## AR INE ARTS DEPARTMENT



tandard contents

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

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BUILDINGS CURRENT

STATISTICS *HOUSING* 

Architectural Appointments Wanted Vacant and

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Registered as a Newspaper.

A 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.

Institution of Electrical Engineers. Savoy Place, W.C.2. TEE Temple Bar 7676 IES Illuminating Engineering Society. 32, Victoria Street, S.W.1. Abbey 5215 Institution of Gas Engineers. 1, Grosvenor Place, S.W.1. IGE Sloane 8606

Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1. THVE Sloane 3158 IIBD Incorporated Institute of British Decorators. Drayton House, Gordon Street,

W.C.1. Euston Museum 1783 TLA Institute of Landscape Architects. 12, Gower Street, W.C.1. Institute of Landscape Architects. 12, Godd, 10, Norfolk Street,
Strand, W.C.2. Temple Bar 4071 I of Arb.

Institute of Builders. 48, Bedford Square, W.C.1. Mu Institute of Refrigeration. Empire House, St. Martin's-le-Grand, E.C.1. IOB Museum 7197 IR

Monarch 7391 IRA Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172 ISE Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128-29

LIDC Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.

LMBA London Master Builders' Association. 47, Bedford Square, W.C.1. Mt MARS Group (English Branch of CIAM). 34, Gordon Square, W.C.1. Museum 3891 MARS Euston 2158-9 MOA Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. Whitehall 3400

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NAMMC 94, Petty France, S.W.1. Abbey 1010
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TCPA Timber Development Association. 75, Cannon Street, E.C.4. City 6146 (3 It Victoria Timber Trades Federation. 81, Cannon Street, E.C.4. City War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1. TDA City 6146 (3 lines) Victoria 8815 TPI TTF WDC City 1476

Mayfair 8866 WEDA Welfare Equipment Development Association. 61, St. Paul's Churchyard, E.C.4. City 4263/4 ZDA

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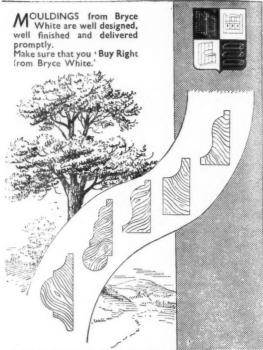


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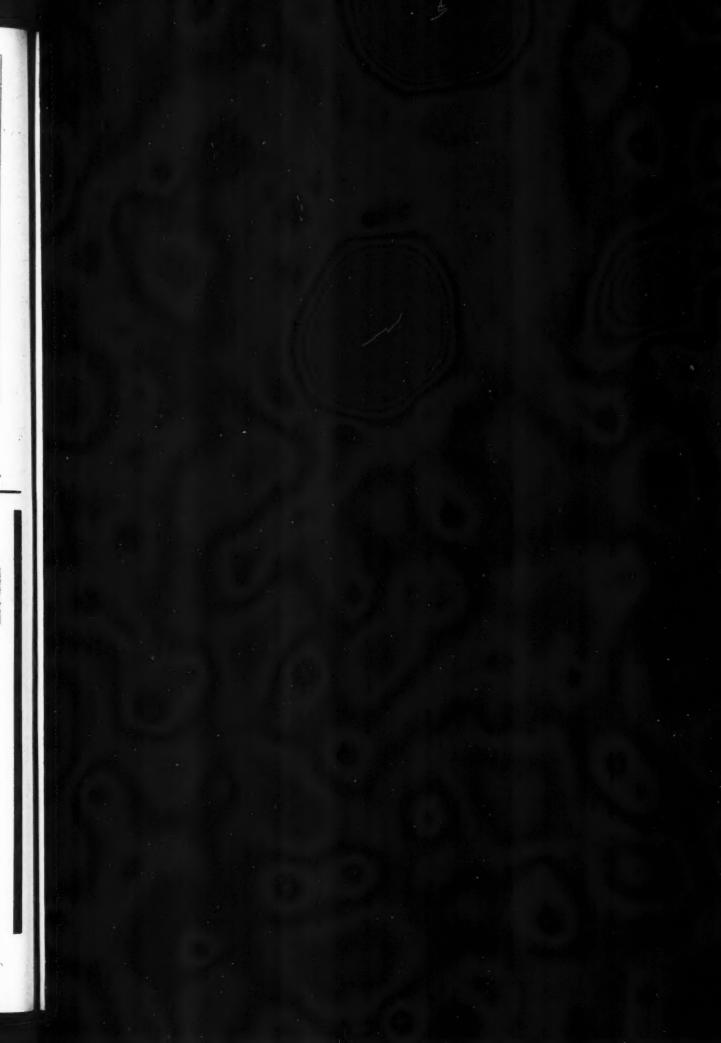
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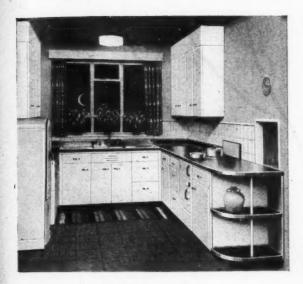
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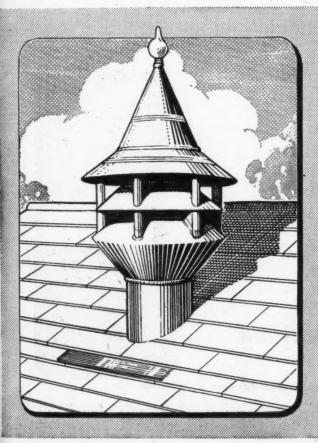
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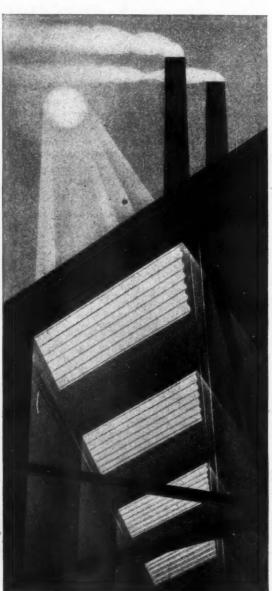


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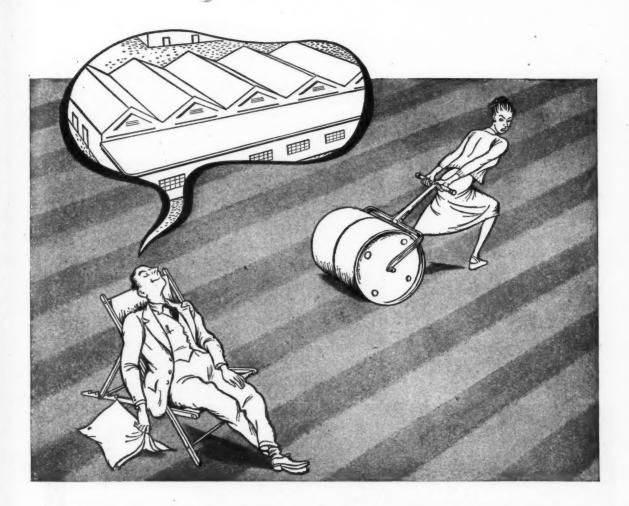
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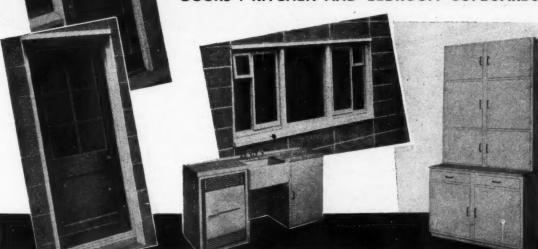
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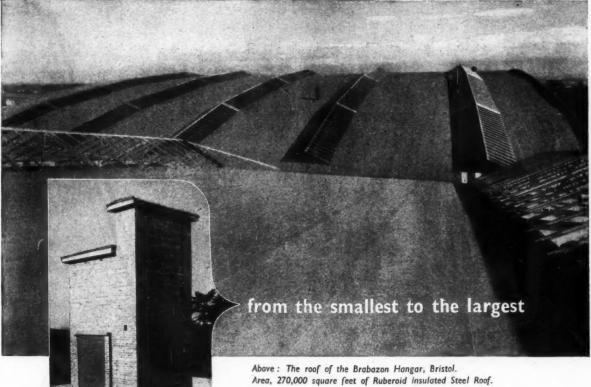
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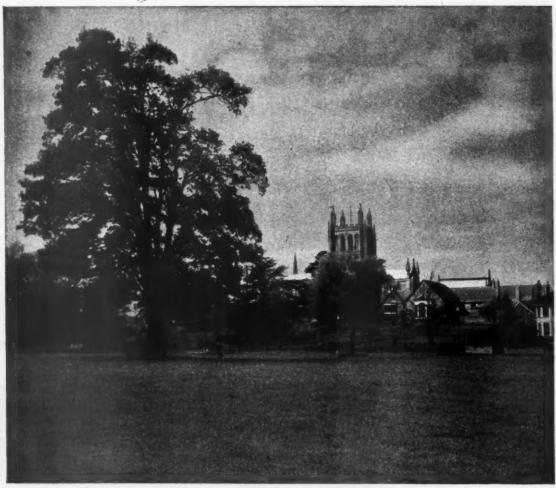
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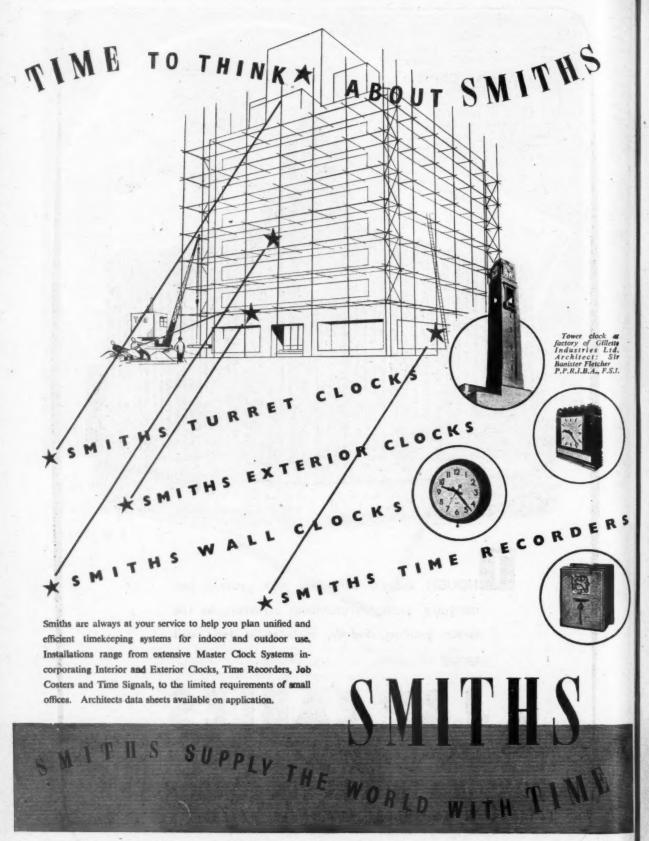
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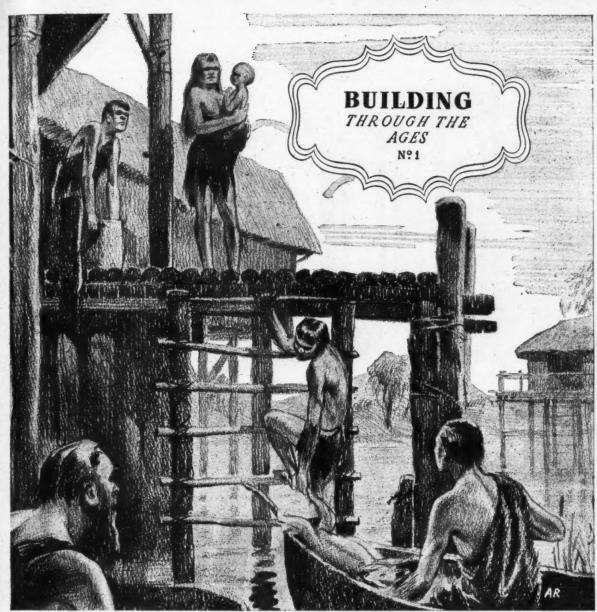
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The first buildings of which any reliable data is obtainable were primitive habitations on the edge, or over the waters, of various Swiss lakes. A typical lake village, as shown, was often built some distance out in the lake, this isolation giving protection from enemies, both human and animal.

The piles which supported the huts were cut and fashioned by stone hatchets, or fire, and on this foundation the flimsy shelter was constructed. The floor platform would be fastened to the piles by wooden pins and lashings. The walls were of thin branches and wattle, made as weathertight as possible by coating with clay. The roof of straw, rushes or bark completed the structure.

Such lake dwellings were common all over Europe from 10000 B.C. down to 300 B.C. It was Man's ever-growing ingenuity in building construction which slowly brought about the transition from these crude shelters to more durable and protective edifices.

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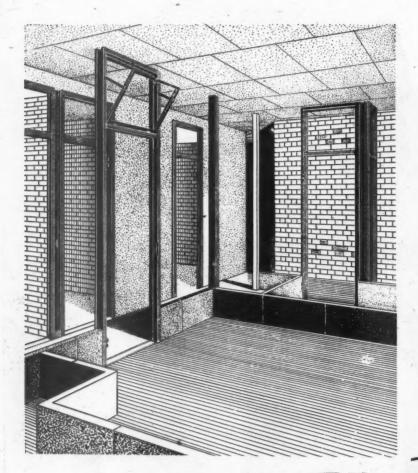




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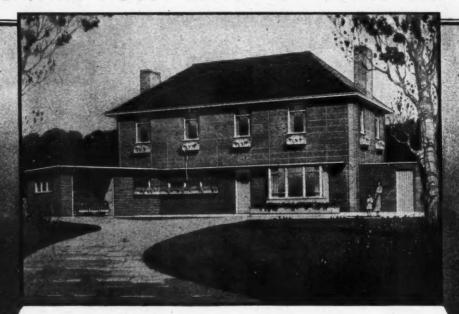
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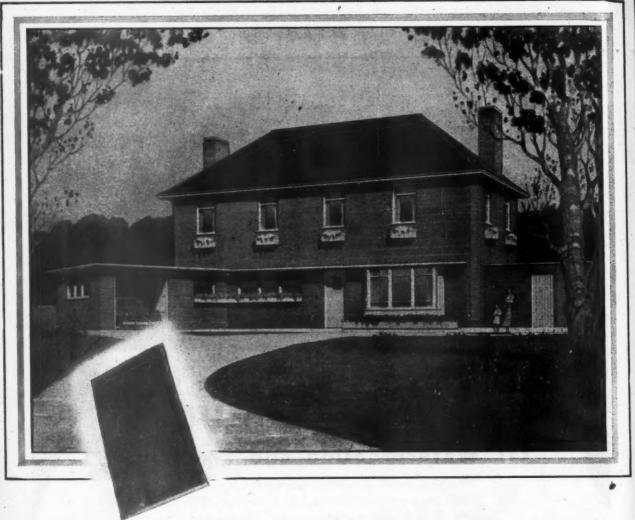
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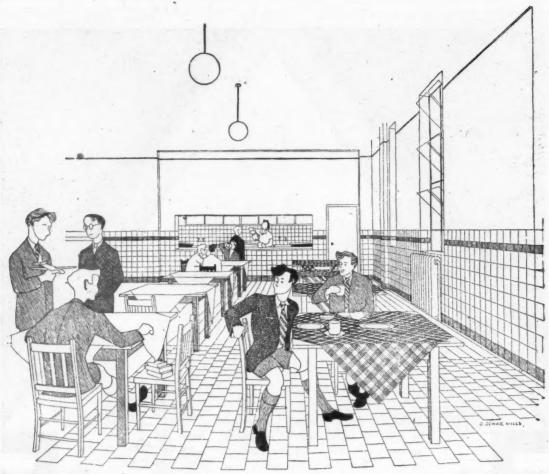
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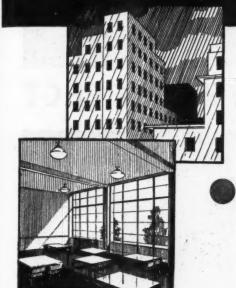
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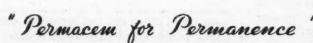
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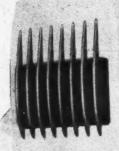
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In common with every other periodical, this JOURNAL is rationed to a small part of its pro-war consumption of paper. Circulation is therefore temporarily restricted but would-be subscribers are advised to have their names put on the waiting-list. Their names will then



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## DIARY FOR MARCH APRIL AND 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.

B BC. Bruno Adler. The Bauhaus, 1919-1933. Second of three talks on the Bauhaus. Third Programme, 7 p.m.

MAR. 11

J. L. Martin. The Bauhaus and its Influence. Last of three talks on the Bauhaus. Third Programme, 8.45 p.m. MAR. 12 John Betjeman. Three Talks on Churches in the West Country. Third Programme,

MAR. 13, 18, 19

BIRMINGHAM. R. Fitzmaurice, Deputy
Chief Scientific Adviser, MOW. New
Methods of Building Construction. At the
University Medical Theatre, Edmund
Street, Birmingham. (Sponsor MOW.)
7 p.m.

MAR. 13, 18, 19

7 p.m. MAR. 16
GLASGOW. Exhibition, "Glasgow Today and Tomorrow." Kelvin Hall,
Glasgow. (Sponsor, Scottish Committee of
the CID and the Glasgow Corporation.)
MARCH 16-APRIL 9

L EAMINGTON SPA. Conference of Directors of Industrial Research. At Ashorne Hill, Leamington Spa. (Sponsor, FBI Industrial Research Committee.)

MARCH 11-14
L ONDON. J. T. Phillips and F. J.
Daniels. Welded Steel Framed Buildings. At the Institution of Structural Engineers, 11, Upper Belgrave Street, S.W.1.
(Sponsor, Institute of Welding and ISE.)
6 p.m.
MARCH 10

A. G. Sutton, Ministry of Fuel and Power. The Thermal Insulation of Buildings. At Caxton Hall, Westminster, S.W.1. (Sponsor, ABT.) 7 p.m. MARCH 10 Col. Devereux. Aluminium Structures in Buildings. At the Institute of Metals, 4, Grosvenor Gardens, S.W.1. (Sponsor, Institute of Metals, 7 p.m. MARCH 10 Civic Exhibition, showing all sections of the work undertaken by Hammersmith and

Civic Exhibition, showing all sections of the work undertaken by Hammersmith and the LCC. At the Town Hall, King Street, W.6. (Sponsor, The Borough of Hammersmith.) Weekdays, 10 a.m. to 9 p.m.

UNTIL MARCH 12

Exhibition of Interior Design. At the Building Centre, 9, Conduit Street, W.1. (Sponsor, LCC Central School of Art and Crafts.)

UNTIL MARCH 19

Ideal Home Exhibition. At Olympia. (Sponsor, The Daily Mail.) UNTIL MARCH 26

Exhibition of Industrial Architecture. At the RIBA, 66, Portland Place, W.1. Weekdays 10 a.m.-7 p.m. Saturday 10 a.m.-5 p.m. UNTIL MARCH 26

The Annual Dinner of the Royal Institution of Chartered Surveyors will be held at Grosvenor House. W.1. Principal guest, the Rt. Hon. Tom Williams. 7 p.m. MARCH 15 Exhibition of Pre-stressed Concrete Construction, At the Institution of Civil Engineers, Great George Street, S.W.1. (Sponsor, MOW.) MARCH 16-25

Charles Madge. The Social Side of a New Town Plan. At the Planning Centre, 28, King Street, W.C.2. (Sponsor, TCPA.) 6.15 p.m. MARCH 16

The Kind of Architecture We Want in Britain. Chairman: Prof. W. G. Holford. Symposium and Discussion arranged by the Architectural Group of the Society for Cultural Relations with the USSR, at 14. Kensington Square, London, W.8. 6.30 p.m. MARCH 17

Building Teachers' Conference. At the Willesden Technical College and School of Art, Denzil Road, N.W.10. 10.45 a.m.-5.30 p.m. MARCH 19

T. P. Hoar. The Protection of Metals against Corrosion. At the RIBA, 66, Portland Place, W.1. (Sponsor, ASB.) 6 p.m. MARCH 22

S. Rowland Pierce. The Architect and Planning. At the AA, 34/6, Bedford Square, W.C.1. (Sponsor, AA.) 7.45 p.m.

MARCH 23

Lt.-Col. B. C. Shore. Dry Rot. At the Tudor Room, Caxton Hall, Westminster. (Sponsor, IAAS.) 6.30 p.m. MARCH 23 Edgar Kaufmann. Museums and Industrial Design. At the RSA, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA.) 2.30 p.m. MARCH 30

Howard Robertson. The Architect, the Client, the Builder and the Building Operative. At the AA, 34/6, Bedford Square, W.C.1. (Sponsor, AA.) 7.45 p.m.

MANCHESTER. Georgian Architecture in Northern Ireland. Exhibition at the Municipal School of Art, All Saints, Manchester 15. Open during school hours. UNTIL MARCH 18

S WANSEA. Allied Ironfounders' Exhibition Train. No. 1 Platform. Swansea (High Street) Station. (Sponsor, Allied Ironfounders.) MARCH 14-19

THE POTTERIES. Design Week organized by the Council of Industrial Design. Details to be announced locally.

#### 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 Commission, 32, Grosvenor Gardens, London, S.W.1. Closing date, May 20, 1949.

## NEWS

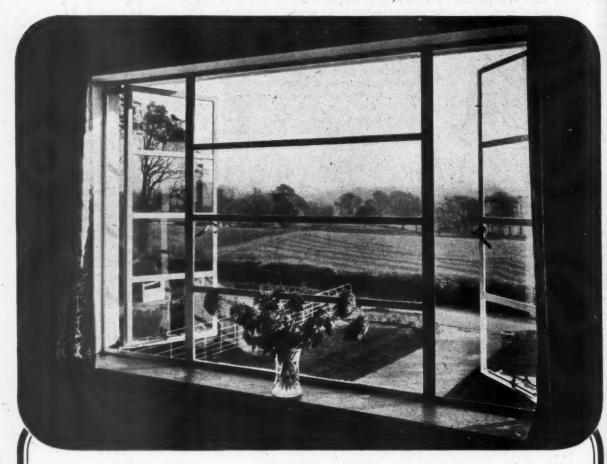
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### From AN ARCHITECT'S Commonplace Book

E. W. GODWIN ON SKETCHING. [From The Conscious Stone, by Dudley Harbron (Latimer House, Ltd.).] "Careful drawing is an exercise the young architect cannot have too much of: therefore always keep about you a fair-sized pocket book, . . . I always carry one, . . . working with a very fine metallic point, and drawing as delicately and as firmly as I can. One great advantage of this kind of book is that you cannot rub out, and thus you early learn to draw only when you have something to draw. The scribbles that some people call 'sketches' represent a certain amount of pen or pencil work, but I implore you not to encourage this abuse of drawing. There are architects who think it no doubt very fine and fancy that work of this kind is so artistic—so like an artist. . . . . Buy the very best drawing materials you can get. Being valuable, you will not be so likely to abuse them with wasteful rubbishy usage. The tendency to play the fool with paper and pencil is so great that we occasionally see it ill-disguised in published works—a well-known and outrageous example is the interior view of the Reverend Newman Hall's chapel. In your pocket book jot down first thoughts for designs, very small and fine; only be sure that they are thoughts and not mere wanderings and meanderings. You will possibly ask what you are to draw apart from design. Everything that is beautiful or that fully answers its purposes."

The RIBA EXHIBITION OF INDUSTRIAL ARCHITECTURE opened on March 3 and will remain open until March 26. A large number of modern factory buildings are shown by means of models, drawings, and photographs. With one or two exceptions the architectural standard is high and illustrates the close co-ordination that now exists between industrialists, engineers, and

Among the important new factories included are the British Nylon Spinners' large factory at Pontypool, just completed by Sir Percy Thomas and employing 2,000 workers; the assembly hangar for the new Brabazon air liner at Filton by Eric Ross; an exceptionally interesting design for a rubber factory at Brynnawr, South Wales, by the Architects' Co-operative Partnership; and the Rothes Colliery, Fife, by the architects' department of the National Coal Board. The last two schemes are still in course of construction. Special sections of the exhibition are given to landscaping and sting, and to industrial welfare buildings, and a small technical section touches briefly on such questions as daylighting, thermal insulation, control of noise, and the use of colour in factories.

The TPI SUMMER SCHOOL is to be held at the University of St. Andrews.

The Organizing Committee of the Town and Country Planning Summer School report that it will not be possible for the 1949 School to be held at Nottingham as proposed at the last AGM, but state that arrangements have been made for the School to be held at the University of St. Andrews, for the week August 20 to 27.

Owing to the restricted size of the School it is expected that it will be necessary to limit the number of representatives from each Planning Authority. All applications

Owing to the restricted size of the School it is expected that it will be necessary to limit the number of representatives from each Planning Authority. All applications must, therefore, be received not later than May 12, after which the Organizing Committee will make the allocations and the Authorities will be notified of the number of bookings accepted. All fees should then be paid. Cancellations after allocations have been made cannot be accepted although transfers from one representative to another will be agreed to, provided particulars are received not later than August 3, 1949. The Minister of Town and Country Planning, the Rt. Hon. Lewis Silkin, M.P., Hon. M.T.P.I., has consented, once again, to open the school, and the form of programme will follow that of last year's School. The

principal addresses will be limited to one per day and will be given by authoritative speakers on matters of current Planning interest. In order that all members may have an opportunity of taking part in the discussion on these addresses, the School will divide into groups of a suitable size under appointed leaders immediately following each address. Later in the day the School will reassemble when the leaders will put to the Speaker the points raised in their respective groups. Experience has shown that this arrangement provides the widest opportunities for members to participate in the discussions.

Grants to local authorities for the conversion of existing houses, are proposed in the NEW HOUSING BILL.

The new Housing Bi!!, which has been formally introduced in the House of Commons by the Minister of Health, proposes to make substantial grants to local authorities to assist the conversion or improvement of existing houses, whether by local authorities themselves or by grants to private property owners. Suitable houses will be brought up to modern standards by such improvements as the addition of extra rooms and the installation of bath rooms and up-to-date kitchens. Private owners will be assisted to undertake similar improvements subject to local authority approval.

Another important proposal made in the Bill is the deletion from the Housing Acts of the requirement that local authorities shall provide houses only for the "working classes." Local councils are now to be given authority to develop mixed estates of houses of varying sizes and types which will attract all income groups. It is also proposed to raise from £1,500 to £5,000 the limit of the value of houses on which councils may lend money for purchase. The Bill applies to England and Wales, and there will be a similar Bill for Scotland to be introduced later.

"The Kind of ARCHITEC-TURE WE WANT in Britain."

This is the subject of a Symposium arranged by the Architecture and Planning Group of the Society for Cultural Relations with the USSR on March 17. Soviet architects are very definite about what is wanted for the USSR, and a transcript of the Symposium will be sent to them for their comparison and comments. Professor W. G. Holford will preside and there will be con-

tributions from leading architects, including Mr. Furneaux Jordan, Mr. Wells Coates, Mr. Rex Harrison and Mr. Peter Shepheard. The papers will be followed by a general discussion, and an invitation is extended to all architects to attend.

Six industries are to be investigated by the MONOPOLIES AND RESTRICTIVE PRACTICES COMMISSION.

The President of the BOT has announced that rainwater goods, soil goods, miscellaneous builders' castings made of cast iron are among the first six industries to be investigated by the Commission.

In all cases the investigation is in respect of supply in the United Kingdom. The Commission will report to the President of the Board on: (1) whether conditions to which the Act applies in fact prevail, and if so in what manner and to what extent; (2) the things which are done by the parties concerned as a result of, or for the purpose of preserving, those conditions, and (3) whether the conditions in question or all or any of the things done as aforesaid operate or may be expected to operate against the public interest. Any person or organization who wishes to offer evidence on the subject matter of these references should write to the Secretary of the Monopolies and Restrictive Practices Commission, 37, Upper Brook Street, London, W.1, for permission to give evidence.

OPEN-AIR PAINTING DISPLAY to be organized by the LCC.
It has been estimated that more than 400,000 people visited the open-air painting display held by the Council in the Victoria Embankment Gardens for the first time last June. In view of this success the Council's Parks Committee have decided to make the display an annual event in mid-May. The same site will be used this year—the main path through the Villiers Street section of the Embankment Gardens. The display will be opened on the morning of Monday, May 9, and remain open until Saturday, May 21. As last year, there will be no sales on Sundays. The object is to enable Londoners to see, and, if they wish, to buy the work of the lesser-known and particularly the younger artists. Conditions will be the same as last year; no entrance charge, no selection committee and no fees payable to the Council. Space will be allotted to exhibitors on the principle of first come first served.



### Threatened with Demolition

The western part of Cheyne Walk, Chelsea, showing some of the Georgian houses threatened with demolition for a new Chelsea Borough housing scheme. The future of this part of old Chelsea, one of the few surviving stretches of old riverside London, is still the subject of controversy. As a result of protests made in *The Times* 

and elsewhere, the original Chelsea Borough scheme is to be modified and consideration will be given to the question of preserving the frontage of Cheyne Walk, which contains many houses of architectural and historic interest, including those of Turner and Wilson Steer. See Astragal's comment on page 227.

# Mr. Paul Cadbury, at the RIBA Conference on Industrial Architecture criticized SLUM CONDITIONS IN THE FACTORIES.

He said: The Industrial Revolution left us not only slum houses for our people but also slum factories. The problem of the slums in terms of houses is more prominently before us than the problem of slums in terms of factories. The needs of this generation are for tens of thousands of new factories—especially for the great mass-oroduction plants of the next generation. Figures show that Birmingham had 8 per cent. bad factories and Smethwick 22 per cent. In both areas another 26 per cent. of factories should be replaced within 30 years. By far the greatest proportion of the

bad slum factories are in the central areas. Very large numbers of people are employed in factories in this central area, since many of the old factories are multi-storey buildings. Here is an opportunity and a challenge to the architects of our own age. Public opinion has been educated to the need for diverting a large proportion of our resources into re-housing projects. It is clearly more important that we should give priority in our resources to rebuilding many of our factories. There is a vital need for cooperation between engineer and architect. In the ultimate issue there should be no conflict between beauty and utility—the logical line is a beautiful line.

Lord Citrine, chairman of the British Electricity, Authority told the delegater that these

Lord Citrine, chairman of the British Electricity Authority, told the delegates that there was a growing recognition in industry, and on the part of those responsible for the direction of large units of industry, that if the best results were to be achieved the architect should be brought in at the earliest stages to take his place with the draughtsmen and engineers. It was now recognized that drabness and ugliness were not essential characteristics of efficient production, and that beauty and good surroundings were essential features of efficient production

Sir John Hacking, deputy chairman, British Electricity Authority, said that the authority did not agree that the appearance of a modern power station should in any way be offensive in a rural landscape. "While it must be admitted that in past years many stations have been built purely from the utilitarian point of view, and have had no architectural merit. it is the authority's intention that the design of all new station buildings shall be entrusted to a competent architect and every effort will be made to ensure that the buildings shall be as attractive as possible."

REFRESHER COURSES FOR TECHNICAL TEACHERS are being arranged by the Ministry of Education this year. The courses are primarily intended for technical teachers who have not previously taken a course of teacher training. Local Education Authorities have been asked to release teachers for the courses and are also invited to make suggestions on the range of subjects which might be included in future courses. The course for teachers of building subjects will be held at the Technical Teachers' Training College at Bolton. The first course is to be held in the summer. Only teachers with not less than two years' full-time teaching experience in Technical Colleges or Secondary Technical Schools will be eligible. Tuition will be free, but teachers will be expected to pay for their accommodation. Teachers wishing to attend one of the courses should apply not later than March 26 to the Director of the College.

The administration of KEN WOOD HOUSE, Hampstead Heath, by the LCC is under consideration.

Ken Wood House (Museum and Art Gallery) has been closed to the public since 1939. In a report submitted to the LCC it is recommended that the Council should become the administrative trustees of the mansion in view of the fact that the Ken Wood trustees are faced with increasing difficulty in administering the bequest. If the LCC takes over the trusteeship the mansion and the contents will be available for public enjoyment at a cost of some £15,000 a year. The mansion is an outstanding example of the Adam brothers' architectural and decorative work, and still contains many pieces of the original furniture. Expert care and maintenance of the pictures and furniture will, however, be necessary before the house is reopened. Some repair of war damage, mainly external, has been completed, under the supervision of the architect to the Council.

Sir CHARLES NICHOLSON, Bt., the ecclesiastical architect, collapsed and died on March 4 at the age of 81. He was probably the last link with the Gothic revivalists, and he was certainly the most experienced architect of his generation in the Gothic style. He was consulting architect to six cathedrals—Wells, Lichfield, Llandaff, Portsmouth, Sheffield, and Belfast; diocesan architect to Wakefield, Winchester, Portsmouth, and Chelmsford. Charles Nicholson was born on April 27, 1867, and educated at Rugby and New College, Oxford. Nicholson was articled to J. D. Sedding, whose Holy Trinity Church, Sloane Street, might be described as a monument to the arts and crafts movement which was an outcome of the Gothic revival. Most of Nicholson's work was done in collaboration with Mr. Hubert Christian Corlette, with whom he entered into partnership in 1895. It included new churches at Cockington, Westcliff, Plymouth, Yelverton, Epsom, Grimsby, Halifax, and other places; country houses, and alterations and additions to churches, colleges, and schools. Among the more important works carried out by Nicholson and Corletter were Government buildings at Kingston, Jamaica; the Chapel of the Holy Spirit in Belfast Cathedral; and the new reredos and canopy in Carlisle Cathedral.

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### ROUND THE TABLE

How the architect is to keep informed on technical progress in building is a question frequently asked today. This week, the usual leading article is replaced by another of the IOURNAL'S round-table dis-



cussions dealing with this subject. Those taking part are the team of technical specialists responsible for the JOURNAL'S Information Centre, together with an architect reader. The chairman is Mr. F. R. Yerbury.

### The Architect and the Technical Specialist

Chairman: We have round this table the regular contributors to the Journal's Technical Section and also a busy practising architect. The idea is to discuss how best to put over to the reader the results of all the work which you contributors do, as professional technicians and as specialists. Going round the table from right to left we have our Planning Expert, who is also an expert on documentation and indexing. Then Mr. Davis, the Quantity Surveyor—he need not be anonymous because we all know he contributes the "current prices" feature. Next to him sits our Structural Engineer, a very precise specialist who rarely commits himself to any kind of unconditional statement. Then we have our expert on general building practice and procedure, who, of course, deals with some of the many complicated legal questions which are received. Next to him sits a very forthright specialist on trade questions, and then our materials specialist who also covers heating and ventilation, and finally Mr. Julian Leathart, who is going to speak for the architect. Mr. Leathart, I know, will have plenty to say, and will have plenty of arguments in support of his own point of view.

First of all, I should like to ask Mr. Leathart why he buys architectural papers, and what he expects to find in them? I would like to go further and ask whether he finds what he expects?

Architect: I buy them primarily for pictorial interest; to see what is going on; to keep abreast of the latest developments in planning and design and to see what the foreign people are doing. The serious articles require time to digest, and they are read only when the occasion or opportunity arises. It is so difficult in running a busy practice to keep pace with scientific developments. As with the general medical practitioner, the architect could well do with a refresher course occasionally. It is difficult for a man long since finished with schooling to comprehend the mathematics involved in, say, the science of acoustics, insulation and lighting. The architect who has been 30 years in practice finds it a little difficult to comprehend these things. A mass of scientific data and formulæ must, perforce, pass right over the head of the average architect on that account. What he wants is the short cut; he does not want the explanation, so much as the end. If he has to solve a certain problem in insulation, he seeks the broad lines of its solution and not the often tedious means involved

in arriving at the solution. I think you will find that the architect, under these circumstances, is wiser if he turns to the expert consultant to solve his problem.

Chairman: Weli, you have heard what an architect reader says. He never gets the time to read technical articles seriously, except when he has to read them because he is on a particular job. We always assume these articles are read but do architects read as much as we think?

Practice: I believe they don't.

Materials and Heating: I think they do. There are large numbers of people who will read technical articles. I think people probably do not read the big technical articles, but I do believe that quite a lot of people skim through the Information Centre notes and then it just sticks in the mind, "Oh, there was something about pre-stressed concrete," and he knows then that there is something which he can look back for in the index. It also strikes him that, time after time, over the course of, perhaps, twelve months, there is a series of references to the particular thing, and he begins to think that there must be something happening there if there are so many references. I believe Information Centre forms a valuable, quick method of keeping roughly up to date. I believe people do read it that way.

Practice: Speaking from experience I think architects read technical articles much less than we think. The average architect does not begin to look for information till he is faced with a problem. That occurs over and over again, Librarians are asked: "I want so and so. Can you put me on to books or pamphlets through which, in half-an-hour, I can grasp the subject?" Questions like that on the Town and Country Planning Act are prepoterous, but architects do ask them. They are practising architects who have to deal with this particular problem. It is certainly my experience that the average architect will not assimilate knowledge till he is faced with the problem in his own job.

Architect: That is so, I believe. A scientific article in a technical journal cannot be read in the cursory manner of a newspaper article. It has to be read with concentration and thought, and after an intensive day's work in the office, it is difficult for the slightly jaded mind to concentrate. A digest of technical information is of great use; let some expert extract

the bare essentials of a scientific problem and he will be rendering to the profession a most excellent service.

Chairman: What is the Quantity Surveyor's opinion?

Surveyor: I realize that it is very difficult to keep abreast of published technical and scientific information, and I do not think that the average architect can pay a great deal of attention to it regularly. Thinking of my own subject—prices—there are, of course, occasions when some problem arises and the architect has not time to reach his consultant, and will want to turn up some information on the subject. Then it is an advantage if he can confirm his opinions, or otherwise, by reference to published prices. When the architect has to go into the problem in great detail, he usually gets in touch with his consultant.

Architect: Yes, information on current costs are invaluable; but thinking of the scientific stuff, science of light, insulation against noise, heat and cold, the science of sound, and so forth, these are things that become really complicated problems

Materials and Heating: Mr. Leathart has pointed out the real difficulty of keeping up to date. Does he find that the Information Centre's short notes on articles help in any way? Is it useful, to be able to glance quickly through those two or three pages of notes and remember that someone has done an article on a particular thing? In other words, you have not to wade through a long article on it, but you have at the back of your mind that at about such-and-such a date someone has produced an article on it, and when the case comes up you can refer, first of all, to the abstract in the JOURNAL and then, if you want to, to the full article.

Architect: That is the short cut to information which I have in mind. If one is faced with a lighting problem, and there appears an article in the JOURNAL on that subject, it is read with interest and advantage, but such an article may appear at a time when one is immersed in an insulation problem. To have a card index mind, which enables you to remember publication dates, is a great advantage, but few of us have one, or at least the opportunity of cultivating one.

Materials and Heating: Both Information Sheets and Information Centre have good indexes and, as both are classified, if you know something appeared last year, without even looking in the index, you can find it quickly.

Chairman: Perhaps it is not the job of one journal to publicize the productions of other journals, otherwise the ideal thing would be to have an index of everybody's.

Planning: Well, we do extract information from a great number of magazines, and the Library Bulletin of the RIBA gives periodical reviews. The disadvantage is that it only appears quarterly and has no index.

Materials and Heating: Neither has it a critical commentary!

Practice: I answer rather specialized questions dealing with fees, Public Health Act contracts and so on, and it always appears to me that while the average architect cannot, of course, have detailed information at his finger tips, he ought to know where to look for it. It would be a good thing if a system could be devised where some sort of information could be given to architects generally, where they can look for particular points, so that when a problem does arise they know where

to look and find the answer, because, quite frankly, I get questions which the average architect ought to know, or else he ought not to be in the profession at all. That is putting it rather bluntly, but it is a fact.

Chairman: Publicizing the AJ index is a most important thing, both from the reader's and the contributor's point of view. The best information in the world is useless if you cannot get hold of it easily, and know where to find what you want.

Trade Questions: I, too, think that in an architect's practice, which covers many more different aspects in the building industry than anyone else's, to know where one can find things is of major importance. In the schools, architects are taught sufficient about such subjects as structural engineering, lighting, heating, and ventilating to enable them to talk intelligently to the individual specialist, but later they have not the time to keep this knowledge up to date. To know where to find such information is the first consideration and our task is to ensure that it is available in a clear and concise manner.

Architect: I thoroughly agree with that. The architect needs the assurance that there are facilities which give him a cross-check on all available information.

Materials and Heating: I agree it is important to know where to look up something but first I think it is important to know that there is something to look up. I think a lot of people who do not read the Information Centre just do not even know there is something they could look up, let alone know where they can look for it.

Trade Questions: Yes, I find that many of the questions that people ask should go to other places—in fact, often the place where I, myself, pick up the answers. Possibly some architects have suffered through getting in touch with trade associations, and then finding that the person they speak to is only a secretary who has no real knowledge of his material at all.

Chairman: There are two sorts of associations; there are certain of them which exist solely to control price, and others which exist for the purpose of improving the knowledge of the use of the material in which they are interested. The real annoyance is the financial association where the chief man in the building is the accountant. He is not a technical man at all, and he is rather inclined to put his point of view more strongly than the technical man. In other words, he is more concerned with the organization of the association advertised than he is with the technical knowledge which one should expect. I do think that, for that reason, you find people approach the JOURNAL for information which, in fact, they should be able to get elsewhere.

Trade Questions: Yes, they find if these associations there may be no one there capable of answering them. At least it would appear so.

Chairman: It would be interesting to get the view of the specialists as to whether associations do back up at the commercial level the recommendation they make at their professional level—whether, for instance, the engineer specialist, giving intelligent information on the use of pre-stressed concrete, is supported at the commercial level by the manufacturer.

Engineer: As far as pre-stressed concrete is concerned, it is a special subject which has not been fully developed in this country and I think readers would find it very difficult to get any information from any association because it is

still so much in the development stage. If an architect goes to two different competitors he might get entirely different answers.

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Chairman: Would you say that in the field of lighting and acoustics there is a lack of being able to get backing? Would you be able to say, "Go along to one of these bodies and you will be able to proceed along the lines I have suggested"? Is there a lag between the kind of information you are giving and the actual backing up that the industry as a whole provides to put the job into practice?

Lighting and Sound: So far as the artificial lighting side is concerned, I would say that industry in this country is definitely pretty far behind in the advanced lines of research in this country and in America. I am thinking particularly of the modern researches on glare and brightness contrast which have moved lighting right out of the field of quantity, as it were, into the field of quantity, as it were, into the field of quality. This has not been followed closely by industry in this country or, at least, not nearly as closely as I think they should have followed it, or as closely as I think they are following it in America. The research in America on glare and brightness contrast is much more closely followed by industry than it is here, though the researches here are thoroughly good, and, indeed, in some cases they preceded the American work. I do not know why that is, but there does not seem to be the will behind the manufacturers to take a real interest in anything but the engineering side. They will not develop the sensory side which involves matters of comfort.

Materials and Heating: I believe the reason why the American industrialist follows research more closely than over here is because the whole of their research is carried out in an entirely different way. Much of the work on research there is done in the universities, but it is sponsored directly by trade interests, so they have a reason for the research being done, and they want to sell the answers as soon as they get them. Over here, not all, but a good deal, of the best research is done by Government authorities, and it has to filter through from the Government authority to the trade association, which takes quite a long while.

Lighting and Sound: I think you are perfectly right on the general matter of industrial and applied scientific research in America, but on the particular question of lighting, the organization in this country is largely the same as in America, where the big lamp manufacturing firms have their own research laboratories. The curious thing is that they do not produce anything like the same amount of material on glare and brightness contrast. They do not seem anything like so sensitive to comfort and discomfort and I do not think they take the same interest in matters bordering on the æsthetic which are of such great concern to the architects.

Materials and Heating:

I, of course, am interested in heating, and in the case of manufacturers in America, most heating research is directly sponsored by some form of trade interest, whereas here it is mainly Government sponsored research. Our manufacturers reluctantly follow Government policy in the matter of heating appliances for the small houses, for example, largely because the Ministry of Fuel have issued to local authorities lists of approved appliances, which means that local authorities demand that those appliances should be used. Therefore, the appliance manufacturer has to toe the line. Incidentally, although they toe the line to the extent of producing a number of appliances, many do the very best they possibly can to deter anyone from using them by providing totally inadequate information for the archi-

tect on how they are to be built into the

Chairman: So you think that the average reader does far better, and gets more information, by reading a paper like the JOURNAL than he is likely to get from any other source?

Materials and Heating: 1 should say that is perhaps true in the case of heating, but not so true in the case of materials generally.

Lighting and Sound: I think architects who read the Information Centre get a better résumé of the literature on lighting, and the general ideas on lighting which are going around, than they would by merely going to a manufacturer. There are exceptions, but I am thinking of the general run of advice.

Chairman: What sort of information does our Planning Expert put over?

Planning: I should say, in the field of planning, a great deal of information is coming from Government sources. All Government publications, therefore, should be covered: white papers, statutory orders and that sort of thing. Then there are the comments on these publications by private bodies, or learned societies, redevelopment plans for existing towns and schemes for new towns. There are also a number of original papers on planning science and on new presentation techniques. A certain amount of planning material from abroad has to be covered which is internationally applicable. But there is not a great deal of it because this country is much further advanced than any other country in the field of planning.

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Engineer: A question I should like to raise is that of paper. In article on the same building is published in almost every journal. I think much paper could be saved if some agreement could be reached between the various papers, so that only one or two of them would publish the description of the same job.

Chairman : Many people do not take more than one paper so if the Technical Editor left out a very highly publicized thing he would not be at all popular.

Engineer: Another point is, that architects should call in the experts more often. Whereas this does not apply to the quantity surveyor, whose status is acknowledged so that more or less every client knows that the services of a quantity surveyor are necessary, it is not the same with a structural engineer. I will quote an example. There is a recent publication by a working party, appointed by the Ministry of Education, which deals with the structural aspects of school construction. Well, there was not one single structural engineer on this working party, and the report has many deficiencies due to this lack. It is a fact that very few of the councils concerned with school construction have the means of officially appointing a consulting engineer, so the engineer, whose co-operation is nevertheless required, has an illegal status. Most of the councils appreciate how useful it would be to have an engineer, consequently his fee has to be concealed in one or the other item. Of course, it costs, in the final issue, more than if the engineer's status was legalized. I feel this is the crux of the problem as far as structure is concerned. In most municipal authorities the architect has no means to call in specialists. This leads to waste of materials. I have insight in these matters from various sources, but my status in most cases is "illegal," and the architect simply has not got the means of paying any fee direct:

Chairman: You suggest that through journals like the AJ you information which takes the place of a structural engineer, but you can warn people that they should have a structural engineer when necessary?

Engineer: Very often they appreciate the necessity, but are not in a position to do what they would like, particularly the local authorities. With private clients it is different, but some of them do not want to pay a fee in addition to that of the architect. It is much worse with Government Departments than with private clients.

Chairman: I would like to ask whether you think architect readers as a whole make the kind of use of our technical digest that they should. Is there cleavage between what you professional specialists do and what the practising architect does?

Lighting and Sound: You ask me is my own information used correctly? I have been struck by the fact that the work on glare and brightness contrast appears to have gone home. If I give a talk on it anywhere, I find I am inundated with sensible questions. I suspect that quality is a thing that any architect can judge well, and all they need is a few keys to open a few doors in their own minds, and they immediately begin to view their surroundings more critically than they did previously. I would be so optimistic as to say that if Information Centre notes go on as they have done, architects will be able to criticize severely and constructively, and a good thing too. I think, on the whole, it does depend to some extent on whether you can touch matters of common observation and make them understood to people or not. Quantity is a thing which is difficult for people to judge, but quality touches the architect at once in a way that

I would also like to say how disappointed I am that the staffs of architectural schools are not themselves more authoritative in the different fields of specialization than they are. They do not appear to have the standing among their local professional colleagues which you would find in, say, physicists among local industrialists who have scientific problems, or a specialist in chest surgery among the doctors in Birmingham. In the academic world you would expect academic people to be authoritative, otherwise they should not be teaching; they should not teach merely to make a living. That is not a good enough reason for teaching. In fact, the schools either do not find them, or do not cultivate them, or the teachers have no opportunity for some reason or other. The teaching staff are not the local authoritative people. I know very few teachers who are recognized authorities in their own districts, and I think it gives rise to the suggestion that they are among the people who cannot earn their living by other means.

Architect: One thing rather worries me. To fill one's mind with a vast store of facts and formulæ is inadvisable, if not impossible. I cannot but feel that the expert is inclined to a certain insularity of outlook. He regards his particular subject as of transcendental importance. The architect, however, has to deal with a large number of technical aspects of building and, therefore, he is forced to rely upon the experts to guide him on the details of the many scientific problems which confront him. He cannot be his own expert on all aspects of building.

Lighting and Sound: I would like to take up this point that the scientist is inclined to become insular. I have not met many experts like that, certainly not good experts, because I think it is an attribute of a good expert that he could have been expert in almost any

subject. Now there are two things which scientific people have to do with their material. One is to record their findings somewhere so that they may be referred to. This kind of article will often be of no particular interest to architects, but it must be recorded somewhere. That is one kind of article. I regret, myself, that this country's publications in architecture are so uncritical that they do not differentiate sufficiently between that kind of article and the kind of article which does in fact review the subject in architectural terms, keeping a balance as between one factor and another. There are these two kinds of scientific article, one prepared with all the logic that goes behind a piece of science, which can persuade anybody that it is to be taken at its face value, whereas in fact it is only a part of the story and may knock the architect off his balance. This kind of paper appears in our architectural journals without any particular way being found by which one can identify it. I can think of articles on lighting, heating and acoustics which have appeared and which should have been reserved for a thoroughly technical building journal, if there were one. The second kind of article is a review paper in which the subject is set out in full balance. They arg a very different type, but they are mixed up with the others. Architects, I am sure, find themselves in difficulties in distinguishing between them, and this does not help matters at all, because architects are not skilled readers in technical subjects. The profession does not handle its academic and technical literature systematically, and that is an awful weakness. I am sorry to say this, but it is the truth and until we get it there will be this continued haggling and argument about whether or not technical literature is suitable for architects. Some is and some is not.

Chairman: What you are suggesting is that the architect is not to read really scientific articles?

Lighting and Sound: I am suggesting that architects should not confuse the purpose and criticize ungenerously the expert's article for not being what it does not set out to be. For instance, if someone discusses the colour of fluorescent tubes in detail, he is criticized either for having a narrow outlook or for adding needlessly to technical literature.

Architect: It seems to me as a practisvolume of scientific and technical information now available requires a central body just to sort it out and get it indexed.

Lighting and Sound: Yes, soience is straddling industry. It is as wide as the practice of architecture in its ramifications; practically everything an architect does except in the purely aesthetic field of imagination is, in fact, represented somewhere or other by someone doing research, who is going to publish it somewhere, sometime. But there are two sides to be borne in mind, the side in which the theoretical subject is being built up by a succession of research investigators who are writing in journals which they all recognize and know, so that if someone writes a paper in which he discusses a new system of structural design he will deposit that paper in some place where he knows other people interested in that subject will find it. At the same time, however, the practitioner is faced with the fact that that is not the field where an architect is going to do his reading. There arises a case, therefore, for double billing, or good abstracts; I mean, of course, abstracts which in point of fact render original documents unnecessary except to the specialist.

Chairman: What does the quantity: surveyor think?

Surveyor: I am in rather a peculiar position. I only cover

mather definite information for which abstracts are not suitable. My experience of architects is that the younger ones tend to have more time to read technical articles than people, like Mr. Leathart, who have been practising for a number of years. It all boils down in the end to one thing; using a simple method of filing and indexing so that one can turn it up in an emergency.

Chairman: Yours is very live stuff. Week by week, prices change and so on. The index, in a sense, is not so important.

Surveyor: A group, under the auspices of the Architectural Science Board, is studying indexing and filing. It was suggested, at one time, that editors of architectural papers should be brought together so that they can all co-operate in tabulating information in the same sort of way. If any ideas turn up which could be put to the Study Group I have no doubt they would be very much appreciated.

Chairman: There is, of course, this new attempt to formulate an international system of documentation. This might be dangerous or it might be useful, but my experience so far has shown there is far more discussion of methods, schedules, titles, etc., in a new frightening alphabetical jargon than there is at present signs of useful documentation. Indeed, the systems proposed seem to catll for documentation in themselves. International practice varies so much, and mentalities vary to such a degree that it would take years to get an easily accessible, practical system at work.

From the British architects' end, would not the JOURNAL'S Information Sheets and Information Centre classification system fit the immediate bill in a practical way? They are designed for rule of thumb usage day by day. Is your experience that from what you have seen of outside offices they do fill the bill and really do work?

Surveyor: I think they can work whether people do work them is an open question; many business offices have not got around to them for one reason or another. There is another point, too. It rather depends on whether there is information about a lot of topics, or a lot of information about comparatively few topics. There are all sorts of reference books in an office, but frequently one doesn't use them because one is not accustomed to them and doesn't expect to find the answer there. If, because of the quantity of information, one cannot help knowing that the AJ is doing work on lighting, one looks it up there, but if the opposite is the case one may not think of the AJ, although the information may be there, nevertheless. It is better to make the system a recognized authority on certain topics and to expand it gradually.

Architect: An architect estimating for a job can only assess his costs on current prices, but with all the delays attendant upon obtaining tenders, prices may well have increased in the interim. Would it not be possible to give periodic percentage increases—or decreases, should these ever occur again in our lifetime—of building costs? For instance, since August, 1947, I am told that building costs have advanced by fifteen per cent.

Chairman: To say the cost of building had gone up fifteen per cent.? Is that a possible thing?

Surveyor: I am inclined to say that if it were to be printed I would require a large bribe to induce me to do it.

Architect: Why would it not be posaible? Certain increases in wages are facts upon which computation could be made. Increases in cost of materials are more difficult to assess, I admit.

Surveyor: Even a so-called expert does not always know. Costs do not rise proportionately with different types of building. For example, in 1947 timber went up by about forty per cent, but that affected some classes of building much more than others. It is a very difficult problem. One knows, perhaps, that bricks, cement and labour have each gone up by so much, but to sort that out and say that a factory has gone up by such and such an amount is difficult. One is also concerned with the variable factors of tendering, whether builders are cutting each other's throats, to try to get work, etc. Although one makes estimates in one's own office, to put them in print is asking quite a lot. Government departments do not do it, so there is no official information. It just depends whether one likes to stake one's reputation or not. Whenever the problem arises, I have, of course, to give an answer, but it is different giving an answer for a specific job. There has been a recent publication on the cost of housing, which gives increased costs at roughly 140 per cent, above pre-war, but I have been talking to certain officials about some factories, and they thought the relevant increase was between 110 and 120 per cent, and I was inclined to agree with them. There you get a distinction between 110 or 120 per cent. for one class of building and 140 per cent, for another.

Chairman: I think Mr. Leathart should draw some conclusions from the architect's point of view.

I would like to say this. Architect: man who has done a large amount of general practice has accumulated a certain amount of knowledge in the hard school of practical experience; and I suggest with a certain amount of diffidence that the laboratory expert should give him a little more credit for what he knows. I am inmore credit for what he knows. clined to think that a little too much science has impinged upon what was once the straightforward craft of building. From the straigntorward craft of building. From the acoustic point of view, the two finest concert halls in England, the Free Trade Hall, Manchester, and the Queen's Hall, London, were designed by Victorian architects, who most likely could not distinguish a decibel from a phon. Take the London theatres; some of the great perfect theatres for each every the most perfect theatres for sound ever built were designed without the use of Sabine's famous formula and are infinitely better acoustically than some of the scientifically-designed modern ones. Let us not forget that a mass of fine sound building in this country was done before we became science conscious. That is all I have to say.

Chairman: Now let one of our Technical Experts have the last

Lighting and Sound: I think Leathart is burying his head in the sand. Queen's Hall and the others are two good auditoria out of dozens of bad ones, and it would be against all reasonable odds not to have one or two that worked. Against his view let me quote the party wall problem. In 1857 the Editor of the Builder cried out for a way to protect him from noisy neighbours—but good honest industry didn't help; he had to wait 80 years until scientists turned to it. No, I am sure the point is this: you would expect fine building to be done before science got cracking, simply because it was carried on in an entirely traditional context. The trouble we face now is that we can draw only to a limited extent on tradition and must rely far more on explicit knowledge. This is a new factor in the development of traditions, and it is far too soon to say that it cannot lead to good buildings; it may, and should, lead to something much better than before.



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

BBC V. LCC

Those of you who were unable on Sunday morning to extricate yourselves from the Crawley murder case-and what a grotesque Graham Greeneland it is, with its South Kensington hotel, false finger-nails and acid baths background-may have missed Round Two of the radio battle between the BBC (The Critics) and the LCC (The Housing Architects). Round One had opened the previous Sunday with an outspoken comment\* from J. M. Richards upon the poor architectural quality of much of London's post-war housing and upon the LCC's departures from its own County of London Plan. Mr. Richards's remarks provoked only a poor discussion-his fellow critics seemed genuinely uneasy at the thought of building being the subject of serious criticism—but they did sting the LCC into a reply, the chief points of which seemed to be that shortage of time and money has prevented better results, that the present Housing Department inherited a lot of obsolete plans which it has had no time to alter, and that appearance is after all a matter of taste.

Mr. Gibson, Chairman of the LCC Housing Committee, who was the LCC's official spokesman, fought a powerful rearguard action, but I was sorry he turned the argument into a semi-political one by concentrating entirely on planning policy. His refusal

<sup>\*</sup> On account of the interest this radio controversy has aroused, Mr. Richards's original-remarks, broadcast on February 27, ase printed on page 228.

to discuss architectural merit-the main target of Richards's original attack-considerably weakened his own case. And I was sorry that, for the benefit of ordinary listeners who cannot be expected to know the difference, a clear distinction was not drawn in the discussion between the Architects' Department of the LCC (which now no longer designs the housing) and the Housing Department, under the Valuer, which does. Mr. Richards made it clear that he was criticizing the work designed in the latter department or erected under its supervision. It would be unfair on the present Chief Architect if the public assumed from his title that he was to blame.

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So much for the argument today, and no doubt there is much more to be said on both sides. Who has won the argument matters little. The important thing is that there has been frank speaking on both sides, that the LCC has shown itself to be far from complacent about its achievements in the past, and that it is hoping to do better in future. How much better we may have to wait until 1951 to see, for in that year the LCC Housing Department will be tested alongside and on equal terms with other architects in the "Live Architecture" exhibition in the East End. Here will be an opportunity for them to prove that they are not only the largest housing authority in the world, but also one of the best. Good luck to them. I hope they'll make it.

#### MARSHALL AID FOR BASINGSTOKE

Because it made a good newspaper story, the sale of the Basingstoke Canal last week at Aldershot has caused an extraordinary public stir. Though it is a good thing that our disgracefully abused waterway system is being put on the map by topical journalism, the story is rather out of proportion. There are many more valuable canals the public has never heard about which are deteriorating at an alarming rate. Rennie's Rochdale Canal, for instance, a remarkable piece of engineering for its time which carries boats as large as 74 feet long by 14 feet beam right over the Pennines, is neglected and now threatened with abandonment-a distressing example of the low state of canal morale, a state which has been deliberately fostered by the railway interest over the past century and which

nationalization does not yet seem to have improved.

But back to Aldershot. In preparation for the auction, notices had been hung up all over the town with the simple but dramatic slogan: TO THE SALE. Such a crowd turned up (including Astragal in person) that the auctioneer had to move his flock to a larger gathering place in the dance hall of the Aldershot Traction Companyvery suitably, for the atmosphere was festive, though highly tensed with hopes and fears; to add to the excitement, some thirty pressmen were milling about flashing their bulbs and capturing comments. But the whole thing was over very quickly. Only a few bids were made and, amidst acclamation, the 32 miles of the Basingstoke were knocked down for £6,000 to a Mrs. Marshall. She was bidding for the purchasing committee under Sir Frederick Sachse, a subordinate body of the Inland Waterways Association, whose aim is to revive the canal both for pleasure and commerce. Several people then made happy speeches including the auctioneer himself who appealed to the 300 people present to subscribe to the committee. A delightful waterway had been saved from both official and private depredation and we can look forward to its development under the control of the IWA as a model naviga-

#### CHEYNE WALK

Some confusion has arisen about which part of Cheyne Walk is threatened by the Chelsea Borough Council's housing scheme and which is not, so I publish a photograph of some of the charming Georgian houses which would definitely disappear if the Council had their way. They include Wilson Steer's house—the one with the studio window in the roof.

It seems, however, that the protests in The Times and elsewhere have had their effect, and the Council's scheme is likely to be modified. The important issue, to me, is not the individual merit of the Georgian houses that were threatened—there are occasions when even Georgian houses must be sacrificed-but the charm and character of the whole west Chelsea waterfront (one of the few surviving stretches of the old riverside London). It is the duty of local authorities not so much to preserve pieces of architecture in isolation but to preserve the character of the areas in their care, and thus prevent every bit of London becoming exactly like every other bit.

### INDUSTRIAL ARCHITECTURE AND IDEAL HOMES

Private views on successive days are a little too much for Astragal, who found with a slight shock that the Ideal



Some of the houses in Cheyne Walk, Chelsea, threatened with demolition by the Chelsea Council's housing scheme. See Astragal's comment above.



A cutaway section of the proposed double-decker coach, for suburban lines of the British Railways. See Astragal's comment below.

Home was immediately followed by the RIBA'S Industrial Architecture exhibition. After twelve acres at Olympia the Henry Florence Hall is a pleasant family sort of size, and the exhibition is clearly laid out and informative; it certainly helped to make the conference a success, as it's always easier to talk if there are useful examples ready at hand to help one's arguments.

I was glad, too, to see that the Exhibition Committee now appears to have abandoned the old system of numbered photographs and a straight Following last year's catalogue. example, the various panels are properly labelled and explained, while the catalogue becomes a general handbook which has some permanent value. Congratulations to editor Eric Bird and his various specialist collaborators.

To the Ideal Home I always go with a faint sense of resentment, but I nearly always find something I'm glad I didn't miss. This year, hats off to the MOH terrace houses and the CID's furnishing of them; it's a nice change to fine a Government department so obviously far ahead of the rest, even though, as one might expect, the queues are longest outside what I think is the worst house in the show. The Pavilion of Beautiful Things (said to be based on a Soane sketch) I didn't much like, and I suspect Mr. Summerson would feel even more strongly about it.

The stands? I only managed to find three by architects, but then I didn't penetrate as far as the beauty queens; poor old Astragal always feels a country cousin in the Empire Hall as the escalators never go the way he wants them to.

DOUBLING UP

A fortnight or so ago, at Marylebone Station, I happened to see a mock-up of the double-decker coach with which British Railways hope to solve the overcrowding problem on suburban lines. Designed by the chief engineer of the Southern region, a sample train will be on the Dartford-Charing Cross route by the end of the year. Although the passenger capacity of each coach is increased by 30 per cent. or more, I felt a somewhat uneasy claustrophobia in the lower compartment, perhaps because the heads of standing passengers come in the clerestory section.

Many Parisian suburban coaches are built on two decks like a bus, and I first travelled in one as long ago as 1929. (Yes, you're right, on my way to see the villa at Garches.) But their loading gauge is higher than ours by nearly a foot, and over here an arrangement something on the lines shown here is more or less inevitable. Anyway, the alternative is 10-coach trains and probably several years to make the platforms long enough. Nobody could tell me whether standing passengers are to be allowed upstairs, but the stepped floor looks awkward for either standing or sitting.

ASTRAGAL

#### London Housing

The following is the text of J. M. Richards's opening remarks in The Critics' discussion on London Housing, broadcast last week and referred to by Astragal on page 226.

I'm afraid this is one of those occasions I'm afraid this is one of those occasions when a critic has to do his duty and criticize. At Charing Cross underground station there is a rather poorly arranged exhibition describing London's post-war housing effort. The poor arrangement is relatively little; the poor quality of most of the material exhibited is a great deal. Because it is, without exaggeration, one of the biggest tragedies of our time that the

great rebuilding opportunity we were faced with after the war is being frittered away, by the substitution of a policy of mere expedience for proper planning, and by sheer bad architecture.

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I must make it clear that I am not criticizing the extent of the housing effort. The number of houses and flats built in England since the war is a remarkable achievement, which no other country in the world has come near. That is now beginning to be recognized, and the LCC and the various London Boroughs have done their share. But mere quantity is not enough, It has been said before, and it must be said again and again, that although it is natural for us, beset by the shortage of houses, to judge housing progress in terms of quantity, posterity will judge it by its quality. And the very fact that houses and flats are going up in such numbers makes it all the more tragic that so many of them are going up in the wrong places and of crude and clumsy design. It doesn't cost any more to build in the right place than in the wrong place, nor to design well instead of badly. In fact it often costs less. And the small amount of really good work that is being done shows that good design is possible under present conditions.

I hadn't intended to say much about planning questions, because under the heading of art the critics will probably think it more appropriate to discuss the design of the actual buildings—their quality as architecture. But there is also an art of designing cities, and during the war the LCC produced a plan for the County of London which promised that in future London would be a designed city. Its growth would be controlled so as to avoid overcrowding and traffic congestion and ensure that there were enough open spaces, and so on. Now, only five years afterwards, building is being only five years afterwards, building is being allowed on the green belt, precious, irreplaceable open spaces in central London—like Campden Hill—are being turned into building sites by the LCC, and London Boroughs, which were declared in the plan to be over-populated, are building flats for larger and larger populations. In many ways this over-building is the most alarming thing of all. Look at the Holborn Borough Council's housing schemes now nearing Council's housing schemes now nearing completion just north of Theobald's Road: huge blocks of flats, packed close together, representing a quite terrifying density of population. I hesitate to label schemes like this the slums of the future, because I know it is poverty as well as overcrowding that breeds slums. But they are a step backward; they have none of the qualities of the brave new London we were promised. On the question of the quality of the architecture. tecture, I ought, in fairness, to mention that there are some schemes included in this schibition that set a high standard: a big scheme by Frederick Gibberd in Hackney and one by Tecton in Finsbury are excellent. There are some reasonably good ones designed for other Borough Councils—mostly by private architects. But there is too much dreary work, lacking all refinement and imagination, and the worst culprit is the Housing Department of the London County Council, quantitively the biggest is the Housing Department of the London County Council, quantitively the biggest housing authority in the world. As architecture the LCC work is of a depressingly low standard whether you take the grim concrete barracks recently provided for the people of Bethnal Green and Deptford and belianted of the immense scheme now under Islington or the immense scheme now under construction at Woodbery Down; a fine site in north London, now being covered with flats of an ineptness in design and crudity of detail that London shouldn't be expected to put up with in 1949.

to put up with in 1949.

I began by saying I regarded this as an occasion for outspoken criticism. Well, I have made it so. Now I would like to know whether the other critics agree that most of the new housing they see going up round them is adding deplorably to the relieuse of London.

ugliness of London.

### PHYSICAL PLANNING SUPPLEMENT

The fourth of the Greater London new towns to present its Master Plan . is Crawley. A possibly superficial but distinctive definition of the character of all four can be given as follows: Stevenage is a Ministry research project, Hemel Hempstead an essay in urban landscaping, Harlow an essay in a new civic urbanism, and Crawley the apotheosis of suburbanism. Such descriptions are perhaps less than fair to their authors, who are pioneering in so far uncharted fields but are useful nevertheless; for during the next fifteen to twenty years Britain, with its new towns, will be a unique laboratory of town planning study. On the following pages the Master Plan for Crawley by its Planning Consultant, Anthony Minoprio, is illustrated. On the right, the model of the town centre looking west, civic buildings on the right and shops to the left of the Boulevard. Below, Crawley lies approximately mid-way between London and Brighton.

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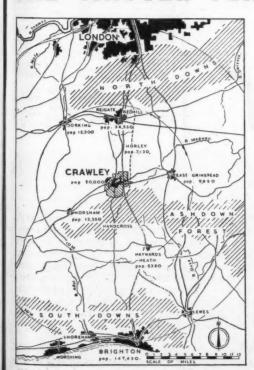
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## CRAWLEY NEW TOWN THE MASTER PLAN DESIGNED BY ANTHONY MINOPRIO

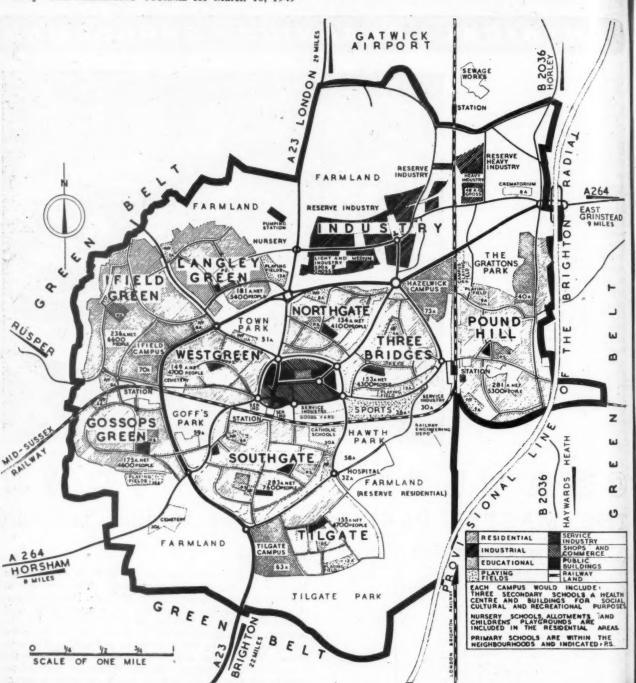


#### introductory

Crawley is the latest of the new towns of the Metropolitan fringe to be presented in some detail. This presentation follows the pattern made familiar by Hemel Hempstead and Harlow—that is, detailed drawings and a model of the civic centre, with a Master Plan for the whole town. Crawley is, however, to be distinguished from the two master plans mentioned above by the absence of any outstanding individual characteristics and by the insistence laid upon the establishment in three of the neighbourhood units of an educational campus in each of which the three types of secondary schools are to be provided. In fact, this idea is Crawley's contribution to the science and art of "new town" planning. The construction of the new town has already begun, and in this respect—its vigorous progress in translating the idea of a new town into bricks and mortar—the Crawley Corporation, under its Chairman, Sir Thomas Bennett, has probably outstripped the other Corporations.

#### the problem

The planner of the new town certainly had no enviable task. The town absorbs the existing towns of Crawley (pop. 4,745) and Three Bridges (pop. 1,500). A large proportion of this existing population almost certainly travels daily to London, though no statistics of the actual numbers appear to have been published. The existing railways are awkwardly situated, the London to Brighton line, to the eastern side of the town, leaves a large chunk of the designated area.



The Master Plan showing the road pattern and the arrangement of the residential neighbourhoods. The lay-out follows the familiar ring-radial pattern. The heavy black line marks the boundaries of the designated area.

isolated beyond it. The Mid-Sussex railway crosses the town from east to west, with a very awkward level-crossing in the existing Crawley High Street. The town is similarly traversed by two main roads, one being the main arterial from London to Brighton (A23), which has already been provided with a bye-pass to avoid the existing town of Crawley. The other is the west-east road (A264) from Horsham to East Grinstead The first of these two roads obviously carries a very heavy traffic, particularly on week-ends and in summer. This represents a problem of formidable proportions, which will be still more acute if existing petrol restrictions are eventually relaxed. There is a proposal, however, to build a new London-Brighton motorway which will pass safely to the east of the new town. It is anticipated that this new road will

be built in about fifteen years' time, and will coincide with the planned completion of the construction of the new town. The site is relatively flat, the maximum difference in level being in the neighbourhood of 80 ft., though approximately one-sixth of the designated area is under woods and plantations, some of them of considerable beauty. There are, however, none of the topographical stimuli to be found at Harlow or, more especially, Hemel Hempstead. The town is planned for an ultimate population of 50,000, of whom there are at present 9,000 living within the area.

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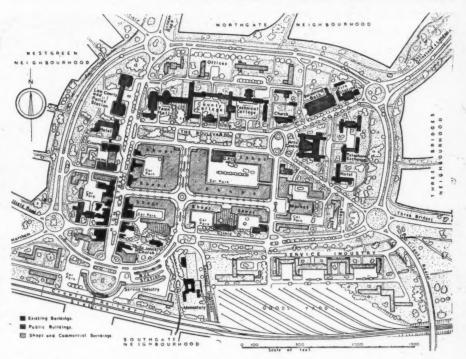
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#### the proposals

The purpose of the Master Plan has been described by its author as the provision of "a framework of roads and zones



Right, the plan of the town centre. The inner ring road of dual carriage-ways circles this area. The main feature is the Boulevard which extends for 400 yards from east to west. In its central grass area some fine existing trees are to be preserved. To the north are the public buildings, and to the south lies the town's shopping centre. An Arts Centre is suggested as the focus of one end of the Boulevard. The existing Crawley High Street is incorporated in the shopping area, and the parish church and monastery have ingeniously been preserved. Below, a view of the model of the town centre looking along the Boulevard.

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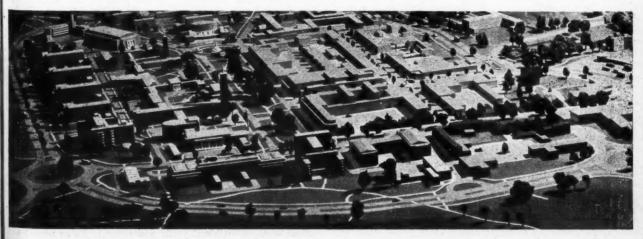
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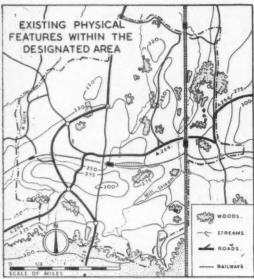
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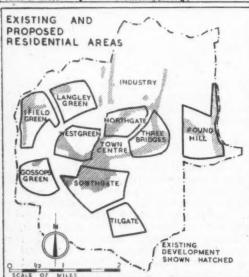
upon which the more detailed planning of the town can be based." Thus the task is regarded as a technical one, and although the road pattern will have its effect on the character of the new town, this effect is apparently regarded as incidental. The general solution is the most conventional of the new town proposals so far published. It follows closely the preliminary outline plan made public in December, 1947, though it is more compact, the built-up area having been reduced by one-fifth. The framework of roads follows the familiar ring radial pattern which is the now recognized canon of English town-planning. The inner ring circles the town centre and the principal shopping area and provides the approach to the railway and bus stations. Half the outer ring is formed by the existing Crawley bye-pass to the west of the town. The eastern half will be a new road passing the existing Three Bridges station and continued to meet the London-Brighton road to the south of the town. Four of the neighbourhood units are within this outer ring, and the other five lie outside, as does the industrial area. One unfortunate neighbourhood is separated from the remainder of the town by the London-Brighton railway. The industrial area is to the north of the town. The three campus sites, where schools and community buildings will be grouped, lie immediately outside the outer ring. There are seven radial roads projected, of which three are already existing. Six farms lying wholly or partly within the designated area are to be preserved as wedges of farmland projecting into the town. There are also five parks, three of them being within a few hundred yards of the town centre.

#### roads

Reference has been made above to the general road proposals, and the pattern can be seen in the general plan. Some 17½ miles of new major roads are proposed, and 5 miles already exist within the town boundary; 13 new roundabouts will be required, together with 7 new bridges and 3 underpasses. The total land requirements for these major roads, roundabouts and bridges are 241 acres. Somewhat more than half of the outer, or Crawley, ring road is to have dual carriageways with a central grass strip. The Crawley-East Grinstead radial is to be similarly treated; considerable areas on each side of all the major roads are reserved for planting and landscaping. No elaborate flyover crossings are proposed except at the junction between A264 and the proposed new London-Brighton motorway. This junction may possibly lie outside the town boundaries. None of the main roads traverse any of the neighbourhood units, but rather form their boundaries, and the number of distributive roads joining the ring-radial system has been reduced to a minimum.

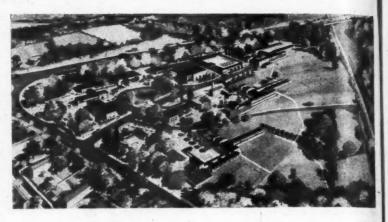








Above, diagrams of various aspects of the plan. right, a suggestion for the treatment of one of the campus On these sites, three in number, the secondary school buildings are to be concentrated together with certain of the community buildings, clinics, etc.



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#### the town centre

In planning the new town centre the Consultant has obviously been influenced by a desire to preserve some connection between the present town of Crawley and the new town. The existing High Street shops are to be embodied in the new shopping area. Ninety-five acres of ground will be occupied by this central area, which, as can be seen from the plans, is sited more or less at the geographical centre of the town. This area, which contains little living accommodation, is bounded on all sides by the inner ring road, to which all the principal radial roads are connected. Through the centre of the town centre runs the Boulevard, 400 yds. long and 66 yds. wide. Along the centre of this boulevard is a green strip on which many fine trees now in the rectory garden, which occupies part of the site, will be preserved. It is also suggested that there should be fountains, flowers and sculptural embellishments. To the north of the Boulevard are various public buildings, with an arts centre on its long axis, while to the south are the shops and the market. One of the major difficulties in planning these impressive town centres lies in the fact that the lay-out, to be successful, depends largely on the architectural quality of the buildings around it. Moreover, the lay-out itself should clearly be conditioned by the form and character of the buildings upon The urban scene depends entirely upon the relation of the two. They must form part of a single architectural conception. At the early stage, when the Master Plan is prepared, the requirements of individual buildings must obviously be guesswork, but it is precisely at this stage that the character of the town centre is determined-at least, theoretically. The working out of the details for such an area will provide an interesting essay in the study of townscape. The model suggests that the concept in the case of Crawley is an essentially suburban one, which will be considered by many to be appropriate for the inner fringes of the home counties. It will be of great interest, in 15 years, when the whole town will have been completed, to see whether the attempt to provide a twentieth century town with a specific character, different, though comparable to that resulting through centuries of growth, or the architectural conceptions of the eighteenth century, is successful.

#### residential area

The nine residential areas proposed will vary in population from 4,100 to 7,600. The four inner areas are to have a net residential density of 29 persons per acre, and the five outer ones 26 persons per acre. It is intended that each neighbourhood will have a socially-balanced community, and there are to be no large areas of one-class housing. Whether the isolation of the Pound Hill neighbourhood will develop in the same way as the similar areas in Welwyn Garden City, where the social balance has been largely lost, remains to be seen. Each neighbourhood will have its own centre, where "the primary school, the local shops, church, inns, hall, clinic, garages, builders' yards and other facilities would be placed, usually round a green." The neighbourhoods are designed so that it should not take more than ten minutes to reach the centre from the furthest houses, while most of the houses in the town are within 1½ miles of the town centre. Approximately 3 acres per thousand population is provided for neighbourhood playing fields, giving a total of 148 acres for all the neighbourhoods.

#### industry

It is estimated that there will be an industrial population of 8,500 workers, and an area of 264 acres has been allocated for factory sites. This area, as can be seen on the plans, is to the north of the area on a relatively flat site. It is proposed to construct standard factories, as well as provide sites for factories designed to the individual industrialist's requirements. It is expected that the contract for the first standard factory will be let this spring. The industrial area will be provided with an administrative centre, clubs and canteens, and will be surrounded with a green belt. Service industries are to be accommodated to the south of the town centre, at Three Bridges and at the centres of the residential neighbourhoods.

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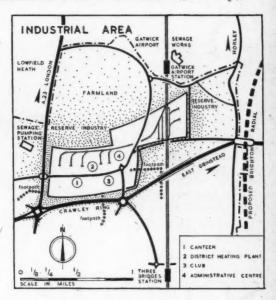
Nearly 10 per cent. of the total area of the town is occupied by sites for educational buildings. Nursery schools and combined junior-infants' schools are sited in the residential areas to be close to the homes which they serve. There are to be nine new schools of this category. Secondary schools are to be grouped with certain community buildings on the new campus sites of which there will be three—at Ifield, Hazelwick and Tilgate. The technical college and county college are to form part of the town centre, adjoining the Library and the Town Hall. The secondary schools will, of course, draw pupils from the surrounding villages and countryside as well as from the new town itself, and have therefore been sited adjacent to the Crawley ring to provide easy access by bus and bicycle.

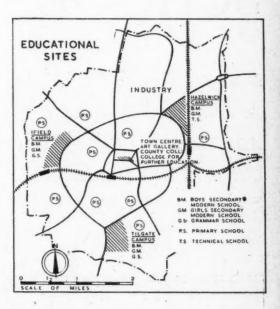
#### programme

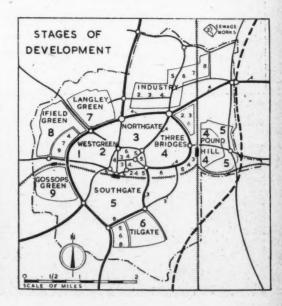
The Corporation has based its programme on a fifteen-year term, when it is hoped the whole development will be completed. It is planned to complete the residential development concurrently with industrial buildings, shops, services and other buildings. If the new towns are to be a success and not become mere dormitory or industrial suburbs, this is essential. The village of Aylesham, in Kent, is a sad warning of what happens to a community when expediency rules. Well over twenty years have passed since the houses were built, but notices announcing "Site for Public Buildings" remain. At Crawley the inner neighbourhoods are to be developed first, thus maintaining a logical growth.

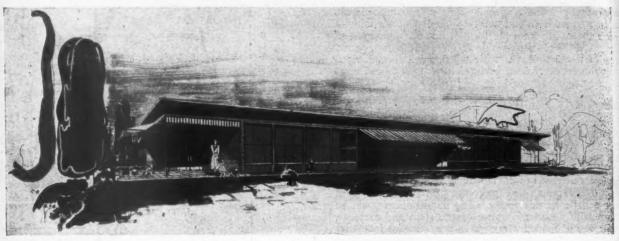
Down the right of the page further diagrams illustrate the layout of the industrial area (top) the distribution of schools and colleges with the three campus sites (middle) and the stages of development (bottom). The inner neighbourhoods are to be developed first. The perspective shows the campanile of the Town Hall seen across the Boulevard.











View from the south-west.

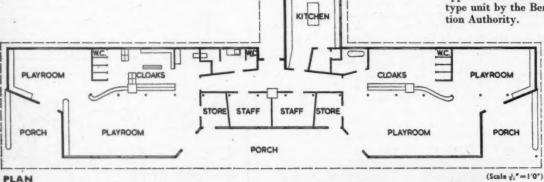
## SCHOOL FOR THE NURSERY SCHOOLS ASSOCIATION

DESIGNED BY THE
ASSOCIATION'S BUILDING
ADVISORY COMMITTEE.
CONSULTING ARCHITECT:
C'. G. STILLMAN

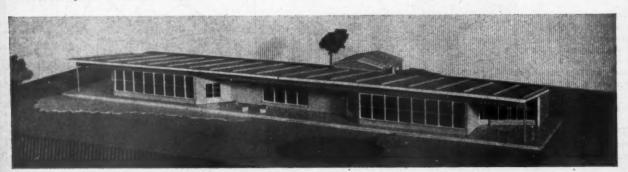
GENERAL.—The Nursery Schools Association have designed a new type of school which reduces the cost per pupil from £400 to below £200. The design retains all the essential standards of space, but reduces corridor space, and by careful planning a minimum

STORE

amount of inside walling is necessary. The unit, with playrooms facing south, makes provision for 80 children and is planned within a simple rectangular structure 150 ft. long by 30 ft. wide, having a roof sloping from a height of 10 ft. 6 in. on the south side to 7 ft. 6 in. on the north. The roof is supported by a series of columns, 8 ft. apart, running centrally throughout the building. The Ministry of Education have approved the erection of a prototype unit by the Berkshire Education Authority.



Below, model from the south-east.

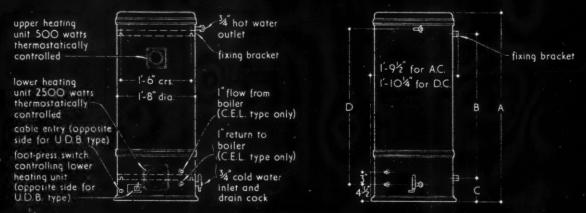






#### WATER HEATING | UNITS | ELECTRIC

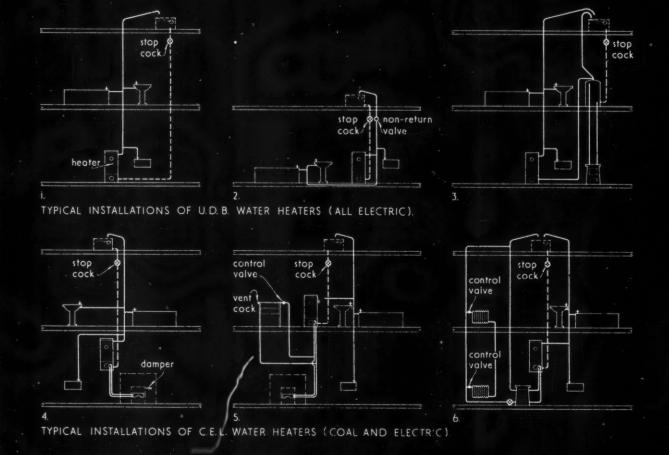
The Architects' Journal Library of Information Sheets 151. Editor: Cotterell Butler, A.R.I.B.A.



FRONT AND SIDE ELEVATIONS OF U.D.B. AND C.E.L. WATER HEATERS.

type	capacity	A	В	C	D
U.D.B.	20 gallons	2'-9"	2'-0"	41/2"	2'-0'2"
U.D.B. and C.E.L.	°30 gallons	3'-11"	3'-0"	51/2"	3'-2'2"
U.D.B. and C.E.L.	35 gallons	4'- 6"	3'- 6"	5'2"	3'-9'2"
U.D.B. and C.E.L.	40 gallons	5'-1"	4'-0"	5½"	4-42"

CAPACITIES AND DIMENSIONS OF U.D.B. AND C.E.L. WATER HEATERS.



#### 32.D9 SADIA AUTOMATIC ELECTRIC WATER HEATERS: U.D.B. AND C.E.L. TYPES

This Sheet, one of a series on automatic electric water heaters, illustrates the U.D.B. (all-electric) and C.E.L. (coal-electric) water heaters. The U.D.B. is available in 20, 30, 35 and 40 gallon capacities and the C.E.L., specially designed for use in conjunction with a saddle or back-boiler, is available in 30, 35 and 40 gallon capacities

#### Design and Construction

Both models are similar in design and construction to those described on Sheet 32.D10 except that they are not fitted with ball tanks. Accordingly, the hot water container has no internal vent tube, and the hot water is drawn directly from the top of the container. The heater operates on the displacement principle, the cold water entering at the bottom of the inner cylinder displacing the hot water flowing out at the top.

The cold water inlet is at the side near the bottom and is provided with a drain cock. The outlet is brought out through the outer casing near the top. The inlet and outlet are screwed  $\frac{\lambda}{4}$  in. male B.S.P. thread and can be arranged either both on the right or both on the left side.

#### Wiring and Loading

The water heaters are completely wired internally in closed conduits, the electrician having only to connect a pair of leads to the terminals together with an earth wire. Screwed conduit can be used right up to the heater.

There are two independent heating units, one near the top and the other at the bottom. The upper unit is fitted with a single 500-watt element controlled by a 5-amp. thermostat. This element is permanently connected to the electricity supply and the thermostat ensures that at least 6 to 7 gallons of hot water at over 160° F. are stored ready for instant use. When a bath or larger quantities of hot water are required, a foot-press switch is operated, bringing the lower heating unit into action. This has a loading of 2,500 watts and is also thermostatically controlled

If it is desired to have the full storage capacity of hot water always ready for use, the heater can also be supplied without a foot-press switch and upper heating unit.

#### Application and Installation

Typical installation arrangements are shown in the illustrations.

1. This installation shows the U.D.B. type water heater connected to provide an independent hot water service to kitchen and bathroom.

The vent or expansion pipe is essential and should be taken from the highest point in the hot water piping. The cold water supply is taken from a ball tank. The U.D.B. type water heater must never be connected direct to the water mains.

The cold water supply pipe to the water heater cannot be used to supply any other cold water taps or outlets. The length of hot water pipe to the furthest hot tap should not exceed 30 ft.

2. This installation shows the water heater installed in a flat or bungalow. The cold water tank should be

fitted as high above the water heater as possible, and the hot water pipes from the water heater to the taps. should not rise above the level of the outlet union, when the head of pressure is less than 6 ft. Where the head room is restricted, a non-return valve about 1 ft. below water level in the vent pipe will improve the flow from the taps.

3. This installation shows the water heater connected to work in conjunction with a fired hot water system. In winter the water heater is fed with hot water from the boiler through the existing hot water tank. top element (500 watts) should always be left on, winter or summer. The system affords a double storage in winter, and ensures an adequate supply of hot water should the boiler go out. During the summer months the water heater will work entirely by electricity.

Two separate vent or expansion pipes are required. No other system of working in conjunction is practicable, nor is there any satisfactory way of utilising only one vent pipe.

4. This installation shows a coal-electric water heater connected to a saddle-boiler with damper control. The water heater is substituted for the traditional type of hot water tank without any additions to the pipework.

The cold water supply is taken from a ball tank and a vent or expansion pipe is provided from the highest point to the hot water piping. It should be noted that this vent or expansion pipe is essential and that the C.E.L. type water heater must never be connected direct to the water mains.

The ideal position for the water heater is on the wall in the kitchen or scullery adjacent to the boiler. This arrangement reduces the length of flow and return pipes to a minimum and provides a fairly short run of pipe to the tap at the sink, where hot water is drawn most frequently.

5. When connected to a boiler of more than 7,000/ 8,000 B.th.u. per hour output, the water in the heater will boil, due to the efficiency of the lagging, and arrangements must be made to utilise the excess heat in radiators or towel-rails. The diagram shows a towel-rail connected in parallel with the calorifier. It should be noted that the flow and return pipes to the towel-rail are taken from the main flow and return pipes well below the water heater. This arrangement is essential to guard against back-circulation and excessive consumption of electricity in summer when the fire is not in use.

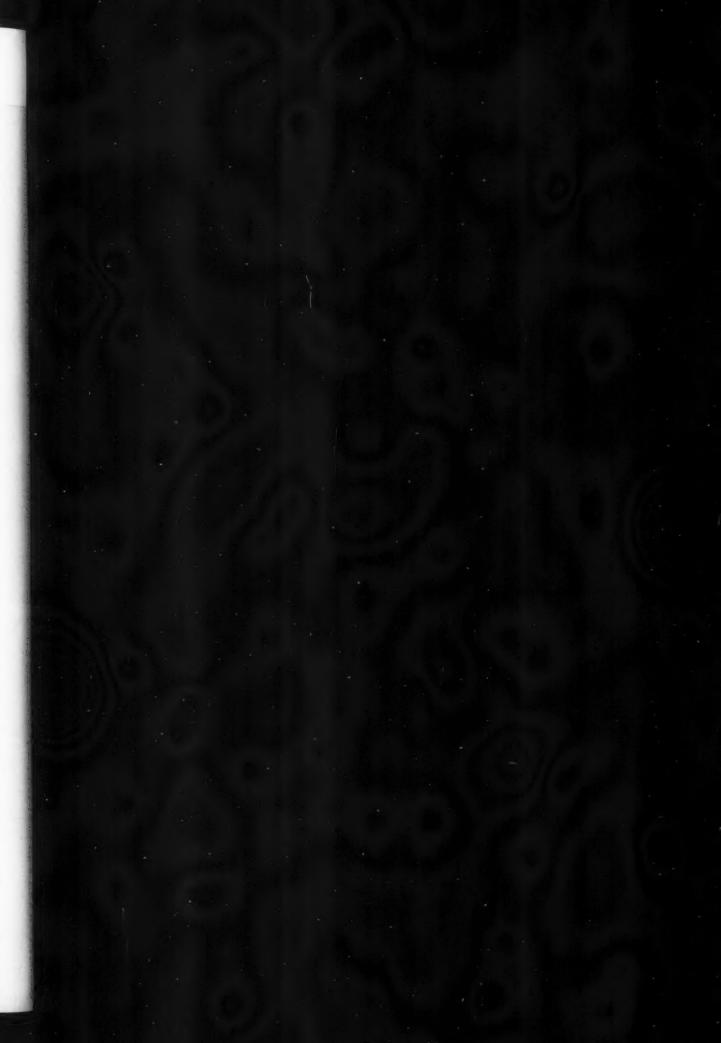
6. This installation shows a C.E.L. type water heater working from a larger boiler which is also used for central heating. In such cases it is usually most satisfactory to provide a separate flow and return of adequate size direct from the boiler tappings to the water heater.

Compiled from information supplied by:

Aidas Electric, Ltd.

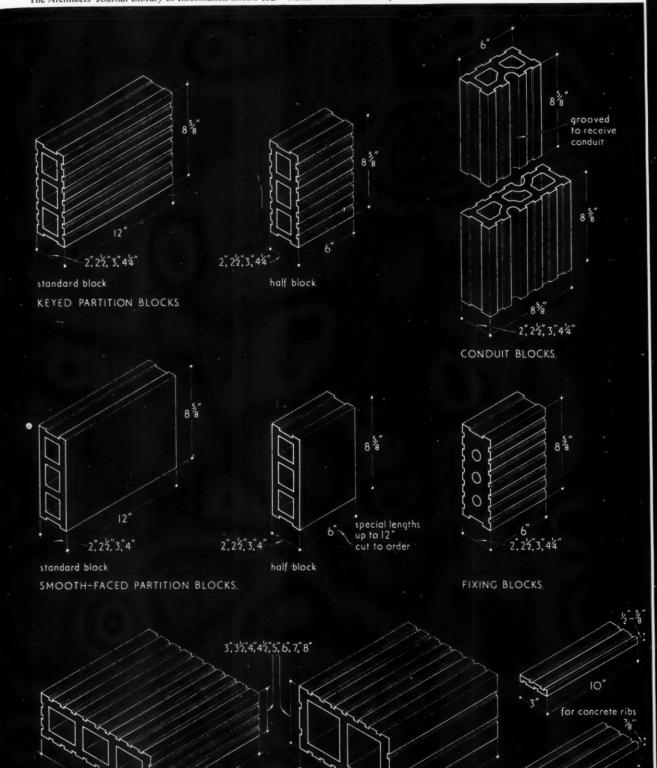
Address: Sadia Works, Rowdell Road, Northolt, Middlesex.

Telephone: Waxlow 1607.
Telegrams: Aidaselect, Greenford, London.





The Architects' Journal Library of Information Sheets 152. Editor: Cotterell Butler, A.R.I.B.A.



10

FLOOR BLOCKS.

FILLER TILES.

for panel heating

PHORPRES HOLLOW CLAY BLOCKS FOR WALLS, PARTITIONS AND FLOORS, Manufacturer: London Brick Company, Limited,

#### 14.B1 · PHORPRES · HOLLOW CLAY BLOCKS FOR WALLS, PARTITIONS AND FLOORS

This Sheet describes Phorpres hollow clay blocks for walls, partitions and floors.

Phorpres blocks are manufactured from gault (buff) and also weald (terra cotta) clays which are high quality engineering

The clays are extensively tempered and extruded into hollow blocks which are then entirely mechanically handled throughout a strictly controlled drying and burning process. The clays contain no lime or other injurious salts, and the burning process renders the material entirely inert, minimizing the occurrence of shrinkage or cracking in the finished plastered surface. The finished product is uniform in size and shape and free from excessive winding and bowing (see B.S. 1190:1944 for tolerances) ensuring minimum laying and plastering costs.

#### Sizes and Weights

Sizes	Weight per square yard of blocks (12 in number)		No. of yards per ton	
	Gault	Terra cotta	Gault	Terra
12" × 81" × 2"	86 93 102 132	93 102 112 140	26 24 22 17	24 22 20 16

#### Crushing Strength

Partition blocks: The crushing strength of individual blocks (gault) tested on edge is:-

2" blo	ocks	3" blocks		4" blocks	
Total load in tons (average)	Stress in lb. per aq. in. (average)	Total load in tons (average)	Stress in. lb. per sq. in. (average)	Total load in tons (average)	Stress in lb. per sq. in. (average)
12-53	1160	13.08	813	11-85	553

Floor blocks: The following is a typical test result taken upon 12 in. × 10 in. × 4 in. floor blocks (terra cotta).

Number	Crushing strength		
Number	Tons per sq. ft.	Lb. per sq. in.	
Average of 4 blocks	256	3990	

#### Strength of Walls

For the purposes of test, wall panels 9 ft. high × 4 ft. 6 in. wide were built in 1:3 rapid hardening cement and the following results were obtained:

Load tests o	a wi	Il panel	5		
				2" blocks	3" blocks
Failing load—tons				44-1	63.0
Failing load per ft. run-tons	0 0			9-53	13.91
Failing stress—Ib. per sq. in.	00	0.0	0 0	890 57·2	866 55·7
Failing stress in wall of blocks-lb.	per	sq. in.		1420	1890

Walls and partitions; Phorpres hollow clay partition blocks are adaptable building units for all types of partition work, internal linings to brickwork and party wall construction. They are manufactured to comply with the crushing strength tests laid down in B.S. 1190:1944 and can therefore take a full structural and load bearing part in building construction. Their strength is combined with lightness in weight and high fire-resisting qualities.

qualities.

The course height of 85 in. enables the block to be bonded

perfectly with 2\frac{1}{2} in. brickwork.

Constructional floors: Phorpres hollow clay floor blocks are also manufactured to comply with B.S. 1190:1944 and the requirements of local authorities for the construction of structural floors and roofs.

Righ from Belo

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D

Key for plaster: The bond or physical adhesion of a rendering or plaster is dependent upon the inherent porosity of the backing material, and in this respect Phorpres blocks possess a balanced absorption or suction value. This is further assisted by balanced absorption or suction value. This is further assisted by the mechanical keying provided by grooves of definite dovetail form. This mechanical key is of first importance in the early stages of drying and setting, when cracking may result from vibration, inevitable during construction. Such vibration without the support provided by mechanical keying may also interfere with, or even prevent, the development of the necessary physical adhesion. physical adhesion.

#### Laying Instructions

The general practice is to lay Phorpres hollow blocks in mortar of 4 parts sand to 1 part cement gauged with lime. This mix can, of course, be varied to suit particular conditions, but too rich a mortar and thick joints should be avoided. Elasticity of joint is of great importance in all partition work and for this reason also partitions should not be pinned up too tightly under beams. Owing to the texture of the material, only the minimum amount of water need be used.

Tests taken on a 3-in. partition block bonded together with mortar and plastered two coats on both faces giving an overall thickness of 4 in. for the wall section, gave the following results:-

Thickness of block	Cold face temp., ° F.	Hot face temp., ° F.	Thermal conductance (c) B.th.u./ sq. ft./hr. ° F. diff. of temp. between faces	Thermal resistance (R = c'.) No. of hrs. for passage of 1 B.th.u./ sq. ft. with 1° diff. of temp.
3"	84	106	0.87	1-15

#### Conduit Partition Blocks

These blocks have been specially designed to eliminate chasing for electrical conduits in finished work and to bond in with main partition walls.

The groove in each block coincides with that of the blocks above and below it to form a continuous channel. A conduit is thus provided for on one or both sides of the partition.

#### Fixing Blocks

These are manufactured for use with the standard partition blocks, to be built in where fixings are known, for skirtings, picture rails, etc.

#### Patents

Conduit partition blocks: The manufacturers are the patentees of these blocks.

This Series of Sheets on bricks and brickwork covers general data on, and applications of, common, facing, cellular and keyed bricks, hollow walling, partition and floor blocks.

Compiled from information supplied by:

#### London Brick Company Limited.

Africa House, Kingsway, London, W.C.2 Holborn 8282. Head Office:

Telephone:

Telegrams: Phorpres, Westcent, London.

Midland District

Office: Prudential Buildings, St. Philip's Place, Birmingham, 3. Telephone: Colmore 4141.

South Western District Office:

trict Office: 11, Orchard Street, Bristol, 1.
Telephone: Bristol 23004-5.

Northern District

Gascoigne Street, Boar Lane, Leeds, 1. Leeds 20771. Office:

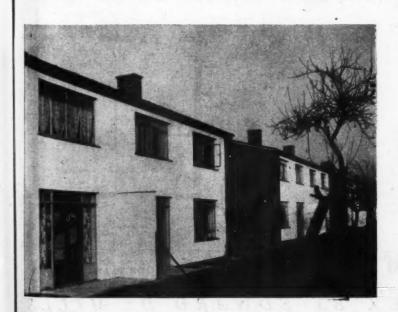
Telephone:

Right, the houses from the north-west. Below, from the south-west.



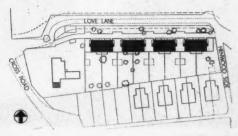
# HOUSES AT WOODFORD BRIDGE, ESSEX

DESIGNED BY EDWARD D. MILLS



GENERAL.—The client wished to build eight houses to let to selected tenants, at a cost determined by licensing conditions laid down by MOH. The local council required semi-detached houses, not exceeding 10 in number.

SITE.—This had no special restrictions. Love Lane will ultimately be made up and taken over by the local authority.



SITE PLAN



CONSTRUCTION.—This is of traditional brick cavity walls, part facings, rendered on part elevation and side elevation. The rear elevation is colour washed. The roof is of low pitch, copper on 1-in. fibre board. The ground floor is of concrete covered with linoleum. The first floor is of boarding on timber joists and covered with lino. Internal walls are of breeze block, plastered and distempered.

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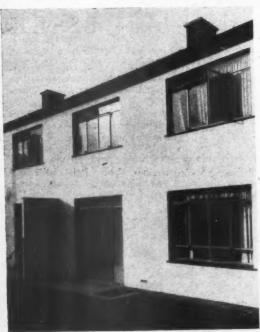
SERVICES.—Coal fires are in the living room and bedroom, electric portable heaters elsewhere. Water heating is by multipoint gas heater in kitchen.

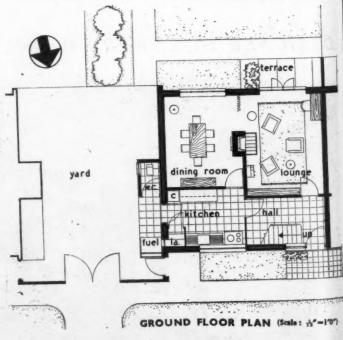
The general contractors were J. & J. Dean, Ltd.

Left, the entrance doors. Below, the garden front.



FIRST FLOOR PLAN





HOUSES IN ESSEX BY EDWARD D. MILLS

This week, instead of the normal article on developments in the Building Industry, Brian Grant deals with the new materials and designs on view at the Ideal Home Exhibition.

# THE IDEAL HOME EXHIBITION

By Brian Grant

#### IDEAL HOME

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After rather more than 40 years the Ideal Home, like Gilbert and Sullivan, has become a sort of national institution to which the architect, in his attempt to keep level with the instincts of the herd, must go, whether he wants to or not. So far as exhibitions are concerned, Olympia is a must every two years when the Montgomery's show is on, while every May there is the BIF. As a rough guess one would say that less than 10 per cent. of the visitors to the Daily Mail show will ever employ an architect, yet it is a show which every architect should see, if only because it is now an accepted show window for the display of the sort of consumer goods about which the average client may be expected to ask, and about which the architect must therefore know unless he is to be dismissed as out of date.

be dismissed as out of date.

After a series of thrilling glimpses into the private lives of Miss Rita Hayworth or of the Royal Family, the main attraction for the general public is, of course, the houses, to be found as usual, in the Hammersmith Road hall. Only since the war have the various Government departments thought it worth while to exhibit here, and the Ministry of Health's terrace houses, furnished by the Council of Industrial Design, are certainly the sort of thing in which one would quite like to live oneself. The prefabs, exemplified by Unity and Hawksley, one would not find at all embarrassing if one lived in the appropriate suburb, but the examples by private enterprise are the sort of thing which gives the architect the automatic creeps and makes the general buying public shudder ecstatically for the day when similar objects will be available almost off the peg.

So far as the rest of the exhibition is concerned, the general standard of display and of goods exhibited is moderate to low. In the furniture section Dunns of Bromley are once more top, so much so that I do not intend to mention them again. The CID furnishings of the MOW houses are a little mannered here and there, but the general standard here is high, and their selection from currently available goods provides a useful review of the better designed ranges. In the three-storey house notice particularly a prototype service trolley with a built-in electric hot plate.

As one might expect, the more interesting displays are in the heating and lighting section. Ascots have a new balanced flue water heater design, but the Gas Council and Electrical Development Association both seem to have made an effort to suit their displays to

As one might expect, the more interesting displays are in the heating and lighting section. Ascots have a new balanced flue water heater design, but the Gas Council and Electrical Development Association both seem to have made an effort to suit their displays to the audience, and I have little doubt that "Alice in Thermland" will be one of the high spots of the show, although to me the decor merely serves to obscure the goods displayed. EDA have quite an interesting series of kitchens showing the development of electrical equipment, but the living room looks more like a film set and would be better in one of the speculative houses.

In the heating section the Watts automatic gravity feed boiler is shown again by

LS



Three-storey terrace house, designed by the Ministry of Health and furnished by the Council of Industrial Design.

Brockhouse, who have also produced another model on the same lines, but slightly larger, and with an output of 72,000 BTU as against 40,000 for the smaller model. I have heard several enthusiastic reports of the smaller model, which needs filling and de-clinkering only once in 24 hours, both processes being extremely simple. The same firm also show a new domestic boiler (30,000 BTU) arranged for burning paraffin and similar fuels. This is a fabricated steel job finished in cream and black and with a Valor type vapourizing burner supplied from the usual constant level container of the type normally used for paraffin cookers. On the model shown control is by a hand-operated metering valve, but thermostatic control is also available.

Ascots, in addition to their usual range of multi-point heaters, show an interesting balanced flue type illustrated here. This is not yet in production and will probably not

be available for 18 months or so, the model now shown being a stage in the development of the design. So far as I remember, all heaters in the past have drawn their combustion air from the room in which they are installed, and therefore have to have a baffle or draught diverter to allow for variations in outside pressure produced by wind gusts. The baffle inevitably looks something of an afterthought, but in the new Ascot design the outer one-piece casing is airtight and the necessary air for combustion is drawn through a separate flue away from the external air, and not from the room. The products of combustion are similarly exhausted through a second adjacent flue way, whilst a wall terminal of special design performs the dual function of admitting air to the inlet flue and allowing a free exit for the combustion products without the possibility of re-circulation. To reduce internal air resistance in the heater, a two-stage



Furniture designed by Jacques Groag for the bedroom of a two-room flat, for a dress designer, as shown in the Ministry of Health exhibit furnished by the Council of Industrial Design.



The Unity house completed save for interior decoration, in 50 hours by 20 tradesmen. The walls are precast concrete slabs erected "dry", clipped and wired to both faces of the reinforced concrete framing with a 6" cavity in between them. The edges of the outer slabs have a ship-lap joint made watertight by pointing with a mastic gun.



high efficiency heat exchanger has been used, which incidentally effects a consider-able saving in the weight of metal normally required.

Operation of the main and pilot gas cocks is by a single rotary interlocking control, and this is also interlocked with the hinged cover of the lighting port, thus obviating any possibility of blow-back which might occur if the port were opened with the main burner light. alight. By comparison with present models of identical output, the balanced flue heater is considerably reduced in overall height and its operating principles remove many of the limitations which require considera-tion when installations of current types of instantaneous gas water heaters are desired in inadequately ventilated or enclosed spaces. As the air inlet flue passes down between the back of the heater and the face of the wall, the heater is slightly deeper from front to back than the other models, but this is not very noticeable and the whole design is very

much neater.
Ascots are also showing a standard multipoint heater modified to give constant tem-perature water supply by thermostat.

Kitchen fittings shown include a new Nevastane range by Benhams made in a number of different sizes, this firm also showing their well-established stainless sinks, plate racks and swivel mixing taps. also have two well-designed small cookers which I do not remember having seen before, as well as several other pleasantly designed fittings.

In the various ironmongery sections there is nothing very much new, but I notice that the Ingersoll lock people have now evolved an elaborate master system, it being impossible to convert any change or submaster key into a master key by filing it down, as the master key is larger than the subsidiaries. The standard Ingersoll lock, incidentally, has a rectangular section dead bolt which cannot be sprung from outside with the burglar's normal flexible outside with the burgiar's normal nexible celluloid, and most insurance companies will accept it as an alternative to a mortice deadlock. The same firm is also producing a small window lock known as the Limpet. This is a separate fitment which is sprung over a metal peg fixed to the window frame, and which prevents the window being overed from outside. opened from outside.

In the sections devoted more to decoration there are some pleasant new wallpapers on Sanderson's stand (designed by riugh Casson) as well as a full range of fabrics. Make a point of seeing this stand (No. See also the information centre organized by Semastic to show their various decorative tiles. Tiles in a number of forms are also shown by the Glazed and Floor Tile Manufacturers Association who have taken a facturers' Association who have taken a large area to show how their products can be used—quite a useful display as it is easy to forget in these days of economy the considerable range and variety of modern tiling; here are rooms of all kinds to demonstrate what can be done.

In a review of this length it is, of course, impossible to draw attention to all the firms connected with the building industry. See, among other things, the new small Hoover washing machines, W. H. Colt's brick on

mesh lathing (Colterro), shingles and ventimesh lathing (Colterro), shingles and venti-lators, and the cheapest of all television sets on the HMV stand—this is a simple enough design and it is said to be technically good. Quite the largest model I have ever seen is on the second floor of the Empire Hall: about the size of a tennis court, it shows a complete steelworks and workers' housing at a scale of 6 ft. to the inch, and is well worth looking at even if you don't like model railways. model railways.

model railways.

In general the whole show, as I have already said, is well worth a visit. Last year (and, I believe, the year before) everything on show was supposed to be on sale in the shops. This year the same conditions have been applied, and one would say that it has been reasonably well kept. The general public is far too tired of "export only" for manufacturers to be able to ignore the rules. to ignore the rules.



Stand designed by Hugh Casson for Sanderson's Ltd.

# FUEL FOR AGA COOKERS IS IN PLENTIFUL SUPPLY

ALL MODELS OF THE AGA COOKER
BURN EFFICIENTLY ON COKE...
AND SUPPLIES OF DOMESTIC COKE
ARE PLENTIFUL

RECENT REPORTS about difficulty in obtaining suitable fuel for cookers of slow combustion or heat conserving types have been misleading.

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Aga owners and prospective purchasers should not be concerned by these reports — the Aga burns coke!

#### THE AGA DESIGNED FOR COKE

In fact, all models of the Aga cooker have been designed specifically to burn coke—the cooker and water heater models for a minimum of 10 hours unattended, other models for a longer period.

Domestic coke is in plentiful supply. One ton of this fuel will last as long in an Aga as a ton of anthracite, and costs considerably less.

The special design and construction from high-duty chrome iron of the Aga firebox makes the Aga cooker suitable for burning all qualities of domestic coke of the correct size.

Many present Aga owners know from their own experience that coke is an efficient fuel for the Aga.

The Aga was designed, originally, in Sweden to burn coke.

With no natural coal resources of their own, the Swedes have always imported their fuel and they have always used coke for Aga cookers.

#### AUSTRALIANS USE COKE

The steady and increasing demand for Aga cookers in overseas markets substantiates still further the efficient performance of these cookers when fuelled with coke. In most of these countries, coke is the only available fuel.

In Australia, one of the best Aga export markets, Aga owners get satisfactory performance using coke even of inferior qualities. The increase in sales demands for the Aga proves further its success with this fuel.

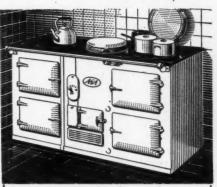
#### NO HARDSHIP FOR AGA OWNERS

It is in national interests that export demands for anthracite should be satisfied.

The export of this fuel, however, need not cause any hardship to present or prospective Aga owners.

Both in this country and abroad, the reputation of the Aga for efficiency and economy has been established by its performance as a coke-burning cooker.

The Aga saves fuel for the householder and the nation.



This is the Aga Model E Cooker for the larger household. Its guaranteed maximum fuel consumption per year it 3 tons using COKE or "Phurnacite".

#### ALL AGA MODELS BURN COKE

Night and day, the Aga is ready to cook. Using coke, its continuous burning fire needs fuel only twice in 24 hours, or 3 times for cookers with water heater and the heavy duty models.

Coke is the most economical smokeless fuel for all Aga models. It costs 20% less than anthracite. Any quality of the correct size is effective fuel for both domestic and heavy duty models in use in schools, hotels, hospitals, etc.

Domestic Aga models are priced from £85 to £115.

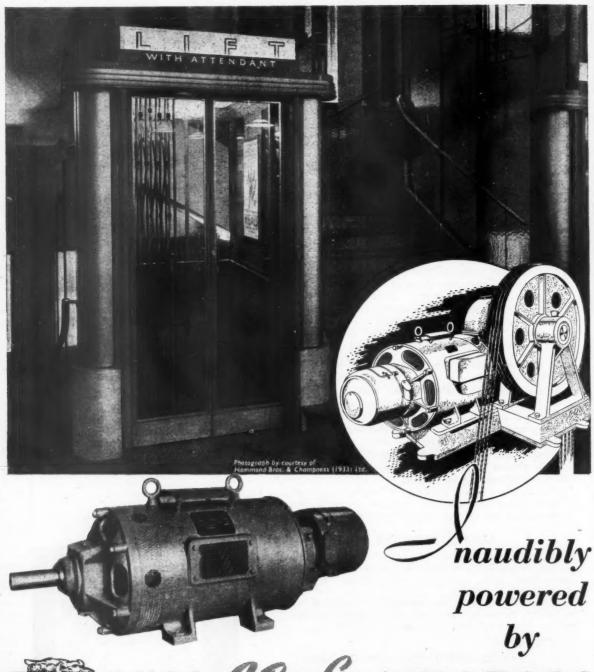


This is the Aga Model CB Cooker and Water Heater for the medium size family. Its guaranteed maximum fuel consumption per year is 3\[2\] tons using COKE or "Phurnacite".

#### AGA HEAT LIMITED

Orchard House, Orchard St., London, W.I

(Proprietors: ALLIED INONFOUNDERS LTD.)





BULL SUPERSILENT MOTORS

You can always rely on Bull Motors

BULL MOTORS (E. R. & F. TURNER LTD.,) IPSWICH, LONDON, MANCHESTER, BIRMINGHAM, NEWCASTLE, GLASGOW



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#### TECHNICAL SECTION

#### ECONOMY IN THE USE OF STEEL

The MOW Steel Economy Committee's Interim Report on the possible economies in the use of steel for building and the constructional engineering industries,\* is a further step towards a more efficient use of steel, a matter repeatedly advocated in this Journal.

Broadly speaking, the problem is technical and psychological. On the technical side, much progress has been made by research, improvements in materials, more refined methods of design, etc. This progress is partly reflected in the new issue of BS 449, C.P. 113:1948,† and C.P. 114:1948. The fact that even the new codes lag behind technical development is indicative of the psychological difficulties to be overcome. The following statement of the Interim Report is characteristic of the situation:—

"In the course of the discussions with the constructional groups it has become clear that an educational campaign upon a very widespread scale must be embarked upon if the full economies resulting from improved specifications and better design practice are to be secured. It is of vital importance that the consulting engineers and the manufacturing firms should be convinced of the desirability of adopting up-to-date practice and that their clients should be equally seized of the necessity for their adoption."

The report suggests three lines of action:—(1) Administrative action to ensure that the new design specifications for steel and reinforced concrete are adopted. (2) Action by departments, socialized industries and industry generally to ensure the more extensive use of shop-welded constructions and of steel of higher quality. (3) Educational publicity and propaganda, in which the professional institutions could be most helpful.

The last point is of the greatest importance, since no administrative action can succeed without the full co-operation of those who are actually engaged on and responsible for the use of steel. For structural steel, the more general adoption of welding is suggested (in accordance with the policy pursued by this Journal) and the more frequent use of high tensile steel recommended. The Committee also supports the more extensive use of cold rolled sections made from light gauge strip steel.

In reinforced concrete construction, the Committee seems to favour an increase of the present working stress for mild steel from 18,000 to 20,000 lb. per sq. in., but this has been opposed by the Reinforced Concrete Association. This is a striking example of the psychological problem and of the necessity of education. 20,000 lb. per sq. in. limit is admitted not only in France, as stated in the report, but also in Germany and other Continental countries, although the yield point of Continental steel is lower than the minimum specified in BS15:1948. Regarding cold worked steel to BS 1144, the new Code requires a thorough revision if economy is to be achieved.

The most promising development in new building methods by which steel can be saved is pre-stressed concrete. The greatest handicap for the introduction of pre-stressed concrete on a large scale is the shortage of high tensile wire.

One essential point is not dealt with by the Committee: the use of reinforced concrete instead of structural steel in multi-storey buildings. The traditional material in this country, as in USA, is structural steel, whilst on the Continent and in South America, where saving in steel has always been important, multi-storey buildings of greater height than usual in this country are done in reinforced concrete. A good example of similar tendencies in this country is Needwood House; the eight-storey block of flats of the LCC at Stoke Newington. This was originally planned as a steel-framed brick-faced construction, but has now been erected in monolithic concrete. On the other hand, the new Government Offices at Whitehall Gardens§ with a weight of structural steelwork of about 7,500 tons, now being encased in concrete, is a good demonstration how not to build during scarcity of steel.

<sup>\*</sup> See AJ for March 3, 1949, p.201. † See AJ for November 4, 1948, pp. 427, 429. ‡ See AJ for February 24, 1948, p. 177. § See Inf. Centre No. 20.71.

DESIGN FABRICATION ERECTION

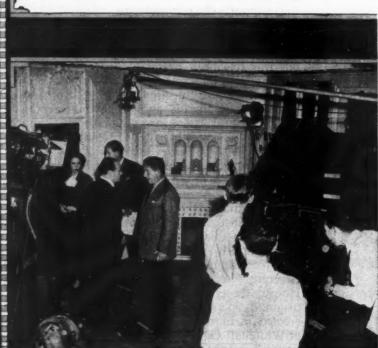
> BOULTON PAUL LTD

Filming "Edward, My Son" produced in the new M.G.M.
British Studios at Elstree. We fabricated and erected the steel structure, using 1020 tons of steel.

Architects:
GUY MORGAN AND PARTNERS,
F.F.R.I.B.A.

General Contractors: SIR ROBERT McALPINE & SONS

STEEL CONSTRUCTION . WELDED OR RIVETED



LONDON

ENG QS

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

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#### 2.73 planning: general PLANNERS' INFORMATION

Planner's Guide to Selected Sources of Information in Great Britain: Part 1: Periodicals and Abstract Publications. E. G. Schoendorff. (APRR Information Bulletin, Nov., 1948, Reference Sheet 15. 6d.)

First section of comprehensive information guide for planners. Classified list of periodicals and abstract publications.

The guide lists periodicals under the headings of;—architecture, building, housing, town and country planning; urban and rural land use, landscape design, preservation; geography, climate; civil engineering, surveying, power and water supply, transport; public administration; education, health, recreation; sociology, economics, statistics. Each entry shows frequency of publication, subscription rates, publishers and their addresses. Abstract publications are grouped together and an indication of their coverage as concerning the planner is provided unless the title gives sufficient information on scope.

Further sections of the guide will cover London libraries and their relevant scope, information services for planners, year-books, general reference books, and directories of Ministries, other public bodies, organisations, and learned societies.

#### 6.20 planning: social and recreational TREE PLANTING, URBAN AREAS

Memorandum on Tree Planting in Urban and Sub-Urban Areas. Department of Health for Scotland. (HMSO, 1948, 2d.)

Useful and informative pamphlet of eight pages providing concise data on trees generally suitable for planting on footways and verges of streets and roads in urban and sub-urban areas of Scotland, with notes on soil, climate and heights of trees. Special lists of trees suitable for parks and large open spaces, and of common shrubs for planting in small areas or for association with trees in parks and open spaces. Introductory notes on planting programmes in relation to planning schemes, and on importance of maintenance by skilled personnel. Planting recommendations for general guidance regarding size, form and height of trees, and in particular for street or roadside planting.

#### 19.60 construction: details PUMICE CONCRETE UNITS

Factory Roofed with Pumice Concrete Units. (Eng. News-Record [USA], Dec. 9, 1948, pp. 89-91.)

A half-million square feet of 4-in, precast slabs used in roof for a porcelain factory.

Four-inch thick precast slabs of pumice concrete with cylindrical holes to reduce weight were used for the roof of a new pottery plant at Torrance, California. Unusual methods were adopted to place the units, most of which were 10 ft. long, 2½ ft. wide, weighing 500 lb. Slabs were poured on steel plates so that the bottom, which forms the ceiling, is very smooth and requires no plaster. Vacuum process was used, with a wet mix for ease in placing, and excess water was drawn out by suction mats. This gave a texture to the top for better bond with the roofing material. The holes were formed by inflated rubber tubes. The density of the concrete is 97 lb./cu. ft. The slabs are designed for a live load of 20 lb./sg. ft. but under test failure was

The slabs are designed for a live load of 20 lb./sq. ft., but under test failure was not produced until a load of some 290 lb./sq. ft. was applied.

The placing of the slabs was done with

The placing of the slabs was done with three different methods, depending on the type of the roof (saw-toothed, pitched, flat). The equipment was so efficient that 9,000 sq. ft. of roof slab were placed in one 8 hr. working day.

#### 21.26 construction: miscellaneous BRICK TOWER STRENGTHENED

Concrete Prismatic Shell Reinforces 85-yearold Brick Church Tower. A. Roger Kelly. (Civil Eng. [USA], Nov., 1948, pp. 32-3.)

Collapse of brick tower avoided by provision of a prismatic reinforced concrete shell inside.

The 90 ft, high brick tower of a church in Binghamton, NY, built in 1860-1862, and supporting a wood-framed spire of 60 to 70 ft. was in an unsafe condition, caused partly by uneven settlement of the foundations, partly by deterioration of the brickwork. The walls bulged about 3 to 5 in. at 50 ft. above ground level. A sway of up to 18 in. was observed at the top of the spire. In order to retain the tower and spire without changing their outward appearance, an independent reinforced concrete tower was built inside the brick tower to support the spire, absorb its sway and support the brickwork against collapse. The reinforced concrete shell is supported on a new raft, independently of the existing foundation.

The article describes details of the construction and various difficulties that had to be solved.

#### 24.105 lighting LIGHTING STANDARDS

Trends in Illumination Standards. M. A. Tinker. (Illum. Eng. [USA], September, 1948, p. 866.)

Attack on high intensities. Interesting.

This is a severe criticism of the American school which, under Luckiesh's leadership, is developing arguments for very high intensities of artificial lighting. The author presents a case purporting to show that intensities in the region of 10-25 foot-candles are sufficient for practically any day-to-day purpose, and he reviews critically the current recommendations of the American IES Code. He attacks a great many of Luckiesh's studies which were intended to support the idea of high intensities, sometimes of several hundred foot-candles. A long defence by Luckiesh is printed.

Architects who think that intensities recommended here are based on what the market will stand will read this article with much interest.

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.

#### QUESTIONS AND ANSWERS.

2980 WOOD WOOL SLABBING: PARTITIONS

Q What is the thermal conductivity of wood wool slabs to be used as partitions between rooms? Is this considered to be a suitable material for fire resistance?

A The thermal conductivity of wood wool slabs is 0.57 B.th.u. per sq. ft., per hour, per 1 in. thickness, per 1° F. difference in temperature between the two faces. Tests at the Building Research Station have shown that 2-in. wood wool slabs with ½-inch gypsum plaster on both sides have a fire resistance period of 1 hour (Grade D) and 3-inch slabs a fire resistance period of 2 hours (Grade C.).

The form printed below is to assist readers requiring up-to-date information on building products and services. Complete and post it to The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1, and the advertisers listed will be asked to supply information direct.

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#### PRICES

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.

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

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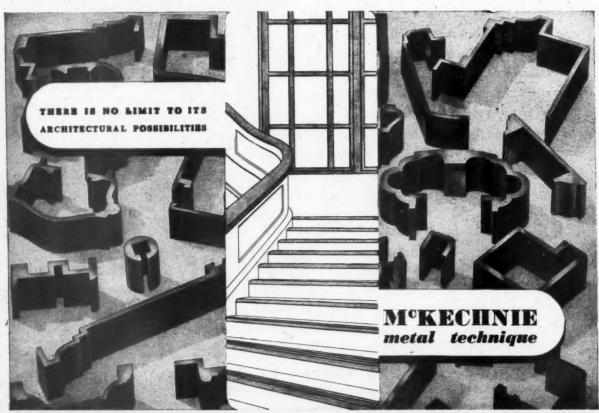
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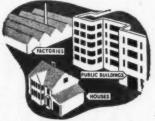
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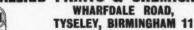
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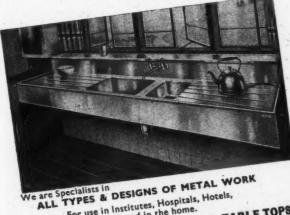
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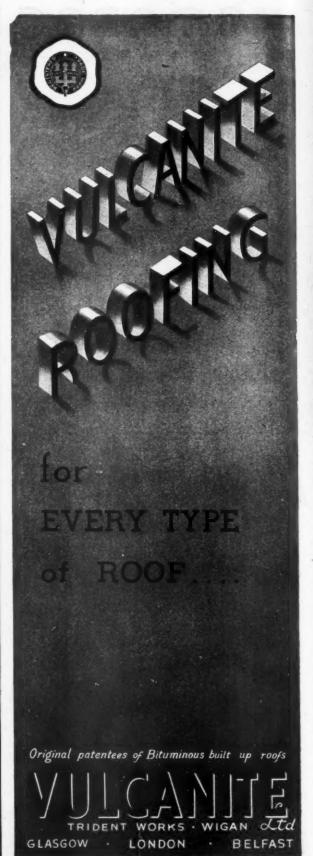
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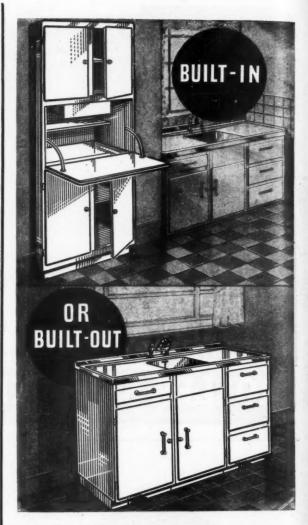
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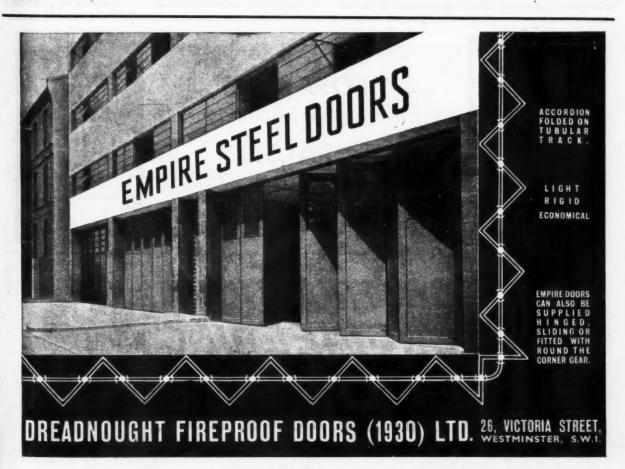
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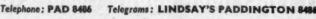
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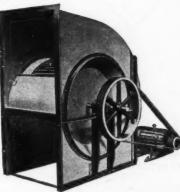
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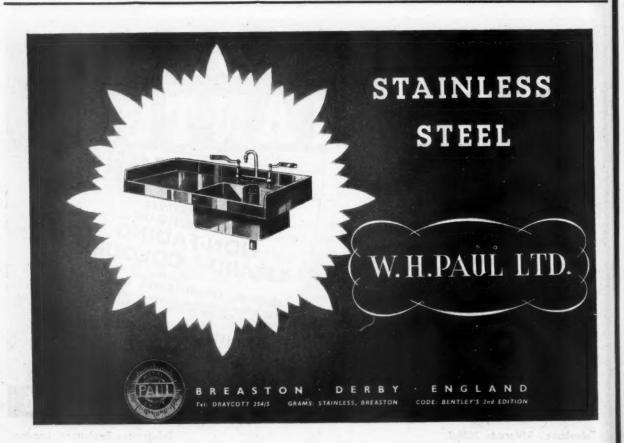
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ARCHITECTURAL ASSISTANTS urgently required. Qualifications: At least three years' Architectural training, and, preferably, some experience in an Architect's office. Ability to carry out under supervision working drawings of smaller works from prepared sketch plans, and elevations. Knowledge of subsidiary duties common to an Architect's office. Some testimonies already accepted and/or in a position to sit for the Intermediate examination of the Royal Institute of British Architects.

STRUCTURAL ENGINEERING ASSISTANTS urgently required. Qualifications: Basic knowledge Static Mechanics, properties of materials, and structural detailing and design obtained over a period of not less than three years at a Technical College, plus one year in a Structural Engineer's office supplemented by Technical Classes. Capable of site surveying, dealing with specifications, and making reliable reports.

SANITARY ENGINEERING ASSISTANT urgently required. Qualifications: Three years as an Apprenticed Pupil or Assistant in a Civil Engineer's Drawing office and three years' partime study in Engineering subjects, including drainage and water supply, and at least one year's experience in a Civil Engineer's Drawing office, experience, and drawing office technique are required. Preference given to candidates who have passed for Associate Membership of the Institution of Municipal Engineer's, the Intermediate examination or the Testamur examination of the Institution of Municipal Engineers, the Intermediate examination or the Testamur examination of the Institution of Municipal Engineers, the Intermediate examination or the Testamur examination of the Institution of Municipal Engineers, the Intermediate examination or the Testamur examination of the Institution of Municipal Engineers, the Intermediate examination or the Testamur examination of the Institution of Municipal Engineers, or equivalent, The commencing salary for all these posts at a maximum of £495 per annum. Entering salary is increased by £290 per annum for each year of age abo

CITY OF STOKE-ON-TRENT.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited from saitably qualified persons, for the following appointments to the permanent staft:—

(a) ASSISTANT ARCHITECTS. Salary A.P.T. Div. Grade VI, £395-£560.

(b) ASSISTANT ARCHITECTS. Salary A.P.T. Div. Grade V. £290-£570.

(c) ASSISTANT ARCHITECTS. Salary A.P.T. Div. Grade III, £460-£495.

(d) ARCHITECTURAL ASSISTANTS. Salary A.P.T. Div. Grade III, £460-£495.

(e) ASSISTANT QUANTITY SURVEYORS. Salary A.P.T. Div. Grade III, £459-£495.

The selected applicants will be required to pass a medical examination and the appointments will be subject to the usual conditions applicable to Local Government service.

Previous experience of Local Government work is not essential.

Applications giving date of birth, particulars of training and experience, etc., with copies of two recent testimonials, should be received by J. R. Piggott. F.R.I.B.A. City Architect, City Architect's Department. Kingsway, Stoke-on-Trent. endorsed with the title of the appointment applied for, not later than Friday. 18th March. 1949.

HARRY TAYLOR.

Town Hall,

Stoke-on-Trent.

Town Hall, Stoke-on-Trent. 22nd February, 1949.

COUNTY BOROUGH OF MIDDLESBROUGH.

EDUCATION COMMITTEE.

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

(a) ONE CHIEF ASSISTANT ARCHITECT, A.P.T. Division VII. (Salary £685—£760 p.a.).

(b) ONE ASSISTANT ARCHITECT, A.P.T. Division VII. (Salary £685—£760 p.a.).

(c) THREE ASSISTANT ARCHITECTS, A.P.T. Division VI. (Salary £595—£660 p.a.).

(d) ONE ARCHITECTURAL ASSISTANT, Misc. Grade I. (Salary £596—£70 p.a.).

(d) ONE ARCHITECTURAL ASSISTANT, Misc. Grade I. (Salary £315—£360 p.a.).

Applicants for appointment (a) must be Associates of the Royal Institute of British Architects; be fully conversant with the design and construction of school buildings in accordance with the requirements of the 1944 Education Act, and be capable of the supervision of Drawing Office staff.

Applicants

Office staff.

Applicants for appointment (b) must be Associates of the Royal Institute of British Architects with experience in the design and construction of school buildings and capable of carrying out

large contracts.

Applicants for appointment (c) should preferably be fully qualified architects with experience of the design and construction of school build-

Applicants for appointment (d) should be neat draughtsmen with general architectural experience.

perience.
Forms of application and general conditions of service may be obtained from the Director of Education, Education Offices, Woodlands Road, Middlesbrough.

E. C. PARR,

E. C. PARR, Town Clerk.

MERIONETH COUNTY COUNCIL.

Applications are invited for the following appointment in the County Planning Depart-

SENIOR PLANNING ASSISTANT. Salary \$240, rising by 3 annual increments of £15 to a maximum of £496. Applicants should have experience in all matters appertaining to the planning of a large rural area. The County of Merioneth includes over 500 square miles of potential National Park and the work offers special opportunities in this field. An appreciation of the problems of such an area is desirable.

appreciation of the problems of such an area is desirable. Preference will be given to candidates who have at least passed the Intermediate Examination of the Town Planning Institute and who have had previous planning experience in the Local Government Service.

The successful applicant should be prepared to run a motor car for official purposes, for which a travelling allowance will be paid.

The appointment is subject to the terms and conditions of service applying to the administrative, technical and clerical officers of the County Council. The appointment will be terminable at he end of any month by one month's notice in writing on either side.

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

Applications, stating age, qualifications, present position and salary, previous appointments held and full details of experience, accompanied by copies of two recent testimonials, are to be sent to the undersigned not later than Saturday, March 19th, 1949

HUGH J. OWEN,

Clerk of the County Council.

HUGH J. OWEN, Clerk of the County Council.

County Offices, Dolgelley, Merioneth. 21st February, 1949.

Dolgelley, Merioneth.
21st February, 1949.

COUNTY BOROUGH OF BOLTON.
HOUSING DEPARTMENT.
Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT on the permanent staff of the Housing Department, at a salary in accordance with Grade V of the A.P.T. Division of the National Joint Council Scales, viz., £520, rising by three annual increments to a maximum of £570 per annum.
Applicants must be fully experienced in the design and preparation of working drawings, details, etc., for municipal housing schemes. The successful applicant will also be required to assist in the preparation of Bills of Quantifies. Preference will be given to members of the R.I.B.A. or candidates possessing similar qualifications.
The appointment will be superannuable, and the person appointed will be required to pass a medical examination.
Applications stating age, qualifications, and details of experience, and accompanied by copies of two recent testimulais, should be sent to the undersigned endorsed "Architectural Assistant, Housing Department," not later than 25th March. 1949.

PHILIP S. RENNISON.

PHILIP S. RENNISON. Town Hall, Bolton.

CITY OF BATH.
CITY ENGINEER'S DEPARTMENT.
ARCHITECTURAL SECTION.
Applications are invited for the following pointment on the permanent staff of the City ingineer:

Engineer:—
JUNIOR ARCHITECTURAL ASSISTANT.
Salary A.P.T. I or II (£390-£455 or £420-£465),
denending on qualifications and experience.
The appointment will be subject to the provisions of the Local Government Superannuation Act. 1937, and the person appointed will be required to pass a medical examination.

Applications, stating age, qualifications and experience, together with names and addresses of three referees, should be sent to the City Engineer, Guildhall, Bath, not later than 19th March, 1949.

JARED E. DIXON, Town Clerk.

Guildhall. Bath. 1st March, 1949.

Bath.

1st March, 1949.

NORTH EAST METROPOLITAN REGIONAL

Applications are invited for the appointment of
ASSISTANT ENGINEER in the Architect's
Section on the Headquarters Staff. Salary scale,
2840×225—2990 (including London Weighting).

Applicants should have good experience of
hospital heating and hot water installation,
design and operation; should be capable of preparing technical reports, and where required
designing such installations and supervising the
work. They must be engineers of professional
standing and be members of the Institution of Civil
Engineers, Institution of Mechanical Engineers,
or Institution of Electrical Engineers,
Appointment is subject to medical examination
and the provisions of the National Health Service
(Superannustion) Regulations, 1947/48.

Applications showing name, age, qualifications,
present position and salary, and giving brief
details of experience, together with the names of
three referees, should reach C. E. Nicol. Secretary, North East Metropolitan Regional Hospital
Board, 11a, Portland Place, London, W.I., within
14 days of the appearance of this advertisement.

Canvassing disqualifies.

BERKSHIRB COUNTY COUNCIL.
Applications are invited for the following pointments in the County Architect's Depart-

BERKSHIEH COUNTY COUNCIL.

Applications are invited for the following appointments in the County Architect's Department:

(a) TWO ASSISTANT COUNTY ARCHITECTS. Salary £750×£25-£250. Candidates must be Membera of the Royal Institute of British Architecta. They must be capable of taking complete charge of Architectaral Work in part of the County, must have high ability in planning, design and construction, and be able to supervise and control staff.

(b) ASSISTANT COUNTY ARCHITECT (ADMINISTRATIVE). Salary Grade VIII £685—£760. Candidates must be members of the Royal Institute of British Architects with considerable professional experience of Local Authority administration and organisation of contracts, and must have had experience in negotiating approval under the various recent Acts and be fully conversant with their requirements.

(c) ASSISTANT ARCHITECT. Salary Grade VI, £595 to £660. Candidates must be members of the Royal Institute of British Architects, with considerable experience in the design and construction of modern buildings and be capable of taking charge of large contracts.

(d) TWO ARCHITECTURAL ASSISTANTS. Salary Grade III, £450-£455. Candidates must be denomated and the thoroughly experienced, in the preparation of working and detail drawings, and specifications for both new buildings and alterations to existing buildings.

(e) PRINCIPAL ENGINEER. Salary Grade VIII, £658-£760. Candidates must be Members of the Institution of Reating and Ventilating Engineers, capable of maintaining all heating, electrical, mechanical and ventilating installations in all Council properties and also be able to prepare designs, specifications and estimates for new installations and supervise their erection.

(f) TWO ASSISTANT QUANTITY SUR-VYORS. Salary Grade VIII, £658-£760. Candidates must be Members of the Royal Institution of Chartered Surveyors and have had considerable experience in the preparation of estimates for heating and ventilating installations in all Council properties and also be able to prepare desig

Shire Hall, Reading

MIDDLESEX COUNTY COUNCIL.
Applications are invited for the following
ppointments in the County Architect's Depart-

ment:—
AECHITECTS.
(a) SENIOR ASSISTANT ARCHITECTS.
A.P.T. Grade VIII, commencing salary £715 p.a.
× £25—£790 p.a. Must be qualified Architects with wide experience in the design, planning and construction of school buildings.
(b) ASSISTANT ARCHITECTS, A.P.T. Grade VII, commencing salary £665 p.a. × £25—£740 p.a. Must be qualified Architects with high ability in design and able to take charge of large contracts.

VII, commence and able to take charge ability in design and able to take charge ability in design and able to take charge large contracts.

(c) ASSISTANT ARCHITECTS, A.P.T. Grade VI, commencing salary £625 × £20(2) × £25(1)—£690 p.a. Must be qualified Architects; ability in design essential.

(d) ARCHITECTURAL ASSISTANTS, A.P.T. Grades II, IV and V (combined). (£450—£600 p.a. Commencing salary according to qualifications and experience).

Grades 11, 12 and v. Commencing salary according to qualifications and experience).

BNGINEERS.

(e) SBNIOR AREA STRUCTURAL ENGINEERS, A.P.T. Grade VIII, commencing salary £715 p.a. × £25—£790 p.a. Must be experienced in design of structural steelwork and reinforced concrete and be capable of taking charge of subsection under general supervision of Chief Structural Engineer.

(f) SENIOR AREA HEATING ENGINEERS, A.P.T. Grade VIII, commencing salary £715 p.a. × £25—£790 p.a. To take charge of a staff of engineers designing heating, domestic hot water, ventilation, gas and kitchen installations, under the general supervision of Chief Engineer.

(g) SENIOR AREA ELECTRICAL ENGINEERS, A.P.T. Grade VIII, commencing salary £715 p.a. × £25—£790 p.a. To take charge of staff of engineers designing electric lighting and power installations under general supervision of Chief Engineer.

staff of engineers designing electric lighting ampower installations under general supervision of Chief Engineer.

(h) HEATING ENGINEERS, A.P.T. Grade VI (2835—2890 p.a.). Thoroughly experienced in design of heating, domestic hot water, ventilation, gas, kitchen installation and engineering services generally, including specifications and supervision of contracts, etc.

(b) ELECTRICAL ENGINEERS, A.P.T. Grade VI (2825—2899 p.a.). Thoroughly experienced in design of electric lighting and power installation, including specifications and supervision of contracts. Experience in electric lifts and refrigeration an advantage, etc.

All salaries quoted include London Weighting for 28 years and over. Betablished and pensionable staff subject to medical fitness.

Application forms to be obtained (stamped addressed envelope required) from The County Architect, 10, Great George Street, Westminster, B.W.I. to be returned by 26th March, 1949 (quoting F.419A.J.). Canvassing discussifies.

(C.W. RADCLIFFE, (Clerk of the County Council.

SALOP COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following
appointments to established posts in the Depart-ARCHITECTURAL.
(a) CHIEF ASSISTANT ARCHITECT. Salary

(e) UNLES ASSISTANT ARCHITECTS.
(735 to £810 p.a.
(b) SENIOR ASSISTANT ARCHITECTS.
A.P.T. Grades V.VA. Salary £520 to £610 p.a.
Applicants for post (c) must be members of
the R.I.B.A. and have had a wide experience in
the design and construction of educational build-

the R.I.B.A. and have had a wine experience in the design and construction of educational buildings.

QUANTITY SURVEYING.

(a) CHIEF ASSISTANT QUANTITY SURVEYOR, A.P.T. Grades VII-VIII. Salary £535 to £760 p.a. T. Grades VII-VIII. Salary £535 to £760 p.a. T. Grades VII-VIII. Salary £535 to £760 p.a. P.T. Grades V.YI. Salary £520 to £660 p.a. (a) ASSISTANT QUANTITY SURVEYOR. A.P.T. Grades V.YI. Salary £420 to £325 p.a. (d) ASSISTANT QUANTITY SURVEYOR. A.P.T. Grades II-III. Salary £420 to £496 p.a. (e) ACCOUNTS CLERK, A.P.T. Grades I-II. Salary £420 to £456 p.a. Applicants for post (a) must be members of the R.I.C.S. (Quantities Division) and have had administrative experience.

3. ENGINEERING SECTION.

(a) SENIOR ASSISTANT ENGINEER, A.P.T. Grades JII-V. Salary £520 to £560 p.a. (b) ASSISTANT ENGINEER, A.P.T. Grades JII-V. Salary £450 to £552 p.a. (b) ASSISTANT ENGINEER, A.P.T. Grades JII-V. Salary £450 to £552 p.a. (b) ASSISTANT ENGINEER, A.P.T. Grades JII-V. Salary £450 to £552 p.a. (b) ASSISTANT ENGINEER, A.P.T. Grades JII-V. Salary £450 to £552 p.a. (c) Applicants for post (d) must be experienced in the preparation of drawings and specifications for central heating and hot water supply installations.

the preparation of drawings and specifications for central heating and hot water supply installations.

Applicants for post (b) must have a good knowledge of the practical side of electrical enquipment, and be capable of supervising electrical installations and maintenance. The successful applicant will be required to provide his own car, and travelling expenses in accordance with the County Scale will be paid.

4. MAINTENANCE SECTION.

BUILDING INSPECTOR, A.P.T. Grades II-III. Salary 2420 to 495 p.a.

Applicants must have a practical knowledge of building work, and preference will be given to those who have experience in the supervision of building contracts and the preparation of specifications and reports.

The successful applicant will be required to provide his own car, and travelling expenses in accordance with the County Scale will be paid.

All the foregoing appointments will be subject to one month's notice in writing on either side; to the terms of the National Joint Council's Scheme of Conditions of Service, and to the provisions of the Local Government Superannuation Act, 1937. Successful applicants will be required to pass a medical examination.

Application forms for any of the appeniments may be obtained from the County Architect, A. G. Chant, F.R.I.B.A., 6, Belmont, Shrowsbury, to whom the forms must be returned, accompanied by copies of not more than three recent testimonials, not later than Saturday, 2nd April, 1949. When applying for forms, applicants must clearly state for which appointment they wish to make application.

Shrowsbary.

G. C. GODBER, Clerk of the Council.

Shrewsbary. February, 1949.

Shrewsbary.

Pebruary, 1949.

COUNTY BOROUGH OF GATESHEAD.
Applications are invited for the following appointments:—

OUNTY BOROUGH OF GATESHEAD.
Applications are invited for the following appointments:—

1) SENIOR ASSISTANT QUANTITY SURVEYOR.
A.P.T. Grade VI (£956-£266 p.a.).
(2) ASSISTANT QUANTITY SURVEYOR.
A.P.T. GRADE III (£450-£495 p.a.).
(3) CLERK OF WORKS, A.P.T. Grade IV (£480-£225 p.a.).
Candidates for (1) should have passed the Final Examination of the R.I.C.S.. and should have a sound knowledge of Quantity Surveying in all its branches. They should be well experienced in the preparation of Bills of Quantities, Specifications, Estimates, Measurement of Work for Interim and Final Certificates and the Settlement of Final Accounts.
Candidates for (3) should have passed the Intermediate Examination of the R.I.C.S.. and should have a sound knowledge of Quantity Surveying in all its branches, together with experience in measurement, abstracting and billing.
Candidates for (3) should hold the Diploma of the Institute of Builders, or similar qualification, and should have had provious experience in a similar capacity. They should have a sound knowledge of all branches of the Building Trade and should be capable of measuring un work done and preparing schedules of materials required.

Experience in supervision of work by Direct Labour, including the erection of houses, would be an advantage.

Labour, including the effection of includes, be an advantage.

The appointments will be subject to the Local Government Superannuation Act, 1937, and to one month's notice on either side. The successful candidates will be required to pass medical examinations.

examinations. Applications, to be made on forms obtainable from the Chief Architect, should be returned together with copies of three recent testimonials, to H. J. Cook, A.R.I.B.A. M.I.Struct.E. Chief Architect. Municipal Buildings. Swinburne Street, Gateshead, 8, not later than the Zist March, 1949.

J. W. PORTER, Town Clerk.

Town Hall, Galeshead, 8.

METROPOLITAN BOROUGH OF LEWISHAM. Applications are invited for the appointment of a TEMPORARY CLERK OF WORKS for the erection of a block of flats. Salary scale A.P.T. Division Grade IV, £480 rising to £525 per annum.

Experience in reinforced concrete construction and of multi-storey flats would be an advantage. The appoint nent will be subject to the Reiss and Regulations of the Council from time to time in force relating to temporary officers, to termination by one month's notice on either side, and to the successful candidate passing a medical examination satisfactorily.

The person expointed will be required to devote his whole time to the duties of the post. Applications in writing, stating age, qualifications in writing, stating age, qualifications and experience, should be addressed to the Borough Architect, Municipal Offices, Canadian Avenue, S.E.6, in an envelope endorsed "Appointment of Clerk of Works."

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

ALAN MILNER SMITH, Town Clerk. Cetford, S.E.6.

Lewisham Town Hall, Catford, S.E.6. 1st March, 1949.

BOROUGH OF SOUTHGATE.

BOROUGH OF SOUTHGATE.

BOROUGH ENGINEER AND SURVEYOR'S

DEPARTMENT.

APPOINTMENT OF CHIEF ARCHITECTURAL

ASSISTANT.

Applications are invited for the above meationed appointment in the Department of the Borough Engineer and Surveyor.

The post is graded A.P.T. VII-VIII plus the appropriate London Weighting, and the commencing salary will be fixed within the Grades mentioned in accordance with the qualifications and experience of the successful candidate.

Applicants must be Associate Members of the Royal Institute of British Architects or hold an equivalent qualification.

Forms of application may be obtained from the Borough Engineer and Surveyor and should be returned to the undersigned not later than 9 a.m. on Monday, 21st March, 1949.

Canvassing, directly or indirectly, will be a disqualification.

GORDON H. TAYLOR.

GORDON H. TAYLOR, Town Clerk Town Hall, Palmers Green, London, N.13. 26th February, 1949.

LONDON COUNTY COUNCIL.

QUANTITY SURVEYORS.

Vacancies exist for Quantity Surveyors in the Housing and Valuation Department, for work is connection with the development of cottage estates and the construction of multi-storey dwellings, at salaries of up to 2700 a year, the commencing salary in each case being determined according to qualifications and experience. Successful candidates will be required to contribute to the Council's Superannation and Provident Fund, and will be eligible for appointment to the Council's permanent staff and for advancement on the occurrence of vacancies.

Duties will include:

(a) Measurement of work in construction of houses, roads and sewers, preparation of interim and final bills; measurement and adjustment of sub-contracts; preparation of cost statistics, estimates, etc.

(b) Management of housing contracts of conderable value; interim valuations for payments; measurement of variations and settlement of final accounts.

Forms of application may be obtained from

accounts.

Forms of application may be obtained from
the Director of Housing and Valuer, The County
Hall. Westminster Bridge, S.E.1 (a stamped
addressed foolscap envelope required), quoting
Q.S.1.

Canvassing disqualifies. (2140) 738

COUNTY BOROUGH OF DERBY.

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent staff in accordance with the National Scale of Salaries:

(1) ONE SENIOR QUANTITY STRVEYOR, Grade VI, A.P. & T. Division. Salary £596-

Grade VI, A.P. & T. Division. Salary £5%—2660.

Applicants should be Chartered Quantity Surveyors or prospective, and have had experiese in the preparation of quantities, specifications site measuring and estimates.

(2) ONE JUNIOR QUANTITY SURVEYOR. Grade IV, A.P. & T. Division. Salary £490—2555. Applicants should be fully experienced in working-up, Final Accounts and the taking off of Minor Works.

The appointments will be subject to one month's notice in writing on either side, and to the terms of the National Joint Council's Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act, 1337, and the successful applicants will be required to pass a medical examination.

Form of application may be obtained from Thos. W. Rast. F.R.I.B.A., Borough Architect, The Council House. Corporation Street, Derby, and should be returned when completed, together with copies of two testimonials, to arrive not later than Monday, 21st March, 1949.

Canvassing, directly or indirectly, will be a disqualification.

The Council House. Corporation Street, Derby.

LIVERPOOL REGIONAL HOSPITAL BOARD, Applications are invited for the following per-manent appointments in the Regional Architect's Department, on the Headquarter's Staff of the

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1996 EYOR'S manent appointments in the Regional Architect's Department, on the Headquarter's Staff of the Board;—

(a) PRINCIPAL ASSISTANT ARCHITECT at a salary of £800 × £25 to £950 per annum.

Applicants must be Associates of the Royal Institute of British Architects, and preferably hold a University degree in Architecture, must possess wide experience of hospital design and construction, and good administrative ability, and be capable of deputising for the Regional Architect.

(b) SENIOR ASSISTANT ARCHITECT, at a salary in accordance with A.P.T. Grade VIII, £655×£25 to £760 per annum.

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.

(c) ASSISTANT ARCHITECT at a salary in accordance with A.P.T. Grade VII, £556 to £650 per annum.

Applicants should be Associates of the Royal Institute of British Architects, and must have a good general experience, and ability in design and construction.

(d) SENIOR QUANTITY SURVEYOR at assary of £755×£25 to £350 per annum.

Applicants must be members of the Royal Institute of Chartered Surveyors, and have had considerable experience in the preparation of estimates, specifications, bills of quantities. measuring variations and the checking of final accounts.

(e) ADMINISTRATIVE ASSISTANT at a

accounts.

(e) ADMINISTRATIVE ASSISTANT at a salary in accordance with A.P.T. Grade II, £420× £15 to £465 per annum. Applicants should have had experience in an Architect's Office, preferably with a Local Authority, and be thoroughly conversant with the routine administration of such a Department. All the above appointments will be subject to the National Health Service (Superannuation) Regulations, 1947/48, and the successful candidates will be required to undergo a medical examination.

tion. Applications, stating age, education, qualifications, experience, present and previous appointments, salary, war service, and clearly stating the post applied for, together with the names and addresses of three referces, should be sent to the undersigned at Alder Hoy Hospital, Eaton Road, Liverpool, 12, to be received not later than the 16th March, 1949.

Ch. 1949.
VINCENT COLLINGE,
Secretary to the Board.
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WARWICKSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the undermentioned appointments on the established staff:

(a) ASSISTANT ARCHITECT, Deputy Section Leader Education, £810-£1.000.
(b) SENIOR ASSISTANT ARCHITECTS, Grade VIII, £635-£760 per annum.
(c) SENIOR ASSISTANT ARCHITECTS, Grade VII, £635-£710 per annum.
(d) ASSISTANT ARCHITECTS, Grade VI, £595-£660 per annum.
(e) ASSISTANT ARCHITECTS, Grade V, £520-£570 per annum.

per annum.
ARCHITECTURAL ASSISTANTS, Grade £450-£495 per annum.
ARCHITECTURAL ASSISTANTS, Grade

(g) A

(g) ARCHITECTURAL ASSISTANTS, Grade I, 2420—2465 per annum. Applicants for:—

(a) Must be Registered Architects with considerable experience in the planning, design and used to supervising the work of other Architects. (b) and (c) Must be Registered Architects with considerable general experience in architectural design and construction and the supervision of Assistants.

(d) and (e) Must be Registered Architects up to six years standing.

(f) and (g) Bhould have passed R.I.B.A. Intermediate examination with up to four years' office experience.

(h) ASSISTANT I.AND SUDVEYOR Grade V.

(f) and (g) Should have passed R.I.B.A. Intermediate examination with up to four years office experience.
(h) ASSISTANT LAND SURVEYOR, Grade V. £520-£570 per annum, should be Associates of the R.I.C.S.
(i) BUILDING INSPECTOR, Grade VI. £595-\$660 per annum, must have extensive knowledge of all building trades and general supervision. able to propare specifications, concise reports and approximate estimates.
(j) ASSISTANT QUANTITY SURVEYOR, Grade V. £520-£570 per annum, should be A.E.I.C.S., with experience in measurement of variations and final accounts.
(i) BUILDBR'S SURVEYOR, Grade III. £450 according to the proparation of schedules for obtaining quotations, measurement of variations, etc.
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.
ADDICATION ADDICATION CONTRACTION OF THE SILKINS, F.R.I.B.A., A.E.I.C.S., County Architect, Shire Hall, Warwick, to whom they should be returned not later than the 21st March, 1949.

L. EDGAR STEPHENS, Clerk of the Council.

Shire Hall, Warwick. 23rd February, 1949.

CORPORATION OF LONDON.

APPOINTMENT OF ARCHITECTURAL
ASSISTANT.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT to be employed exclusively on the reconstruction of the Central Criminal Courts, Old Bailey, E.C.4.
Salary from 2400 to 2625 (inclusive of Consolidated Bonus) according to age and experience.

Applicants should either have qualified or be about to qualify as associates of the Royal Institute of British Architects. Previous experience in the planning of Law Courts is not essential. The appointments are for the present on a temporary basis, but, in the event of establishment to the permanent staff, temporary service will count for the purpose of superannuation. Appointments are subject to the provisions of Local Government Superannuation and applications endorsed "Architectural Assistant" to be made to George Holliday, F.R.I.C.S., City Surveyor, 55/61. Moorgate, F.C.2, not later than Thursday, 17th March, giving details of service with Armed Forces, age, qualifications and experience, and the names of two persons to whom reference may be made.

COUNTY BOROUGH OF GREAT YARMOUTH.

COUNTY BOROUGH OF GREAT YARMOUTH.
BOROUGH ENGINEER'S DEPARTMENT.
Applications are invited for the following permanent appointments:
TWO GENERAL ARCHITECTURAL ASSISTANTS.
Salary A D.T. Great V.W.

TANTS.
Salary, A.P.T. Grade IV (£480-£525).
Applicants for these posts should have bassed the intermediate Examination of the R.I.B.A.
Forms and particulars can be obtained from the undersigned on receipt of 4 stamped/addressed envelope, and applications should be submitted not later than Friday, 18th March, 1949.

FARRA CONWAY, Town Clerk.

Town Hall, Great Yarmouth. 19th February, 1949. DBE/DAB.

Great Yarmouth.
19th February, 1949.
DBE/DAB.

COUNTY BOROUGH OF ROTHERHAM.
CHIEF ARCHITECTURAL ASSISTANTS.
Applications are invited for the appointment of TWO CHIEF ARCHITECTURAL ASSISTANTS.
TANTS in the office of the Borough Engineer at salaries of £685 rising by annual increments to £760 per annum.
Applicants must be Associate Members of the R.I.B.A. and have high ability in design.
The Architectural work in the department is very varied and consists of Educational, Housing, Health and other types of Local Authority Buildings, and the volume of work is rapidly expanding.

The appointments will be subject to the Conditions of Service adopted by the Council and based on the National Scheme of Conditions of Service, and will be determinable by one month's notice on either side.

The posts are superannuable and the candidates selected for the appointment will be required to pass and Modical Examination.

HOUSING ACCOMMODATION will be made available for the successful applicants if required. Applicants must state whether they are related to any member or officer of the Rotherham County Borough Council, deliberate omission to disclose any such relationship will disqualify any candidate.

Canvassing of Members of the Council, whether direct or indirect, will disqualify.

Applications endorsed "Chief Architectural Assistants," stating age, qualifications and details of experience, accompanied by copies of three recent testimonials, should be delivered to the undersigned net later than 25th March, 1949.

JOHN S. WALL,

Municipal Offices,
Rotherham, Yorks.

Municipal Offices,
Rotherham, Yorks.

HAMPSHIRE.

Applications are invited for the following appointments on the established staff of the County Architect's Department:—
SENIOR ASSISTANT ARCHITECTS on Grade VI of the National Salary Scales (£595×£20×£25—£560).

Candidates must be Registered Architects, preferably A.R.I.B.A., with experience in design and construction of public buildings, including schools.

ASSISTANT MAINTENANCE SURVEYOR on Grade II of the National Salary Scales £480×£15—£465).

Candidates should have passed the Intermediate Examination of the R.I.B.A. or R.I.C.S. and have had experience on maintenance and minor works and surveys of sites and buildings.

The appointments will be subject to the provisions of the Local Government Superannation Act, 1937, and to the National Scheme of Conditions of Service, and will be terminable by one calendar month's notice on either side. In approved cases, the County Council are prepared to assist newly appointed members of the staff to meet removal and other expenses.

Applications, on forms to be obtained from the County Architect, The Castle, Winchester, should be returned to him not later than the 28th March, 1949.

G. A. WHEATLEY,

G. A. WHEATLEY, Clerk of the County Council.

The Castle, Winchester. February, 1949.

BOROUGH OF NUNEATON.
ENGINEER AND SURVEYOR'S
DEPARTMENT.
ARCHITECTURAL ASSISTANT.
Applications are invited for the appointment of Architectural Assistant on the staff of the Borough Surveyor, at a salary in accordance with Grade A.P.T. V of the National Scheme of Conditions of Service (£520-£570).
Candidates must be registered Architects, and preference will be given to those who have passed the intermediate examination of the E.I.B.A. or possess similar qualifications and have had experience in the design, construction and preparation of bills of quantities, specifications, etc., in connection with housing, schools, etc., and the general supervision of contracts.
Consideration will be given to the provision of housing accommodation.
Further particulars and conditions of appointment may be obtained from the undersigned, by whom all applications must be received not later than 28th March, 1949.

T. OLDROYD,
Town Clerk.

T. OLDROYD, Town Clerk.

than 28th March, 1949.

Council House,
Nuneaton.

CHESHIRE COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.
APPOINTMENT OF PLANNING STAFF.
Applications are invited for the following appointments which are on the permanent establishment of the County Planning Department.
The posts are subject to the Local Government Superannuation Act, 1937, and the successful applicants will be required to act under the direction of the County Planning Officer and, in the case of area appointments, under the direction of the Area Planning Officer in the preparation of a Development Plan for the County and the control of development under the Town and Country Planning Act, 1947.

(a) SENIOR PLANNING ASSISTANT—HEAD QUARTERS, CHESTER. Salary A.P.T. V-VI (250—2560).
Applicants should be corporate members of the Town Planning Institute, and preference will be given to those possessing an additional recognised qualification in architecture or engineering. They must also have had considerable experience in all aspects of statutory planning, development control and planning procedure.

(b) PLANNING ASSISTANTS—SALARY A.P.T. III—IV (2450—2525).
Applicants for these positions should have obtained the intermediate examination (or equivalent) of one of the recognised institutions, and preference will be given to candidates who have had training in architecture, and some experience in Town and Country Planning.

The successful applicants will be stationed in the following areas:—Northwich, Nantwich, Stockport, Chester and Altrincham, and all applications should indicate the applicant's preference.

(c) JUNIOR PLANNING ASSISTANTS.

applications should preference.

(c) JUNIOR PLANNING ASSISTANTS.
Salary A.P.T. I-II (£390—£465).
Applicants should have had training in a planning, architectural, surveying or engineering

(c) JUNIOR PLANNING ASSISTANTS. Salary A.PT. I-II (£390—2455). Applicants should have had training in a planning, architectural, surveying or engineering office.

The successful applicants will be stationed in Northwich, Nantwich, Stockport and Altrincham, and all applications should therefore indicate the applicant's preference.

Forms of application: together with details of the duties and conditions attaching to the appointments, may be obtained from the undersigned on receipt of a STAMPED AND ADDRESSED FOOLSCAP ENVELOPE.

The last date for the receipt of completed applications is Saturday, the 19th March, 1949.

EKNNETH O. MALE.

County Planning Officer.

Bridgegate House, Lower Bridge Street,

Chester.

CORNWALL COUNTY COUNCIL.

APPOINTMENT OF DEPUTY COUNTY

APPOINTMENT OF DEPUTY

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County Hall, Truro. 28th February, 1949.

COUNTY BOROUGH OF ROTHERHAM.
ASSISTANT BOROUGH ARCHITECT.
Applications are invited for the post of ASSISTANT BOROUGH ARCHITECT in the office of
the Borough Engineer at a salary of £760, rising
by annual increments to a maximum of £910 per

the Borough Engineer at a salary of 2760, rising by annual increments to a maximum of 2910 per annum.

Applicants must be Associate Members of the R.I.B.A. and preferably a holder of a degree in Architecture from a recognised school.

The department is responsible for carrying out all building work of the Corporation, including large housing and educational programmes, and the successful applicant will be required to exercise a general supervision over staff engaged on this work (with particular emphasis on design) under the direction of the Borough Engineer and Deputy Borough Architect, in addition to the direct control of a major project.

The appointment will be subject to the Conditions of Service adopted by the Council and based on the National Scheme of Conditions of Service and will be determinable by one month's notice on either side.

The post is Superannuable and the candidate selected for the appointment will be required to pass a Medical Examination.

HOUSING ACCOMMODATION will be available for the successful applicant if required. Applicants must state whether they are related to any member or officer of the Rotherham County Borough Council, deliberate omission to disclose any such relationship will disqualify any candidate.

Canvassing of Members of the Council, whether direct or indirect, will disqualify.

Applications endorsed "Assistant Borough Architect" stating age, qualifications and details of experience, accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than 25th March, 1949.

JOHN S. WALL,

Town Clerk.

JOHN S. WALL, Town Clerk.

Municipal Offices,
Rotherham, Yorks.

1908
COUNTY OF LINCOLN-PARTS OF LINDERY.
COUNTY ARCHITECT'S DEPARTMENT.
BUILDING SURVEYORS/INSPECTORS.
Applications are invited from persons having a sound practical knowledge of building, and able to prepare brief specifications and rough estimates for maintenance and small building works. The successful applicants for the three posts may be required to reside in a particular area of the County and all applicants will be required to previde their own car for which an allowance for an 8-b.p. car will be allowed on the County Council scale.

scale.

The appointments are superannuated, salary in accordance with APT. Grade IV, commencing at £480 per annum, rising in four years to a maximum of £525, plus £20 per annum office expenses if living in a particular area.

Particulars relating to the appointment and application forms can be obtained from the undersigned, completed forms are to be returned not later than Tuesday, 22nd March, 1949.

A. RONALD CLARK. A.R I.B.A., A.M.T.P.I., County Architect.

County Offices, Lincoln.

BRECONSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following catablished posts in the County Architect's (61 One ACCURATE COUNTY ARCHITECTS)

Department:—
(a) One ASSASTANT ARCHITECT, A.P. & T.
Grade IV, Salary Scale £480-£525 per annum.
(b) Two ARCHITECTURAL ASSISTANTS.
A.P. & T. Grade I, Salary Scale £390-£435 per

A.P. & T. Grade 1, Salary Scale £390—2435 per minum.

The appointments will be subject to (i) the Mational Scheme of Conditions of Service, (ii) the Provisions of the Local Government Superannation Act, 1937, (iii) the passing of a satisfactory medical examination, and (iv) one month's written sotice on either side.

Canvassing, directly or indirectly, will definitely disqualify the candidate for the appointment.

Applications are to be made on a form to be obtained from the County Architect. Mr. H. C. W. Strickland, F.R.I.B.A.. Watton Offices. Brecon, South Wales, and must be returned to the undersigned not later tuan 19th March, 1949.

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

County Hall.

RICKMANSWORTH URBAN DISTRICT
COUNCIL.

ARCHITECTURAL ASSISTANT in the Surveyor's Department required, salary £550, rising to £610 plus car allowance. Applicants must have designed housing schemes, prepared specifications, bills, and estimates, and preference will be given to Associates R.I.B.A. or a similar qualification.

The question of providing housing accommoda-tion if required, would probably be favourably considered.

considered.

Applications giving full particulars of age, qualifications and previous experience, together with the names of two referees, should reach the undersigned by 19th March, 1949.

C. G. RANSOME WILLIAMS, Clerk of the Council.

Council Offices, Rickmansworth. 1st March, 1949.

COUNTY BOROUGH OF ROCHDALE.
BOROUGH SURVEYOR'S DEPARTMENT.
APPOINTMENT OF TWO ARCHITECTURAL
ASSISTANTS.
Applications are invited for the appointment of
Two Architectural Assistants in the Borough Surveyor's Department, on Grade IV of the A.P.T.
Division of the National Joinf Council's Scales, at
a salary of £480 per annum rising to £525 per
annum.

a salary of £490 per annum rasing transman.

Applicants should be Registered Architects, and have a thorough knowledge of Architectural work with practical experience in the design of public buildings of all types.

The appointments will be subject to the provisions of the Local Government Superannuation Acts and to the selected candidates passing a medical examination.

Canvassing is prohibited, and candidates must disclose whether to their knowledge they are related to any member or senior officer of the Council.

lated to any member or senior officer of the Council.

Applications stating age, qualifications and full particulars of experience, together with the names of two persons to whom reference may be made, and endorsed "Architectural Assistant," must be delivered to the Borough Surveyor, Town Hall, Rochdale, not later than 9 a.m. on Monday, 28th March, 1949.

G. F. SIMMONDS.

G. F. SIMMONDS, Town Clerk.

Town Hall. Rochdale. 3rd March, 1949.

Rochdale.

3rd March, 1949.

PERMANAGH COUNTY EDUCATION COMMITTEE.

SCHOOL ARCHITFCT.

Applications are invited from Registered Architects for the position of Full-time School Architect and Maintenance Officer under the Committee. Preference will be given to candidates who have obtained a degree in Architecture or who have passed the Associateship Examination of the Royal Institute of British Architects. Experience in school design will be an additional recommendation.

The salary will be within the range £700 to £900 per annum, including bonus, and the actual salary within that range will be determined according to the qualifications and experience of the person appointed. A travelling allowance will also be paid.

Forms of application and conditions of appointment may be obtained from the undersigned, with whom applications must be lodged not later than Monday, 4th April, 1949.

Preference will be given to ex-Service applicants, provided the Committee is satisfied that the encessful candidate can, or within reasonable time, will be able to fill the vacant post efficiently.

within reasonable

J. MALONE.

Courthouse, Enniskillen,
N. Ireland.
28th February, 1949.

WILLENBAT.

N. Igeland.
28th February, 1949.

WILLENHALL URBAN DISTRICT COUNCIL.
APPOINTMENT OF HOUSING ARCHITECT.
The Council invite applications for the appointment of Housing Architect at a salary in accordance with Grade A.P.T. VII of the National Salary Scales (£655×£25-£710).
Candidates must be at least Associates of the Royal Institute of British Architects and have had wide experience in architectural design and construction, particularly in relation to the building of houses.
The successful candidate will be responsible directly to the Council, and the appointment will be subject to the Local Government Superannuation Act, 1937, the National Scheme of Conditions of Service, and to termination by one month's notice on either side.
Applications stating age, qualifications, present and previous appointments, particulars of experience, the names of three persons to whom reference can be made, and whether the candidate is to his knowledge related to any Member or Senior Officer of the Council, must reach me not later than Monday, 14th March, 1949.
Canvassing will disqualify.

JOHN R. RIDING, Clerk of the Council

CIERK of the Council.

1977

CIVIL SERVICE.

QUANTITY STRVEYORS and ASSISTANT QUANTITY SURVEYORS are required throughout the United Kingdom by the Ministry of Works. Admiralty, War Department. Air Ministry and War Damage Commission, and occasionally overseas by the Admiralty, Air Ministry and War Department. Aithough these are not established posts some of them have long term possibilities, and competitions are held vericdically to fill established vacancies.

Salaries for these professional posts in London for officers over 25 years of age range from £750 to £750 per annum in lower grades. And from £750 to £1,000 p.a. in the higher grades. They are slightly lower in the provinces. Salary on entry will be in accordance with age, qualifications and experience.

Vacancies also exist for Quantity Surveying Assistants and others baving some experience in a quantity surveyor's office, at salaries ranging from £300 p.a. upwards.

Applicants should apply, quoting ref. J.Q.S., to Room 37, Ministry of Labour and National Service, Technical and Scientific Register, York House, Kingsway, W.C.2.

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UNIVERSITY COLLEGE, LONDON
Applications are invited for the post of ARCHITECTURAL ASSISTANT in the office of the Bursar. Applicants must be capable draughtsmen
with practical building experience, preferably in
the office of an architect or quantity surveyor,
and with knowledge of specifications, quantity
bills and measuring. Initial salary £400-£590,
according to qualifications and experience.
Applications, to be received within a fortnight of
the appearance of this advertisement, should be
sent to the Secretary, University College, London, Gower Street, W.C.1, from whoft further particulars may be obtained.

sent to the Secretary, University Collect. Dendon, Gower Street, W.C.L. from whom further particulars may be obtained.

PONTYPRIDD URBAN DISTRICT COUNCIL. Applications are invited for the following PER. MANENT APPOINTMENT, which is subject to the provisions of the Local Government Superanunation Act, 1937. Candidates must not be over 45 years of age and the snecessful candidate will be required to pass a Medical Examination.

ARCHITECTURAL ASSISTANT. Sulary £660 per annum—the maximum of A.P.T. Grade VI of the National Scales of Salaries.

Minimum qualification required for this appointment is:—Associate of the Royal Institute of British Architects.

The person appointed will be required to devote the whole of his time to the service of the Council and the appointment will be subject to one month's notice on either side.

Forms of application are obtainable from Mr. W. Cecil Evans, Municipal Buildings, Pontyprid, Glam., and should be obtained by intending candidates.

Applications, in form required, together with the names and addresses of three persons to whom reference may be made, must be received by the undersigned not later than Priday, the First day of April, 1949.

Canvassing will be a disqualification and candidates must disclose any relationship to Members or Senior Officers of the Council.

H. LEONARD PORCHER.

H. LEONARD PORCHER, Clerk of the Council.

Municipal Buildings,
Pontypridd.
4th March, 1949.

COUNTY BOROUGH OF CROYDON.
EDUCATION COMMITTEE.
SCHOOL ARCHITECT'S SECTION.
Applications are invited for the appointment of Courter of C

Applications are invited for the approximate of:

of:

ASSISTANT ARCHITECTS (two posts).

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

Experience in school works an advantage.
London Weighting of £30 per annum (£20 per annum if under 26 years of age) is paid in addition to the salaries shown above.

The appointments are established and superannuable, subject to medical examination.

Forms of application may be obtained from the Chief Education Officer, Katharine Street, Croydon (by sending a stamped, addressed foolscap envelope), and must be returned to him not later than 18th March, 1949.

Canvassing will disquality.

E. TABERNER,

Town Clerk.

26th February, 1949.

BOROUGH OF SLOUGH.

Applications are invited for the permanent appointment of an ASSISTANT ARCHITECT within Grade A.P.T. III of the National Scales, at a consolidated commencing salary of 2460 p.a., rising, on satisfactory service, by annual increments of £15, to a maximum of £456 p.a.

Applicants must give details of experience in housing, municipal building design and general building construction, and state age, marital state, qualifications, technical training, present and previous appointments, with dates, together with the names of two architects to whom reference can be made.

The appointment will be subject to (i) the provisions of the Local Government Superannuation Act, 1937, (ii) the National Scheme of Conditions of Service, (iii) the satisfactory passing of a medical examination by the successful applicant, and (iv) termination by one month's notice on either side.

either side.

Applications, in sealed envelopes, endorsed "Assistant Architect, Grade HI," must reach the undersigned not later than first post on Monday, 21st March, 1949.

Candidates must, when making application, disclose in writing whether to their knowledge they are related to any member or senior officer of the Council.

Canyassing, directly or indirectly are related. directly or indirectly, Canvassing, disqualify.

NORMAN T. BERRY, Town Clerk.

Town Hall, Slough. 10th March, 1949.

2011
DEPARTMENT OF HEALTH FOR SCOTLAND invite applications from fully qualified
Architects for posts of temporary ASSISTANT
ARCHITECT. Work mainly concerned with
housing, hospitals and design of health centres.
Selary range, £462-£735. Starting pay according to age and experience, subject to maximum
of £600. Salaries for women somewhat lower
than for men. There will be an opportunity to
compete for established posts by open competition (ages between 25 and 35). Form of
application from Establishment Officer (Room 30).
Department of Health for Scotland, 8t, Andrew's
House, Edinburgh, 1. Completed forms must be
refurned by 31st March, 1949.

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Clerk. 2011 OCOT-alified TANT

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CITY OF LEEDS.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

Post.

Consolidation

Applications are invited for the following appointments:—
Post.

(a) ASSISTANT ARCHITECTS, £595—£660.
(b) ASSISTANT ARCHITECTS, £520—£660.
(c) ASSISTANT ARCHITECTS, £450—£525.
(d) ASSISTANT ARCHITECTS, £450—£525.
(e) ASSISTANT ARCHITECTS, £450—£525.
(f) ASSISTANT ARCHITECTS, £450—£455.
(g) JUNIOR ASSISTANT ARCHITECTS.

(g) JUNIOR ASSISTANT ARCHITECTS.

(h) TRACER. Commencing salary according to age, maximum salary

£385 (Male) and £308 (Female).
(h) TRACER. Commencing salary according to age, maximum salary £305 (Male) and £308

(Female).

(h) TRACER. Commencing salary according to age, maximum salary £385 (Male) and £308 (Female).
(i) DRAUGHTSMAN (Male or Female), £315—2500.
Candidates for appointments (a) to (e) must be Registered Architects and must have had a thorough training and experience in architectural design and construction.
(j) HEATING AND VENTILATING ENGINEER £520—£570.

(f) HEATING AND VENTILATING
NEER, £520-£570.
(k) ELECTRICAL ENGINEER, £520-£570.
Candidates must have a thorough experience
in the preparation of schemes and the supervision of large installations.
(l) ASSISTANT QUANTITY SURVEYOR,

£450-£525. (m) ASSISTANT QUANTITY SURVEYOR,

(m) ASSISTANT QUANTITY SURVEYOR, 2375-2420.

(n) JUNIOR ASSISTANT QUANTITY SURVEYOR. Commencing salary according to age, maximum £385 p.a.

In each case the payment of salary increments will be subject to satisfactory service and will be granted normally with effect from the 1st April following the completion of 6 months' service, except in the case of appointments (g), (h), (n), where birthday increments will be payable. The appointments are subject to the Local Government Superannuation Act, 1957, and successful applicants will be required to pass a medical examination.

ful applicants will be required to pass a secondarion.

Applications on forms to be obtained from the undersigned, accompanied by copies of not more than three recent testimonials (not returnable), must be received by me in the envelope supplied therefor, not later than 10.0 a.m. on Saturday, the 26th March, 1949.

Canvassing in any form, either directly or indirectly, will be a disqualification.

R. A. H. LIVETT, A.R.I.B.A.

City Architect.

Priestley House, Quarry Hill, Leeds, 9.

Leeds, 9.

EAST SUFFOLK COUNTY COUNCIL
COUNTY PLANNING DEPARTMENT.
Applications are invited for the appointment of
ASSISTANT PLANNING OFFICER for work on
the County Development Plan, in the County
Planning Officer's Department.
The salary will be within the A.P.T. Division,
Grade VII (£635—£710 per annum) of the
National Joint Council's scale, with scale
allowance for the use of a motor car, and will
be determinable by one month's notice on either
side.

side.

Extensive planning experience is required for this appointment. Applicants should be either Members or Associate Members of the Town Planning Institute, preference being given to those possessing qualifications in engineering, surveying, or architecture.

Applications endorsed "Assistant Planning Officer," stating age, qualifications, experience, present and past appointments, and giving names and addresses of two referees, to be delivered to the undersigned not later than the first post, Saturday morning, 26th March, 1949.

G. C. LIGHTFOOT,

G.C. LIGHTFOOT,

Clerk of the County Council.

County Hall, Ipswich.

Ipswich.

COUNTY BOROUGH OF ROTHERHAM.

ASSISTANT ARCHITECT.

Applications are invited for the appointment of an Architectural Assistant in the office of the Borough Engineer, at a commencing salary of £595 rising by annual increments to a maximum of £660 per annum.

Applicants must be Associate Members of the Royal Institute of British Architects and preferably with experience in the service of a Local Authority.

Applicants must be a control of a Local Royal Institute of British Architects and provided ably with experience in the service of a Local Authority.

The post is Superannuable, and the candidate selected for appointment will be required to pass a medical examination.

The appointment will be subject to the conditions of service adopted by the Council and based on the National Scheme of Conditions of Service. It will be determinable by one month's notice on either side.

HOTSING ACCOMMODATION will be made available for the successful applicant if required. Applicants must state whether they are related to any member or officer of the Rotherham County Borough Council. Deliberate omission to disclose any such relationship will disqualify any candidate.

Canvassing of Members of the Council, whether direct or indirect, will disqualify.

Applications endorsed "Architectural Assistant," stating age, qualifications and experience, accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than the 25th March. 1949.

JOHN S. WALL,

Town Clerk.

Municipal Offices, Rotherham, Yorks.

LEEDS REGIONAL HOSPITAL BOARD.
Applications are invited for the following appointments in the Architect's Section on the Headquarters Staft:—
(a) ARCHITECTURAL ASSISTANT. Salary scale £480—£525.
(b) ARCHITECTURAL ASSISTANT. Salary scale £480—£495.
Candidates must have experience of preparing details, working drawings and surveying buildings, and preferably have some experience of hospital construction.

The above appointments are superannusble, and successful candidates will be required to pass a medical examination.
Applications, stating age, details of experience and qualifications, together with the names of three referees to be forwarded to the Secretary, 29/31, Eastgate, Leeds, 2, not later than Saturday, 26th March, 1942.
Canvassing in any form, either directly or indirectly, will disqualify.

COUNTY BOROUGH OF WALSALL.

county borontolder of Walsall.

PUBLIC WORKS DEPARTMENT.

Applications are invited for the following appointment:—
CHIEF ASSISTANT PLANNER at a salary in accordance with Grade VIII of the Administrative, Professional and Technical Division of the National Scale (£685×£25—£750).

Preference will be given to candidates who are Corporate Members of the Town Planning Institute of the Institute of Register of the Royal Institute of British Architects.

Applicants must have had considerable experience in the preparation of Planning and reDevelopment Schemes, and 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 and Building Surveyor's Office.

of the Planning Omce and Successful office.

A flat will be available for the successful applicant, if required.

Applications, giving age, details of qualifications and experience, present and previous appointments, together with copies of three recent testimonials, should be received by the undersigned not later than Friday, 18th March. 1949.

M. E. HABERSHON, Borough Engineer and Surveyor.

Council House, Walsall. 1st March, 1949.

BOROUGH OF CONGLETON.

ARCHITECTURAL ASSISTANT, GRADE II.

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department, at a salary in accordance with Grade II of the A.P.T. Division of the National Scales (£420—£455). The appointment will be subject to the National Scheme of Conditions of Service, to the Local Government Superannuation Act, 1937, and to passing a medical examination; and will be terminable by one month's notice on either side. The Housing Committee will consider providing HOUSING ACCOMMODATION for the successful applicant, if necessary. Applications endorsed "Architectural Assistant," stating age, whether married or single, qualifications, particulars of experience, and accompanied by copies of three recent testimonials, should be delivered to the Borough Surveyor. Mr. C. Brown, M.I.Mun.E., A.R.I.B.A., A.R.I.C.S., AMT.P.I., not later than first post on Monday, the 28th March, 1949

JACK MEE, Town Clerk.

Town Hall. Congleton, Cheshire. 2nd March, 1949.

EAST SUFFOLK COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following post in the County Architect's Department:—
ONE ASSISTANT QUANTITY SURVEYOR.
A.P.T. Grade IV, consolidated solary £480—£525.
The commencing salary in the grade will be fixed according to the qualifications and experience of the candidate.
Applicants should preferably have passed the Intermediate examination of the R.I.C.S. (Quantities Division), and have had some experience in a Quantity Surveyor's office. They should have some knowledge of all stages of the work for the preparation of Bills of Quantities, including estimating, site measurement and preparation and settlement of final accounts.
The successful candidate will be required to work under the direction of the Senior Quantity Surveyor.
The appointment will be subject to one month's notice on either side and 4 the control of the solice.

work under the direction of the Senior Quantity
Surveyor.

The appointment will be subject to one month's
notice on either side and to the provisions of the
Local Government Superannuation Act, 1937. The
successful applicant will be required to pass a
medical examination.

Applications stating age, qualifications and full
details of previous experience, accompanied by
copies of three recent testimonials, should be sent
to E. J. Symmox, F.R.I.B.A., County Architect,
County Hall, Ipswich, not later than 25th March,
1949.

Canvassing, either directly or indirectly, will
disqualify a candidate from consideration.

G. C. LIGHTFOOT,

Clerk of the Council.

County Hall, Ipswich.

BOROUGH OF WORTHING.
APPOINTMENT OF SERIOR
APPOINTMENT OF SERIOR
ARCHITECTURAL 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 2520, rising by three annual increments to £570 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 Bocal Government Superannuation Act, 1937, and to the successful candidate passing satisfactority a medical examination. The Council will assist the successful applicant to obtain housing accommodation, if necessary.
Applications endorsed "Senior Architectural Assistant, Grade V." 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 Monday, 28th March, 1949.

ERNEST G. TOWNSEND.

ERNEST G. TOWNSEND, Town Clerk.

not later than 12 noon on Monday, 28th March, 1949.

ERNEST G. TOWNSEND.
Town Hall.
Worthing.
25th February, 1949.

BOROUGH OF WALTHAMSTOW.
BOROUGH ARCHITECT'S PEPARTMENT.
ASSISTANT ARCHITECT'S.
Applications are invited for the permanent positions of
ASSISTANT ARCHITECT.
ONE at a salary in accordance with Grade VII of the National Joint Council for Local Authorities Administrative, Professional, and Technical Division (£535 rising to £710 by annual increments, plus London Weighting allowance according to the scale).
FOUR at a salary in accordance with Grade VI of the National Joint Council for Local Authorities Administrative, Professional and Technical Division (£555 rising to £710 by annual increments, plus London Weighting allowance according to the scale).
Applicants must be suitably qualified and must have a high ability in design and construction and should have had considerable experience in connection with the design of reinforced concrete structures will be an advantage; and for one of the Grade VI posts the applicant should have had experience in connection with planning and redevelopment.
Applicants for the Grade VII post should, in addition to these qualifications, be capable of organising and supervising staff and controlling large contracts.
The appointments will be subject to the Local Government Superannuation Act, 1937, to the National Joint Council's Conditions of Service, to amination, and to termination by one month's notice on either side.
Applications stating age, qualifications and experience, accompanied by names and addresses of three referees to whom reference may be made, must reach the undersigned, endorsed "Assistant Architect." not later than Saturday, the 19th March, 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 or holder of any senior office under the Council or holder of any senior office under the Council.

holder of any senior office under the Council.

G. A. BLAKELEY.

Town Hall,

Walthamstow, E.17.

28th February. 1949.

CITY OF BRADFORD.

CITY OF BRADFORD.

CITY ENGINEER AND SURVEYOR'S

APPOINTMENT OF TWO SURVEYOR'S

APPOINTMENT OF TWO STATE

APPOINTMENT OF TWO GRADE A.P.T. V.

Applications are invited for the positions of Senior Town Planning sasistants in the City
Engineer and Surveyor's Department; one appointment in accordance with Grade A.P.T. V

of the National Scale of Salaries. £220-£570 per annum, and one appointment in accordance with Grade A.P.T. V

of the National Scale of Salaries. £220-£570 per annum, and one appointment in accordance with Grade A.P.T. VI. £595-£660 per annum.

Candidates should be Associates of the R.I.B.A. and hold a University Degree or Diploma in Architecture, or the final examination of a recognised school of Architecture, with experience in Town Planning. Candidates should state their experience in Civil Engineering and/or Surveying.

These 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 will disquality, and any applicant who is related to a member of, or a senior officer of, the Council, must disclose the fact in his applications.

Applications stating age, present and previous appointments, with dates, qualifications and experience, accompanied by copies of three recent testimonials, should reach the undersigned not later than the 25th March. 1949.

W. H. LEATHEM,

Town Hall,

Bradford.

Town Hall, Bradford.

COUNTY COUNCIL OF HUNTINGDON.
APPOINTMENT OF COUNTY AR HITECT.
Applications are invited from persons not exceeding 45 years of age for the vacant position of County Architect, at a salary on a scale of £1,000, rising, subject to satisfactory service, by annual increments of £50, to £1,200 per annum.
Candidates must have passed the Associate Membership examination and Corporate Members of the Royal Institute of British Architecta.
The person appointed will be required to have had considerable experience in the administration of a County Architect's Department and in the design, construction and maintenance of County Buildings, including Schools, Police Stations and Pablic Health properties.
The position will be subject to the terms of the Local Government Superannuation Act, 1937, and the person appointed will be required to pass a medical examination.
The appointment will be terminable by three calendar months' notice on either side.
Applications, together with the names of three referees, sating age, technical qualifications and details of experience, are required to be submitted so as to reach the undersigned by not later than the first post on Friday, 25th March, 1949.

County Buildings,
Huntingdon,

County Buildings, Huntingdou. February, 1949.

February, 1949.

CITY OF SALFORD.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANTS in the Architect's Department; salary Grade VI, £995 to £660.

Candidates must be Associates of the Royal Institute of British Architects or hold an equivalent qualification, and should possess a sound experience in design and construction and also be experienced in the management of building contracts.

tracts.

The appointments will be subject to:—
(a) The Conditions of Service of the National Joint Council as adopted by the City Council;
(b) The provisions of the Local Government Superannuation Act, 1937;
(c) The passing successfully of a Medical Examination.

(c) The passing successfully of a meutical maniation.

Applications stating age, qualifications and experience, together with particulars of past and present employment, accompanied by copies of two recent testimonials, should be forwarded in envelopes endorsed "Architectural Assistant," Town Hall, Salford, 5, and be delivered not later than Wednesday, 30th March, 1949.

Applicants must disclose, in writing, whether or not they are related to any Member of the Council or an Officer of the Authority.

H. H. TOMSON,

Town Clerk.

COUNTY BOROUGH OF DUDLEY.

COUNTY BOROUGH OF DUDLEY.

(Amended Advertisement).

(CHIEF ASSISTANT ARCHITECT.

Applications are invited for the permanent appointment to the Borough Architect's Department. of a Chief Assistant Architect as a salary in accordance with Grade VII A.P.T. Division, i.e., £635—£710 per annum.

Applicants must be Associates of the R.I.B.A. and must have had considerable experience in the design and construction of modern buildings, particularly housing and educational work.

The successful applicant will be responsible directly to the Borough Architect and will be in complete charge of the Drawing Office.

Applications stating age, qualifications, present position, salary and experience, and the names of two persons to whom reference may be made, should be delivered to me not later than Monday, the 4th April, 1949.

The tenancy of a house would be made available if required.

P. D. WADSWORTH.

P. D. WADSWORTH. Town Clerk.

The Council House. Dudley. February, 1949.

28th February, 1949.

COUNTY ROROUGH OF SOUTH SHIELDS.

BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited from persons with appropriate academic qualifications and experience for the nosition of:

(a) CHIEF ASSISTANT OUANTITY SURVEYOR, Grade A.P.T. VI (£595—2660).

(b) SENIOR PLANNING ASSISTANT, Grade A.P.T. VI (£596—2670).

(c) SECOND ASSISTANT ARCHITECT, Grade A.P.T. IV (£400—2525).

Applications for the above appointment.

A.P.T.
(c) SECOND ASSISTANT ABOUT A.P.T. IV (£480—£525).
Applications for the above appointments must be made on forms obtainable from the Berough Engineer, Lt.-Col. John Reid, O.B.E., M.I.C.E.,
Town Hall. South Shields, and returned not later than Saturday, 9th April, 1949, appropriately endorsed.

Associatements will be subject to:

Associatements will be subject to:

orned.
Appointments will be subject to:
1. Provisions of Local Government Superannua-on Act, 1937.
2. National Conditions of Service.
3. Satisfactorily passing of medical examina-

tion.
4. Termination by one month's notice on either

4. Termination by one munical states and a side. Canvassing will be a disqualification and applicants must disclose any relationship to members or senior officers of the Council.

HAROLD AYREY,

Town Clerk.

Town Ifall, South Shields. 1st March, 1949.

CITY OF STOKE-ON-TRENT.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited from suitably qualified persons for the following appointments to the permanent staff:—

TWO SENIOR ASSISTANT QUANTITY SURVEYORS. Salary A.P.T. Div. Grade VI. £595—

2660.

VEYORS. Salary A.P.T. Div. Grade VI. £696—2660.

Applicants must be competent to prepare Bills of Quantities for large contracts and experienced in all branches of Quantity Surveying practice. The selected applicants will be required to pass a medical examination and the appointments will be assisted to Local Government Service.

Previous experience of Local Government work is not essential.

The successful applicants will be assisted in obtaining HOUSING ACCOMMOPATION. Applications giving date of birth, particulars of training and experience, etc., with copies of two recent testimonials, should he received by J. R. Piggott, F.R.I.B.A., City Architect, City Architect's Department, Kingsway, Stoke-on-Treat, endorsed with the title of the appointment applied for, not later than Friday, 18th March, 1949.

Town Hall,

for, not later than Friday, 18th March, 1949.

HARRY TAYLOR,

Town Hall,

8toke-on-Trent.
2nd February. 1949.

URBAN DISTRICT OF EAST BARNET.
ENGINEER & SURVEYOR'S DEPARTMENT.
Applications are invited for the following Permanent Appointments:—
(a) ARCHITECTURAL ASSISTANT—A.P.T.
Salary scale 2480 to £525 per annum, plus the appropriate London Weighting.
(b) ARCHITECTURAL ASSISTANT, A.P.T.
Grade III.
Salary scale £450 to £495 per annum, plus the appropriate London Weighting.
(c) Engineering ASSISTANT—A.P.T.
Grade III.
Salary scale £420 to £455 per annum, plus the appropriate London Weighting.
(London Weighting, under 21 years £10, 21-25 years £20, over 25 years £30 per annum).

Applicants should be qualified by examination, and preference will be given to those having previous experience with a Local Authority.
Each of the appointments will be subject to one month's notice on 3 ither side, and to the provisions of the Local Government Superannuation Act, 1937. Successful candidates will be required to pass a satisfactory medical examination.

Forms of application may be obtained from the undersigned and should be returned by not later than Saturday, 26th March, 1949.

C. M. BARNES, O.B.E., M.I.Mun.E., F.R.S.I.,

Engineer and Surveyor.

Town Hall, Station Road, New Barnet, Hertfordshire. 1991

CITY OF LEEDS.
CITY ARCHITECT'S DEPARTMENT.
Applications are invited for the following

Applications are invited for the following appointment:—
CHIEF QUANTITY SURVEYOR, salary scale £1,100 p.a. to £1,250 p.a.
Candidates must be fully qualified Quantity Surveyors with a considerable experience in large scale contracts.
The successful candidate will be in charge of the Quantity Surveyor's Section of the City Architect's Department, and only those who have had wide experience in the profession and are accustomed to supervising a large staff need apply.

apply.

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

amination.

Applications on forms to be obtained from the undersigned should be returned not later than 10 a.m. on Saturday, the 26th March, 1949.

Assistance will be given in finding housing scommodation.

Canvassing in any form, either directly or indirectly, will be a disqualification.

R. A. H. LIVETT, A.R.I.B.A.,

Priestley House, Quarry Hill.

City Architect.

Priestley House, Quarry Hill, Leeds, 9.

Leeds, 9.

LANCASHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S -DEPARTMENT.
APPOINTMENT OF PRINCIPAL ASSISTANT
ARCHITECT.
Applications are invited for the appointment on
the permanent staff of Principal Assistant Architect, salary 2960 × 225-21.060.
Applicants must possess high ability in design
and administration.
The appointment will be subject to the provisions of the Local Government Superannuation
Act. 1937. to a satisfactory medical examination,
and to the termination of the 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, Esq., F.R.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,
4th April, 1949.

R. H. ADCOCK,
Clerk et the County Council

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

County Offices, Preston. 1st March, 1949.

COUNTY BOROUGH OF SMETHWICK, BOROUGH ENGINEER & SURVEYOR'S PEPARTMENT. Applications are invited for the following

Applications are invited for the following appointments:

(a) CHIEF TOWN PLANNING ASSISTANT, salary Grade VII (£635—£710).

Preference will be given to candidates who are Corporate Members of the Town Planning Institute. Applicants must have had considerable experience in the preparation of Planning and Re-development Schemes and possess a thorough knowledge of the various Acts and Orders relating to Town and Country Planning.

(b) TOWN PLANNING ASSISTANT, salary Grade IV (£480—£525).

Applicants should have had planning experience and preference will be given to those who have passed the Intermediate examination of the Town Planning Institute or the equivalent.

perience and preference will be given to those who have passed the Intermediate examination of the Town Planning Institute or the equivalent.

(c) TOWN Planning Institute or the equivalent.

(c) TOWN PLANNING ASSISTANT, salary Grade II (2420—2465).

Applicants should have had planning experience and be preparing to sit for an appropriate professional examination.

The appointments will be subject to the Local Government Superannuation Act, 1937, to the passing of a medical examination by successful candidates, and to termination by one month's notice on either side.

Applications should be made under the headings indicated as follows:—

1. Appointment desired.

2. Name and address.

3. Age and marital state.

4. Education.

5. Qualifications.

6. Present position and date of appointment.

7. Details of experience.

8. Any further information in support of application.

9. Notice required to terminate present appointment.

Applications. accompanied by copies of two recent testimonials (or stating the names of two persons to whom reference can be made) should be delivered, suitably endorsed, to Mr. Roland Fletcher, M.Inst.C.E., Borcugh Engineer & Surveyor, Council House, Smethwirk, not later than 28th March, 1949.

E. L. TWYCROSS, E. L. TWYCROSS, Town Clerk.

Council Hous Smethwick. 2nd March, 1949.

Smethwick.

2nd March, 1949.

COUNTY BOROUGH OF OLDHAM.

APPOINTMENT OF ARCHITECTURAL

ASSISTANTS.

Applications are invited for the following appointments in my Department:—

(1) SENIOR ARCHITECTURAL ASSISTANT, Grade V. Candidates must hold recognised architectural qualifications and must have had experience in the design and supervision of public buildings and housing schemes. The salary is is accordance with A.P.T. Grade V of the National Scales (£520 to £570 per annum).

(2) SENIOR ARCHITECTURAL JSSISTANT, Grade IV. Candidates should hold a recognised architectural qualification and should have had experience in the design and construction of housing schemes. The salary is in accordance with A.P.T. Grade IV of the National Scales (£480 to £525 per annum).

A.F.I. Grade II of the National Scales (£420 to £465

Grade II of the National Scales (acts)

The appointments will be subject to the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination. They will be provided with HOUSING ACCOMMODATION if recessary.

Applications, stating age and previous appointments in addition to qualifications and experience, and copies of three recent testimonials, must reach the undersigned not later than Monday, March 28th, 1949, in envelopes endorsed to indicate the appointment for which the candidate is applying.

A. L. HOBSON, Borough Engineer and Surveyor. Municipal Buildings, 75. Union Street, Oldham. 28th February, 1949.

28th February, 1949.

COUNTY BOROUGH OF EASTBOURNE.
BOROUGH ENGINEER'S DEPARTMENT.
Appointment of ASSISTANT ARCHITECT.
Salary Grade A.P.T. 6.
Applications are invited for the above appointment at a salary in accordance with salary grade
A.P.T. 6. (2595/£66 p.a.).
Applicants should be Associate Members of the
Royal Institute of British Architects and have
had good experience in the design, supervision and
construction of new buildings.
The appointment is subject to the National
Joint Council's Conditions of Service and the
Local Government Superannmation Act, 1937.
Applications, giving full details of age, present
position, qualifications and experience, together
with the names and addresses of two persons
from whom references can be obtained, should be
forwarded to the undersigned not later than
Saurday, the 19th March, 1949.
BAYMOND WILLIAMS, B.Sc., A.M.I.C.E.,
Borough Engineer.

2/4, Saffrons Road,
Eastbourne.

2/4, Saffrons Road, Eastbourne. 28th February, 1949.

1980

EAST SUSSEX COUNTY COUNCIL.

Applications are invited for appointment to the following posts in the County Planning Depart-

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Clerk.

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1988

Applications are invited for appointment to the following posts in the Caunty Planning Department:

(a) TECHNICAL PLANNING ASSISTANTS in the Area Offices at Bexhill, Crowborough, Haywards Heath and Lewes respectively. The salaries will be on one of the following grades of the National Charter:—A.P.T. II (£420×£15 to £955). A.P.T. III (£450×£15 to £955). A.P.T. IV (£480×£15 to £955). A.P.T. IV (£480×£15 to £956). A.P.T. IV

preference will be given to Associates of the R.I.B.A.

The above appointments are terminable by one month's notice on either side; they are superanuable, and a candidate to be successful must pass a medical examination to the satisfaction of the County Medical Officer. Canvassing, either directly or indirectly, will disqualify, and a candidate who is related to a member of, or a senior officer under, the Council, must disclose the fact in his application.

In the case of all the posts, possession of a motor car is desirable, and travelling and subsistence allowances in accordance with the scales approved by the County Council from time to time will be payable in addition to the salary. Applications on a form to be obtained from the County Planning Officer, County Hall, Lewes, must be sent to me at the County Hall, Lewes, by the 26th March, 1949.

H. S. MARTIN,

Cierk of the County Council.

4th March, 1949.

CITY OF PLYMOUTH.

Clerk of the County Council.

Ath March, 1949.

CITY OF PLYMOUTH.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointment on the established staff, which is subject to the Local Government Superannation.

Act, 1937, a satisfactory medical examination, and one month's notice on either side for termination.

and one month's notice on either side for termination.

PRINCIPAL ASSISTANT ARCHITECT (General Section), A.P.T. Grade VIII, consolidated salary £685-£760 per annum.

This Department is normally responsible for the whole of the Corporation's Architectural work, including housing, education and general municipal buildings, and offers considerable scope to candidates with initiative and ability. Candidates must be Registered Architects and have passed the final examination of the R.I.B.A. or hold equivalent qualifications. The successful applicant will be required to take charge of a section of the Department, and should have first-class ability in design.

Applicants must not be over 40 years of age, but this condition may be relaxed in the case of a person up to the age of 45 years, 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, must be returned not later than Monday, 28th March, 1949.

HOUSING ACCOMMODATION may be pro-

1949. HOUSING ACCOMMODATION may be provided, if required, by successful married vided, if applicant.

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

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

City Architect's Department,

Seymour Road, Plymouth.

1962

NORTH WEST METROPOLITAN REGIONAL

HOSPITAL BOARD.

ARCHITECT'S DEPARTMENT.

Applications are invited for the position of

SENIOR ASSISTANT ARCHITECT,

Applications are invited for the position of

A.P.T. VIII, £685—2760 per annum, plus London

Weighting.

Applicants should be members of the R.I.B.A.,

and have had good general experience in design,

construction and supervision of hospital build
ing work, including experience in the control of

staff. A detailed knowledge of hospital alteration

and adaptation work, together with the ability

to prepare approximate estimates of costs, is

essential.

The appointment is subject to the provisions

of the National Health Service (Superannuation)

Regulations, 1947-48, and will be terminable by

one month's notice. The successful applicant will

be required to pass a medical examination.

Applications stating age, qualifications and ex
perience, together with the names of two referees,

should be addressed to the Secretary. North West

Metropolitan Regional Hospital Board, 11a, Port
land Place, W.1, not later than 26th March, 1949.

Applications are invited for the following wholetime appointments on the permanent staff of the
City Architectural Department:

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

Housing accommodation may be made available
for the successful applicant.

(b) TWO ASSISTANT ARCHITECTS. Salary
on Grade A.P.T. V. commencing at £520 per
annum and rising to £570 per annum.

Candidates for the (a) and (b) appointments
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 £400 per
annum and rising to £465 per annum.

(d) ONE ASSISTANT ARCHITECT. Salary
on Grade A.P.T. II, commencing at £420 per
annum and rising to £465 per annum.
Salary increments are subject to satisfactory
service.

The posts are subject to one month's notice on

Salary increments are subject to extensive service.

The posts are subject to one month's ratice 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.

required to contribute to the Coventry Muni-cipal Officers' Widows' and Orphans' Pension Fund.

Applications for the above appointments must be made on the forms obtainable from the under-signed, and should be returned completed, together with copies of not more than two recent testimonials, or names of two pensons ic whom reference may be made, not later than Wednes-day, the 30th March, 1949.

Canvassing, directly or indirectly, will be a disqualification.

D. E. E. GIBSON,

D. E. E. GIBSON, City Architect.

14, Warwick Row, Coventry. Date as issue.

Coventry.
Date as issue.

RURAL DISTRICT COUNCIL OF
WINCANTON.

ARCHITECTURAL ASSISTANT.
Applications are invited for the appointment
of Architectural Assistant in the Architect's and
Housing Department of the Council.

The appointment will be temporary but will
subsist for at least three years.
Applicants must be competent to make surveys, prepare plans, dead with quantities and to
assist generally in the Drawing Office.
The salary will be in accordance with Grade
III of the National Scale (£450×£15—£495).
Applications endorsed "Architectural Assistant," stating age, qualifications and experience,
and giving the names of three persons to whom
undersigned not later than the 21st March, 1949.
Canvassing, direct or indirect, will be a disqualification.

S. L. CHAVE,

S. L. CHAVE, Clerk to the Council.

S. L. CHAVE, Clerk to the Council.

Wincanton, Somerset.

1st March, 1949.

CUMBERLAND COUNTY COUNCIL.
Applications are invited for the appointments of JUNIOR ASSISTANT ARCHITECTS, Grade III, 2450—2495 of the A.P. & T. Division of the National Scales of Salaries.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the persons appointed will be required to pass a medical exemination.

Applicants for appointments should have passed, or be preparing to take the R.I.B.A. Intermediate Examination, and should have had experience in an Architect's Office.

Applications must be made on a form obtainable from John H. Haughan, F.R.I.B.A... County Architect, 15, Portland Squary, Carlisle, and should be returned completed to him, together with copies of note more than three recent testimonials, not later than Monday, the 14th March, 1949.

G. N. C. SWIFT.

G. N. C. SWIFT. Clerk of the County Council. February, 1949.

Tenders for Contracts
6 Hines or under, 10s.; each additional line, 1s. 6d.
BOROUGH OF LUTON.
380 HOUSES, FARLEY HILL ESTATE, LUTON.
SANITARY FITTINGS.
Tenders are invited for the supply and delivery of sanitary fittings for the houses being erected on the Farley Hill Housing Estate.
The Form of Tender, Specification and Conditions of Contract can be obtained from the Borough Engineer, Town Hall, Luton, on payment of a deposit of £2 2s. 0d. which will be returnable on the receipt of a bona fide tender which is not subsequently withdrawn. Cheques must be made payable to "Luton Corporation." Tenders, enclosed in the official envelope provided, must be delivered to the Town Clerk not later than noon on the 25th March, 1949.
The Council do not bind themselves to accept the lowest or any tender.
W. H. ROBINSON,
Town Hall,
Luton.

Town Hall, Luton. February, 1949.

Architectural Appointments Vacant

4 isnes of under, 5s.; such additional line, 1s. 6s

Architectural Assistant required

(qualified) for General Practice—Surveys,
Working Drawings and Specifications. Write,
stating age, previous experience and salary required, Henry C. Smart & Partners, L.B.L.B.A.

120, Moorgate, E.C.2.

An expanding Middle East Oil Company
urgently requires an Assistant Architectural required is not of sketch and working drawings connected with any
architectural items required; should be up to
seaior architectural standard; A.R.L.B.A. preferable; not less than 7 years in drawing offices
engaged on housing schemes, public buildings,
town planning, etc.; knowledge of Middle East
architectural practice, climatic difficulties,
materials, is an advantage; some knowledge of reinforced concrete and specialised construction,
including the "Bellrock" system, desirable; age
25-40; salary 2500-2750 per annum, according to
age and experience. Write, giving brief details
for application form, and quoting LO 125, to Box
"Z.F.", c/o J. W. Vickers a Co., Ltd., 7/8, Great
Winchester Street, London, E.C.2.

A RCHITECTURAL ASSISTANT (single) reA quired for country town office; office trained;
good draughtsman; car owner/driver; experience
in outside supervision and specifications; salary
£500 per annum. Details to Box 1946.

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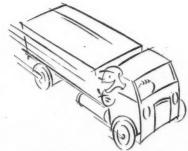
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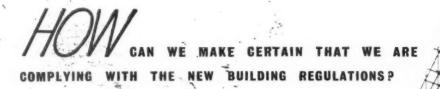
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