# BTACK



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

## NEWS and COMMENT

Diary News

Architects' Commonplace Book

Astragal's Notes and Topics Letters

Societies and Institutions

### TECHNICAL **SECTION**

Information Sheets Information Centre

Current Technique Questions and Answers

Prices The Industry

PHYSICAL PLANNING SUPPLEMENT

BUILDINGS CURRENT

STATISTICS

Architectural Appointments Wanted Vacant and

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

Architectural Association, 34/6, Bedford Square, W.C.1.

Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley,"

Castle Hill, Avenue, Berkhampstead, Herts.

Architects' Benevolent Society. 66, Portland Place, W.1.

Association of Building Technicians. 5, Ashley Place, S.W.1.

Altra Council of Great Britain. 4, St. James' Square, S.W.1.

Whitehell 9737

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Mayfair 7501/8

Whitehead, "Dyneley,"

Welbeck 5721

Victoria 0447-8

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Mayfair 7501/8 AAT ABS ABT ACGB ADA APRR Mayfair 7501/8

Aluminium Development Association. 33, Grosvenor Street, W.1. Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1. Euston 2158-9 ArchSA

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

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

Architectural Science Board of the Royal Institute of British Architects. Ardwick 3480 Welbeck 9738 ARCUK ASB 66, Portland Place, W.1. Welbeck 5721

**AScW** Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.1. BAE

Board of Architectural Education. 66, Portland Place, W.1. Welbeck 5721
Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1.
Reliance 7611, Ext. 1706 BATC

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British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.
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British Door Association. 43, George Street, Croydon. Mayfair 8641/6 BCC Welbeck 4185 Perivale 6869 BCCF BCIRA Redditch 716 BDA Croydon 5452 BEDA British Electrical Development Association. 2, Savoy Hill, W.C.2. Temple Bar 9434 British Gas Council. 1, Grosvenor Place, S.W.1.
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Glasgow Central 2891 BIA

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Cement and Concrete Association.
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Central Institute of Art and Design. 4: 42, Dover Street, W.1. Shrewsbury 3031
Sloane 5255 CCA Radlett 5616

CDA CIAD Regent 3074 Congrès Internationaux d'Architecture Ioderne. Doldertal, 7. Zurich, Switzerland Council of Industrial Design. Tilbury House, Petty France, S.W.1. Whitehall 6322 Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7. CIAM CID CPC Kensington 8161

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40, Piccadilly, W.1. Reg English Place-Name Society. 7, Selwyn Gardens, Cambridge. Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1. Regent 4448 **EPNS** FAS

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Chancery 7583 FRHB Federation of Registered House Builders. 82, New Cavendish Street, W.1. Langham 4041

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Georgian Group. 27, Grosvenor Place, S.W.1. Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1. Sloane 2844 Whitehall 2881 HC IAAS Housing Centre. 13, Suffolk Street, Pau Mail, S.W.1.
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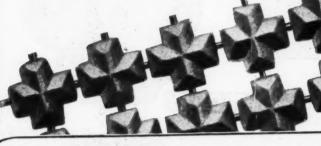


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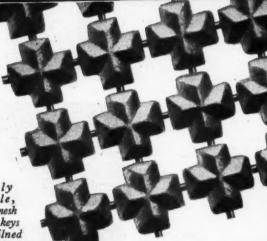
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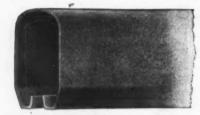
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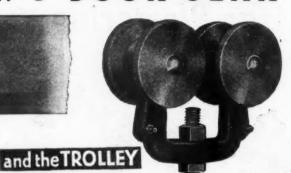


The BRACKET

# The Facilities KING SLIDING DOOR GEAR

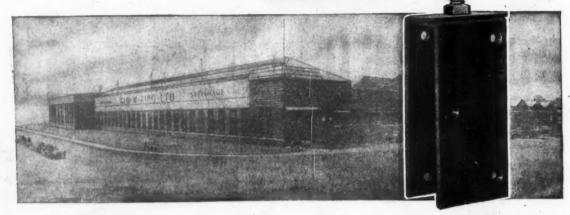


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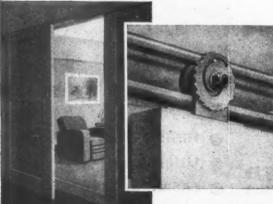
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This picture shows part of the extensive Drawing Office where a team of skilled engineers is constantly working to improve every detail of KING products.

products.





Enquiries are invited for the new "HOMESTIC" Sliding Door Gear of light alloy; eminently suitable for interior doors in dwelling houses, flats, etc.

DESIGN Photograph on right

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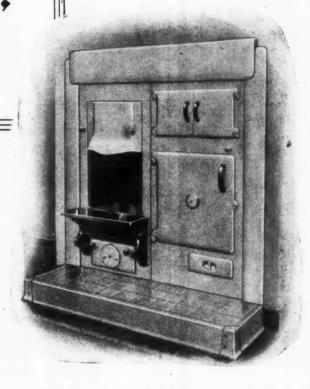
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ONE efficient and economical fire provides heat for a large and uniformly heated oven, a fast-boiling machine-ground hot-plate with extension hob, a hot closet and a supply of hot water for a normal family household. The fire has a closed position for slow overnight burning, and for the prevention of excessive heat emission during the summer months.

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GRATE.—Overall size, 38 in. by 38 in. by 14½ in. Brickwork opening required, 44 in. high by 40 in. wide and 15 in. deep. MANTEL.—Overall size, 45½ in. wide by 44¾ in. high. KERB.—To suit 44 in. by 12 in. tile hearth.

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The cooker has been selected for inclusion in the Ministry of Health's Approved List of improved appliances as recommended to all local authorities.



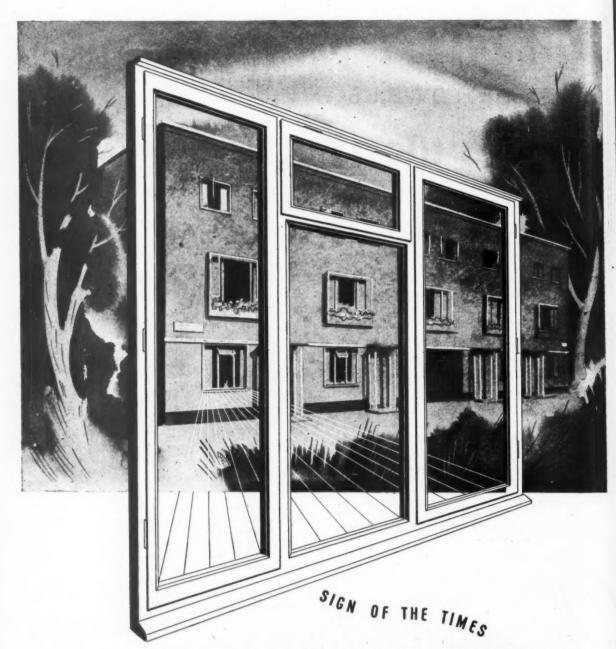
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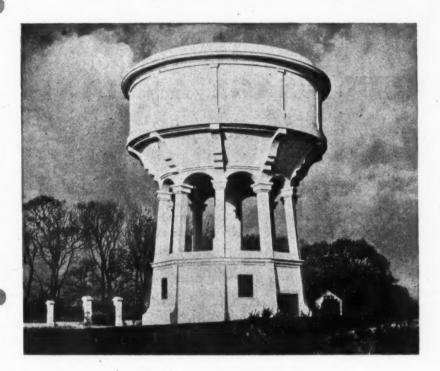
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It is a landmark for miles around. In addition to giving
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-a first step to lower prices

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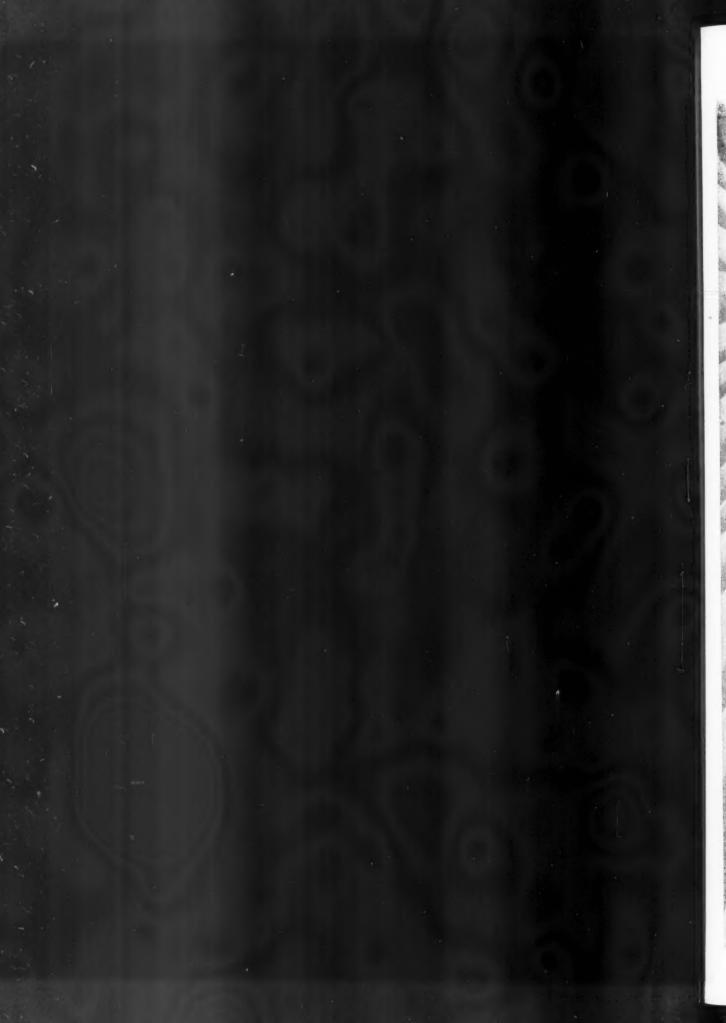
"Management Interest" is the secret Why does one firm so often use twice as much fuel as another? Such variation is surely too great to be accounted for by differences in the process or in quantity and quality of product.

It is almost always found that efficiency starts at the top. If Management is actively interested in its usage of fuel, heat and power—if Management is constantly asking questions and listening sympathetically to its engineers' suggestions—its influence is infectious. From the Chairman's office all the way down to the coal yard, people begin to sit up and pay attention.

"Fuel Usage Analysis"—what it is and how to start it It is not enough to know the total amount of fuel, heat and power used every day or week or month. More details should be sought and many more questions asked. How much does each department and each process use? Who is too cold and who is too warm? Would it be helpful to instal steam-meters and thermometers and other instruments—and who should be responsible for their regular calibration and maintenance?

Once Management starts asking itself questions, it will begin to achieve results. Some pertinent questions are available. Later advertisements in this series will direct you to them.





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Architects: Norman and Dawbarn.

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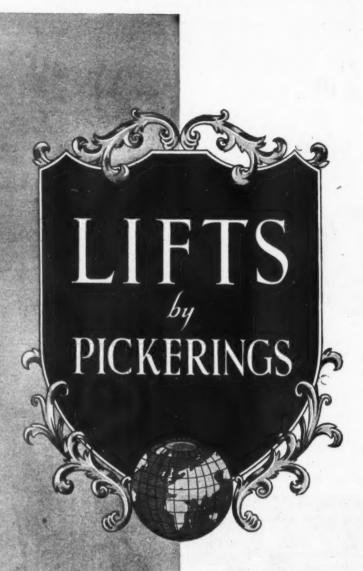
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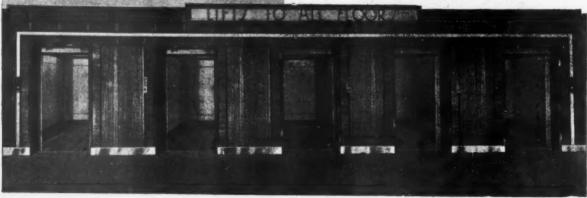






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RELATIVE COSTS OF EAVES GUTTERS AND
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Repainted three times.

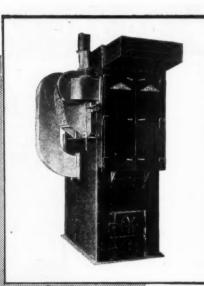
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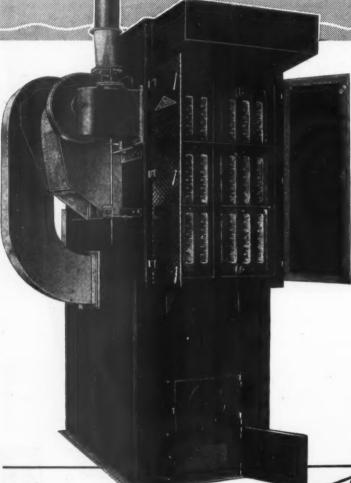
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RW2/41

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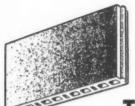
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2" thick U value (plastered both sides)

0.313

CAVITY WALL

41" brick outer leaf

41" B-A inner leaf

(unventilated)

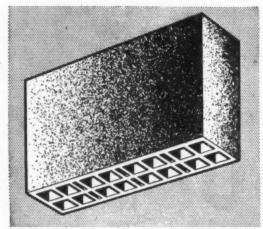
(Registered Design) vibrated cellular loadbearing

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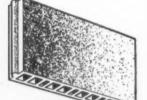
**BUILDING COSTS** FOR INNER LEAF OF **CAVITY WALLS** 



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### **Extract from Housing Manual 1944**

"Interest attaches to the use of a cavity wall consisting of an external leaf of brick and an inner leaf of lightweight concrete, as it provides a method of obtaining a higher value of Thermal insulation than the cavity wall consisting of two leaves of 43" brickwork. It shows moreover an appreciable saving in cost and speed of erection of walls in comparison with the all-brick cavity wall."



value

0.170

3" thick U value (plastered both sides) 0-292

Gross cost of erection

### Extract from Post-War Building Studies No. 1 House Construction Part 1, Section 64

It is suggested that the following maximum values for heat transmission coefficients will prove economical.

In houses in which the apparatus does not allow full control over heat output.

Extl. walls of living rooms . . . U not to exceed 0.20 A 41" Broad - Acheson block inner leaf in 11" cavity wall construction amply complies with the above suggestion.
.... U value being ·170

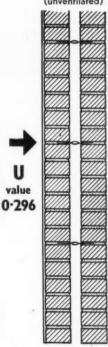
### Some interesting facts

A 3" thick Broad-Acheson block (plastered) provides thermal insulation equivalent to 18" thick solid brickwork (plastered).

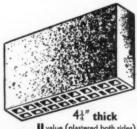
A 4½" thick Broad-Acheson block (plastered) provides thermal insulation equivalent to 22½" thick solid brickwork or a 20" cavity brick wall (plastered).



**CAVITY WALL** 41" brick outer leaf 41" brick inner leaf (unventilated)



Gross cost of erection 24.55/- per yd. supe



U value (plastered both sides) 0.202

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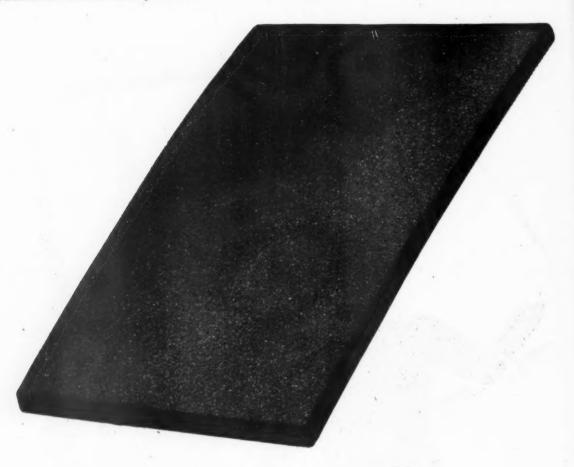
Most electrical engineers in the business know Pritchett & Gold, not only as makers of dependable batteries but as people who actually enjoy having their technical brains picked. Part I of the service we provide is a staff of specialists whose job is either to prepare complete and detailed specifications

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PRITCHETT & GOLD and E.P.S. CO LTD
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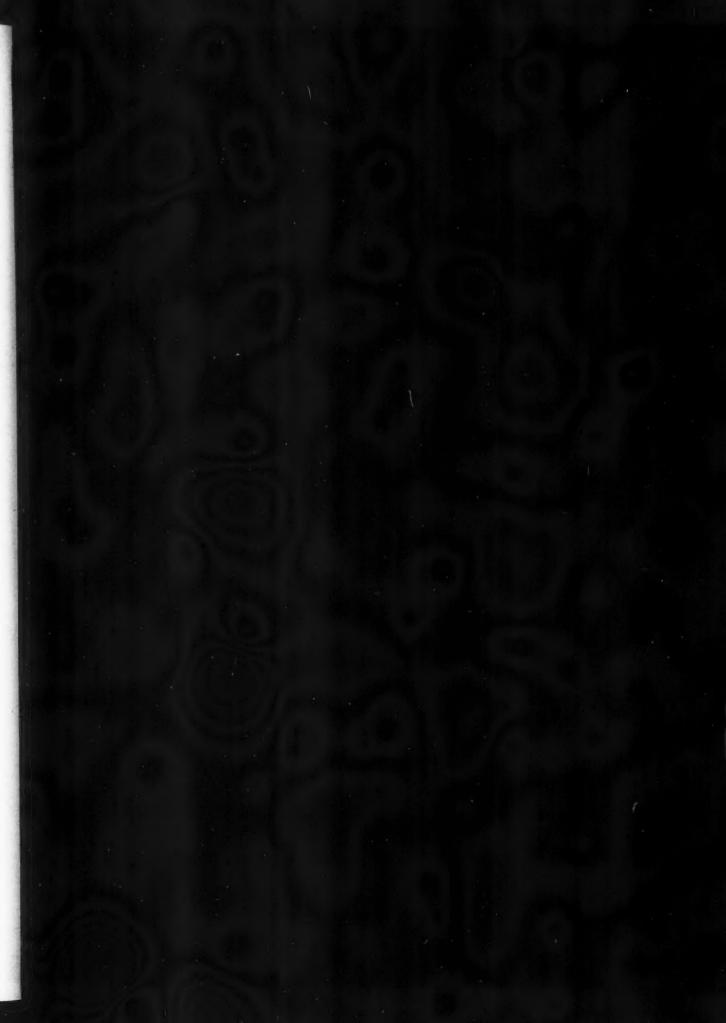


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THE MARLEY TILE COMPANY LIMITED · SEVENOAKS · KENT









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Seaside municipalities, and all who live or work by the sea, will find it sound business to use only the best paint—'Dulux'.

'Dulux' is made by Imperial Chemical Industries Limited, who will gladly advise on colour schemes and application. For further information apply to the nearest I.C.I. Sales Office.

# IMPERIAL CHEMICAL INDUSTRIES LIMITED PAINTS DIVISION





## RICHARD THOMAS & BALDWINS LTD.

make light alloy corrugated sheets as well as galvanised. Light alloy sheets are available for early delivery.

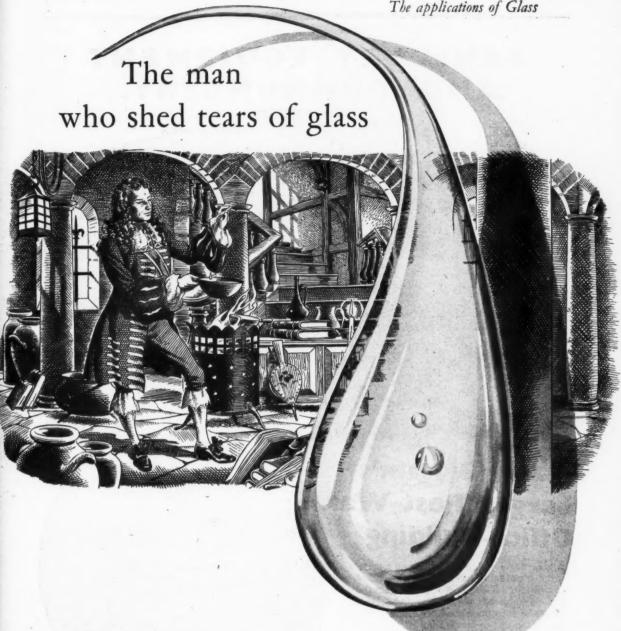
FURTHER PARTICULARS FROM 47, PARK STREET, LONDON, W.1





The Architects' Journal for July 21, 1949

The applications of Glass



Besides being a distinguished soldier and statesman, Prince Rupert of Bavaria, grandson of James I of England, was responsible for many valuable scientific discoveries. When experimenting in the middle seventeenth century, he found that by allowing molten glass to drip into water, tear-shaped drops of glass were produced that were strong enough to resist heavy blows. If the tail of the drop were broken, however, the glass immediately collapsed into minute particles that could be crumbled in the hand without injury.

Prince Rupert's drops were the forerunners of "toughened" glass, now being manufactured by a modern process in the form of "Armourplate." Its high resistance to both physical and thermal shock, coupled with the fact that it exhibits no dangerous cutting edges if fractured, makes it ideal for purposes where the requirements call for high strength, resistance to thermal shock, and a safety fracture, combined with all the normal properties associated with glass.

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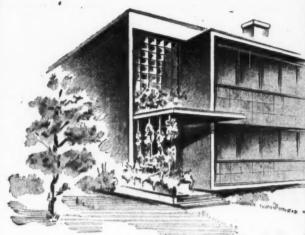
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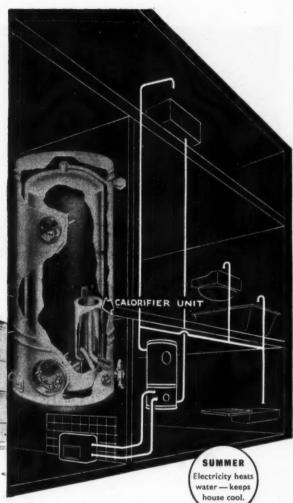
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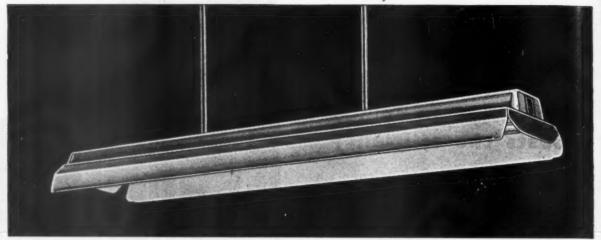
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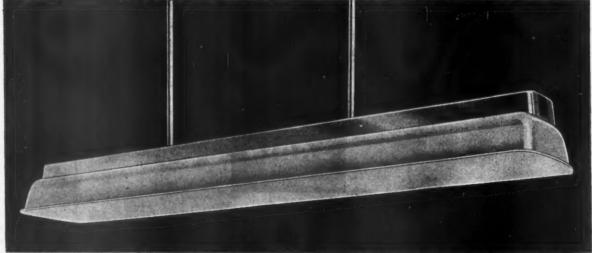
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#### JOHN DWIGHT AND HIS STONEWARE

Stoneware is a hard, impervious type of opaque pottery fired at a very high temperature. It was made in China at least as early as the 3rd century B.C., and seems to have developed independently in Germany in the Middle Ages. In the 16th century, salt-glazing was introduced. Common salt was thrown into the kiln after a temperature of over 1,200° C. had been reached; the sodium in the salt combining with the silica and alumina in the clay to form a characteristic thin, transparent "salt-glaze".

German stoneware was imported into England in the Tudor period. Similar wares were made in London in Charles I's reign and in 1671, John Dwight (sometimes called "The father of English pottery") took out a patent for "stone ware vulgarly known as Cologne

ware". He set up a pottery in Fulham where, by adding finely ground calcined flint to the clay, he produced a fine white stoneware body which was later emulated by Staffordshire potters. Dwight, like many others, sought also to discover "the mistery" of porcelain. But the credit for this fell to a German alchemist, Johann Böttger, who in 1710 established the famous porcelain factory at Meissen, near Dresden.

Dwight produced at Fulham a number of jugs, mugs and other useful wares, decorated with reliefs of hunting scenes. His most notable contribution to English ceramic art, however, was a series of statuettes, figures, busts and other pieces of pottery sculpture which for modelling and technique have probably never been excelled. Among the best-known are a life-size head of Prince Rupert, two

smaller busts of Charles II and James II, and a recumbent half-length figure of Dwight's daughter, Lydia.

It is interesting to recall that John Doulton, the founder of the House of Doulton, was born in Fulham in 1793 and served his apprenticeship at the famous pottery which Dwight had founded over a century before. His son Sir Henry Doulton, in about 1870, brought about a great revival of the art of salt-glaze stoneware and from then onwards to the present day the Royal Doulton Potteries have continued to produce beautiful individual examples of this ware which has been well-described as "an aristocrat among ceramics". The sensitive, restful shapes of stoneware pots, their soft deep colourings and their unique texture have a lasting appeal and fascination for all pottery-lovers.



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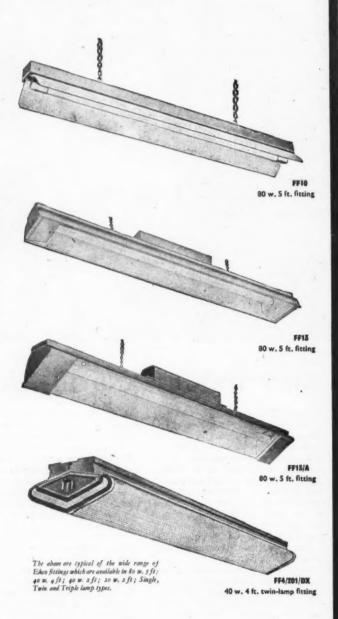
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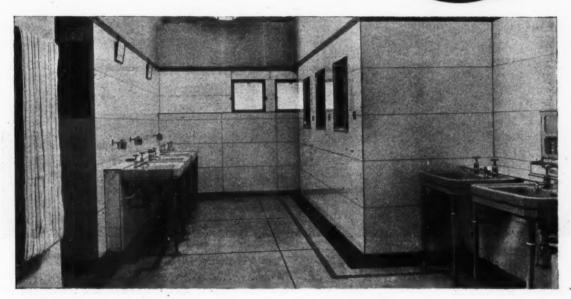


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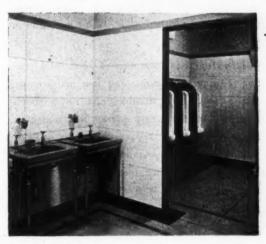


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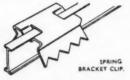


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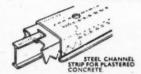
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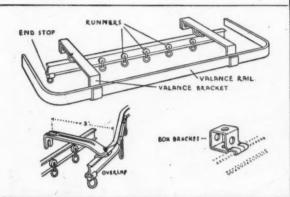




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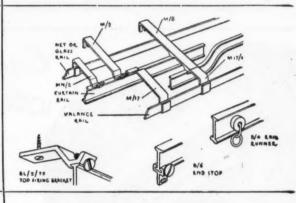


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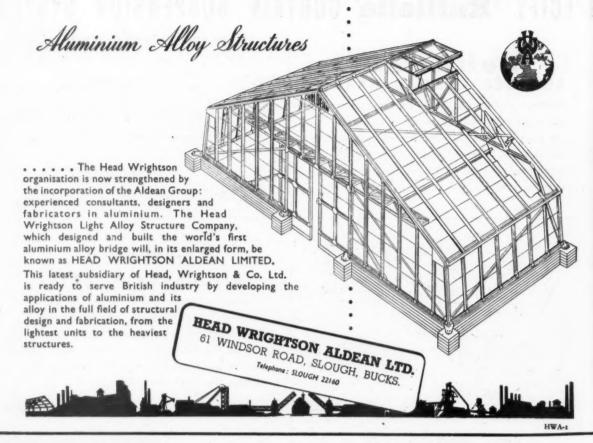
Architect's Journal: the following information Sheets are available and will be sent on request to manufacturers. SHEET 44 D.I. ("RUFFLETTE" RECESSED TRACK). SHEET 44 D.2. ("RUFFLETTE" B/L and M Type Rails).

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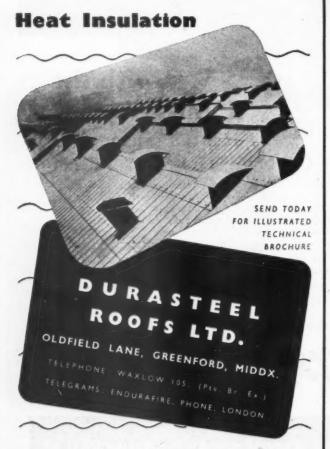
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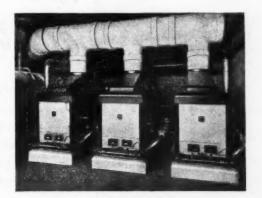
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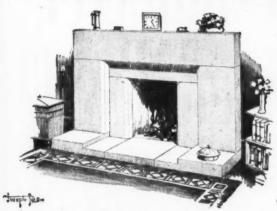
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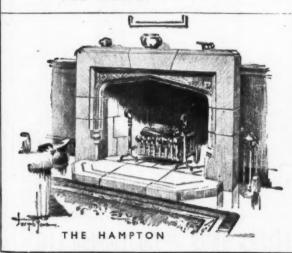
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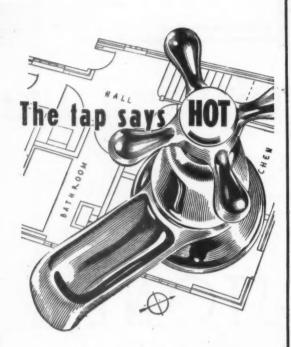
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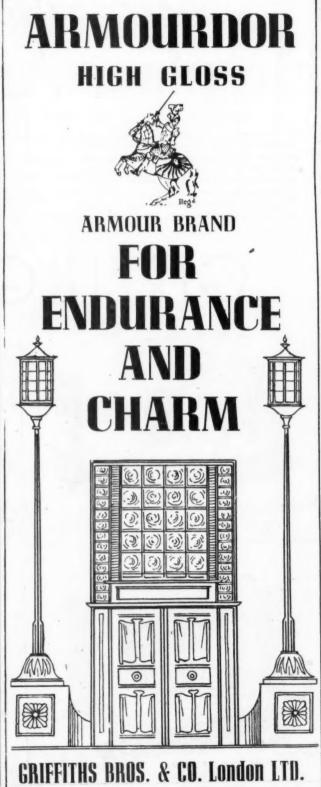
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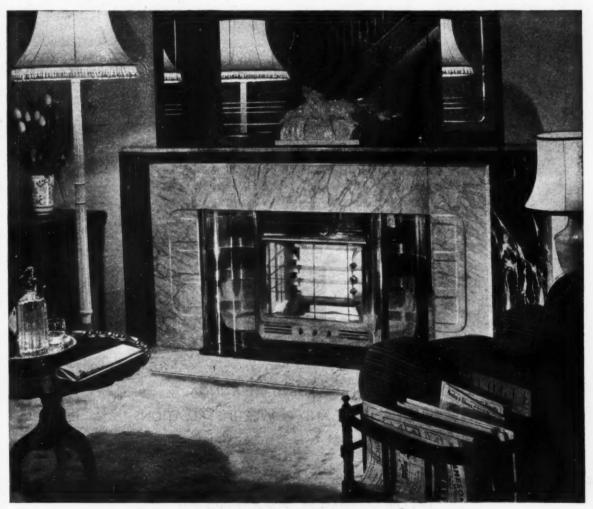
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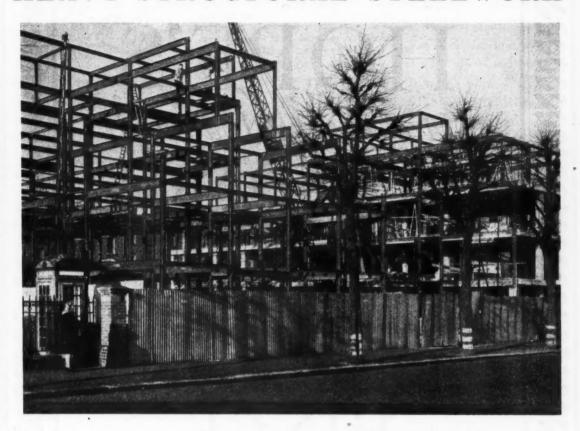
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In common with every other periodical, this JOURNAL is rationed to a small part of its pre-war consumption of paper. Circulation is therefore temporarily restricted but would-be subscribers are advised to have their names put on the waiting-list. Their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



be added to the subscription list as soon as possible. Subscription rates: by post in the 'U.K. or abroad, £1 15's. 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 price. Volumes can be bound complete with index, in cloth cases, for 17s. 6d. each; carriage 1s. extra.

## DIARY FOR JULY AUGUST AND SEPTEMBER

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

B IRMINGHAM. Exhibition of Work of Students of College and Schwols of Arts and Crafts. Museum and Art Gallery. (Sponsor, City of Birmingham Education Committee.) Daily, 10.30 a.m. to 6.30 p.m. Sunday, 2 p.m. to 5.30 p.m.

UNTIL JULY 25

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

H ARLECH. Residential Summer School on Art, to be held at Coleg Harlech, Harlech, Merionethshire. Details from the Secretary of the College. (Sponsor, Coleg Harlech.)

July 23-30

LONDON. AGM of BSI, 24-28, Victoria Street, S.W.1. 3 p.m. July 27

Exhibition of Work of School of Architecture, Polish University College. 21, Princes Gate, S.W.7. 10 a.m. to 6 p.m. UNTIL JULY 28

Furniture Design Conference. At the RIBA, 66, Portland Place, W.1. (Sponsor, CID.)

One-day Conference on Rent Control and the Condition of Houses. Central Hall, Westminster, S.W.1 10.30 a.m. (Sponsor, HC.) July 22

Exhibition of photographs of Old London, by W. A. Clerk. At the City of London Guildhall, E.C.2. Weekdays 10 a.m. to 5 p.m., Saturday 10 a.m. to 1 p.m.

UNTIL JULY 30

ST. ANDREWS. Town and Country Planning Summer School. At the University of St. Andrews, Fife. (Sponsor, TPI.) AUGUST 20-27

#### COMPETITIONS

The Trustees of the Victorian National War Memorial invite competitive designs for the 1939/1945 War Memorial which is to take the form of a great forecourt on the north side of the existing Shrine of Remembrance. The competition is open to architects who served in His Majesty's Forces during the 1914/1918 or 1939/1945 wars and who are members of the RAIA or RIBA or who are legally registered in Australia or New Zealand. Every intending competitor is required to register his name in writing with the Secretary, The Royal Victorian Institute of Architects, 55, Collins Place, Melbourne, Australia, not later than 12 noon, Monday, August 1, 1949. Assessors: Robert S. Demaine, F.R.A.I.A., Marcus W. Martin, F.R.A.I.A., W. Balcombe Griffiths, M.C., A.R.A.I.A. Premiums: £1,000, £500, £250.

The estimated cost of the memorial must not exceed £90,000, exclusive of architects' fees. Last day for submitting designs: Monday, October 31, 1949. Designs may be sent to the Agent General for Victoria, Victoria House, Melbourne Place, Strand, London, W.C.2, from whom conditions of the competition may be obtained.

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

#### NEWS

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As part of its campaign for the improvement of sites, with regard both to caravanners' convenience and to the protection of amenities, the Caravan Club has prepared a scale model showing a suggested layout for a caravan site for country recreation. The layout was designed by G. A. Jellicoe, after conferences with officers of the Caravan Club, and the model was constructed by Patrick Horsbrugh. The model illustrates that a well planned caravan site of moderate size can fit successfully into typical English landscape without damaging amenities.



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#### From AN ARCHITECT'S Commonplace Book

ARCHITECTURAL EDUCATION (From Eliel Saarinen, by Albert Christ-Janer (The University of Chicago Press).]—The basic theory of Eliel Saarinen's teaching is that the student must have a specific problem when he comes to Cranbrook, and that, during his stay, he must achieve a solution for his problem. "Eliel Saarinen's philosophy of architectural education includes the premise that all work done by the student must be based upon reality, and therefore be a part of life itself, and not upon artificial conditions about which the student can only theorize. Architecture, according to Mr. Saarinen, is not necessarily building, but it includes everything which man has created as a practical organic solution of his relation to his environment. The student at Cranbrook must think, feel and understand architecture not as a 'fine art,' but as something with which man has constant contact. Each student at Cranbrook chooses his own problem which he develops to a solution. These problems as chosen are those in which the student has a vital interest and thorough knowledge of the surroundings and conditions of life which may have an influence on the solution. They are individual problems of his associates and by their mutual criticism. There is no assembling of stylistic forms for the solution of a problem, but a dependence upon common sense."

## New maps prepared by the MOTCP show POPUL-ATION CHANGES BETWEEN THE WARS.

A number of maps that have been prepared by the Ministry of Town and Country Planning to show the changes in population throughout Great Britain for the periods 1921-31 and 1931-39 have been published by the Ordnance Survey. They show a marked decline in North Devon and in the greater part of mid-Wales, but increases nearly everywhere are shown in the seaside areas. The maps are at a scale of approximately 10 miles to one inch, two sheets covering the whole of Great Britain. They are on sale at the Ordnance Survey Offices, Chesington, Surrey.

#### A PLAN FOR REBUILDING THE CITY CHURCHES has been approved by the London Diocesan Reorganization Committee.

san Reorganization Committee.

Proposals for a far-reaching reorganization of the City churches have, in the past week, been laid in outline before the City clergy and the City Corporation. The proposals, having been accepted by the reorganization committee, are now given wider circulation, not as a settled plan but to evoke consultation and comment. The Bishop of London's Commission on the City Churches, appointed in September, 1941, to view the problem in the light of the new situation, produced its final report and recommendations just five years later. With that report as its starting-point, the sub-committee evolved a set of proposals calculated to fulfil its aim. The committee felt itself bound not to vary the findings of the Bishop's Commission, and so far as those findings concerned the restoration or retention of church buildings it has not departed to any major degree from the Commission's suggestions.

not departed to any major degree from the Commission's suggestions.

There are 46 parish churches in the City. To these was added, for the purposes of the reorganization committee's survey, the damaged Wren church of St. Andrew, Holborn, the site of which lies outside the City deaneries. Though St. Andrew's, Holborn, is to be restored, the committee leaves open the question whether the building should be turned to some other ecclesiastical use. It is proposed that six of these churches shall not be restored and that their sites be sold (see page 65). Another four are the subjects of special recommendations, as follows:—Christ Church, Greyfriars.—Though the Bishop's Commission recommended its restoration for use as an institute, the com-

mittee would prefer to make it the administrative headquarters of the diocese. St. Dunstan-in-the-East.—To be restored for use as an institute. St. Bartholomew the Less.—To become the chapel of Bart's Hospital. St. Augustine, Watling Street.—Surviving parts to be incorporated in the new choir school for St. Paul's Cathedral.

It is recommended that the rest of the bombed, or war damaged, churches be restored although the number of parish churches in the City is to be reduced from 46 to 15, with corresponding amalgamations among the parishes.

## A Plan recently published envisages the expenditure of £5,625,000 over a period of twenty years for the DEVELOPMENT OF THE UNIVERSITY OF LIVERPOOL. Drafted by Professor W. G. Holford, the

plan provides for development along the ridge overlooking the centre of the city. It moves the main focal point of the University from where it now stands, at the top of Brownlow Hill, towards the neighbourhood of Abercromby Square, about 300 yards to the south. It will be on the same ridge as Liverpool Cathedral and the School of Art and next to the site of the Metro-

politan Cathedral. The plan makes use of a war-damaged and partly-derelict site close to the commercial centre of Liverpool, deliberately favouring it as against a move to the outskirts of the city, Liverpool Corporation are assisting both the University and the Teaching Hospital—which must be adjacent—by allocating an area of about 125 acres, which means that, under the Holford Plan, a precinct will eventually be created in which the University and hospital buildings will predominate, though some shops, flats and houses will remain within it. The Medical School and Hospital will grow up on the north side of the present University centre and extend as far as Prescot Street. A few old buildings will be incorporated in the new development, which is likely to be very extensive, particularly in the Faculties of Science and Medicine.

The main halls of residence will continue to grow outside the Precinct, but some provision has been made for flats, lodgings and club-rooms in the Abercromby Square area to cater for the social side of University life. Professor Holford favours a central heating system for the University. Discussing building costs, he estimates that to construct 25,000,000 cubic feet of building will require 8,000 man-years—or an average of 400 men for twenty years, not including professional services and civil engineering labour.



On July 15 W. H. Smith and Son, Ltd., opened a new bookstall at Marylebone station to replace the temporary stall in use since the war. The new stall, designed by H. F. Bailey, is constructed in aluminium alloy, and is a prototype which indicates the design of bookstalls to be used on railway stations in this country in future.

#### A Site to be Sold

Six of the City of London's churches are not to be rebuilt. All, to a varying degree, the design of Sir Christopher Wren, they were either totally destroyed during the war or so far damaged as to make restoration impracticable. The remainder of the damaged City churches, with three exceptions, are to be completely restored, and the Diocesan Reorganisation Committee are to be congratulated on their imaginative scheme which will do much to

regain the architectural glories of the City. Above is shown, in its original state, the church of St. Mary, Aldermanbury, one of the six churches whose sites are to be sold. The future use of these sites is a matter of some concern. It is to be hoped that the City Corporation will ensure that some will be retained as open spaces in the over congested City, a policy repeatedly advocated in the Journal. See also pages 59 and 65.

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## The ARCHITECTURAL ASSOCIATION is to have a WAR MEMORIAL. It is proposed to erect a memorial tablet to commemorate the members of the Architectural Association who died on national service during the second world war. Relatives of members whose names should be inscribed on the tablet are requested to send particulars to the secretary, the Architectural Association, 36, Bedford Square, London, W.C.1.

#### NEWS IN BRIEF

South Shields Education Committee is to arrange an architectural competition in connection with the design of a proposed new technical college to accommodate 900 students.

The General Purposes Committee, of the LCC has reported that the Royal Fine Art Commission has approved in principle the design of the South Bank Concert Hall, and has expressed the hope that the erection of the building will proceed very shortly.

The Central Land Board has completed the work of acknowledging the 930,000 claims on the £300 million for loss of development values, Where agents have been employed acknowledgments have been sent to them. The final date for lodging claims was June 30 last. Any claimant or agent who has not now received an acknowledgment should communicate with the Board's Regional Office at once.



On the recommendation of the New South Wales Chapter, RAIA, the RIBA has awarded a Bronze Medal, for the period of 11 years ending December, 1947, to the Orient Line Building, Spring Street, Sydney, NSW, designed by Messrs. Fowell, McConnell and Mansfield, in association Brian O'Rorke. The building was fully described in the Architectural Review, August 1941, pages 49-52.

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#### THE LCC'S DRAFT DEVELOPMENT PLAN

THE London County Council, at its meeting on June 28, approved an outline Draft Development Plan prepared by the Town Planning Committee. The Draft deals with population and density, roads, railways, open spaces and schools, but the individual architect and his client will be concerned with the proposed methods of controlling the bulk of a building on a single site in a non-residential area. The Council have three years from July 1, 1948, in which to complete the Development Plan and submit it to the Minister of Town and Country Planning for approval, and though applications for permission to develop during this interim period will be considered on their merits, it is proposed that they should be examined in the light of the proposed methods of control.

Three controlling factors in the development of an individual non-residential site are proposed, *i.e.*, the aggregate floor area of the building having a ratio to the net site area, angular lines of set back and the application of the Daylighting Code issued by the Ministry of Town and Country Planning.

The ratio of floor area to net site area in central areas is 5:1 diminishing to 2:1 in the outlying parts of the County. A ratio of  $5\frac{1}{2}$ :1 may be applied in the vicinity of the Bank. Thus, with a net site area of 5,000 sq. ft. the permitted aggregate floor area would be 25,000 sq. ft. in the 5:1 zone. This could be used to cover a substantial part of the site with a low building or a higher building in a smaller part of the site. The angular lines of set back in non-residential zones vary from 56 degrees in the 5:1 zone to 40 degrees in the 2:1 zone. All enclosed courts are to have an angular set back of 45 degrees with 40 degrees in the 2:1 zone.

The aggregate floor area, above and below ground, is to be measured so as to include thicknesses of internal and external walls, areas of staircases, corridors and covered passages, lavatories and other enclosed or covered accommodation. Basements used for offices, living or similar uses are to be included, but underground private garages, loading and unloading space, strong rooms and storage rooms are to be excluded.

So far as the City of London is concerned the consultants' plan, as approved by the Court of Common Council in 1947, is to be taken as a basis for considering development applications, and the Greater London Plan will be used as a guide to planning on the County boundary.

Considerable ingenuity will be required to make the best of an individual site in a non-residential area having regard to the three controlling factors, and it may even be that the London Building Acts will add further to the architect's problem.

During the three years interim period before the Development Plan becomes operative an appeal can be made to the Minister of Town and Country Planning against a refusal of planning permission, or a permission subject to conditions. It is conceivable that the accommodation required by a client and the financial aspect of the project when contrasted with the building designed in accordance with the three controlling factors, may lead to an appeal, and the Town Planning Act provides that in certain circumstances the Council may be required to purchase the interest in a site if planning permission is refused, and must do so if the Minister confirms an owner's notice demanding purchase. The Minister, however, has wide powers under the Act and may give such directions as will perhaps satisfy a reasonable client and at the same time relieve the Council from the obligation to buy the site. Such considerations will no doubt be in the Council's mind and mutual concessions may, it is hoped, provide a satisfactory solution of a problem from the point of view of both the client and the Council, thus avoiding the intervention of the Minister.



The Architects' Journal

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N O T E S

THE AA PRIZE GIVING

A summer afternoon, a marquee on the lawn, the pattern of plane tree leaves against a sunlit canvas and in one's ears a voice reading an interminable list of names and scholarships; isn't that the picture in everyone's mind of an end of term prize giving? Such was the scene at the Architectural Association last week, a scene which will be repeated in much the same way all over the country this summer and, no doubt, for as long as schools exist.

Yet, though the pattern of procedure was so similar to other prize givings, this occasion was an unique one for the AA in three ways: firstly, as I mentioned the other week, the Prime Minister, Mr. Attlee, presented the prizes; secondly, the Principal, Furneaux Jordan, in an excellent speech which was greeted with special aplause, attempted the most difficult and dangerous of a principal's tasks: to outline the future trends of architectural training. He said that students will have less time at the drawing board and more studying technics, and working on real buildings in the course of construction (in particular on the LCC Concert Hall), and Third-year students are to build a Fifth year design for a Youth Hostel .

The third unique event was one peculiar to the occasion, a sensation hard to describe yet tangible even to those of differing political and architectural camps, and that was a sense of affinity and friendliness, the friendliness of a community which, in the principal's own words "Is concerned with creation and beauty . . . idealistic, and visionary, but one which also knows courage, realism and determination."

WARE WIRE

The damage done to the cause of good design by the railways in introducing the old oak tavern car will be nothing beside the damage they may do to the whole English scene if a decision forecast in a recent paragraph in the *Times* is actually taken. This paragraph

stated that the committee set up by the Transport Commission to inquire into railway electrification is almost certain to recommend the use of overhead wires in future instead of a third rail.

It is already the case that along the roads—in the remotest countryside as well as in urban areas—a tangle of overhead wires of all kinds obstructs the view and destroys the sense of open sky. If this is going to happen along the railways too—remember several of the main lines are due to be electrified—it will be disastrous. The railways still pass discreetly through unspoilt country, which in places they even adorn by their presence. They will not adorn it any more when accompanied by overhead wires and the gantries needed to carry them.

Before it comes to a final decision the Committee must be made to understand that there are many things more important than the technical convenience it seems chiefly to be thinking about, and the safeguarding of the English landscape is one of them.

ph

SCOTS AND SCANDINAVIA

A group of Professor Gordon Brown's students at the Edinburgh school of architecture, together with students of industrial design and sculpture of the Edinburgh College of Art, will spend part of their summer holidays working in Stockholm under Professor Arbohm of the Technical High School and Dr. Ake Stavenow, Director of the School of Industrial Design. The students will be encouraged to collaborate in designs, exchange ideas amongst themselves and with Swedish students, and study Swedish problems and techniques.

I only hope this does not lead to another bunch of students bringing pure Swedish detail back to Britain. For two reasons I do not expect, however, that this will occur. Firstly, the Scots are a hard-headed crowd who exude such a Scotch, haggis and highland atmosphere abroad that only the most determined natives can ever make an impression on them. Secondly, there are all the signs of the beginnings of a first-rate school of Scottish design sufficiently mature to be inspired by Swedish work without having any de-



The Prime Minister, Mr. Clement Attlee, presenting a prize to Mr. B. L. Adams, a student, at the Architectural Association's prize giving last Friday. On Mr. Attlee's right is Mr. Furneaux Jordan, the Principal of the AA. See Astragal's comment on the opposite page.

Scotland has many sire to copy it. physical similarities to the Scandinavian countries, and she might well form ties to bind her as close to them as she once was to France.

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The Plymouth City Council is preparing furnished houses in which to instruct families, taken from condemned slum property, in the virtues of cleanliness and good house-keeping before they are given new homes. While this will not deter people from keeping coal in the bath if they have no coal store and cannot afford hot water for the bath, it leaves no excuse for that scourge of the philanthropic socialist, the eight-pound-a-week labourer who likes to be dirty.

This fish and chip fed individual with a surfeit of offspring and a scarcity of sense, is still far from rare, and it is the effect of two or three such families in an estate which necessitates the provision of railings around trees, the substitution of asphalt for grass and flowers, and takes half the joy from an architect's task. All success to Plymouth for tackling this problem so bravely.

A MODEST PROFESSION

Several other papers, I imagine, have had a handout from the contact man of Carson-Ruff Associates, a firm which "directs public relations for the architectural firm of Walter Wurdeman and Welton Becket." The opening paragraph of the six-page history seems to me worth quoting almost in full. "Beneath the names . . . on the door of their Los Angeles offices, is inscribed the single explanatory legend: Architects. It is very likely the understatement of all times. For Wurdeman and Becket, though both members in good standing of the American Institute of Architects, have made an impact on their contemporary civilisation that goes considerably beyond the drafting board. department stores they have designed have already begun to revolutionize merchandising methods throughout the country. A garage they are building now is being hailed as the solution to the nation's parking problem. A police department, still in the planning stage, may eventually alter our entire penal procedure. Whatever the architectural assignment-from cocktail bars to cyclotrons-Wurdeman and Becket seem to have invariably produced a building that not only renders

all prototypes immediately obsolete, but establishes a precedent in modus operandi. Within the framework of their exacting profession the two men are quietly remodelling the American way of life."

Well, I have done a bit of remodelling in my time, but it has only been old houses and I am too modest to interfere unduly with the British way of life. My PRO must be lying down on his job.

ASTRAGAL

#### LETTERS

Andrew Derbyshire Julian Keable Tony Moore 70hn Ollis

Ian Colquhoun

H. R. Lane, A.R.I.B.A.

#### Peckham Health Centre

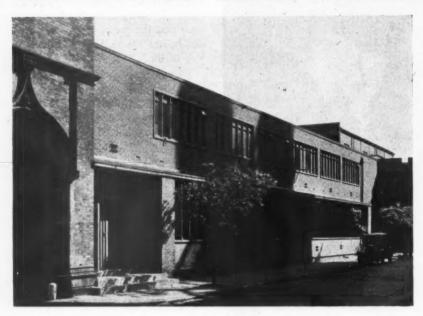
SIR,-In the Observer of Sunday, May 8. there appeared a short paragraph outlining the present financial position of the Peck-ham Health Centre. It seems that unless £50,000 is found quite soon, this extra-ordinarily valuable experiment—which has far-reaching sociological as well as biological significance (and is thus of first importance to architects)-may have to be abandoned.

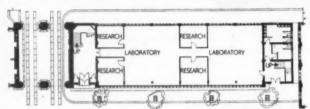
During the course of our studies we have become more and more convinced that the future progress of architecture does not lie in a rejection of the functionalism of the years between the wars, but rather in an extension of functional research beyond the limited physical field into that of man's biological, psychological and spiritual needs.
On the one hand we are faced with the problem of finding out what, in a healthy society, these needs are likely to be. But on the other hand we find that the physical environment of today is an expression more of the economic forces of the Industrial Revolution than of the biological needs of man. Our dilemma lies in the fact that of man. Our differential lies in the fact that this environment has conditioned and, in some cases, seriously warped the natural living patterns of our society to such an extent that study of man as he lives now is extent that study of man as he lives now is a most uncertain guide to his potentialities for full living. Yet we must somehow dis-cover and understand these natural patterns if our architecture is to foster them and help to provide the material basis for a healthy society.

In trying to resolve this dilemma we have found the work of the Peckham Health Centre an invaluable inspiration and an unique source of experience and information.

As grant-aided students we are not able to respond as we would wish to the appeal for funds made in the Observer. However, we are sure that there must be many others who also believe that this experiment has much to teach us all, and who would be

#### MEDAL BRONZE AWARD



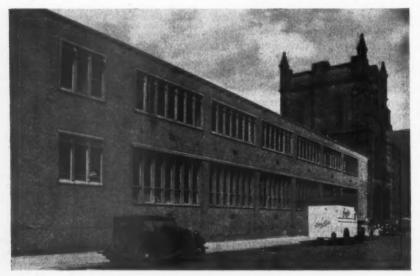


GROUND FLOOR PLAN [Scale:  $\sqrt{n} = 1.0^{\circ}$ ]



FIRST FLOOR PLAN

Awarded the RIBA Bronze Medal by the Northern Archi-tectural Association, for the best building completed during the five years ending December five years ending December 1948, this Coke Research Lab-1948, this Coke Research Lab-oratory by Professor W. G. Edwards, is the first post-war building to be erected in the scheme for the extension and development of King's College, Newcas le-upon-Tyne. The walls are of sandfaced brickwork with precast stone dressings, the interior being fairfaced brick-work, colour washed.



willing to help the centre financially if they heard of its present need.

ANDREW DERBYSHIRE JULIAN KEARLE TONY MOORE JOHN OLLIS

London.

#### Architecture for "the people"

SIR.—There has been in recent months a number of letters urging the architect among other things, to build to express the needs of "the people," to take part in activities outside his office, to enter into the life of the community, and so on and so forth. On paper it looks and sounds fine, but what precisely do these noble sentiments mean? Nobody has yet explained. One of your correspondents, apropos of the LCC housing, suggested rightly that there was a danger of regarding working-class housing as a special kind of architecture: in the same way I would suggest that there is in existence a peculiar inverted snobbery which talks of "the people" and "the social life of the community" as though they were apart and not for the likes of us. they were apart and not for the likes of u.

In heaven's name, who are the people if we are not all part of them; and what is this social life of the community that we do not all take part by drinking in a pub, going to the Chelsea fair, or lying on our backs among the filthy litter in our democratic parks?

I suppose it implies many more meetings, discussions, debates, forums and what-not, and a lot more talk of which we get plenty already. But the architect is a hard-worked man at the moment, and likely to be more so; and it seems to me that his best service to the community is in getting good build-ings well built, and that he might concentrate on that.

I shall be accused of being a deviationis, a reactionary, a moral saboteur, when I say "Come off it." But perhaps someone who thinks that the jargon isn't just jargon for jargon's sake will explain to those who don't, or to me, if I am the only one. Best of all, perhaps someone will show us some practical examples. London. IAN COLQUHOUN

#### The Plan for London

SIR,—The building on "green belt" areas and on open spaces, as "Astragal" mentions so clearly and despondently in the AJ for May 12, 1949, is very sad and very bad. London is therefore, at present, getting no plan at all as Bumbledom is very busy ruining the Abercrombie-Forshaw plan. There is hope, however, in this disaster if we have the "nous" to examine the position thoroughly. It is much better to have no plan at all unless essential things are done

I may sound didactic and rather too "excathedra" but I must, with all the power I can possibly command in this letter, state what I conceive to be the actual position,

which is this:—
No useful progress can be made with roads, open spaces, neighbourhood areas, dispositions of industry and commerce, housing nor with any other things which the Londoner wants settled, until the rail-ways are required to replan the terminal London Stations in a connected ring so that any train approaching London can come out again without shunting and, in addition, can circulate round the ring in both directions as desired, so that rail traffic can use Lon-don as efficiently as radial roads use a

roundabout.
In short, London first requires the same railway efficiency in and around London as she gets on the Underground, or even better. Until this is done it is not possible to see clearly what the road pattern, or the best arrangements for living or working can be. Paradeniya, Ceylon. H. R. LANE

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#### SIX WREN CHURCHES WHICH ARE NOT TO BE REBUILT

These are the churches whose sites the London Diocesan Reorganisation Committee, in agreement with the report of the Bishop of London's Commission on the City Churches, has decided should be sold. Above, from left to right: St. Stephen's, Coleman Street, one of the less interesting of Wren's churches which has been destroyed. St. Andrew-by-the-Wardrobe, built by Wren in 1692, and restored by Garner in about 1875. The railings and piers were added by Sir Banister Fletcher in 1902. The tower alone remains. The interior is shown bottom right. St. Mildred's, Bread Street, a domed, single-chamber church of great beauty and little altered since completion in 1683. It has been completely destroyed, except for a portion of the brick tower. Right, St. Swithun's, London Stone. Very severely damaged. This church, built between 1677 and 1687, had an interesting plan with an eightsided dome placed over a square and pierced by lunettes. The Victorian restorer, Woodthorpe, had inserted Florentine tracery in the windows. Below, from left to right: St. Mary's, Aldermanbury, built by Wren in 1667-70, with Florentine tracery inserted by Woodthorpe. The Bishop's Commission was not satisfied that either from the spiritual or architectural point of view the expense of rebuilding it would be justified. The exterior of this church is shown on page 60. St. Alban's, Wood Street, which has been very severely damaged. Rebuilt in the Gothic style in 1682-7, the tower, which still stands, is from drawings by Wren. The interior of St. Andrew-by-the-Wardrobe. See page 59.



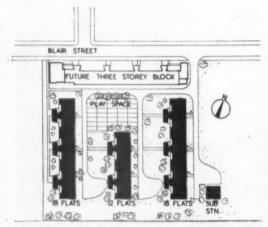








## FLATS AT POPLAR



EAST INDIA DOCK ROAD

SITE PLAN

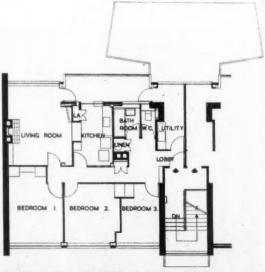
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REFUS

GROUND FLOOR PLAN [Scale: 1/"-1"0"]

BY W. J. RANKIN, BOROUGH ENGINEER & SURVEYOR; C. H. WEED,
PRINCIPAL ASSISTANT ARCHITECT

GENERAL.—These flats had to be erected as part of a larger redevelopment area, on land which had already been cleared by enemy action, while retaining in some measure the existing road network. It was essential to restrict the height of the dwellings in order

to keep the site as open as possible within the limits of the overall density requirements. For this reason, as well as the close proximity of 6- and 8-storey blocks, it was decided to design these dwellings in three 3-storey blocks containing 18 flats and one



FIRST AND SECOND FLOOR PLAN





Opposite, the flats from north. Right, the elevation of a main entrance and staircase to a flat block. Below, right, a block from the south.

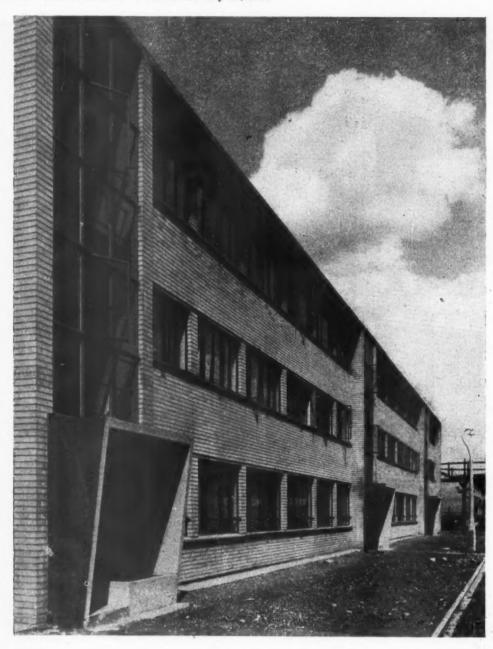
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A block of eighteen flats from the south-east.



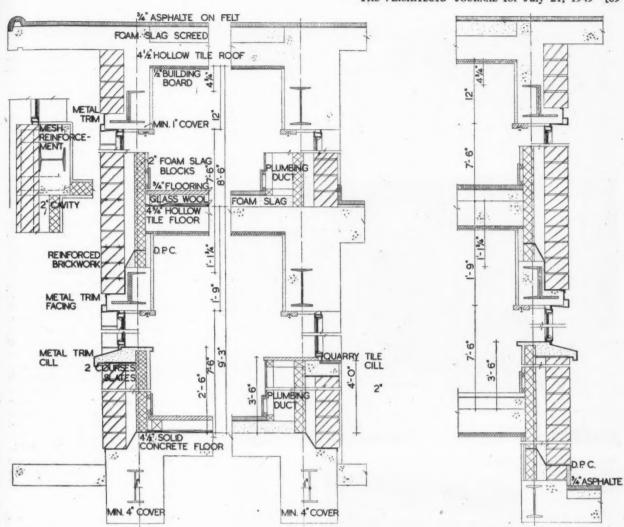
REAR ELEVATION

3-storey block containing 12 flats.

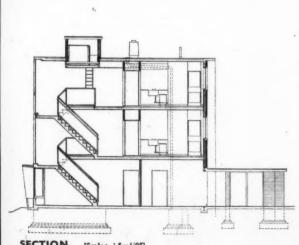
SITE.—Completion of the site works cannot be executed until the autumn, when the whole of the site will be planted with flowering trees and shrubs, exceptfor an area to the north of the middle block to be laid out as a hard playground for children.

PLAN.—Staircase access serves

FLATS AT POPLAR : BY W. J. RANKIN, BOROUGH



DETAIL OF FRONT AND REAR WALL PANELS [Scale: ["=1'0"] DETAIL OF REAR WALL OF UTILITY ROOMS



SECTION [Scale: 14"=1"0"]

flats

12

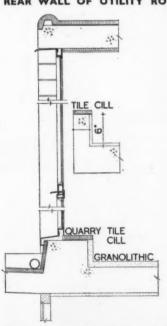
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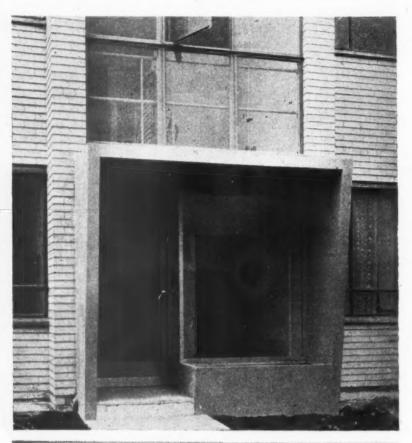
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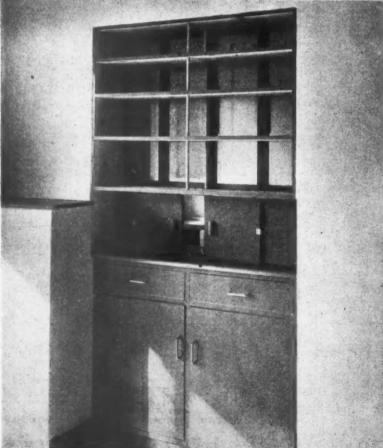
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DETAIL THROUGH STAIRCASE WINDOW

ENGINEER & C. H. WEED, PRINCIPAL ASSISTANT ARCHITECT





two flats per floor off each staircase, and each flat has been designed with three bedrooms, living room with service through to the kitchen, utility room and bathroom with separate w.c. A bicycle or pram store is available for each flat planned externally on the ground floor under cover, and close to the main staircase. Each bedroom has built-in wardrobes, and, in addition, the best bedroom is fitted with a dressing table unit, Dry stores and broom cupboards have been provided in the kitchen.

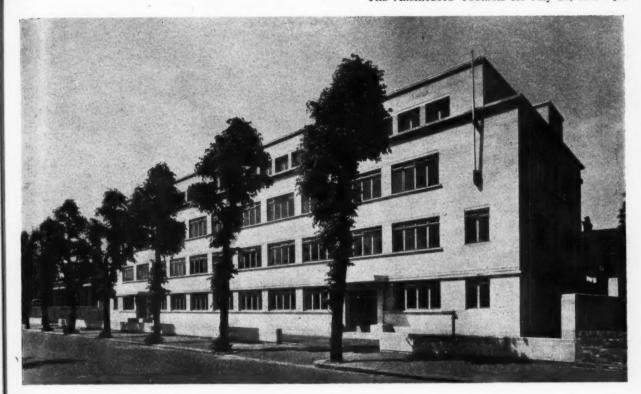
CONSTRUCTION.—The blocks are of load-bearing cross walls in brickwork carrying part of a very light steel semi-frame, together with fire-resisting structural floors and a flat roof of hollow tiles. Infilling panels between floors and the main structure to all elevations are of cavity wall construction with an external skin of 41-in. brickwork and an inner skin of 21-in. foamed slag blocks. order to reduce the transmission of impact noises a glass silk quilt has been used for insulation purposes, laid direct on to the structural floor with a floating timber-The roof framed floor-finish. has been insulated with a 3-in. foamed-slag screed. The brickwork throughout is of pale cream sand-lime bricks, finished with a deeply raked horizontal joint and flush vertical joints.

HEATING .- Domestic hot water is obtained from an independent system in each flat serviced by a solid fuel boiler in the kitchen, and serving points in the kitchen, bathroom and utility room.

The general contractors were The Direct Labour Section of the Borough Engineer and Surveyor's Department, Poplar Borough For the list of sub-Council. contractors see page 82.

Top, left, an entrance. Left, the fitment between the living rooms and the kitchens.

> FLATS PL



# OFFICES AT HAMMERSMITH

DESIGNED BY SIR JOHN BURNET, TAIT & PARTNERS

From the south-east. Above, from the north.

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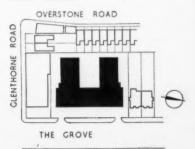
R



GENERAL.—This office provides accommodation for the head office staff of Messrs. G. Wimpey & Co. on the site of former buildings destroyed in the war.

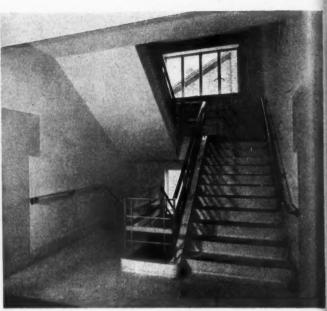
SITE.—This has a frontage to a made-up road of 180 ft., and is 150 ft. deep. There are service roads on all sides. The site is bounded on three sides by terrace houses. The building is four stories high, with wings set back at the second and third floor levels owing to restrictions imposed by rights of light of the adjoining property.

#### SITE PLAN





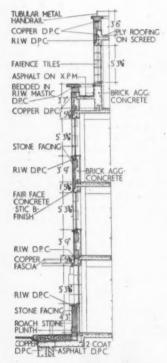
Above, a main entrance. Right, a staircase.



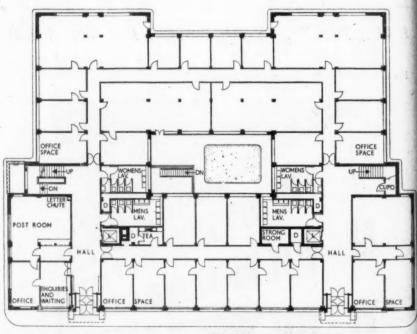
PLAN.—With a frontage of 158 ft. and with wings running east and west of 115 ft. depth, the U-shaped plan is based on a 12 ft. grid. The internal division of the office space can be changed with a minimum of structural alterations by special metal junctions of partitions to window mullions.

CONSTRUCTION.—This is of steel frame encased in concrete.

The solid external walls are 131 in. thick with 41in. and 9in. Portland stone facing bonded to brickwork Roof construction is of hollow tiles covered with bituminous-ply roofing laid to falls on thermal insulating material. The internal walls are in 4½ in. and 9 in. common bricks. There are hollow tile floors throughout, except in the basement and in part of the ground floor. The floor finish



DETAIL THROUGH EAST ELEVATION [Scale: -."=1"0"] [Scale: -,"=1'0"]



GROUND FLOOR PLAN

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h"=1'0'

IR



INTERNAL DORMER

The Architects' Journal Library of Information Sheets 189. Editor: Cotterell Butler, A.R.I.B.A. corner dressed down moulding 2" lead tack top edge turned over and copper nailed at 2"crs. double welt 3"lap edge turned through boards and copper nailed front edge lead copper nailed tacks and single welted soakers fitted to apron weather verge dressed to corner PROJECTING DORMER. edge turned on leadburned to face of frame and copper nailed: nails covered with single welt solder 12 screw sill apron fixing and edge of lead washer turned over rafter and copper nailed soldered dot leadburned dol léad tack leadburned or soldered to back of tack turned through slot and down lead sheet back of boarding edge held **brass** with lead screws tacks and washers secret tack

ALTERNATIVE METHODS OF FIXING.

#### 10.G21 SHEET LEADWORK FOR DORMER WINDOWS

This Sheet deals with lead sheet flashings and weatherings to timber framed dormer windows. Dormer windows may be wholly projecting from the roof, wholly inset or part projecting part inset. Sheet lead is used for covering dormer roofs, for weatherings to dormer cheeks, for the flashing at the intersection of the cheeks with the roof and for the flashing at the intersection of the front with the roof.

A dormer may be designed completely covered in lead as shown or with tiled or slated roofs or cheeks.

#### **Projecting Dormers**

Roofs: Lead coverings to dormer flat roofs are constructed in the same way as those for ordinary flat roofs. (See Sheet 10.G11.)

If the roof is split up into more than one bay rolls are used running from back to front as joints. If the dormer roof is formed with a curved (swept) surface it is practical to use double welt joints, running with the curve, which being less conspicuous are usually preferred to rolls. Pieces of lead for covering curved surfaces are similarly limited in size as for flat roofs for pitches up to 50°. If the pitch of the roof is from 50° to 70° the size of any one bay should be limited to 8 ft. long by 1 ft. 9 in. wide.

Where the dormer roof and the main roof intersect, the lead should be carried up under the roof covering over a tilting fillet and dressed down at the corners. The edges of the dormer roof may be simply turned down into a gutter, if this is provided, or finished by dressing over a moulding and holding down the free edge with 2 in. lead tacks at 2 ft. 6 in. intervals.

Cheeks: It is a general rule when covering vertical surfaces with lead sheet that fixings giving support should be at intervals not greater than 2 ft. 6 in. in any direction. Average size dormer cheeks, if they are to be covered in one piece, require an intermediate fixing in addition to those provided at the edges, and it is usually placed in the centre of the cheek. Such intermediate fixings are soldered or leadburned dots or secret tacks. Alternatively, or for larger cheeks, more than one piece of lead is used for which fixing is provided only at the edges. Usually three pieces of lead are sufficient with one vertical joint made by a double welt and one horizontal joint made with a 3 in. lap. The top edges of each piece are turned through the boarding and copper nailed at the back.

The lower and free edge of a dormer cheek covering acts as cover flashing to the abutment flashing and is held down with lead clips. The front edge is turned round the corner post, copper nailed and a single welt is turned back over the nail heads.

Abutment flashings: The flashing where dormer cheeks intersect the roof corresponds to the usual abutment flashing such as the side flashings of chimney stacks (see Sheets 10.G1 and 10.G2).

Front apron flashing: The front apron is fixed into position first on the lower trimmer purlin and the window sill is bedded on to it. The corners are dressed round similarly to chimney stack front aprons. The apron is carried down the roof slope, over the roof covering, for 5 in. to 6 in. and the front edge is held with lead tacks at 2 ft. 6 in. intervals.

#### Internal Dormers

The maximum size of pieces of lead and the method of fixing for internal dormer cheeks is the same as that for external dormers. At the junction of the cheek with the roof slope, soakers may be fitted to give a good weathering. The flat surface in front of the dormer window is covered similarly to a small flat roof and at the intersection with the sloping roof an apron is carried down the roof slope for 6 in. and lead tacks are fitted to hold down the free edge.

#### Weight of Lead

5, 6 and 7 lb. lead is normally used for dormer coverings. 6 lb. is preferable to 5 lb. where some dressing of the lead is required and 7 lb. should be used for flat roofs which may carry traffic.

#### Further Information

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

Compiled from information supplied by ?

The Lead Industries Development Council.

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

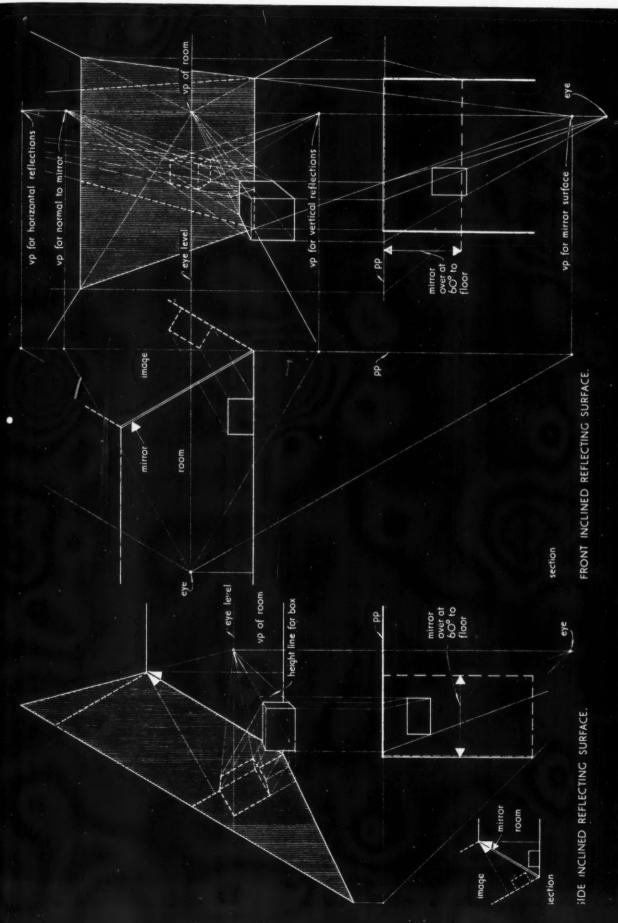
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Editor: Cotterell Butler, A.R.I.B.A.





#### DRAUGHTSMANSHIP PERSPECTIVE

The Architects' Journal Library of Information Sheets 190. Editor: Cotterell Butler, A.R.I.B.A.



'ERSPECTIVE DRAWING : INCLINED REFLECTING SURFACES. Compiled by Leslie A. Lee, L.I.O.B., and H.N. Hoskings A.R.I.B.A., for Eagle Pencil Company-Chemi-Sealed Turquoise

#### 1.B39 PERSPECTIVE DRAWING: INCLINED REFLECTING SURFACES

This Sheet, one of the series on draughtsmanship, deals with the theory of perspective and describes the setting up in perspective of the reflections obtained from inclined reflecting surfaces.

#### Side Inclined Reflecting Surface

The first example shows the reflection obtained in a mirror wall at the side of the spectator and inclined at an angle of 60° to the floor surface. It would be possible on a section through the reflecting surface to draw the image behind the mirror and then to find the plan of this inclined image. This could be drawn on the plan and projected in the usual way, the heights of points being taken from the section.

A simpler method is shown which does not necessitate this inclined projection. Referring to the small section through the mirror it will be seen that:

(a) as the floor surface makes an angle of 60° to the mirror the reflected floor surface will be at the same angle to the mirror.

(b) the reflection of the object is at the same distance behind the mirror as the object is in front of it, and

(c) the line joining a point and its reflection is normal to the slope of the mirror, i.e., at an angle of 30° to the horizontal.

The view of the room and object is set up in perspective and the reflections of the floor and ceiling lines are drawn at an angle of 60° to the mirror. Two lines are then drawn from the sides of the box on the perspective floor surface to the junction of the floor with the mirror. These lines are then projected up at 60° to the mirror surface and represent the reflection of the lines already drawn from the box. To locate the position of the reflection of the box on these lines, draw lines at 30° to the horizontal, i.e., normal to the slope of the mirror, from each corner of the bottom of the box to cut the parallel lines on the reflected floor surface. This gives the position of the bottom of the box in the reflection. Next set up perpendiculars to the long sides of the reflected box bottom then draw 30° normals to the mirror from the corners of the top of the box; the points where these lines intersect the perpendiculars just drawn locate the top of the box.

#### Front Inclined Reflecting Surface

The second example shows the reflection in an inclined mirror forming the end wall of a room.

A section cutting through the mirror is first drawn and on it are marked the eye position and picture plane. The image is then drawn as before making the angles to the mirror of the reflected floor and objects the same as the real ones. Vanishing parallels are drawn from the eye to cut the picture plane giving the levels of the vanishing points for the mirror surface, reflected horizontal surfaces, reflected vertical surfaces and for lines normal to the slope of the mirror.

The perspective is set up in the usual way and a vertical line is drawn through the vanishing point for the room and on this are marked the vanishing points for the inclined surfaces. As in the last example, two lines are produced from the sides of the box to cut the junction of the floor and the mirror and from these two points lines are vanished to the vanishing point for reflected horizontal surfaces. To find the position of the bottom of the box on these lines, normals (in perspective) to the mirror are drawn from the bottom of the real box. Having drawn the reflected bottom through each of its corners draw lines from the vanishing point for reflected vertical surfaces; where normals (in perspective) from the top of the box touch these is the top of the box in the reflection.

Alternative method of projecting top of box: An alternative method of projecting the top of the box is to draw the slope of the mirror at the two points where the sides of the box produced touch its base. This is done by drawing through these points to the vanishing point for the mirror surface. These lines are the traces, or intersections of the planes containing the sides of the box with the mirror. The sides of the top of the box are drawn to them and then lines taken to the vanishing point for reflected horizontal surfaces; the points where they cut the normals to the mirror surface drawn from the top of the box, or the reflected verticals drawn from the reflected base give the position of the reflected top.

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Alternative method of obtaining vanishing points without drawing section: These points may be found directly on the perspective in the following way: From the central vanishing point mark off along the eye level the distance of the eye from the picture plane and from this point draw lines at the same angles to the horizontal as the inclined planes, to cut the vertical drawn through the central visual ray or vanishing point thus locating the position of the various vanishing points. This merely follows the method shown on the section but simplifies the construction.

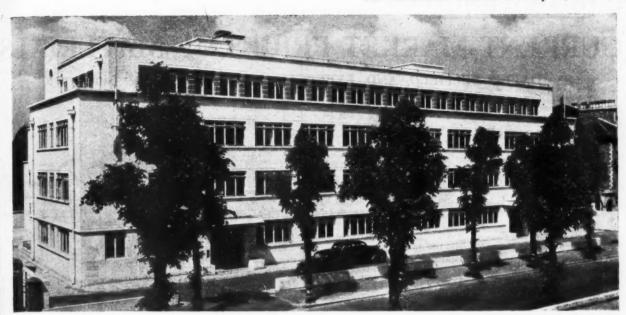
This Series of Sheets covers geometrical drawing, orthographic, isometric and axonometric projections, perspective, rendering, lettering and draughtsmanship generally.

Compiled from information supplied by:

#### Eagle Pencil Company

Address: Ashley Road, Tottenham, London, N.17. Telephone: Tottenham 4435-6-7.

Telegrams: Octennial, London.



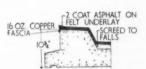
The main front seen from The Grove.

is of wood blocks, except in the entrance halls, staircase and lavatories, where it is in terrazzo. INTERNAL FINISH.—Internal walls are plastered, with the exception of the entrance halls and staircases which are in terrazzo: ceilings are plastered throughout, and in the corridors are suspended on metal bracketing and lathing. There are built-in timber fitments in the tea rooms, and stain-

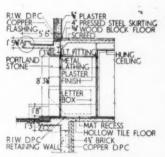
less steel sink units in the kitchen on the ground floor.

SERVICES.—There are tea rooms on each floor for the preparation of tea which is dispensed from trollies with electric urns. All plumbing and heating runs are concealed in the ducting.

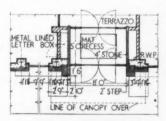
The general contractors were Messrs. George Wimpey and Co., Ltd. For list of sub-contractors see page 82.



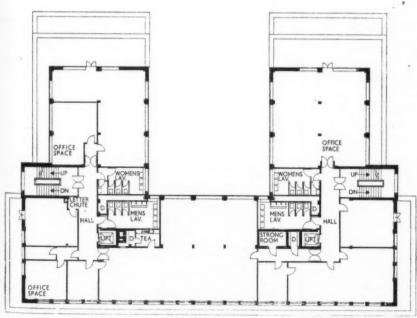
DETAIL AT A. BELOW



SECTION OF ENTRANCE



PLAN OF ENTRANCE
[Scale: 1/2"=1'0"]



THIRD FLOOR PLAN

# CURRENT MARKET PRICES OF MATERIALS

BY DAVIS, BELFIELD AND EVEREST, Chartered Quantity Surveyors

Rates of Wages last rose on LONDON DISTRICT	February 7,	1949, a	nd are n		llows :—	Lah	ourers.
Within 12 miles radius	• •	ngir			11½d.		41d.
From 12-15 ,, ,,				2s.	11d.	25.	4d.
LIVERPOOL and DISTRICT				2s.	11½d.	2s.	4½d.
GRADE CLASSIFICATIONS		Α	AL	Aª	A <sup>3</sup>		
	Craftsmen	2s. 10d.	2s. 9½d.	2s. 9d.	2s. 81d.		
	Labourers	2s. 31d.	2s. 3d.	2s. 2½d.	2s. 2d.		



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Prices vary according to quality and the quantity ordered.

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

#### CONCRETOR

#### Cements

\* In non-returnable paper bags charged at 11/- net per ton or 7d. sach net per bag in lots of less than 1 ton.

\* In non-returnable jute sacks charged at 11/- net per ton or 7d.

each net per sack in lots of less than 1 ton.

\* In returnable jute sacks charged at the rate of 35/6 net per ton of cement or 1/9 ant per sack in lots of less than 1 ton. Credit on return at 1/6 net per sack.

• In returnable cotton sacks charged at the rate of 66/8 net per ton or 3/4 each sack in lots of less than 1 ton. Credit on return at 3/- net

† Supplied in paper bags and/or non-returnable jute sacks—9/- per

ton extra in 1-ton lots or more, 6d. net than 1 ton.	each bag	or sack in lots	of less
Case I LOAL		In 80-ton fr F.A.S. Safe	
	6 tons	in River Th	
	and over		
* Portland to B.S. 12 per ton	60/6	58/-	
* Rapid hardening to B.S. 12 ,,	66/6	64/-	
† Aquacrete water repellent ,,	92/-	/	
4 " 417" cement (quick setting			
extra rapid hardening)	82/-	1	
† Colorcrete, red, buff and khaki ,,	102/-		
Colorcrete, other shades. 1 ton lots.	183/-	to 407/- (paper free)	bags
Snowcrete		um 1-ton lots) paper bags free	
		0-19 1 ton	
Ciment Fondu to B.S. 915		wts. upwa	
delivered London area per owt.		4/7 per ton :	236/6
Aggregate and Sandi	(Full Loc	ids)	
2" Unscreened ballast to B.S. 882, Tabl	le 5	per yard cube	14/5
1" (Down) Washed, crushed and graded	shingle		
to B.S. 882, Table 2		per yard cube	14/5
∦" (Down) Ditto	***	per yard cube	15/5
2º Broken brick		per yard cube	14/6
2º Ditto		per yard cube	16/-
Washed pan breeze		per yard cube	10/6
& Sharp washed sand to B.S. 882, Ta		per yard cube	16/4
White Silver Sand for white cement (	one ton		
lots)—			
Fine		per yard cube	
Coarse		per yard cube	48/9
(For Sands for Bricklaying and Pla	setering, a	ss respective tr	ides)
Paving	18		
Brick hardcore		per yard cube	6/6
		per yard cube	6/6
Clean furnace clinker and boiler ashes.	***	per yard cube	3/6
	***	per yard cube	17/6
f fine ditto	***	per yard cube	19/-
Clean granite chippings to B.S. 1201,			
(in 5-ton loads)	***	per ton	39/6
Ditto (in 5-ton loads) (Immediate deli	very)	per ton,	42/6

Home trade maximum basis price for mild steel rods to B.S. 785, & diameter and upwards, ex

mills delivered to station or siding

#### CONCRETOR—(continued)

Extras for :-

#### Reinforcement-continued

EVAULUS IUI ;							
Under #" to %" diameter	****	****	****	per ton		15	(
Ditto " and over f" diame	ter	****	****	per ton	£1	2	-
and over H diameter	****	****	****	per ton	£1	10	-
# and over & diameter	****	****	****	per ton	£1	17	-
and over & diameter	****	****	****	per ton	£2	8	1
A and over I diameter	****	****	****	per ton	£2	12	-
diameter	****	****	****	per ton	£3	.0	-
Under 1" to 4" diameter	****	****	****	per ton	24	10	1
Lengths over 40 ft. to 45 ft.		****	****	per ton		15	1
., ,, 45 ft. to 50 ft.		****	****	per ton	12	2	
,, 50 ft. (as 50 ft		per ft.)	****	per ton		2	1
		- ,		-			

,, ,, ,, ,,,				
Fab	ric Reinfor	cement		
	16.35 lb.	9.32 lb.	5.67 lb.	1.83 lb.
Steel wire mesh fabric to B.	S.			
1221, Part A per yd. super.	5/111	3/51	2/1	1/1#
	10.76 lb.	7.32 lb.	5.17 lb.	1.58 lb.
Steel wire mesh fabric to B.	S.			
1221, Part B per yd. super		2/81	1/111	1/03

#### 1/111 1221, Part B per yd. super.3/11# 2/81

ererantí	(for exposing aggregate)	)	Southwark Bridge.
Ditto	per gallon (for obtaining a bond)	26/8	Drums chargeable and credited, if
Ditto	per gallon	16/8	returned.

#### BRICKLAYER

			on Bru				
					****	per 1,000	109/6
8	****					per 1,000	129/6
					****	per 1,000	181/6
		****	****	****			
ssed Flet	tons		2444	4470			
						per 1,000	87/-
	ssed Flet		ssed Flettons	ssed Flettons	ssed Flettons	ssed Flettons	s per 1,000 per 1,000 per 1,000 per 1,000 per 1,000 per 1,000

	Faci	ng Brick					
Hand-selected sand lime		ny Ditta			per	1,000	121/-
Phorpres rustic Flettons				****	per	1,000	105/-
Stooks God hand		****			per	1,000	216/6
Stocks, second hard					per	1,000	206/6
Sandfaced, hand made r	eds		****			1,000	
Red rubbers (94")					per	100	55/-
†White facings					per	1,000	105/-
†Coloured facings (crear	ns, buffs,	browns	and te	rra-	-		From
cotta)				****	per	1,000	125/-
†Dunbriks (concrete), gr	eystone i	facings	****		per		135/-
†Dunbriks (concrete) va	rious cole	Durs	** **	****	per	1,000	152/6

Dunbriks (concrete), greystone lacings	hor	1,000	TOOL
†Dunbriks (concrete) various colours	рет	1,000	152/6
†Southwater pressed sandfaced reds	рег	1,000	187/6
†Dorking pressed sandfaced multicoloured facings	per	1,000	165/-
Engineering Bricks			
†Lingfield engineering wirecuts	per	1,000	127/6
†Southwater or Lunsford engineering No. 1 (fir quality red pressed)	рег	1,000	215/-
†Southwater or Lunsford engineering No. 2 (secon	nd	7 000	1051
quality red pressed)	per	1,000	190/-
†24" White Engineering bricks to B.S. 187	per	1,000	120/-
*Blue pressed bricks to B.S. 1301	per	1.000	160/-
* Plus 110% plusage, 5 per cent. builders cash dis-	count.	-,	
† Prices ex works-Haulage extra.			

£21 13 6

				4 00 0	V/ 1000				
Firebricks,	best	Stom	bridge,	21"	****	****	****	per 1,000 per 1,000	58/-
Ditto, 3"				****		****		per 1,000	09/2

	THE ARCHITECTS JOURNA
	BRICKLAYER—(continued)
12	Glazed Bricks Best quality Seconds
20	White, Ivory or Brown, 9" × 2\frac{1}{2}" × 4\frac{1}{2}":—
	Headers
	Headers per 1,000 41 10 0 39 10 0 Stretchers per 1,000 42 0 0 40 0 0
	Headers
	Lames and Sands
	Lime, greystone, to B.S. 890 per ton 84/9
no:	*Lime, blue lias per cwt. 7/6 (small
•	(USDTITION)
F.I.Arb.	Washed pit sand to B.S. 1200 per yard cube 16/4 (For cements, see "Concretor.")  Including paper bags. Hire of jute sacks charged at 1/6 and credited at 1/6. If left, charged at 1/9.  Sundries
	10 s.w. gauge galvanized butterfly type wall ties to
15 0 £1 2 6	B.S. 1243 per 1,000 87/3 12 s.w. gauge ditto per 1,000 74/3
£1 10 0 £1 17 6 £2 5 6 £2 13 6	Wall ties, self coloured, $8'' \times \frac{1}{4}'' \times \frac{1}{4}''$ , to B.S. 1243 per cwt. $58/3$ Wall ties, galvanized, $8'' \times \frac{1}{4}'' \times \frac{1}{4}''$ , to B.S. 1243 per cwt. $76/3$ Damp proof course slates : Imported Welsh Size $14'' \times 9''$ per $100$ 43/3 $55/9$
£3 0 ¢ £4 10 ¢	$14'' \times 44''$ per 100 20/9 27/6  Hessian based bitumen damp course to B.S.
15 0 £1 2 6	743 per yard super 4/3
2 6	Red and buff terra-cottt each 1/- 2/- 5/4 14/1 Black cast-iron School Board 9" × 3" 9" × 6" 9" × 9" 12" × 9"
1.83 16.	Black cast-iron School Board   9" × 3" 9" × 6" 9" × 9" 12" × 9"
1/14	
1.58 lb.	ventilators each 1/9 3/1 4/1 —  Galvanized ditto each 2/6 4/10 6/2 —  Buff terra-cotts chimney 1'0" 1'6" 2'0" 2'6" 3'6" 5'0"  pots each 5/7 6/8 9/8 12/10 29/5 50/2  Fireday (loose) per ton 118/6
1/01	pots each 5/7 6/8 9/8 12/10 29/5 50/2 Freelay (loose) per ton 118/6
arehous,	wan remore ment supplied in standard rolls containing 25 varus linear
Bridge.	
ited, il	Descent for quantities.
	Partitions, etc.
	Clinker per yard super 3/6 4/- 4/6 6/- Hellow block to B.S.
0 109/6	1190 per yard super 3/1 3/4 4/- 4/7 (4½")   Plaster per yard super 6/6 7/3 8/5     Moler per yard super 7/6 9/- 10/- 11/3     12 Wood Wood Wood allows per yard super 7/6 9/- 4/10
0 129/6	Moler per yard super 7/6 9/- 10/- 11/3   11' Wood Wool slabs per yard super from 4/2 to 4/10
0 86/-	1   1   1   1   1   1   1   1   1   1
0 87/-	† Prices according to quantity ordered.
0.1011	Red quarry tiles, 6" × 6" × 4", to B.S. 1286 per yard super 10/9
00 121/-	Red quarry tiles, 6" × 6" × 4", to B.S. 1286 per yard super 10/9
00 216/6	Hard red paving bricks, 2" per 1,000 326/-
00 244/- 55/-	Ditto 11 per 1,000 309/6 DRAINLAYER
00 105/- From	Clay Land Drain Pipes to B.S. 1196
00 125/-	Pipes in 12" lengths per 1,000 138/6 179/- 372/-
00 135/-	(Delivered in full loads Central London Area.)  Salt Glazed Stoneware Pipes and Fittings
00 187/6	Standard List + Orders under Orders under
	Orders for 2 tons 100 2 tons less 2 tons and pieces than 100
00 127/6	over upwards pieces
00 215/-	Best Quality 35% 55% 65%
00 185/-	British Standard Quality         42½%         62½%         72½%           Tested Quality         60%         80%         90%           British Standard Tested         67½%         87½%         97½%
00 120/-	British Standard Tested 67\(\frac{1}{2}\)\(\text{\$\infty}\) 87\(\frac{1}{2}\)\(\text{\$\infty}\) 97\(\frac{1}{2}\)\(\text{\$\infty}\)  Cast Iron Drain Pipes and Fittings
	Socket and spigot pipes to B.S. 437:-
	per yd. per yd. each each each
00 58/-	1 1 17 4" 16/6 18/1 29/- 22/2 17/11 2 0 1 6" 24/7 29/1 46/8 37/3 28/1
00 68/3	3 3 21 9" 44/5 58/1 100/4 76/7 —

DRAINLAYER—(continued)				
Cast-Iron Drain Pipes and	Fitting	78—cont	inued	
Tonnage Allowances :— Orders up to 2 tons nett.				
		4"	6"	9"
*Bends (short radius) as Fig. No. 4 es	ch	6/3	13/-	40/-
*Single junctions as Fig. No. 18 es	ch	11/-	22/6	
*Intercepting traps as Fig. No. 33 es	ch	30/-	50/-	
Single junctions as Fig. No. 18 ex Intercepting traps as Fig. No. 33 es Gullies ordinary trapped "P" es Extra for vertical back inlet 4"	ch	14/6	_	_
*Extra for vertical back inlet 4" es	ch	4/3	_	-
*H.M.O.W. large socket gully trap	ich l	21/-	_	-
with 9" gully top and heavy grating and one back inlet es	ch	98/9		
* These prices are subject to 831% p	lusage.	20/0		_
Channels in Brown Standard list + same discounts as " B	Grazea	ware.	alt ala	C+
ware pipes.	Car (	luanty a	ore-Rig	zed Stone
White Glazed C	hannel			
Orders under 20 pieces. Standard li				
a				
Concrete Pipes to B.S. 556	es, eic.	12"	24"	48"
With O C joints per feet me				
With O.G. joints per foot run Bends cash		3/10	33/9	38/4
Bends cash Junctions each Double junctions each		11/6 32/-	63/6	116/-
Double junctions each		921-	03/0	
Concrete pipes to B.S. 556				_
With spigot and sooket joints				
per foot rur	à.	4/3	12/4	42/3
Bends each	1	12/9.	37/-	126/9
Bends eacl Junctions eacl Double junctions eacl	1	32/-	68/6	_
Double junctions each	l .	-	_	_
Concrete road gulley to B.S. 556				
18" diameter and 42" deep each	700	62/6	-	_
Precast concrete manholes to B.S.	039	27*	48"	72"
Precast concrete manhole chamber rings	3			
per foot rus		13/6	38/4	86/9
6" precast concrete cover slabs each	à .	35/-	65/6	_
*Manhole covers and				
To B.S. 497		Size of	,	Unit
		load		price
C.I. coated double triangular manhole and frame, 22" dia. clear opening to				pasoo
497, Grade A	****	35 ton	8	110/-
C.I. coated circular manhole cover	and	00 102		2201
frame, 22" dia. elear opening to B.S. Grade B.	497,		_	601
	Simo	5 ton		60/- Double sea
Grade B				Flat type
	load	FIRE		
C.I. coated manhole coverand frame.	load			
C.I. coated manhole coverand frame, 18" × 18" to B.S. 497, Grade C		24	1/6	36/-
C.I. coated manhole coverand frame, 18" × 18" to B.S. 497, Grade C Ditte galvanised ditte	load	24	1/6	36/- 49/9
C.I. coated manhole coverand frame, 18" × 18" to B.S. 497, Grade C Ditte galvanised ditto Ditto coated manhole cover and	load l ton	24		
C.I. coated manhole cover and frame, 18" × 18" to B.S. 497, Grade C Ditte galvanised ditte Ditto coated manhole cover and frame, 24" × 18" to B.S. 497,	load l ton l ton	. 24 36	5/-	49/9
C.I. coated manhole cover and frame, 18" × 18" to B.S. 497, Grade C Ditte galvanised ditte Ditto coated manhole cover and frame, 24" × 18" to B.S. 497,	load l ton l ton l ton	24 36 27	s/- 1/-	49/9
C.I. coated manhole cover and frame, 18" × 18" to B.S. 497, Grade C  Ditte galvanised ditto	load l ton l ton	24 36 27	5/-	49/9
C.I. coated manhole cover and frame, 18" × 18" to B.S. 497, Grade C Ditto galvanised ditto	load l ton l ton l ton	24 36 27	s/- 1/-	49/9
C.I. coated manhole cover and frame, 18" × 18" to B.S. 497, Grade C Ditto galvanised ditto Ditto coated manhole cover and frame, 24" × 18" to B.S. 497, Grade C Ditto galvanised ditto Ditto coated manhole cover and frame, 24" × 24" to B.S. 497.	load l ton l ton l ton l ton	24 36 27 40	5/- 1/- 0/6	49/9 40/- 58/-
C.I. coated manhole cover and frame, 18" × 18" to B.S. 497, Grade C Ditto galvanised ditto Ditto coated manhole cover and frame, 24" × 18" to B.S. 497, Grade C Ditto galvanised ditto Ditto coated manhole cover and frame, 24" × 24" to B.S. 497.	load l ton l ton l ton l ton	24 36 27 40	5/- 1/- 0/6	49/9 40/- 58/-
C.I. coated manhole cover and frame, 18" × 18" to B.S. 497, Grade C Ditto galvanised ditto Ditto coated manhole cover and frame, 24" × 18" to B.S. 497, Grade C Ditto galvanised ditto Ditto coated manhole cover and frame, 24" × 24" to B.S. 497.	load l ton l ton l ton l ton	24 36 27 40	5/- 1/- 0/6	49/9 40/- 58/-

34.4		C	0	30.3
70/1	A		<b>6</b> 1	l N

MASON	
Yorkstone	
Building quality Robin Hoed and Woodk	rirk Blue Stone.
Blocks scrappled, random sizes per	foot cube 8/11
Add for blocks to dimension sizes per	foot cube 1/1 (each dimension)
Templates with sawn beds, edges rough (up	,
to 4 ft. super and not over 2' 6" long) per	foot cube 10/-
Templates with sawn beds, sawn one edge, per	
Templates with sawn beds, sawn two edges, per	
Price f.o.r. Yorkshire, railway rate to London	
per ton. (Minimum 4-ton loads)	38/7
Artificial Stone to B.S. 121	7
6" × 3" Copings and sills pe	r foot run 2/3
6" × 6" Copings and sills pe	r foot run 4/6
9" × 3" Copings and sills pe	r foot run 3/6
	r foot run 6/9
	r foot run 4/6
	r foot run 9/-
Cornices according to detail, per foot cube (from	

#### TECHNICAL SECTION 76] MASON—(continued) Bath Stone in random blocks St. Aldhelms Box Ground .... per foot cube Monk's Park 5/4 Delivered on rail at South Lambeth station. Portland Stone in random blocks, average 20 feet Delivered on rail at Nine Elms Station. ... per foot cube 6/14 . SLATER, TILER AND ROOFER Best Bangor Slates to B.S 680 .... per 1,000 actual 95 0 0 per 1,000 actual 63 0 0 24" × 12" 20" × 10" Prices include for delivery to site in lots of 1,000 and upwards. Hand-made sandfaced 101" × 61" red roofing tiles 189 j-per 1,000 Machine-made sandfaced best red tiles with continuous nibs, 104" × 64" per 1,000 169/3 Berkshire hand-made red Pantiles, 141" × per 100 70/-Berkshire hand-made Dun coloured Pantiles, 14%" × 10" per 100 80/6 Concrete Tiles per 1,000 90/- to 95/-per 1,000 £14 10s Double Roman tiles per 1,000 | Felt | Slaters or sarking felt to B.S. 747 | per yard run | 1/3 | Roofing felt (1-ply bitumen) to B.S. 747, Part I | per yard sup. 1/8 | Bituminous hair felt to B.S. 747, Part II | per roll | 76/-

CARPENTER A				
Imported Insulat- ing board	Up to 5,000 sq. ft.	5,000	to 15,000	sq. ft.
(per 100 sq. ft.)	37/6		36/-	
	15,000 to 50,000 sq. ft.	Over	80,000 sq	. ft.
(per 100 sq. ft.)	33/9		31/6	
	Up to 5,000 sq. ft.	5,000	to 10,000	sq. ft.
board (per 100 sq.ft.) Imported Hard-	46/6		45/-	
beard(per 100 sq. ft.)	62/6		61/3	
sourd(por soord, to.)	10,000 to 30,000 sq. ft.	Ov	er 30,000 a	en 64
Imported Hard-	reject to deject sq. 14.	011	01 00,000 8	·4. 10.
board(per 100 sq.ft.)	43/-		41/-	
board(per 100 sq.ft.)	58/6		56/-	
				· Over
		25-75 yards	150-300 yards	600 yarda
#" Fireproof plaster bo	ard per yard super	2/8	2/4	2/-
Ditto		2/6	2/2	1/10
2" Paper Faced Linen'I	ape, per 100 yard roll	-10	-12	6/6
Joint filler	per lb.	_	_	-/4

	er vard super	3/6 3/21 trade
1" Semi compressed flat building sheets, grey, Ditto	per yard super per yard super per yard super per yard super per yard super Subject to 5%	1/71 2/4 5/4 4/- 3/01 trade

Asbestos-cement and Asbestos Products

44 611 11 41 11 11 11 11 11		dries			
" Sisalkraft " standard grade		7170	0140	per yard sup.	-/7
" Sisalkraft " subsoil grade	****	****	****	per yard sup.	-/4
"Cabots" quilts (Ex Works	1) !				,
Triple ply f thick	9007	****	****	2/4 per yard s	HDAT
Double ply thick	****	****	****	2/1	
Single ply thick	00.11	****		1/10	
All rolls 28 yds. long by	36" W	ride.	Quanti	ities less than	oomplete
roll 2d. extra per yard.					-om-brace

#### CARPENTER AND JOINER-(continued)

#### Sundries continued

PLAS

Sharp Cow H

Goat I

Flagalvar Heasia 31

Stand

White Cream Angle

Roun Colou

Angle Roun Eggsl

PLU

31 lb

Lead

Guti

disc O disc

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Ha Og

Ad Pla Tia Dr

E

	S	lundries—	ontinued		
Fibreglass	" sound deader	ning quilt	,	per yard supe	ar.
	south dondor	me dans		yds. Ove	
Light gr	ade	** ****	2/31		2/3
	grade		2/8		2/8
In rolls 27	wards long by	36" wide	-10		-1-
Fibreglass	" bitumen bond	led mate			
	ard rolls		Der 1	yard super	1/81
	yards long by	42" wide	Por	yara super	1/02
	se in l' thickn		ner:	yard super	1/4
			-		
	own Timber I	Prices. S	ee Statu	tory Rules	and Orders,
947, No. 94			01 1	T .	1 2010
	Softwood P.	rices. See	Statut	ory Instru	nents, 1949
No. 1079.	Traduced T	below G.	- C14 - 4 - 4	T	
Imported	Hardwood F	Tices. Se	Statut	ory Instrum	nents, 1949
Nos. 497 and				1040 37- 40	0
	ces. See Statu				
	y be obtained		ation to	n.m. Statio	nary Omce,
TOTA HOUSE,	Kingsway, W.	.0.2.			
	Standard Panel	led and GI	ared Wo	nd Doors	
	size 2' 0" × 6				90.79
Гуре 4	size 2' 6" × 6			each	39/3
Type 2 v A	size 2' 6" × 6	1 6" V 18	****	each	41/6
The v × G	size 2' 9" × 6	16" - 9"	****		49/9 51/9
Type 4 v G	size 2' 6" × 6		****	each	51/9
-3 Pv = ^ W	size 2' 9" × 6	6" 2 2"	****		84/-
In lots of	from 1 to 11 is	nolnaive	****	enon	Oral -
		2202020100			
	Standard	E.J.M.A.	Wood P	7 indows	
INP 26	size 2' 6" × 1	54"	****	each	25/4
	size 2' 6" × 1	" 10"		each	113/9
4V 36 IV 40	size 4' 0" × 2	2' 21"		each	33/1
3T 46	size 4' 6" × 5			each	116/8
4T 50	size 5' 0" × 7	7′ 10″		each	139/8
	Standard	i E.J.M.A	. Kitcher	1 Units	
No. 1	size 3' 0" × 3			each	191/8
No. 2	size 3' 0" × 3	3' 6" × 1'	7"	each	128/8
No. 4	size 3' 0" × 1	1'9" × 1'	7"	each	
No. 5	size 3' 10" ×	1'9" × 1'	7"	each	99/6
No. 7	size 6' 6" × 1	1'9" × 1'	7*	each	186/-
Coekhoard	l" thick			our	61d.
	sp nails to B.S	1909	****	it. sup.	
C40 #0002 0111	ap main to 15.0		* ****		
Cut steel flo	or brads to B.S	3. 1202		3" per cwt. 2" per cwt.	48/6
	wire nails to B			l" per cwt.	50/4
	wire staples wit				
1" × 12 g		m 001	-	per cwt.	67/3
STEEL .	AND IRON	WORK	ER		
Basis price	for rolled steel	joist sectio	ns, 5"×		£ 8. d
41" to 16"	$\times$ 6" in 10 ft.			ex mills per	ton 20 3
Extra for si				Add non ton	
9" × 7" 6" × 3"	****	4000 440		Add per ton	5 7
31" ~ 31"	7, 4" × 4", 5" × 14" × 8", 16" 7", 18" × 8", 20	3" 10"	8" 19"	22 22	
A	14" × 8" 16"	V 8" 18	V 6"		
18" > "	". 18" × 8" 90	" × 61" 90	" × 71"		10
5" × 91"	22" × 7"	V 08 ' 20	V .8	99 99	15
$4'' \times 2\frac{1}{2}$	4" × 3", 24" >	71"		99 99	1 0
$3'' \times 3''$				99 99	1 5
41" × 11	,			22 22	1 10
4" × 11"				22 22	2 10
$3'' \times 1\frac{1}{2}''$	****			99 99	3 10
Basis price	for angles			ex mills per	
	" tees			" "	20 13
22 22	" solid steel c			29 29	21 13
"		rered Stati	on or Sid		
PLASTE	RER				
		Plaster an	d Cemeni		
				1-ton	6-ton
MRS 1-19 19		1101 0	D	loads	loads
Torsere (pro	wning) to B.S.	LIVI, CIAM	D per to	on 118/6	99/3
Gypstone t	o B.S. 1191, Cl	nas D	D per to	on 80/6	ar Work

		loads	loads
Thistle (browning) to B.S. 1191, Class B	per ton	118/6	99/3
Gypstone to B.S. 1191, Class B	per ton	80/6	1
Paristone (haired) to B.S. 1191, Class B	per ton	83/-	ex Works,
Ditto (unhaired)	per ton	80/6	Kent.
Glastone to B.S. 1191, Class C	per ton	83/-	,
Sirapite (coarse) to B.S. 1191, Class C	per ton	115/6	96/3
Ditto (fine) to B.S. 1191, Class C	per ton	123/6	104/3
Keene's Pink to B.S. 1191, Class D	per ton	161/9	
Keene's White to B.S. 1191, Class D	per ton	166/9	
Cullamix (Tyrolean Finish), 1-ton lots	-		
and upwards per to	n from	155/6 to	189/-

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1949 1949

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orks, it.

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PLASTERER—(continued)	INTERNAL PLUMBER—(continued)
Sharp washed sand to B.S. 1198 per yard cube 16/4	Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.
Cow Hair per cwt. 84/6 Goat Hair per cwt. 102/6 Franded metal lathing 9'0" × 2'0" × 3"	Fittings and flanges and tubes ordered in long random lengths are subject to the following trade discounts:—
mesh × 26 gauge	Tubes: \frac{1}{2}" to 4"  Class A 43\frac{1}{2}\% Fittings: \frac{1}{2} \text{Toptweight} 1719\(\frac{1}{2}\)
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
3}* wide per roll 7/3	Wanges:
Wall Tiles The following prices are subject to 75 per cent. addition: Standard quality. White, glazed 6" × 6" × 4" per vard super 8/6	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
White, glazed 6" × 6" × ‡"         per yard super 9/-         Gream , , , ,         per yard super 1/0 ±         Angle beads (1‡" wide)        per yard run 1/0 ±         Rounded edge tiles (white glazed)        per yard run 1/8	COPPERSMITH AND ZINC WORKER  Copper
", ", (cream glazed) per yard run 1/9 Caloured enamelled bright glazed, 6' × 6' × 4' per yard super 14/3	Hot rolled copper sheeting in 5-cwt. lots (4' × 2' sheets), to B.S. 899 16 wire gauge per lb. 1/8
Asgle beads (1½" wide)	Ditto
Rounded edge tiles per yard run 2/10	GLAZIER
PLUMBER  Lead	Sheet Glass, cut to size (ordinary glazing quality), to B.S. 952, Section A.  For quantities exceeding 500 ft. super.  24 oz per foot super 5 d.
3 lb. and upwards milled sheet lead in quantities of 5 cwts. to 1 ton in sheets to B.S. 1178 per cwt. 99/— Lead ternary alloy, No. 2 quality extra over sheet	26 oz per foot super 7½d. 32 oz per foot super 9½d. Polished Plate glass, ordinary substance, approximately ½", to B.S. 952, Section A.
lead or lead pipe per cwt. 16/9 Allowance for old lead delivered to merchant or manufacturer per cwt. 57/3	Glazing Selected Silvering
Cast Iron Goods	2 ft. super per foot super 2/8 2/10 3/4
Percentage Adjustment. on List No. 3100 A.B. 1/2/40	3 ft. super per foot super 3/- 3/8 4/1 5 ft. super per foot super 3/2 3/10 4/7 *45 ft. super per foot super 3/9 4/1 5/7 *100 ft. super per foot super 4/5 5/7 7/2
Bainwater Goods (painted or unpainted) Plus 71½% Soil goods (coated or uncoated) Plus 71½%	* Extra sizes, i.e., plates exceeding 100 ft. super or 160 in. long, or 96 in. wide, at higher prices.
Mild Steel Rainwater Goods Standard List +	f" figured rolled and cathedral, to B.S. 952, Section B—untinted 71d. per foot super
Gutters (under 100 lengths) 98% Pipes and Fittings ( ,, ,, ) 108%  Asbestos-Cement Rainwater Goods	tinted 104d. per foot super
The following prices are subject to 12½% trade discount and 1½% discount.  Orders over £30 are subject to 17½% trade discount and 1½% discount.	# or # rolled plate, ,, ,, , , , , , , , , , , , , , , ,
Reinwater Pipes.  Prices are for 6' 0" lengths, but 10' 0" lengths are available in 2", 2", 3" and 4" diameters at same prices. Short lengths up to 2' 0" are	Hollow glass blocks, to B.S. 952, Section D:—
charged as 1 yard. From 2'0" to 4'0" charged as $1\frac{1}{2}$ yards. From 4'0" to 6'0" charged as 2 yards. Over 6'0" charged as $10'0$ "	P.B.2. $5\frac{1}{4}$ × $5\frac{1}{4}$ × $3\frac{1}{4}$ 2/6 each P.B.3. $7\frac{1}{4}$ × $7\frac{1}{4}$ × $3\frac{1}{4}$ 3/10 each P.B.32. $7\frac{1}{4}$ × $7\frac{1}{4}$ × $3\frac{1}{4}$ 3/10 each
Round Pipes.	Radiussed corner blocks to match up with :— P.B.2 4/6 each P.B.3 or 32 6/- each
24' per yard run 2/71 3' per yard run 3/2 4' per yard run 4/4	
6' per yard run 9/1	PAINTER
Short lengths of gutter up to 2'0" charged as 1 yard; from 2'0" to 4'0" as 1½ yards, and over 4'0" as 2 yards. Half round gutters 3" 4" 44" 5" 6" 8"	Snowcem paint (in free air-tight metal containers)
per yard run $1/8$ 2/- 2/1 2/5 $\frac{1}{2}$ 3/5 4/2 $\frac{1}{2}$ 0gee gutters per yard run — 2/5 $\frac{1}{2}$ 2/7 $\frac{1}{2}$ 3/2 3/10 $\frac{1}{2}$ 5/-	Ready mixed white lead paint (best), semi- gloss, per 32 lb per gallon 41/6   Aluminium paint (best quality) per gallon 29/-
INTERNAL PLUMBER	White enamel paint per gallon 41/- Stiff white lead (genuine English stack process,
Lead pipe in coils, 5 cwts, and upwards, to B.S. 602 per cwt. 100/3	1 ton lots, 1 cwt. kegs) per cwt. 131/- Liquid driers, best Terebene per gallon 19/- Knotting per gallon 25/-
Add if ribbon marked per cwt/3 Plumber's solder per cwt. 298/6	Oil stain (scumble)
Timman's solder per cwt. 278/0 Drawn lead traps with brass screw eye, 6 lb., to	,, ,, general oak per gallon 24/-
B.S. 504 1" 11" 2"	Turpentine, genuine American, 5-gallon lots per gallon
8. trap each 4/- 4/7 5/9 8/3 P. trap each 3/6 3/10 4/9 6/8 Extra for 3" deep seal "S" trap each 1/- 1/1 1/3 1/7 Extra for 3" deep seal "P" trap each -/8 -/10 -/10 1/1	, substitute per gallon 3/8  Linseed Oil Putty per cwt. 50/3  Ferramastic (14 lb. kegs) per cwt. 74/-  Size, in 1 S, best quality per lb. 2/4
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INFORMATION CENTRE · INFORMATION SHEETS
QUESTIONS AND ANSWERS · CURRENT TECHNIQUE
THE INDUSTRY · PRICES · TECHNICAL ARTICLES

## TECHNICAL SECTION

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

## INFORMATION CENTRE

1 SOCIOLOGY, 2 PLANNING: General. 3 PLANNING: Regional and National. 4 PLANNING: Urban and Rural. 5 PLANNING: Public Utilities. 6 PLANNING: Social and Recreational. 7 PRACTICE. 8 SURVEYING, SPECIFICATION. 9 DESIGN: General. 10 DESIGN: Building Types. 11 MATERIALS: General. 12 MATERIALS: Metal. 13 MATERIALS: Timber. 14 MATERIALS: Concrete. 15 MATERIALS: Miscellaneous. 17 CONSTRUCTION: General. 18 CONSTRUCTION: Theory. 19 CONSTRUCTION: Details. 20 CONSTRUCTION: Oscialis. 20 CONSTRUCTION: Miscellaneous. 22 SOUND INSULATION-ACOUSTICS. 33 HEATING, VENTILATION. 24 LIGHT-ING. 25 WATER SUPPLY, SANITATION. 26 SERVICES. EQUIPMENT: Miscellaneous. 27 FURNITURE, FITTINGS. 28 MISCELLANEOUS.

# 2.86 planning: general CIVIC DESIGN

Civic Design: An Inquiry into the Scope and Nature of Town Planning. W. Holford. (H. K. Lewis & Co., Ltd., 1949. 2s. 6d.) Inaugural lecture delivered at University College, London, in November, 1948. Definition of civic design as an art as well as a technique. Interdependence of design and administration. Training of planners. Excellent statement on fundamental approach to town planning.

Town planning, in the author's view, is a branch of town government. Its functions derive less from routine administration and politics, but more from a desire for physical and social betterment, and this desire emerges as civic design. In so far as civic design represents a process of selection and arrangement the questions must be asked whether this process can be considered an art, and if so whether it differs from the art of architecture.

of architecture.

In trying to find an answer to the first question art is discussed in relation to the design process in general, and in relation to design in town and country in particular. It is shown that there are limitations to the concept of civic design as an art which have to be accepted. Account should be taken of the fact that the opportunities for the practice of civic design "are less frequent, its conditions more arduous, and the dimensions in which it is realised so much broader than those of the other arts that appreciation of it is cumulative rather than immediate. Towns have to be lived in first, and then looked into." Civic design has to be considered as an art as well as a technique. It is also important to acknowledge the inter-

dependence between design, or plan-making, and administration, or control of development, and to study the resultant difference in approach to town planning problems by practitioners and administrators

in approach to town planning problems by practitioners and administrators.

In answer to the second question whether, if civic design is an art, it differs from the art of architecture, the author states "that the training and the essential discipline are the same, but that civic design is a continuation of architecture within a wider dimension. Civic design has to deal with the relations between buildings, and between them and landscape . . ; it has to deal in time as well as space. . . When civic design is coupled with its administrative engine and becomes town and country planning in the statutory sense of the word, the bounds become wider still. . ."

Other aspects discussed include the cultural background of town planning, the type of men and women best fitted to deal with the various fields of design and administration, and lastly methods of training.

# 2.87 planning: general ADVERTISEMENT CONTROL

Town and Country Planning (Control of Advertisements) Regulations, 1948: Explanatory Memorandum. Ministry of Town and Country Planning and Department of Health for Scotland. (HMSO, 1949, 3d.)

Memorandum providing general indication of extent of regulations.

In an introduction it is stated that the Control of Advertisement Regulations, which came into force on August 1, 1948, empower local planning authorities to control advertisements in the interests of amenity and public safety. A definition of the term "advertisement" under the Town and Country Planning Act, 1947, is followed by notes on the scope of the regulations which apply only to advertisements displayed on land, including the exterior of buildings and land covered with water. Exceptions to the rules are given. All advertisements referred to in the regulations require consent before they may be displayed, and they have to conform to certain standard conditions.

onform to certain standard conditions.

Other sections of the memorandum deal with the effect of the regulations on existing advertisements: with those advertisements which may be displayed without express consent; with the right of appeal where an application has been refused; with areas which call for a special standard of control; with the enforcement of advertisement control; and lastly with some miscellaneous provisions including flyposting.

## 2.88 planning: general METROPOLITAN PLANNING

Culture and Cities. Jaqueline Tyrwhitt. (APRR Information, Bulletin, June, 1949.) Interesting note, inviting criticism, on a proposal for a metropolitan area of 1,000,000 people on an hexagonal grid. Illustrated by diagrammatic layout and key.

The proposed scheme results from an examination of current developments which the planner must take into account when considering the metropolitan problem. These

developments concern home, industry, shopping, education and culture, and some of their outstanding present-day trends are briefly outlined. It is necessary to bring such trends into line with the legitimate needs of the family group, which the author assumes are best catered for in the 50,000 person urban unit.

In order to handle the stated problems in actual planning schemes a theoretic planning pattern has been evolved which is based on an hexagonal grid. As an example of its application a diagram for a metropolitan area of about 1,000,000 people is shown. There are thirty urban units each of 30,000-70,000 persons. Twenty-four of these units are equi-distant from a large industrial area, providing a great variety of employment, and from a good commercial centre. Each of the industrial areas and commercial centres shown serve 300,000 workers and 300,000 shoppers respectively. All thirty units are directly connected, via a fast motorway, with a metropolitan centre, which, in addition to its business district, has university buildings, concert halls, and galleries, reference libraries, specialized hospitals, and "all the highest, most selective, most specialized products of our civilization."

Other traffic shown in the diagram concerns industrial traffic by rail, road and water, and residential traffic, the latter not being specified.

Referring to her planning pattern, the author states that it is a descendant of the series of the satellite town, the linear city, la ville radieuse and other theoretic planning patterns.

# 10.52 design: building types HOUSING POLICY ABROAD

Housing Policy Abroad. PEP. (Political and Economic Planning, Broadsheet No. 229, June 13, 1949. 2s)

Usetul and informative study of housing policies and methods adopted in USA, Sweden, Denmark, Holland and Australia.

Although comparison of methods may be misleading owing to the variety of causes which create housing problems in different countries there are, nevertheless, certain elements common to the problems of most countries. The pamphlet does not aim at providing an exhaustive summary of housing policy in any one country. It rather underlines those features which seem to be especially relevant to British problems, and deals with them under the headings of housing agencies and finance; standards and costs; and policy and price control. Conclusions drawn from the investigation are stated concisely followed by a few references for further reading.

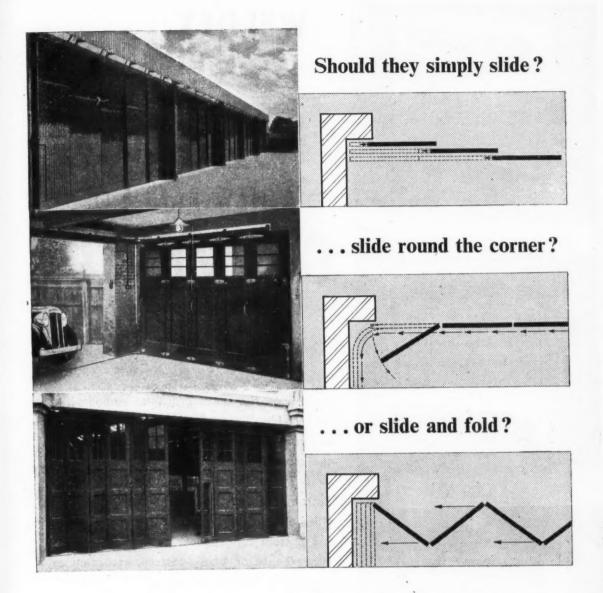
# 10.53 design: building types FACTORIES

The Architect in Industry. Report of a Conference held at the RIBA, March, 1949 (Part II). (RIBA Journal, May, 1949.)

Report of the summing-up session of conference. Chief points of session on structural technique, heating and ventilating, lighting and welfare. A useful quick guide to the main points of the conference. Includes discussion which followed the sectional reports.

# 10.54 design: building types R.C. STADIUM

Le Nouveau Stade du Club "Huracan" a Buenos Aires. (The new stadium "Huracan" in Buenos Aires). P. C. Balduca. (La Technique des Travaux [Belgium]. March-April, 1949, pp. 91-100.)



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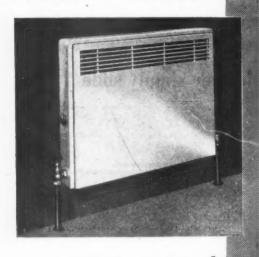
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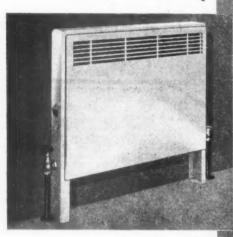
To answer these questions, and the variations of them which arise at the planning stage, it is necessary to combine details of the job with our experience of what can or should be done to achieve the utmost efficiency in sliding door action. A careful study of our Catalogue No. 48 will provide full information as to the most suitable gear for most conditions of service. It is a complete technical guide with all dimensions and is fully priced. Our Drawing Office and trained technical representatives are available to supplement this information and to ensure that the correct gear is accurately prepared for each job.

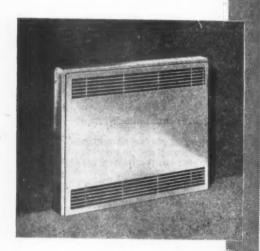


for any Door, Partition or Window that slides or folds.

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# WELDEX HEATERS MITOCINCE A NEW RANGE OF

# CONVECTOR HEATERS

Built upon the sound principles embodied in all "Weldex" Steel Gilled Tube Heaters, they are of all welded construction and suitable for the most arduous duties. The three models, Wall Type, Floor Type, and Floor Type with Bottom Grille are made in various lengths, the gilled elements for which have alternative side and bottom connections, and are available in either 2-tube or 4-tube pattern, according to the heating capacity required.

These Convectors are admirably suited for use in Schools, Hospitals, Public Buildings, Hotels, Residences, Theatres, Factories, etc., and are supplied in stoved grey primer finish as standard. Special and two-colour finishes to blend with any colour scheme can also be provided.



Stadium in reinforced concrete framed structure accommodating 90,000 spectators.

The structure comprises a large number of rigid frames. These support L-shaped precast units of various lengths spanning between them and forming the steps for the seating. This system of construction allows free expansion and contraction due to temperature. Altogether about 10,000 units were used in a total length of over 131,000 ft. The bulk of the structure is carried on piles.

## 18.29 construction: details WALLS

The Avoidance of Cracking in Masonry Construction of Concrete or Sand-lime Bricks. Building Research Station Digest No. 6. (Pamphlet distributed by BRS. 1949.)

Shrinkage cracks. Amount of cracking. Precautions. Reference to BS for materials.

The increasing tendency to use concrete and sand-lime bricks is not always accompanied by an appreciation of the need for a rather different treatment from that suited to elay bricks. Both concrete and sand-lime products are liable to appreciable shrinkage, and, unless provision is made for this,

cracked walls will sometimes occur. The first precaution is to ensure that the bricks are in accordance with the British Standards, which specify the minimum shrinkage feasible for these materials. Storage on site to avoid undue wetting is also worth while. Even with these precautions, however, some shrinkage must be expected, and it is therefore important to use a mortar which is not too strong. The note gives definite recommendations on this point and also mentions the influence of design and the possible use of reinforcement in bed joints. A useful up-to-date summary of information on a point which has been referred to in several earlier BRS publications.

# 19.72 construction: details PATTERN STAINING

Pattern Staining in Buildings. N. S. Billington and D. G. R. Bonnell (National Building Studies Special Report No. 6. HMSO, 1949).

General description of the effect of pattern staining; reasons for its occurrence; methods of preventing it. pp. 17, illustrated.

An account is given of investigations made in a number of buildings where pattern staining occurred. The results of these investigations confirm that the existence of tempera-

Posts supporting lighting equipment

Suspende 35

Prefabricated steps

Joint

Canopy Meximal 9:6

Bracing in r. c.

18:0' 18:0' 15:6

Piles

Vertical section of stadium in Buenos Aires showing details of reinforcement of frames and prefabricated steps. See 10.54.

ture differences over the surface of a non-homogeneous construction affords an adequate explanation of the phenomena observed, and that these temperature variations are due to differences in the heat flow through various parts of the construction.

# 20.138 construction: complete structures R.C. MARKET HALL, PANTIN

Halle a Marchandise de Pantin en Béton Armé (Market hall in reinforced concrete at Pantin). M. Cayla. (Travaux, France, June, 1949, pp. 253-5.)

Market hall in reinforced concrete shell construction covering an area of 1,063 by 354 ft

The hall is subdivided into three bays of 106 ft. 6 in., 120 ft. 3 in., and 127 ft. 8 in. width. The roof in each bay is a cylindrical shell of parabolic shape and 2½ in. thickness, stiffened by ribs at alternative centres of 48 ft. 5 in. and 29 ft. respectively. The springings of the ribs are connected by ties 18 ft. above the ground floor. The rise of the shell is also 18 ft. The ribs and the ties form three hinged arches.

Contrary to the conventional arrangement of lantern lights projecting above roof level, the glazing forms two sloping sides

Contrary to the conventional arrangement of lantern lights projecting above roof level, the glazing forms two sloping sides of a V-shaped valley below the roof shell. At the crown the width of the opening is 12 ft. 6 in. and the height of the glazing 11 ft. 6 in.

Expansion joints are provided at 155-ft. centres right through the middle of the 29-ft. panels, so that no double columns are required.

The job was carried out on tubular scaffolding which was movable in the longitudinal direction after being lowered by a few inches. The same scaffolding could be used 14 times. The ties, of high-tensile steel, were tensioned to a stress corresponding to the dead weight of the structure, and thus the shell was lifted from the formwork. An additional tensioning force, equivalent to the effect of the weight of the lanterns, was applied at a second stage.

## 23.104 heating and ventilation POWER SUPPLY: CO-ORDINATION

(1) Technical Aspects of Interchange with the Grid. L. D. Anscombe and A. J. Ellison. (2) Surplus Heat or Power Supplied to Adjoining Works. G. E. Foxwell. (3) Coordinating Heat and Power in a District. H. E. Partridge. (Institute of Fuel, 1949.)

Technical papers read at second conference on combined heat and power supplies held on April 27, 1949. Paper (3) summarises and comments upon (1) and (2) and papers read at first conference.

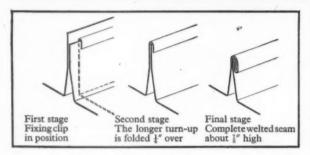
Paper (1) discusses connection of private generating plants in parallel with the Grid, in such a way that surplus current is supplied to the Grid, and current is drawn from it when local power requirements exceed generating capacity. Methods of control and synchronism. Important subject, because running generating equipment in parallel with the Grid hitherto seldom permitted.

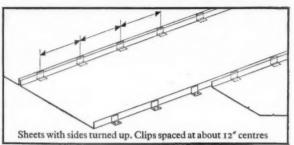
Paper (2) discusses heat and power linkages, other than electrical. In particular, steam is considered, but fuel-gas (e.g., from coke ovens) and mechanical power are also included.

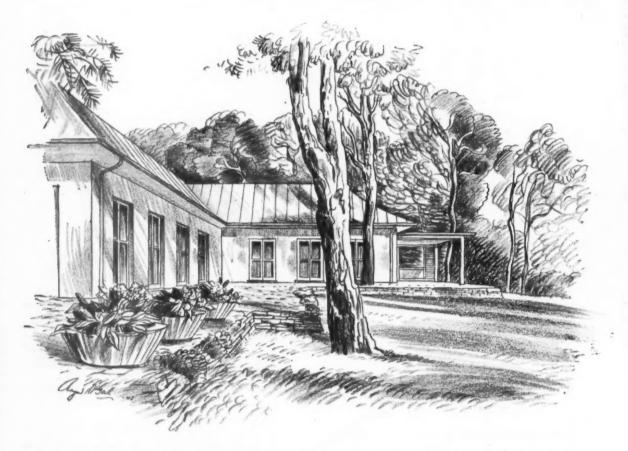
Paper (3) attempts to co-ordinate the whole series of papers, and quotes a typical industrial case to point out the savings possible. Proposals are made for immediate action.

The application to existing buildings and industries is especially considered; the importance of planning and siting new industrial buildings in order that advantage can

# STANDING SEAM ZINC ROOFING







The standing seam system of zinc roofing, much used on the Continent, resembles the system used for copper in this country, although wider welts and higher seams are generally found more satisfactory with zinc. Either sheet or strip zinc can be used, and should be laid over inodorous felt or building paper. One side edge is turned up 11,", the other 11,", and

the standing seam completed as shown above. When sheet is used, the ends are joined by a single welt, or at drips if the fall is less than 1 in 8. The minimum fall suitable for this type of roofing is  $1\frac{1}{2}$  in 8 ft. Further information on rainwater pipes, gutters, and other uses of zinc in building can be had from the Association, together with a list of publications.

#### ZINC DEVELOPMENT ASSOCIATION

LINCOLN HOUSE TURL STREET OXFORD TELEPHONE OXFORD 47988



be taken of the interchange is neglected, and points to the importance of including an architect and town planner in a conference of this kind.

# 23.105 heating and ventilation AIR CONDITIONING

Air Conditioning. H. and H. Herkimer. (New York: Chemical Publishing Co., Inc. London: Chapman & Hall, Ltd. £2.)

New book on air conditioning in theory and practice, with some reference to other forms of heating, and many diagrams and tables.

So many books about air conditioning have been published in the United States that some people will have doubts whether there is room for another.

Such doubts can be dispelled. In his preface the author states that the book contains the subject-matter of his own "Engineer's Pocket Manual," compiled over a period of thirty years. As such it contains a very large amount of information unhampered by verbiage, and should prove a very valuable reference book for all who have to do with air conditioning. Especially is this so in the case of architects, who may have to make the necessary provisions in their buildings for the equipment for this duty, and have in the past not infrequently found difficulty in finding the necessary data in suitably simple form.

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

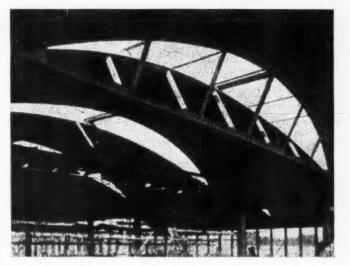
## ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal."
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Please ask manufacturers to send further particulars to:—
NAME

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ADDRESS

BLOCK LETTERS, Plance



R.C. Market Hall with internal lantern lights. See 20.138.

The book is divided into two parts: the first is concerned with the theoretical and scientific aspect of the subject, the second with the purely practical. It deals admirably with both; but it is a pity that, although steam heating installations receive attention, hot water as a heating medium barely receives comment.

barely receives comment.

This, however, is but a very minor criticism of an admirable book.

# 23.106 heating and ventilation GAS INSTALLATION

Domestic Gas Handbook for Architects and Builders. (British Gas Council.)

A book containing much useful information on the installation of gas-fired equipment, interspersed with puffs for the use of gas for various domestic purposes.

An expensively produced little book, very well printed, and with many excellent diagrams; albeit that the latter are in white line on a very trying orange-coloured background.

Sections are included on gas supply, ventilation, space and water heating, cooking, refrigeration, washing and central heating; both installations and appliances are described in detail. The advantages of gas for each purpose are pointed out.

described in detail. The advantages of gas for each purpose are pointed out.

There is a great deal of useful information in this book, and its careful reading should help to eliminate many common faults in gas installations. No information as to comparative costs is given, nor, in the circumstances, could it be expected.

## 25.73 water supply and sanitation SEWERS AND WATER MAINS

Velocities and Discharge Rates, for Designers of Sewers and Water Mains. Crimp and Bruges. (The Technical Publishing Co. Ltd. 1949.)

A book of tables and graphs, giving velocities and discharges for sewers and channels of different sections, areas, and inclinations, and other useful information.

A standard rk, just republished, of great value to civil engineers and others who have to design sewers and water mains, or who have to gauge the flow of streams. Contains, in its new form, other information, such as the relevant data from British Standards, and amortisation tables.

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

## QUESTIONS AND ANSWERS

2993 RENT CONTROL ACT, 1949

In 1948 my client converted his house into self-contained units, carrying out substantial structural alterations and fixing fittings such as kitchen cabinets, built-in refrigerators, inset electric fires, etc., which the tenants are not entitled to remove. My client on consideration of premiums (£200-£300) has granted the tenants 14 years' leases from April. 1948. My client sold his property in December, 1948, and informed the purchaser that he had obtained premiums from the tenants.

I am csked for an opinion whether, under the Landlord and Tenant (Rent Control) Act, 1949, recently published, my client will have to refund premiums although he is no longer a landlord.

A Prior to the 1949 Act there was no legal objection to requiring a premium for the lease of a dwelling if the lease was for a term of fourteen years or upwards even though the dwelling was one within the Acts (Increase of Rent and Mortgage Interest (Restrictions) Act, 1920—section 8).

(Increase of Rent and Mortgage Interest (Restrictions) Act, 1920—section 8).

Section 2 (7) of the 1949 Act repeals Section 8 of the 1920 Act but provides that such repeal shall not affect the operation of Section 8 "as respects anything done before the commencement of this Act."

On the facts stated the owner was, under section 8 of the 1920 Act, in April, 1948, entitled to require a premium for the leases granted. The owner is, therefore, under no obligation to refund any of the premiums he has received in respect of the tenancies of the four flats.

## Announcements

The BOT remind retailers that, in order to save dollars, import licences for turpentine are issued subject to the condition that retail sales are only made for medical, veterinary and pharmaceutical purposes. Merchants buying from the importers are under the terms of their contract, bound this condition which must be strictly served. Turpentine substitute is already observed. largely used by the paint industry and is suitable for ordinary domestic purposes. It has the advantages of being efficient,

It has the advantages of being efficient, cheap, and in free supply.

Hardwoods of the graded square edged variety can now be obtained from East Portugal and West Africa. The permitted quantity is small, and the volume authorized to an applicant will be restricted. Previously, there was a delay in the delivery of some contracts from these countries. Firms should therefore be certain of complete delivery by December 31, 1949, before making applications to the Board of Trade

making applications to the Board of Trade Timber Control.

Messrs. Blackburne, Norburn & Partners.
FF./L.R.I.B.A., Nairobi and Dar-es-Salaam, have now opened an office at P.O. Private Bag, Kampala, Uganda, and would be pleased to receive trade catalogues and announcements.

From July 26, the address of the Area 17 (Cardiff) Office of the Board of Trade Timber Control will be:—Imperial Building, Mount Stuart Square, Cardiff.

In view of the rise in the price of lead

on the American market, the Ministry of Supply announces that from July 14 the price of good soft pig lead was increased by £5 10s. per ton (delivered) from £75 10s. to £81. Discounts and premiums remain unchanged. Additional charges on orders booked for delivery subsequent to the month of order, are also unchanged. The Ministry also announces that in future the prices at which copper, lead, zinc and tin will be sold (subject to licence) to consumers in the United Kingdom will be the prices ruling on the date the order is posted, and not on the date the order is received at the Non-Ferrous Metals Directorate, Rugby.

# Buildings Illustrated

Offices for Messrs, Wimpey at Hammersmith (pages 71-73). Architect, Sir John Burnet, Tait & Partners. General contractors George Wimpey & Co., Ltd. Subcontractors: asphalt, Val de Travers & Co., Ltd. Subcontractors & Supplementation of the Supplementa contractors: asphalt, Val de Travers & Co., Ltd.; stone, South-Western Stone Co., Ltd.; structural steel, Universal Steel Door & Engineering Co., Ltd.; fireproof construction, Digspeker & Co., Ltd.; special roofings, Standard Flat Roofing Co., Ltd.; special roofings, Standard Flat Roofing Co., Ltd.; partitions, J. H. Sankey & Son, Ltd. (moler blocks), George Wimpey & Co., Ltd., John Thompson, Ltd. (steel door frames); glass, Aygee, Ltd.; woodblock flooring, Vigers Bros., Ltd.; waterproofing materials, R.I.W. Protective Products Co., Ltd.; central heating, Matthew Hall & Co., Ltd.; gas fixtures, Thomas Potterton, Ltd.; gas fixtures, Thomas Potterton, Ltd.; gas fixture, Stouth Soilers, Ldeal Boilers, Ltd.; electric wiring and light fixtures, Troughton & Young, Ltd.; boilers, Ideal Boilers, Ltd.; electric wiring and light fixtures, Troughton & Young, Ltd.; ventilation and plumbing, Matthew Hall & Co., Ltd.; sanitary fittings, Associated Clay Industries, Ltd.; door furniture. James Gibbons & Co., Ltd.; stair treads, Diespeker & Co., Ltd.; casements, Williams & Williams, Ltd.; telephones, G.P.O. and Reliance Telephone Co, Ltd.; fireproof doors, Williams & Williams, Ltd.; iron staircases, Grundy Arnatt, Ltd.; plaster, J. H. Jenner & Co., Ltd.; cement glaze, Modern Surfaces, Ltd.; joinery, Walter Lawrence & Son, Ltd.; tiling, J. H. Sankey & Son, Ltd.; furniture, Beresford & Hicks, Ltd.; lifts, G. K. Jensen & Co., Ltd.; plastic lettering, E. J. & A. T. Bradford, Ltd.

Flats in the Abbott Road Area, Poplar pages 66-70). Architects, W. J. Rankin, A.C.G.I., A.M.I.C.E., Borough Engineer and (pages 66-70). Ac.G.I., A.M.I.C.E., Borough Engineer and Surveyor. C. H. Weed, A.R.I.B.A, Principal Assistant Architect, assisted by A. J. Lane, A.R.I.B.A., and J. W. Hammond, Architectural Assistants. General contractors: the Direct Labour Section of the Borough Engi-Borough Council. Sub-contractors: services, Metropolitan Water Board, North Thames Gas Board, London Electricity Board; steel-Gas Board, London Electricity Board; steel-work, Joseph Westwood & Co., Ltd.; hollow tile floor and roofs, Caxton Floors, Ltd.; metal windows and doors, Crittal Manufac-turing Co., Ltd.; balustrading and iron-mongery, Clarke Hunt & Co., Ltd., and A. J. Binns, Ltd.; plumbing, R. J. Audrey, Ltd.; kitchen fitments, Alfred Lockhart, Ltd.; joinery, Sharpe Bros. & Knight Davies Bros., Ltd.; fireplace, surrounds, Southborough joinery, Sharpe Bros. & Knight Davies Bros., Ltd.; fireplace surrounds, Southborough Sheet Metal Works, Ltd.; asphalte floor and roofs, City Asphalte Co., Ltd.; sanitary fittings, John Knowles & Co. (London), Ltd.; plastering, Southern Plastering Co.; granolithic paving, Kendell's Stone & Paving Co., Ltd.; glazing, J. Clark & Eaton.

## Correction

Mr. C. F. W. Haseldine is President of the Nottingham, Derby and Lincoln Architec-tural Society, for 1949-50, and not Mr. R. E. M. Coombes as printed in our issue for June 23. Messrs. E. W. Pedley, T. N. Cartwright, and W. E. N. Webster are the Vice-Presidents of the Society.



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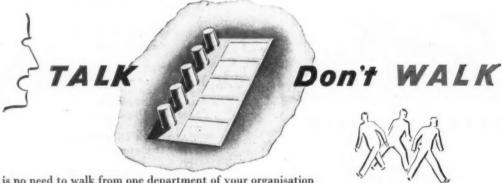
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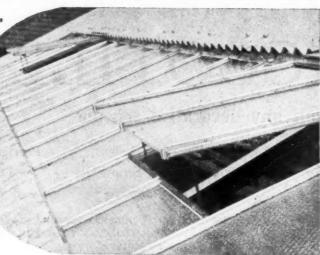
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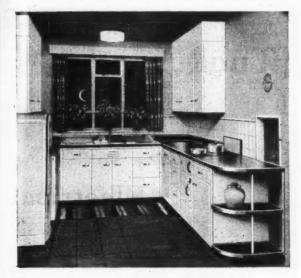
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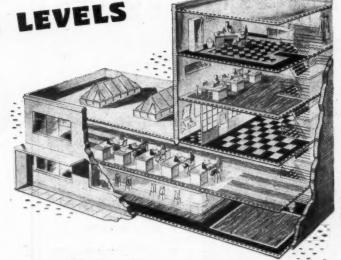
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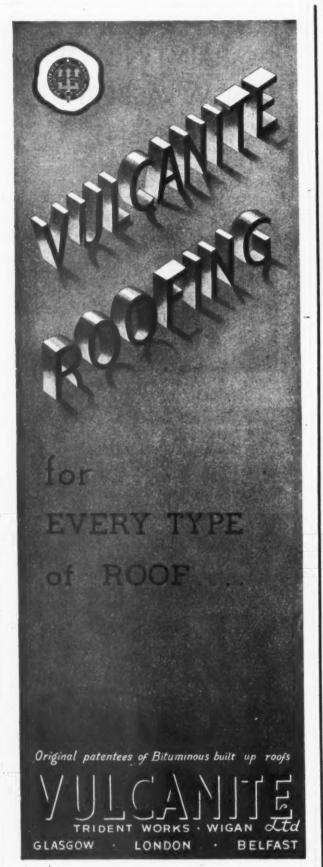
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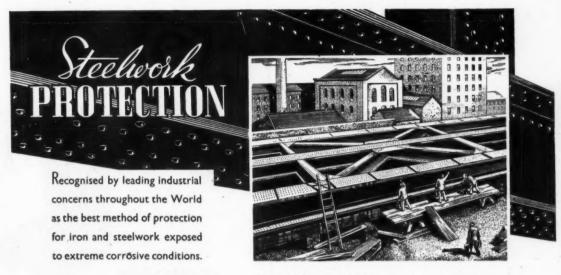
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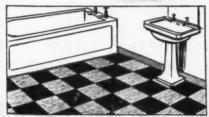
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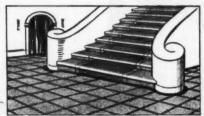
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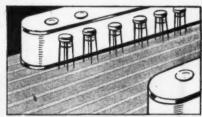
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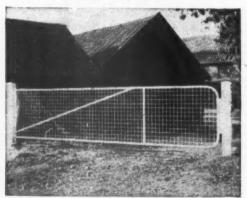


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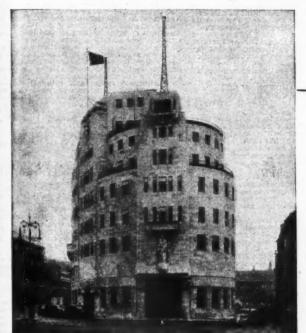
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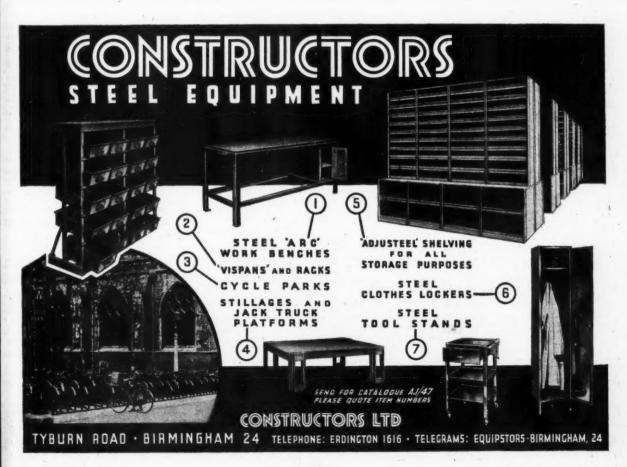
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ARCHITECTURAL ASSISTANT (Grade A.P.T., I). Salary £390 to £435 per annum.

ENGINEERING ASSISTANT (Grade A.P.T., V). Salary £290 to £750 per annum.

ENGINEERING ASSISTANT (Grade A.P.T., IV). Salary £490 to £752 per annum.

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

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

The Council will be prepared to consider appli-

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

Full particulars of the duties, terms and conditions of appointment and form of application (which must be returned by Monday, 15th August, 1949, may be obtained from the undersigned. Canvassing in any form will disqualify.

HA A EDWARDS.

H. A. EDWARDS, Town Clerk.

Town Hall, East Ham, E.6 July, 1949.

COUNTY BOROUGH OF STOCKPORT.
Applications are invited for the following posi-

Applications are invited for the following position:—
GENERAL ARCHITECTURAL ASSISTANT.
A.P.T., V (£520-£570 per annum).
The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will
be required to pass a medical examination.
Applications, stating age, qualifications and experience, together with copies of two recent
testimonials, must be delivered to the undersigned
by 6th August, 1949.
Candidates must disclose in their application
whether to their knowledge they are related to
any member of the Council or to any senior
official of the Corporation.
Candassing, directly or indirectly, will be a
disqualification.

WM. F. GARDNER, M.I.C.E.

WM. F. GARDNER, M.I.C.E., A.M.T.P.I., Borough Surveyor. 1542

Town Hall, Stockport.

Town Hall, Stockport.

Town Hall, Stockport.

COUNTY BOROUGH OF GREAT YARMOUTH.

BOROUGH ENGINEER'S DEPARTMENT.

APPOINTMENT OF FOUR SENIOR.

ASSISTANT ARCHITECTS.

Applications are invited for the above appointments, at a salary in accordance with A.P.T., Grade YI (£98-£660 per annum) of the National Conditions of Service.

Preference will be given to Associates of the Royal Institute of British Architects and to applicants who have had previous experience in modern school design.

Applicants need not have had previous Local Government experience.

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

Applications, stating age, qualifications and experience, together with the names of three persons to whom reference can be made, should be enclosed in an envelope endorsed "Senior Assistant Architect," and must reach me not later than Tuesday, 2nd August, 1949.

Canvassing will be deemed a disqualification, and candidates must disclose in writing any relationship to any member of, or holder of any senior office under the Conneil. Candidates who fail to do so will be disqualified and, if appointed, liable to dismissal without notice.

FARRA CONWAY.

FARRA CONWAY.

Town Clerk.

FARRA CONWAY, Town Clerk.

Town Hall, Great Yarmouth. 1st July, 1949. FJ/DAB.

SOMERSET COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:—
(a) ARCHITECTURAL ASSISTANTS. Salary

(a) ARCHITECTURAL ASSISTANTS. Salary Grade VI, 2595-2660.
(b) ARCHITECTURAL ASSISTANT. Salary Grade I. 2390-2435.
(c) QUANTITY SURVEYOR. Salary Grade VI, 2595-2660.
Applicants for (a) must be A.R.I.B.A., with good general Architectural experience, and for (c) A.R.I.C.S. (Quantities Sub-Division).
The appointments, which may be made within the appropriate scale, will be subject to (i) the Scheme of Conditions of Service of the National Joint Council for Local-Authorities' Administrative, Professional, Technical and Clerical Services, and (ii) the provisions of the Local Government Superannastion Act, 1397, and any amendments thereof. Selected candidates will be required to pass a medical examination.
Applications, giving full details of age, qualifications and experience, should be forwarded, together with copies of three recent testimonials, to reach the undersigned by Thursday, 4th August, 1949.

together with concerning to reach the undersigned by Innu-to reach the undersigned by Innu-August. 1949.
Candidates should state whether or not they are related to member and/or senior official of the Council. Canvassing will be disqualification. R. O. HARRIS. F.R.I.B.A.. County Architect.

Park Street, Taunton. 1st July, 1949.

ESSEX EDUCATION COMMITTEE.

SOUTH-WEST ESSEX TECHNICAL COLLEGE
AND SCHOOL OF ART

(FOREST ROAD. WALTHAMSTOW. E.IT).

Required, PART-TIME DAY STUDIO MASTERS. LECTURERS and INSTRUCTORS in the Department of Architecture and Building of the College as from September. 1949. Previous teaching experience is not essential but candidates should have had good practical experience in some branch of the professions or trades connected with Building. The work can be arranged on a half-day or half-days to suit individual applicants.

The Department provides full-time and parttime courses in Architecture: Town Planning; Civil. Structural and Municipal Engineering; Land. Quantity. Building, Estate Management and Valuation Surveving: General Building and certain of the Building Crafts.

Applications (no forms), giving details of training, qualifications, experience and times available, should be submitted to the Clerk to the Governors at the College.

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

COUNTY OF LINCOLN—PARTS OF
LINDSEY.

Applications are invited for a TEMPORARY
CLERK OF WORKS, to supervise the crection
of new Police Buildings and Magistrates Courts
and Superintendent's and Inspector's Houses at the
Civic Centre Site, Scunthorpe, at a salary of
£10 10s. per week inclusive.
Candidates must have practical knowledge of
all branches of the Building Trade and be experienced in the supervision and erection of buildings, capable of setting out, taking levels,
measuring up, checking quantities, keeping
records, and making reports.

The duration of the appointment is expected
to be approximately 18 to 24 months. The work
is expected to start September-October, 1949. The
appointment will be terminable by one month's
notice on either side.

Applications, stating age, qualifications and experience, with particulars of past and present
employment, and accompanied by copies of three
recent testimonials, must be received by the
Architects, Messrs. Charles B. Pearson & Son,
F.R.I.B.A., 18, Dalton Square, Lancaster, not
later than 30th July, 1949.

HERBERT COPLAND,
Clerk of the County Council

Architects, Messey. Charless B. Pearson a son, F. R.I.B.A., 18, Dalton Square, Lancaster, not later than 30th July, 1949.

HERBERT COPLAND.

Clerk of the County Council.

County Offices, Lincoln.

1st July, 1949.

GLOUCESTERSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of ASSISTANT ARCHITECT (Section Leader) on A.P. and T., Grade VIII (2685-2760) in the above Department.

The successful applicant will be in charge of a section of the County and will be responsible for all work carried out in that section.

Applicants should be Associate Members of the B.I.B.A., and have wide experience in projects usually dealt with by a County Council, i.e., Education, Police and Health Buildings.

Appointment will be subject to the Local Government Superannuation Act, 1937, and candidate before appointment will be terminable by one month's notice on either side.

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

LONDON COUNTY COUNCIL.

LONDON COUNTY COUNCIL.

GUY H. DAVIS,

Clerk of the County Council.

1st July, 1949.

LONDON COUNTY COUNCIL.

VACANCIES FOR QUANTITY SURVEYORS
ASSISTANTS IN THE ARCHITECT'S DEPARTMENT.

(a) TEMPORARY TECHNICAL ASSISTANT.

£440×£20-£580 a year.

(b) TEMPORARY TECHNICAL ASSISTANT.

Up to 1678. 6d. a week.

Candidates for (a) should be experienced on interim valuations for payments on account, measuring, adjusting, pricing and agreeing fisal accounts. Applicants for (b) should be capable of abstracting and billing, and should have had previous experience in a quantity surveyor's office. Applications are also invited under (a) for a BUILDING WORKS ESTIMATOR, with uptodate knowledge of all types of construction and experience in pricing Bills of Quantities
Appointments will be on a temporary basis in the first instance, with opportunities to compete on merit for permanent appointments and promotion on the occurrence of vacancies. Successful candidates will be required to contribute to the Superannuation and Provident Fund.

Application forms from the Architect (AR/P/Q).

County Hall, Westminster Bridge, S E.1, enclosing stamped addressed foolscap envelope. Canvasing stamped addressed foolscap envelope. Canvasing singualifies. (847)

County Hall, Westminster Bridge, S. E.I., enclosing stamped addressed foolscap envelope. Canvassing disqualifies. (847)

CITY AND COUNTY OF KINGSTON-UPON-HULL.

PLANNING ASSISTANT, A.P.T., GRADE IV, 2480-2525 PER ANNUM.

Applications are invited for the appointment of Planning Assistant, A.P.T., Grade IV, 2480-253 PER ANNUM.

Applications are invited for the appointment of Planning Assistant, A.P.T., Grade IV, 2480-253 Per annum. Preference will be given to candidates who hold a recognized professional qualification.

The appointment will be subject to the Local Government Superannuation Act, 1937, and to the National Conditions of Service for Local Authorities' Administrative, Professional, Technical and Clerical Services, to such other conditions of service as have been specified from time to time by the Council, and to one month's notice in writing on either side.

Successful candidates will be required to pass a medical examination.

Applicants should state whether or not they are related to any member of the Kingston-upon-Hull County Borough Council or Chief Official of the Corporation.

Canvassing will be a disqualification, Applications, stating age, qualifications, experience and present salary, together with the names and addresses of two persons to whom reference may be made, should be delivered to the undersigned on or before Tuesday, the 9th August, 1949-U. AYLMER COATES, Barch, F.R.I.B.A., M.T.P.I., Town Planning Officer. 1500

SURREY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following

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PON-

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Arch.,

appointments:

ARCHITECTURAL ASSISTANT, Grade I, at a commencing salary of £390, rising by annual increments of £15 to £435 per annum, plus London allowance of up to £30 per annum, according to

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

accompanied by a small sample of the applicant be second as a small sample of the applicant be such as the successful applicant will be required to pass a medical examination.

CLERK OF WORKS, on major building projects, on the temporary establishment of the County Council. The salary will be up to a maximum of £12 per week, according to the qualifications and experience of the applicant. All applicants must have been properly trained as craftsmen, and for preference have served as foreman on substantial contrasts prior to 1940.

Applications, stating age, qualifications, full details of experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall. Kingston-upon-Thames, not later than the 30th July, 1949.

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

DUDLEY AUKLAND,
Clerk of the Council.
County Hall, Kingston-upon-Thames. 1535

Clerk of the Council.

COUNTY Hall, Kingston-upon-Thames. 1535

COUNTY OF LINCOLN—PARTS OF LINDSEY.

COUNTY ARCHITECT'S DEPARTMENT.
In connection with the re-organization of the above department, vacancies occur for the following:

ARCHITECTS:
(a) SENIOR ASSISTANT ARCHITECT.
Grade V. £520 per annum, rising to £570.
(b) SENIOR ASSISTANT ARCHITECT.
Grade IV. £480 per annum, rising to £525.
(c) JUNIOR ASSISTANTS. Grade II, £420 per annum, rising to £525.
(d) SENIOR QUANTITY SURVEYOR. Grade IVI. £435 per annum, rising to £10.
(e) ASSISTANT QUANTITY SURVEYOR. Grade VII. £535 per annum, rising to £10.
(frade IV. £480 per annum, rising to £525.
(f) JUNIOR ASSISTANT. Grade I, £390 per annum, rising to £455.
Candidates for (a) should preferably be Associates of the R.I.B.A. and have had good experience in the design and construction of modern buildings. Candidates for (b) and (c) should have a reasonable knowledge of building construction. For the appointment (d) preference will be given to Members of the R.I.C.S., and applicants should be able to take charge of preparation of Bills of Quantities for large works. For the appointment (e) preference will be given to Members of the R.I.C.S., and applicants should be able to take charge of preparation of Bills of Quantities for large works. For the appointment (f) preference will be given to Members of the R.I.C.S., and applicants should be able to take charge of preparation of Bills of Quantities for large works. For the appointment (e) preference will be given to holders of the latermediate Examination of final certificates, and of abstracting. For the appointment (f) applicants should be able to abstract, square out. and bill small jobs.

The appointments are on the permanent staff of the County Council, and the successful candidates will be required to pass a medical examination.

A subsistence allowance will be paid to married men finding it necessary to obtain lodgings in

dates will be required to pass a measure tion.

A subsistence allowance will be paid to married men finding it necessary to obtain lodgings in Lincoln whilst maintaining their homes outside Lincoln of 25s. per week for six months, plus 3rd class railway fare to their home each two months.

Applications, stating age, qualifications, ex-

months.

Applications, stating age, qualifications, experience, past and present appointments stating clearly which post is applied for and accompanied by at least two testimonials, to be sent to the undersigned not later than 1st August, 1444 dersigned not laver

A. RONALD CLARK, A.R.I.B.A.,
A.M.T.P.I.,
County Architect.
1515

County Offices, Lincoln.

SOUTH-EASTERN GAS BOARD.
ARCHITECT AND SURVEYOR'S
DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.
Applications are invited for the above sppointment, the offices of the department being situated at Katharine Street. Croydon.
The commencing salary will be from 2500 per annum, decendent upon qualifications and experience. Salary will be provisional, the future rate and conditions of employment being in accordance with those laid down from time to time by the appropriate negotiating body.
Applicants should be suitably trained and capable of preparing working drawings and specifications. and have had good experience in industrial buildings, offices and showrooms.
After a probationary period the post will become a permanent one. The successful candidate will be required to pass a medical examination.
Applications should be sent to the Personnel Maneger Scatteries.

Applications should be sent to the Personnel Manager, South-Eastern Gas Board, at 709, Old Kent Road, S.E.15, within fourteen days of publication of this notice.

MERIONETH COUNTY COUNCIL.
Applications are invited for the following appointment in the County Planning Department:—
SENIOR PLANNING ASSISTANT.
Salary £450, rising by three annual increments of £15 to a maximum of £495.
Applicants should have experience in all matters appertaining to the planning of a large rural area. The County of Merioneth includes over 500 square miles of potential National Park, and the work offers special opportunities in this field. An appreciation of the problems of such an area is desirable.

Preference will be given to candidates who have at least passed the Intermediate Examination of the Town Planning Institute and who have had revious planning experience in the Locai Government Service.

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

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

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

Applications, stating age, qualifications, present

to the Local Government Superannuation Act, 1937.

Applications, stating age, qualifications, present position and salary, previous appointments held, and full details of experience, accompanied by copies of two recent testimonials, are to be sent to the undersigned not later than Saturday, 6th August, 1949.

HIGH I OWEN

copies of two recent testimonials, are to be sent to the undersigned not later than Saturday, 6th August, 1949.

HUGH J. OWEN.

Clerk of the County Council.

County Offices. Dolgelley, Merioneth.

4th July, 1949.

COUNTY BOROUGH OF NORTHAMPTON.

DEPARTMENT OF BOROUGH ARCHITECT

AND TOWN PLANNING OFFICER.

APPOINTMENT OF PLANNING ASSISTANTS.

Applications for the under-mentioned permanent posts stating age, qualifications experience, past and present appointments and calary, whether related to any member or senior officer of the Council, and giving the names of two persons to whom reference can be made, should be delivered to J. L. Womersley, A.R.I.B.A., A.M.T.P.I., Borough Architect and Town Planning Officer, not later than 3rd August, 1949.

TOWN PIANNING ASSISTANT. Grade V., A.P.T. (£520-£570).

The successful applicant will be required to carry out work in connection with the preparation of the Survey and Development Plan and the detailed replanning schemes for the contral area and should preferably have passed the final examination of the Town Planning Institute or hold an equivalent qualification.

TOWN PLANNING ASSISTANT. Grade III, A.P.T. (£450-£495).

The successful applicant will be required to assist in the preparation of the Survey and Development Plan and should be studying for the Town Planning Institute 'examination or equivalent qualification.

Canvassing will disquality.

Applicants should clearly state the appointment for which they wish to be considered.

C. E. VIVIAN ROWE.

C. E. VIVIAN ROWE.

Guildhall, Northampton. 1559

CITY ARCHITECT'S DEPARTMENT.

Applications invited from qualified Architects for appointment of DEPUTY SECTION HEAD (Education). Candidates should be Associate Members of the R.I.B.A.. with good general experience in design and construction of all types of School Buildings and in control of a number of Senior and Junior Architectural Staff. Experience in Local Authority office work will be an advantage.

Salary offered is Grade L (2660×250-2860). Appointments are subject to provisions of Local Government Superannuation Acts. 1937 and 1939, and successful applicants required to pass medicial examination. All appointments terminable by one month's notice in writing on either side.

Housing accommodation provided if necessary at economic rent.

Applications, stating age, training, qualifications, experience, present appointment and period held, and salary, together with names of three referees, must be delivered to the undersigned by Monday, 25th July, 1949.

ECTY ARCHITECT.

referees, must be delivered to the undersigned by Monday, 25th July, 1949.

CITY ARCHITECT.

Bagle House, Colston Avenue, Bristol, 1. 1544.

THE SOUTH WALES ELECTRICITY BOARD.

Anolications are invited for the position of ARCHITECTURAL ASSISTANT in the Civil Bragineering Department of the Board at St. Mellons, Cardiff.

Apolicants will be required to undertake the design, layout and preparation of working drawings for Showroms, Offices and Sob-Stations, including alterations to existing buildings.

The salary will be in the provisional range of 2600-2700 per annum, according to qualifications and experience.

Applications, stating age, present position, present salary, qualifications and experience together with the names and addresses of three referees, should be addressed to the Secretary (Establishments Section). The South Wales Electricity Board, St. Mellons, Cardiff, so as to reach him not later than the 3rd August, 1949. 1556

CITY AND COUNTY OF KINGSTON-UPON-HULL.

TOWN PLANNING DEPARTMENT.
Applications are invited for appointment as follows:—
(1) SENIOR PLANNING ASSISTANT. A.P.T.,
Grade VIII, £685-£760 p.a.
Qualifications: (i) Degree or diploma in Architecture or A.B.I.B.A., and (ii) Membership or Associate Membership of the Town Planning Institute.

Qualifications: (i) Degree or diploma in Architecture or A.R.I.B.A., and (ii) Membership of Associate Membership of the Town Planning Institute.

(2) SENIOR PLANNING ASSISTANT. A.P.T., Grade VIII, £685-£760 p.a.
Qualifications: (i) Degree in either Civil Engineering or Estate Management, or A.M.I.K.E., or A.M.I.M.I.E., or A.R.I.C.S., and (ii) Membership or Associate Membership of the Town Planning Institute.

For the above posts, preference will be given to candidates who have had experience in the detailed planning of central areas, residential neighbourhoods and industrial estates.

(3) SENIOR PLANNING ASSISTANT. A.P.T., Grade VIII, £685-£760 p.a.

Qualifications: (i) Degree or diploma in Architecture, Civil Engineering or Estate Management, or A.R.I.B.A., or A.M.I.C.E., or A.M.J.Mun.E., or A.R.I.C.S.; and (ii) Membership or Associate Membership of the Town Planning Institute.

For the above post, preference will be given to candidates who have had experience in drawing up Planning Schemes, and of Development control.

(4) TWO PLANNING ASSISTANTS. A.P.T., Grade II, £420-£465 p.a. Preference will be given to candidates who have hade sperience remediate examination of a recognized professional institution.

The appointments will be subject to the Local

(4) TWO PLANNING ASSISTANTS. A.P.T., Grade II, £420-£45 p.a. Preference will be given to candidates who have passed the Intermediate examination of a recognized professional institution.

The appointments will be subject to the Local Government Superannuation Act, 1937, and to the National Conditions of Service fog Local Authorities' Administrative, Professional, Technical and Clerical Services, to such other conditions of service as have been specified from time to time by the Council, and to one month's notice in writing on either side.

Successful candidates will be required to pass a medical examination.

Applicants should state whether or fnot they are related to any member of the Kingston-upon-Hull County Borough Council or Chief Official of the Corporation.

Canvassing will be a disqualification, experience and present salary, together with the names and addresses of two persons to whom reference may be made, should be delivered to the undersigned on or before 2nd August, 1949.—U. AYLMER COATES, B.Arch., F.R.I.B.A., M.T.P.I., Town Planning Officer.

CITY OF OXFORD.

CITY ARCHITECT AND PLANNING OFFICER'S DEPARTMENT.

Applications are invited for the appointment of ASSISTANT in the General Maintenance Section of the City Architect and Planning Officer's Department. The section deals with maintenance work, alterations and repairs for school buildings and other Council buildings, and candidates should preferably have had experience with a Local Authority.

Preference will be given to persons suitably qualified or possessing special experience.

The salary will be in accordance with Grade II of the A.P.T. Division of the National Scales. I.E., £420 p.a., rising by annual increments of £15, subject to satisfactory service, to £455 p.a. The appointment will be subject to the National Conditions of Service, the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Further details of the duties and application forms, which must be used in applying

HARRY PLOWMAN.
Town Clerk

Town Hall. Oxford. 1563
BOROUGH OF ENNISKILLEN.
APPOINTMENT OF ASSISTANT ARCHITECT
AND PLANNING OFFICER.
The Borough Council of Enniskillen invites applications for the position of Assistant Architect and Planning Officer in the Architectural and Planning Department.
Candidates should have passed the Intermediate Examination of the Royal Institute of British Architects or the Town Planning Institute, and should have not less than 5 years' practical experience.

Architects or the Town Planning Institute, and should have not less than 5 years' practical experience.

The consolidated salary of the successful candidate will be fixed within the range of from £400 to £450 per annum, according to qualifications and experience.

The appointment will be on a temporary basis and may be terminated at any time by one month's notice in writing on either side.

Preference will be given to suitably qualified ex-Service men.

Applications, stating age and giving full particulars of qualifications and experience together with copies of two recent testimonials, to be delivered to the undersigned not later than 10 a.m. on Friday, 29th July, 1949.

NOBLE J. CONNOR,

Town Clerk's Office, Town Hall, Enniskillen.

9th July, 1949.

THE COUNTY COUNCIL OF THE COUNTY OF CLACKMANNAN.
PLANNING STAFF.
Applications are invited for the following permanent appointment in the Town Planning Section of the County Architect's Department:—PLANNING ASSITANT. Salary scale (A.P.T., Grade V). 2520-2570, inclusive of all bonus. A house will be available at the appropriate rent. Candidates should preferably hold a professional qualification in Architecture or Surveying and have experience in Town and Country Planning and in the preparation of basic surveys and development plans.
The appointment will be subject to the Local Government Superannuation (Scotland) Act. 1937, and the person selected will require to undergo a medical examination prior to appointment.
Applications, stating age, qualifications and experience, with one copy of three recent testimonials, should be lodged with the County Clerk, County Buildings, Alloa, not later than 31st July, 1949.

N. A. SCORGIE.

N. A. SCORGIE, County Clerk.

N. A. SCORGIE,
County Buildings, Alloa.

Sth July, 1949.

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

(a) SENIOR ASSISTANT ARCHITECT. Grade VIII, A.PT. Division (£685-£760 p.a.).

(b) ARCHITECTURAL ASSISTANT, Grade IV, A.P.T. Division (£480-£255 p.a.).

(c) JUNIOR ARCHITECTURAL ASSISTANT, Grade III, A.P.T. Division (£480-£495 p.a.).

Applicants for post (a) are required to be Associate Members of the B.I.B.A. and capable of a high standard of design. Preference will be given to those candidates who have had experience in the control of staff.

Applicants for post (c) should have passed, or attained the equivalent standard of the B.I.B.A. Intermediate Examination.

Applicants for post (c) should have passed, or be preparing to take the B.I.B.A. Intermediate Examination.

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

Applications, on forms obtainable from John H. Haughan, F.R.I.B.A.. County Architect, 15, Portland Square, Carlisle, should be delivered to him not later than Tuesday, 2nd August, 1949, together with copies of not more than three recent testimonials.

G. N. C. SWIFT,

Clerk of the County Council.

July, 1949.

July, 1949.

ROBERT GORDON'S TECHNICAL COLLEGE,
ABERDEEN.
SCHOOL OF ARCHITECTURE AND
DEPARRMENT OF BUILDING.
Head: E. F. Daviss, B.Arch.(Lvpl.), F.R.I.B.A.,
Applications are invited for the following
posts:

posts:—
(a) JUNIOR ASSISTANT (Lecturer and Studio Instructor) in Architectural Design and Construction.

(d) JUNIOR ASSISTANT (Lecturer and Studio Instructor) in Architectural Design and Construction.

(b) JUNIOR ASSISTANT (Lecturer and Studio Instructor) in Constructional Subjects.
Salary scale for both posts £375 by £15 to £610, with placing according to qualifications and experience.

The School of Architecture is recognized for purposes of exemption from the R.I.B.A. Intermediate and Final Examinations.
Candidates must be Associates of the Royal Institute of British Architects, and should possess the Degree or Diploma of a Recognized School of Architecture.

Members of the staff of the School of Architecture are normally afforded reasonable opportunities for Private Practice and Research.
Conditions of appointments and forms of application may be obtained from the undersigned, to whom completed applications, together with copies of three recent testimonals and names of three referees, should be sent not later than Monday, 15th August, 1949.

A. C. WEST,

A. C. WEST, Director

COUNTY BOROUGH OF HALIFAX BOROUGH ENGINEER'S DEPARTMENT. Applications are invited for the following

BORDULEN Applications are invited to Applications are invited to appointments:

(1) ARCHITECTURAL ASSISTANT (General).

(2) ARCHITECTURAL ASSISTANT (General).

(3) (Schools).

Salary in accordance with Scale V, A.P.T. (£520-£570).

(2) ARCHITECTURAL ASSISTANT (Schools). Salary in accordance with Scale III, A.P.T. (£450-£495).
Candidates should possess appropriate technical qualifications, and will be required to pass a medical examination. The appointments will be subject to the conditions of service adopted by the Corporation and to the Local Government Superannation Act, 1937.
Applications, stating age, qualifications, present position, salary and experience, accompanied by copies of three recent testimonials, appropriately endorsed, should be delivered to the undersigned not later than Saturday, 30th July.

RICHARD DE Z. HALL.

Town Hall, Halifax.

Town Hall, Halifax. 7th July, 1949. 1567 CITY OF PETERBOROUGH.

CITY ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the appointment of Assistant Quantity Surveyor, A.P.T., Grade III, 2450×£15—£495 per annum.

Applicants abould have had experience in a Quantity Surveyor's office and should be capable of abstracting, billing and measurement of works on site.

of abstracting, billing and measurement of works on site.

This appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination. Applications, stating age, qualifications and experience, accompanied by copies of not more than three recent testimonials and suitably endorsed, must be delivered to the undersigned not later than 4th August, 1949.

Candidates should state whether they are related to any member or senior officer of the Council.

Canvassing, either directly or indirectly, will disqualify.

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

ARTHUR J. REEVES.

ARTHUR J. REEVES, Town Clerk.

Town Hall, Peterborough. July, 1949.

OUNTY BOROUGH OF MIDDLESBROUGH.

EDUCATION COMMITTEE.
ARCHITECT'S DEPARTMENT.

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

(a) ASSISTANT INSPECTOR OF SCHOOL BUILDINGS. A.P.T., Division I (salary £390-£435 per annum).

(b) MAINTENANCE ENGINEER. (Salary £360-£435 per annum).

(b) MAINTENANCE ENGINEER. (Salary £360-£435 per annum).

Applicants for appointment (a) must be experienced in the repair and maintenance of Buildings and Playgrounds and be able to prepare reports, specifications and estimates.

Applicants for appointment (b) must be experienced in the supervision and maintenance of steam equipment in the School Kitchens and all types of heating and domestic hot water services.

Forms of application and conditions of service may be obtained from the Director of Education, Education Offices, Woodlands Road, Middlesbrough, to whom completed forms should be returned by 9 a.m. on Friday, 12th August, 1949.

E. C. PARR, Town Clerk.

SALOP COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments to Established posts in the Depart-(1) SENIOR A.P.T., Grad NIOR ASSISTANT ARCHITECT. Grades V-VA. Salary £520 to £610 per

A.P.T. Grades V-VA. Salary £520 to £610 per annum.

(2) ASSISTANT ARCHITECTS. A.P.T., Grades II-III. Salary £420 to £495 per annum. The appointments will be subject to one month's notice in writing on either side: to the terms of the National Joint Council's Scheme of Conditions of Service, and to the provisions of the Local Government Superannuation Act, 1937. The successful applicants will be required to pass a medical examination.

Application forms may be obtained from the County Architect. A. G. Chant, F.R.I.B.A., 5, Belmont, Shrewsbury, to whom they must be returned, accompanied by copies of not more than three recent testimonials, not later than Friday, 12th August, 1949.

G. C. GODBER,

G. C. GODBER, Clerk of the Council.

Shrewsbury. July, 1949.

BOROUGH OF FOLKESTONE.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.
ARCHITECTURAL ASSISTANT (TEMPORARY)
£600 p.a.
Applications are invited for the appointment of an Architectural Assistant, at a salary of £600 per annum. The appointment is temporary and subject to one month's notice from either side. The duration of the appointment will be approximately two years.
Applicants should be Registered Architects, qualified by examination, quick and accurate draughtsmen, and be experienced in the preparation of Housing plans and general Architectural work. Applications, stating age, qualifications and experience, together with the names and addresses of two referees, should be endorsed "Architectural Assistant," and addressed to the Borough Engineer, Municipal Offices, West Terrace, Folkestone, and delivered not later than Tuesday, 2nd August, 1949.

C. F. NICHOLSON,

C. F. NICHOLSON, Town Clerk.

Town Clerk's Office, West Terrace, Folkestone. 7th July, 1949.

applications, stating age, qualifications and experience, accompanied by copies of not more than two recent testimonials, must be delivered to the Borough Engineer at the address given below, not later than 2nd August, 1949, endorsed "Temporary Architectural Assistant."

Canvassing will disqualify and applicants must state whether they are related to any member or senior officer of the Council.

N. CATCHPOLE, Town Clerk.

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Town Hall, Colchester. July, 1949.

Town Hall. Colchester.

July, 1949.

GLAMORGAN COUNTY COUNCIL.

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

(a) PRINCIPAL ASSISTANT ARCHITECT. Commencing salary £810 per annum, rising by annual increments of £25 to £910 per annum.

(b) SENIOR ASSISTANT ARCHITECT. A.P. and T. Grade VIII (£685-£760).

(c) ASSISTANT ARCHITECTS. A.P. and T., Grade VII (£685-£760).

(d) ASSISTANT ARCHITECTS. A.P. and T., Grade VIII (£685-£760).

(e) SENIOR ASSISTANT QUANTITY SURVEYOR. A.P. and T., Grade VIII (£685-£760).

(f) ESTIMATING ASSISTANT. A.P. and T., Grade VI (£595-£660).

(g) ASSISTANT QUANTITY SURVEYORS. A.P. and T., Grade VI (£595-£660).

(h) ESTIMATING ASSISTANT. A.P. and T., Grade VI (£595-£660).

(c) ASSISTANT QUANTITY SURVEYORS. A.P. and T., Grade IV (£490-£525).

Candidates for (a) must be Registered Architects and/or Associates of the R.I.B.A., possess high ability in design and administration, and be capable of supervising the work of a technical section of the County Architect's Department; for (b), (c) and (d) candidates must be Chartered Quantity Surveyors of the E.I.C.S. (Quantities Section), and for (g) candidates must be Chartered Quantity Surveyors of the E.I.C.S. (Quantities Section), and for (g) candidates must have passed the Intermediate examination of the R.I.C.S. (Quantities Section).

Candidates must not be over 50 years of age, but this condition may be relaxed in the case of a person already in the service of the authority, or a specially suitable candidate employed by another authority. In the case of cx-Service applicants, the age limit will be raised by the number of years served in H.M. Forces during the late war.

Application forms and particulars of all the above-mentioned appointments and conditions of service may be obtained from L. R. Gower, F.E.I.B.A., County Architect, County Hall, Cardiff.

D. J. PARRY, Clerk of the County Council. Glamorgan County Hall, Cardiff.

D. J. PARRY,
Clerk of the County Council.
12th July, 1949.

Glamorgan County Hall, Cardiff.

12th July, 1949.

EASTERN ELECTRICITY BOARD.

Appointment of:—

(a) SENIOR ARCHITECTURAL ASSISTANT.

(b) ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointments in the Architect's Section of the Chief Engineer's Department at Area Headquarters, Wherstead, near Ipswich.

(a) Senior Architectural Assistant. Salary £900 per annum. Preference will be given to Associate Members of the R.I.B.A., who have had a good training and have wide experience in design. construction, supervision and management of Bullding Contracts. Experience in the design of Showrooms. Offices, Canteens, Stores and light industrial buildings, although not essential, would be an advantage.

(b) Architectural Assistant. Salary £550 per annum. Applicants should have a good knowledge of design and construction, be good draughtsmen, and be capable of preparing working drawings, and should preferably have reached at least Intermediate R.I.B.A. or equivalent standard.

The salaries and conditions of employment for the above posts are provisional and may be adjusted in accordance with the terms and conditions laid down from time to time by the appropriate negotiating body.

The successful candidates will be required to contribute to a superannuation scheme, and may be required to pass a medical examination.

Applications should be made on forms to be obtained from the Chief Engineer, Eastern Electricity Beard, Wherstead, Ipswich, to whom they should be returned, duly completed, so as to arrive not later than 14 days from the appearance of this advertisement.

ARCHITECTS AND ARCHITECTURAL DRAUGHTSMEN. Applications are invited for the following vacancies with The Central Office of Information (Exhibitions Division):

Post A. J.153/49: A.B.I.B.A. or P.A.S.I., or

equivalent.

HICHER EXECUTIVE OFFICER (Temporary). Salary: £675 to £800 p.a. (men), £550 to £675 p.a. (women). Experience of exhibitions work, ability to prepare specifications, working drawings, etc., and to settle contractors' final

rawings, etc., and to see the Control of the Counts.

Post B. Spec.: Inter. R.I.B.A. standard. Archiectural draughtsman.

TEMPORARY ASSISTANT. Salary according to age in the range £230 to £575 p.a. (men), £230 of £460 (women). Quick and accurate draughtsmanship, knowledge of specification writing, and ability to prepare working drawings under super-

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Applications should be addressed to The Technical and Scientific Register ("K"), York House, Kingsway, London, W.C.2.

House, Ringsway, London, W.C.2.

THE UNIVERSITY OF SHEFFIELD.
Applications are invited for posts of
LECTURER and ASSISTANT LECTURER in
the Department of Architecture, to begin duties
as soon as possible.
Salary scales: Lecturer £600-£1,100, Assistant
Lecturer £450-£500, with Superannuation provision
under the Federated Superannuation Scheme for
Universities, and a family allowance. The commencing salary on either scale will depend upon
the qualifications and experience of the successful
candidate. Further particulars may be obtained
from the undersigned, with whom applications
(three copies), including the names and addresses
of two referees, should be lodged by 13th August,
1349.

A. W. CHAPMAN, Registrar.

of two referees, should be lodged by 13th August, 1949.

A. W. CHAPMAN, Registrar. 1545

URBAN DISTRICT COUNCIL OF CORBY.
ENGINEER AND SURVEYOR'S

DEPARTMENT.

Applications are invited for the undermentioned appointments on the permanent staff of the Council's Engineer and Surveyor:—

(1) ARCHITECTURAL ASSISTANT, with previous experience of the design of buildings, preparation of working drawings, building details and estimating. Salary within the range of Grades A.P.T., IV (£480-£255) to A.P.T., VI (£595-£660), according to qualifications and experience, but only candidates who have passed the Final examination of an appropriate Professional Institution will be considered eligible for Grade VI.

(2) JUNIOR ENGINEERING AND SURVEY-ING ASSISTANT (two appointments). Grade A.P.T. II (£420-£465), who must be competent in surveying, levelling and draughtsmanship, and preferably have previous municipal experience. Candidates should have passed an Intermediate examination of a recognized professional body or be University graduates.

The Council has extensive works in hand and contemplated, and the appointments will offer wide scope and excellent experience for keen and enthusiastic persons. Housing accommodation will be made available to the selected candidates, if married. The provisions of the Local Government Superannuation Act, 1937, will apply. Forms of application for the respective appointments may be obtained from the undersigned, to whom they must be submitted not later than 9 a.m. on Friday, the 29th July, 1949.

Clerk of the Council.

Council Offices, Corby, Northants.

11th July, 1949.

WELSH REGIONAL HOSPITAL BOARD.

Applications are invited for the following permanent posts on the Board's headquarters staff:—ARCHITECT'S DIVISION:

(a) ASSISTANT ARCHITECT. Salary A.P.T., Grade VII (£568 to £760).

(b) ASSISTANT ARCHITECT. Salary A.P.T., Grade VII (£450 to £495).

Applicants for posts (a) and (b) must be registered Architects and have passed the Intermediate Examination of the R.I.B.A.

(d) SENIOR ASSISTAN

VEYOR. Salary A.P.T., Grade VIII (£685 to £760).

Applicants must have passed the Final Examination of the Royal Institute of Chartered Surveyors (Quantities Division), or be otherwise suitably qualified, and should be familiar in all respects with a quantity surveyor's duties, including the preparation of estimates and bills of quantities.

(e) ADMINISTRATIVE ASSISTANT. Salary A.P.T., Grade IV (£480 to £285).

Applicants should have had a sound office training, and must poasess administrative ability, especially in relation to architectural matters. The appointments are subject to the provisions of the National Health Service (Superannuation) Regulations, stating age, qualifications and experience, together with the names of two referees, should be addressed to the Secretary, Temole of Peace and Health, Cathays Park, Cardiff, so as to reach him not later than 35th July, 1949.

WARWICKSHIRE COUNTY COUNCIL.
COUNTY ABCHITECT'S DEPARTMENT.
Applications are invited for the undermentioned appointments on the established ASSISTANT ARCHITECT. A.P.T., VIII (£685-£760).
ASSISTANT ARCHITECT. A.P.T., VI (£596-£660).
ASSISTANT ARCHITECT. A.P.T., V (£520-£570).

ASSISTANT ARCHITECT. A.P.T., v (2.569-2570).

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

Application forms can be obtained from C. H. Elkins, F.R.I.B.A., A.R.I.C.S., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS, Clerk of the Council

L EDGAR STEPHENS,
Clerk of the Council.
Shire Hall, Warwick.

HUNTINGDON COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
SENIOR ASSISTANT ARCHITECT,
GRADE VII.
Applications are invited for the appointment of Senior Assistant Architect.
Salary Grade VII,
Applicants should hold the R.I.B.A. or equivalent qualification, and have had experience in connection with the design and construction of public buildings.
The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.
Applications, endorsed "Senior Assistant Architect," should be sent to S. J. Hands, A.E.I.B.A., County Architect, County Buildings, Huntingdon, to be received not later than first post on Tuesday, 2nd August, 1949, stating: (1) Name, (2) address, (3) age, (4) qualifications, (5) education and salary and date of appointment, (7) previous positions, (8) particulars of experience, and should be accompanied by two recent testimonials or the names of two persons to whom reference may be made.

JOHN KELLY,
Clerk of the County County

TOTAL STATE THE COUNTY ASSISTANT ARCHITECT.

Applicants must be fully qualified and have had extensive experience in the supervision of Drawing Office Staff and possess a contemporary outlook on architectural design and construction.

(2) ASSISTANT ARCHITECTS.

(3) ASSISTANT ARCHITECTS.

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(5) ASSISTANT ARCHITECTS.

(6) ASSISTANT ARCHITECTS.

(7) APPLICATE OF ARCHITECTS.

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(3) QUANTITY SURVEYORS' ASSISTANT.
A.P.T., Grade II, £420 to £465 per annum.
Applicants should have had experience in a Quantity Surveyor's or Builders' Office, and possess knowledge of the preparation of Bills of Quantities, Specifications, Site Measurement, and the Preparation of Final Accounts.

The appointments, which are terminable by one month's notice on either side, are subject to the provisions of the Local Government Superannation Act, 1937, in connection with which the successful candidate will be required to pass a medical examination.

successful cannotate will be required to pass a medical examination.

Applications, stating age, training, qualifications, experience, and details of past and present appointments, stating salary, and accompanied by copies of three testimonials, should reach the County Architect. County Hall, Beverley, not later than the 30th July, 1949.

T. STEPHENSON,
Clerk of the County Council.
July, 1949.

July, 1949.

BOROUGH OF COLWYN BAY.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.
Applications are invited for the appointment of
an Architectural Assistant in the Borough
Engineer's Department. Salary, Grade A.P.T.,
IV (£480-£525 per annum).
Candidates must be registered Architects. The
appointment will be subject to:—
(1) The National Scheme of Conditions of
Service.

(1) The National Scheme S. Service.
(2) The provisions of the Local Government Superannuation Act, 1930.
(3) The passing of a medical examination. Applications on forms obtained from the Borough Engineer, Town Hall. Colwyn Bay, to be delivered to the Town Clerk not later than 20th August, 1949.
Canvassing will be a disqualification.

HAROLD E. BÉAITHWAITE, Clerk. Town Hall, Colwyn Bay. 14th July, 1949.

CITY OF MANCHESTER EDUCATION
COMMITTEE.

EXTENSION TO THE MUNICIPAL COLLEGE
OF TECHNOLOGY.

CLERK OF WORKS.
Applications are invited for the position of Clerk of Works, to supervise, under the direction of the Architects, Messrs. Bradshaw, Class & Hope, FF.R.I.B.A., the erection of extensions to the Municipal College of Technology, Whitworth Street, Manchester, which have already been partly completed. The remaining work is expected to occupy about 4 years.

The building will be of steel frame and freproof construction throughout and faced with brickwork with terra cotta dressings.

Previous experience as Clerk of Works on important buildings is essential.

Salary £13 5s. per week.
Applications, which should state age and full particulars of previous experience, and should be accompanied by copies of not more than three testimonials of recent date, must be endorsed. "Clerk of Works, Extensions to the Municipal College of Technology," and should be received by the Chief Education Officer, Deans gate, Manchester, 3, not later than 6th August, 1999.

Canvassing, either directly or indirectly, will disquality.

Partnership and Financial

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

CHIEF ASSISTANT, qualified Surveyor (29),
seeks Junior Partnership in busy firm of
Architects and Surveyors, preferably on South
Coast; hard worker and accustomed to responsibility; capital available. Box 1577.

**Tenders for Contracts** 

Tenders for Contracts
6 lines or under, los.; each additional line, Is, 6d.

PEMBROKESHIRE COUNTY COUNCIL.

TENBY (NEW) INFANTS SCHOOL.

Building Contractors desirous of TENDERINGfor the ERECTION of the above SCHOOL (180SCHOLARS) are requested to submit their applications to Walter Barrett, M.B.E., A.R.I.B.A.,
County Architect, County Offices, Haverfordwest,
Pembrokeshire, by the 26th July, 1949.

General Conditions and Bills of Quantities will
be supplied on receipt of £5 5s. deposit, returnable upon receipt of a bona-fide Tender or the
return of the Bill. Drawings, etc., can be inspected at the office of the County Architect
during the usual working hours.

No Tender will be considered unless submitted
in the endorsed envelope provided for the purpose,
and the Council does not bind itself to accept the
lowest or any Tender received.

Contractors will be required to provide proof
that they are in a position to provide the necessary labour to carry out the works.

Last day for the receipt of Tender is first post,
Thursday, 18th August, 1949.

Clerk of the Education Committee.

County Offices, Haverfordwest, Pembs.

7th July, 1949.

**Architectural Foundation** 

Architectural Foundation

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

ARCHITECTURAL FOUNDATION. under the Will of WILLIAM HOFFMAN WOOD, deceased. Applications are invited from Students of Architecture of either sex under 21 born in Yorkshire, of parents one or both of whom were born in Yorkshire, for consideration for the benefits of the above Foundation, which include defraying the costs of the advancement of Architectural training either by study or by travel in ancient and modern cities. Applicants should forward particulars of sex, age, place of birth of self and parents, education and present occupation. to W. H. Clarke & Company, Solicitors, 12, South Parade, Leeds, 1, by 31st August, 1949.

Architectural Appointments Vacant

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

A RCHITECTURAL ASSISTANT of Intermediates standard, required immediately by Firm of Architects in West End of London; salary according to experience and qualifications.

Rox 1068

A RCHITECTURAL ASSISTANT required, pre-ferably with industrial experience. Write to Employment Manager, Cadbury Brothers, Ltd., Bournville, Birmingham, giving age, qualifica-tions and salary required.

A BCHITECTURAL ASSISTANT required for interesting and varied work; must have passed Intermediate Examination. Reply, quoting age and experience. to Personnel Dept., Fort Dunlop, Erdington, Birmingham. 24

A SSISTANT, salary between £500 and £700 p.a.
Eric Lyons & G. Paulson Townsend,
Chartered Architects, Mill House, Bridge Road,
Hampton Court.

Hampton Court.

ARCHITECTURAL ASSISTANT.
Standard only. required in London; experienced in war damage and conversions. both domestic and commercial nature, to include flats, offices and industrial buildings; 5-day week; bonus, superannuation scheme. Box 1441.

LAST AFRICA.—Progressive Firm of Archiapplicant should be recently qualified A.B.I.B.A.
or equal, capable of carrying jobs from sketches
to completion; minimum salary £750 per annum.
TWO ARCHITECT'S ASSISTANTS; applicants
should be Intermediate R.I.B.A. or equal; must
be quick and neat draughtsmen, capable of working with minimum supervision; minimum salary
£550. Starting salary and increments will be
fixed in accordance with qualifications and experience, and will include participation in profit
sharing bonus scheme, two weeks local leave per
annum, three months' paid leave in U.K. on
completion of three-year contract, and passage
paid both ways. Applicants must be prepared to
fly to take up appointment about September. Experience on houses, offices, shops and flats will
be an advantage. Comfortable living accommodation is available. Particulars of training and
experience, past and present appointments, age,
marital status, date available, together with
testimonials (no samples of work at present), to
be sent to U.K. Representative, 58, Kingsway,
Luton, Beds. 1510

ARCHITECTURAL ASSISTANT required;

Luton, Beds. 1510

A RCHITECTURAL ASSISTANT required; Intermediate standard, with office experience or fully qualified, for general practice including Hospitals, Factories and Offices, etc. Apply Kenchington & Farms, F., A. and A.R.I.B.A., Welbeck 6643. 1498

inclading Hospitals, Factories and Offices, etc. Apply Kenchington & Farms, F., A. and A.R.I.B.A., Welbeck 6543.

Lyperies of the Architect's office in West End; extensive programme in connection with Road Transport Undertakings. Apply Alsan A. Briggs, F.R.I.B.A., 15, Curzon Street, London, W.I. Telephone: GRO. 4151.

LOUGH ESTATES, LTD., require ARCHITECTION OF The Control of the Architect, Mainly industrial, on Trading Estate; subsistence allowance will be payable for a limited period in certain cases. Apply, giving particulars of experience, salary required, etc. ot the Architect, Slough Estates, Ltd., Trading Estates, Slough, Bucks.

A SHENTANT required for senior position in Bank's Architect's office in London; age about 35-40; preferably an Associate R.I.B.A., and well experienced in the design and construction of office buildings, also war damage and maintenance repairs; good prospects and permanency for suitable applicant. Box 1507.

RELIABLE ASSISTANT required; able to detail and assist with design and supervision in Branch office of established County Group of Architects, to work under supervision of resident Partner; every opportunity and good salary for good keen man. Saunders & Partners, 14, Mercer Row. Louth, Lincs.

1494

RCHITECT to Maidstone Brewery has vacancy for qualified and experience of licensed premises an advantage, but not essential; accommodation available in Maidctone; staff pension scheme; salary according to age and experience. Box 1524.

version scheme; salary according to age and experience, Box 1524.

VEST RIDING Architects require ASSISTANT for busy general practice; Industrial, Hospital and Housing work; excellent prospects for reliable man. Box 1493.

ENERAL ASSISTANT required immediately; experience in the preparation of working

TENERAL ASSISTANT required immediately;

We experience in the preparation of working drawings, details, etc., for housing and other classes of architectural work, including surveying and levelling; West Riding of Yorkshire town. Apply, giving experience, references, and salary required, Box 1523.

ing and levelling; West Riding of Yorkshire town. Apply, giving experience, references, and salary required. Box 1523.

A RCHITECTURAL ASSISTANTS required 'mmediately; London office; good salary and prospects. Write, with particulars of age, qualifications, experience, and salary required. to Box 755, c/o 7, Coptic Street, W.C.1.

A SSISTANT ARCHITECT required for general practice. Reply, stating age, qualifications, experience, and salary required. Johnson & Crabtree, F./F.B.I.B.A., 20, Priory Flace, Doncaster. Telephone 3445.

SENIOR ASSISTANT ARCHITECT required for appointment to staff of Development and Research Department; applicants must hold Associateship of R.I.B.A., and be interested and experienced in industrial construction. Applications in writing, stating age, experience, and salary required, to Chief Staff Architect, Hiford, Ltd., Romford, Essex.

NORMAN & DAWBARN, 5, Gower Street, London, W.C.1. require experienced ARCHITECTURAL ASSISTANT, to work on large School; proved ability to prepare full working drawings, agree specifications, and arrange sub-contracts essential. Apply in writing, giving age, office experience, with dates, professional reference, and salary required.

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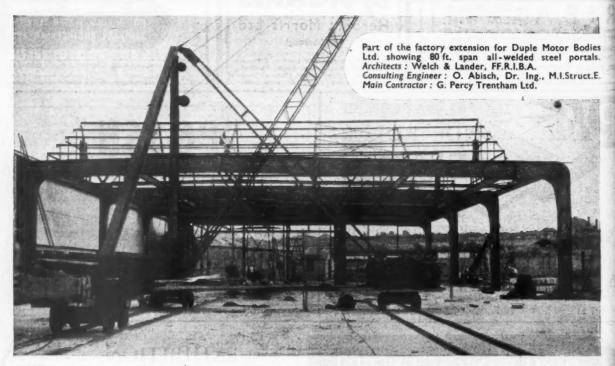
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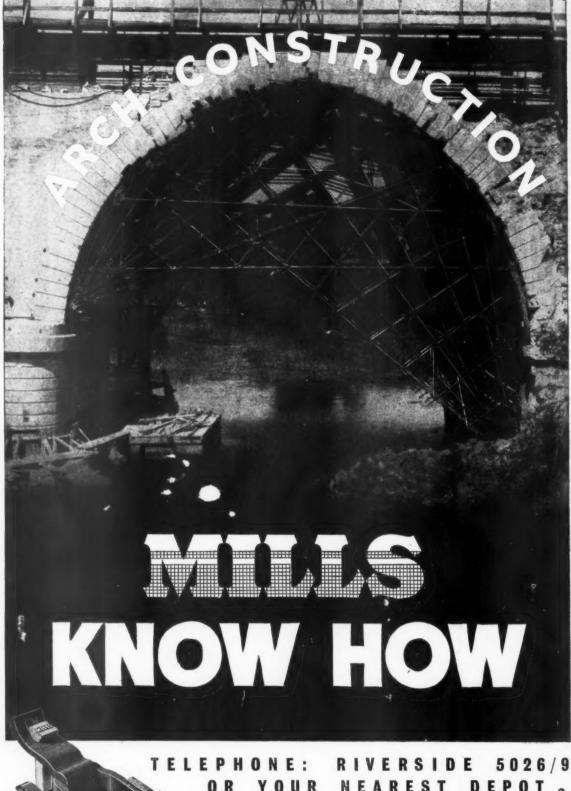
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