buildings. Showrooms and Offices, and be canable of settling Contractors' accounts and preparing preliminary estimates for projected schemes.

Applications, on the prescribed form obtainable from the Administrative Officer, Southern Electricity Board, 2/6, Windmill Lane, Southall, should be sent so as to reach there not later than 21st May, 1949.

F. W. KEMPTON. Secretary.

TION t appoint-Mr. Alex.

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RD. RA. RVEYOR. sition of rovisional

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ON. Secretary.

WARWICKSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the under-mentioned appointments on the established staff:
ASSISTANT ARCHITECTS. Grade V, £520-£570 per annum. Registered Architects up to six years' standing.

ASSISTANT ARCHITECTS. Grade V, £520-£570 per annum. Registered Architects up to six years' standing. ASSISTANT ARCHITECT. Grade IV, £480-£625 per annum. Registered Architects up to three years' standing. ARCHITECTURAL ASSISTANTS. Grade III, £450-£496 per annum, to have passed B.I.B.A. Intermediate examination, with up to four years' office experience.

office experience.
ARCHITECTURAL ASSISTANTS. Grade II,
£420-£45 per annum, to have passed R.I.B.A.
Intermediate examination, with up to four years'

office experience.

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

Application forms can be obtained from C. H. Elkins, F.R.I.B.A. A.B.I.C.S., County Architect, Shire Hall, Warwick, to whom they should be returned by the 17th May, 1949.

L. EDGAR STEPHENS,

Clerk of the Council.

Shire Hall, Warwick.

BOROUGH OF MALDEN AND COOMBE.

BOROUGH ENGINEER AND SURVEYOR'S

DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANT (MALE OR FERMALE), GRADE I, A.P.T.

Applications are invited for the above-mentioned appointment, at a salary of £390×£15-£435 per annum, plus London weighting.

Applicants should have had good general experience and be competent draughtsmen. Preference will be given to those engaged upon a course of training leading to a recognized architecteral qualification.

The appointment, which is to the permanent staff, will be terminable by one month's notice on either side, and is subject to the National Scheme of Conditions of Service.

The successful candidate will be required to pass a medical examination and to contribute under the Local Government Superannuation Act, 1937.

Applications, giving details of age, experience, present and past appointments with designations and salaries, and enclosing copies of two recent testimonials, should be addressed to reach the undersigned not later than 28th May, 1949.

Canvassing, directly or indirectly, will be deemed a disqualification, and candidates must disclose in their applications whether to their knowledge they are related to any member or senior official of the Council.

HAROLD E BARRETT,

Town Clerk.

Municipal Offices, New Malden, Surrey.

695

HAROLD E. BARRETT.
Town Clerk.

Municipal Offices, New Malden, Surrey.

CITY OF SHEFFIELD.

CITY OF SHEFFIELD.

CITY ARCHITECT'S DEPARTMENT.

APPOINTMENT OF TECHNICAL STAFF.
Vacancies for technical officers exist on the
Staff of the City Architect (W. G. Davies,
F.R.I.B.A.), in the following grades:

ARCHITECT'S.

(a) Grade J. Salary £70-£860.

(b) Grade VI. Salary £505-£710

(c) Grade VI. Salary £505-£600.

(d) Grade VI. Salary £505-£600.

(d) Grade V. Salary £505-£600.

(e) Grade V. Salary £505-£570.

(f) Grade IV. Salary £450-£455.

(g) Grade II. Salary £450-£455.

SURVEYING ASSISTANTS.

(j) Grades VII. VI. V and IV. (Qualification
A.R.I.C.S.)

EVERFEYING ASSISTANTS.

A.R.I.C.S.)

(k) Grade I SURVEYING ASSISTANTS.

(k) Grade I OUANTITY SURVEYORS

(l) Grades VII, V(a), V and IV. (Qualifications A.R.I.C.S. and/or A.I.Q.S.).

OUANTITY SURVEYORS.

AR.I.C.S. and/or A.I.Q.S.)

OUANTITY SURVEYORS.

(m) Grade II.

STRUCTURAL ENGINEER.

(n) Grade VII. Salary £53-£710. Applicants must hold a minimum qualification of A.M.I.Struct.B., and have experience in modern practice and design of (a) steel frame buildings, and (b) reinforced concrete construction.

Residential accommodation will be available for a limited number of applicants appointed, provided they are married.

The appointments will be subject to one month's notice on either side, to be given in writing at any time. and to the terms and conditions of service of the National Joint Council for Iocal Authorities' Administrative. Professional, Technical and Clerical Services, as applied by the City Council to their official staff.

The appointments will also be subject to the provisions of the Local Government Superanmation Act. 1837. and candidates must have previous local government service carrying a transfer value within the meaning of the Act or not be more than 40 years of age.

The successful candidates will be required to pass a medical examination.

Annications on forms to be obtained from the City Architect. W. G. Davies, Esg., F.R.I.B.A., Town Hall Sheffield. I. must be received by the undersiened not later than 237d May. 1949.

Canvassing, directly or indirectly, will disqualify.

JOHN HEYS. Town Clerk.

Town Hal!. Sheffield, 1.

CIVIL SERVICE COMMISSION.

Applications are invited for permanent appointments as SENIOR INVESTIGATOR and JUNIOR INVESTIGATOR in the Royal Commission on Ancient Monuments in Wales and Monmouthshire.

Salary scales (for men): Senior Investigator, £720-£810; Junior Investigator, £310-£670. Rates for women are somewhat lower. For the post of Senior Investigator candidates must be at least 30 years of age on 1st April, 1949, for the post of Junior Investigator they must be at least 21 and under 26 years of age on 1st April, 1949. Candidates must have knowledge of the history of Architecture, the history of Applied Art, or the archæology of Britain. For the post of Senior Investigator a thorough knowledge of the history of Architecture is essential. Other things being equal, preference will be given to Welsh-speaking candidates.

Particulars and application forms from the

candidates.

Particulars and application forms from the Secretary, Civil Service Commission, Burlington Gardens, London, W.l., quoting No. 2574. Completed application forms must be received by the Secretary by the 23rd June, 1949.

2693/100.

CITY OF PLYMOUTH.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of a SENIOR ASSISTANT QUANTITY SURVEYOR, A.P. and T., Grade VI (£595 to £660).

The appointment, which is on the permanent staff, is subject to the Local Government Superannuation Act, 1937, a satisfactory medical examination, and one month's notice on either side for termination.

Applicants should be Members of the Royal Institution of Chartered Surveyors (Quantities Section).

Institution of Chartered Surveyors (Quantities Section).

Candidates must not be over 40 years of age, but this condition may be relaxed in the case of a person up to 45 years of age employed by another Local Authority.

Applications on forms obtainable from the undersigned, accompanied by copies of not more than three recent testimonials and/or names of persons to whom reference may be made, should be received at my office not later than Saturday, 4th June, 1949.

Housing accommodation may be made available to the successful married applicant if he requires it.

E. G. CATCHPOLE, A.R.I.B.A.,

E. G. CATCHPOLE, A.R.I.B.A., City Architect

Seymour Road, Plymouth.

Seymour Road, Plymouth.

SINGAPORE IMPROVEMENT TRUST.

ASSISTANT ARCHITECT.

An Assistant Architect is required by the Singapore Improvement Trust, the appointment being in the first instance on a three years' agreement. Age limit 32 years.

Applicants must be qualified by examination as Associates of the R.I.B.A.

The normal commencing salary may be paid if justified by the age, qualifications and experience of the applicant. Expatriation allowance \$192 per month if single, \$246 per month if married, and \$318 per month if married with children, and car allowance are payable in addition (\$1 Malayan equals 2s. 4d.).

Strict medical examination.

Provident Fund to which the officer must contributes a minimum of 7½ per cent, rising by stages to 20 per cent, after 20 years' service.

Leave and passages in accordance with regulations.

Leave and passages in accordance with regulations.

Housing accommodation at 6 per cent. of salary provided, or an allowance paid in lieu.

Application, stating whether married or single, giving age and birthplace, with details of education, training and experience, and accompanied by copies of testimonials, to be ledged with Messars. Peirce & Williams, I. Victoria Street, Westminster, London, S.W.I. Agents to the Singapore Improvement Trust, not later than Monday, 13th June, 1949.

COUNTY OF LINCOLN—PARTS OF

pore Improvement Trust, not later than Monday.

13th June: 1949.

COUNTY OF LINCOLN—PARTS OF

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of
ARCHITECTURAL ASSISTANT in the above
Department. Experience in Education and
general County work is desirable.

Salary will be in accordance with A.P.T.
Division, Grades V and VI, of the National
Scales, i.e., £520, rising by annual increments of
£15 and £20 to a maximum of £660 per annum
inclusive. Commencing salary will be in accordance with experience. Car and subsistence allowances will also be paid on the National Scales.

A lodging allowance of 30s. a week up to a
maximum of six months will be paid to married
men where difficulty is found in obtaining
housing accommodation.

The appointment will be subject to the provisions of the Local Government Superannustion
Act, 1937, to a satisfactory medical certificate,
and to one month's notice in writing on either
Applications, giving full particulars of age, ex-

Applications, giving full particulars of age, experience, qualifications, and present appointment, together with cooles of two testimonials or the names and addresses of two referees, should reach the undersigned not later than 3rd June, 1949. Canvassing, either directly or indirectly, will disqualify.

J. E. BLOW,

Clark of the County Council.

County Offices. Sleaford, Lines.

3rd May, 1949.

COUNTY BOROUGH OF HALIFAX.
BOROUGH ENGINEER'S DEPARTMENT.
APPOINTMENT OF CHIEF ARCHITECTURAL
ASSISTANT AND SENIOR ARCHITECTURAL
ASSISTANT.
Applications are invited for the following
appointments in the Borough Engineer's Department:—
Chief Architectural Assistant. Grade VI.
A.P.T., 2595-2560 per annum.
Senior Architectural Assistant. Grade V.
A.P.T., 2500-2570 per annum.
Previous experience in Local Government is
not essontial, and the Corporation will endeavour,
where necessary, to purchase houses or flat for
the successful applicants.
These apprintments are subject to the Local
Government Superannuation Act, 1937.
Applications, stating age, qualifications, present
position, salary and experience, accompanied by
copies of three recent testimonials and appropriately endorsed, should be delivered to the
undersigned not later than Saturday, 28th May,
1949.

R. de Z. HALL,

R. de Z. HALL, Town Clerk.

Town Hall, Halifax.

2nd May, 1949.

BOROUGH OF WALTHAMSTOW.

BOROUGH ARCHITECT'S DEPARTMENT.

ASSISTANT ARCHITECT'S ASSISTANT ARCHITECT.

Applications are invited for the permanent position of Assistant Architect, at a salary in accordance with Grade II of the National Joint Council for Local Authorities' Administrative, Professional and Technical Division (£420, rising to £465 by annual increments, plus London weighting allowance according to scale).

Applicants must have had, experience in the preparation of working and detail drawings for various classes of buildings.

The appointment will be subject to the Local Government Superannuation Act, 1937, to the National Joint Council's Conditions of Service, to the successful candidate passing a medical examination, and to the termination by one month's notice on either side.

Applications, stating age, qualifications and experience, accompanied by names and addresses of three persons to whom reference may be made, must reach the undersigned, endorsed "Assistant Architect," not later than Saturday, the 28th May, 1949.

Canvassing in any form will be deemed a disqualification, and applicants must disclose any relationship to any member of the Council or holder of any senior office under the Council.

G. A. BLAKELEY, Town Clerk:

G. A. BLAKELEY,
Town Hall, Walthamstow, E.17.

12th May, 1949.

CITY OF NOTTINGHAM EDUCATION

COMMITTEE.

COLLEGE OF ART AND CRAFTS.

Principal: ALYBED H. RODWAY, A.R.C.A.

Applications are invited for the full-time post of HEAD OF THE SCHOOL OF ARCHITECTURE, the appointment to take effect on the 1st September. 1949. The College of Art is recognized by the Ministry of Education as a Central Art Institution.

Candidates must hold a Degree or Diploma in Architecture, be Fellows or Associates R.I.B.A. and have had previous experience as Head, or as Senior Assistant in a School conducting courses, recognized by the R.I.B.A. as giving exemption.

The School of Architecture of the College provides a recognized full-time Diploma course, partime day and evening courses, and a recognized Diploma course (at present part-time) in Town and Country Planning.

Salary according to the Burnham Scales for Grade III Hedds of Departments, plus additions for training and graduation. Subject to observance of the conditions relating to full-time service, the successful candidate will be given such opportunities as may be practicable for the maintenance of his professional practice.

Application forms are obtainable from the Principal. College of Art and Crafts. Waverley Street, Nottingham, to whom they should be returned within fourteen days of the appearance of this advertisement.

F. STEPHENSON,

Director of Education.

F. STEPHENSON,
Director of Education.
Education Office, South Parade,
Nottingham.
909

Nottingham.

BUCKS COUNTY COUNCIL.

COUNTY ABCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent staff:

(a) ASSISTANT ARCHITECTS, Grade VI.

Salary £595-£660 p.a.

(b) SSINIOR BUILDING SURVEYOR, Grade VI. Salary £595-£660 p.a.

(c) ASSISTANT BUILDING SURVEYOR, Grade IV. Salary £490-£450 p.a.

(d) ARCHITECTURAL ASSISTANT, Grade III. Salary £490-£450 p.a.

(e) ARCHITECTURAL ASSISTANT, Grade III. Salary £400-£450 p.a.

Travelling and subsistence allowances will be paid in accordance with the National Scheme of Conditions of Service for the time being in force. The appointments are superannuable and subject to medical examination.

Further particulars and form of application may be obtained from the County Architect, County Offices, Aylesbury, to whom applications must be delivered by 30th May, 1949.

COUNTY BOROUGH OF CARLISLE.
CITY ENGINEER'S DEPARTMENT.
Applications are invited for the following appointments:

(4) CHIEF ASSISTANT ARCHITECT. Grade
VII. £555-£710.

VII. £335-2710.
(b) PRINCIPAL ASSISTANT ARCHITECT.
Grade VI. £505-£660.
(c) ARCHITECTURAL ASSISTANT. Grade
IV. £480-£525.

, £480-£525. (d) QUANTITY SURVEYOR. Grade V, £520-

(d) QUANTITY SURVEYOR. Grade V, £520-£570.

(e) JUNIOR QUANTITY SURVEYOR. Grade I, £390-£435.

(f) HEATING AND VENTILATING ENGINERER. Grade V, £520-£570

(g) CHIEF ASSISTANT ARCHITECT. Grade VII, £635-£710.

(h) PRINCIPAL ASSISTANT ARCHITECT. Grade VI, £955-£660.

Applicants for appointments (a), (b), (g) and (h) should be Members of the Royal Institute of British Architects, and applicants for (c) should have passed the Intermediate examination of the Royal Institute of British Architects. For appointment (d) applicants must have experience in the preparation of Bills of Quantities, Estimates and Settlement of Final Accounts. Preference will be given to Associates of the Royal Institute of Chartered Surveyors. Applicants for (e) should have experience in working up Bills of Quantities, and preference will be given to those who have passed the first examination of the Royal Institute of Chartered Surveyors. For (f) applicants should be experienced in the design and preparation of drawings, specifications and estimates for all classes of Heating and Ventilating Mork. Preference will be given to Associate Members of the Institute of Heating and Ventilating Engineers.

Forms of application and conditions of employment may be obtained from the City Engineer, 18, Fisher Street, Carlisle, to whom applications should be returned not later than Monday, 23rd May, 1949.

H. D. A. ROBERTSON.

H. D. A. BOBERTSON. 15, Pisher Street, Carlisle.

COUNTY BOROUGH OF BARROW-IN-FURNESS, BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT. Applications are invited for the tollowing per-

manent appointments: 
(a) SENIOR ASSISTANT ARCHITECT. Grade
VI. 2596-2660 p.a.

manent appointments:

(a) SENIOR ASSISTANT ARCHITECT. Grade
VI. 2595-2660 p.A. ARCHITECT (New Works).

(b) ASSISTANT ARCHITECT (Maintenance).

(c) ASSISTANT ARCHITECT (Maintenance).

(d) QUANTITY SURVEYOB. Grade Va. £550-2610 p.a.

(d) QUANTITY SURVEYOB. Grade Va. £550-2610 p.a.

Candidates for post (a) must be Associates of the R.I.B.A.

For other posts the possession of a recognized professional qualification will be an advantage.

The Council has accepted the principle of providing housing accommodation.

The appointments will be subject to: (1) The National Scheme of Conditions of Service; (2) the provisions of the Local Government Superannuation Act. 1937: (3) termination by one menth's notice on either side; (4) the successful candidate passing a medical examination. and (5) becoming a member of the appropriate Trade Union.

Further details of the posts and forms of application may be obtained from the Borough Engineer and Surveyor, to whom completed applications must be returned not later than Saturday, 21st May, 1949.

Canvassing in any form will disquality.

W. L. ALLEN.

Town Clerk.

W. L. ALLEN. Town Clerk

METROPOLITAN BOROUGH OF LEWISHAM.
APPOINTMENT OF ARCHITECTURAL
APPOINTMENT OF ARCHITECTURAL
APPOINTMENT OF ARCHITECTURAL
Applications are invited for the appointment of
Architectval Assistant. Class II, in the Borough
Architect's Department. Salary scale A.P.T.
Division, Grades IV and V (£480, rising to £570
per annum, plus Lendon "weighting." varying
between £10 and £30 per annum, according to
ages?

per annum, priss L'adon "weighting," varying between £10 and 230 per annum, according to age)

The appointment will be subject to the rules and regulations of the Council from time to time in force in relation to officers; to the National Scheme of Conditions of Service; to the provisions of the Local Government Euperannuation Act. 1937; to the satisfactory passing of a medical examination by the Council's Medical Officer of Health, and to termination by one month's notice on either side.

Candidates for the appointment should have had a sound architectural training, and preference will be given to those applicants with experience in design and construction of housing estates and multi-storey flats.

Forms of application may be obtained from me and should be returned, accompanied by copies of not more than three testimonials, addressed to me in an envelope endorsed "Architectural Assistant, Class FR," so as to be received not later than Saturday, the 21st May, 1949.

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

ALAN MILINER SMITH

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

ALAN MILNER SMITH,
Lewisham Town Hall, Catford, S.E.6.

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COUNTY BOROUGH OF CROYDON.
BOROUGH ENGINEER'S DEPARTMENT.
SENIOR ASSISTANT ARCHITECT.
Applications are invited for this appointment from suitably qualified candidates, who have had architectural experience (particularly housing) with a Local Authority, and have held an appointment as Group Leader.
Salary Grade A.P.T., VII, £665 per annum, rising to £740 per annum, inclusive of London weighting of £30 per annum. The appointment is pensionable, subject to a medical examination.
The Council are unable to offer housing accommodation.

rne council are analis to oner housing zommodation.

Forms of application may be obtained from the Borough Engineer, Town Hall, Croydon, and lould be returned to him within fourteen days om the date when this advertisement is pubthe Borough Enginess, should be returned to him we from the date when this ad-lished. Canvassing will disqualify.

E. TABERNER, Town Clerk.

COUNTY BOROUGH OF MIDDLESBROUGH
EDUCATION COMMITTEE.
APPOINTMENT OF CLERK OF WORKS.
Applications are invited for the appointment of
a Clerk of Works to supervise the erection of a
new County Primary School at Thorntree,
Middlesbrough. The school will comprise a
Junior School as the subject of the first Contract,
and an Infants School, Dining Room Unit and
Caretaker's House, etc., as the subject of the
second Contract, and the services of the successful
applicant will be required for the duration of
these works.
The salary will be at the rate of £10 per week.

applicant will be required for the duration of these works. The salary will be at the rate of £10 per week. Applicants ahould hold experience on large contract works and in the keeping of all records, etc., in connection with same, and should have a thorough knowledge of all the building trades. Forms of application and general conditions of service may be obtained from the Director of Education, Education Offices, Woodlands Road, Middlesbrough, to whom completed application forms should be returned not later than Wednesday, 18th May, 1949.

E. C. PARR, Town Clerk.

CUDWORTH URBAN DISTRICT COUNCIL.

Applications are invited for the above permanent appointment at a salary in accordance with Grade IV of the National Scales (£460-0002).

Candidates should have a good general Municipal engineering experience, and be capable of the preparation of house plans, Specifications and Bills of Quantities for Housing Schemes and the settlement of final accounts.

A new traditional house will be provided for the successful applicant if required.

Applications, endorsed "Deputy Surveyor," stating age, qualifications, experience, together with copies of three testimonials, to be sent to the undersigned not later than Saturday, 21st May, 1949.

C. M. PRATT, Solicitor, Clerk to the Council.

5, Regent Street, Barnsley.

LONDON COUNTY COUNCIL.
PLANNING STAFF.
Vacancies in the following grades (some permaneut) :-PLANNING OFFICER, Grade I, £840 to £960

PLANNING OFFICEB, Grade II, 2700 to 2840 PLANNING OFFICER, Grade III, £550 to

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

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 forms of application obtainable from the Architect to the Council (AR.P.P.), The County Hall. Westimister Bridge, S.E.1 (enclose stamped addressed fooiscap envelope). Canvassing disqualifies. (193)

HEREFORDSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments on the permanent staff:
TWO ASSISTANT ARCHITECTS. Grade VIII, A.P.T. Division. £685×£25 to £760 per annum. Candidates must be Associate Members of the R.I.B.A. and be able to take charge of a section of the drawing office.
The appointments will be subject to the provisions of the Local Government Superannation.
Act, 1937, and to one month's retice on either side. The successful applicants will be required to pass a medical examination.
Forms of application may be obtained from W. Usher. A.R.I.B.A., County Architect. County Offices. Bath Street, Hereford, by whom completed applications should be received not later than 27th May, 1949.

BOROUGH OF HOENSEY.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.
APPOINTMENT OF SENIOR ARCHITEC

DEPARTMENT.

APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the following permanent appointment:—
Senior Architectural Assistant, Grade VI-VII (A.P.T., Division of the National Scale), at a salary of £595-£710 per annum, pius London weighting allowance of £30 per annum. Commencing salary according to qualifications and experience.

experience.
Candidates should preferably be Associate Members of the Royal Institute of British Architects, and experienced in the design of contemporary buildings, and in the management of building contracts.

Applications, stating age, present and previous appointments, tecthnical training, qualifications, etc., together with the names of three referees, must be delivered to Mr. J. H. Meville Bichards, A.M.I.C.E., M.I.Mun.E., Borough Engineer and Surveyor, Hornsey Town Hall, N.S., not later than the 21st May, 1949.
Canvassing, either directly or indirectly, will disqualify.

H. BEDALE, Town Clerk.

Town Hall, Hornsey, N.8.

2nd May, 1949.

THE RAILWAY EXECUTIVE.

The Railway Executive invite applications from Associates of the Royal Institute of British Architects for the following appointments in the Office of the Architect to the Executive, at 222, Marylebone Road, London, N.W.1:—

(a) ONE SENIOR ARCHITECTURAL ASSISTANT.

(a) ONE SENIOR ARCHITECTURAL ASSISTANTS.

(b) TWO ARCHITECTURAL ASSISTANTS.

Applicants must possess design ability, a keninterest in modern architectural developments, good draughtsmanship and, particularly in the case of (a) all-round practical experience. Candidates from outside the Railway service will be in competition with Architects already employed by models. Pailways.

dates from outside the Railway service will be in competition with Architects already employed by British Railways.

The salary offered for position (a) is in the region of 2500-21.000 per annum, and for posts (b) in the region of 2500-2550 per annum, according to the qualifications of the successful candidates, who will be eligible for membership of a Superannation 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 Road, London, N.W.I. It is emphasised that any approach except in the form of a direct and written application from the candidates themselves will disqualify an applicant.

CITY OF LANCASTER.
CITY BNGINEER'S AND SURVEYOR'S
DEPARTMENT.
Applications are invited for the post of ARCHITECTURAL ASSISTANT, on A.P.T., Grade III
or IV. of the National Scales, according to experience.

perience.
The office is not sectionalised, and in consequence experience on many types of work will be obtained.
Apolications. stating age, married or single, training, qualifications and experience, with particulars of past and present employment, and stating the names of three persons to whom reference can be made, should be delivered to the City Engineer, Town Hall. Lancaster, not later than Monday, 23rd May, 1949.

R. M. MIDDLETON

B. M. MIDDLETON, Town Clerk.

Town Hall, Lancaster.

27th April. 1949.

GLOUCESTERSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:

(a) ASSISTANT ARCHITECT'S.
Candidates should be qualified members of the B.I.B.A., with good general experience in design and construction of public buildings, including schools.

A.P. and T., Grade V. and eligible for promotion to A.P. and T. Grade VI, according to

A.P. and T., Grade v. and engine or promotion to A.P. and T. Grade VI, according to experience.

(b) ARCHITECTURAL ASSISTANTS.
Candidates should have passed the Intermediate examination of the R.I.B.A., with general experience in design and construction.

A.P. and T. Grade IV

(c) JUNIOR ARCHITECTURAL ASSISTANTS.
Salary in accordance with experience. A.P. and T. Grades I. II or III.

Appointments will be subject to the Local Government Superanuation Art. 1937. and candidates, before appointment, will be required to pass a medical examination.

Anolicants should state whether or net they possess a motor car and/or hold a driving licence. The appointments will be terminable by one month's notice on either side.

Applications, stating (1) name and address, (2) married or single. (3) age. (4) qualifications, (5) present position, salary, and date of appointment. (6) previous positions with dates and salaries. (7) narticulars of experience, and accompanied by copies of three recent testimentals, should be sent to S. E. Urwin, F.R.I.B.A. County Architect. Shire Hall, Gloucester, not later than Monday, 23rd May, 1949.

GUY H. DAVIS.

26th, April, 1949.

OR'S HTEC. llowing VI-VII London Com-ns and

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R'S RCHI-de III to exCANNOCK URBAN DISTRICT COUNCIL.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.
Applications are invited for the appointment of an Architectural Assistant in the Architectu's Department, at a salary to be fixed in accordance with the experience of the selected applicant within either Grade I or Grade II of the A.P.T. Division of the National Scale.
Applications, giving full details of age, training, qualifications, present and previous appointments, nature of experience, and previous appointments, nature of experience, and names of two persons to whom reference can be made, must be delivered to the undersigned not later than Saturday, 28th May, 1949.
Canvassing, either directly or indirectly, will disquality, and applicants should state whether to their knowledge they are related to any member of or the holder of any senior office under the Council.

WM. C. SPEEDY,
Clerk of the Council.
Cannack, Staffs.

Council House, The Green, Cannock, Staffs. 29th April, 1949.

29th April, 1949.

COUNTY BOROUGH OF BAST HAM.
BOROUGH ENGINEER'S DEPARTMENT.
Applications are invited for the undermentioned appointments.
SENIOR ARCHITECTURAL ASSISTANT
(Grade A.P.T., VI). Salary £595 to £660 per

(Grade A.P.T., VI). Salary £595 to £560 per annum.

ARCHITECTURAL ASSISTANT (Grade A.P.T., V). Salary £520 to £570 per annum.

ARCHITECTURAL ASSISTANT (Grade A.P.T., IV). Salary £480 to £525 per annum.

The appropriate London weighting is paid in addition to the above salaries, and salaries in excess of the minima of the grades may be paid according to the qualifications and experience of successful candidates.

The Council have in course of preparation a large and varied programme of interesting works which it is anticipated will not be affected by the proposed reductions in capital expenditure.

The Council will be prepared to consider applications for a subsistence allowance in appropriate cases from persons appointed should they be unable to obtain suitable housing accommodation.

tion.
Full particulars of the duties, terms and conditions of appointment and form of application (which must be returned by Monday, the 23rd May, 1949) may be obtained from the under-May, 1949) may be obtained signed.
Canvassing in any form will disqualify.
H. A. EDWARDS,
Town Clerk.

Town Hall, East Ham, E.6.

April, 1949.

METROPOLITAN BOROUGH OF POPLAR.

Applications are invited from suitably qualified persons for the following vacant appointments in the Borough Engineer and Surveyor's Departments.

in the Borough Engineer and Surveyor's Department:—

(a) TWO ARCHITECTURAL ASSISTANTS. Grade A.P.T., IV (£480×£15 to £255 per annum, plus London weighting).

(b) ONE ARCHITECTURAL ASSISTANT. Grade A.P.T., V (£520×£15×£15×£20 to £570 per annum, plus London weighting).

(c) THREE ARCHITECTURAL ASSISTANTS. Grade A.P.T., IV (£480×£15 to £255 per annum, plus London weighting).

(d) ONE ARCHITECTURAL ASSISTANT. Grade A.P.T., IV (£480×£15 to £255 per annum, plus London weighting).

Appointments (a) are established posts. and appointments (b), (c) and (d) are non-established posts.

Appointments (a) are established posts. and appointments (b), (c) and (d) are non-established posts.

Experience of Local Authority's housing will be an advantage, especially for appointment (b). The Council are unable to provide housing accommodation.

Forms of application may be obtained from the Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3. to whom completed applications must be returned by not later than first post on Monday, 23rd May, 1949.

BOROUGH OF TAUNTON.

Apolications are invited for the following appointments in the Borough Housing Architect's Department:—

(a) SENIOR ASSISTANT QUANTITY SURVEYOR (A.P.T., Grade V). Salary £520, rising by annual increments to £570.

(b) ASSISTANT QUANTITY SURVEYOR (A.P.T., Grade II). Salary £420, rising by annual increments to £465.

Applicants must be proficient in abstracting and hilling, measuring up on site, and the preparation of final accounts.

The Council have adopted the National Scheme of Conditions of Service, and the appointments will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation.

Housing accommodation will be made available, if necessary.

Applications, stating are, qualifications, previous and present apnointments with salaries, details of experience, and the earliest date, when available, together with copies of two recent text montalists, should be sent to C. Bacon, F.R.I.B.A. Borowth Housing Architect, No. 2. Baldwin Road, Taunton, to reach him by not later than Monday, 23rd May, 1947.

LATWELL

Municipal Buildings, Taunton.

Municipal Buildings, Taunton. 29th April, 1949.

Applications are invited for the following whole-time appointments on the permanent staff of the City Architectural Department:—
(a) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., VII, commencing at £535 per annum and rising to £710 per annum.
(b) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., V. commencing at £530 per annum. Applicants should be Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications.
(c) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., IV, commencing at £480 per annum and rising to £525 per annum.
(d) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., III, commencing at £480 per annum and rising to £455 per annum.
Applicants should have passed the Intermediate examination of the Royal Institute of British Architects.
(c) ONE ASSISTANT ARCHITECT. Salary on Craft of the Royal Institute of British Architects.

examination of the Boyal Institute of British Architects.

(e) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., II, commencing at 2420 per annum and rising to 2455 per annum.

(f) CHIEF QUANTITY SURVEYOR. Salary on Grade A.P.T., VIII, commencing at 2635 per annum and rising to 2750 per annum.

Applicants should be Members of the Royal Institute of Chartered Surveyors (Quantities Division), and should have a wide experience of all branches of Quantity Surveying appertaining to the work of a Local Authority.

In certain circumstances, housing accommodation may be made available for the successful applicants in the cases of (a), (b) and (f). Salary increments are subject to satisfactory service.

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 annuities 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 Coventry Municipal Officers' Widows' and Orphans' Pension Fund.

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 ten days after the publication of this advertisement.

Canvassing, directly or indirectly, will be a disqualification.

D. E. E. GIBSON, City Architect.

A. Warwick Row, Coventry.

12th May, 1943.

THE UNIVERSITY OF LIVERPOOL.

ADDications are invited for the post of LECTURER AND STUDIO INSTRUCTOR, in the School of Architecture, at a salary scale of £550×£35—£900 per annum.

Applications accompanied, if possible, by drawings or photographs of work, two testimonials, and the names of two referees, should be received not later than 11th June, 1949, by the undersigned, from whom forther particulars of the conditions of appointment may be obtained. m forme.
intment may be obtained.
STANLEY DUMBELL.
Registrar.
764

COUNTY BOROUGH OF CROYDON,
EDUCATION COMMITTEE.
SCHOOL ARCHITECT'S SECTION.
Applications are invited for the appointment of
JUNIOR ARCHITECTURAL ASSISTANT.
Candidates should be of Inter, R.I.B.A.
standard, with experience in preparing working
drawlings.

Canusace standard, with experience in preparing working drawings.
Salary A.P.T., II. £420 p.a.×£15—£465 p.a. In addition London weighting of £30 p.a. is paid (£20 p.a. if under 26 years of age).
The appointment is established and superanneable, subject to medical examination.
The Council does not offer living accommodation for this appointment.
Forms of application obtainable from the Chief Education Officer, Katharine Street. Croydon (on sending stamped addressed foolscap envelope): must be returned to him not later than the 23rd May, 1949.
Canvassing will disqualify.

E. TABERNER.
Town Clerk.

April. 1949.

BRITISH ELECTRICITY AUTHORITY.

LONDON DIVISION.

Applications are invited for a post as QUANTITY SURVEYOR in the Construction Department of the Division.

Applicants should be Associates of the Royal Institute of Chartered Surveyors or other recognized Association, and should have had experience in the preparation of Bills of Quantities and site measurement for interim and final certificates in connection with civil engineering and building work for power stations and ancillary works.

bullding work for power seasons and accessed works.

Salary would be in accordance with qualifications and experience.

Applications stating age, qualifications, experience and salary required, abould be sent to the Divisional Secretary. British Electricity Authority (Yondon Division). Breon House. Horseferry Road, Westminster. S.W.1. not later than 14 days from the date of this advertisement.

J. N. WAITE.

Divisional Controller.

THE NORTH OF SCOTLAND COLLEGE OF AGRICULTURE.

The Governors invite applications for the post of ARCHITECTURAL DRAUGHTSMAN, for the Farm Buldings Advisory Service (Headquarters at Craibstone).

Salary scale £220 to £410, with entry according to age and qualifications.

Letters of application, in triplicate, giving particulars of age, qualifications and experience, and three copies of not more than three recent testimonials, should be lodged with the undersigned not later than 14th May, 1949.

JOHN L. INNES.

JOHN L. INNES,

Secretary.

Application forms and particulars from the Secretary.

LOCAL APPOINTMENTS COMMISSION.
POSITION VACANT: HOUSING ARCHITECT,
Application forms and particulars from the Secretary, 45, Upper O'Connell Street, Dublin.
Salary £1,050×£40-£1,250. Essential qualifications include: (a) Degree in Architecture or M.R.I.A.I. or A.R.I.B.A. or F.R.I.B.A.; (b) considerable practical experience in the layout, design, construction and maintenance of large-scale housing schemes, including multiple flat and cottage dwellings, and (c) a satisfactory knowledge of the design and construction of dwellings by non-traditional methods. Latest time for receiving completed application forms, 5 p.m. on 2nd June, 1949.

**Tenders for Contracts** 

6 lines or under, 10s.; each additional line, 1s. 6d.

6 lines or under, 10s.; each additional line, 1s. 6d.

HOUSING—GLANLLYN ESTATE, BALA.
Tenders are invited for the erection of Six
Houses for the Welsh Agricultural Land SubCommission. Applications should be made on or
before May 14, 1949, accompanied by a deposit of
22 s. (which will be returned on receipt of a
bona fide tender—not subsequently withdrawn) to
the undersigned, from whom copies of Bill of
Quantities, Specification and Drawings may be
obtained.
The lowest or any tender will not necessarily
be accepted.
S. COLWYN FOULKES, M.Arch.,
Merton Place, Pwillycrochan Avenue,
Colwyn Bay.

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Architectural Appointments Vacant

Here or under, 5e.; each additional line, 1s. 5e.

EELY & PAGET, F./L.R.I.B.A., require fully qualified ASSISTANT; must be experienced working drawings and specifications, with sound knowledge of all normal methods of construction; licensed work now in hand includes many important Ecclesiastical commissions. Apply by letter, giving usual details, to 41, Cloth Fair, B.C.1.

B.C.1. STATE OF THE PROPERTY OF THE PRINCE AND A SASISTANTS required immediately for the Lancaster and Manchester office of the andersigned; applicants should have had experience in one or more of the following types of buildings. Schools, Hospitals and Police Buildings. Applystating age, and full details of experience and salary required, to C. B. Peorson & Son, P.R.I.B.A., Chartered Architects, 18, Dalton Square, Lancaster.

salary required, to C. B. Pecison & Son. P.R.I.B.A., Chartered Architects, 18, Dalton Square, Lancaster.

A RCHITECTURAL ASSISTANT required immediately for S.E. Kent; capable of preparing working drawings and specifications, and supervising building work; calary approximately 2450, according to qualifications; single man preferred. Particulars to Box 708.

SENIOR and JUNIOR ASSISTANTS required for Industrial and Domestic Practice in the London area; neat and accurate draughtsmanship-essential. Write, giving full particulars, to L. & C. Hannen & Partners, Chartered Architects, 7. Victoria Street, S.W.I. Abbey 2033/4.

709

TINE SPINNERS & DOUBLERS, LTD., St. James's Square, Manchester, requirequalified ARCHITECT, to take charge of Drawford of their Mills. Applicants should give their age, qualification, and salary required. 735

ARCHITECTURAL ASSISTANT required immediately. Leeds area; must be experienced in working drawings, details, levelling, etc. Write, staking age, experience and salary required, to Box 236.

ARCHITECTURAL DRAUGHTSMAN required for large industrial and Commercial Com-

quired, to Box 236.

A RCHITECTURAL DRAUGHTSMAN required for large Industrial and Commercial Company in London; should be able to make site surveys, prenare working and detail drawings and specifications; please state age, experience, and salary required. Box 777.

SENIOR ARCHITECTURAL ASSISTANT relative of the progressing Private Practice; good salary and excellent prospects for suitable applicant. Full details of age, education, training and experience, to Ernest S. England (Harold Sanger, A.R.I.B.A., and Ronald Rothwell, Dip.Arch., A.R.I.B.A.), Chartered Architects, 12. Clegg Street, Oldham.

A RCHITECT'S ASSISTANT required for Con-birmingham office; good progressive position, with superannuation and five-day week, offered to keen, energetic, and capable man; state age, ex-perience, and salary required. Box 787.

perience, and salary required. Box 787.

A SENIOR ARCHITECTURAL ASSISTANT, salary £500-£50, and a JUNIOR ASSISTANT, £400-£500, salaries according to experience, required immediately. Telephone: W. Curtis Green, R.A., Son & Lloyd, 5, Pickering Place, St. James's Street, S.W.L. Whitehall 1993.

A BCHITECTURAL ASSISTANT, above R.I.B.A. Inter. standard; interested in contemporary design. Apply Box 769.

SENIOR and JUNIOR ARCHITECTURAL ASSISTANTS required; experience of good quality building an advantage. Apply Lavender, Twentyman & Percy, F./A.R.I.B.A., 2, Waterloo Boad, Wolverhampton. 768

Twentyman & Percy, F./A.E.I.B.A., 2, waterico Boad, Woiverhampton. 768

ENIOR ARCHITECTURAL ASSISTANTS required immediately, London office; good salary and prospects. Write, with particulars of age, qualifications, experience, and salary required. Box 722, c/o 7, Coptic Street, W.C.I. 780

ARCHITECT, London and Leleester, requires an experienced, qualified ASSISTANT, to take charge of established Leleester office; knowledge of quantities an advantage; flat available if desired; commencing salary in the region of £800 to £359 p.a., according to qualifications and experience; permanency with excellent prospects to right man. Application, with full details, to C. Edmund Wilford, A.E.I.B.A., Eagle House, Jermyn Street, B.W.1 (Whitehall 6694, 8055 and 2806).

Signature of the state of the s

A SSISTANTS required in Bank's Architect's office in London; must be neat draughtsmen, with good knowledge of construction; capable of surveying buildings and preparing detail drawings and sketch plans; prospect of permanency for suitable applicants. Write, stating age and experience, Box 789.

A RCHITECTURAL ASSISTANTS required; Also JUNIOR SURVEYOR, to train under Qualified Surveyor, London office. Apply. stating age, experience, and salary required, to Box 791.

A RCHITECT'S SENIOR and JUNIOR ASSISTANTS required for Doblin office, practical experience in Hospital and Industrial work an advantage; good prospects for suitable applicants. Reply, stating qualifications, experience, age, and salary required. Interview in London will be arranged. Box 72.

A RCHITECTURAL

A RCHITECTURAL DRAUGHTSMAN required in South Essex for preparing Schemes and Working Drawings for industrial buildings. Applications and experience, are invited from first-class draughtsman, with a sound knowledge of construction, and not less than 5 years' office experience, subject to some reduction for service in H.M. Forces. Box 804.

A RUHITECTURAL ASSISTANT required in Norwich office; must be capable and fully conversant with present conditions in a provincial practice. Details of experience and salary required to Box 808.

quired to Box 808.

WILL any ASSISTANT, preferring a small private office in an East Midland country town, to a Council Office, please apply to Box 782.

ARCHITECTURAL ASSISTANT or DRAUGHTSMAN required for interesting and varied country practice in Dorset. Apply, stating experience and salary required, to L. Magnus Austin, F.R.I.B.A., M.T.P.I., Bowling Alley Walk, Dorchester, Dorset.

S22

ARCHITECTS ASSISTANT required for

Alley Walk, Dorchester, Dorses.

RCHITECT'S ASSISTANT required for domestic and industrial practice; neat and accurate draughtsman essential; capable of preparing working drawings and supervising jobs. State experience and salary required to R. Jelinek-Karl, Chartered Architect, 22, Chancery Lanc.

SENIOR ARCHITECTURAL ASSISTANT and DRAUGHTSMAN required by leading firm of Building Surveyors in the City of London, specializing in industrial and commercial properties; age 27/45; salary £550-£700 per annum; permanent post. Box 879.

A RCHITECTURAL ASSISTANTS (one Junior, one Senior) required by Midhand Company; must be quick and accurate draughtsmen, with experience on industrial buildings. Full particulars, salary required, to Box 877.

ENIOR ARCHITECTURAL ASSISTANT is required in the City offices of a London Company to take part in the replanning and rebuilding of several City buildings; essentials are excellent draughtsmanship, and good knowledge of the War Damage and London Building Acts. Apply, stating full details, to Box 890.

A BCHITECTURAL ASSISTANT required; salary according to ability; good draughts-manship; experience in surveys, working drawings, specifications. Apply Krnst L. Frued, M.Inst. K.A., 33, St. John's Wood Terrace, N.W.S. Primrose 1727.

Firmrose 1727.

JUNIOR ARCHITECTURAL ASSISTANTS
and ARCHITECTURAL DRAUGHTSMEN
required in the Staff Architect's Department of
Messers. Prices, Tailors, Ltd.; go.d. prospects;
satary in accordance with age and experience.
Applications in writing to Mr. Evan E. Morgan,
F.E.I.B.A., M.R.San.L., the Staff Architect,
Cardigan Croscent, Kirkstall Road, Leeds, 4. 889

A RCHITECTURAL ASSISTANT required;
standard of R.I.B.A. Intermediate, with
sound knowledge of building construction; salary
£500 p.a. Hargreaves & Reed, 17, Crook Log,
Rexleyheath, Kont. 888

£500 p.a. Hargrea Bexleyheath, Kent.

Reviewheath, Kent.

PROGRESSIVE Manufacturing Company in the West End require an ARCHITECTURAL ASSISTANT; applicants must be A.R.I.B.A., age 25-35, and experienced in the preparation experienced in the preparation working drawings age 25-35, and experienced in the preparation of surveys, sketch plans, working drawings in connection with industrial buildings; also able to supervise work in progress and prepare reports in regard to same. Apply in writing, stating age, qualifications, full details of experience and salary required, to Box U.4128, A.K. Advg., 212a, Shaftesbury Avenue, W.C.2. 898

A.K. Advg., 212a, Shaftesbury Avenue, W.C.2. 698

A.R.CHITECT'S ASSISTANT, preferably member R.I.B.A., with general experience, required for West of England office; applicants should have sound knowledge modern construction, good draughtsmen, and 5 years' office experience; salary £500-£700, according to qualifications. Write with full details of qualifications, experience, and age, to Box 557.

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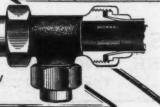
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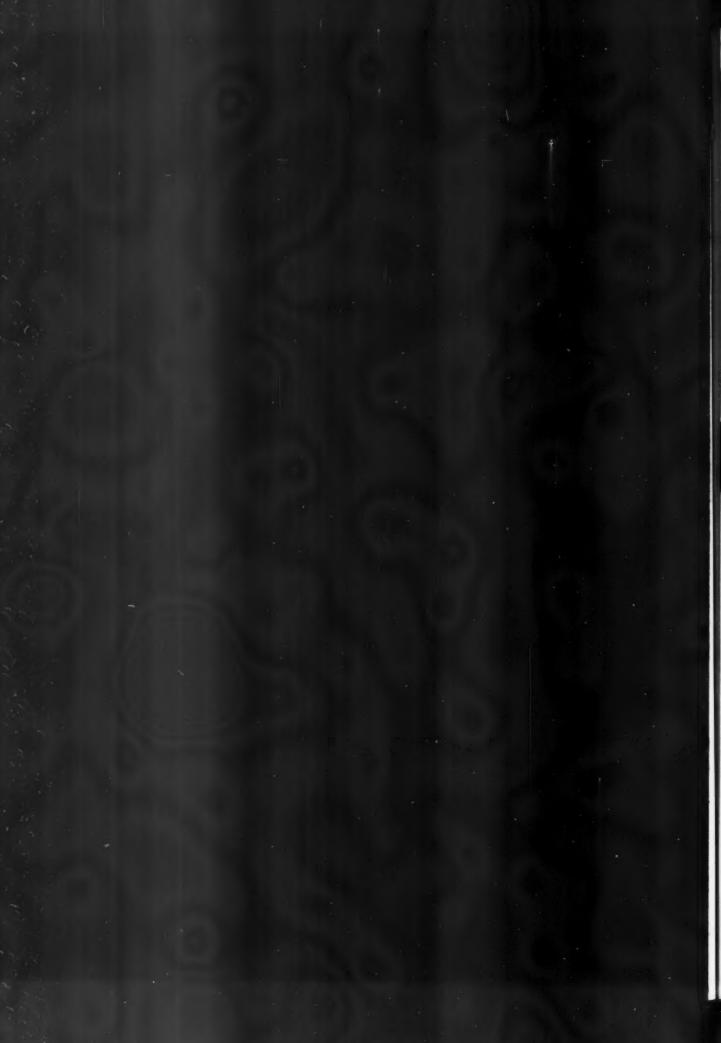
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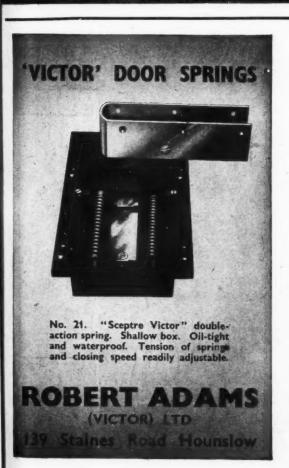
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