ARC



TO LAND

standard contents

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

DIARY NEWS

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Lighting Physical Planning Heating & Ventilation Structure Questions & Answers Materials Acoustics & Sound Insulation

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PRICES

Architectural Appointments Wanted and Vacant

[VOL. 103 No. 26831 THE ARCHITECTURAL PRESS Editorial: Thirteen Queen Anne's Gate, Westminster, S.W.1. Phone: Whitehall 0611 Subscriptions and Advertising: Forty-Five Cheam, Surrey. 'Phone: The Avenue Vigilant 0087-9.

TCPA TDA

Price 9d. 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, is given below. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA ABT ACGB APRR	Architectural Association. 34/6, Bedford Square, W.C.1. Museum 0974 Association of Building Technicians. 5, Ashley Place, S.W.1. Victoria 0447-8 Arts Council of Great Britain. 9, Belgrave Square, S.W.1. Sloane 0421 Association for Planning and Regional Reconstruction. 34, Gordon
ARCUK ASB	Square, W.C.1. Euston 2158-9 Architects' Registration Council. 68, Portland Place, W.1. Welbeck 9738 Architectural Science Board of the Royal Institute of British Architects.
BC BCIRA BDA BIA	Building Centre. 23, Maddox Street, W.1. British Cast Iron Research Association. Alvechurch, Birmingham. British Door Association. 25, Victoria Street, S.W.1. British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2. Welbeck 5721 Mayfair 2128 Mayfair 2128 Abbey 5422-3
BIAE BINC BOT BRS BSA	Glasgow Central 2891 British Institute of Adult Education. 29, Tavistock Square, W.C.1. Euston 5385 Building Industries National Council. 11, Weymouth Street, W.1. Langham 2785 Board of Trade. Millbank, S.W.1. Whitehall 5140 Building Research Station. Bucknalls Lane, Watford. Garston 2246 British Steelwork Association. Egginton House, Buckingham Gate, S.W.1.
BSI CCA CID CPRE CSI DIA DOT EJMA	British Standards Institution. 28, Victoria Street, S.W.1. Abbey 3333 Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1. Sloane 5255 Council of Industrial Design. Tilbury House, Petty France, S.W.1. Whitehall 6322 Council for the Preservation of Rural England. 4, Hobart Place, S.W. Sloane 4280 Chartered Surveyors' Institution. 12, Great George Street, S.W.1. Whitehall 5322 Design and Industries Association. 9, Conduit Street, W.1. Mayfair 5432 Department of Overseas Trade. 35, Old Queen Street, S.W.1. Victoria 9040 English Joinery Manufacturers Association (Incorporated). Sackville House, 40, Piccadilly, W.1. Regent 4448
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1. Sloane 2837
FMB	Federation of Master Builders. 23, Compton Terrace, Upper Street, N.1.
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1. Sloane 2837
GG HC IAAS	Georgian Group. 4, Hobart Place, S.W.1, Housing Centre. 13 Suffolk Street, Pall Mall, S.W.1. Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.
ICE IEE IOB IRA ISE LIDC	Institution of Civil Engineers. Great George Street, S.W.1. Institution of Electrical Engineers. Savoy Place, W.C.2. Institute of Builders. 48, Bedford Square, W.C.1. Institute of Registered Architects. 47, Victoria Street, S.W.1. Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.
LMBA MARS MOA MOE MOH MOLNS MOS MOT MOTCP	Ministry of Labour and National Service. St. James's Square, W.C. Whitehall 7264 Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. Gerrard 6933 Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1. Whitehall 7264 Park 7678 Whitehall 3400 Sloane 4522 Whitehall 3400 Ministry of Labour and National Service. St. James's Square, S.W.1. Whitehall 6200 Ministry of Transport. Berkeley Square House, Berkeley Square, W.1. Abbey 7711 Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1. Whitehall 8411
MOW NAMMO	Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 7611 Natural Asphalte Mine-Owners and Manufacturers Council.
NBR NFBTE	94, Petty France, S.W.1. Abbey 1010 National Buildings Record. 37, Onslow Gardens, S.W.7. National Federation of Building Trades Employers. 82, New Cavendish Street,
NFBTO	W.1. Langham 4041 National Federation of Building Trades Operatives. 9, Rugby Chambers, Rugby
NFHS NT	Street, W.C.1. Holborn 2770 National Federation of Housing Societies. 13, Suffolk St., S.W.1. Whitehall 2881/2/8 National Trust for Places of Historic Interest or Natural Beauty.
PEP PWB	42, Queen Anne's Gate, S.W.1. Whitehall 0211/2 Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245 Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House, 7(1)
RCA RIBA RS RSA SFMA	Reinforced Concrete Association. 91, Petty France, S.W.1. Whitehall 9936 Royal Institute of British Architects. 66, Portland Place, W.1. Welbeck 5721 Royal Society. Burlington House, Piccadilly, Wil. Regent 3335 Royal Society of Arts. 6, John Adam Street, W.C.2. Temple Bar 8274 School Furniture Manufacturers' Association. 13, New Square, Lincolo's Inn,
SIA SPAB	Society of Industrial Artists. 20, Wellfield Avenue, N.10. Tudor 7027 Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.

Society of Industrial Artists. 20, Wellfield Avenue, N.10.

Tudor 7027
Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.
Holborn 2646
Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.
Temple Bar 5006
City 6147

Timber Development Association. 75, Cannon Street, E.C.4. Town Planning Institute. 18, Ashley Place, S.W.1.

City 6147 Victoria 8815

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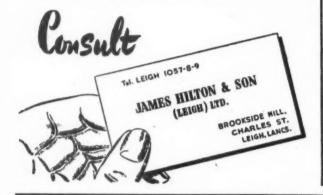
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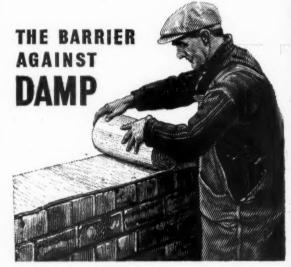
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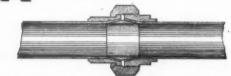


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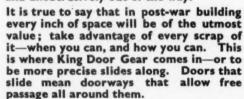
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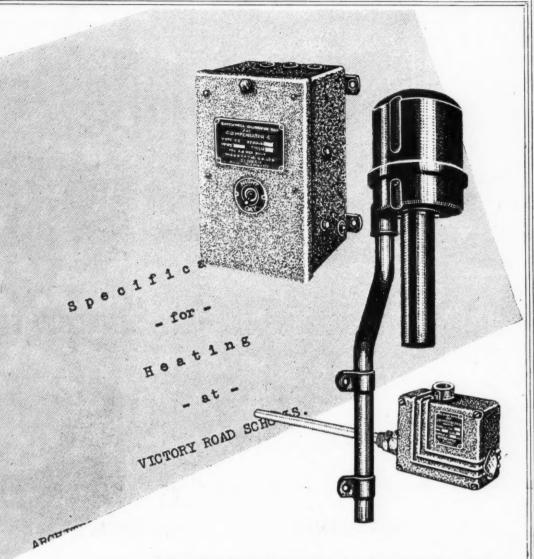
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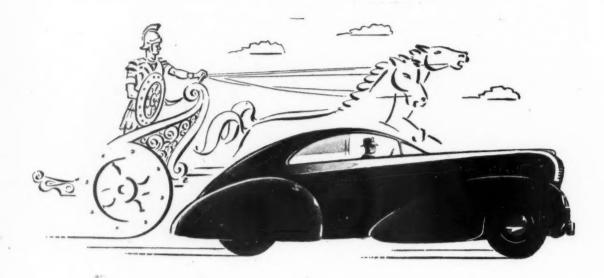
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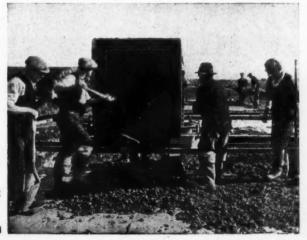
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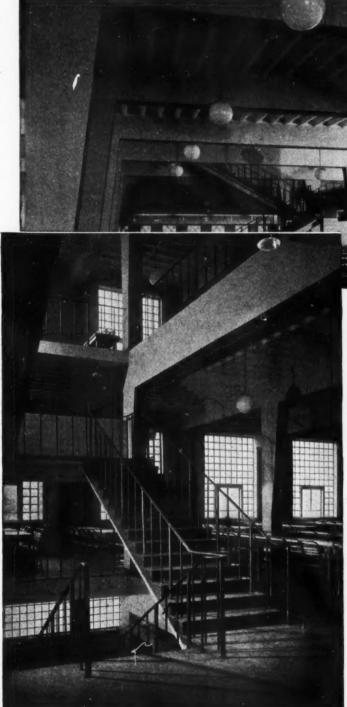
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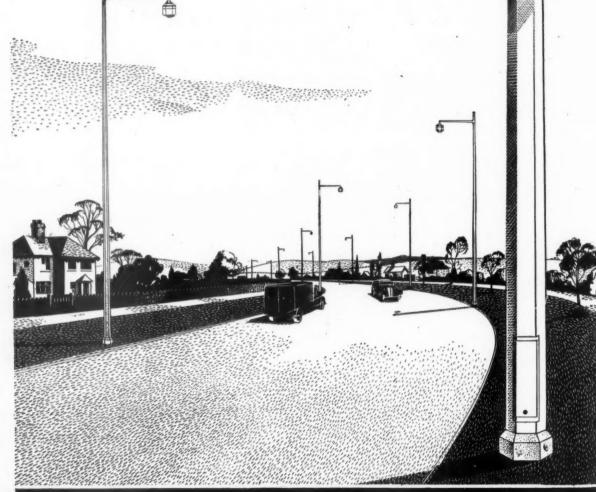
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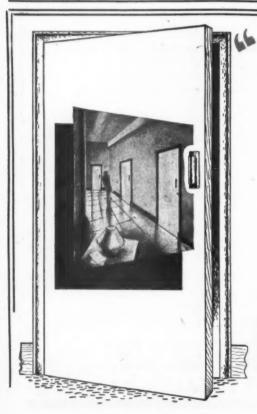
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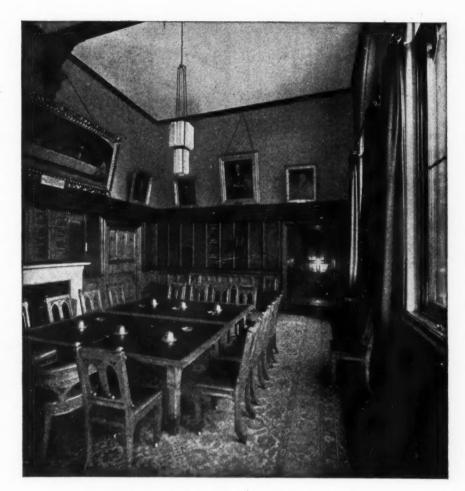
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How employers can find the right executives

MANY employers will remember the tragic waste of talent and ability that resulted from the scramble for employment after the 1914-18 war.

But this time the Government has taken steps to see that talent and ability are not wasted. A free, nation-wide appointments service makes it easy for employers to select just the men and women they need for executive, managerial or administrative posts.

Among the thousands now being released every week from the Forces or from war industry are numbers of qualified and experienced men and women with the capacity for responsible jobs. And with them, younger men of high promise - often with little or no pre-war experience of business or industry, but with qualities of initiative and judgment developed and tested in the Forces.

MATCHING MEN WITH JOBS

The service works through thirteen Regional Appointments Offices, where candidates for responsible posts - men and women from civilian employment as well as from the Servicesare interviewed, classified and registered. All who are without previous experience in their chosen field are assessed and "screened" by modern, tested methods to discover their special aptitudes and potentialities.

The result is that the employer seeking a man to fill a certain post - or to train for it - can draw on the whole country if need be; and he is spared many useless interviews, since suitable candidates only are submitted for his choice.

The purpose of the Appointments Offices is NOT to find jobs for all applicants, regardless of ability; but to see that those who have ability get the chance to show it, and to offer employers the choice of the best men available for responsible posts.

Since VE-day, more than 30,000 responsible positions have thus been successfully filled. Whatever your needs for experienced or potential executives, you would be well advised to get in touch with your Regional Appointments Office.

Most probably the man you are seeking is already on the register of one of the Appointments Offices - or will be when his release group is reached. In any case the Appointments Offices will spare no efforts to help you find him.

TRAINING SCHEMES

Even if your need for staff is still some months ahead, you will be interested in the training schemes by which promising candidates are being assisted to complete their professional or technical education, or to take courses in business administration.

> Write, telephone or call. The Regional Appointments Offices are in the following towns:-

LONDON: 1-6 Tavistock Square, W.C.1 CAMBRIDGE: 5 Salisbury Villas, Station Road READING: 23 Valpy Street

BRISTOL: Lyndale Hotel, Berkeley Square

BIRMINGHAM: 239 Broad Street NOTTINGHAM: Commerce Chambers, Upper Parliament Street

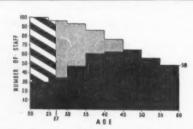
LEEDS: Greek Street Chambers, Greek Street MANCHESTER: Commercial Chambers, 47 Corpora-

tion Street LIVERPOOL: Cotton Exchange, Bixteth Street NEWCASTLE-ON-TYNE: 153 Barras Bridge EDINBURGH: 5 Rothesay Terrace GLASGOW: 450 Sauchiehall Street CARDIFF: 8 Cathedral Road

A General Manager's Appreciation

The following extract from a letter written by the General Manager of a large engineering works is typical of scores of expressions of appreciation received:

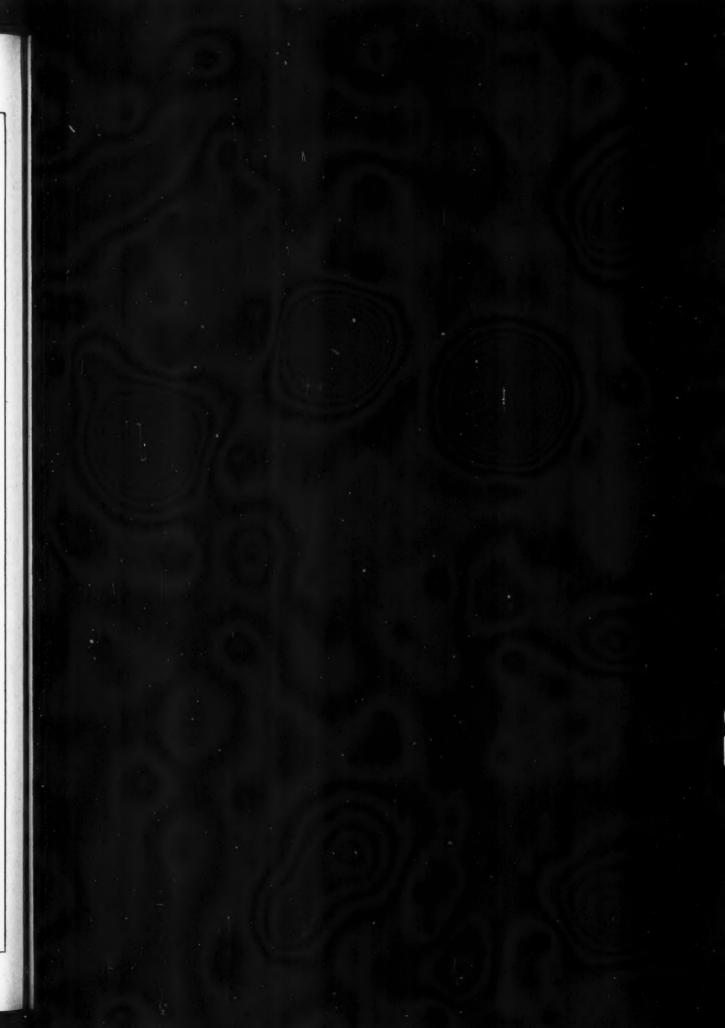
"All the six applicants whose names you sent to me were interviewed. May I say that I was impressed by the consistent high standard of the applicants, and that it was with very great difficulty that a choice was made."



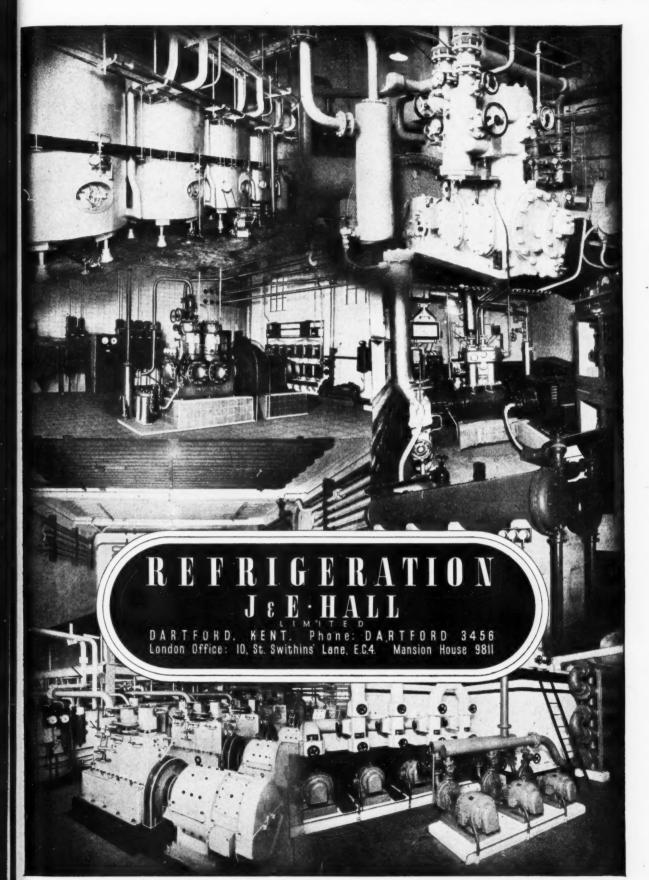
THE SEVEN-YEAR GAP. Employers trying to make up for the lost years, when they could not recruit promising young men to train for executive jobs, are finding the Appointments Offices a valuable source of "material."

The above chart represents the staff structure of a typical engineering In grey : men called away. In black : the war-time staff, reserved or unfit. In stripes: the 20-27 age gap now left, even after reinstatement of pre-war employees.

Unfilled, this gap will mean a dangerous staff shortage, in ten years' time, of the 30-37's; in twenty years' time, of the 40-47's. It can be filled only by men between 20 and 27 returning to civil life. Most of those of executive calibre are applying, on release, to the Appointments Offices. That is where employers are finding the talent they want.







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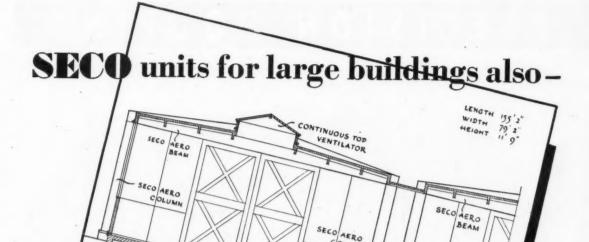
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BOTTOM: The use of three bays side by side gives a total width of 79ft. 2ins.

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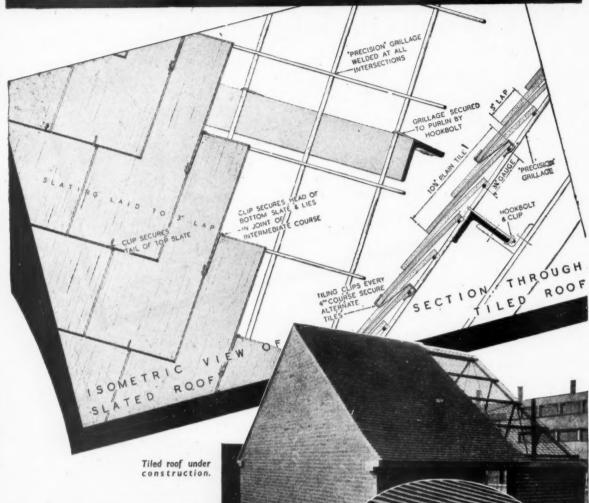
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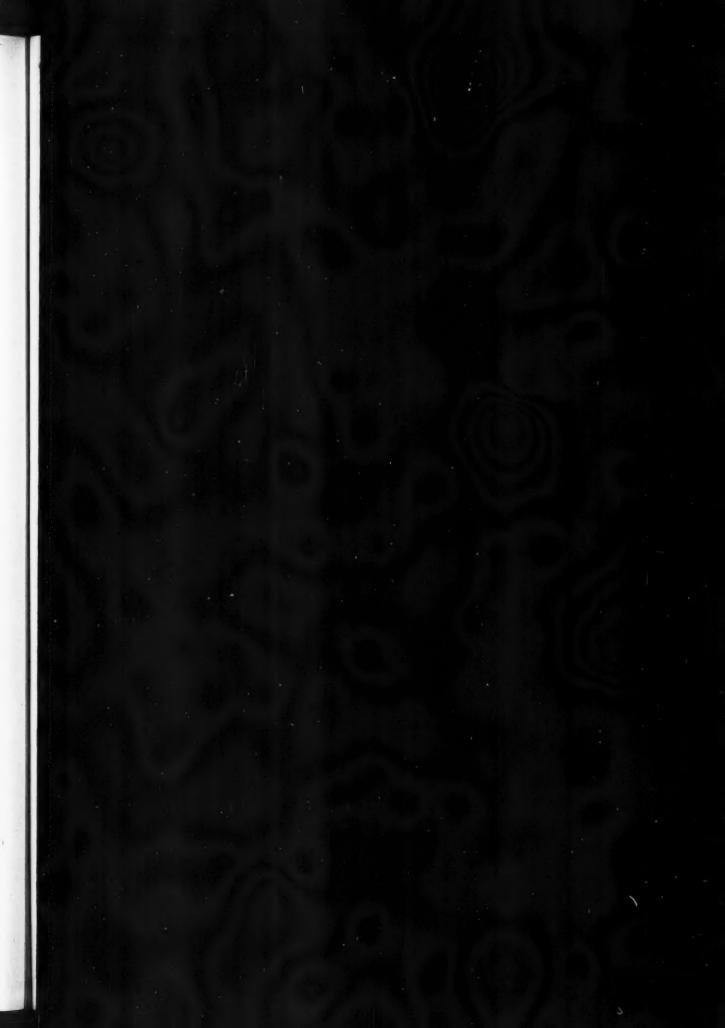


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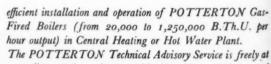
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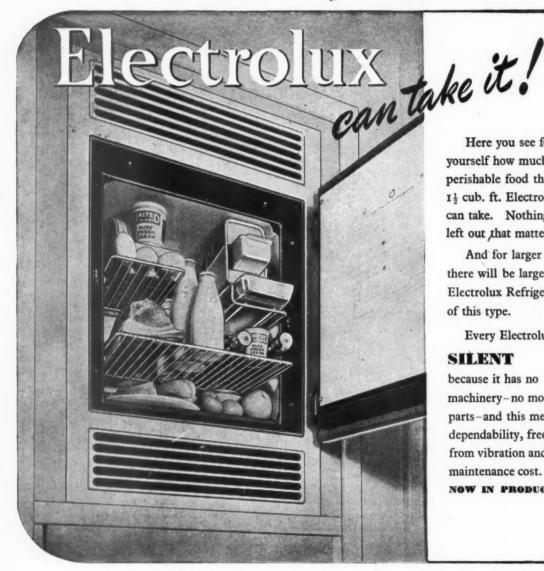


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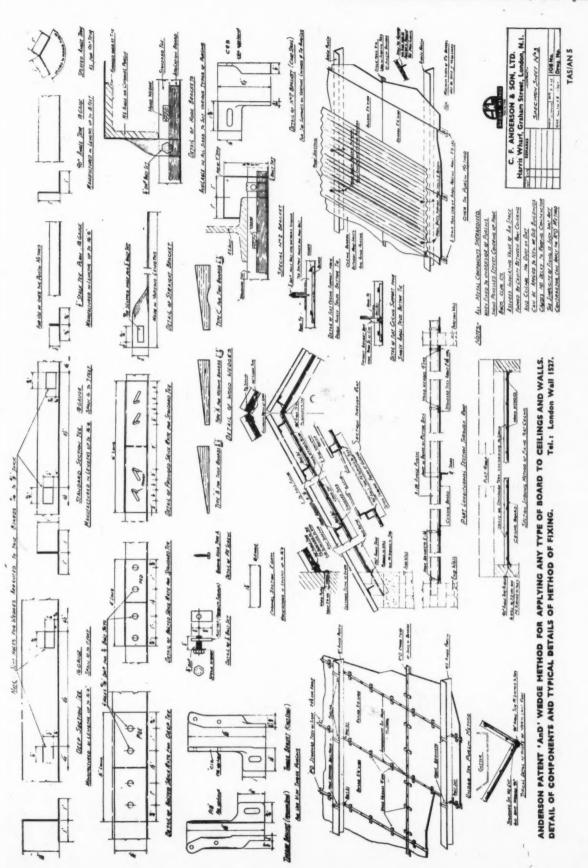
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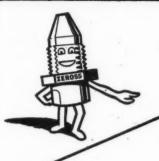
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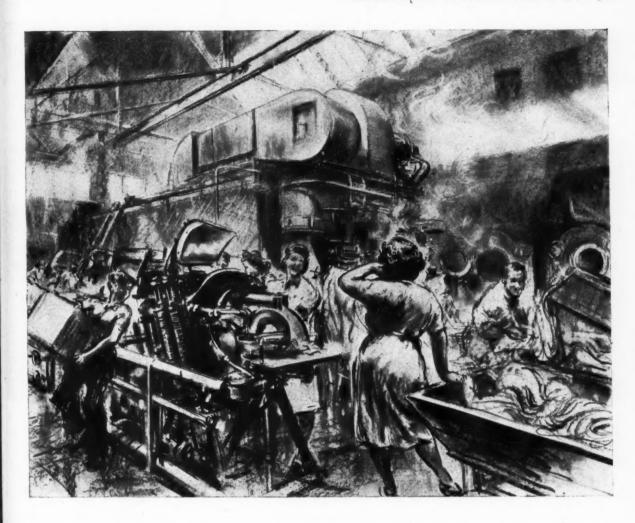
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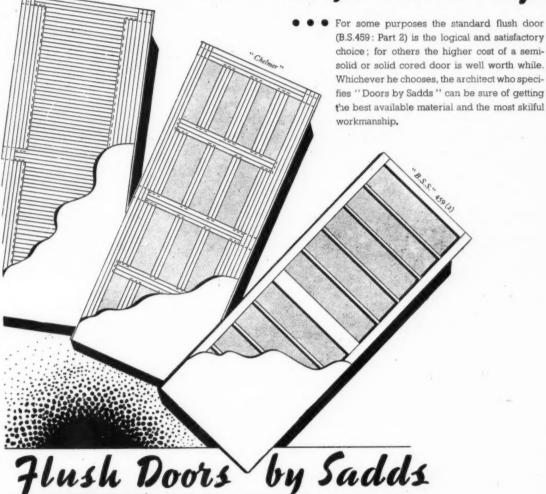
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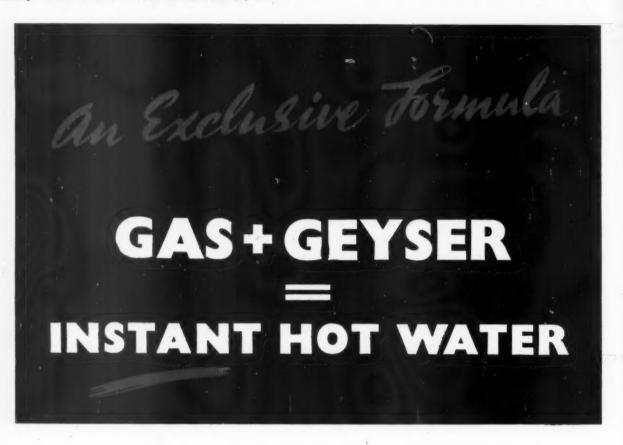
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pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the Journal. Newsagents now cannot supply the Journal except to a "firm order." Subscription rates: by post in the U.K. or abroad, £1 155. od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available) double tries. Volumes can be bound able), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the JOURNAL and made of raw materials now in short supply, are not necessarily available for export.

RY FOR

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

BRIGHOUSE. Recording Britain South At the Public Library, Museum and Art Gallery. (Sponsor, The Arts Council.)

Graph Britain South At the Public Library, Museum and Art Gallery. (Sponsor, The Arts Council.)

COLCHESTER. National COLCHESTER. National Buildings Record. Exhibition at the Colchester and Essex Museum, Colchester Castle. (Sponsor, The Arts Council.)

JUNE 27-JULY 3

LEICESTER. Works of James Ensor. Exhibition at the Museum and Art Gallery. (Sponsor, The Arts Council.) JUNE 27-30

LONDON. Exhibition of Architects'
Working Drawings. At the RIBA,
66, Portland Place, London, W.I. The
exhibition includes drawings lent by
T. P. Bennett and Son (Two
Hutted Camps). Stanley Hall & Easton
and Robertson: (School of Anatomy,
Cambridge; Caius College, Cambridge;
British Pavilion, New York World
Fair 1939). Graham Dawbarn (Norman
and Dawbarn): (A selection from the following: Permanent Auxiliary Air Force
Station, Manchester; Two Aircraft Repair
Factories at Gatwick and Loughborough;
Civil Airport Buildings, Birmingham).
(Sponsor, RIBA.) 10 a.m. to 6 p.m.

June 27 JUNE 27

Chemical Research Exhibition. At the Tea Centre, Lower Regent Street, S.W.1. (Spon-sor, Imperial Chemical Industries.) JUNE 27-28

Exhibition of Planning Films (in sound). At the Central Hall, Westminster. Films to be shown: The Proud City, The Plan and the People, and A City Reborn. Mrs. Bolton, Chairman of the Town Planning Comton, Chairman of the Town Planning Com-mittee London County Council, will be pre-sent and it is anticipated will answer any questions about the County of London Plan. A limited number of tickets are available on application to the General Secretary, IAAS, Faton Place, Westminster, S.W.1. Eaton Place, Westminster, S.W.1.

June 28. 6.30 p.m.

Oriental and European Carpets and Rugs. Exhibition at the Royal Water Colour Society's Galleries, 26, Conduit Street, W.1. (Sponsor, Perez.) June 27-29

Building Materials and Components. Exhibition at the Princes Gallery, Piccadilly, W.1. (Sponsors, Ministry of Works and the Ministry of Health in consultation with the other Government Departments concerned.) Monday to Friday, 10 a.m. to 6 p.m. Saturdays, 10 a.m. to 1 p.m.

JUNE 27 for about 4 weeks.

First Post-War Annual Reception of the RIBA. At the RIBA's first post-war annual reception, the President and Lady Thomas will receive guests in the Henry Florence Hall, 66, Portland Place, London, W.1, from 8 p.m. to 9 p.m. At 9 p.m. there will be music by the Charles Ernesco's Quintet in the fover, and later in the evening a song the foyer, and later in the evening a song recital will be given by Miss Rose Hill, soprano, and Mr. Roderick Jones, baritone (by kind permission of the Sadlers Wells Opera Company). Mr. Stanley Mobsby will be at the piano. On view during the reception will be an exhibition of the Knutsford scheme entitled Your Town, and an exhibition of library books, prints and drawings will be shown in the Aston Webb room.

Refreshments will be served in the Henry Refreshments will be served in the Henry Florence Hall and also in the Members' Room. Any member of the Institute wishing to attend the reception who has not already applied for tickets should do so at once. They can be obtained from the Secretary, RIBA, price 7s. 6d, each, and members can each bring one guest. Uniforms or lounge suits will be worn. (Sponsor, RIBA.) 8 p.m. to 9 p.m.

Presentation of Howard Memorial Medal to Professor Lewis Mumford. At a luncheon at the Connaught Rooms, Great Queen Street, W.C.1. (Sponsor, TCPA.) Luncheon 17s. 6d. 12.30 p.m. for 1 p.m. June 27

Lewis Mumford. Amongst Lewis Mumford's many engagements will be a lecture at the RIBA, 66, Portland Place, W.1, entitled A World City for the United Nations. The lecture has been arranged by the RIBA in collaboration with the Institute of Sociology. 6 p.m.

NEWARK. Drawings and Watercolours by Living Scottish Artists. Exhibition at Gilstrap Public Library and Municipal Museum. (Sponsor, The Arts Council.) NEWARK. JUNE 27-JULY 1

S UDBURY. Conference and Exhibition on the Sudbury and District Planning Association's Survey and Plan. At the Town Hall, Sudbury, Suffolk. Speakers:
L. F. Easterbrook, R. L. Reiss, Chairman: Donald McCullough. TCPA.) JUNE 28

WATFORD. Accent on Colour. Exhibition at the Public Library and Art Gallery. (Sponsor, The Arts Council.)

JUNE 27-29

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

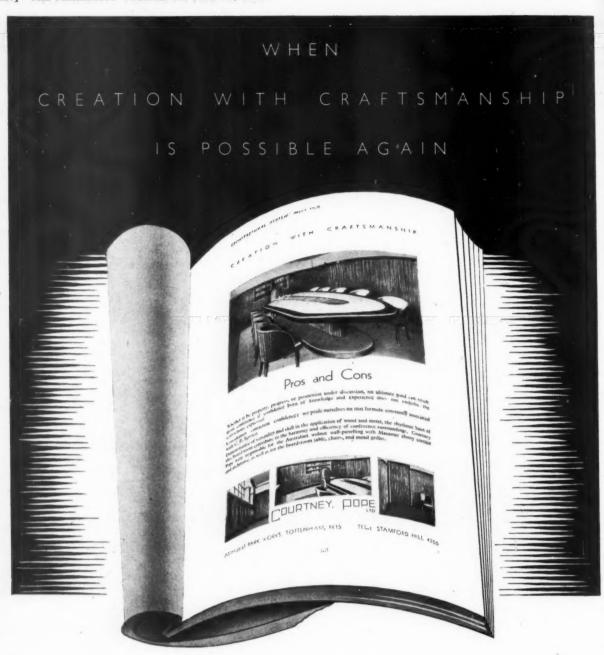
* means spare a second for this, it will probably be worth it.

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

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

Mr. Eric A. W. Iver, A.R.I.B.A., Architect to the County Borough of Northampton Education Committee, has been APPOINTED DEPUTY CITYARCHI-OFPLYMOUTH. TECT

The Minister of Transport, who proposes to make the necessary Orders to give effect to the London-Fishguard road improvement scheme, has appointed Mr. E. C. P. Lascelles to hold a public inquiry on Septem-ber 24 at Bristol. The scheme includes NEW BRIDGES OVER THE SEVERN AND The new road is proposed to be constructed from a point on the Exeter-Leeds trunk road north of Almondsbury to a point on the London-Fishguard trunk road north of Haysgate, terminating on a point on the Newport-Chepstow road. The Severn Bridge, as it will be known, begins at a point on the Beachley Peninsula and terminates at the face of Aust Cliff. The main span of this nearly a mile long suspension bridge is 3,000 ft., and the side spans flanking it are each 1,000 ft. long. Connection between the south-east anchorage and the mainland at south-east anchorage and the mainland at Aust Cliff will be by three girder spans. The width of the bridge has not yet been finally determined, but it is expected to be about 100 ft. The Wye Bridge will be a deck girder bridge of eight spans, seven of which have each approximately 100 ft. clear opening; the remaining span over the navigable channel has a clear opening of 150 ft. The width of the bridge is approximately 90 ft. width of the bridge is approximately 90 ft.



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AN AMERICAN ON THE AMERICAN CITY: BROADWAY AS SYMBOL. [From City Development, by Lewis Mumford (Secker and Warburg).] It is scarcely possible to exaggerate the part that Broadway—I use the term generically—has played in the American town. It is not merely the Agora but the Acropolis. When the factory whistle closes the week, and the factory hands of Camden, or Pittsburgh, or Bridgeport pour out of the buildings and stockades in which they spend the more exhausting half of their lives, it is through Broadway that the greater part of their repressions seek an outlet . . . Now, under normal conditions, for a great part of the population in a factory town one of the chief instincts to be repressed is that of acquisition (collection) . . . In the five and ten cent store it is possible for the circumscribed factory operative to obtain the illusion of unmoderated expenditure—and even extravagance—without actually inflicting any irreparable rent in his purse. Broadway is thus, in more than one sense, the great compensatory device of the American city. The dazzle of white lights, the colour of electric signs, the alabaster architecture of the moving-picture palaces, the aesthetic appeals of the shop windows—these stand for elements that are left out of the drab perspectives of the industrial city. People who do not know how to spend their time must take what satisfaction they can in spending their money . . . Broadway, in sum, is the façade of the American city: a false front.

Mr. Arthur Greenwood, at the annual conference of the Labour Party at Bournemouth; There is nothing to which the Government is more deeply committed than HOUSING and I have every confidence in Mr. Aneurin Bevan's drive and energy to see that the problem is solved before the end of the present Parliament. Mr. Greenwood accepted a motion from the National Union of Agricultural Workers asking the Ministry of Health to give effect to the recommendations of the Dudley Committee and build farm cottages as far as possible in villages, though he asked for time for the Minister of Health to give serious attention to a second part of the motion urging the necessity of bringing all farm cottages within the full scope of the Rent Act, so that no farm worker should be evicted from a cottage unless suitable alternative accommodation was available. Mr. Green-wood also accepted a motion asking that the programme of temporary prefabricated houses should be curtailed where it conflicted with permanent housing schemes. The temporary houses, he said, had been promised before the present Government took office. Mr. Bevan did not like the building off temporary houses, but to damp down their production straight away might cause great difficulties. He hoped, however, that the present programme, except for the aluminium houses, would be completed this autumn. Motions asking for subsidies for the conversion of large houses into two or more self-contained dyellings and for the enmore self-contained dwellings and for the en-forcement of high standards of construction were also accepted.

The Minister of Health has been in consultation with the Minister of Works with regard to the steps which can be taken to assist the natural stone industry and TO PROVIDE EMPLOYMENT FOR STONE MASONS returning from the Forces. In a circular to local and other authorities the Ministry of Health state: Natural stone is required for a variety of purposes, and a good deal of work is waiting to be done, e.g., in the repair of bomb damaged stone buildings. Work which makes demands upon considerable numbers of building trade workers, other than stone masons, will usually

have to be postponed for the present. In some cases, however, work can be carried out by stone masons which will involve a relatively small demand for other types of building labour and for materials in short supply. Where, in such cases, the work to be done relates to services for which this Department is responsible, the Minister will be prepared to consider sympathetically

applications for his authority, or for his support in civil licensing cases to applications made to the Ministry of Works, to enable the work to proceed. Where, owing to the existing serious shortage of building and civil engineering labour and of materials, it is not possible for a particular project to be put in hand now, it is suggested that an order for the natural stone might be placed in advance.



Memorial tablet to Sir Edwin Lutyens, President of the Royal Academy from 1938 to the time of his death in 1944, unveiled by Sir Alfred J. Munnings, his successor, in the crypt of St. Paul's Cathedral. The tablet is of stone and was designed by Mr. W. Curtis Green, R.A. It has been placed among the memorials to other Royal Academicians, and on the same wall as those commemorating Sir George Frampton, Sir Alfred Gilbert, and Sir Hamo Thornycroft. Affixed to the stone is Sir Edwin Lutyens's shield of arms in enamelled bronze, the crest modelled in three dimensions. In the photograph Sir Alfred Munnings is seen standing by the memorial he had just unveiled.



LEWIS MUMFORD

Mr. Lewis Mumford, the American author, planner and sociologist now on a visit to this country. Today he receives the Howard Memorial Medal from the President of the Town and Country Planning Association at a luncheon to be held in London. The recent acceptance by the Government of the Greater London Plan and the publication of the New Town Bill makes Mr. Mumford's visit of special interest. In all his writings during the past twenty years he has advocated a policy of dispersal and decentralisation and the building of new towns. Born in 1895, educated at the College of the City of New York, Columbia University, and, for some years Professor of Humanities at Stamford University, California, he has an international reputa-

tion as an authority on town planning, through his books The Culture of Cities, Faith for Living, and Technics of Civilisation. His latest book, City Development, contains a critical essay on the County of London Plan. Today's occasion will be the fifth presentation of the Howard Memorial Medal, which was inaugurated by the Town and Country Planning Association in 1938 to commemorate the work of Sir Ebenezer Howard. On Thursday last Mr. Mumford gave an address before the Town Planning Institute and on Saturday spoke at the Institute of Sociology Conference on the City of the Future. On July 12 he will lecture at the RIBA on A World City for the United Nations. See Astragal, page 480.

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Speaking at the Town and Country Planning Association, Mr. Charles Dalton said that THE MOST OPPONENTS **DANGEROUS** THE NEW TOWN ticket the season holders who live on These Jacobins on the 8.15 he added, are a favoured minority who can work in a great city and then escape to rural delights in the country. I wonder if they reflect on the city and then escape to rural delights in the country. I wonder if they reflect on the millions in London alone to whom such escape is impossible, who return to houses as dingy as and less hygienic than their factories? The dormitory population helped to manufacture most of the fuss at Stevenage and I have no doubt they will spring into activity with all the other places. Mr. Dalton continued: The prime need when planning to enlarge a small town like Stevenage, is to have good public relations with the existing residents of the town, especially with those who have lived and worked there with those who have lived and worked there all their lives. It is not wise to have too much officialdom which they will naturally distrust. They were there first and should be approached in a friendly way. It should be possible to persuade all the people affected that they are taking part in a great adventure. The planners themselves should take warning from what happened at Stevenage. They are apt to get rather self-satisfied and forget that human nature will not always conform to their rules. One way to achieve this unity of purpose is to take good plan-ning films to the town concerned and show them in all the cinemas and halls available. Let the people see films like The City and Land of Promise and, of course, films should be made specially. Another way is to win the co-operation of the local Press. At Stevenage, for example, there is no local newspaper and the people have had no objective report of what was to happen, from their own paper. The great advantages that an extension to a town like Storogan and the stor paper. The great advantages that an extension to a town like Stevenage can bring should also be stressed. The children will have a much better chance. There will be better schools and other facilities, They will be healthier and happier than in the congested area of a big town. Stevenage itself has been worrying for years about the out-of-date school buildings which existed there. I do hope that the Stevenage plan goes for-I do hope that the Stevenage plan goes for-ward and that the Minister of Town and Country Planning will set up some sort of Public Relations Bureau in Stevenage to tell the people, on the spot, how they will be-come part of a new plan.

Joining Norway and Sweden 200 ft. above the Svine Sund, south of Fredrikshald, the HIGHEST BRIDGE IN EUROPE has been officially opened by King Haakon of Norway and the Crown Prince of Sweden, accompanied by Crown Princess Louise. According to the special correspondent of The Times the construction of the bridge, which is 1,260 ft. long with one span of 465 ft., was begun in 1939 and was almost completed by Swedish engineers in 1942, when the German occupation forces were already established on the Norwegian side. The bridge was the scene of dramatic and often fatal attempts to escape from Norway during the war. In 1942 lightning exploded a mine on the Swedish side, destroying the second arch, and the restoration was postponed until the end of the war. After eight months' work the bridge, a majestic engineering achievement, which now re-establishes the main western Scandinavian motor route, was completed, costing more than 3,000,000 Swedish kronor.

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COMPENSATION

WHEN housing plans were merely plans, cost was no more than one among many unresolved problems. Now, as the plans begin to transform themselves into actual happenings, finance, in one form or another, emerges as a stumbling block. In some cases it is no more than a potential difficulty. Money, as yet, does not cripple local authority housing. There is no financial problem in the repair of war-damaged property. But in one field monetary considerations are already affecting redevelopment, that is, over the problem of compensation, particularly in the basis on which land and premises compulsorily acquired are to be valued. As the discussions at Stevenage showed, as soon as a redevelopment plan seems likely to become an actual project. the compensation issue is one that is most hotly debated. The present basis of compensation for compulsory acquisition is laid down in the 1944 Planning Act. With one exception, the basis is the March, 1939, price level. The exception is in the case of the owner-occupier, who is given a 30 per cent. increment on his March, 1939, value. That standard is to prevail for the five years following the passing of the 1944 Act. When the basis of valuation was discussed in the Commons during the debates on the Bill, the Labour Party, then virtually in opposition to the Coalition Government on this issue, were strong advocates of the 1939 price level and only agreed to the owner-occupier exception with reluctance. It will therefore be difficult for the present Government to reverse the policy it advocated out of office, but they will have increasing difficulty in meeting the arguments in favour of some change, still more in denying that there is any problem to solve.

Admittedly, it is essential for any Government to do all that it can to check inflation. To admit that 1939 prices will never return is not only to admit that inflation exists. It is to accept some of its results as permanent. Prices may never sink back quite to 1939 figures, but it is certain that they will fall from their present level and it is possible that improved methods and equipment, and increased output, will bring them very near to the levels of seven years ago. To stabilize compensation on present-day prices would impose an unnecessary burden on the community. The man who, before the war, chose land as an investment has no right to complain if it does not appreciate to the extent that some other forms of investment have. Even if it remains at its 1939 level of value, it will have fared better than some other classes of investment, equally reputable.

But to the owner-occupier, the man, say, at Stevenage, one of the 260 whose houses are to be destroyed, his house and land is not only an investment. It is a shelter, it is a home. In his case, one thing is certain. It is impossible now, for anyone dispossessed of the house in which he lives to buy or build anything like an equivalent at a cost equal to the 1939 price of the destroyed property. It is bad enough to tell a man whose home was totally destroyed by enemy action that

he must treat the gap between compensation and cost of replacement as a personal misfortune of war. It is intolerable to say to a man whose house is to be destroyed by Government action that he too will fare no better.

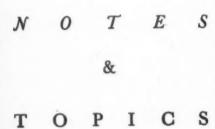
The key to the problem of the compensation level is this distinction between land as an investment and land as a home. What the owner-occupier should be given is a replacement, not a sum of money, adequate or inadequate. It can never be a good thing if the foundation of the new is to be laid on an injustice to the old, for it is on considerations of justice and humanity, quite as much as on the quality of the architecture and the excellence of the lay-out, that the re-planning of Britain will be judged by the people of the country.



The Architects' Journal

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

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LEWIS MUMFORD

The era of V.I.P.s is rapidly changing from the days when the arrival of a notable personage from one of our numerous Allies in the Great Struggle, either of military or economic significance, was all the news. Today, those who belong to the more constructive forces in the world are moving around with some semblance of freedom—last week heralding the arrival of Lewis Mumford in London, where the Town Planning Institute and the Institute of Sociology provided opportunities for representative gatherings to welcome him and hear his observations on

current matters connected with planning. Doubtless after he has completed his tour of various centres in these Islands, Lewis Mumford will have formed some very definite opinions on our reconstruction problems, although at the Institute of Sociology Conference on The City of the Future he was apparently rather surprised to have found that this country had not changed noticeably in spite of the physical and social ravages of war. respect he pointed out that the liability of the last century and a half of debased slum housing and mediocre suburban building still remains to be dealt with.

Mr. Mumford drew our attention very emphatically to many truths which are easily overlooked by the planner. He laid stress again at the Conference on a remark he had made at the Town Planning Institute-that if the planner forgets the baby in the pram, the plan will lack the fundamental out-Further in answer to a question on the problem (now intensifying again) of the motor car, he suggested that if planners do their work properly we shall not have so many people seeking escape from their urban environment. Concerning the people and their work, conditions should be such that the industrial employee will find the same interest that is the good fortune of the professional man.

The much publicised Neighbourhood Unit—at one period in recent times thought to be the solution of social problems—came in for much discussion, and it was interesting to hear Mr. Mumford's personal leanings towards the small hamlet of ten or so houses as

a more neighbourly unit rather than the five to ten thousand persons we have been considering. In regard to the provision of better services which the larger unit should be capable of providing, we were told that whilst the Americans admire big buildings and are prepared to allow their towns to approach the verge of bankruptcy in the erection of magnificent High Schools, which are the social focii of the districts, the standard of teaching which sometimes goes on within these buildings is not always comparable to their splendour. In these and many other pungent remarks there is much food for thought to those concerned with planning, and there will be many who will seek to gather whatever Lewis Mumford says during his visit to this and

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UNSPEC BUILDERS

An interesting brochure* puts on record the result of the recent competition for post-war small house types, in which the entrants were housebuilders and architects in partnership. What do we find resulting from such a novel partnership? Much, indeed, that is good. The housebuilders' contribution must have been to insist upon houses planned to an average set of conditions—a programme new to architects accustomed to design for the individual client. Then, no doubt, they were very strict with their architect-partners on questions of cost.

No doubt the builders were somewhat surprised at what the architects had to give. They must have gasped at the number of quarts that the really skilful planner can squeeze into their pint pots of 900 ft. super. Amazing, too, how scientific these architects have become, whom they used to think such arty fellows. They do seem to know quite a lot about heat insulation, sound insulation, fuel utilization, daylighting, insolation, rain exclusion, illumination and what have you.

Yes, the architects have certainly given the scientific planning, construction

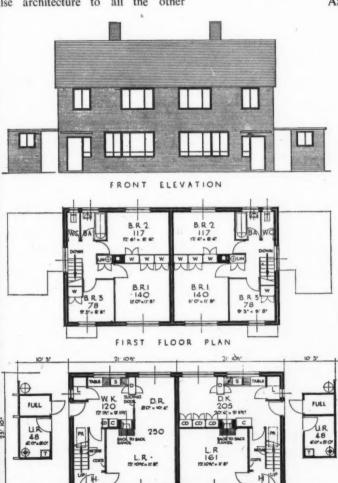
^{*} Your New Home (Housebuilding Industries Standing Committee, 82, Cavendish Street, London, W.1., 2s. 6d.)

and equipment of small houses a big lift forward by joining in this competition, which in these respects must be voted a success. But did the poor spec' builder hope his arty friend would make the houses look nice? If he did, he was sadly disappointed.

Now, this is where we really must think again. It is just not good enough merely to shave off the offensive bits that the pre-war builder employed to doll up his little houses, and then to line everything up with a tee-square in good proportion. The result is not so much severe, it is empty. But how shall we make the ordinary man's house look like Home, without adding false architecture to all the other pretentious nonsense in the visual environment?

Perhaps the answer lies in persuading him to forget his wish to be semidetached, and to let us plan him streets. courts, terraces, squares, crescents, circuses-instead of separate little pairs of surprised-looking houses, endlessly repeated and infinitely monotonous, let us group the houses into grander compositions. That would give sufficient room-I mean literally area in yards super-for graceful variety and charm in elevations and grouping. In the restricted façade of the single small house it is impossible to do anything much that would not be an utter bore in repetition. That is why the houses under review are so dull.

ASTRAGAL



GROUND FLOOR PLAN Demonstration Houses at Crown Terrace, Handforth, Cheshire. Builder: Architects: Messrs. Partington and Tomlinsons (Contractors) Ltd. Bolland, AA.R.I.B.A. 11in. hollow brick, steel windows, Cotswold grey Marley tiles, Marley all-concrete pitched roof with wood-wool concrete slab lining. See Astragal's note.



LETTERS

Denis O'D. Hanna. B.A., L.R.I.B.A.

F. William Smith

Miss B. Giles. (Secretary, Polytechnic Architectural Students' Society)

Crystal Palace Competition

SIR,—Surely one of the signs of a nation's greatness is her power to pioneer in the field of art. It is therefore with apprehension for our future that one learns that the Crystal Palace Competition, the most important architectural event since the war, has been won by an example of outmoded architecture. Perhaps outmoded is the wrong word to use for architecture that never could be good in this or any other

Ruling out of court the possibility that the winning design was drawn out of a hat, we are left to the doleful conclusion that the selection was made on a basis of compromise between all the architectural styles that have laid claim to public attention in the last half century.

is a basic principle in any age of good design that material and structure are used design that material and structure are used in accordance with our best technical knowledge, but it is claimed for this building that it makes no "special adventure in new construction." If this had been the attitude of our forefathers we should still be competing with bears and wild boars for the occupation of caves. Surely this is retreat after we have had the works and writings of such men as Le Corbusier with us for a generation.

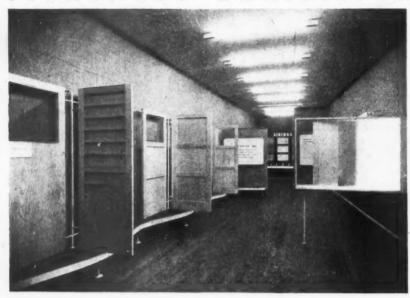
I am an old enough architect to have been trained in the traditional school. I will defend the good traditions against all defend the good traditions against all comers, but in recent years the truths underlying modern architecture have been borne in upon me with a conviction that there is no denying.

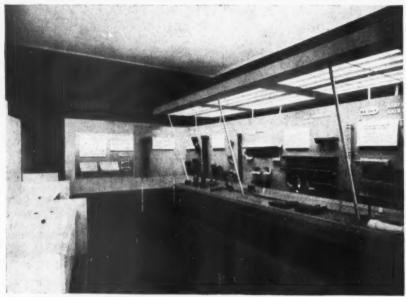
no denying.

It is therefore very painful to many like myself to see men who should be helping to lead the country on to her architectural destiny dallying by the way with architecture which is neither ancient nor modern.

A style of building whose keynote is compromise has no future. These are not days of appeasement policy—England never became great on a creed of avoiding giving offence. A bolder line then is needed if we wish to take our place as reconstructors able to help ourselves and others out of able to help ourselves and others out of post-war impasse.

STANDARDS EXHIBITION









Views of the exhibition on Standard Products for Housing, organized by the Ministry of Works, the Ministry of Health and the Department of Health for Scotland, with the co-operation of the Ministry of Fuel and Power, the Ministry of Supply and the Board of Trade, now being held at Prince's Galleries, Piccadilly. The exhibition has been arranged in a series of five groups based on the sequence of erection and equipment of a building—the Carcass, Finishings, Sanitation and Water Supply, Fuel Burning Appliances and Storage Fitments—and covers quality, performance, dimensional and test standards. The exhibition has been designed by Bromek Katz and R. Vaughan. Top, the door and window room. Centre, the sanitary fittings room. Below, left, kitchen fitments. Below, right, the walls, floors and roof room. The exhibition remains open until the end of July.

Big steps and great decisions lie ahead of the modern architect if our civilisation is to be saved. To succeed be will have to use modern methods, but he cannot fail to be hampered in his work if public taste, which is his strength, is to be misdirected by hav-ing wrong examples held before it. In 1851 the Crystal Palace was a mile-stone in the road of modern architecture. It was the work of men of courage and enterprise. The Crystal Palace of 1951 leads to a destination which I would prefer Big steps and great decisions lie ahead of

leads to a destination which I would prefer the authors of the design to indicate them selves. Is it not time for Britain to stand and take stock of her position?

The comfort one derives from the assurance that "This structure is in accordance with Home Office regulations" is only second to that which comes from the conviction that it will never be built in this form.

Northern Ireland

Holywood, DENIS O'D, HANNA

SIR,-Lewis Mumford has reminded us in Sir,—Lewis Mumford has reminded us in his Culture of Cities that civilisations tend to follow a cycle which end in their collapse. The period of protection is followed by the Court Parade and Capital

which in turn gives way to Megalopolis, the paper dream city and decline.

The paper plan of the winning design for the Crystal Palace has the axial lines of for the Crystal Palace has the axial lines of the Court Parade, etc., period, and one is led to believe that the Concourse or Public Hall, if constructed, would exhibit the type of congestion and confusion familiar in Megalopolis. But Mumford does not end his story with an inevitable Necropolis. He shows us the path of escape into a new and delightful world—the path already trod by the Ebenezer Howards and the Frank Lloyd Wrights of this world. Decentralization, social units, and biotechnic design are the signosts. the signposts.

The recent plan for Greater London with its concentric bands of decreasing density displays a similar lack of appreciation of this path of escape from the fate which awaits Megalopolis. Here is no vision of a well grouped region of balanced townships, but instead a congested centre spreads its melancholy influence in ever widening circles

But this is no time to split the architectural world. Rather would we, who glimpse the route to safety, seek to lead the profession away from imminent danger and avert the impending crash of civilisation.

impending crash of civilisation.

This competition shows that people still think in two dimensions. Einstein has shown that it is essential to think in four dimensions—time being as important in planning and design as three dimensionsional space relationships.

There is still time to avoid Necropolis, but it can only be done by a conscious effort to provide the proper conditions for man's survival.

survival.

This is the task which to-day confronts the profession—the setting of the stage for the last act of an old play or the first act of a new one

If civilisation is to survive we must commence to set the stage for the new play. Now Bath F. WILLIAM SMITH

SIR,—As a group of architectural students we feel particularly disappointed with the results of the Crystal Palace Competition.

We consider that, first, a piece of architecture can not be judged from one of its aspects only, e.g., layout, as was done in the case of the Crystal Palace Competition. Secondly, as these competitions afford the only opportunity by which young architects can show their ability, this approach on the part of the assessors must be very discouraging.
Thirdly, if the designs which were sub-

mitted were not up to the standard required, should the prize have been awarded at all?

Secretary, Polytechnic Architectural London Students' Society

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PHYSICAL PLANNING SUPPLEMENT



The First Report of the Post-War Redevelopment Advisory (Special) Commit-tee of the City of Liverpool was submitted to the City Council in April. The Members of the City Council in April. The Members of the Committee included the Town Clerk, the City Architect, and the City Engineer, in addition to representatives from the Council. Contrary to the usual method of presenting town plans today, Liverpool has not prepared a comprehensive scheme covering all phases of the redevelopment of the City, but is submitting proposals in stages to the Council to that the Members may be informed of the basic decisions already reached and pon which will be built up in more detail further proposals for the reconstruction of the City. Above, a view of the centre of Liverpool from over the Mersey, showing the area affected by the proposed Inner Ring Road. Photo: Aerofilms Ltd.

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The City Council of Liverpool set up a Post-War Redevelopment Advisory (Special) Committee in February, 1942, to report to the Council on the subject of the post-war redevelopment of the City, and to consult with the many interested bodies. The work commenced at a particularly opportune time, as it coincided with the initiation by the then Ministry of Works and Planning of the Merseyside Regional Scheme, and it was thus possible to develop the Liverpool policy contemporaneously with the evolution of the regional This circumstance was particularly valuable proposals.

LIVERPOOL

REDEVELOPMENT AND RECONSTRUCTION PROPOSALS

concerning road proposals, which were able to be considered from a regional rather than a parochial outlook. The passing of the 1944 Act enabled the Committee to embody their first recommendations for the necessary procedure to be initiated regarding the acquisition of blitzed areas of the City prior to redevelopment.

basic road plan

The Report draws attention to the necessity for a sound structure of main roads in Liverpool, and points out the deficiency of an adequate ring road system, although in Queens Drive, Liverpool already has an excellent example of this type of road. The proposals outlined are for an Inner Ring Road, a Middle Ring Road, the existing Queens Drive and an Outer Circle Road. The first of these is the subject of detailed proposals dealt with later in this review. The Middle Ring Road is on a line generally determined by existing roads, although at one point, Boaler Street, provision is made for a new road cutting across the existing property to make a direct connection with Holt Road, and so eradicate the present tortuous route which involves turning into and out of Kensington. Queens Drive, an example of Liverpool's foresight, was planned and constructed some years ago, but relies for its completion on a continuation beyond the city boundary, a provision which was made in the Merseyside Regional Plan. The Outer Circle Road was planned, and portions were constructed, before the war. Owing to its location at a general radius of some six miles from the centre of the city, it necessarily follows a line partly outside the city boundary and was fully considered by the Technical Sub-Committee of the Merseyside Advisory Joint Planning Committee.

Four major radial roads are designed to give improved service to Preston, Manchester, Warrington and Speke, and under the proposals, it will be unnecessary to proceed with the suggested Everton Tunnel. The construction of a new road bridge across the Mersey between Widnes and Runcorn -likely to take place within the next few years-and the anticipated industrial development at Speke, call for a road of arterial value to Speke and Widnes. The main road structure is completed by four other roads. The first is to provide a new arterial Dock Road in place of the present road, which it is intended should cater only for dock traffic. A Central Area By-Pass Road is designed to enable traffic to proceed north and south without entering the heart of the city. The two remaining links in the road plan provide connections from the Inner Ring Road to the East Lancashire Road and the Speke-Widnes Road. Widths of roads are still under consideration, but the standard of 120 feet, which has been successful in the past for main roads on the outskirts of the city, will no doubt influence the ultimate decision.

basic zoning proposals

The subject of Use Zoning on a broad basis has been considered in relation to the framework of the Road Proposals. The Central Commercial and Business Area of the city is bounded by the Inner Ring Road, and it is flanked north and south by the Dockside Industrial Area; these zones follow the well-established lines on which the city was built

in the years of its rapid expansion up to the middle of the last century. Immediately outside the Inner Ring Road is a transitional area, in which it is considered that it may be advisable to erect buildings serving a variety of purposes; the zoning of this area has been left undetermined. Central Residential Zone extends between the Dockside and Riverside Area and the proposed by-pass road which will follow the ridge on which are sited the two cathedrals. The Inner Residential Zone bounded by the Middle Ring Road will provide for a frankly urban type of development limited to a lower density than that in the Central Residential Area, where a proportion of flats will be included. Further out from the centre of the city, the Middle Residential Zone between the Middle Ring Road and Queens Drive will provide a large area available for redevelopment at a density intermediate between the urban type of the Inner and Central Zones and the suburban type of the outskirts. Outside Queens Drive will be the Outer Residential Area, considered in the light of new development, as opposed to the other zones nearer the centre of the city which require redevelopment. In the Residential Zones, the intention is to over-come the existing dormitory type of suburb and the long distances which have to be travelled to reach open spaces by sub-division into neighbourhood units separated by parkways linked on a planned park system. Redevelopment of the Central and Inner Residential Area is considered possible within the next 20 years; that of the Middle Residential Area is unlikely to be achieved for 30 years. The Outer Residential Area, being of comparatively recent date, is expected to remain in its present condition for a much longer period.

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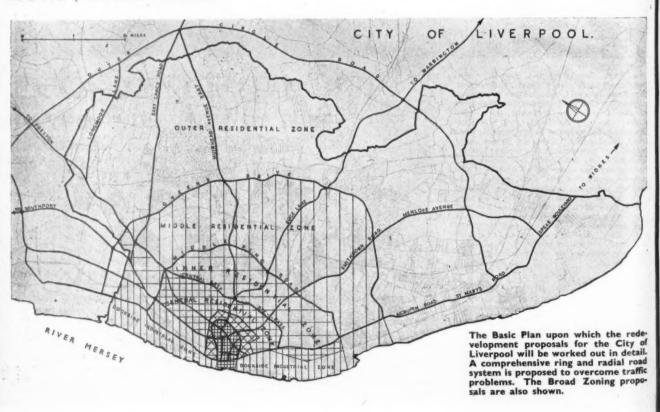
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inner ring road

The necessity for speedily reconstructing the extensive war damage in the centre of the city has indicated that this part of the city should be considered more thoroughly in the Report. The proposals for the Inner Ring Road and its surroundings have therefore been worked out in greater detail, not only with respect to the road layout, but in the practical relationship to war damage, buildings which will have to be demolished, and finance. The planning of the road system of

ROAD STRUCTURE



the Central Area is related to the position of the three railway stations and the entrances to the Mersey Tunnel, although it is a matter of disappointment that the Railway Companies did not envisage any alteration or extension of the sites of the three termini which would have led to æsthetic improvement. Two fly-over crossings are proposed for the Inner Ring Road over Scotland Road and Paradise Street. The estimated costs of acquiring the land and constructing the Inner Ring Road are interesting, and give an indication of the likely cost of planning proposals in important cities.

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deof In preparing this estimate the normal overall width of the road was taken at 130 feet, accommodating two carriageways, one double tramway track, one single tramway track, and two footways.

urgent replanning

The Report considers the question of the urgent replanning of areas of extensive war damage, and an area of approximately 1,509 acres in extent has been suggested which may

Acquisition of vacant land, including sites of demolished buildings Acquisition of land and buildings, including disturbance and trade compensation	£1,255,000 £3,253,300
Estimated cost of acquisition	£4,508,300
Deduct value of remainder of land available for redevelop- ment after reserving site for road	£3,425,000
Net estimated cost of acquisition	£1,083,300
Estimated cost of construction of road, 2·22 miles in length, exclusive of service mains and sewers	£597,460
Total net estimated cost of the Inner Ring Road	£1,680,760

An approximate valuation was made at 1939 values of all land and premises of the property affected for the purpose of estimating the cost of acquisition.

INNER RING ROAD





Above, plan showing the proposed Inner Ring Road for Liverpool in relation to the war damage in the vicinity; heavily damaged buildings outlined by a thick line. Below, plan showing the properties affected and the limits of deviation (dotted) for the Inner Ring Road. Left, the layout of the City Centre showing the interconnection via the Inner Ring Road between the Main Railway Termini.



ROAD JUNCTION



be accepted by the Minister under Section 1 of the 1944 Act: the existing conditions which have influenced the selection are (a) traffic congestion and occurrence of road accidents: (b) depressed housing; (c) sub-standard commercial and industrial buildings; (d) mix-up of housing and industry; (e) lack of open spaces; (f) war damage. At a later date, several smaller areas aggregating approximately 480 acres, are recommended for designation; these are mainly residential intrusions, now insanitary, into the dockside industrial zone. A further area of approximately 38 acres, part of the proposed Dockside Industrial Zone, is recommended, as a matter of urgency, to be dealt with under Section 2(2) of the 1944 Act; this area will provide suitable sites for the relocation of industries now occupying land in the central area of the city which is required for other purposes. The areas to be dealt with under these two sections of the Act are shown on maps included in the Report.

conclusion

Liverpool has avoided the preparation and presentation of a comprehensive plan for the city, unlike her neighbours Birkenhead and Manchester, and in so doing the opportunity is lost for the general public to consider and discuss the kind of Liverpool which may be most fitting for the future. There is very little evidence that, apart from the comprehensive consultation with interested bodies, the requirements of the various social and industrial factors of the city have really been adequately surveyed and studied. The Committee, who prepared the Report, state that they have refrained from following the more general example of presenting plans in a spectacular manner because they could be based only on proposals upon which the Members of the Council had not been fully consulted or had any opportunity of expressing an opinion, and it is because of this that they are anxious to proceed step by step. Even so, a searching survey before the plan, and then presentation in a manner which can enable the public to understand and criticize, together with a thorough grasp of all the problems affected in replanning, should be forthcoming from Liverpool-of major importance as a city.

The layout of the Residential Group for Old People prepared by Gerhard Kallman, for the Old Age in the New World Exhibition. The site is assumed to be outside a small town looking forward development. increased

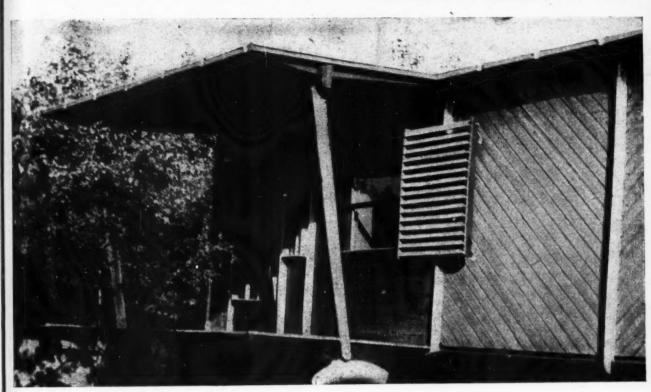
on of the City of Liverpool.

NINER S

OLD RESIDENTIAL GROUP FOR PEOPLE

The planning of residential groups is of great interest today in the struggle to provide houses for the people after the unproductive war years, and in the Old Age in the New World Exhibition, arranged by the National Old People's Welfare Committee and the Housing Centre, held in London in March, a scheme for a residential group was included to demonstrate the relation of old peoples' houses to the rest of the community. The layout of the group was prepared by Gerhard Kallman, and was arranged so that the old peoples' houses were not to be segregated but should allow the inhabitants to take part in the life around them and have easy access to all social facilities. The Exhibition made clear that houses for old people must be included when new sites are planned and should not be on hilly ground, but with sunny aspect. Advice was given that the layout should not be in the form of squares or cul-desacs, in order that the old people

may retain a sense of indepen-dence and take part in the lives of the younger folk around them. The design for the residential group includes accommodation in two-storey houses with private gardens, in one terrace with a communal garden, in ground floor flats, and in a hostel which, although it has its own grounds, is situated adjacent to the playing fields and the community centre. This centre contains a small local cinema and a lunch club for the old people, and accommodation is provided for a doctor and a district nurse nearby. Generally, access to the social facilities is uninterruptedly pedestrian, but in the case of the flats, however, the local road has to be crossed. This road is a loop road branching off from a sub-artery and serving exclusively local needs. The layout was prepared for exhibition purposes, although a few theoretical existing buildings are shown, and it is assumed that the site is outside a small town looking forward to development.



The porch. The window shutters are sliding.

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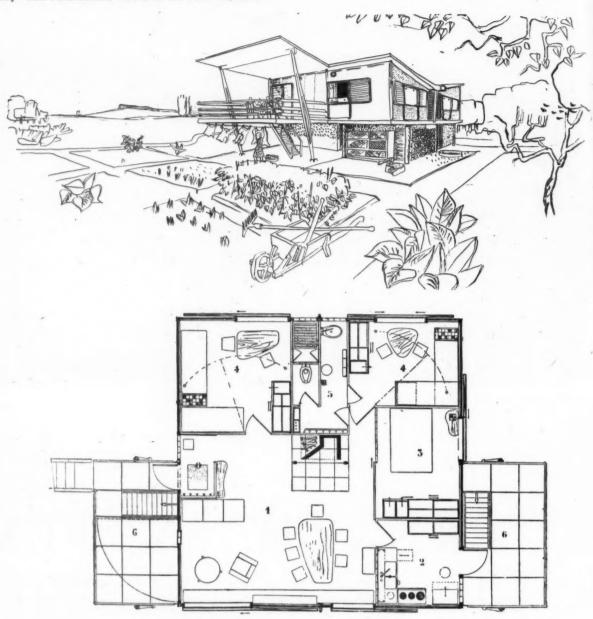
FRENCH SYSTEM OF PREFABRICATION

ARCHITECT: P. JEANNERET ENGINEER: JEAN PROUVE

The main support of this prototype for an emergency prefabricated house of steel and timber, designed in partnership by a famous French architect and engineer, is a central post having two splayed legs, supporting a cantilevered ridge piece. The wall panels form merely secondary supports and take the ends of the metal roof sections, which are bent at an angle at the centre and span the whole width of the house. Strengthening bars link the ends of the ridge to the floor. Wall panels are of timber in metal frames, some of them incorporating windows. These windows slide down into the wall panels like railway carriage windows. The house stands on tall concrete posts, between which span the steel floor beams.

The sliding shutters add to the character of the design, which has the elegance typical of the work of both designers.

The accompanying illustrations, from blocks kindly lent to the Architecture D'Aujourdhui, explain the system better than words.

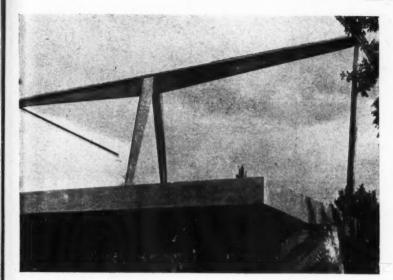




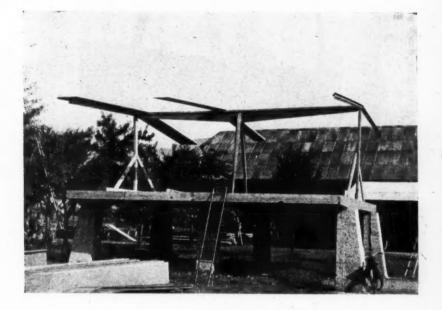
Top, sketch of a prefabricated house designed on the French system. Above, plan of the house shown in the sketch. Left, the prototype house nearing completion.

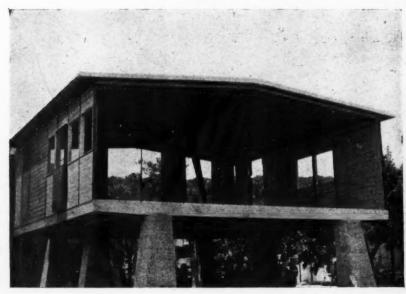
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Three progress photographs. Left, the central splayed post and cantilevered ridge piece of steel which takes the main weight of the steel roof panels. Immediately below, another view of the framework showing the gable pieces and two of the roof units in position; the ends of the cantilevers are being temporarily supported. Bottom, the roof completed and part of the wall panels in place; metal rods now tie the cantilever ends to the floor.



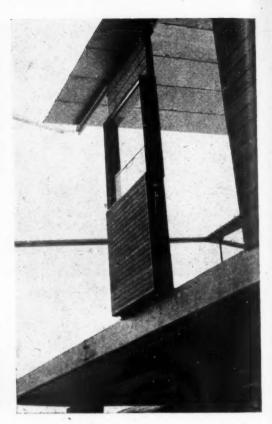


FRENCH SYSTEM OF PREFABRICATION

BY P. JEANNERET AND JEAN PROUVE

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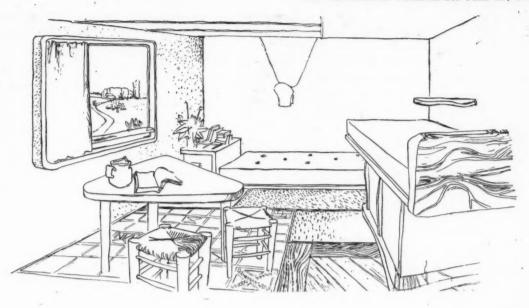


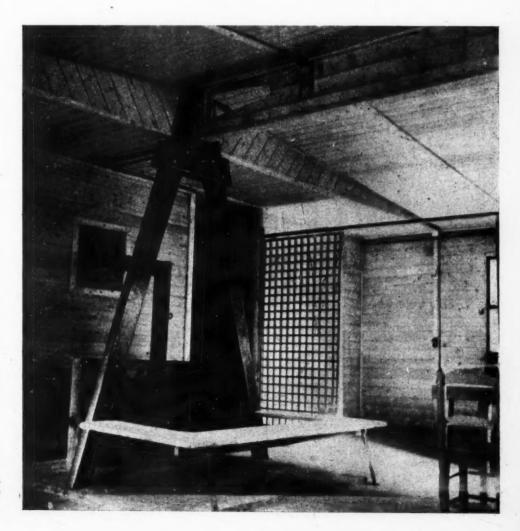
Three more progress photographs. Above left, the steel frame and half the roof units in position. Above right, close up of a wall panel. Below left, the roof units which span the whole width of the house, being supported centrally by the ridge.



FRENCH SYSTEM OF PREFABRICATION

ARCHITECT: P. JEANNERET ENGINEER: JEAN PROUVE





Top, sketch of a bedroom. Right, interior of the living-room.

INFORMATION CENTRE

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

PHYSICAL PLANNING

2599

Bristol Housing Survey

HOUSING ESTATES: A STUDY of BRISTOL CORPORATION POLICY AND PRACTICE BETWEEN THE WARS. Jevons and J. Madge. (J. W. Arrowsmith, Bristol, 1946, 7s. 6d.) House-to-house survey of Bristol Corporation's housing estates sponsored by University of Bristol Social Survey. Bibliography. Illustrated.

The survey gives information on four important problems of Bristol's housing estate policy, namely (a) on changes in cost of living due to rehousing, (b) on the provision of amenities on the estates, (c) on municipal rent policy, and (d) on the size and loca-tion of houses needed for the present and

future population.

Research was undertaken to ascertain facts in regard to the following aspects:

1. Inter-war building and demolition to improve working class housing in Bristol.

2. The development of the estates in regard to situation and size, growth, gardens, houses and estate planning.

houses and estate planning.

3. The social and occupational grade of estate families, their age composition and

their size.

4. Family incomes and earning strength and the standard of living of families.

5. The cost of living on the estates as determined by

determined by transport costs, shopping facilities on the estates, expenditure on rents, and furniture, cleaning and heating

costs.

6. The size of houses in relation to

The Corporation's rents and rent

policy.

8. Types of families leaving the estates, reasons for leaving and housing conditions

reasons for leaving and housing conditions after removal.

9. The adaptation of families from slum clearance areas to life on the estates. Six main conclusions are drawn from the findings of the survey, which are dealt with in detail. Summed up they are as follows:

(a) There should be less segregation of estates from the life of the city as a whole.

(b) The poorer section of the population on the estates should be less isolated.

(c) The fixing of densities on new estates

(c) The fixing of densities on new estates should be kept more flexible.

(d) Self-government on the estates should be encouraged. More attention should be given to

REAL living space requirements.

(f) A revised system of rent control and rent standardization should be introduced.

Industrializing Backward Areas

THE INDUSTRIALIZATION OF BACKWARD AREAS. K. Mandelbaum. (Institute of Statistics Monograph No. 2, Basil Blackwell, Oxford, 1945, 10s. 6d.) Outline scheme for rapid industrialization of over-populated and backward areas of eastern and south-eastern Europe.

A Hypothetical Model Of An Industrializa-tion Process In S.E. Europe, gives a quanti-tative example of such a process. The author assumes a rate of industrialization which would absorb into industrial employment the natural increase in population and the existnatural increase in population and the existing surplus population within a generation.
He assumes also the specific kind of development which the region might undertake,
having regard to the natural resources of
the area. On this basis he determines the
capital requirements of an initial five-year
period and derives the production and
demand structure of the newly industrialized
sector. In order to show the magnitude of sector. In order to show the magnitude of the changes in living standards, occupational distribution, and external economic rela-tions which would result from such a form of large-scale and planned industrialization realistic research material is referred to.

STRUCTURE

Continuity

EFFICIENCY IN STRUCTURE INVOKES THE PRINCIPLE OF CONTINUITY.

The study deals with the problem in two The study deals with the problem in two parts. The first part, Economic Problems of Industrialization, provides a theoretical discussion on the conditions needed and the mechanism of the process of industrialization of backward areas suffering from agricultural over-population. The second part, A Hypothetical Model Of An Industrialization process in SE Express of the process of

N. Severud. (Architectural Record, January, 1946, pp. 81-88.) Modern trends in structural arrangement of multistorey framed buildings in steel and reinforced concrete.

The article deals with framed structures both in steel and reinforced concrete. It is based on conditions prevailing in USA, but many of its suggestions could be useful in

this country. this country.

From the point of view of maintenance, there is great advantage in using painted concrete ceilings, left with the texture of the plywood form. This avoids the difficulty of plaster spalling. Stains from damp spots tend to disappear gradually.

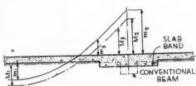
Cost comparisons show that the use of floors of lightweight concrete of strength equal to ordinary concrete would have many

equal to ordinary concrete would have many

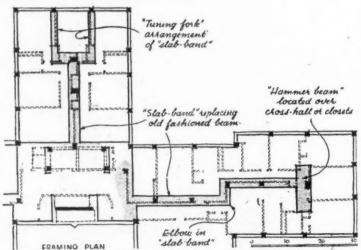
advantages.

Instead of the conventional type of beam with a substantial projection under the ceiling, slab-bands are suggested which allow considerable freedom in the arrangeallow considerable freedom in the arrange-ment of the columns. It may be necessary to increase the size of the columns, but this is more economical than introducing more horizontal beams. With a proper distribution of columns completely flat ceil-ings will be found to be the most economi-cal construction in many cases. The





 m_1, M_1 - POSITIVE BENDING MOMENT m_2, M_2 - NEGATIVE BENDING MOMENT m_3, M_3 - CRITICAL BENDING MOMENT



Top right, modifications in the conventional folded steel ceiling section so that the steel serves as reinforcement to the concrete. Centre right, the Slab-Band, an innovation on the conventional beam; small letters represent the bending moments of the slab-band, capital states of the conventional beam; though the initial negative bending moment m_2 of the slab-band is greater than that of the conventional beam M_3 , the critical bending moment m_3 is appreciably smaller than M_3 . Below, part plan of proposed New York flats; shaded areas show three ways of handling the highly adaptable slab-band; dotted lines are room partitions; the band creates minimum interference with a smooth ceiling. See No. 2601.

TIMBER

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The Rayburn provides, at a strictly economic price, the standard of efficiency demanded these days. Being free-standing and self-setting, it is easy to install. Fuel consumption is exceptionally low; on 11 to 2 cwts. a week it will burn continuously day and night, supplying hot water as well as cooking all meals. Installation details for various types of wall or recess will be supplied on request.

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determining element here is usually the tendency of the concrete slab to punch through at the column heads. Various steel column heads have been designed to overcome this handicap and they can be placed within the thickness of the slab. In the case of reinforced concrete columns, precast heads may be used. In proportioning columns, it seems best to hold to a constant width and to obtain the additional concrete in the lower stories by increasing the columns in one

direction only.

As buildings increase in height, the problem arises of stability against wind. In general, building codes make no allowance stiffness of outside walls, though these walls are by far the stiffest element of the whole building. The author expects that before long building departments will accept reinforced brick as a structural element. This has only recently been introduced in the USA with excel-

been introduced in the USA with excel-lent results. In the beginning there was a great deal of doubt to overcome, arising out of the idea that reinforcement in the joints would rust, the rust would cause spalling, and the masonry would deteriorate. By utilizing the wall section from the window head to the window sill next above as a structural element, it is possible to obtain greatly increased stiffness. In this manner the frame is relieved of its sup-nosed burden of resisting lateral stresses. posed burden of resisting lateral stresses, and the outside wall is given recognition of what it will do in any event, which is to furnish lateral stiffness.

Cavity walls were apparently first used in USA in 1939. Recent inspection of the buildings shows amazing results, not even a haircrack is visible.

Any structural calculation involving ex-terior walls must take into account the fact that the inside and the outside of a building that the inside and the outside of a building exists under totally different conditions of weather. Cracks in masonry walls do not generally occur in a gradual manner. The material holds together until strains build up that are beyond its endurance, and then it gives way with a bang. The twofold advantage of the cavity wall is, first, that there is enough separation between the inside and the outside wall so that each can follow its natural trend, and, second, that connections are in a degree elastic. Conditions are particularly severe in parapet walls.

The author suggests the use of a series of L-shaped closets as internal columns. They could be arranged so as to be spatially useful to the tenant instead of acting as a mere obstruction. Such closets could be formed of high-strength pre-stressed con-crete shaped into angles. Placed side by side, they would form closets opening alternately in opposite directions.

By an extension of the same approach, it would be sensible to use steel forms for the floor slab which will rest on the steel closet-column. After the concrete has been poured, the steel form acts as the reinforcing. A ceiling of lightweight concrete may be used as fireproofing for the steel.

Metal-lined exterior walls are another line of development.

HEATING and Ventilation

Domestic Survey

DOMESTIC FUEL POLICY. Report by the Fuel and Power Advisory Council (HMSO, free). 60-page report of great importance. Surveys whole field of fuel in relation to domestic heating, including construction of house, type of installation and smoke abatement. Action on lines recommended likely to cause revolution in heating in this

country. Appendices include statistics of fuel consumption, statement on smoke abatement, lengthy discussion on comfort conditions and examination of electricity tariffs. Much of information and many recommendations follow lines of Egerton Report, Post-War Building Study No. 19 (see Inf. Centre No. 2476: 4.4.46), but as shorter document this report easier to read.

If this Report achieves its objects the heating of our homes is in for a very major change for the better. The majority of the information and many of the recommendations are similar to the material contained in the Egerton Report but in this instance are put more briefly and without much of the accompanying detail and sup-porting data which inevitably had to be included in the Study Committee document. The preface of this Report states that its object may be regarded as an attempt to indicate how the data given in the Egerton Report can best be applied in practice. It is interesting to note that the actual terms of reference included a special reference to atmospheric pollution and a good deal of attention is in fact given to this subject in the Report, including a special appendix. The main part of the Report starts with a

general outline of the present situation. One-third of all coal mined is used for domestic purposes and yet only a small portion of each house is warmed. A striking comment on our inefficiency is made by suggesting that whereas the total floor area of our houses is very high by comparison with other countries, the area of house actually warmed and therefore comfortable for day time usage is less than in any other civilised country.

The ordinary open fire comes in for re-peated criticism but solid-fuel appliances are nevertheless still regarded as the main source of winter heating. The value of the coal-cellar as a storage unit to combat sudden cold spells cannot be ignored.

The main Egerton Report recommendation for background heat plus topping up is re-peated. New types of appliances are men-tioned which will double the efficiency of pre-war open fires. The openable stove gets high praise.

A most important recommendation is that standards should be set for new appliances and that after a time all new appliances should be forced to meet all these standards. There is also a suggestion that the Government should arrange for mass production of good types of appliance. Proper facilities for testing are recommended.

There is not a great deal said about flats. but there is a very definite recommendation that the main source of heat should be from a central plant. This should make some local authorities change their habits.

The impossibility of any immediate total

cure for atmospheric pollution is recognised but very strong representations are made for an increase in the supply of smokeless fuels and for new appliances to be so made that they are capable of burning such fuels in the future. Meantime, it is suggested that the limited supplies of such fuels should be concentrated for use in the small domestic appliances in towns.

It is impossible to mention the many other important recommendations which are made. Architects should read this Report if only in order to be in a position to do their part as ordinary citizens in implementing the recommendations because if really carried out the change in appearance in our cities and in comfort in our homes would be a real advance towards a higher standard of life.

Garage Heating

WHOLESALER INSTALLS RADIANT HEAT IN NEW GARAGE. (Plumbing and Heating Journal, USA. April, 1946, p. 71.)

Under-floor heating installation in 3,300 sq. ft. garage. Pipe laid at 16-in. centres of 1-in. insulating board on 2-in. gravel fill. Sand cover 2 in. thick over pipes, followed by 4-in. and 6-in. floor slab. Insulation of building to cut down heat losses.

A detailed account of an under-floor heat-ing installation for a public garage at Allen-town, Pa., where differences in summer and winter temperature are extreme. One of the chief advantages claimed is rapid evapora-tion of water, ice or snow on the floor brought in by cars, thus ensuring a dry floor at all times. The air temperature inside the brought in by cars, thus classified the building is designed at 60 degrees F, and insulation provided includes 6 in. thickness of rock wool in the walls and 2 in, of the same material in the ceilings. The cubic capacity of the building is stated as 46,438 cubic feet; oil is used for heating the 121 gallons of water contained in the system.

Cremation

CREMATION IN GREAT BRITAIN. (The Pharoe Press. 12s. 6d. Obtainable only from the publishers, 47, Nottingham Place, London, W.1.) Prepared by Cremation Society of Great Britain. History of cremation. Cremation law. Notes on all existing crematoria in Great Britain. Technical chapters on planning and furnaces.

This is the third edition of a book first published in 1909 and is comprehensive in scope. The descriptions of each Crema-torium are in general terms only but the technical chapters are well illustrated and should be valuable to architects. There is a bibliography and a list of foreign

crematoria.

QUESTIONS

and Answers

THE Information Centre answers any question about architecture building question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential, and in no case is the identity of an enquirer disclosed to a third party. Questions should be sent to: THE ARCHITECTS' JOURNAL, 13, Queen Anne's Gate, Westminster, S. W. I.

Copyright Design

Q I am designing an original house which will incorporate several novel features. When this is submitted to the appropriate council can I protect the copyright by taking out a provisional application for a registered design with the Patent Office? Alternatively should I just mark it Copyright Reserved? I feel that this latter procedure provides no cover at all against some of the features be-ing copied by other builders. Some of the features, as soon as they are proved, will be patented. Will you please advise me?

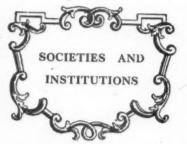
Any architectural design automatically becomes the copyright of the designer and any person copying it without permission is liable for an action for infringement

of copyright,

If you wish to cover only certain specific features of the whole design we suggest that the only reliable method is to take out a patent. The words Registered Design so frequently seen give very little protection, as any infringer has only to alter one small

detail of the design and it then ceases to be

If your novel features are methods of planning rather than items of equipment, we think that you will find it very difficult to prevent them from being copied by other



Speeches and lectures delivered before societies as well reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economize space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front Except where inverted commas are used, the reports are summaries and not verbatim.

AA

Fitzmaurice

At the Architectural Association, 34-36, Bedford Square, W.C.1. Lecture on MATERIALS AND METHODS OF CON-STRUCTION FOR HOUSING, by R. Fitzmaurice, B.SC., M.INST.C.E., HON. A.R.I.B.A. Deputy Chief Scientific Adviser, Ministry of Works. Chairman, Graham Dawbarn, M.A., F.R.I.B.A., President of the AA.

The present is R. Fitzmaurice: rather a difficult time for anybody to make any pro-nouncement about this peculiar and difficult subject. A great deal of work has been and is being done on the development of new methods of construction for housing, and many of these new methods will be applicable to a certain extent to other tween cult time for anybody to make any applicable to a certain extent to other types of building. Unfortunately, the work being done is hardly half way to its completion, and it is very difficult to see the wood for

The problem now facing us is a very severe and difficult one, and it exists not only in England, but is common to practically the whole of Europe. There is an urgent neces-sity to provide a sufficient number of houses for a large number of people to live in in

decent comfort.

The existence of this situation means that the majority of the architectural and build-ing professions are working on the problem of housing, and that is supremely well worth doing. One thing is clear, that we shall not get many thanks. Whatever we do will be get many thanks. criticised. A tr criticised. A tremendous weight of criticism is brought to bear on anything anybody does or ventures to put forward in this sphere, but it is a task well worth doing.

During the closing years of the war an enormous amount of work was done on the amenities of housing. The Building Re-search Station, with whom I used to work, really put in an Homeric effort on this prob-lem. Standards of requirements were really thought out and written down, and I think it was the first time in history that this has been done.

We started off on the reconstruction and the housing programmes with the idea of raising the standards in certain specific re-spects to certain defined levels. We still have those high ideals before us; but the trouble is that in the urge to get cover for the people at any cost the tendency is for the standards to be overlooked or written down. It is due to the people who have given thought, time and trouble to the mat-ter that we should do the most that can be done to live up to the ideals that have been formulated in the immediately preceding years. Those ideals should be kept conyears. Those ideals snould be kept the tinually before the minds of the people who tinually before the minds of the people who are actually executing the work. Those ideals were carefully thought out and their requirements in the long run will be of enormous benefit to the conditions under which people live. We should struggle to provide them. But, at the same time, we have got to be really clever and provide a higher standard of amenity with a smaller consumption of materials and labour. consumption of materials and labour.

In certain conditions, it is easier to provide the newer forms of construction than the traditional form, but in other conditions the traditional wins hands down. In the result, it is probably fair to say that what one gains on the swings one loses on the roundabouts. However, we shall not secure an improved standard of amenities, which is what we all want, until everybody is prepared to put up a fight for that improved standard.

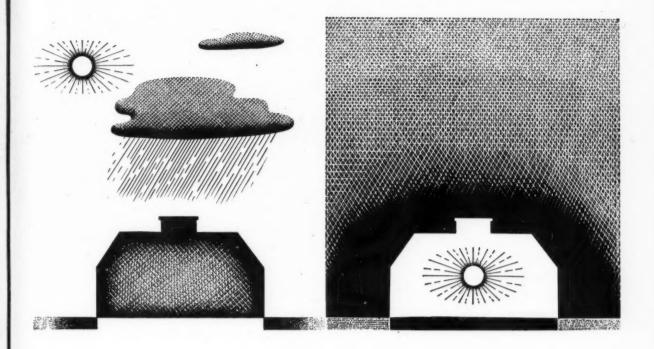
In the construction of houses we have got to be more economical in the use of fuel, but we are also beginning to reach the stage where we shall have to consider the question of fuel in the production of the materials from which we build our houses. A material which needs the lavish use of fuel may be less desirable than a material which does not less desirable than a material which does not need so much. This aspect has not been brought acutely before us in Britain, but in the Netherlands, particularly in Holland, this consideration is very acutely in the minds of those who direct building policy. They are earnestly considering the possibilities of using for construction purposes materials whose manufacture only calls for the use of small quantities of fuel. That is a new thought. I do not think it has been raised in Britain before, but it is a point of a new thought. I do not think it has been raised in Britain before, but it is a point of view which is bound to have its effect upon the shape of the building to come. It will be interesting to follow out exactly what that is going to mean. At the moment studies into this aspect have not been carried very far.

Architects naturally look at the matter from the point of view of the building designer. I should like to dwell on the various factors which influence design. At the outset there is a whole range of normal physical requirements about which a great deal has been spoken and written. A great deal of work has been done to bring those requirements into the realm of definite quantitative terms. Durability, reliability, stability, heat insula-tion, sound insulation; those and many other things have been dealt with quantitatively. The officers of the Building Research Station have expressed these requirements clearly and aptly. But it is only if you have those requirements well in mind in your design that you can get a reasonable balance between amenity, cost and so on. It is more than worth while to keep those physical requirements in mind all the time you are designing. Always try and get down to actual quantitative terms. In a certain number of cases it will not be possible to provide the full standard of amenity in regard to some particular element of your building. If you are dealing with the problem quantitatively, you will see if you can restore the balance, if you fall short in one place, by giving a little more somewhere else. Set yourselves a high standard, but above all, deal quantitatively with these things.

The designer now, whether he likes it or not, has to think the whole time, with every line he puts on his drawing board and with every word he writes into his specification, every word he writes into his specification, how the articles he is using are produced. Very often he will not know how an article is produced. I, like many of you here, have been in building all my life, and I should normally have assumed that I knew about most of these things; but, when you come down to detail, you find you are extremely ignorant of the way things are done. As soon as you come to alternative methods of production, you will find that the method of production, you will find that the method of production does affect design. If your design does not take into account the way the job has to be done, you might as well tear it up, because, when you come to put your building up, either it will not happen, or it will be complete for when you will be a complete flop. When you are uswill be a complete flop. When you are using these new methods that is something which you must do. You have got to thrash out these details. It is very difficult at first, but it is not impossible, and you have no hope of success unless you do this. These things have been done by engineers who make so many of the things in everyday use by all of us: motor-cars, railway engines, electrical apparatus and so on. If engines, electrical apparatus and so on. If you are going to use these new methods then you have to acquire the technique which alone will make it possible for you to use them. If you are not prepared to acquire this technique, then do not waste everybody's time, including your own, and keep out of

What has happened in the introduction of alternative methods of building construction is that a certain number of people have had faith in the thesis that, if you think out accurately the components you are going to use and fix the tolerances, then when you get to the site they will go together without having to be cut, sawn or planed. Many people had the faith that that would be so, and we have now reached the point that people have made building units, they have made components for building, they have studied dimensional tolerances, they have made these things in considerable numbers, they have gone on to the sites, and they have all gone together quickly. A year ago you could only say that if they did it, it might be so; but now in actual fact they have been made and they have gone tohave been made and they have gone together. That applies to components of concrete, components of steel and components
of wood. We have seen it; the figures are
there, and I hope they will be published in
the next few months. That indicates that
the thing is well worth pursuing. I would
not at this stage rate it higher than that.
I would not say: "Here is an ideal which
has risen as a result of that faith"; but it
is possible to say that these things can be
made according to accurate dimensions, and,
if they are made accurately, they will go together.

What will be the impact of this on design? I have not the foggiest idea. The thing starts at the design stage. If buildings are going to be tailor-made, and if each component is going to be tailor-made to fit into position, then it is for the designer to bear that fact in mind from the very start. It is a formidable problem. You set to work and produce a design; certain elements of that design require certain tolerances of dimension, and you, as a designer, have got to find out whether, in the normal process of manufacture, it is possible to keep to those tolerances which you have dictated. You have got to do a lot of work to find that out. You have not only got to find out what the tolerances are, but you have to produce a design which will accommodate them. That is no mean problem. Here is this new aspect which has come into building. If you are



THE CONTROL OF WEATHER 1946

Weather control, like charity, begins at home. It began indeed many centuries ago with four walls to stop the wind and a roof to hold back the rain.

The introduction of a fire brought with it the problem of even distribution of its warmth—a problem which has been progressively reduced as new methods of heating were invented. In recent years modern scientific knowledge has been brought to bear on this and allied problems and, as might be expected from a firm with their record of achievement, Bratt Colbran Limited are well to the fore in the new developments of room heating. Their forthcoming post-war models will show remarkable technical advances associated with great distinction in design.

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to use these new methods, you, the designer, must master this aspect of the problem. If no one can master it, then the new methods cannot be used; and either you master them, or someone else will master them and use them.

It will by now be obvious that you cannot set to work at your drawing board until you find somebody to tell you what are the limits of accuracy to which a certain process can be worked. Again, that presents no mean problem. That is the future facing the man who is going to design in terms of new materials and methods.

What is going to be the effect on the quality of design when these new limitations are imposed? There is the vexed question of the dimensional module. Is one going to be tied down by some empirical module to which everything has to be tied? I have not the foggiest idea. I do not know whether the designer as an æsthete is going to be severely cramped. Time alone will show that. It is not my business to prophesy, and, frankly, I have not thought a great deal about it. Will the buildings which are produced by these new methods be inferior from the point of view of the passer-by? From the point of view of the passer-by? From the point of view of a person who looks at these new cities, is it going to present a depressing spectacle or not? All these things we shall learn in the fullness of time.

Announcements

Mr. Morris de Metz, F.R.I.B.A., has entered into partnership with Mr. Theo. H. Birks, F.R.I.B.A., and they are practising under the style of de Metz & Birks, at 2, Ludgate Hill, London, E.C.4. (City 4086/7.)

Mr. Leo De Syllas, A.R.I.B.A., now appointed Architect and Planning Officer to the Government of Barbados, 35, Broad Street, Bridgetown, Barbados, B.W.I., would like to receive trade catalogues and information about materials and general building equipment available for export. Lighting, cooking, plumbing, hardware, and wall and floor linings and finishes in particular.

Architects, surveyors and town planners, historians, tourists, educational authorities and publishers, to mention only a few, will find good illustrative material in the Aerofilms Library of Air Photographs. The library comprises many thousands of air views of the cities, towns and villages, the industries, natural features, installations, roads, railways, bridges, housing, public works and engineering features in the British Isles; it also contains many air views of other countries near and far. Built up during the course of the last quarter of a century, the library is in many respects unique. Some of the pictures have now taken on an historic value, especially where modern warfare has wrought changes. Miss T. Hamilton-Jones, M.B.E., is the Librarian in charge at the Company's London Office at 29, Old Bond Street, W.I. Aerofilms Limited is an associated company of Hunting Aerosurveys Limited and part of the Hunting Group.

Mr. J. H. Cox, A.R.I.B.A., has been released from the Army and would be pleased to receive trade catalogues at 9, Broughton Avenue, Aylesbury, Bucks.

The Flush Door Manufacturers' Association state that they would like to receive particulars of materials which can be offered by any branch of British Industry as a substitute for plywood. Interested parties should contact the Secretary at Stapleford Road, Trowell, Nottingham, to obtain basic particulars.

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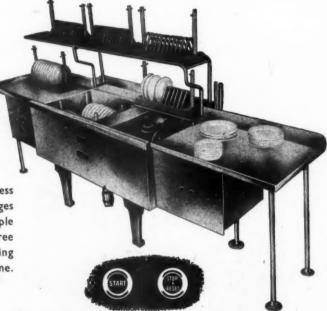
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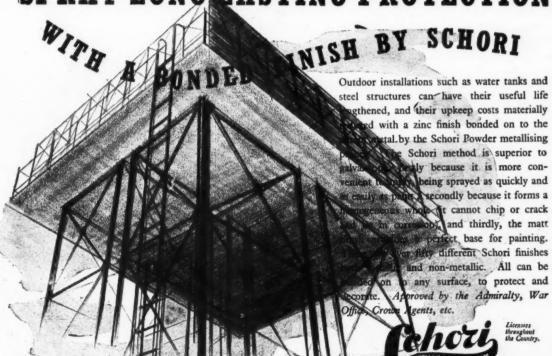
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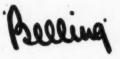




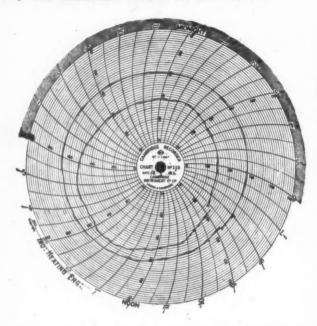
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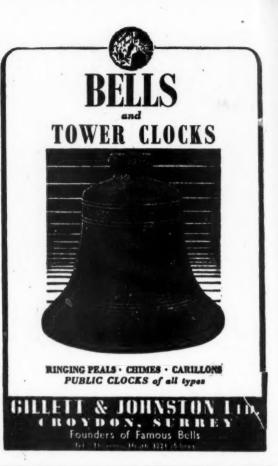


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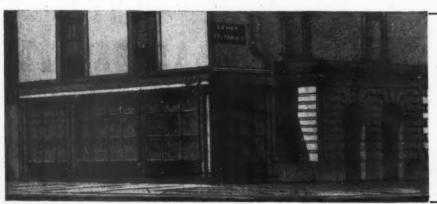






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CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal." War Address: 45 the Avenue, Cheam, Surrey, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

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

Public and Official Announcements

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

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

LONDON COUNTY COUNCIL.

Applications are invited for the following posi-

(1) QUANTITY SURVEYORS AND ASSISTANTS (SENIOR AND JUNIOR). Required

TANTS (SENIOR AND general and adjusting variations under building contracts and preparing estimates.

(b) Preparing estimates and measuring repairs and minor works under schedule of prices (experience of London County Council War Department or Office of Works Schedules).

(c) Working up, etc., in connection with domestic buildings and general working up (junior).

(c) Working up, domestic buildings (innior).

(d) Measurement of roads and sewers and housing work on cottage estates, preparation of interim and final bills on Schedules.

(2) ARCHITECTS. BUILDING SURVEYORS, TECHNICAL ASSISTANTS (ARCHITECTURAL) AND JUNIOR DRAWING OFFICE ASSISTANTS. Required for:

(a) Work in connection with the design and development of housing schemes for cottage estates and block dwellings (experience in domestic architecture preferred).

(b) Similar work in connection with schools and hospitals.

(c) The preparation of estimates and specifications for works of cleaning and painting, repairs

(b) Similar work in connection with schools and hospitals.

(c) The preparation of estimates and specifications for works of cleaning and painting, repairs and minor alterations at schools and hospitals.

(d) Assistants to district surveyors. A knowledge of the London Building Acts and by-laws is necessary for these positions.

(e) Junior drawing office assistants for general drawing office work. Should be able to finish plans from rough drawings, take dimensions and make sketches. Pay, according to age and experience, up to 65s. a week, plus cost-of-living addition.

(3) HEATING ENGINEERS AND HEATING AND VENTILATING ASSISTANTS. Good technical education required. Applicants must be experienced in the design of, and preparation of drawings, specifications and estimates for, modern hot water heating, ventilating and hot water supply schemes.

Except as otherwise shown, salaries for the above positions will be determined by qualifications and experience up to a maximum of 2420 a year, together with cost-of-living additions up to £90 a year, according to basic salary. Salary up to £500 for certain positions of heating engineer and building surveyor. Successful candidates will be engaged on a temporary basis, but will be eligible for appointment, according to merits, for permanent appointment on the occurrence of vacancies. Temporary staff are required to contribute to the Council's Superannuation and Provident Fund.

Ex-Service candidates with experience prior to their war service will be specially considered. Application forms may be obtained from the Clerk of the Council. County Hall, Westminster Bridge, London, S.E.1, enclosing stamped addressed Golscap envelope.

R.I.B.A. ARCHITECTURAL SCIENCE BOARD AND JOURNAL.

Applications are invited for the post of Secretary to the Architectural Science Board and Technical Assistant Editor to the Journal. Preference given to a member of the R.I.B.A. with some scientific background and literary ability. Duties, which would be whole time, would be to manage the work of the Board and of its Committees and to prepare material for the technical and scientific sections of the Journal. Commencing salary £600 per annum. Apply in writing to the Secretary, R.I.B.A., before 22nd July 1946.

HARROGATE AND DISTRICT REGIONAL PLANNING COMMITTEE.

SENIOR PLANNING ASSISTANT.

Applications are invited for the appointment of Senior Planning Assistant at a salary in accordance with the National Scale of Salaries, A.P.T. Grade IV, commencing at £420, and rising by annual increments of £15 to £465 per annum, plus cost of living bonus. Applicants should be Associate Members of the Town Planning Institute, and have had experience in the preparation of Statutory Planning Schemes and the control of interim development. Preference will be given to applicants who possess also a qualification in engineering and/or architecture.

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

Applications, stating age, qualifications, and

provisions of the Local Government Superannuation Act, 1937.
Applications, stating age, qualifications, and previous experience, endorsed "Senior Planning Assistant," and accompanied by copies of not more than three recent testimonials, should be submitted to the undersigned not later than Thursday, the 11th July, 1946.
Canvassing, either directly or indirectly, will be a disqualification.
J. M. DODDS.
Honorary Clerk of the Committee.
Town Clerk's Department,
Municipal Offices, Harrogate.
18th June, 1946.

CITY OF PORTSMOUTH.

CITY PLANNING OFFICER'S DEPARTMENT.

Applications are invited for the following permanent appointments in the office of the City Planning Officer, engaged on the preparation and administration of statutory planning schemes for the Authority's administrative area and plans for the reconstruction and future development of the City and its environs.

(a) SENIOR PLANNING ASSISTANTS (2).

Applicants are expected to be members of either the Royal Institute of British Architects. Royal Institute of Chartered Surveyors or Institute of City Institute of the Town Planning Institute, and to be thoroughly conversant with modern planning technique and experienced in the preparation and administration of statutory planning and urban improvement schemes. The salary is Grade VIII of the National Scale of Salaries, viz: - \$625 - \$2700 per annum.

(b) PLANNING ASSISTANTS (2).

Applicants should have a knowledge of the technique of planning practice and Interim Development administration, and be experienced in statutory planning practice and Interim Development administration, and be competent draughtemen. The salary is Grade I of the National Scale of Salaries, viz: \$230-£375 per annum. Preference will be given to the holders of appropriate professional qualifications.

The appointments will in every case be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass a medical examination. All appointments are subject to the National Scheme of Conditions of Service. All salaries are supplemented by cost of living bonus at the present time. Applications, stating age, qualifications, experience, logether with the names of three responsible persons to whom reference fray be made, must be delivered to the undersigned, clearly marked "City Planning Appointment" in the later than 12th July, 1946.

Canvassing will be a disqualification.

Town Clerk.

City Conneil Chambers.

1. Clarence Parade, Southsea.

City Council Chambers.
1. Clarence Parade, Southsea.
17th June, 1946. 922

COUNTY BOROUGH OF BOLTON.

Applications are invited for the appointment of two Architectural Assistants in the Borough Engineer and Surveyor's Denortment at salaries in accordance with Grade III A.P.T. Division of the National Joint Council Salary Scales. i.e. 2390 per annum, rising by annual increments of 715 to 2435 per annum, plus cost of living bonus, at present 259 19s. per annum.

The commencing salaries will be fixed in accordance with the qualifications and experience of the selected candidates.

Applicants must be competent to prepare sketch plans, working drawings, details and specifications. Preference will be given to members of the R.I.B.A.

The appointments will be subject to the provisions of the Local Government Superannuation Act. 1937, and to the selected candidates passing satisfactorily a medical examination.

Applications, stating age training, qualifications and experience, together with copies of not more than three testimonials, to be delivered to the undersigned not later than 10 a.m. on Monday, 15th July. 1946.

Town Hall, Bolton.

Town Hall, Bolton.

17th June, 1946.

Town Hall, Bolton. 17th June, 1946.

FIFE COUNTY COUNCIL.

COUNTY HOUSING ARCHITECT'S DEPARTMENT.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant in the County Housing Architect's Department. Applicants must be Architects under 45 years of age, preferably with previous experience of Local Authority Schemes, particularly Housing. The appointment is subject to the provision of the Local Government (Scotland) Superannuation Act, 1937, and the selected candidate will require to pass a medical examination.

Salary will be £400 per annum plus war increase of £90 per annum.

Applications, stating age, training and experience, accompanied by copies of not more than three recent testimonials, must be lodged with the undersigned not later than 11 a.m. on 12th July, 1946.

July, 1946.

Canvassing will result in disqualification

J. H. MITCHELL,

County Clerk.

County Buildings, Capar. 13th June, 1946.

BOROUGH OF SOUTHGATE.

AMENDED ADVERTISEMENT.

BOROUGH ENGINEER'S & SURVEYOR'S DEPARTMENT.

DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant on the Established Staff of the Borough Engineer and Surveyor at a Salary in accordance with Grade V in the A.P.T. Division of the scales of salaries recommended by the National Joint Council, i.e., 2460-2510 per annum, plus £20 London Area weighting, in addition, a cost of living bonus (at present £59 16s, per annum) is payable.

Applicants should be Associate Members of the Royal Institute of British Architects, or hold an equivalent qualification. Previous municipal experience, particularly in housing, will be an advantage.

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

Candidates who to their knowledge are related to a Member or Senior Officer of the Council must disclose the relationship in writing to the Town Clerk. Failure to do so will disqualify or ender the candidate appointed liable to dismissal without notice.

Canvassing, either directly or indirectly, will

Town Clerk. Failure to go so trender the candidate appointed liable to grammissal without notice.

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

Applications, stating 1. Name and address: 2. Age; 3. Qualifications by examination: 4. Present position, salary and date appointed; 5. Previous positions, with dates and salaries; 6. Particulars of experience and accompanied by copies of three recent testimonials, should be sent to Mr. J. T. W. Peat. R.I. B.A. Borough Fnarineer and Surveyor, Southgate Town Hall, Palmers Green, London, N.I.3. in an envelope endorsed "Architectural Assistant," so as to reach him not later than Friday, 5th July. 1946.

Town Clerk.

Southgate Town Hall, Palmers Green, London, N.13. 13th June, 1946.

CITY OF LINCOLN.

CITY ENGINEER'S DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL
Applications are invited for the following permanent appointments in the City Engineer's
(1) Architectural Architectural

manent appointments in the City Engineer's Department.

(1) Architectural Assistant.

Salary in accordance with Grade IV. \$420-£15-\$465, of the scales of the National Joint Council. plus cost of living bonus.

(2) Architectural Assistant.

Salary in accordance with Grade III. \$390-£15-\$455, of the scales of the National Joint Council, plus cost of living bonus.

Candidates should be Associate Members of the Royal Institute of British Architectural work. Including housing. and in the preparation of working drawings and specifications.

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

Forms of application can be obtained from and should be returned to, the City Engineer and Surveyor. Corporation Offices, Silver Street, Lincoln, not later than Friday, 12th July, endorsed "Architectural Assistant."

J. H. SMITH.

Town Clerk.

J. H. SMITH. Town Clerk.

Corporation Offices, Lincoln. 13th June, 1946.

COUNTY BOROUGH OF CANTERBURY.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following Appointments in the City Architect's Department:—

1. Senior Assistant Architect (permanent).

Grade IV, salary of £420 x £15—£465 per

annum. Applicants must be A.R.I.B.A., and preference will be given to those trained at a recognised School of Architecture, who have a contemporary outlook and experience of working on educational buildings. Previous local Anthority experience is not essential.

2. Architectural Assistant (temporary), Grade III, salary of £390 x £15 - £435 per annum. Applicants must be A.R.I.B.A., and should have had experience on educational buildings.

3. Architectural Assistant (temporary) Grade I, salary of £330 x £15 - £375 per annum.

Preference will be given to applicants who are A.R.I.B.A., and have some experience of housing work.

A.R.I.B.A., and have some experience of housing work.

Cost of living bonus at present £59 16s, per annum is payable on all the above salaries.

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

Applications, stating age, qualifications and experience, together with the names of three persons to whom reference may be made, should be forwarded to the City Architect, Mr. L. Hugh Wilson, A.R.I.B.A., A.M.T.P.I., Municipal Buildings, Dane John. Canterbury, not later than Saturday, 6th July, 1946.

J. BOYLE,

J. BOYLE, n Clerk.

Municipal Buildings, Canterbury. 6th June, 1946.

BOROUGH OF SWINDON.

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following permanent appointments on the staff of the Borough

Architect:—
OUANTITY SURVEYOR. The salary offered is in accordance with Grade IV of the Administrative, Professional and Technical Division of the National Scales (£420 to £465), plus such cost of living bonus as may from time to time be paid by the Corporation (at present £59 16s.). Candidates must have had extensive experience in the preparation of Bills of Quantities, Specifications and Schedules for all classes of public buildings and measuring up for the adjustment and settlement of contractors' final accounts.

Preference will be given to candidates who have passed the examination of the Chartered Surveyors' Institute.

passed the examination of the Chartered Surveyors' Institute.

ARCHITECTURAL ASSISTANT. The salary offered is in accordance with Grade III of the Administrative, Professional and Technical Division of the National Scales (£390 to £435), plus such cost of living bonus as may from time to time be paid by the Corporation (at present £59 16s.). Candidates should have experience in Housing and the General Architectural Work of a Local Authority.

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

Forms of application may be obtained from the undersigned, and applications appropriately endorsed must be delivered to me not later than Saturday, 13 July, 1946.

D. MURRAY JOHN

Civic Offices, Swindon. 10th June. 1946.

MIDDLESBROUGH FOUCATION COMMITTEE.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited from men with suitable qualifications and experience for appointment as Architectural Assistant on the established staff in the Architect's Section of the Middlesbrough Education Department.

Applicants should have had experience in the preparation of working drawings and details, and preference will be given to candidates who are Members of the Royal Institute of British Architects and have had previous experience of educational bullding work.

The salary scale will be fixed according to the age, qualifications and experience of the selected candidate. Cost of living bonus, at present £60 per annum, will be paid in addition to the basic salary.

Salary.

The appointment will be subject to the provisions of the Local Government Superannuation

Act. 1937.

Applications, stating age, present position and salary, training, qualifications and experience, together with copies of not more than three recent testimonials, should be delivered to the Unrector of Education, Education Offices, Woodlands Road, Middleshrough, by not later than Saturday, 6th July, 1945.

PRESTON KITCHEN Town Clerk.

Town's Clerk's Offices, Middlesbrough.

June, 1946.

COUNTY OF SOUTHAMPTON.

COUNTY OF SOUTHAMPTON.
Applications are invited for the following appointments on the established staff of the County Architect's Department:—
(a) Principal Assistant Architects, Grade VII.
Salary £575×£25—£650 per annum.
(b) Senior Assistant Architects, Grade VI.
Salary £535×20 and £25—£600 per annum.
(c) Assistant Architects, Grade IV. Salary £402×£15—£455 per annum.
(d) Assistant Architects, Grade III. Salary £309×£15—£435 per annum.
(e) Architectural Assistants, Grade I. Salary £309×£15—£375 per annum.
(f) Assistant Quantity Surveyor, Grade V. Salary £460×£15 and £20—£510 per annum.
(g) Heating Engineer, Grade VI. Salary £535×20 and £25—£600 per annum.
The cost of living allowance, at present £59 16s. per annum, will be payable in each case in addition to the salaries stated.
Candidates for Appointments (a), (b), (c) 2nd (d), must be Registered Architects, preferably A.R.I.B.A., with good general experience in design and construction of public buildings, including Schools. and const

A.R.I.B.A.. with good general experience in design and construction of public buildings, including Schools.

Candidates for Appointments (e) should have passed the Intermediate examination R.I.B.A., and have had some practical experience.

Candidates for Appointment (f) should have the qualification P.A.S.I. and experience in the preparation of Bills of Quantities and Estimates, and in the settlement of final accounts on building contracts.

Candidates for Appointment (g) should have suitable qualifications and be Associate Members of the Institute of Heating and Ventilating Engineers. They must have had experience in the design of heating, hot water, and ventilating systems in all classes of public buildings. A knowledge of electrical work and mechanical equipment will be considered an advantage.

The appointments will be subject to the Local Government Superannuation Act, 1937, and candidates before appointment will be required to pass a medical examination.

The appointments will be terminable by one month's notice on either side.

Applications should be made on forms to be obtained from Simpson Low, A.R.I.B.A., Dipl.Arch., County Architect, The Castle, Winchester, to whom they should be returned so as to arrive not later than Monday, the 8th July, 1946.

Members of H.M. Forces serving overseas may

1946.
Members of H.M. Porces serving overseas may apply direct by letter giving details of qualifications, experience, and date of release.

G. A. WHEATLEY,

Clerk of the County Council.

The Castle, Winchester. June. 1946.

COUNTY BOROUGH OF EAST HAM.

APPOINTMENT OF TEMPORARY ARCHITECTURAL ASSISTANTS.

TERMS AND CONDITIONS OF APPOINTMENT.

APPOINTMENT.

Applications are invited from qualified persons for the temporary appointments of two Architectural Assistants (Grade C) in the Borough Engineer and Surveyor's Department.

Candidates must be Associate Members of the Royal Institute of British Architects or hold an equivalent qualification, and have general knowledge and experience of architectural work in the service of a local authority.

The salary will be in accordance with Grade C of the Council's Grading Scheme for official staff, i.e., \$420 per annum rising to annual increments of £15 to a maximum of £465 per annum, plus war bonus at present £50 fos. per annum, but the commencing salary may be increased according to the qualifications and experience of the persons appointed. The Council propose to apply the National Salary Scales, and the salary for these posts will be subject to revision in the near future.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937. to the Council's conditions of service for temporary official staff in force from time to time, and the successful candidates will be required to pass a medical examination.

Applications on the form provided, must be delivered as soon as possible to the undersigned, together with copies of three recent testimonials, and endorsed "Architectural Assistant."

Canvassing in any form, will disonalify.

Town Hall, East Ham, E.6.

Town Hall, East Ham, E.6. 14th June, 1946.

HERIOT-WATT COLLEGE, EDINBURGH.

Applications are invited from British subjects for the post of Lecturer in Building. Qualifications and teaching experience in general building subjects including Building Science and in Structural Steel and Reinforced Concrete are essential. Salary Scale for Lecturers Grade I 2400-215-2685, Grade II 2400-215-359, Placing will be given according to qualifications and experience. Further particulars and application form may be obtained from the Principal with whom applications must be submitted not later than 31st July. applications
31st July.

J. CAMERON SMAIL. Principal

BRIGHTON TECHNICAL COLLEGE.

Principal: G. E. WATTS, M.A., Ph.D., B.Sc., F.R.I.C.

Applications are invited for the appointment of LECTURER IN ARCHITECTURAL AND BUILDING SUBJECTS. Applicants should possess good qualifications and practical experience in Architecture, Building Technology or Structural Engineering. The work will be entirely with Senior Students.

Salary according to Burnham Technical Scale with full allowance for approved professional or industrial experience.

The person appointed will

The person appointed will be required to assume duties as soon as possible after 1st Sep

assume duties as soon are remoter, 1946.

Forms of application, which may be obtained from the undersigned, should be returned, together with copies of two recent testimonials, to the Principal, not later than 22nd July, 1946.

E. HERBERT TOWNE.

Education Officer.

Education Office. 54, Old Steine, Brighton, 1.

BOROUGH OF CHESTERFIELD.

SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for a Senior Architectural Assistant in the Architectural Section of the Borough Engineer's Department. Candidates must hold recognised architectural qualifications, be able to prepare Bills of Quantities, and preference will be given to those having municipal

ference will be given to those having municipal experience.

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

Commencing salary £450, rising by £25 per annum (subject to satisfactory service) to a maximum of £500, plus cost of living bonus.

Applications, endorsed "Senior Architectural Assistant," stating age and full details of qualifications, and experience, accompanied by copies of not more than three recent testimonials, should be sent to the undersigned not later than July 15th, 1946.

RICHARD CLEGG.

RICHARD CLEGG. Town Clerk.

Town Hall, Chesterfield. 15th June, 1946.

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COUNTY BOROUGH OF SOUTHEND-ON-SEA EDUCATIONAL COMMITTEE.

MUNICIPAL COLLEGE.

Principal: P. F. R. VENABLES, Ph.D., B.Sc., F.R.I.C.

SENIOR LECTURER IN BUILDING.

Applications are invited for this vacancy, which is a post of special responsibility with an allowance of £30 per annum over and above the Burnham Technical Scale (Provincial), and which will include increments for recognised industrial and teaching experience. The successful candidate should possess at least Higher National Certificate in Building or its equivalent: he will be required to supervise and to teach senior partime students studying for the City and Guilds Examinations, and also to teach building subjects to students attending courses in fine recognised R.I.B.A. School of Architecture, the Head of Department of which is Mr. Norman Keep, F.R.I.B.A.

Further details of the post and forms of application may be obtained from the undersigned on receipt of a stamped and addressed envelope-Applications should be returned to the Principal as soon as possible. The candidate will be expected to take up his duties by 1st September. 1946.

H. BOYES WATSON.

Office

H. BOYES WATSON,

Chief Education

Southend-on-Sea.

11th June, 1946

COUNTY BOROUGH OF WEST BROMWICH

Applications are invited for the following ap-intment in the Borough Engineer and Sur-

Applications are invited for the following appointment in the Borough Engineer and Surveyor's Department.

CHIEF ASSISTANT ARCHITECT at a salary in accordance with Grade VIII of the National Scales, £625 rising to £700 plus cost-of-living bonus. Candidates should be qualified Architects and should have had experience of Municipal Work. Preference will be given to applicants who are Associates of the Royal Institute of British Architects.

The above appointment is a designated post under the Local Government Act, 1937.

Applications, stating age, experience and qualifications, accompanied by copies of three recent testimonials and endorsed "Chief Assistant Architect," must be received by the undersigned not later than noon on Thursday, July 11th, 1946. Canvassing in any form will disqualify candidates.

LOHN G TEFFERSON, M.Inst.C.E.

JOHN G. TEFFERSON, M.Inst.C.E. Bornigh Engineer and Surveyor. Town Hall, West Bromwich.

CHESTERFIELD RURAL DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following

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SYOT.

Applications are invited for the following appointments:—

(a) ARCHITECTURAL QUANTITY SURVEYOR. Salary £420 to £455, plus cost-of-living bonus of £59 16s. a year.

Applicants must be P.A.S.I., A.I.Q.S., or A.R.I.B.A., and have had experience in the preparation of quantities and the measurement of building work, and final accounts. Preference will be given to those with an architectural training. (b) BUILDING SURVEYOR. Salary £390 to £435, plus cost-of-living bonus of £59 16s. a year. Applicants must be P.A.S.I. or have Building Inspector's Certificate of the Institution of Municipal and County Engineers, or London City and Guilds Certificate in Building. They must be fully conversant with building bye-laws, the Public Health Acts and Town and Country Planning administration, and have had experience of the supervision of building work.

(c) BUILDING INSPECTOR. Salary £330 to £375, plus cost-of-living banus of £59 16s. a year. Applicants must be P.A.S.I. or have Building Inspector's Certificate of the Institution of Municipal and County Engineers, or London City and Guilds Certificate in Building Construction, or Higher National Certificate in Building, and have had experience of building work.

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

Applications, giving two references, should be delivered to the undersigned not later than the 6th July, 1946.

Burister-at-Law),

Engineer and Surveyor to the Council.

Rural Council House, Chesterfield, Derby. 945

BERKSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

APPOINTMENT OF TECHNICAL STAFF.

APPOINTMENT OF TECHNICAL STAFF.

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

(a) CHIEF QUANTITY SURVEYOR at a salary of £353 rising by two annual increments of £20 and one of £25 to a maximum of £600 per annum plus bonus.

(b) ASSISTANT QUANTITY SURVEYOR at a salary of £460 per annum rising by two annual increments of £15 and one of £20 to a maximum of £510 per annum rising by two annual increments of £15 and one of £20 to a maximum of £510 per annum rising by two annual increments of £15 and one of £20 to a maximum of £510 per annum rising by two annual increments of £15 to a maximum of £350 per annum rising by three annual increments of £15 to a maximum of £35 per annum plus bonus.

The above grades are on the National Scale of Salaries and the cost of living bonus is at present £9 16s, per annum.

Candidates for appointments (a) and (b) should be members of the Surveyors' Institution (Quantities Section) and should have had wide experience in preparing approximate estimates and Bills of Quantities, adjustments of accounts, etc. Previous experience with a Local Government Authority will be an advantage with regard to appointment (a).

Candidates for appointment (c) should be members of the Institution of Heating and Ventilating Engineers and should have had wide experience in design and supervision of heating, hot water supply, electrical and general mechanical installations.

Candidates for appointments (d) should be chartered and registered Architects and should have should

water supply, electrical and general mechanical installations.
Candidates for appointments (d) should be chartered and registered Architects and should have had considerable experience of preparing working drawings and be able to take charge of contracts.
All the appointments will be subject to the Local Government Superannuation Act, to one month's notice on either side, to the successful candidates passing a medical examination, and to the Council's General Conditions of Service for Administrative, Professional, Technical and Clerical Staff for the time being in force.
Application forms can be obtained on receipt of a stamped addressed envelope from the County Architect, 10, Abbots Walk, Reading, to whom they should be returned completed, together with copies of three recent testimonials, on or before Tuesday, 6th August, 1946.
Candidates serving with H.M. Forces abroad need not complete the official form of application but may submit direct application to the County Architect within the time specified, giving particulars of age, education, qualifications, experience, number of release group, date of probable release, and three names of references.

The possession of a car is not essential but would be an aidvantage.
Canvassing directly or indirectly will be a disqualification.

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

Shire Hall, Reading,

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

COUNTY BOROUGH OF WOLVERHAMPTON. APPOINTMENT OF CHIEF ARCHITECTURAL

ASSISTANT.

Applications are invited for the above appointment on the staff of the Borough Engineer and Surveyor, at a salary of £700 per annum rising by annual increments of £25 to £800, plus cost of living bonus at present £60 per annum. Candidates should be Fellows or Associates of the R.I.B.A. and must be highly competent in architectural design and administration, having had actual experience in the carrying out of architectural works, including housing and public buildings of various descriptions.

The appointment, which will be subject to one month's notice on either side, is subject to the provisions of the Local Government Officers Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The Conditions of Service will be those of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services. Canvassing will be a disqualification.

Applications, stating age, qualifications and full details of experience, together with copies of not more than three recent testimonials, should be delivered to the undersigned not later than Monday, the 15th July, 1946, in envelope marked "Chief Architectural Assistant."

J. BROCK ALLON, Town Hall, Wolverhampton.

June, 1946.

Town Hall, Wolverhampton. June, 1946. COUNTY BOROUGH OF EASTBOURNE.

APPOINTMENT OF DEPUTY BOROUGH ARCHITECT.

ARCHITEUT.

Applications are invited for the above post in the Borough Engineer's Department, at a salary of £625 per annum, rising by three increments of £25, to £700, plus cost-of-living bonus, at present amounting to £59 lés, per annum.

Applicants should be Associates of the Royal Institute of British Architects, and should have had considerable experience in the design and construction, both by contract and by direct labour, of the normal type of buildings erected by Local Authorities.

The appointment will be subject to the provisions of the Local Government Superannuation Act, \$337, and to the passing of a medical examination by the successful candidate, and will be terminable by one month's notice on either side.

side.
Applications, endorsed "Deputy Borough Architect," accompanied by three recent testimonials, should be forwarded to the undersigned so as to reach him not later than Monday, 15th July, 1946.

July, 1946.

RAYMOND WILLIAMS,
Borough Engineer.

"Bishopsbourne," Carlisle Road, Eastbourne. 943

CITY OF PORTSMOUTH.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments in the Department of the City Architect:—

(a) ASSISTANT ARCHITECTS (£450-£510).
(b) ASSISTANT ARCHITECTS (£390-£435).
(c) ASSISTANT ARCHITECTS (£30-£375).
(d) JUNIOR ASSISTANT ARCHITECTS (£255-£315).

(£) ASSISTANT QUANTITY SURVEYORS (£650-£510).
(f) ASSISTANT QUANTITY SURVEYORS

(e) ASSISTANT QUANTITY SURVEYORS (£450-£510).
(f) ASSISTANT QUANTITY SURVEYORS (£390-£485).
(g) JUNIOR ASSISTANT QUANTITY SURVEYORS (£256-£315).
Applicants for (a) and (b) should be members of the Royal Institute of British Architects.
Applicants for (c) and (d) should have bassed the Intermediate Examination of the Royal Institute of British Architects.
Applicants for (e) should be Professional Associates of the Chartered Surveyors' Institution, having qualified in the Quantities Sub-division, and should have had experience in taking-off in a quantity surveyor's office.
Applicants for (f) and (g) should be Registered Students of the Chartered Surveyors' Institution, and preferably should have passed the First Professional Examination, and have passed the First Professional Examination. and have had experience in working-up in a quantity surveyor's office.
The appointments will, in every case, be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass a medical examination.
All increments take effect on the 1st April in each year, the first one on the above scales being payable 1st April, 1947, subject to six months' service in the post. Salaries are supplemented by cost-of-living branus of £1 3s, per week. Appointments will be terminable by one month's notice on either side.

Applications, stating name, age, qualifications, and the names and addresses of two persons to whom reference can be made, must be delivered to the undersigned, not later than 10 a.m. on Friday, 19th July, 1946.

Canvassing will be a disqualification.

V. BLANCHARD.

Town Clerk.

CITY OF MANCHESTER.

CITY ARCHITECT'S DEPARTMENT.

APPOINTMENT OF SENIOR HEATING, VENTILATING AND MECHANICAL ENGINEER.

Applications are invited for the appointment of Senior Heating, Ventilating and Mechanical Engineer, on the permanent staff of the City Architect's Department, basic salary £505 by £30 to £535, plus cost-of-living bonus, at present £60 per annum. The salary may be reviewed in the event of the Corporation adopting National Salary Scales.

The successful candidate will be required to pass a medical examination before the appointment is confirmed, to contribute to the Corporation's Superannuation Fund, and to execute the Corporation's Deed of Service.

Candidates should preferably be Members or Associate Members of the Institute of Mechanical Engineers, or of the Institute of Mechanical Engineers, or of the Institute of Mechanical Engineers, be capable draughtsmen, fully experienced in the design and supervision of modern heating, hot water and ventilation systems of all types for local authority buildings of every description. Candidates should also possess a sound knowledge of all mechanical equipment connected therewith.

Applications must be made on the appropriate form, which can be had at my office, and must be returned (together with copies of not more than three recent testimonials) to me—not to any member of the Council—by 10 a.m. on Friday, 12th July, 1946, endorsed "Senior Heating, Ventilating and Mechanical Engineer."

Canvassing in any form, oral or written, direct or indirect, is prohibited, and will be regarded as a disqualification.

PHILIP B. DINGLE,

Town Hall, Manchester.

June, 1946.

Town Hall, Manchester. June, 1946.

KENT COUNTY COUNCIL.

FOUR ASSISTANT ARCHITECTS are required on the temporary staff of the Buildings Department. The salary will be £420 a year, rising by annual increments of £15 to £465, plus war addition—at present £59 16s.

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

Candidates were by members of the BLB and the successful candidates with the successful candidates will be required to pass a medical examination.

examination.

Candidates must be members of the R.I.B.A., by examination, or hold equivalent qualifications, and must be experienced in the preparation of preliminary plans, working drawings, and specification for school buildings, and the supervision of works in progress.

tion for school buildings, and the supervision of works in progress.

Applications, on forms obtainable from the County Architect, Springfield, Maidstone, must be delivered not later than the 13th July, 1946.

W. L. PLATTS,

Clerk of the County Council.

County Hall, Maidstone.

17th June, 1946.

POPLAR BOROUGH COUNCIL.

APPOINTMENT OF PRINCIPAL ASSISTANT ARCHITECT.

APPOINTMENT OF PRINCIPAL ASSISTANT ARCHITECT.

Applications are invited for the permanent position of Principal Assistant Architect to the Poplar Borough Council.

A large area of Poplar is situated in the proposed Stepney and Poplar Reconstruction are in hand and envisaged for the future. The position cails for sound technical and administrative ability and offers a good opportunity for experience in planning and architectural work with plenty of scope for originality and initiative. Candidates should be Associates of the Royal Institute of British Architects and experience in the carrying out of building work by direct labour would be an advantage. The successful candidate would be required to devote his whole time to the service of the Council.

The salary will be in accordance with Grade VIII (A.P.I. Division) of the National Scale of Salaries, i.e., 2645 rising to 2720 per annum, plus War Bonus at present amounting to £59 16s. per annum, but may be subject to review at a later date.

The appointment will be subject to the provisions of the Poplar Borough Council Superanuation Acts, 1911 to 1937, and the successful candidate will be required to pass a medical examination. Termination of the appointment will be subject to one month's notice on either side.

Applications, endorsed "Principal Assistant Architect," stating age, qualifications, and pre-

will be subject to one months a side.

Applications, endorsed "Principal Assistant Architect," stating age, qualifications, and present and past employment, and accompanied by copies of three recent testimonials, must be delivered to the Town Clerk, at the Foplar Town Hall, Bow Road, London, E.5, not later than 9 a.m. on 20th July, 1946.

Canvassing members or officers of the Council in any form will disqualify.

S. A. HAMILTON.

Popular Town Hall.

Poplar Town Hall, Bow Road, E.3. June, 1946.

SOMERSET COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of a Class I Architectural Assistant. The post is part of the authorised establishment, but the appointment will be on a temporary basis for the present in accordance with the County Council's regulations (shortly to be reviewed). The scale of salary attaching to the appointment is £430 per annum, by annual increments of £15 to £475 per annum, plus cost of living bonus (at present £59 19s. per annum). Candidates must be Associates of the Royal Institute of British Architects or hold other equivalent professional qualifications, with good experience in Architectrarl design.

British Architectural design.

Architectural design.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination by the County Medical Officer of Health.

Applications, stating age, training experience, qualifications and length of time to take up new appointment, together with copies of three recent testimonials, should be sent to the undersigned not later than 5th July, 1946.

R. O. HARRIS, F.R.I.B.A.,

County Architect.

Park Street, Taunton, Somerset.

SURREY COUNTY COUNCIL. APPOINTMENT OF CHIEF QUANTITY SURVEYOR.

AMENDED NOTICE.

Applications are invited for the appointment of Chief Quantity Surveyor. The salary will be £900 per annum, rising by annual increments of £25 to a maximum of £1,000 per annum. Applicants must be Members of the Surveyors' Institution (Quantities Section), and should have a wide experience in the preparation of approximate estimates and Billis of Quantities, adjustment of accounts, and other works which are incidental to the position of Chief Quantity Surveyor in a Local Government Department. The successful applicant will be expected to possess tact and initiative, and be experienced in the control of staff.

The appointment will be subject to one month's notice on either side, and the provision of the

tact and initiative, and be experienced in the control of staff.

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

Applications, stating age, full details of previous experience, and qualifications, accompanied by copies of three recent testimonials, and the names of three referees, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-on-Thames, not later than Saturday, 6th July, 1946.

DUDLEY AUKLAND,

Clerk of the Council.

County Hall, Kingston-on-Thames.

BOROUGH OF WHITEHAVEN.

ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment in the Borough Surveyor's Department.

Applicants must be Members of the Royal Institute of British Architects and should have had experience in housing and general building works as carried out by a local authority. Experience in taking off and billing quantities will be an adventige.

in taking off and billing quantitations advantage.

The salary will be at the rate of £420 per annum rising by annual increments of £15 to £465 per annum, plus cost of living bonus of £59 16s. per annum.

Applications, stating age, qualifications and experience, together with copies of two recent testimonials, should be addressed to the undersigned not later than 1st July, 1946.

A. D. VICKERMAN,

Town Clerk.

Town Hall, Whitehaven. 7th June, 1946.

SOUTHAMPTON COUNTY BOROUGH.

APPOINTMENT OF JUNIOR DRAUGHTSMAN.

APPOINTMENT OF JUNIOR DRAUGHTSMAN.

Applications are invited for the appointment of two junior draughtsmen in the Borough Architect's Department, at salaries in accordance with the General Division of the new National Scale for Local Authorities.

Applicants must be not less than 16 years of age, and preference will be given to Probationers or Students of the Royal Institute of British Architects who intend to qualify themselves for Associate Membership and become Registered Architects.

Applications in writing, stating age, qualifications and experience, accompanied by copies of two recent testimonials, should be made to Mr. Denis Winston, M.A., B.Arch., A.R.I.B.A., M.T.P.I., Borough Architect, Civic Centre, Southampton, to reach the above not later than Tuesday, 2nd July, 1946.

R. RONALD H. MEGGESON.

17th June, 1946.

COUNTY BOROUGH OF EAST HAM.

APPOINTMENT OF TEMPORARY JUNIOR TOWN PLANNING ASSISTANT.

TOWN PLANNING ASSISTANT.

Applications are invited for the temporary appointment of a Junior Town Planning Assistant (Grade 1), in the Borough Engineer and Surveyor's Department.
Candidates must be competent draughtsmen and have general knowledge and experience of town planning work. Preference will be given to those with experience in the service of a local authority.
The salary will be in accordance with Grade 1 of the National Salary Scale, i.e., £330 per annum, rising by annual increments of £15 to a maximum of £375 per annum, plus London allowance (£20 p.a.) ant war bonus, at present £59 l6s. per annum, but the commencing salary may be increased according to the qualifications and experience of the person appointed.
The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, to the Council's conditions of service for temporary official staff in force from time to time, and the successful candidates will be required to pass a medical examination.
Applications on the form provided must be delivered to the undersigned, together with copies of three recent testimonials, and endorsed "Town Planning Assistant," not later than Monday, 29th July, 1946.
Canvassing in any form will disqualify.

July, 1946.
Canvassing in any form will disqualify.
(Sgd.) H. A. EDWARDS,
Town Clerk. Town Hall, East Ham, E.6. 26th June, 1946.

Tenders

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

WANDSWORTH BOROUGH COUNCIL.

REBUILDING OF SIX MAISONETTES, GORSE RISE, S.W.16.

Tenders are invited for the rebuilding of a lock of six maisonettes in Gorse Rise, Streatotock of six ham, 8.W.16. Application

Applications for Forms of Tender, Bills of Quantities, and Specification must be made to the Architects, Messrs. George Elkington and Son. Norfolk House, 7. Laurence Pountney Hill. E.C.4, accompanied by a deposit of two guineas which will be returned upon submission of a bona fåde tender.

Tenders endorsed "Rebuilding maisonettes—Gorse Rise," must be delivered to the Town Clerk, Municipal Buildings, Wandsworth, S.W.18. not later than 12 noon on Tuesday, 16th July, 1946.

By Order, R. H. JERMAN, Town Clerk.

Municipal Buildings, Wandsworth, S.W.18. 17th June, 1946.

Partnerships

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

EX-MAJOR R.E., Associate, age 31 seeks partnership with established Architect.—Box 918.

A. R.I.B.A. (aged 31), ex-Major R.E., just of the leased, wishes to associate himself by Partnership or otherwise with established practice S. Midlands; own office accommodation, in growing town; willing to offer free services in lieu of capital for limited periods if necessary. Apply Box 946.

Architectural Appointments Vacant

Four lines or under, 5s.; each additional line, 1s. 6d.

Wherever possible prospective employers are urged to give in their advertisements full information about the duty and responsibilities involved, the location of the office, and the salary offered. The inclusion of the Advertiser's name in lieu of a box number

JUNIOR DRAUGHTSMAN (male, British) required for general practice; state full qualifications and salary by fetter. Goldsmith. F.B.I.B.A., 44, Great Russell Street, W.C.1. 882

SENIOR ASSISTANT required in busy Architect's Office in East Midlands, some knowledge of quantities desirable; permanent position to suitable applicant. Write, stating age, experience and qualifications and salary required, to E. H. C. Inskip & Son, Goldington Road, Bedford. to E. I Bedford

A RCHITECTURAL ASSISTANT required for spare time or part time work; East Suburban district. Write, stating age, qualifications and experience, to Box 894.

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SENIOR and Junior Architectural Assistants required immediately; progressive and permanent positions.—Write, stating age, experience, and salary required to W. Stephen Thomas, A.R.I.B.A., Metropolitan Bank Chambers, Commercial Street, Newport.

A RCHITECTURAL DRAUGHTSMAN required for builder's office in Northamptonshire; good knowledge of quantities essential, also surveys and working drawings; progressive position; salary £400; a house its available for immediate occupation. Box 907.

JUNIOR ASSISTANT, age between 20-23, with some previous experience in an Architects office.—Full details of previous appointments and salary required to Box 908.

A RCHITECTURAL ASSISTANT wanted in

A RCHITECTURAL ASSISTANT wanted in London office of staff Architect to large industrial company; well trained, good draughtsman, able to handle large and small jobs from sketch plans to finish; salary £400 to £500 according to qualifications. Apply Box 909.

ing to qualifications. Apply Box 909.

WANTED.—good, experienced Architectural Assistant with at least 10 years' experience including service of articles; good designer draughtsman in ink and pencil, with details surveying; quantities helpful; state type of work used to; fine opportunity for good man if suitable; chance of early partnership in country town; state experience with two testimonials, drawings for approval. Box 911.

ENIOR ARCHITECTURAL ASSISTANT

drawings for approval. Box 911.

SENIOR ARCHITECTURAL ASSISTANT (A.R.I.B.A.) required by London consultants; age 28/36; must be good designer with experience in multi-storey buildings and recent building practice; salary £600 per annum. Write Box 910.

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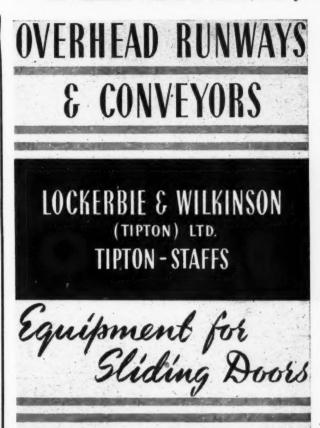
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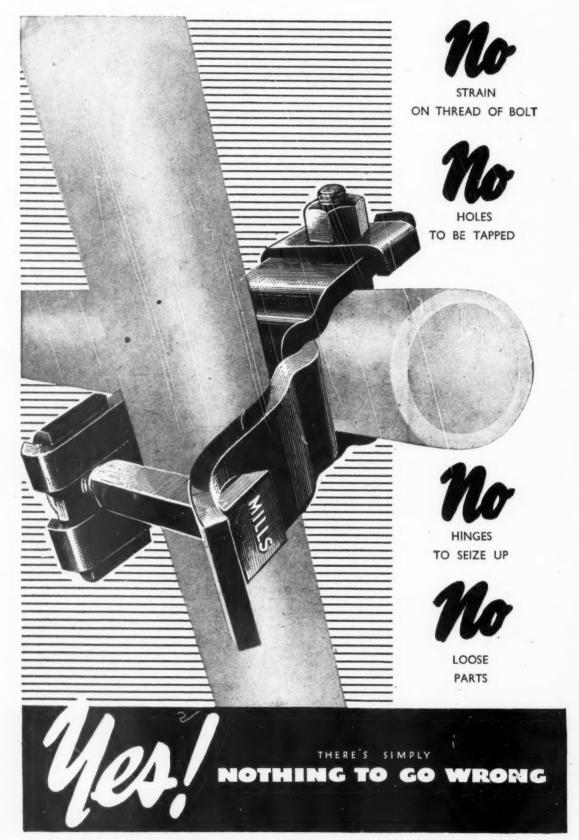
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