T H E



standard contents 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

### CURRENT BUILDINGS

TECHNICAL SECTION

Information Sheets Information Centre Current Technique Questions and Answers Housing Statistics Prices The Industry

### PHYSICAL PLANNING SUPPLEMENT

Architectural Appointments Wanted and Vacant

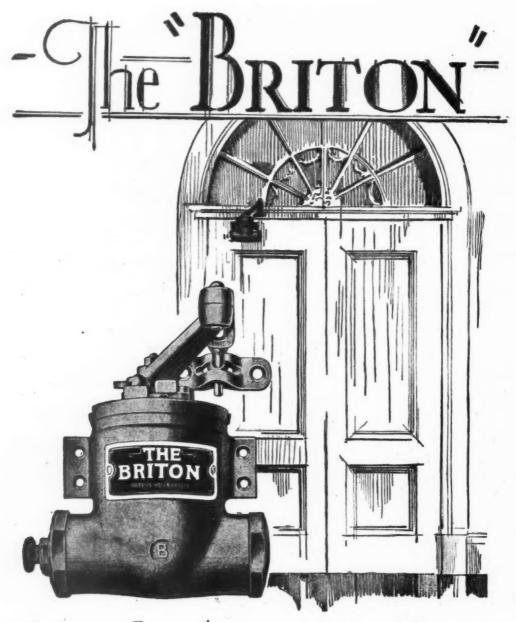
No. 2713] [Vol. 105 THE ARCHITECTURAL PRESS Editorial: Thirteen Queen Anne's Gate, Westminster, S. W.1. Phone: Whitehall 0611 Subscriptions and Advertising: Forty-Five The Avenue, Cheam, Surrey. 'Phone: Vigilant 0087-9.

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ARCHITEC'JOURNAL for January 23, 1947 ARCHITEC'JTC STAR JOURNAL for January 23, 1947 FED 8-1947 JOURNAL for January 23, 1947

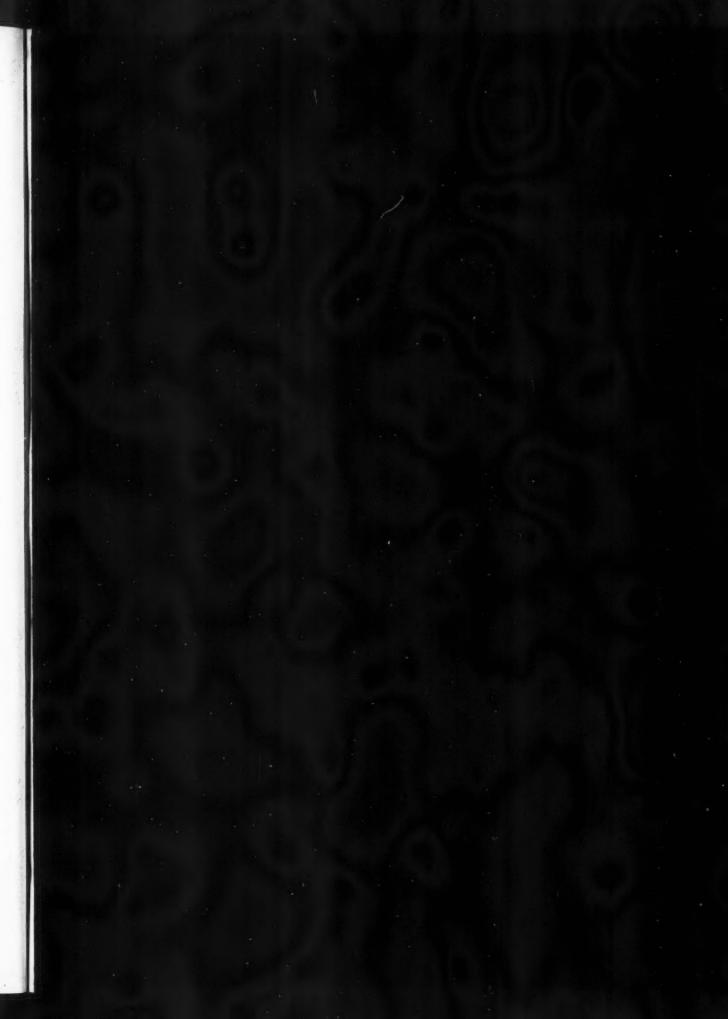
A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to H one week, I to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in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

	Architectural Association, 34/6, Bedford Square, W.C.1. Association of Art Institutions. Secy.: W. Marlborough Whitehead, Castle Hill Avenue, Berkhampstead, Herts.	Museum 0974 "Dyneley,"
ACGB	Architects' Benevolent Society. 66, Portland Place, W.1. Association of Building Technicians. 5, Ashley Place, S.W.1. Arts Council of Great Britain. 9, Belgrave Square, S.W.1.	Welbeck 5721 Victoria 0447-8 Sloane 0421
ADA	Aluminium Development Association. 67, Brook Street, W.1. Association for Planning and Regional Reconstruction. 34, Gordon	
ArchSA	Square, W.C.1. Architectural Students' Association. 24-26, Abercromby Square, Liv	
ARCUK	Architects' Registration Council. 68, Portland Place, W.1. Architectural Science Board of the Royal Institute of British Architec	
BAE	66, Portland Place, W.1. Board of Architectural Education. 66, Portland Place, W.1. Building Apprenticeship and Training Council. Lambeth Bridge Ho	Welbeck 5721 Welbeck 5721 use, S.E.1.
BC BCC BCCF BCIRA	Building Centre. 23, Maddox Street, W.1. British Colour Council. 28, Sackville Street, W.1. British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13. British Cast Iron Research Association. Alvechurch, Birmingham.	7611, Ext. 1706 Mayfair 2128 Regent 3613 Perivale 6869 Redditch 716
BDĄ	British Door Association. 25, Victoria Street, S.W.1.	Abbey 5422-3
BEDA BGC	British Electrical Development Association. 2, Savoy Hill, W.C.2. T British Gas Council. 1, Grosvenor Place, S.W.1.	emple Bar 9434 Sloane 4554
BGF	British Gas Federation. 1, Grosvenor Place, S.W.1.	Sloane 8266
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.	2.
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT BRS	Board of Trade. Millbank, S.W.1. Building Research Station. Bucknalls Lane, Watford.	Whitehall 5140 Garston 2246
BSA	British Steelwork Association. Eggington House, Buckingham Gate	, S.W.1.
BSA	Building Societies Association 14, Park Street, W.1.	ictoria 7301-2-3 Mayfair 0515
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
CAS	County Architects Society. C/o A. Guy Chant, F.R.I.B.A.	broughury 2021
CCA	Salop County Council, 5, Belmont, Shrewsbury. S Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CDA CIAD	Copper Development Association. Kendals Hall, Radlett, Herts. Central Institute of Arts and Design. C/o National Gallery, W.C.2	Radlett 5616
		Whitehall 2415
CIAM CID CPC	Congres Internationaux d'Architectures Modernes. Doldertal, 7. Zuri Council of Industrial Design. Tilbury House, Petty France, S.W.1. Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7.	
CPRE		Kensington 7070 W Sloane 4280
CUJC	Coal Utilization Joint Council. 54, Victoria Street, S.W.1.	Victoria 9851
DIA	Design and Industries Association. 9, Conduit Street, W.1.	Mayfair 5432
DOT EC	Department of Overseas Trade. 35, Old Queen Street, S.W.1. Electricity Commission. Savoy Court, Strand, W.C.2.	Victoria 9040 Temple Bar 7565
EJMA	English Joinery Manufacturers Association (Incorporated). Sackvil	le House,
EPNS FAS	40, Piccadilly, W. English Place-Name Society. 7, Selwyn Gardens, Cambridge. Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns.	
FASSC	Federation of Association of Specialists and Sub Contractors	Sloane 2837
FBI	21, Tothill Street, S.W.1. Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 9606 Whitehall 6711
FC FCMI	Forestry Commission. 25, Savile Row, W.1. Federation of Coated Macadam Industries. 37, Chester Square, S.	
FDMA	Flush Door Manufacturers Association. Stapleford Road, Trowell	Sloane 1002 , Nottingham.
FLD	Friends of the Lake District. Pennington House, Nr. Ulverston, L	Ilkeston 623/4/5 ancs. Ulverston 201
FMB	Federation of Master Builders. 23, Compton Terrace, Upper Stree	
FRHB	Federation of Registered House Builders. 82, New Cavendish Stree	
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.	
GG	Georgian Group. 4, Hobart Place, S.W.1. Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Sloane 2844 Whitehall 2881



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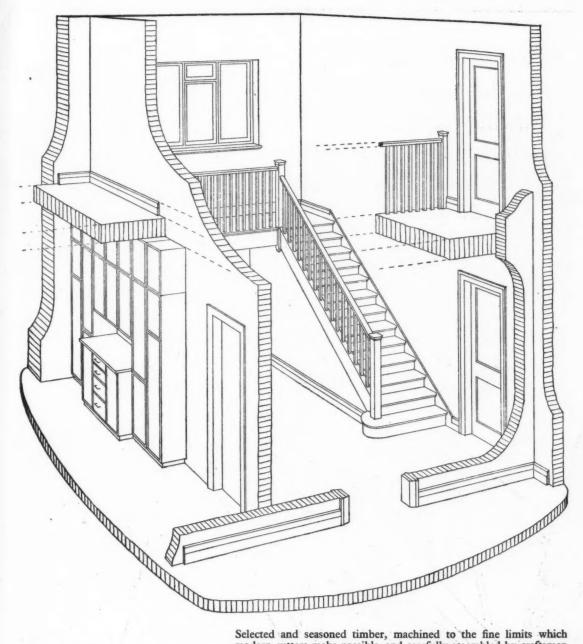
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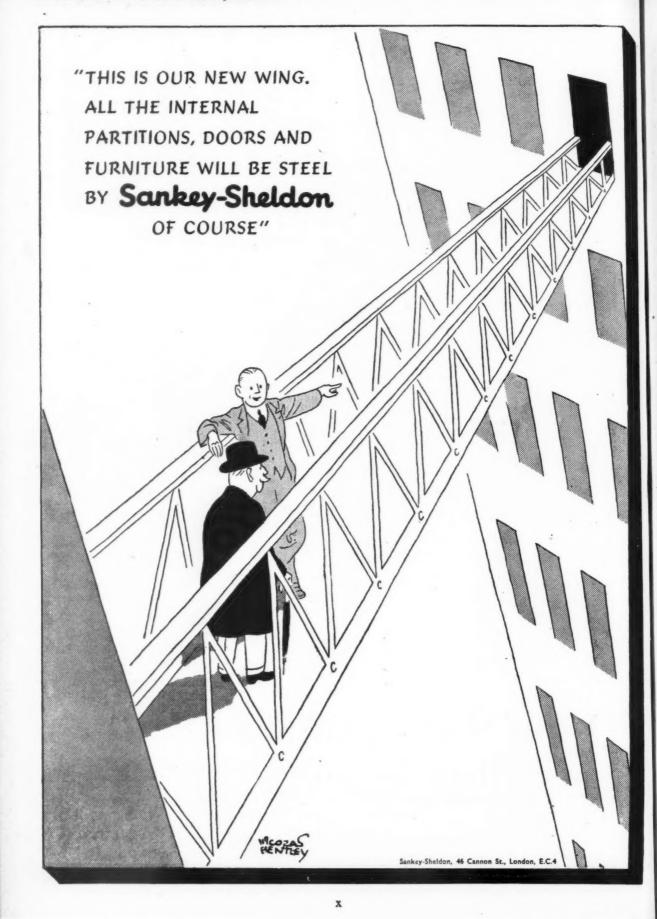
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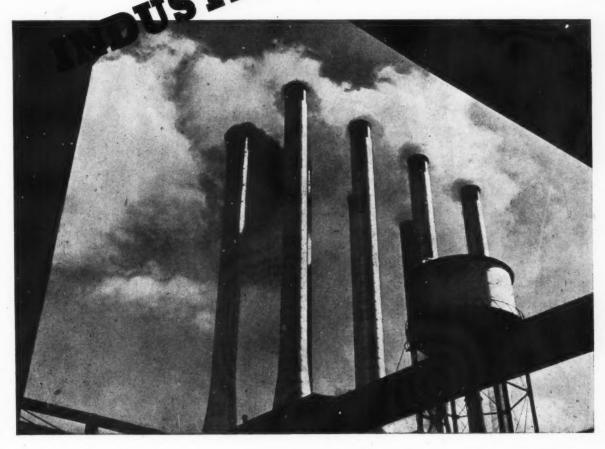
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To make good heat loss per 1000 sq. ft.	Fuel Consumption tons p.a.	7.7	8.3	1.7	1.8	1.9	2.0
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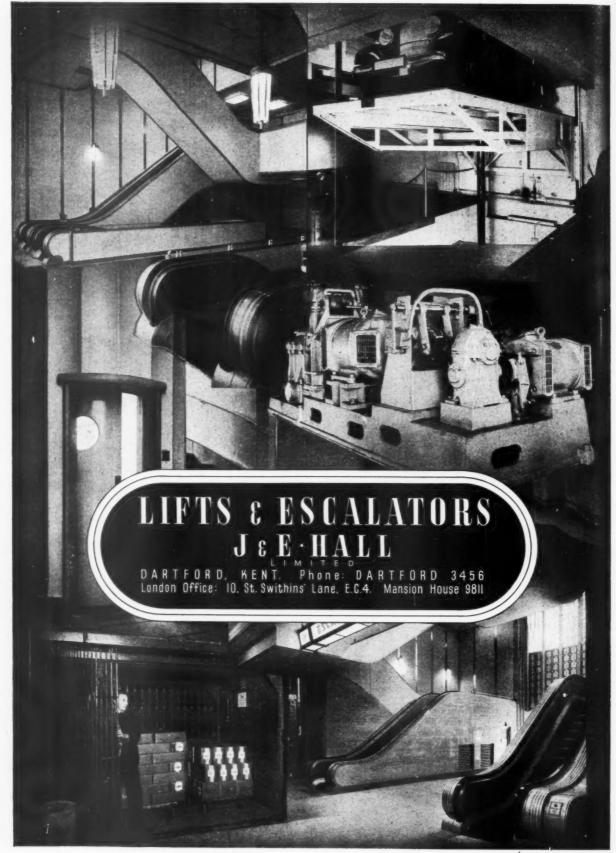
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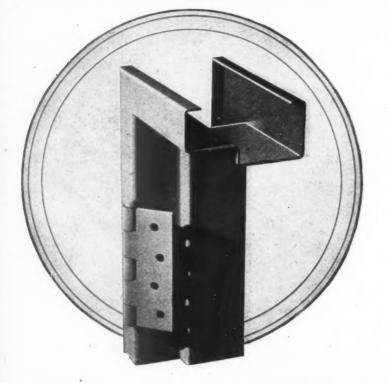
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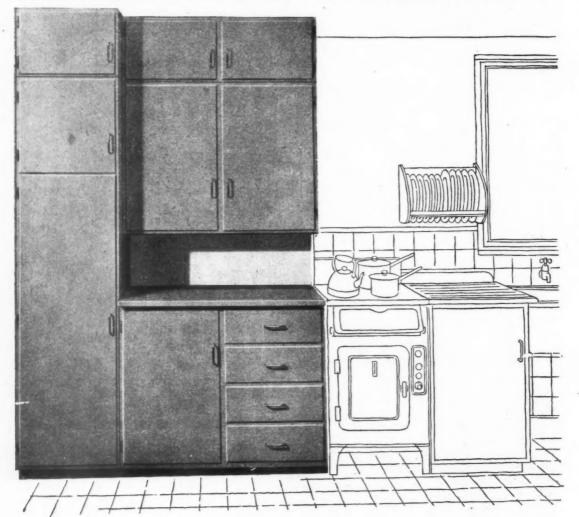
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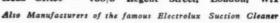
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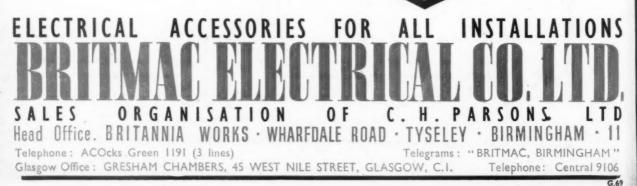
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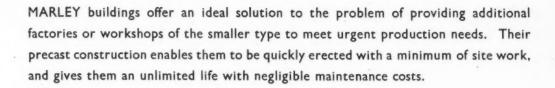


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THE ARCHITECT'S JOURNAL for January 23, 1947

### FURTHER INFORMATION

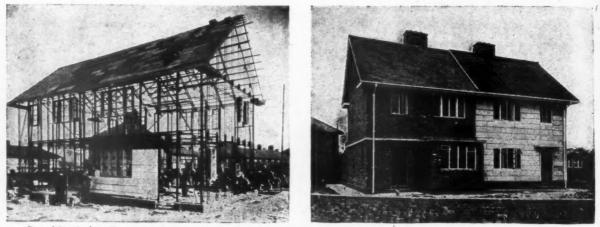
Full details of the construction and components will be supplied on request, together with quotation.

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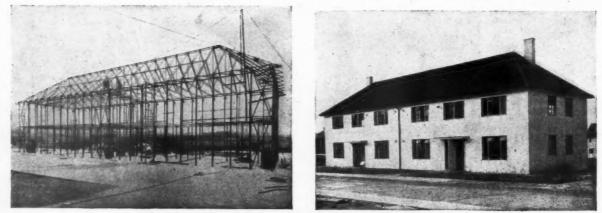
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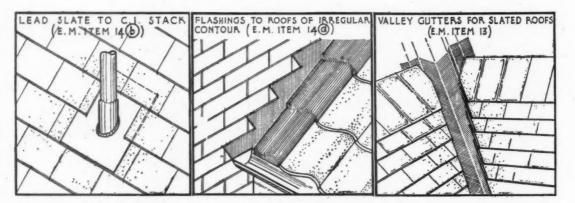
and at

14 GREAT PETER STREET, WESTMINSTER, S.W.I Tel: Abbey 1575

xxvii

# LEAD Sheet and Pipe

may be used for building purposes but, for the time being the available supplies will not be sufficient to allow its unrestricted use. An Economy Memorandum has accordingly been issued by the Ministry of Health, which is designed to make lead sheet and pipe available for some vital minimum uses in each house. These uses are summarised in a leaflet "Vital Minimum Uses of Lead Sheet and Pipe in House Building", copies of which may be obtained from L.I.D.C. The examples below are extracted from the leaflet.



#### LEAD SLATES

The weathering apron with an upstand that fits over any pipe ventilator, cowl or ducting that penetrates a pitched roof is an item in house construction based primarily on the manner in which sheet lead can be manipulated to difficult shapes. Whilst the original method of forming lead slates by working up a flat sheet may be superseded by the method of forming by lead burning two prepared pieces, upstand and apron, the general properties of sheet lead remain to ensure that a sound weathering is obtained to a difficult roof intersection. The substance of lead for this purpose should not exceed 4 lbs. (See Item<sup>S</sup> 14(b) and (c) of E.M.).

### SPECIAL FLASHINGS

The ease with which sheet lead can be worked to roof materials of irregular contour makes its use essential for flashings to pantiles, moulded tiles, corrugated asbestos cement and similar materials. The use of a substance of sheet lead not exceeding 4 lbs. per sq. ft. is permitted for this purpose. (See Item 14(d) of E.M.). For side and bottom flashings to patent glazing in pitched roofs sheet lead is also of particular value. The use of sheet lead of substance not exceeding 3 lbs. per sq. ft. is permitted. (See Item 14(e) of E.M.)

### VALLEY GUTTERS

Whilst the available supplies of lead sheet are not sufficient to permit its use for valley gutters generally, it may be used for sloping valley gutters in slated or interlocking tile roofs or for horizontal gutters where alternatives are not practicable. (See Item 13 of E.M.)

h

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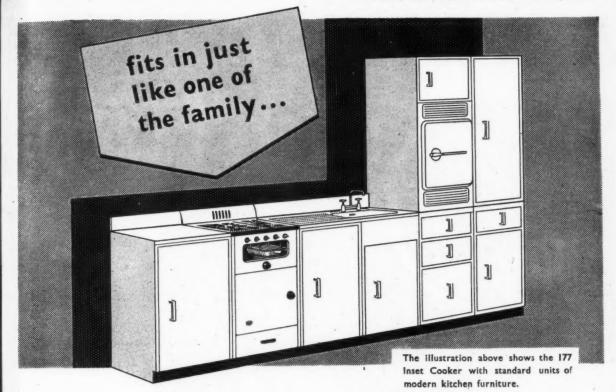
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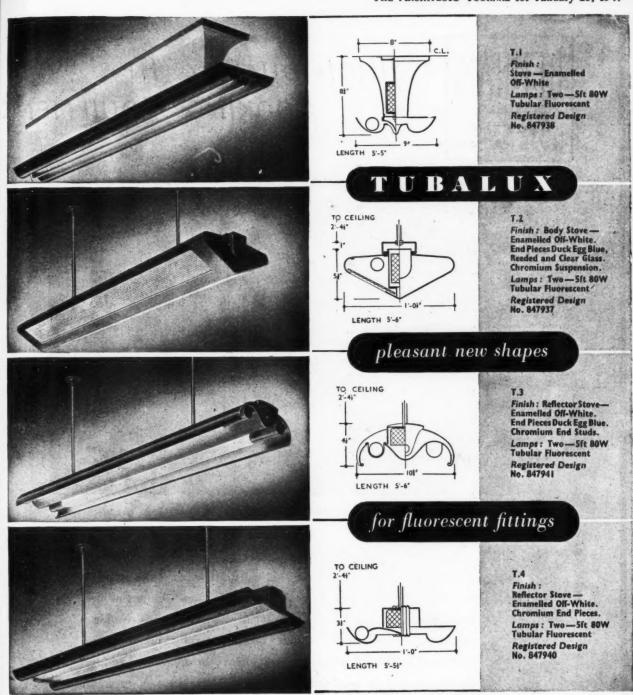
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NEW

In common with every other periodical this JOURNAL is rationed to a small part of its prewar needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order." Subscription rates : by post in the



U.K. or abroad, £1 15s. 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 15s. each; carriage 1s. extra. Goods advertised in the JOURNAL and made of raw material now in short supply, are not necessarily available for export.

#### DIARY FOR JANUARY FEBRUARY AND MARCH

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

GLASGOW. A. N. Allcock. Develop-ment of Refrigeration. At the Insti-tution of Engineers and Shipbuilders in Scotland, 39, Elmbank Crescent, Glasgow, C.2. 7.30 p.m. (Sponsor, IHVE, Scottish Benech) Branch.) **JAN. 28** 

LONDON. Exhibition of the King's Pic-tures. At the Royal Academy, Picca-dilly, W. About 500 paintings in the Royal Collection, selected from all the Palaces in which the collection is permanently kept. Includes a large number of works not nor-mally accessible to the public. Weredays maily accessible to the public. Weekdays, 10 a.m. to 7 p.m. Sundays, 2 p.m. to 7 p.m. Admission 1s. 6d. Until MAR. 16 British Legion Exhibition. At Central

Hall, Westminster, S.W.1. 10 a.m. till 10 (Sponsor, BL.) Until JAN. 26 p.m.

National Federation of Building Trades Employers Annual Dinner and Dance. At the Dorchester Hotel, Park Lane, W.1. (Sponsor, NFBTE.) 6.45 p.m. JAN. 29 Society of Women Artists. 86th Exhibition of Pictures, Sculpture and Crafts. At Guild-hall, E.C.2. 10 a.m. to 5 p.m., except Satur-days. (Sponsor, Society of Women Artists.) UNTIL JAN. 29

Paintings by British Soldiers in Germany. Exhibition at Heal's 195, Tottenham Court Road, W.C. (Sponsor, National Council of YMCAs.) 10 a.m. to 5.30 p.m. Until JAN. 31

Gas in the Design for Living. Exhibition at the Building Centre, 9, Conduit Street, W.I. Weekdays, 10 a.m to 5 p.m. Saturdays, 10 a.m. to 1 p.m. (Sponsor, British Gas Council.) Until JAN. 31 Ethiopian Exhibition of Arts, Crafts, In-dustry and Education. At Foyles Bookshop, 111, Charing Cross Road, W.C.2. 9 a.m. to 6 p.m. (Sponsor, Princess Tsahai Memorial Hoenial Council) Hospital Council.) Until FEB. 4

E. H. Nevard. The Stress Grading of Timber and Its Influence on Structural Design. At the Institution of Structural Engineers, 11, Upper Belgrave Street, S.W.1. Super Structural JAN. 23 John Gloag. Industrial Design. At the Planning Centre, 28, King Street, Covent Garden, W.C.2. Buffet lunch, 12.45 p.m. Talk, 1.15 p.m. (Sponsor, TCPA.) JAN. 23

Talk, 1.15 p.m. (Sponsor, 1971) E. Maxwell Fry. Modern Architecture. At the International Arts Centre, 3, Orme Square, Bayswater Road, W.2. (Sponsor, IAC.) 8 p.m. JAN. 24 Stanley Mayne, of the Ministry of Health.

The Government's Housing Programme. At the Housing Centre, 13, Suffolk Street, S.W.1. 1.15 p.m. (Sponsors, HC.) JAN. 28

Professor W. G. Holford. New Towns. At the RIBA, 66, Portland Place, W.1. 6 p.m. (Sponsor, RIBA.) JAN. 28 S. Payton. Electrical Work as Applied to Heating and Ventilation. At the Junior In-stitution of Engineers, 39, Victoria Street, S.W.1. 6 p.m. (Sponsor, IHVE, London and District Associate Members and Graduates Section.) **JAN. 28** 

Howard Robertson. Design of Interiors. At the AA, 34-36, Bedford Square, W.C.1. (Sponsor, AA.) 6 p.m. JAN. 29

Walter C. Puckey, Director and Manager, Messrs. Hoover, Ltd. The Scientific Approach to Labour Problems. At the Royal Society of Arts, 6-8, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA.) 6-8, John RSA., (Sponsor, RSA., JAN. 29 5 p.m.

G. Grenfell Baines and Raglan Squire. Partnership and Profit Sharing. Third of the informal lectures on Office Organization. At the RIBA, 66, Portland Place, W.I. Chairman, H. V. Lobb. Grenfell Baines will deal with working relationships in the profession and will discuss the question of rewards, recognition, and the opportunities and responsibilities which arise from certain types of group sharing. He will also give brief account of the measures adopted for carrying out the aims and ideals of his organization. Raglan Squire will talk about the relationship of partners and asso-ciate architects in a firm. and of the ad-vantages and disadvantages to be derived from abbreviated names for architectural firms. He will also deal with the question of the distribution of profits and staff wel-fare as well as with the relation which exists between clients and members of the staff. Light refreshments will be available at a small charge from 6.0-6.30 p.m. for those coming direct from their offices. Lecture, 6.30 p.m. (Sponsor, RIBA.) FEB. 4

AA Exhibition of Photographs by Mem-bers. At the AA, 34-36, Bedford Square, W.C.1. As far as possible photographs should be mounted on white cards 16 inches high, and title, name, make of camera, etc., should be printed on the front of the mount in the bottom right-hand corner. Photo-graphs should be delivered to No. 36, Bed-ford Square not later than February 20. (Sponsor, AA.) FEB. 26

Brixton School of Building Association Re-union. Reception and dance at the Bedford Hotel, Balham, S.W. Past students, from all sections of the School, cordially welcomed. Tickets, price 5s. (including buffet), obtainable before March 1 from the Hon. General Secretary, Brixton School of Building, Ferndale Road, S.W.4. MAR. 8

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

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

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

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

The RIBA Council has appointed a special Sub-Committee to submit proposals for a MEMORIAL RIBA MEMBERS and Stu T0**MEMBERS** and Students who lost their lives in the war. Cadbury Brown, A.R.I.B.A., R. Gordon Brown, A.R.I.B.A., and G. Grey Wornum, F.R.I.B.A. It is proposed to include the names of civilian members and students who lost their lives as a result of enemy action as well as those serving in the armed forces. To ansure that the records are as forces. To ensure that the records are as complete as possible, members are asked to send the Secretary, RIBA, details of any members or students whose names should be included, particularly of those whose names have not already appeared in the lists published from time to time in the Journal.

On December 20 the Czech architect JOSEF POLASEK, a member of CIAM, died at Brno aged 47. Josef Polásek distinguished himself in the development of housing and the con-struction of school buildings. The Czechoslovak group of CIAM was represented at his burial by the delegate of CIRPAC, Bohuslav Fuchs, Fr. Kalivoda and Jan Vísek.

## IDEAS IN STORE DESIGN

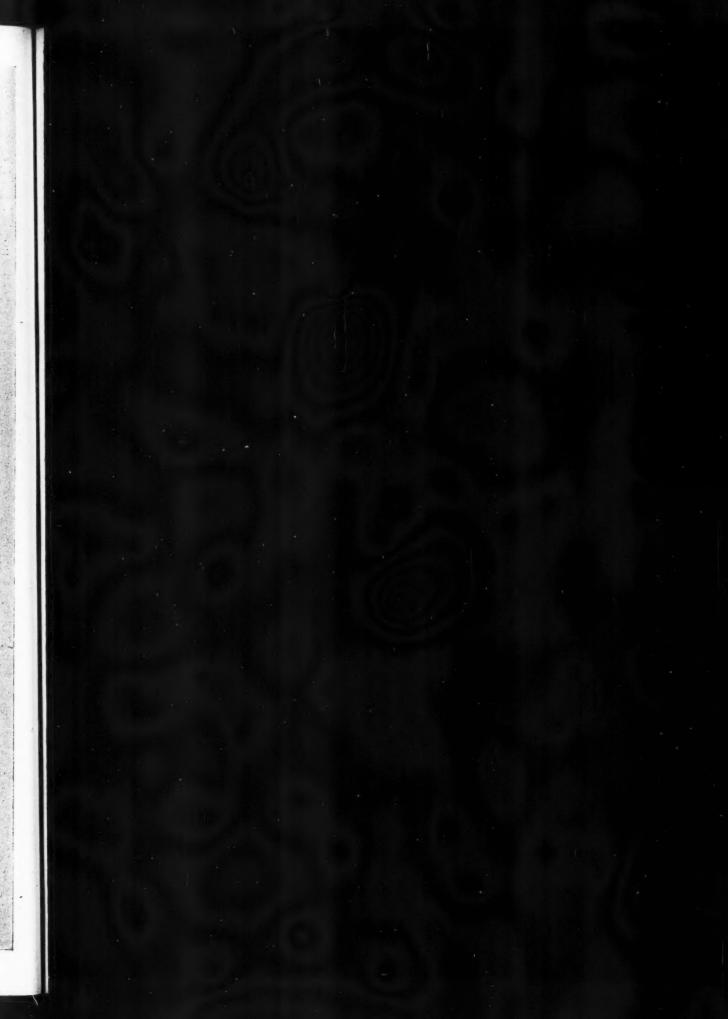
Everything new must be different.: but just as our greatest artists have based

their new conceptions on old themes so do George Parnall craftsmen base their

designs for the Stores of tomorrow on well tried experience.

GEORGE PARNALL

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#### From AN ARCHITECT'S Commonplace Book

MODERN DESIGN AS PROPAGANDA FOR PLENTY. [From The Castles on the Ground, by J. M. Richards (Architectural Press).] The complaint is often made that the man in the street is apathetic about plaining and design. Perhaps this is partly the caution of conservatism; he feels he cannot be sure whether what planning offers him has enough in common with what he likes about the unplanned world he knows. But evidence shows that he will accept what is generally meant by good design quickly enough when it is identified—as once it used to be—with the things he requires the physical world to provide for him. As things are, he is following sound instincts in refusing to welcome modern design in all its purity and discipline. If he did so he would be entering a fool's paradise, since he would only find himself enjoying the shadow of the modern world without its substance—the substance being, of course, its economic benefits. All agree on the need for a new vernacular, but the best means of bringing architecture back to serving popular needs are not necessarily architectural means. All this may seem to be leading to the somewhat defeatist suggestion that we can do nothing but wallow in architectural anarchy until the economic benefits of the modern world have been extended to all its inhabitants, freeing them from the need of the protective embrace of a familiar environment and enabling them to welcome a new age unreservedly, together with all the arts that belong to it. But the issue is not as simple as that. In the contemporary world generally, architecture has its place as one of the weapons of progress. . . architecture can itself fulfil the purpose of advertising the potential of the modern world. It can show people what science ought to be able to do for them. . .

Chief Architect to the GWR MR. BRIAN B. LEWIS HAS RE-SIGNED IN ORDER TO PRO-CEED TO AUSTRALIA to take up the newly established Chair of Architecture at Melbourne University.

Mr. Aneurin Bevan : I LIVED IN A THATCHED COTTAGE for more than ten years and know what an agreeable experience it is. This remark was made by Mr. Aneurin Bevan, the Minister of Health, when he opened the exhibition of rural building materials at the Building Centre. He said he felt that he was in a rather complex situation because he was compelled by the necessities of the housing position to try to persuade all kinds of new buildings into existence, including pre-fabricated forms of construction which many architects shuddered at, and at the same time he had a very deep a, and at the same time he had a very deep hove for the older building materials. They must try to solve the housing problem quantitatively, and in five or ten years' time not be ashamed of what they had done. At the moment the Government and all At the moment the Government and all those responsible for housing the people of Great Britain were being judged by the number of houses they were putting up, but in five or ten years' time they would be judged by the kind of houses they had erected and the sort of achitectural com-positions they had been able to achieve. Those responsible for the exhibition were trying to preserve and defend the old build-ing crafts and he wished every success to them. He had lived in a thatched cottage for more than ten years and he knew what for more than ten years and he knew what an agreeable experience it was. Thatch formed an excellent building material in both summer and winter. It was, he con-tinued, impossible to solve the housing problem, particularly in rural areas, by using only traditional building materials and by putting up only traditional forms of buildings. New forms had to be employed, in some instances pre-cast concrete and also brick buildings. Where they had to use a brick which was not so kind as it might be to its surroundings they must endeavour to its surroundings they must endeavour to use one which would take colour-wash easily. In this country we had been rather frightened to use colour-wash and it would have to be splashed about a bit more.

Where they had to put up buildings in the countryside which were not traditional it might be that they could be separated from the older types of buildings to prevent the new and old from clashing with one another very badly. They were faced with a trial of their ingenuity to endeavour, if they could, to solve the housing problem without mutilating the beauties of the countryside. He commended the Ministry of Labour apprenticeship scheme which, he said, sought to preserve the arts of the thatcher, and he would do all in his power to assist it. Sir Charles Reilly said he felt that Mr. Bevan was on the side of the architects in what he was doing to preserve amenities which before the war were often spoiled by speculative building.

Strong representations have been received by the Board of Trade that the maximum PRICES FOR STANDING TIMBER which were fixed by the Order at the outbreak of war and have not been changed since should be increased to cover increased costs of maintenance and replanting. The Board of Trade now announces that after full consideration of these representations it has made an Order which will provide increased maximum prices for standing tim-ber. The Order came into force on January 2, and provides for an increase of 25 per 2, and provides for an increase of 25 per cent, in the maximum prices of growing trees sold for felling and appropriate higher maximum prices for home grown timber in the log. The need for home grown timber of all kinds is still great; over half the available supplies of hardwoods are home produced. The adjustments corresponding to the increased maximum prices of growing trees will be incorporated in revised maximum prices of home grown mining timber and home grown converted timber. It is expected that these will be published and brought into force within the next month.



Protests, including one from Sir Alfred Munnings, President of the Royal Academy, are being made in The Times against the proposal of the Tendring Hundred Waterworks Company to build a pumping station at Dedham. A Bill to carry out the scheme is to be presented in Parliament. The site, a meadow (seen in the left of the photograph), was acquired as long ago as 1912. Dedham is famous through the genius of John Constable, whose Dedham Vale was purchased by Edinburgh for £20,000. The threatened meadow lies just out of reach of the long protecting shadow of the Church tower. Photo, The Times.



## One Way

In this week's issue is reviewed the News Chronicle's traffic scheme for London's West End prepared by Mr. Edward Antrobus, a taxidriver. London's traffic congestion becomes daily more critical, and such practical schemes as this which offer immediate relief deserve serious consideration. The Antrobus plan is a comprehensive oneway scheme. It includes Lower Regent Street (a photo of which appears above), where one-way traffic already operates, but only as part of London's present piecemeal and inadequate traffic system.

#### During the next five years the Manchester City Council contemplates the erection of MORE THAN A THOUSAND DWELLINGS FOR OLD PEOPLE—The Town Clerk. Mr. Philip B. Dingle, the Town Clerk of Manchester, in a letter to The Times on Housing for the Aged, states: In 1927 the City Council decided that municipal housing schemes should include accommo-dation for elderly people. This decision re-sulted in the erection of 1,028 new dwellings for old people during the period between 1928 and the outbreak of war in 1939; this figure represents 4 per cent. of all dwellings rected by the corporation during that period. The types of dwellings erected differed so as to meet the varying needs of old people, and 70 dwellings were of the cottage-colony type incorporating common rooms and reading and recreation rooms; 804 were cottage dwellings, and the remaining 154 were self-contained flats. When, last year, the City Council formulated their decided to allocate 5 per cent. of the total number of dwellings included in the programme for the exclusive use of elderly people; the five-year programme contem-plates the completion of 25,000 houses by 1951 and therefore during the next five years provision will be made for the erection of 1,250 dwellings for old people. Already, as part of the programme, plans have been prepared for two blocks of flats for elderly people on the city's estate at Wythenshawe, and both these schemes will comprise the cottage-colony type of dwellings and include provision for communal, social, and recre-ational facilities. These flats will provide accommodation for 61 elderly couples and, subject to Ministerial consent, the scheme will be started at an early date; other schemes under the programme will proceed as soon as circumstances permit. In addition to dwellings specifically designed for old people, the City Council have always pro-vided small-sized dwellings in such numbers as experience has proved appropriate to the needs of the city. The dwellings contemplated under the five-year programme will meet all the known needs of the city on the basis of the information in the possession of the council, but in association with the Manchester and Salford Council of Social Service the City Council are at present undertaking a survey in an endeavour to obtain the most accurate indication possible about the nature and extent of the problem in Manchester. When the results of the survey are known the council will be in a position to consider whether the provision they have made requires to be supplemented.

The Secretary of State for the Colonies has appointed Mr. Graham Dawbarn ARCHITECT OF THE UNIVERSITY COLLEGE OF THE BRITISH WEST INDIES.

Ministry of Works: The prices of ASBESTOS CEMENT products have been reduced by 2<sup>1</sup>/<sub>2</sub> per cent. under the industry's voluntary price control agreement with the Ministry of Works. The agreement does not apply to fixing accessories or applied work.

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## THE NEW PLANNING BILL

A<sup>T</sup> long last, and in terms which are as uncompromising as they are indefinite, the Government's proposals to meet the twin planning problems of compensation and betterment have been published.\* We say indefinite, because the landowner still does not know where he stands ; he will receive no compensation, strictly speaking, although Parliament is asked to agree to a charge of £300 million to meet cases of hardship where land is depreciated in value because of the provisions of the Bill ; nor does he know what betterment tax he will have to pay when the authorities allow him to sell one of his fields for housing or turn a terrace into a row of shops. But from the point of view of the planning authorities themselves this Bill is literally the Green Light that will set them moving.

Two quite startling simplifications are proposed : first, that the only planning authorities should be County Councils and County Boroughs (or Joint Boards), thus cutting down the number of authorities to almost a tenth of their previous total; secondly, that positive development plans, of quite a different type to the former Statutory Schemes, shall be submitted to the Minister within three years, and shall subsequently be reviewed and brought up to date every five years. These development plans are to be of a kind that the public can understand and examine ; and a public enquiry will be held on each one. They will not only include maps of present and proposed land-use, the traffic improvements and open spaces suggested, and the layout and siting of public works; but they must designate land subject to compulsory purchase on behalf of Government Departments, public utilities, or the local authority itself, and also that required for reconstruction after war-damage or decay.

These powers are enormous. They completely change the scope of town planning, which used to be based on a system of holding the balance between the interests of different owners; planning becomes the direct responsibility of the authorities to administer in the public interest at their discretion and that of the Minister. They can purchase for almost any reasonable purpose, they exercise an absolute control over development as no one can change the use of his land-except in the narrowest of limits-without permission, and they are free from the fear of having to fall back on secondrate or compromise solutions to their planning problems because of the threat of compensation. Could they ask for more? The only two serious weaknesses that may be revealed in their position are constant dependence on the decisions of the Minister and the Central Land Board which acts on his behalf, and lack of technical staff to carry out the real business of planning. A courageous and well-informed staff will relieve any authority of serious interference by the Minister, since he and his advisers cannot possibly supervise local planning in detail, and will be only too ready to give a

<sup>\*</sup> For synopsis of Bill, see p. 103

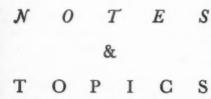
competent body its head. So, when the shouting dies down, and the Bill—or something very like it—becomes law, its success will in the end rest on the shoulders of the architects, engineers, estate managers and administrative officers of the larger local authorities.

The future of national planning under this Bill is more doubtful. In theory the Minister stitches together the large patches of his quilt, trims the edges, co-ordinates their design and adds certain decorations of his own in the form of National Parks, coastal preservation, the maintenance of old buildings and fine trees, the founding of New Towns and the planned expansion of old ones. All this should make a really national plan, a framework within which the constituent sections can pursue or amend their local policies, and which represents the physical form taken by a changing national economy. But before it can achieve this result in practice more will have to be said in Parliament about the relation of the decisions of the Minister of Town and Country Planning to those of other Government departments.

While we watch the progress of the Bill, we can at least admire it for being comprehensive, imaginative and intelligible.







HOARDING NOSTALGIA

Amidst all its urban squalor, *laisser-faire* industrialism has produced a great deal of incidental beauty that can be discovered by those who look for it—the kind, for instance, that T. S. Eliot found in London and James Joyce in Dublin; the kind that the Sharawags find in all sorts of peculiar places where accident produces a picture.

All this cold and logical tidying-up process that is beginning, laudable as it is in most ways, may lose us some things which we are only just beginning to appreciate. For example, who would not regret to some extent the dowsing of the Piccadilly lights? And there are even some who would miss such London pictures as that reproduced on the facing page.

A puritan has remarked about it: "Look what has been allowed to happen to these pleasant little terrace houses when the advertising boys get at them. These are not derelict houses; they are all occupied. Imagine the effect on the inhabitants, especially the children. It is difficult to conceive a greater disregard for seemliness, order and social duty."

Of course, he is right in one way, but if your social conscience does not prick you too much and if you do not allow your eyes to stick too long to Watneys, or gaze too fervently into the soul of the Craven A girl, you must allow that there *is* a kind of colourful beauty and accidental pattern in the scene as a whole.

Don't misunderstand me. One can only hope that the minor but important part of the Town and Country Planning Bill dealing with the control of outdoor advertising will become law if only because it may spare us the terror of those women with whips. But a little colour and some subtle visual pleasures may also depart from our streets.

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#### COVENTRY CATHEDRAL

The Royal Fine Art Commission has decided wisely in finding unacceptable the hybrid solution for the rebuilding of Coventry Cathedral. The abandonment of the present proposals marks the end of the second stage of the metamorphosis. The first was the thoroughgoing mediæval pastiche inside and out, the second, now ended. was a scheme retaining a Gothic exterior and a modernised interior. The way is now open for a scheme in harmony with contemporary architectural development and contemporary religious aspirations. All parties to the discussion seem to have conducted themselves with admirable dignity and restraint, and we are to be spared the spectacle of a public row.

The Commission appointed by the Cathedral Council has a difficult task and much will depend on the architect member still to be appointed. He will indeed have to be wise as a serpent if the future designer of the new cathedral is not to be persecuted as Sir Giles has apparently been by "societies, committees, commissions, etc."

#### HOUSING RESEARCH

The joint BRS-IAAS research exhibition held last week at Caxton House can fairly be described as informative without being spectacular. Most of the recommendations are by now familiar enough to architects, but it was interesting to see the actual test rigs used to assess the efficiency of gas cookers and fires, and the awful warnings of what will almost certainly happen if elementary precautions are neglected. I understand that this exhibition is to tour various provincial centres during the next few months. I would suggest that it also might well be a permanent Caxton House feature, so that newlyweds might be led gently by the Registrar and shown how their new house ought to be built, even if they are going to spend the next year or two with in-laws.

#### HELPING THE GERMANS

"One German professor at the Hanover Technical Hochschule said to me

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wistfully, 'If only we could have just one copy, even an old copy, of the Architectural Review." A flattering tribute this from Mr. Aubrey Douglas-Smith in a recent Home Service talk on German Universities in the British Zone, where students are suffering "a fantastic shortage of books and technical and academic journals."

I hear that as soon as the identity of the Hanoverian professor has been discovered, he will receive a free copy of the Review from the publishers each month. This is at least a gesture, and useful work of this kind in helping our late enemies to help themselves could undoubtedly be done if individuals in this country were to forward old copies of technical and cultural journals to Germany. And if anyone feels benevolent enough he can subscribe to technical papers here to be sent to people he knows in Germany, for the sending of journals abroad is officially encouraged by the granting of extra paper above the normal ration for internal use. I suspect that this is less the result of magnanimity than of the desire to stimulate export trade by circulating abroad any British journal advertising British goods.

Though a lot can be done by individual effort, helping Germans in this way should be organized. Indeed, a body has already been formed for the purpose called the Agency for Intellectual Relief in Germany [temporary Worth Priory, Crawley, address : Surrey]. This body has the support of some important Church dignitaries, literary figures, and others. If they can effectively spread technical information and liberal ideas in the German wasteland, they will be doing a valuable service and deserve general support.

#### A SENSIBLE MAP

Planners, architects, local government experts, might well spend some time in studying the boundaries of the fourteen new areas for electricity supply, to be found in the White Paper published with the new Electricity Bill. At the moment Britain is a mass of areas, regions, and what-have-yous. Hardly two Government Departments, hardly two branches of the same Department, dream of dividing Britain up in the same way. But a good deal of thought has gone into the Electricity Bill. Its practical proposals, so even some unsocialists say, are sane and workable. And more and more Britain will be tied together on a framework based on the grid. If ever we are regionalised, if ever local government is re-cast, the electricity map might well form a prototype for all subsequent maps.

#### FROM THE POSTBAG

"Dear Astragal, - The expressive composition in honour of Mr. Churchill, illustrated in your notes of January 2, appears to lack one small detail. Should not the bulldogs be provided with small cigars-or would American cigarettes be more appropriate?-Yours truly, Peter H. F. Stiles."

#### ASTRAGAL

A London scene on which Astragal comments on the facing page. (Photograph by Arthur Ling.)



## LETTERS

#### John Gloag

A. B. Knapp-Fisher, (Chairman, RIBA Board of Architectural Education).

W. R. S. Hodgson, Secretary and General Manager, Lead Industries Development Council).

#### E. W. Chandler

#### Dutch Architecture in the Fenland

SIR,—Astragal's references to Holland in England is particularly interesting; but Lincolnshire is not the only county influenced by Dutch taste in architecture. When the Fens were drained in the seven-teenth century, under the direction of Cornelius Vermuyden, many Dutch settlers were granted land in the new areas that had been reclaimed by the drainage schemes. In the district around Downham Market there are many buildings with Dutch charac-teristics, and even place names are affected. For example, a village not far from Wisbech is called Nordelf. In all sorts of out of the way places, even in a tiny village like Denver, near Downham, you come across cottages and small country houses that are wholly Dutch in character. London

#### JOHN GLOAG

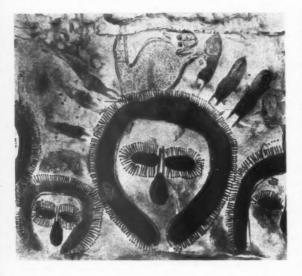
#### Architectural Education

SIR,-Mr. Alexander Aitman, in his letter

SIR,—Mr. Alexander Aitman, in his letter in your issue of January 9, makes a state-ment which should at once be corrected. In the first place, it is not the policy of the RIBA to discontinue the RIBA Ex-ternal Examinations. When the Report of the Special Committee on Architectural Education was published, there was pub-lished with it, a statement of the action taken by the Council on the various recom-mendations made by the Special Com-mittee. This statement was published in your issue for August 29, 1946. The open-ing paragraphs of the statement made it clear that the Council had not overlooked methods of training alternatives to that offered by the Recognised Schools of Archi-tecture. In fact, the Council decided, on the recommendation of the Board of Architectural Education, to take steps to intensify the RIBA collaboration with those schools which provide, by means of even-ing or part-time courses, facilities for

### PRIMITIVE ROCK PAINTINGS COME TO LONDON





Last week at Australia House an exhibition opened to the public of reproductions of aboriginal rock-paintings from rock-shelters in the Kimberley district of north-western Australia. The copies were made in 1938 and 1939 by members of the Frobenius Institute in Frankfurt and have been lent by the Germans and Americans.

The originals of these paintings are used in ritual today and, though frequently repainted, are believed by the aborigines to have been produced in the dim past by the mouthless, haloed, ancestral wond'ina; the mythical heroes symbolic of creative power, who threw the images of their shadows upon the rock before sinking underground. Top and left, wond'ina figures and other totemistic and mythical symbols. Right, an example of another kind of Australian primitive art also to be seen at Australia House—a pre-historic rock painting, having no meaning to the present-day aborigines.



those who wish to take the RIBA Examin-ations externally. This is not the introduc-tion of a new policy, for it has always been the RIBA policy to assist by all avail-able means the institutions providing tuition for those who cannot attend courses of study recognised for exemption from the RIBA Examinations.

In regard to the number of schools, with-out agreeing with Mr. Aitman, I can how-ever say that this matter is having the atten-tion of the Board at this moment.

A. B. KNAPP-FISHER, Chairman, RIBA Board of Architectural Education

#### Housing Statistics

HOUSING STATISTICS SIR.—In the article by Mr. Ian Bowen, published in your JOURNAL for December 12, it is contended that the availability of vari-ous products used in the building industry, including lead, is handicapped by an in-adequate labour supply. There is also a graph which purports to show that the aver-age weekly production of lead pipes in Sep-tember, 1946, was of the order of 9,000 tons. Lest many of your lead-hungry readers should wonder why they are not able to get all the supplies they require, perhaps you

would be good enough to correct these two statements, as it appears that your contri-butor must have been misinformed. The shortage of lead products for building

is not due to a shortage of labour, but is is not due to a shortage of labour, but is due to a shortage of supplies of pig lead released to the manufacturers. The figure of 9,000 tons of lead pipes per week is something like six times the best pre-war rate of production; the present rate of output is more nearly a tenth of your contributor's estimate.

W. R. S. HODGSON, Secretary and General Manager, Lead Industries Development Council

Mr. Ian Bowen replies: (1) There was no suggestion in the article of December 12 that the lead industry was handicapped by a shortage of labour. I would still maintain shortage of labour. I would still maintain that, at that date, "20,000 more men in the materials industries would be worth 100,000 in building itself" (which are the words to which objection seems to be taken). But how any inflow of labour should be allonow any innow of labour should be allo-cated between the different materials indus-tries, it is impossible to guess in the absence of published figures, industry by industry, of employment and of labour requirements. (2) The 9,000 tons was ten times too much, as your correspondent observes. I can only apologise for the extra "0" on the graph

scale, due to there being less than the usual time for checking this pre-Christmas article.

#### Registration

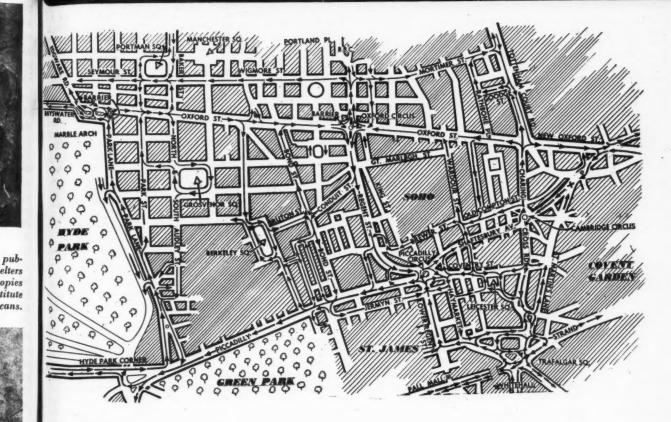
**SIR**,—Although I have considerable sym-pathy with the position of Messrs. Smith, Lloyd, and Myers, I have much less for their attitude, which appears to be based on a misconception. Registration is not a reward for patriotic virtue, but the guarate-tee of a minimum of professional compet-ence. To allow indiscriminate registration whenever some such circumstances as the present arise, would be to defer indefinitely present arise, would be to defer indefinitely the happy day envisaged by the Act, when the word architect really will mean something.

Although the experience of a Major R.E. is no doubt valuable in some directions, it is questionable whether he is thereby neces-sarily fitted to become an architect. If he safily fitted to become an architect. If he is, it should be a very quick and easy matter to pass the qualifying examination. Port-land Place last week, was crowded with some three hundred candidates, the majority of whom had found themselves in the posi-tion of your correspondences but who had tion of your correspondents, but who had got down to the job of remedying the effects of six architecturally wasted years as cheerfully as possible.

Folkestone

E. W. CHANDLER

### PHYSICAL PLANNING SUPPLEMENT





The West End is the core of London's traffic tangle. Pending the realization of a bold and comprehensive long-term plan, the immediate implementation of some short-term ameliorative plan which will untie this tangle becomes daily more imperative. The News Chronicle is therefore to be congratulated on putting forward a practical proposal of its own. The author of the plan, which is reproduced above, is Mr. Edward Antrobus, a London taxi-driver. The plan aims to eliminate as far as possible all traffic blocks and involuntary halts. It is based on a one-way system of traffic flow which it is believed would reduce the time to make a journey through the West End to an average of between one fifth and one tenth of the time now necessary. Each of the main one-way routes would have one or more relief streets for reverse traffic. Two bus stopping places on each of the main routes forming the four sides of the main "square" are provided for in the plan. Because we believe that it is an intelligent solution deserving serious consideration, we have asked a traffic specialist to review and comment on Mr. Antrobus's plan. He is Mr. R. B. Hounsfield, B.A., A.M.I.C.E., A.M.Inst.T., who was for ten years in the Traffic Engineering Section of the Ministry of Transport and is now acting on his own account as a Consulting Traffic Engineer. Left, Mr. Antrobus.

## A TAXIMAN'S SOLUTION OF LONDON'S TRAFFIC PROBLEM THE NEWS CHRONICLE PLAN FOR THE WEST END

Traffic congestion in the West End of London to-day is too well-known to need a detailed description. Suffice it to say that London is one of the first cities in the country to return to traffic conditions comparable with those which existed before the war. The main through routes are already loaded to capacity and many drivers seek to avoid the worst centres of congestion by using devious routes so that narrow sidestreets at times become completely jammed.

Quite apart from any long-term proposals which might effect a permanent solution to this problem it is evident that, if this area of London is not to be brought to a complete standstill in the near future, a drastic revision of present-day methods of traffic control will have to be undertaken. Prominent among the immediate possibilities is an increase in the use of one-way streets.

A system on these lines has recently been evolved by Mr. Edward Antrobus, a London taxi-driver, and was described and illustrated in the News Chronicle on January 7. It consists of a vast roundabout comprising Piccadilly, Park Lane, Oxford Street and Regent Street; subsidiary one-way

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streets within this area and also beyond it together constitute a system stretching from Hyde Park to Bloomsbury and from Portman Square to the Nelson Column.

#### benefits and limitations of one-way streets

When faced with such a scheme as this, it is well to consider all aspects of the one-way system of traffic control.

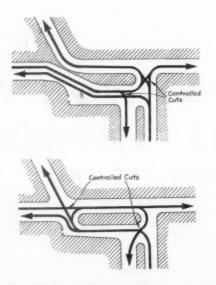
At the junctions of ordinary two-way streets which are heavily loaded with much turning traffic, the amount of time lost by each vehicle, both in waiting for other streams of traffic to cross or turn and in starting up in a queue of vehicles, becomes excessive and the capacity of the streets is severely reduced. Further, two-way traffic in a narrow street operating an unofficial "shuttle" system past a parked vehicle is very inconvenient. One-way traffic control has done much to ease these difficulties and its extension to large areas such as the West End of London is worthy of the most careful consideration. A scheme can undoubtedly be devised which will solve many difficulties—at least, in theory. A plan can be drawn on paper which provides for all possible journeys; it only remains for the harassed driver to follow them on the ground—if he can.

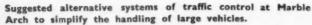
One-way streets have, up to the present, not been used to a greater extent owing to their many disadvantages. They make many local journeys much longer, and these may be numerous; they make it difficult to get to certain parts of some streets and, if traders are numerous, this may be detrimental to trade. As London is primarily a market, this latter consideration is an important one. Finally, one-way streets are notoriously confusing to strangers.

With all these disadvantages, it is clear that one-way streets should not be accepted lightly. At the same time, traffic conditions in the West End of London are rapidly reaching the stage where the advantages of extensive one-way streets may be regarded as outweighing the disadvantages—provided always that the details of the scheme are such that drivers, strangers and "regulars" alike, do not tie themselves in knots in going about their business.

#### comments on present proposals

If, as may well be the case, a system of the magnitude suggested by Mr. Antrobus has become imperative in spite of its disadvantages, then clearly the author has based his proposals on sound principles. He has evolved a main gyratory system for Regent Street, Piccadilly, Park Lane and Oxford Street as far as Oxford Circus; subsidiary gyratory systems, both internal and external, are "geared" to this like so many gear-wheels, and the





detours imposed on drivers making the various possible journeys have in many places been reduced to the minimum which the existing layout of the streets permits.

However, traffic wishing to travel eastwards from Hyde Park Corner must, according to this system, either go down to The Mall, up to Oxford Street, or find its own way through Mayfair. An authorised route via Mount Street, Bruton Street and Vigo Street suggests itself with a complementary one-way system from Davies Street to Park Street in Grosvenor Street "geared" to Mount Street, with a corresponding modification in Davies Street.

The one-way system in St. Martin's Place is unlikely to be successful, as the weaving lengths are too short; it is a warning that one-way working can at times be carried too far; the system on the north side of the Cavell Monument is liable to become an uncontrolled "cut," and it is often better, in such cases, for the "cut" to be a recognised one and be put where it can be controlled. Parliament Square provides an illustration of a controlled "cut" used in conjunction with a roundabout, and it is by no means the limiting factor in the capacity of that junction. At St. Martin's Place, it would seem preferable for the traffic from Charing Cross Road to Duncannon Street to keep to a straight course and for traffic from the south-west to St. Martin's Lane to do the same; the resultant "cut" could be easily controlled by signals; the street is narrow but there would be no turning traffic.

The two-way street on the west of Piccadilly Circus produces another uncontrolled "cut" on the north. If traffic from Lower Regent Street to Shaftesbury Avenue were routed east of Eros, the west side of the Circus would remain one-day (but southbound) and the "cut" would be where it could be controlled.

Another example of sharp turns and short weaving lengths is at Marble Arch. This could well become unworkable where large vehicles are concerned. Two alternatives, both easier for large vehicles, present themselves: one is a gyratory system as existing, but simplified by the one-way approaches with controlled "cuts" west and south-east of the arch; the other is a two-way street south of the arch with one-way working anti-clockwise east and north of it and a controlled "cut" for traffic from Bayswater to enter East Carriage Drive. (See diagrams.)

The barrier in Oxford Circus is unusual but quite practicable. A similar barrier would be needed in Bond Street.

A defect in the scheme is at Hay Hill, South of Berkeley Square. The street is narrow and the corners at both ends are sharp; right-turning vehicles, except taxis, often swing well into the middle of the road so that "cuts" or other conflicting movements are forced on to the traffic. Either traffic in Hay Hill should keep to the left or the system should be re-designed on a wider basis.

Vehicles turning from Bruton Street and Conduit Street into Bond Street might have to be released alternatively to control the "cuts" of turning vehicles in these narrow streets.

#### present and future needs

There is little doubt that something on the lines of Mr. Antrobus's proposals is the best that can be devised as a short-term measure.

However, it is well to ask how the sorry state of traffic congestion in Central London has come about. No major Central London street improvement has appeared since Kingsway was built; traffic has since increased enormously; no comprehensive traffic survey has been published; nothing but the most cursory examination of parking needs has been made—New York and Auckland, New Zealand, are far ahead of us here. To suggest that no solution will ever be found is a defeatest attitude. In other areas, traffic volumes have not increased *ad infinitum* just because the facilities are there.

The future traffic \*needs of London can be measured and allowed for no less accurately than any other commodity. London is a market, and the flow of traffic is its life-blood. A sane and reasoned approach to its long-term needs will pay ample dividends. possible e mini. its. de Park

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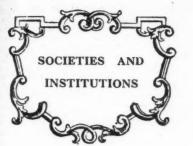
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Speeches and lectures delivered societies as well before as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economize space the bodies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

## MOTCP New Planning Bill

The following is a resumé issued by the Ministry of Town and Country Planning, of the new TOWN AND COUNTRY PLANNING BILL, 1947, shortly to come before Parliament. The full text of the Bill can be obtained from H.M. Stationery Office, price 2s. 0d. (Explanatory Memorandum, 4d.) The Bill is discussed in this week's leading article on page 97.

(1) The Bill sets up a new planning system which for the first time makes practical such projects as: Reconstruction and redevelopment of our old towns; the preservation of Green Belts; the provision of open spaces in overcrowded areas; the allocation of land for new houses, factories, etc., in the right place, as exemplified in the Abercrombie Plans for London and similar plans for other cities. Such projects have been impossible in the past because of: (a) the inflated compensation payable to landowners by local authorities; (b) 'an excessively static and rigid planning system which laid undue emphasis on local at the expense of regional and national needs.

(2) The most onerous form of compensation was that payable to owners to preserve areas such as London's Green Belt, or the best agricultural land in any part of the country, from the ravages of uncontrolled development. In the past, local authorities have, in theory, been able to preserve land against building, but in practice could not possibly meet the cost of

compensation involved. Thus the intention of previous Town and Country Planning Acts was frustrated.

(3) The Bill substantially implements the recommendations of the Uthwatt Committee. It does not nationalise the land, but it deprives landowners of the right to build on their land unless the building is in accordance with proper planning requirements, and it creates a right to impose a development charge (*i.e.*, BEITERMENT) if permission to build is granted (thus depriving the landowner of future "unearned increment" in land values). The Government takes the view that owners who lose development value as a result of the passing of the Bill are not on that account entitled as of right to compensation. They recognise, however, that if no payments were made, hardship would be caused in many cases, and they have decided that a capital sum should be made available out of which payments may be made to landowners. The Bill fixes this sum at £300,000,000, to cover England, Wales and Scotland. The method of distribution will be decided later by the Treasury, subject to affirmative resolution of both Houses of Parliament.

(4) The Bill distinguishes two elements in the value of land: (a) Its value for the purpose for which it is being used, e.g., farmland, houses or shops. This is its "existing use" value. (b) Its value for a potentially more profitable use, e.g., development of farmland as a building estate, or replacement of houses by shops and cinemas. This is its " development "value. In a remote rural area the development value may be zero. If the land lies on the edge of a rapidly expanding town the development value may be high. Where building or rebuilding increases the value of land above its existing use value, betterment will be collected by the State instead of by the landowner, whose opportunity for profit was often created not by his own activities but by the growth of the community. For this purpose the Bill creates a Central Land Board which will replace landowners as the collectors of this increment in land value. The Bill, while depriving landowners of the development value of their land, leaves them with its existing use value. The farmer can go on farming land and the owner of a house and garden can go on living there. Neither is affected by the Bill. Both retain the value of their land for such a use.

(5) The position of the private land developer remains essentially unchanged, except that in future he will have to pay a proportion of the price of the land to the Central Land Board in the form of a development charge. The cost of the land to the developer will be much the same as before, though ont the one hand a landowner in a key position will not be able to hold him to ransom, and on the other, the developer will have to write two cheques where one would have done before. Private development will, as now, have to be in accordance with local and national planning requirements. If the developer is the landowner himself he will have to pay a development charge just as a third party would.

#### THE NEW PLANNING SYSTEM

(a) The Compensation and Betterment Problem having been disposed of, a positive system of planning is substituted for the negative and restrictive machinery of past Acts. Local planning authorities will have to submit development plans within three years. The Bill, unlike previous Acts, requires these plans to be reviewed at least every five years. They will thus be capable of continuous adaptation to changing conditions.

(b) County Councils are for the first time given direct planning functions, so that the

requirements of town and country will be co-ordinated over a wider area than in the past. County Councils and County Boroughs will prepare the plans, but local councils will have to be fully consulted; and the carrying out of the plan, including the putting up of buildings, whether by private or public enterprise, will remain their responsibility. Where regional planning needs overlap county boundaries, counties and county boroughs will be able to join together in joint planning boards. Co-ordination at national level will be the responsibility of the Minister.

(c) The Bill provides full powers for public purchase of land required for the carrying out of a plan and provides an Exchequer Grant to local authorites in respect of: (i) loss on redevelopment operations; (ii) compulsory purchase, where they reduce the value of the land they buy by putting it to a less profitable use; (iii) payments to a landowner if the value of his land is reduced below existing use value. All purchases of land for public use (whether by Government Departments, local authorities or statutory undertakings) will be at existing use value. The 1939 standard is retained. Powers already exercised by local authorities under the 1944 Act for dealing with blitzed areas are extended to any land wanted for development or redevelopment for a ten-year building programme, whether by public or private enterprise, which the plan will indicate. This programme of development will be extended when the plans are reviewed every five years or less, and can thus always be kept from five to ten years ahead.

(d) The Bill also provides powers: (i) to control outdoor advertisements. Regulations will be made to establish a national code of control for outdoor advertising; (ii) to ensure the preservation of trees in the interests of amenity and the preservation of historic buildings. The powers here will be on the same lines as those now existing.

#### RIBA

## Summerson

November 10, 1946, at 66, Portland Place, W.1. A paper read before the RIBA on HEAVENLY MANSIONS: AN INTERPRETATION OF GOTHIC ARCHITEC-TURE, by John N. Summerson, B.A.(ARCH.), F.S.A., A.R.I.B.A.

J. Summerson: One kind of play common to nearly every child is to get under a piece of furniture or some extemporised shelter of his own and to exclaim that he is in a "house." Freud showed, many years ago, that this kind of play is associated with an unconscious wish to return to the inactive security of the womb. I am rot, however, concerned with the psycho-analytic aspects of the matter except in so far as they show that this particular kind of play cannot be dismissed merely as mimicry of the widespread adult practice of living in houses. It is symbolism—of a fundamental kind, expressed in terms of play. It is a kind of symbolism which has a great deal to do with the æsthetics of architecture. At a later stage, the child's conduct of the game becomes more realistic; he constructs or uses doll's houses and insists on a strict analogy between his own practices and those

At a later stage, the child's conduct of the game becomes more realistic: he constructs or uses doll's houses and insists on a strict analogy between his own practices and those of adult life—the doll's house must be an epitome of an adult's home. But whether the child is playing under the table or handling a doll's house, his imagination is working in the same way. He is placing either himself or the doll (a projection of himself) in a sheltered setting. The pleasure he derives from it is a pleasure in the relationship between himself (or the doll) and the setting.

None of us ever entirely outgrows the love of the doll's house or, usually in a vicarious form, the love of squatting under the table. Camping and sailing are two adult forms of play closely analogous to the "my house" pretences of a child. In both, there is the fascination of the miniature shelter which excludes the elements by only a narrow margin and intensifies the sense of security in a hostile world. Less direct but even more common is the liking for models and houses in miniature.

But we must be careful to keep separate two different manifestations of this appeal. There is the "cosiness" of the little house; but also its ceremony. It is the "cosiness" which psychologists underline in their interpretation of its symbolism. But for us the ceremonial idea is more important-the idea of neatness and serenity within, contrasting with wildness and confusion without. The ceremony of the child's house, like its cosiness, is found again in adult play-that grave form of play which is intertwined with religious and social customs. The baldachino, the canopy over a throne, the catafalque over a tomb, the ceremonial shelter carried over a pope or bishop in a procession-these are not empirical devices to exclude dust or rain but vestiges of infantile regression such as we have just observed.

It is precisely this feeling for the ceremony of the little house which links all that I have been saying with the development of architecture. The Latin word for a building is aedes; the word for a little building is aedicula, and this word was applied classical times more particularly to little buildings whose function was symbolic— ceremonial. It was applied to a shrine placed at the far end, from the entrance, of a temple to receive the statue of a deitya sort of architectural canopy in the form of a rudimentary temple, complete with gable—or, to use the classical word—pediwas also used for the ment. It shrines again, miniature temples-in which the Lares or titular deities of a house or street were preserved.

I am not going to trace back the history of the aedicule, but I suspect it is practically as old as architecture itself, and as widespread. This miniature temple used for a ceremonial, symbolic purpose may even enshrine one of man's first purely architectural discoveries, a discovery reenacted by every child who establishes his momentary dominion under the table.

Now, the aedicule, from a remote period, has been used as a subjunctive means of architectural expression. That is to say, it has been used to harmonise architecture of strictly human scale with architecture of a diminutive scale, so that a building may at the same time serve the purposes of men and of a race of imaginary beings smaller than men. It has also been used to prehuman scale in a serve the building deliberately enlarged to express the superhuman character of a god. Perhaps this should be put another way: the aedicule has been enlarged to human scale and then beyond, to a heroic scale, losing its attribute of smallness and "cosiness" but retaining and affirming its attribute of ceremoniousness

So long as the aedicule is used as a setting for statues its use approximates to its original function as a shrine—a function which it preserved, as we shall see, right through the middle ages. But at some period—I cannot say when—its use was extended to give ceremonial importance to an opening—a door or a window. It then became virtually two-dimensional, a frame or portal, suggesting that the opening which it embraced was one of special significance.

This special significance, however, was in due course afforded to so many doors and windows that the aedicule became nothing more than a trite, easily overworked, deco rative feature. As such it re-emerges early in the Italian renaissance and as such it has been employed hundreds and thousands of times in this and every other country since the end of the sixteenth century. The Georgian door-case is an instance familiar to everybody, so familiar that it never occurs to us to consider such a thing as being anything so pompous as an aedicule or to connect it with that remote period of archior to tectural history when the miniature temple really possessed some emotional significance, still less to that remoter period when its use was reserved for the shrine of a deity.

Now, at this point I am going to introduce, quite abruptly, the thesis I wish to submit simply by asking you to compare two architectural compositions. One is a first-century wall-painting at Pompeii. The other is the south porch of Chartres Cathedral, built about A.D. 1250. You will notice that these two compositions, separated in time by more than a thousand years, have a very great deal in common. Both are divided into three bays. In both cases the divisions between the bays are open and extend upwards into aedicules, containing figures. In both, the main openings are crested with gables or pediments. In both, the supporting members are fantastically thin. In short, the porch at Chartres is, in principle, a loyal realisation of the Pompeian project.

Can there possibly be any historical threads? Or must we refer the resemblances to a basic psychology shared alike by the artists of Classical Pompeii, those of Medieval Chartres and the child under the table. I believe that there are historical threads; but I do not think that they could have spun their way through a thousand years of history but for the primitive and universal love of that kind of fantasy represented by the aedicule—the "little house." When the Chartres porches were built, Pompeii lay forgotten in its tomb of ashes—

form human conscience. Obviously no influences from Pompeii itself can ever have found their way into the medieval world. But the art of Pompeii was an art widespread in the Roman empire and it is only a freak of history which has made the buried city its most conspicuous exemplar.

city its most conspicuous exemplar. It has been satisfactorily shown, by Mâle, Lasteyrief and others, that the re-entry of figure-sculpture into architecture in the Romanesque churches of the eleventh century was conditioned by the sculptors' familiarity with metal-work, manuscripts and other objects of art: the technique of architectural sculpture, up to the Gothic revolution in the middle of the twelfth century shows clear evidence of such a derivation. But so far as I know, nobody has developed the corollary of this—namely, that the aedicular architecture of Romanesque churches may have been reinforced or given renewed vitality from the same source.

Romanesque architecture is composite; it is an aggregate rather than a synthesis. It preserves much that is Roman-the round arch, the barrel vault and, in some parts of France the principle of the pilaster and Corinthian-But to this is added someesque carving. thing—something which distinguishes this architecture as Romanesque. This is not simply a matter of ornament-of characteristic sculptures and mouldings. Nor is it a matter of structure, the empirical quest of a satisfactory vaulting system-this quest is in fact, curiously independent of stylistic de-It is more radical than all this; velopment. it is something resulting from a profound desire to escape from the remorseless discipline of gravity, a desire to dissolve the heavy prose of building into religious poetry; a desire to transform the heavy man-made temple into a multiple, imponderable pile of heavenly mansions.

Romanesque is puzzling, ambiguous, incomplete. The point of all its busy-ness

eludes one. Then, suddenly, the creation of Gothic explains everything. Some extraordinary men—some among Abbot Suger's masons at Saint Denis, some elsewhere—saw precisely how to arrive at a true synthesis of the warring elements in Romanesque. They were followed by others and within a hundred years the whole of the first and decisive chapter of Gothic had been written.

In Romanesque, the aedicular episodes are ornamental, merely ornamental-parasitic. But the creators of Gothic seized upon this incidental "Pompeian" idea and made it capital. In doing so they created, and at the same time solved, certain structural problems as well as other undefined problems of space and proportion. If we study Gothic in this light—as the evolution of an idea—we shall find that both the technical and the æsthetic aspects fall into place and become readily understandable from our twen.ieth century standpoint.

The pointed arch was, of course, structurally convenient; but this matter of convenience has been over-stressed. Gothic created and simultaneously solved its problems. The notion of the Gothic system solving the Romanesque problem is from the point of view of structure, unreal. We are told that the pointed arch rendered possible the high, brittle structures of the thirteenth century. But this is not strictly true; structures just as high and just as brittle could have been constructed on a round-arched system.

The pointed-arch system was, I believe, adopted for this reason; it had an air of fantasy—perhaps, dare one guess, of oriental fantasy—which went along with the realisation of the "Pompeian" idea.

Unrelated to the aedicular idea, Gothic mouldings can become meaningless; they do so where the idea is obscured by an excess of vanity on the part of the mason—as, for example, in the Angel Choir at Lincoln where the mouldings nearly defeat their own end.

It is during the first half of the thirteenth century that one of the major implications of the aedicular system is gradually unfolded The aedicule is, in essence, a shrine. The Gothic cathedral is, therefore, a multi-plication of shrines. These shrines—aedicules-are disposed in a series of orders, descending from the master-order which controls the bay-unit and the vault. The stature of the orders is diminished in the aisles, again in the clerestory and triforium and once again in the purely ornamental plane. It is here that it joins hands with the sculptor; these last aedicules are inhabited not by the human users of the cathedral but by supernatural beings carved in stone. Here, in fact, the aedicule returns to its proper scale and proper function—here it is once more the "little house." Indeed, it is perhaps more logical to regard the whole Cathedral as an ascent from this scale-the normal aedicular scale-than to regard the ornamental aedicule as a reduction from its grand relations who have grown big and been married to the structural carcase of the building.

Anyway, it is on the ornamental plane that the aedicule is employed for the identical purpose for which it is used in manuscripts, vories, enamels and reliefs, namely, to proa framework, a mise-en-scène, peraphical exposition. Already for iconographical exposition. in Romanesque buildings, this idea has been exploited, especially in west fronts (e.g., Angoulême) and portals. But in Romanesque work the sculpture is stylised and the aedicule is a dead form-or rather a chrysalis-form form whose potentialities are The Gothic artists brought to life hidden. not only the sculpture but likewise the aedicule itself. Hence, the porches of porches Chartres; hence also the great portals of Amiens, Bourges, Rheims and Laon. Has any Baroque or Rococo architecture ever set out to contradict the structural elements of a façade with such determined insolence?

This newly arranged Technical Section will now draw together in a comprehensive whole all the technical material in the Journal. It will cover Information Centre, Questions and Answers, Current Technique, The Industry, Prices, special technical articles and so on, and will, from time to time, contain editorial notes on technical trends and developments.

### **TECHNICAL SECTION**

The Architects' Journal

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#### CLASSIFICATION FOR INFORMATION CENTRE

1 SOCIOLOGY Human needs, family structure, population statistics, social relationships 2 PLANNING : GENERAL History and evolution, legislation, administration, survey technique, comprehensive publications 3 PLANNING : REGIONAL & NATIONAL Re-planning and new planning, surveys, planning schemes

- 4 PLANNING: URBAN & RURAL Re-planning and new planning, surveys, planning schemes, site planning, zoning 5 PLANNING : PUBLIC UTILITIES
- Transport, power, water supply, main drainage, retail and other distributive services
- 6 PLANNING : SOCIAL & RECREATIONAL Health, education and other community services, recreation, preservation of amenities
- 7 PRACTICE Professional practice, office management and organization, model making, draughtsmanship
- 8 SURVEYING & SPECIFICATION Land surveying, quantity surveying, estimating costs, specification notes
- 9 DESIGN: GENERAL Architectural design generally, design data, comprehensive publications
- 10 DESIGN : BUILDING TYPES Administrative, industrial, domestic, commercial . . . . .
- 11 MATERIALS : GENERAL Comprehensive publications, comparative data, legislation . . . . (This section includes products)
- 12 MATERIALS : METAL (Including products)
- 13 MATERIALS : TIMBER ding products)
- 14 MATERIALS : CONCRETE ding products and allied products)

15	MATERIALS : APPLIED FINISHES & TREATMENTS Paints, stains, plasters and renderings
16	MATERIALS : MISCELLANEOUS Glass, bitumen, plastics, fibreboards, plaster, stone
17	CONSTRUCTION : GENERAL Comprehensive publications, general data, legislation
18	CONSTRUCTION : THEORY Statics, principles of design, general design data
19	CONSTRUCTION : DETAILS
20	CONSTRUCTION : COMPLETE STRUCTURES Buildings, bridges, reservoirs
21	<b>CONSTRUCTION : MISCELLANEOUS</b> Demolition, shoring and underpinning, contractors' work
22	SOUND INSULATION & ACOUSTICS Physiological data, general design
23	HEATING & VENTILATION Physiological data, services, fittings and equipment
24	LIGHTING Physiological data, natural and artificial, fittings and equipment.
25	WATER SUPPLY & SANITATION Fittings and equipment, plumbing and water heating, drainage minor sewage disposal, hygiene
26	SERVICES & EQUIPMENT: MISCELLANEOUS Cooking, lifts, escalators, telephones
27	FURNITURE & FITTINGS Furniture, soft furnishings and fittings such as bolts, curtain rails.
28	MISCELLANEOUS Aesthetics, sculpture, painting and allied arts

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TECHNICAL SECTION

THE ARCHITECTS' JOURNAL for January 23, 1947

## **CURRENT MARKET PRICES OF MATERIALS**

BY DAVIS, BELFIELD AND EVEREST,

#### Chartered Quantity Surveyors.

Rates of Wages last rose on January 1, 1946, and are now as follows :--

LONDO	N DISTRICT						Cra	ftsmen.	Lab	ourers
V	Vithin 12 miles	radius					2s.	71d.	28.	1 <u>‡</u> d.
F	rom 12-15 "	92		• •			2s.	7d.	2s.	1d.
F	rom 12-15 "	99	••	••	••	•••	28.	7d.		ZS.

GRADE CLAS	SIFICA	TIONS					
	Α	A1	A <sup>2</sup>	A <sup>3</sup>	В	B1	B <sup>2</sup>
Craftsmen 2	2s. 6d.	2s. 5½d.	2s. 5d.	2s. 41d.	2s. 4d.	2s. 31d.	2s. 3d.
Labourers 2	s. 0d.	1s. 11 <sup>3</sup> / <sub>4</sub> d.	1s. 114d.	1s. 11d.	1s. 10 <sup>1</sup> / <sub>2</sub> d.	1s. 10d.	1s. 93d.

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.

Cements

#### CONCRETOR

† All delivered in paper bags (20 to the ton) free.
\* Paper bags or non-returnable jute sacks charged at 7/- extra per ton.

	6 Tons and over	In 80-ton freights F.A.S Safe Wharf In River Thames, London Area.
*Portland	per ton 55/-	52/-
•** 417 " Quick setting extra rapid bardening	per ton 76/6	
*Rapid hardening	per ton $61/-$	58/6
#Water renellant	per ton 86/6	
Atlas White (1 barrel 376 lb.)		per barrel — 6 ton upwards
*Colorcrete rapid hardening, b	uff and red per t	
*Colorcrete rapid hardening kl	haki per t	on 96/6
†Colorcrete	man Ann C	rom 176/6 to 400/6
†Snowcrete	per t	on 226/6
1	1-9	10-19 1 ton and
†Ciment Fondu, delivered	Central cwts	cwts. upwards
London area	per cwt. 16/8	15/- per ton 238/-

#### Aggregate and Sands (Full Loads)

2" Unscreened ballast #(Down) Washed,	crushe		l gra	hab	per yard cube	14/-
shingle		* * * * * * * * * * * * * * * * * * *	r Bre		per yard cube	14/-
" (Down) Ditto 2" Broken brick					per yard cube	15/-
	* *				per yard cube	14/6
f" Ditto					per yard cube	16/-
Washed pan breeze					per yard cube	9/6
	**	**			per yard cube	
ff" Sharp washed sand					per yard cube	15/7
White Silver Sand for	white	cemen	t (one	ton	lots) per yard	40/-

(For Sands for Bricklaying and Plastering see respective trades)

#### Pavings

Brick hardcore					per yard cube	6/6
Concrete ditto					per yard cube	
Clean furnace clinks					per yard cube	3/-
Coarse gravel for pe	ths				per yard cube	-
Fine ditto					per yard cube	-
Clean granite chipp					per ton	39/7
Ditto (in 5 ton los	ds) (Im	mediat	e delive	ery)	per ton	40/7

#### CONCRETOR—(continued)

	Pa	wings-	-continu	ued	
Red quarry tiles,					per yard super 9/9
Ditto	6" × 6" ×				per yard super 8/8
Buff ditto	6" × 6" ×	7"			per yard super10/11
Ditto	6" × 6" ×	§"			per yard super 9/9
Hard red paving	bricks, 2"	1			per 1,000 260/9
Ditto	14"				per 1,000 246/6
		Reinfo	rcement		

F.S.I., F.I.Art.

Home trade max f" diameter an							
or siding	ia upwara		 		ton £16	19	6
Extras for :				-			
Under #" to #" dia	meter		 	p	er ton	10/	-
Ditto 1 and over	I" diamet	OF	 	p	er ton	15/	-
1" and over 11" dia			 	p	er ton	20/	-
and over A" di	iameter		 	p	er ton	25/	_
fa" and over 3" di	iameter		 	p	er ton	30/	-
A" and over 1"			 	D	er ton	35/	-
l' diameter			 		er ton	40/	
Under #" to #"			 		er ton	60/	
Lengths over 40 f	t. to 45 ft.		 	p	er ton	10/	-
	t. to 50 ft.		 		er ton	15/	
	t. (as 50 ft				er ton	1/	

#### Sundries

Retarding	liquid, in 5-gallon drums (for exposing aggregate)		1	Ex Warehouse, Southwark Bridge.
Ditto	(for obtaining a bond) (for obtaining a bond) per gallon	23/- 14/41	}	Drums chargeable and credited, if returned.

#### BRICKLAYER

#### Common Bricks

#### .. per 1,000 **†Rough** stocks .. . . Third stocks . . . . .. per 1,000 --.. per 1,000 . . . . ... . . Sand limes .. per 1,000 .. .. .. Phorpres pressed Flettons Phorpres keyed Flettons Blue Staffordshire wirecuts .. per 1,000 70/-.. .. .. .. .. .. per 1,000 72/-.. . . .. firebricks, best Stourbridge 2<sup>4</sup>/<sub>4</sub> ... .. ... .. per 1,000 532/6 .. Facing and Engineering Bricks

add	15/- ne	r 1.0	000.									
	t King's			aiden	Lane	) Stn.	For	deliver	y in	W.C.	district	b.
	rpres ru								per	1,000	90/-	
Sand	Limes,	No.	2						per	1,000		
	Limes,								per	1,000		
Land	Timon	Ma	1						-	1 000		

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#### BRICKLAYER-(continued)

	DRICKLIK DAC (COMMINACU)
LS	Facing and Engineering Bricks-continued.
CLL	21" engineering bricks per 1,000 120/-
	Hard stocks, seconds
	Sand-faced, hand-made reds per 1,000 -
	Sand-faced, machine-made reds per 1,000 from 100/-
	If and stocks, firsts
	Coloured facings (creams, buffs, browns &
	*Dunbriks (concrete), greys or Commons per 1,000 125/-         *Dunbriks (concrete), various colours per 1,000 145/-         *Southwater engineering No. 1 (first quality red
	fSouthwater engineering No. 1 (first quality red pressed)
	Konthwater angineering No 9 (second quality red
	pressed) per 1,000 156/- Blue pressed
	Southwater pressed sandfaced reds
	Dorking pressed sandfaced multi-coloured
	facings
-	
	Limes and Sand 1-ton lots 6-ton lots
×.	Lime, greystone per ton 74/9 — Lime, chalk
~	Lime, chaik
-	Lime, hydrated (including paper bags) per ton 79/6 -
	Washed pit sand
I.Art.	Lime, blue Liss (including paper bags) per ton 79/6 — Lime, hydrated (including paper bags) per ton 79/6 — Washed pit sand
	at 1/9.
	Sundries
	Wall ties, self coloured $\dots$ per cwt, — Wall ties, galvanized $\dots$ per cwt, — D.P.C. slates, size $14'' \times 9''$ per 100 $46/6$ D.P.C. slates, size $14'' \times 44''$ per 100 $16/-$ Ledkore D.P.C. Grade A per foot super 10d. Ledkore D.P.C. Grade B per foot super 1/13d. Ledkore D.P.C. Grade C per foot super 1/13d. Ledkore D.P.C. Grade C per foot super 1/13d.
	D.P.C. slates, size 14" × 9" per 100 46/6
	D.P.C. slates, size 14" × 41" per 100 16/-
9/9	Ledkore D.P.C. Grade B per foot super 1/14d.
8/8 0/11	Ledkore D.P.C. Grade C per foot super 1/4
9/9	<sup>‡</sup> Trade discount $7\frac{1}{2}$ per cent. and cash discount $7\frac{1}{2}$ per cent. Prices include delivery on minimum of £5 orders.
10/9 16/6	Airbricks: $9'' \times 3''  9'' \times 6''  9'' \times 9''  12'' \times 9''  14'' \times 9''$
6/6	Ded and haff tame
	red and bur terra cotta each $1/ 1/10$ $4/10$ $ 12/11$ Black cast iron, School $9'' \times 3''$ $9'' \times 6''$ $9'' \times 9''$ $12'' \times 6''$ $12'' \times 9''$ Board pattern airbricks part doz.
	Board pattern airbricks
19 6	per doz
10/-	per doz Galvanized ditto per doz Black hit and miss cast
10/-	ince mentileters
20/-	Galvenized ditto run doz
25/- 30/-	Buff terra cotta chimney 1'0" 1'6" 2'0" 2'6" 3'6" 5'0"
35/-	pots each 4/9 5/8 8/2 10/10 24/11 42/6
40/-	per doz. —
60/- 10/-	
15/-	*2" wide black japanned per roll 2/9 *2" wide galvanized per roll - *24" wide black japanned per roll 3/5 *24" wide galvanized per roll - *24" wide galvanized per roll -
1/6	"24" wide black japanned per roll 3/5 on orders of £7. Dis-
house,	Partitions, etc.
Bridge. geable	2"         2¼"         3"         4"           Clinker          per yard super         3/2         3/8         4/2         5/3
d, if	Pumice per yard super $7/   -$
	Pumiceper yard super $7/-$ Hollow Blockper yard super $3/1$ $3/4$ $4/ 4/7$ Plasterper yard super $5/4$ $6/ 7/1$ $9/2$
	T <sup>1</sup> Wood-wool Slabs per yard super from 4/2 to 4/10
	12" Wood-wool Slabs per yard super from 6/7 to 7/61
	<ul> <li>†3" Wood-wool Slabs per yard super from 8/6 to 9/8<sup>1</sup>/<sub>2</sub></li> <li>† Prices according to quantity ordered. 2<sup>1</sup>/<sub>2</sub>% Cash Discount.</li> </ul>
-	
	Gas Flue Blocks
70/-	Flues. Flues
72/-	Straight blocks each 1/9 3/-
-	Backing block per set of 3 4/2 7/9 Cover blocks each 2/7 4/10 Pablic blocks each 2/7 4/10
08/- 45/-	Kaking blocks 45° each 3/11 6/4
32/6	Raking blocks 60° each 2/10 4/3
	Closer blocks
_	Closer flashing blocks each 1/4 2/4
-	Terminal and can
00/-	Terminal and cap           per set       8/9       14/7         Middle terminal and cap          per set       8/6       13/11
istrict	End terminal and cap per set 8/9 14/6
	Corbel block each 6/7 13/5 Gathering block each — 7/-
	Cathering Dioce each - 7/-

DRAINLAYER

#### Land Drain Pipes

2" 3" 4" . 2" lengths .. .. per 1,000 99/6 138/6 179/- 372/-(Delivered in full loads Central London Area.) Pipes in 12" lengths ...

TECHNICAL SECTION

#### Salt Glazed Stoneware Pipes and Fittings

				4"	6″	9"	
Pipe (2' lengths)			each	1/8	2/6	4/6	
Bends, ordinary			each	2/6	3/9	6/9	
Single Junction, 2' long			each	3/4	5/-	9/-	
Yard Gulley, without gra	ting		each	6/3	6/101	11/3	
Ordinary round or squar		ting,					
painted			each	-/71	1/3	2/6	
Ordinary round or squar	e Gra	ting,					
galvanized			each	1/01	2/1	4/4	
Extra for Inlets, horizont	al		each	1/6	1/6	1/6	
Extra for Inlets, vertical			each	2/3	2/3	2/3	
Intercepting Trap with	Star	aford					
Stopper			each	17/6	22/6	37/6	
Grease and mud intercepte	or with	buck	tet for	removi	ng		
silt and grease for 6", 9	" and	12" 0	drains,	with ir	on }eac	h 20/-	
grating, painted					5		
Ditto, with iron grating	alvani	ized			each	21/101	

			Brit	dard S	Br tish Standard Tested
Orders under	tons and over 2 tons, 100 piec 2 tons, less than	es upwards	Plus	55% 1	Plus 621% Plus 80% Plus 90%
Orders under	tons and over 2 tons, 100 piece 2 tons, less than	es upwards.	Best Plus 369 Plus 471 Plus 571	6 Subje	econds ect to 15% be price of quality for izes.
	Cast Iron	Drain Pipes	and Fitti	ngs	
Socket and Weight (per 9 ft.)	Spigot Pipes :	9 fts.	6 fts.	4 fts. each	3 fts. each
1.1.8 1.1.17 2.0.1	4" per yard . 4" per yard . 6" per yard .	. 10/2 . 15/-	10/10 11/2 17/11	17/5 17/10 28/10	13/2 13/8 23/-
3.3.21	9" per yard .	. 27/3	35/9	62/-	47/4
		2 fts.	18 ins.	12 ms.	9 ins.
1.1.8		. 10/10			_
1.1.17		. 11/1			
2.0.1 3.3.21		. 17/4		_	_
Ord Ord	Allowances : ers up to 2 ton ers 2 to 4 tons ers 4 tons or of	less 21%.			
			4"	6"	9"
	t radius)		9/8	20/-	61/7
	ions Fig. N		16/11	33/8	106/3
Intercepting	traps	each	46/3	77/-	189/5
	nary trapped " ]	each	$\frac{22}{4}$	_	
Extra for in Grease Gulle		each	11/7 196/4	_	_
H.M.O.W.	large socket g gulley top a	ulley trap	100/2		
	and one back in		40/5	72/-	-
	Channels	in Brown G	lazed War	e 4"	6" 9"
	traight channels		each	1/3 1/	
	lengths		each	1/3 1	101 -

Half round st	raight	channels	1 30" le	ong		•	each		-	4/22	
Ditto, short le	ngths						each	1/3	1/10		
Half round or	dinary	channel	bende	3			each	1/101	2/91	5/01	
Ditto, short					۰.		each	1/10	2/91	-	
Ditto, long							each	3/9	5/7	10/1	
Three-quarter	round	branch	bends				each		7/6	-	
								6"×4	" 9	"×6"	
Half round ta	per cha	nnels 2	4" long	ç			each	3/9		6/9	
Half round ta	per cha	annel be	nds				each	4/81		8/51	

The above prices are subject to the same discounts as those given for "Best" quality salt glazed stoneware pipes.

#### Manhole Covers, etc. Black Galvanized \$24" × 18" single seal for foot traffic. (Weight 3 cwts. in lots of 24) ... each \$24" × 18" single seal for light car traffic. (Weight 2 cwts. in lots of 24) ... each \$24" × 18" Wood Block pattern. For road traffic. (Weight 3 cwts.) ... each 19/3 30/-49/7 88/2 Conted 79/3

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#### TECHNICAL SECTION

#### THE ARCHITECTS' JOURNAL for January 23, 1947

#### DRAINLAYER—(continued)

#### Manhole Covers, etc.-(continued)

	Fine Cast	Galv.
Cast iron steps, 13 <sup>4</sup> / <sub>2</sub> long, 6" wide, 9" in wall, approximate weight 5 <sup>1</sup> / <sub>2</sub> lb. each per dozen (Galvanized fresh air inlets with cast brase fronts (L.C.C. pattern)	17/4 4″ 10/11	28/11 6″ 41/10

MASON

#### Yorkstone

Building quality Robin Hood and Woodkirk Blue St Blocks scrappled, random sizes per foot cube Add for blocks to dimension sizes per foot cube	one. 7/5 10d. (each dimension)
Templates with sawn beds, edges rough (up to 4 ft. super and not over 2' 6" long) per foot cube	8/3
Templates with sawn beds, sawn one edge, per foot cube	8/3 9/10 <del>2</del> 11/61
Templates with sawn beds, sawn two edges, per foot cube	11/6
Price f.o.r. Yorkshire, railway rate to London Station per ton. (Minimum 4-ton loads.)	37/7

#### Artificial Stone

6"	×	3"	Copings and	sills				per	foot	run	2/6
6"	X	6"	Copings and	l sills				per	foot	run	3/10
			Copings and						foot		3/-
9″	×	6"	Copings and	l sills				per	foot	run	5/6
12"	×	3"	Copings and	l sills		* *		per	foot	run	3/10
12"	4	6"	Copings and	l sills				per	foot	run	6/7
Corn	hie	88	according to	detail.	per	foot	cube	(from)		1	11/10

#### SLATER, TILER AND ROOFER

#### Best Bangor Slates

					£ s. d.	
24" × 12"			D	er 1.000 actual		
20" × 10"				er 1,000 actual		
t'rices include for d			in lots			
Basic for Hand-made a	andfaced	1 104"	× 61"	red roofing tile		
				per 1.000	171/-	
Machine-made sandface	a 101" \	× 61"	red root	fing tiles	/	
				per 1,000	_	
Berkshire rustic pantile	8			per 1,000		
	Asl	bestos-	cement			
6"corrugated sheets, gr	ev			per yard sup	er 3/5	
Standard 3" corrugated	sheets,	grey		per yard supe		
Slates (Manufacture tem						
* 151" × 71" grey				per 1,000	£7 6	0
* 151" × 151" diago	onal, gre	y		per 1,000	£14 12	0
<ul> <li>151" × 151" diago</li> </ul>	nal, rus	set or	brindle	ed per 1.000	£23 12	- 6
Pantiles (Manufacture t						
* Large russet brown				per 1,000		
* Prices are for min					niect to f	5%
trade discount and 21%				,		10
	u.					
WALLBOARDS,	Etc.					

" Insulation Board	1	Up to 5, 00 sq. ft. per yard super 2/3 fr	5,000 to 20,000 sq. ft. per yard super 2/17
J" Ditto	••	per yard super : /9§ Up to 5,000 sq. ft.	per yard super 2/7 # 5,000 to 15,000 sq. ft.
I Hardboard		per foot super 45d.	per foot super 47d.
Je" Ditto		per foot super old.	per foot super 6d.
	OF		-
semi-hard)		per foot super 5 nd.	per foot super 5d.
		Laminated Wallboard	
1 Thickness (stand			
I bundle up to 2.5	i00 s	a.ft per	foot super -/2-&d.

1 bundle up to 2,500	sq. ft.		 per foot super	-/2 fd. -/2 fd.
2,500 sq. ft. to 5,000			 per foot super	
5,000 sq. ft. and ove	r	• •	 per foot super	-/2 id.

Asbestos-cement and Asbestos Products 1 4 . 1 . 11.11

Semi-C	ompre	seed if	at build	ding sh	ieeta, gr	ey	
						per yard super	
the Ditto						per yard super	1/7
11' Ditto						per yard super	2/31
1Pr new are	for or	ders of	two to	ns and	l over a	nd are subject to	5% trade
discount	and 2	1% ca	sh dise	ount.			
"1" Astesto					"×4"	0"),	
-						per foot super	-/5
* A Ditto						per foot super	-/4
\$ 3 "Achoat				R/ 0" >	1 4' 0")	ner ward anner	9/81

<sup>3</sup> Asbestos wood (in sheets 5' 0"  $\times$  4' 0") per yard super 2/6<sup>3</sup> \* Prices are for orders of 2 tons and over and are subject to 2<sup>1</sup>/<sub>1</sub>% cash discount.

#### WALLBOARDS, Etc.-(continued)

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2 G P

WALLBOARDS, Etc.—(continued)
Asbestos-Cement and Asbestos Products-(continued)
1" Asbestos Insulating Board per foot super -
Over
25-75 150-300 600
yards yards yards yards # Fireproof plaster board per yard super 2/6 2/2 1/10
#" Fireproof plaster board     per yard super     2/6     2/2     1/10       4" Ditto      per yard super     2/4     2/-     1/8
2" Paper Faced Linen Tape per 100 yard roll 5/-
Joint filler per lb/4
Sundries
Slaters or sarking felt per yard run -/10
Roofing felt (1-ply bitumen) per yard sup. 1/1 Bituminous hair felt per roll 66/-
All rolls 25 yards long by 32" wide.
Building paper, 50" wide (B.I. 20) per yard run 1/1 , (K. 40) (Supplies limited) per yard run -/5t
"Cabots "Quilts : (Ex Works) Twenty roll lots delivered carr. free
Double ply per roll - per half roll -
All rolls 28 yards long by 36" wide. Special terms for quantities.
"Fibreglass" sound deadening quilt per vard super
Up to 500 yds. Over 500 yd Light grade 1/11 1/191
Medium grade
In rolls 27 yards long by 36" wide.
In rolls 27 yards long by 36" wide. "Fibreglass" bitumen bonded mats
in standard rolls per yard super 1/4 In rolls 10, 121, 15 yards long by 23", 36", 42", 45", 48" wide
Cut steel clasp nails $\dots \dots \dots$
"""floor brads 2"" 39/6
Bright oval wire nails 1" 47/9
points
Der in in in it it it for bor oned
and share the second strained
STEEL AND IRONWORKER
Steelwork £ s. d.
Basis price for rolled steel joists sections
$5'' \times 3''$ to $16'' \times 6''$ , in 10 ft. to 50 ft. lengths ex mills 16 12 0
per ton
PLASTERER
Plaster and Cement 1-ton
loads
loads
Sirapite (coarse) per ton 91/6
Sirapite (coarse) per ton 91/6 , (fine) per ton 99/6 Victorite No. 1 (White) per ton —
loads           Sirapite (coarse)         per ton 91/6           ,, (fine)         per ton 99/6           Victorite No, 1 (White)         per ton —           ,, No. 2 (Buff)         per ton —
Sirapite (coarse)     per ton     91/6       "(fine)     per ton     90/6       Victorite No. 1 (White)     per ton     —       "No. 2 (Buff)     per ton     91/6
Sirapite (coarse)     per ton     91/6       "(fine)     per ton     90/6       Victorite No. 1 (White)     per ton     —       "No. 2 (Buff)     per ton     91/6
Sirapite (coarse)     per ton     91/6       "(fine)     per ton     90/6       Victorite No. 1 (White)     per ton     —       "No. 2 (Buff)     per ton     91/6
Sirapite (coarse)       per ton       91/6         " (fine)       per ton       99/6         Victorite No. 1 (White)       per ton       —         " No. 2 (Buff)       per ton       —         Thistle (browning)       per ton       91/6         Pink plaster       per ton       87/-         White plaster       per ton       96/-         Keene's pink       per ton       144/6
Sirapite (coarse)       per ton       91/6         " (fine)       per ton       99/6         Victorite No. 1 (White)       per ton       —         " No. 2 (Buff)       per ton       —         Thistle (browning)       per ton       91/6         Pink plaster       per ton       87/-         White plaster       per ton       96/-         Keene's pink       per ton       144/6
Sirapite (coarse)       per ton       91/6         " (fine)       per ton       99/6         Victorite No. 1 (White)       per ton       —         " No. 2 (Buff)       per ton       —         Thistle (browning)       per ton       91/6         Pink plaster       per ton       87/-         White plaster       per ton       96/-         Keene's pink       per ton       144/6
loads         Sirapite (coarse)       per ton       91/6         " (fine)       per ton       99/6         Victorite No. 1 (White)       per ton       —         ", No. 2 (Buff)       per ton       —         ", No. 2 (Buff)       per ton       91/6         Pink plaster       per ton       87/-         White plaster       per ton       96/-         Keene's pink       per ton       150/6         Gypstone       per ton       70/6         Glastone       per ton       73/-         Paristone (haired)       per ton       73/-         Cullamix (Tyrolean Finish) 1 ton lots and up-       Kent
loads         Sirapite (coarse)       per ton       91/6         " (fine)       per ton       90/6         Victorite No. 1 (White)       per ton       —         "No. 2 (Buff)       per ton       —         "Thistle (browning)       per ton       91/6         Pink plaster       per ton       91/6         White plaster       per ton       96/-         Keene's pink       per ton       164/-         Keene's white       per ton       160/6         Gypstone       per ton       70/6         Paristone (haired)       per ton       73/-         Kent       per ton       73/-
loads         Sirapite (coarse)       per ton       91/6         " (fine)       per ton       99/6         Victorite No. 1 (White)       per ton       —         ", No. 2 (Buff)       per ton       —         ", No. 2 (Buff)       per ton       91/6         Pink plaster       per ton       87/-         White plaster       per ton       96/-         Keene's pink       per ton       150/6         Gypstone       per ton       70/6         Glastone       per ton       73/-         Paristone (haired)       per ton       73/-         Cullamix (Tyrolean Finish) 1 ton lots and up-       Kent
Sirapite (coarse)       per ton       91/6         " (fine)       per ton       90/6         Victorite No. 1 (White)       per ton       90/6         Victorite No. 1 (White)       per ton          " No. 2 (Buff)       per ton          Thistle (browning)       per ton       91/6         Pink plaster       per ton       96/-         Keene's pink       per ton       160/-         Glastone       per ton       73/-         Glastone       per ton       73/-         Cullamix (Tyrolean Finish) 1 ton lots and up-       wards per ton from 149/- to 182/6         Sharp washed sand       per yard cube 15/7
loads Sirapite (coarse) per ton 91/6 , (fine) per ton 90/6 Victorite No. 1 (White) per ton 90/6 Victorite No. 1 (White) per ton 91/6 Pink plaster per ton 91/6 Pink plaster per ton 91/6 Keene's pink per ton 96/- Keene's white per ton 160/6 Gypstone per ton 150/6 Glastone per ton 73/- Paristone (haired) per ton 73/- Variatione (haired) per ton 73/- Variatione (haired) per ton 73/- Sharp washed sand
loads         Sirapite (coarse)       per ton 91/6         " (fine)       per ton 99/6         Victorite No. 1 (White)       per ton         ", No. 2 (Buff)       per ton 91/6         Pink plaster       per ton 87/-         White plaster       per ton 96/-         Keene's pink       per ton 150/6         Gypstone       per ton 73/-         Paristone (haired)       per ton 73/-         Kent Cullamix (Tyrolean Finish) 1 ton lots and up-         wards per ton from 149/- to 182/6         Sharp washed sand       per owt. 34/6         Goat's hair       per owt. 102/6
loads         Sirapite (coarse)       per ton 91/6         " (fine)       per ton 90/6         Victorite No. 1 (White)       per ton 90/6         Victorite No. 1 (White)       per ton 90/6         Thistle (browning)       per ton 91/6         Pink plaster       per ton 91/6         Pink plaster       per ton 96/-         Keene's white       per ton 144/6         Keene's white       per ton 73/-         Glastone       per ton 73/-         Paristone (haired)       per ton 73/-         Kandries       Sharp washed sand         Sharp washed sand       per con from 149/- to 182/6         Sundries       Sharp washed sand         Expanded metal lathing, 9' 0" × 2' 0" "" mesh
loads         Sirapite (coarse)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
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bloads         Sirapite (coarse)       per ton       91/6         " (fine)       per ton       99/6         Victorite No. 1 (White)       per ton
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loadsSirapite (coarse) per ton $91/6$ " (fine) per ton $90/6$ Victorite No. 1 (White) per ton $90/6$ Victorite No. 1 (White) per ton $90/6$ Victorite No. 1 (White) per ton $90/6$ Pink plaster per ton $91/6$ Pink plaster per ton $91/6$ Keene's pink per ton $144/6$ Keene's white per ton $150/6$ Gypetone per ton $73/-$ Paristone (haired) per ton $73/-$ Katt per ton $73/-$ Variatione (haired) per ton $73/-$ Variatione (haired) per ton $73/-$ Variatione (haired) per ton $73/-$ Kent per ton $73/-$ Kent per ton $74/-$ Variatione (haired) per tonSharp washed sand per event per avalue use 15/7 per owt. $84/6$ Goat's hair per event per avalue metal lathing, 9' 0'' $2'$ 0'' $\frac{1}{2}''$ mesh $\times 26$ gauge per owt. $\times 26$ gauge per owt per owt. $68/11$ m, (bright wire) per owt. $25-150$ 150-300 per owt. $63/4$ Hessian Scrim cloth in 100-yard rolls $3^{1'}$ wide per coll $7/6$ Wall TilesThe following prices are subject to 75 per cent. addition :Standard quality. </td
loadsSirapite (coarse) per ton $91/6$ ", (fine) per ton $90/6$ Victorite No. 1 (White) per ton $90/6$ Victorite No. 1 (White) per ton $90/6$ Victorite No. 1 (White) per ton $-$ ", No. 2 (Buff) per ton $-$ Thistel (browning) per ton $91/6$ Pink plaster per ton $91/6$ Pink plaster per ton $96/-$ Keene's white per ton $96/-$ Keene's white per ton $150/6$ Glastone per ton $73/-$ Paristone (haired) per ton $73/-$ Paristone (haired) per ton $73/-$ KentCullamix (Tyrolean Finish) 1 ton lots and up- wards per ton from 149/- to 182/6Sharp washed sand per owt. 84/6Goat's hair per owt. 84/6Goat's hair per owt. 84/6Kire Slate nails (galvanized) 14" × 15 gaugeper cwt. 68/11", ", ", (bright wire)", ", per owt per owt.25-150150-300Over" Plaster board (plaster base)yardsyardsper yard super2/11/91/7Hessian Scrim cloth in 100-yard rolls $3_1''$ wide per owt. $63/4$ Hessian Serim cloth in 100-yard rolls $3_1''$ wide per yard super $8/6$ Cream", ", per yard super $8/6$ Cream", ", per yard super $8/6$
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$
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Sirapite (coarse)is per ton91/6y(fine)per ton90/6Victorite No. 1 (White)per tonyNo. 2 (Buff)per tonThistle (browning)per ton91/6Pink plasterper ton91/6Keene's pinkper ton96/-Keene's whiteper ton144/6Keene's whiteper ton10/6Glastoneper ton73/-Paristone (haired)per ton73/-Kattper ton73/-Variatione (haired)per ton73/-Variatione (haired)per ton73/-Variatione (haired)per ton149/- to 182/6SundriesSundriesSundriesSharp washed sandper ward superCow hairper ward. 84/6Goat's hairper evet. 102/6Expanded metal lathing, 9' 0'' 2' 0'' ‡'' meshper evet. 68/11per avet. 68/11per evet. 68/11* 26 gaugeper evet. 63/4Hessian Scrim cloth in 100-yard rolls?* Paristor board (plaster base)yards600 yards?* Tlaster board (plaster base) </td
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PLUMBER Lead 34 lb. and upwards milled sheet lead in quantities per cwt. 69/6 Over 600 per cwt. 11/-yards 1/10
1/8
5/per cwt. 49/3 manufacturer ... .. .. .. .. Cast Iron Goods Percentage Adjustment. on List No. 3100 A.B. 1/2/40 -/10 1/1 Rainwater Goods (painted or unpainted) ... Plus 54% Soil goods (coated or uncoated) Plus 54% Mild Steel Rainwater Goods The following prices for Pipes and Fittings are subject to 65 per cent. addition, and Gutters are subject to 571 per cent. addition. arr. free 24 gauge rainwater slip jointed pipes. 2" Galvanized round pipes with ears ... per 6' 0" 2/7 Painted round pipes with ears 3 31" 4" 21" 3/11 3/9 4/3 4/9 500 yd Painted or galvanized short lengths with ears, extra each -/6 3/11 4/-2/9 3/71 -/6 -/6 -/6 -/6 18 Gauge gutters. 3" Galvanized half round gutters per 6' 0" 2/-Painted half round gut-ters ... per 6' 0" 1/6 Painted or galvanized abort learths extra 3]" 4" 41" 5" 6" 2/3 2/9 3/71  $2/4\frac{1}{4}$ 3/-1/9 2/-2/3 2/6 3/short lengths extra -/3 each -/3 -/3 -/3 -/3 -/3 Asbestos-Cement Rainwater Goods The following prices are subject to 121 per cent. trade discount and  $^{21}_{\rm V}$  cash discount. Orders over £30 are subject to 17½ per cent. trade discount and  $^{21}_{\rm 2}\%$ s. d. cash discount. Bainwater Pipes. 8 12 0 Prices are for 6' 0" lengths, but 10' 0" lengths are available in 2", 24", 3" and 4" diameters at same prices. Short lengths up to 2' 0" are 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". 24" 3" Round pipes per yard run .. ••• .. per yard run  $\frac{2}{6\frac{3}{4}}$  $\frac{3}{1}$ •• •• •• .. .. .. per yard run . . 4" 4/21 per yard run .. .. .. .. . . . . 7/1 5" ··· 6" ··· per yard run . . . . . . . . . . . . . 8/101 ... ... . . .. per yard run . . . . Gutters. Short lengths of gutter up to 2' 0" charged as 1 yard; from 2' 0" to 4' 0" as 1 $\frac{1}{2}$  yards, and over 4' 0" as 2 yards. Half round gutters  $3^{"}$   $4^{"}$   $4\frac{1}{2}$ "  $5^{"}$   $6^{"}$   $8^{"}$ per yard run  $1/7\frac{1}{2}$   $1/11\frac{1}{2}$   $2/-\frac{1}{2}$   $2/4\frac{1}{2}$   $3/3\frac{3}{4}$  4/1Ogee gutters per yard run -  $2/4\frac{1}{2}$   $2/6\frac{1}{4}$  3/1 3/9  $4/10\frac{1}{2}$ 4/101 INTERNAL PLUMBER Lead pipe in coils, 5 cwts. and upwards per cwt. 69/6 . . per cwt. 72/6 -/3 per cwt. per cwt. 11/-224/per cwt. 275/per cwt. Drawn lead traps with brass screw eye, 6 lb. 1‡" 3/41 11" 4/21 1" 2" 8. trap .... each 2/11 P. trap .... each 2/7 Extra for 3" deep seal "S" trap each -/6 Extra for 3" deep seal "P" trap each -/4 6/1  $\frac{2}{9\frac{1}{2}}$ -/7 -/5 3/6 4/11 -/10 yards 1/7 -/8 -/3 -/7 Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc. Tubes. Tubes 2 ft. long and over 1" per ft. -/51 Pieces 12" to 231" long 1" -/61 1" 2" 1<u>1</u>" 1/1 14" 1/41 -/91 1/10 1/1 1/11 2/8 1/5 3/4 4/9 each 1/2 .. each -/11 2/71 3/2 5/2 Bends ... 1/71 hittings. 2/7 Elbows, square each 1/1 1/3 1/6 2/2 4/3 Trees .. .. each 1/2 Crosses .. .. each 1/3 Crosses .. .. each 9/0 1/5 1/7 1/8 1/10 2/4 2/6 2/10 3/1 4/8 5/1 3/3 4/1 5/6 6/7 10/6 Sockets, plain .. ea Sockets, diminished each -/4-/6 -/8 -/101 -/5 1/3

each -/6 -/7

-/9

1/-

1/4

2/-

1)

)

. 66/-

-/4

1/1 -/51

ntities.

1/101

2/31

1/4

47/3

39/6

47/9

59/6

182/6

e 15/7 84/6

102/6

41-

68/11

)ver

8/6

9/-1/1 1/10

4/3 1/2 2/5 5/-

1/5

2/10

T

**INTERNAL PLUMBER**—(continued) Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc. - (continued) .. each 1/-.. each -/5.. each -/41‡" 1/9 1/--/8 1" 9" 1/4 -/8 -/6 1/2 -/6  $\frac{2/-}{1/3}$ -/10 219 Flanges 2/-Cans .. Plugs .. -/5 1/3 Fittings and flanges and tubes ordered in long random lengths are subject to the following trade discounts :---Tubes Fittings Flange " Light Weight " ... " Heavy Weight " ... 461% 191% 31% 31% 231% 39% .. COPPERSMITH AND ZINC WORKER Copper GLAZIER Sheet Glass, cut to size (ordinary glazing quality) For quantities exceeding 500 ft. super. 24 oz. 26 oz. per foot super 8åd. 32 oz. . . . . . . Polished Plate glass, ordinary substance, approximately 1" :-Glazing Selected Silvering In plates not exceeding : quality 2 ft. super . . . per foot super 2/5 3 ft. super . . . per foot super 2/9 5 ft. super . . . per foot super 3/glazing quality 2/7 3/1 3/2 3/10 5 ft. super . . . per foot super 2/9 3/2 3/105 ft. super . . . per foot super 3/- 3/8 4/5\*45 ft. super . . . per foot super 3/8 4/- 5/6\*100 ft. super . . . per foot super 4/5 5/7 7/2\* Extra sizes, *i.e.*, plates exceeding 100 ft. super or 160 inches long, or 100 inches wide, at higher prices. 7kd. per foot super 10kd. per foot super 6kd. per foot super 75d per foot super " figured rolled and cathedral-untinted tinted ... •• •• .. 7§d. per foot super . . . . . . . . per foot super 7§d. . . . . . . . . 1/21d. per foot super \* \* ... . . .. 93d. per foot super 101d. per foot super . . . . .. . . Georgian wired cast ••• .. . . . . " polished wired ... 3/6d. per foot super . . . . ... .. .. wired arctic 1/8d. per foot super ... . . Hollow glass blocks :- $\begin{array}{c} \text{P.B.2.} & 5\frac{3}{4}'' \times 5\frac{3}{4}'' \times 3\frac{7}{4}'' \\ \text{P.B.3.} & 7\frac{3}{4}'' \times 7\frac{3}{4}'' \times 3\frac{7}{4}'' \\ \text{P.B.32.} & 7\frac{3}{4}'' \times 7\frac{3}{4}'' \times 3\frac{7}{4}'' \\ \end{array}$ 2/6 each 3/6 each 3/6 each Radiussed corner bricks to match up with :---P.B.2 .. 4/6 each P.B.2 ... P.B.3 or 32 ... 6/- each . . PAINTER

Hot rolled copper sheeting in 5-cwt.

lots				 16 wire gauge	per lb.	1/6
Ditto				 24 wire gauge	per lb.	1/81
Copper wire,	10,	12 and	14 gauge	 	per lb.	1/51
Copper nails				 	per lb.	1/61

**TECHNICAL SECTION** 

Snowcem paint (in						=01
containers)	• •		• •		per ewt.	
White ceiling distemper					per cwt.	
Washable distemper	**		**	per	cwt. from 66	/- to 80/-
Ready mixed white le	ad p	aint (b	est), s	semi-		33 -
gloss, per 32 lb.	**	**			per gallon	
Aluminium paint (best				• •	per gallon	40 -
White enamel				* *	per gallon	50/6
White enamel paint				* *	per gallon	38/-
Stiff white lead (genuin	e Eng	lish sta	ek pro	00088,		100.0
1 ton lots, 1 cwt. keg	8)				per cwt.	107/9
Liquid driers					per gallon	26/6
Linseed oil raw (5-gallo	n drui	ms)	• •		per gallon	16/3
" " boiled (5-g					per gallon	16/5
French polish					per gallon	21/-
Knotting					per gallon	24 -
Oil stain (scumble)					per lb.	36
" " red oxide					per ewt.	80,-
" " middle Bruns	vick g	reen			per cwt.	120/-
" " dark umber					per cwt.	130/-
" " golden ochre					per cwt.	112/-
Varnish (outside qualit	y) oal	K			per gallon	38 -
	coj	pal			per gallon	38 -
22 23 23	fla	tting			per gallon	40/-
Turpentine, genuine A	nerica	n 5-gal	llon lo	ta	per gallon	
" substitute					per gallon	3/6
Creosote, 1-gallon lots					per gallon	2/-
Linseed Oil Putty					per cwt.	42/6
Utility Glazing Putty					per cwt.	37/6
Size in 1 S					per lb.	1/11
" in <b>I</b> S					per lb.	1/9
Best quality English g					per book	
Extra thick, ditto		-, 20 0			per book	

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#### TECHNICAL SECTION

The function of this feature is to supply a digest of, and commentary on, current information of interest to architects as recorded in technical publications and statements of every kind throughout the world. Items are prepared by specialists of the highest authority who are not on the permanent staff of the Journal, and views expressed are disinterested and objective. The Editors welcome information on all developments from any source.

#### INFORMATION CENTRE

#### 2.1 planning: general ADMINISTRATION

Town Planning in the United States. E van Storch (US National Housing Agency, Washington, D.C., 1946.)

Article prepared for Congress of International Federation for Housing and Town Planning, Hastings, October, 1946. Town Planning in USA compared with town planning in Europe. Authority for town planning. Planning Practice. Planning machinery. Very clear and concise statement of principles of administration.

Differences between town planning in the United States and in Europe are mainly to be found in the governmental structure within which official town planning is authorized and conducted and in the purposes and principles which guide its practice.

Authority for Town Planning. Town planning lies strictly within the powers and authority of the separate States. The States, in turn, may delegate to their respective local governments the authority to engage in specific types of planning activity and to exercise specific regulations over land use and development. Town planning, therefore, is determined first by State and second by local government policy. The Federal Government exercises no direction or control over town planning functions. Its policy may be influential but not decisive.

Permission and authority to plan is granted by the separate States to their local governments through enabling legislation. These laws establish the limits within which planning powers and authority are delegated to the local governments and gene-ally make provision for the types of agencies or public bodies which might be created to exercise planning powers and functions. However, in general this permissive State legislation neither requires that planning action must be taken by local governments, nor does it necessarily extend the permissive function to all forms of local government. Thirty-four of the forty-eight States and

Thirty-four of the forty-eight States and the District of Columbia have laws authorizing the establishment of local planning agencies, with powers to prepare compre-

#### THE ARCHITECTS' JOURNAL for January 23, 1947

hensive plans for the development or improvement of their communities. These local planning commissions do not have financing powers, nor do they engage in general development activiles beyond the planning stage; and the adoption of a plan does not guarantee its fulfilment.

All forty-eight States and the District of Columbia have zoning laws to protect the character of existing sound neighbourhoods, to assist in the rehabilitation of blighted areas, and to implement plans for the development of future neighbourhoods and communities.

In 1946, 552 out of a total of 1.072 cities of a population of over 10.000 report having official planning bodies, and 197 having unofficial bodies. 173 cities with a population of over 25,000 are co-operating with other units of government in their area in planning on a metropolitan or regional basis. The amount budgeted by cities in 1946 for the operation of their planning agencies amounts to over two million dollars, concentrated mostly in the larger centres of population.

Town Planning Practice. Initial decisions to undertake development are of private origin. They arise from the constantly developing technical resources and are, in part, influenced by public regulations and controls adopted or by public improvements undertaken in response to advance planning by public agencies. In principle town planning practice guides but does not direct the location and character of new developments, and devises functional modifications to meet new conditions.

With regard to decentralisation, statutory planning powers do not permit public planning agencies to direct where, when, or how decentralisation should take place. These decisions are made by the industries them-selves as they formulate their own plans. The degree of population decentralisation within urban areas depends on the separate choices of highly mobile individuals bound only by limitation of transport facilities. Public planning, in turn, has to estimate the degree and timing of movement; to anticipate new services; to provide proper regulations and controls; and to chart the necessa y adjustments to be made in the existing vsical structure.

Concerning the replanning of central city areas over twenty States have adopted some form of urban development laws, most of which permit the creation of local public agencies to acquire land in slum and blighted areas for development according to officially adopted plans.

Proposals to create new towns, to develop satellite communities and to extend existing towns result rather from private decision and action than from direction by any Government unit.

Planning Machinery. The present state cf planning commissions—composed of either all citizen members appointed by the chief executive or composed in part of such citizens and in part of officials—is still in an evolutionary stage. Amongst changes advocated in the form of planning machinery is a proposal to transform the independent planning commission into a planning department of local government.

#### 8.2 surveying and specification QUANTITIES AND ESTIMATING

A Guide for Builders Writing the Bill of Quantities and Estimating for Repairs. G. Chrystal Smith, F.A.B.S.S., A.I.A.S. (The Illustrated Carpenter and Builder.) 23. Od. Bills of quantities and estimating for repairs. The first section of this book, covering 45 pages, consists of a list of the usual items to be found in bills of quantities, with the unit of measurement in each case. The reader can learn, therefore, how an item should appear in a bill, and what sundry labours, etc., should properly be measured as separate items instead of being included in the general description. The remaining 12 pages deal with estimating for repairs and contains a useful list of prices for such work. The book is remarkably good value and should be most useful to all those who have not the time to devote to the more comprehensive reference books already available.

#### 21.1 construction: miscellaneous ELECTRICAL PLANT

Electricity in the Building Industry. F. C. Orchard, M.LE.E., A.M.LMECH.E. (Chapman and Hall. 15s. 0s.)

Fundamental principles of electricity and electrical machines. Electric motor characteristics, plant installation, workshop wiring and lighting, machine tools and portable electric tools, including maintenance and recent research. Of more value to builders and contractors than to architects. Illustrated.

#### 24.4 lighting "BLACK" LIGHT

Black Light and Colour Magic. (Arch. Record [USA], Sept., 1946, p. 115.)

Technical article on use of phosphorescence and fluorescence; colours, intensities, durability, light sources and application. 12 illustrations. Interesting article with useful information.

The main points in this note are as follows: Certain pigments or chemical substances have the property of absorbing energy from a radiant source and after converting it to another form, re-emit it as visible coloured light. Some pigments only admit light during activation and these are termed fluorescent; others have an after glow effect, often lasting several hours, and these are said to be phosphorescent. The latter can be activated by any form of light, natural or artificial, the former only by ultra-violet sources, *i.e.*, "black" lamps. The tange of fluorescent colours is large,

The range of fluorescent colours is large, from light yellow through orange and red to green and blue, but the phosphorescent colours are more limited, from blue to orange-yellow. The brightness of fluorescent pigments depends on the intensity of the source, but the phosphorescent pigments depend for brightness on the type of pigment, the medium in which it is incorporated, intensity of light source, length of exposure and temperature. The durability of pigments ranges from several months to at least several years.

But hypes of material can be incorporated in paints which are best applied over bright white undercoats. The phosphorescent pigments do not paint well, due to their coarseness, but they can be sprayed readily. Textiles can be coated or printed with pigments or fluorescent dyes, and are used for marking tapes, draperies and for identity patterns on carpets. Plastics can be made which incorporate luminescent materials.

Many other applications are mentioned, for instance, for safety purposes when lights fail, for marking the shape of stairs; for light switches and door knobs, and for augmenting the lighting in rooms by using escaping energy from fluorescent lamps. Added to these is an extensive field of decoration.

The article describes all the various properties of the substances very lucidly, and the applications are interesting and even exciting. Some well chosen illustrations are included, and the whole article makes very good reading for architects. The item indry sured uded ng 12 and work. and have npreble.

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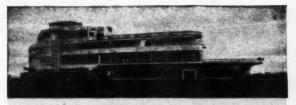
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General View of Terminal Building, Dublin Airport. Architect: Mr. D. Fitzgereld. B.Arch., M.R.I.A.I., A.R.I.B.A.

the architect. Some of them have already been used with great effect in airports; for example, at the Birmingham Municipal Airport and the Dublin Airport Terminal Building. Architects and architectural students are invited to consult our Technical Department at St. Helens, or our London Office, regarding the properties and uses of glass in building.

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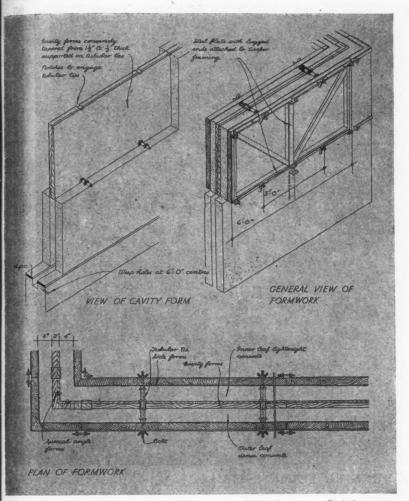
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## BRATT COLBRAN LIMITED. IO MORTIMER STREET. LONDON. W.I. Phone MUSEUM 9411-9311. PIONEERS IN OVERHEAD RADIANT HEATING







Above, construction and arrangement of formwork. Right, houses at Badminton constructed by the Corvus system.

## 24.5 lighting

Colour . . . with a Purpose. H. Quinn. (Heating, Piping and Air Conditioning, Jan., 1946, p. 115. Published with the Journal of the American Society of Heating and Ventilating Engineers.)

Industrial examples; muscular reactions to colour stimulus. Unusual but not very helpful. Two illustrations.

This article describes a number of colour treatments in American industrial plants and links them to what appears to be an exposition of the American idea of colour dynamics. It is claimed that muscular reactions can be affected by colour, and figures are given representing some form of measurement of this effect. Thus blue gets 24 units, orange 35, and red 42. This is suggested to be a measure of the stimulus resulting from the rate at which light waves impinge on the eye.

Although interesting the descriptions of colour treatment are not very useful. The measurements of colour effects on muscular reaction are scantily quoted, with no source or description of the measurement method. One is left feeling sceptical. This feature answers any question connected with building confidentially and free of charge. Questions should be sent to the Technical Editor, The Architects' Journal, 13, Queen Anne's Gate, S.W.1.

#### QUESTIONS

#### AND ANSWERS

#### 2880 BUILDING REPAIR COSTS

Q I shall be obliged if you can give me information on the present-day percentage of general building repair costs in comparison with those of 1939. Is it possible for you to give them. or, failing that, to let me know where the figures might be available?

If you have the figures yourself you might also give the Government calculation. The



#### CURRENT TECHNIQUE

This Section refers briefly to technical aspects of current structural and other work of interest,

#### CONCRETE FORMWORK

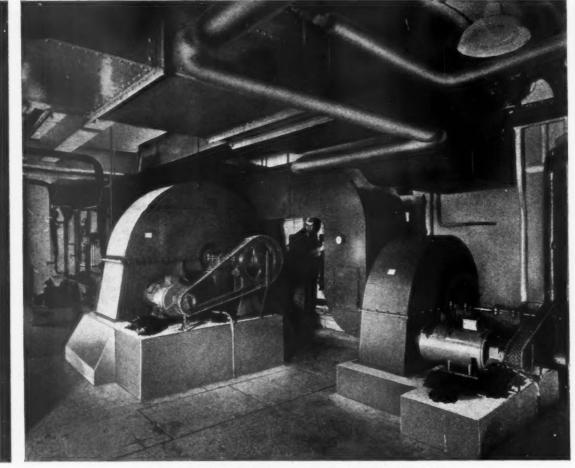
The Corvus system—developed on the Duke of Beaufort's estate at Badminton. Inventor and patentee, Major Nelson Rooke, agent to the Duke. Architect, C. E. Carus-Wilson, M.C., F.R.I.B.A. Constructors for four houses. Cowlin and Sons, Ltd. The formwork is constructed of 2-in. x 2-in. framed timber, faced with 18-gauge galvanised iron made up in sections 6 ft. x 3 ft. To make handling easier, it is proposed in future to construct shuttering of aluminium alloy. Formwork has a double wedge cavity plate (galvanised iron, faced timber) in centre, which completely fills cavity, preventing accumulation of débris. Lugs fitted on top of plates facilitate withdrawal after concrete has set. Formwork is held in position by tubular steel wall ties,  $\frac{1}{2}$  in. in diameter, which remain in concrete. Spacing of forms is approximately 3 ft. centre to centre, vertically and laterally. Circular steel lugs welded on the outside of the tubular ties are accurately spaced to maintain the inner and outer leaves and cavity plates in correct positions. Bolts (withdrawn when the concrete has set and the formwork struck) pass through the tubular wall ties from one side to the other, keeping the units firmly in position during pouring. External walls of houses have 4-in. outer and inner sections, 2-in. cavity—10-in. total. Outer sections are of ordinary dense concrete; inner of foamed slag concrete.



private and the Government calculations have differed considerably these last few years.

A No official figures are available and opinions vary, but the average increase in building costs since early in 1939 is probably between 110 per cent. and 115 per cent. There is a considerable fluctuation in tendering, according to the type of job and in many districts labour and materials are in such short supply that contractors are only really interested in good-sized straightforward, high priority jobs. This leads to keen tendering for such work and not nearly such keen tendering for other types of work. Jobs which require the importation of labour from other (possibly higher grade) districts, resulting in the payment of travelling time, travelling expenses, canteen facilities and possibly subsistence, cost relatively more. Such additional 15 per cent.-20 per cent. upon the cost of the Contract.

Very small, non-priority jobs, are in a class of their own, and depend very largely upon the small contractors' desire for more work which varies with the place and time. In some districts one is lucky to get the work done even at a price which appears to be far above the present economic level.



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This feature covers both the production and marketing of new materials and designs of equipment, as well as the general trend of developments within the Building Industry.

#### THE INDUSTRY

#### [by Philip Scholberg]

#### JOINTS FOR COPPER TUBE

Copper being now in pretty free supply, and comparing favourably with alternative materials in cost, the latest of the copper pipe compression joints is of considerable interest: This new joint is known as the Hanlo (see section below) and has been designed by Mr. Kenneth Hanson, already well enough known as the original patentee of the Anti-Vak Greenwood and Hanson trap. The main feature of this new joint is the very positive double grip of the ferrule on the copper tube. As the union nut is tightened both ends of the ferrule are forced into the tube, and it has been found in practice that the grip at the rear end of the ferrule is the stronger, where it is well away from the end of the tube and so less likely to crush it. After the first tightening of the piont the ferrule is fixed to the tube and the whole assembly becomes a coned joint which can be broken and reassembled any number of times.

In use on the job the joint is simple. The tube is cut to length, pushed into the joint, and the nut tightened, the length of thread of the nut being such that it is not possible to overtighten the joint. At the moment a range of tees, elbows and other fittings is made in sizes from  $\frac{1}{2}$  inch to 14 inch, but the range will be extended from  $\frac{1}{2}$  inch to 21 inch in the near future. On test a halfinch coupling on a length of 18 gauge semiannealed copper tube showed no failure or movement at a pressure of 5,200 lb. per square inch, the maximum pressure which the pump was capable of producing. All fittings are produced in high-grade gunmetal. (Lovell & Hanson Ltd., 181, Wolverhampton Street, Dudley, Worcs.)

#### ALUMINIUM ALLOY DATA

LIN

The Metals Division of Imperial Chemical Industries has just published a booklet which classifies and summarises the physical properties of their range of Kynal and Kynalcore wrought aluminum alloys. Kynalcore, incidentally, is ICI's name for strong alloy sheet or strip to which has been applied a coating of high purity aluminium to give increased corrosion resistance. The data are arranged in eight schedules so as to enable designers to select the most suitable alloy for their requirements. I am also very glad to see that, to their private alloy references, ICI add, where applicable the corresponding DTD, BSS or STAM specification numbers. Light alloys are by no means as complicated for trade references as plastics, but nearly all the different producers make alloys which are roughly comparable, and then market them under their private designations, so that the unfortunate user has to compare analyses and strengths, a much lengthier process than checking BSS or similar numbers. (ICI Metals Division, Kynoch Works, Witton, Birmingham, 6.)

THE GERMAN BUILDING INDUSTRY Quite a number of the reports prepared by visiting experts on German technical developments during the war have been published by HM Stationery Office and are available through booksellers. From the architects' point of view the report with the maximum of immediate interest is the one dealing with the German building industry as a whole, BIOS report No. 575, price 12s. 6d. It has been prepared by a team of six investigators who, under the leadership of Mr. Hartland Thomas, toured Western Germany between October, 1945, and January, 1946, to carry out investigations under the main headings of Building Science, Civil Engineering, Building and Architecture. Quite a large percentage of their report is devoted to bridge designs for the Autobahnen. Most of us have seen these in photographs, but the report recommends that, in view of the large trunk road schemes proposed for this country there should be a full-scale investigation of the relative merits and costs of the different types of bridge design and construction. The general planning and landscaping of the autobahnen is also recommended for further investigation. Other subjects covered include pre-stressed concrete, shell concrete, structural timber, lightweight concrete and welded steelwork, and interesting information is given about the organisation of the building industry in general.

So far as the architect is concerned, his status in relation to client and contractor is the same as it is here. The independent consulting engineer, however, is rarely met, and his German equivalent is the Technical Director attached to some industrial concern or firm of contractors. The whole building industry is dominated by a very few very large firms who combine building with civil engineering and who are accustomed to produce " design and price" tenders to a sketch scheme by the client. There is a considerable degree of collaboration between the Professors at Technical High Schools (which have University status) and contractors, so that the results of theoretical developments and research tend to reach the field far more quickly than they do here.

Dimensional standardisation has made considerable progress, for which Professor Neufert was largely responsible. He discarded the metric system on the grounds that the most useful method of subdivision is repeated halving. He therefore took 1,000 and halved, quartered and eighthed it into 500, 250 and 125. The unit for domestic work and other small buildings is 1.25 m., and for larger work 2.50 m. It is interesting to note that this standard is applied to horizontal dimensions only, the vertical dimension being left to the choice of the designer. This standard was apparently not compulsory, but the licensing authorities seem to have required an adequate explanation for any departure from it, and it is still being voluntarily used by a number of designers and manufacturers.

On the contractors' side a system of payment by results for the operatives became compulsory on all jobs at the beginning of 1943 and is claimed to have worked well to the general satisfaction of all concerned. It

#### TECHNICAL SECTION [113

is not now in operation, but at least one very large firm is said to be convinced of its indispensability when conditions become more normal. The system starts with a standard of times for each job and bases the pay on "Is hours" for actual work done and "Should hours" for the standard output. In addition to this the men are placed in five grades of special, high, normal, low and very low output, each grade having a wage conversion factor varying from 1.20 to 0.80. The scheme has a piecework element in that a given piece of work is scheduled to be done in a given time, but the whole of the saving acrues to the worker, the employer saving only on overhead and other expenses as a result of the time saved.

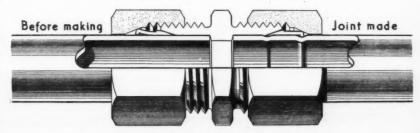
The saving only on overhead and other expenses as a result of the time saved. The system, as the investigators admit, is rather involved, and it also suffers from the cardinal fault that the operative cannot see how the amount in his pay packet has been arrived at, but it is suggested that its possibilities for this country should be further investigated. I note in my morning paper that our operatives have just asked for an extra 6d. an hour for craftsmen and another 9d. for labourers, and it seems probable that nothing but hourly rates will ever be the official method of payment in this country, though we all know how far the unofficial bonus puts up the output.

#### **TEMPORARY HOUSING**

Now that the temporary housing programme (except for Airoh) is slowly closing down, it was a happy thought for the Arcon group to summarise the work done and to invite a selection of workers to help celebrate it. Travelling about the country by car or train one registers rows of temporary housing without really bothering to think of the amount of work involved in getting them there. To list all the firms who have had a hand in the work would take several columns of type, but the original sponsors of the scheme were ICI, Stewarts and Lloyds, Turners, and Williams and Williams, with Taylor Woodrow for field work and distribution in general.

Getting the right number of parts to the right site at the right time is obviously a major work, particularly when the components arrive in bulk and have to be distributed in house sets. One naturally thinks in the easy terms of one bath one house and forgets that it also means x bags of bolts and y of screws, and that x or y plus or minus one will mean at least one house less. About a year ago I spent several hours tramping round the half million square feet of one of the many distribution centres, with components coming in and houses going out at a peak rate of 250 a week, with 500-odd men who seemed to know more or less what to do next. Jobs of this order have, of course, been done during the war, but one tends to forget, with Mr. Bevan's monthly figures, that the temporaries are to be added on, and are providing pretty reasonable comfort for more people than the permanents, and that the building industry and the component manufacturers have done a pretty big job.

have done a pretty big job. P.S.—No official news yet of the muchrumoured Arcon two-storey permanent.



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to practice from their wartime jobs are anxious to obtain the latest information regarding a number of building products and services. We print the form below in response to a number of requests . . . it will save you time and trouble.

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#### Announcements

Mr. Walter Sim has been awarded the MBE in the recent Honours List, for his services as Secretary of the Roofing Felt Industries Executive Committee. The Com-mittee was formed from the roofing felt manufacturers during the war, at the re-quest of the Government, and operated a voluntary control of the industry on behalf of the Ministry of Works. Despite the ex-treme shortage of roofing material and raw materials during the war years, the Com-mittee fulfilled the needs of the Government in seeing that supplies were organised for the roofing of all types of factories and buildings under Government control. Mr. Sim is also the Secretary of the Felt Roof-ing Contractors' Advisory Board. The new French periodical on architecture

and town planning, L'Homme et l'Archi-tecture, is now available to readers in this country. For the time being, it is published in alternate months, and the subscription rates are 1,200 francs for six issues, or 650

frances for three issues. The Publishers' ad-dress is: 10 Rue Saint-Augustin, Paris (2). Mr. Walter P. Paepcke, chairman of the Board of Directors of the Institute of De-sign, has announced that Professor Serge Chermayeff has been granted a six months' leave of absence from the Chairmanship of the Department of Design of Brooklyn College, Brooklyn, New York, and has accepted appointment as President and Director of the Institute of Design of Director of the Institute of Design of Chicago.

Mr. S. E. Bragg, A.R.I.B.A. (late Major R.E.), has been appointed Architect in the Estate Department of the Chelmsford Rural District Council, and would be glad to receive catalogues and other current technical data, to Estate Department, Council Offices, London Road, Chelmsford.

A gross price list has just been issued by Wellington Tube Works, Ltd., Tipton. This new list covering Tubes and Fittings should prove of considerable value to all buyers, as it is complete with all re-vised extras and allowances. Messrs, Wellington Tubes will be pleased to supply copies on application.

Following an application made by the Cornish Slate Quarries Regional Committee, the Minister has authorised an increase in the present selling prices of  $2\frac{1}{2}$  per cent., the increase to operate as and from December

23, 1946. The Brightside Foundry and Engineering Co., Ltd., have moved to Lambton House, Lambton Road, Newcastle-upon-Tyne, 2. Telephone: Newcastle-upon-Tyne 23395/6.

Mr. Marshall Sisson, F.S.A., F.R.I.B.A., of Shermans, Dedham, Colchester, has removed to Farm Hall, Godmanchester, Hunts. (Huntingdon 363). He has an office also at 47, North Hill, Colchester, Essex (Colchester 4642).

The address of the English Place-Name Society is now 7, Selwyn Gardens, Cam-

Mr. Anthony M. Chitty, M.A., F.R.I.B.A., A.M.T.P.I., of Hening and Chitty, architects, will shortly fly to Turkey at the request of the British Council, to open the exhibition *Replanning Britain*, and to lecture on hous-ing and town planning. He will visit Aning and town planning. He will visit An-kara, Istanbul and Smyrna.

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MR. JOSEPH HILL, F.R.I.B.A., sometime president of the Architectural Association. MR. MACDONALD GILL, F.R.I.B.A., archi-

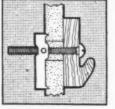
MR. MACDONALD GILL, F.K.I.B.A., arcni-tect, mural painter, and cartographer. Mr. H. Bayley, Manager, Building and Decorating Division of Messrs. Cellon, Ltd. for about 15 years.

#### PERMANENT FIXINGS

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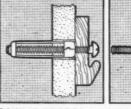
Rawlplug Toggle Bolts provide a simple means of making fixings to hollow partition walls or ceilings, asbestos board, hollow bricks and tiles, etc. They are ideal

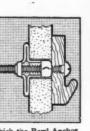
because they distribute the strain over a wide area.



#### An extremely ingenious device, When

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ACTUAL SIZE

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RAWL-ANCHORS are manufactured from ductile steel and ensure very firm fixtures. Fixing is simplicity itself — just a [° diam. hole

into which the Rawl-Anchor is placed and then the screw is tightened. Millions have been used on housing contracts.

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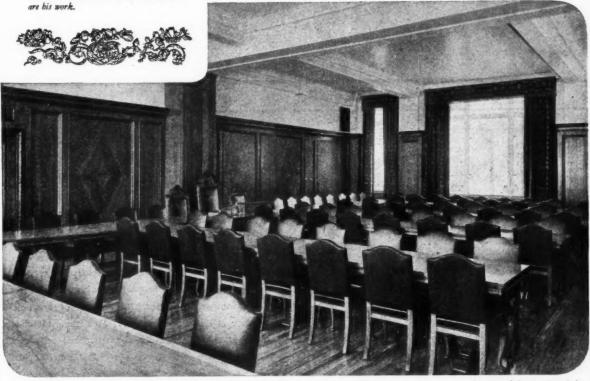
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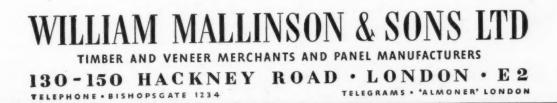
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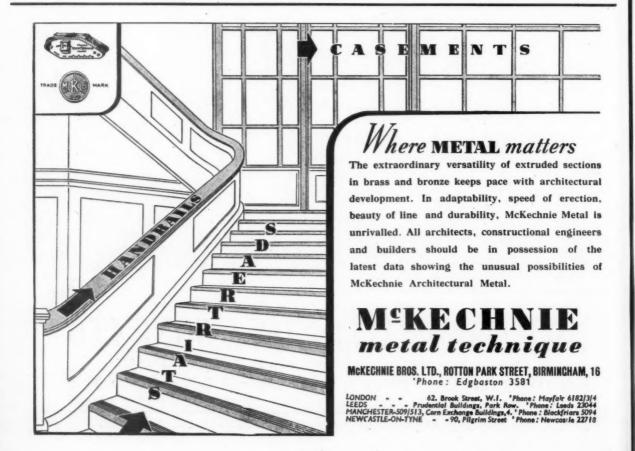
## Craftsmen in

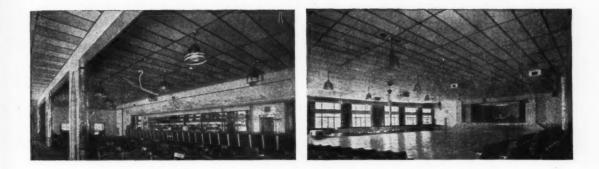
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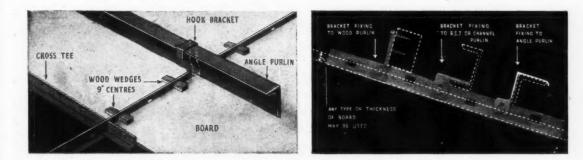
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# R. CATTLE LTD.

Look forward to renewing the pleasant associations with their many friends in the Architectural profession and can assure them that the same personal service will still be gladly given.

## High Class Joinery and Precision Wood Work

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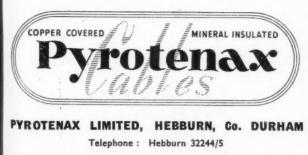


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The Factory "Industry is the right hand of Fortune, and Frugality the left". Few will deny the truth of this old Scottish proverb, particularly if for 'frugality' we read 'true economy'. A good example of this is found in the increasing use of Pyrotenax M. I. Cables by many of the largest and most important factories in the country.

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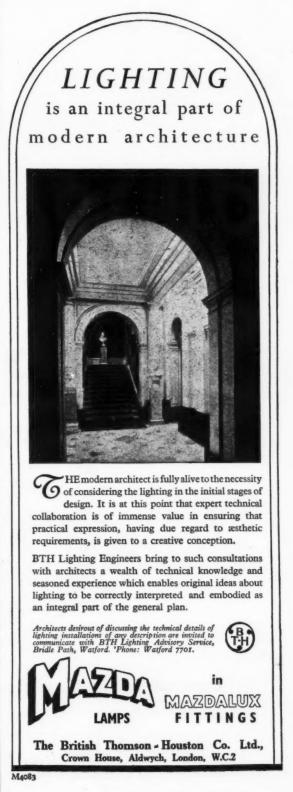


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THE ARCHITECTS' JOURNAL for January 23, 1947





Fire That Never Dies



How the pale Phoebe, bunting in a grove, First saw the boy Endymion, from whose eyes She took eternal fire that never dies; JOHN FLETCHER (1579-1625).

We may suppose that Phoebe knew that undying fires are precious beyond rubies; especially in domestic affairs.

Twentieth-century Phoebes, equally wise in their generation, bring "fire that never dies" to their own hearths by installing Eagle Ranges. Thus does their cooking begin bright and early in the morning in Ranges which demand no coaxing into flickering life, nor time to "burn up."

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THE ARCHITECTS' JOURNAL for January 23, 1947



## THE PROBLEM OF LIGHT

IN many types of public buildings, daylight and artificial light are not the only problems. There is a third essential — Emergency Lighting. It should be planned, as the other lighting is planned, by the architect.

When emergency lighting installations must be considered, make full use of Chloride. Their experience of the subject goes back to earliest pioneer days. Their knowledge is always freely at your service. And they are the makers of Keepalite, the automatic system which uses the mains interruption itself to switch on the emergency lighting.



## THE AUTOMATIC EMERGENCY LIGHTING SYSTEM

THE CHLORIDE ELECTRICAL STORAGE CO. LTD Stationary Battery Department, 77 King St., Manchester 2. Telephone: Blackfriars 4731

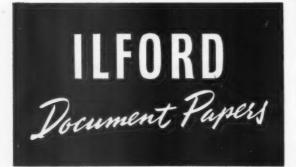
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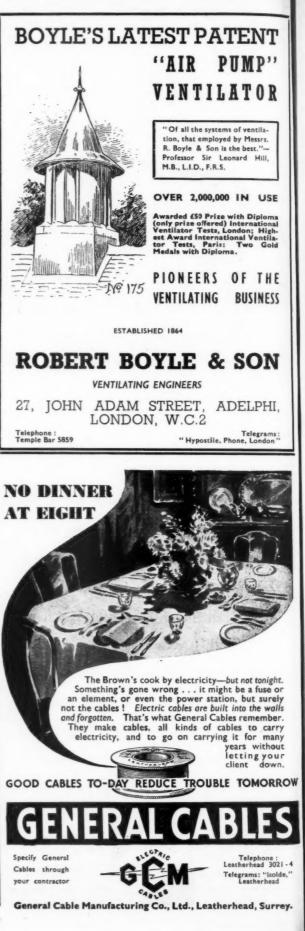


A bulky print is awkward to store and with repeated handling soon becomes soiled, torn, and difficult to read. Photographic reproduction is unequalled for clarity and absolute accuracy in the copying of documents or records. Almost any type of document can be made to yield prints as easy to read as the original itself (and without the need for checking), small enough for card-indexing and available in any numbers or sizes — and all from a single negative.

> It is worth finding out how to create a flexible system of plan and document records by photographic methods. The Ilford booklet "Photography Applied to Plan Copying in Engineering and Other Industries" is sent free, and requests for any further information will receive the willing attention of the Ilford Technical Service Department.



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# ELECTRIC Heating and Cooking for THE MODERN HOME

As leading manufacturers of Electric Fires, Cookers and other Home Electrical Appliances, we offer over thirty years' intensive and specialised experience to all concerned in planning and building post-war homes.



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course, famous for its high efficiency.

Although our present production is largely absorbed by urgent Government orders for Housing requirements, all enquiries will receive our heen and enthusiastic co-operation.

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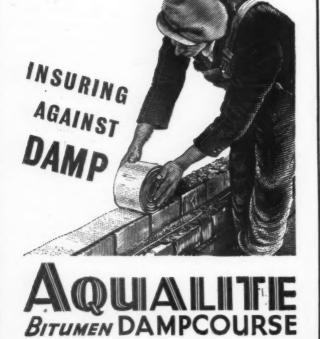
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WILLIAM BRIGGS & SONS, LTD., DUNDEE AND LONDON Branches throughout the Country



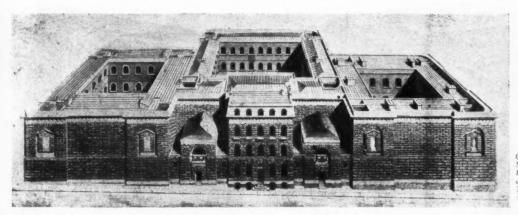


# BROMSGROVE GUILD LD

ARCHITECTURAL METALWORKERS

## BROMSGROVE

WORCESTERSHIRE



Original water colour II Newgate Prison, by George Dance the younger. Repro-Juced by permission of the Trustees of Sir John Soane's Wuseum.

## The younger Dance had been City Architect for more than 20 years

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when the first Rowney founded his business in London. Much of Dance's best work, such as Newgate, was already done, but he remained in office for a further 20 years—long enough to see Rowney's reputation as securely established as his own.

Founded in that classic age, the House of Rowney has served great architects ever since. For one hundred and fifty-seven years a Rowney has directed the business. Each succeeding generation has re-

GEORGE ROWNEY AND COMPANY

tained the cherished tradition of quality and craftsmanship. Each has, in turn, added the fruits of scientific progress to the store of a unique experience.

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Made in 20 colours, Black and White, in varying bottle sizes from  $\frac{1}{2}$  oz. These inks are in such perfect suspension that they do not leave a deposit at the bottom of the bottle. This means smooth, even flow from the dawing pen. It is well worth asking for Rowmey's by name.

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## **CLASSIFIED ADVERTISEMENTS**

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

in the following Thursday's paper. Replies to Box Numbers should be addressed care of "The Architects' Journal," War Address: 45 The Avenue, Cheam, Surrey

**Public and Official Announcements** Six lines or under, 10s.; each additional line, 1s. 6d.

Siz lines or under, 10s.; each additional line, 1s. 6d. THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEORS LABINATION OF ARCHITECTS AND SURVEORS AND AND ASSOCIATION OF ARCHITECTS AND PLACE, LONDON, S.W.I. THE, SHORES: 75, EARON PLACE, LONDON, S.W.I. THE, SLOANE 5615. 991 LONDON COUNTY COUNCIL. CLERKS OF WORKS. Applications are invited for positions of Clerks of Works (Class II), in the Architect's Depart-ment, to supervise constructional, maintenance, and repair works at the Council's schools, be shortly a few Class I positions. Rates of pay (according to qualifications and experimece) are: Class I. £350-£400 a year (basic), plus cost-of-lying addition, at present £78-£90 a year; Class II, up to 135s. a week, plus cost-of-lying addition, at present £78-£90 a year; Class II, up to 135s. a week, may also a superime and Successful candidates, under 55 years of age, will we subject to the Council's Superannuation and Provient Fund, but will be temporary in the first instance. Other things being equal, preference will be

and Provident Fund, but will be temporary in the first instance. Other things being equal, preference will be given to persons registered under the Disabled Persons' (Employment) Act, 1944, and ex-Service men will also receive special consideration. Applications (enclosing stamped addressed envelupe) to be made to the Architect to the Goancil, County Hall, Westminster Bridge, S.B.1, for form of application. Canvassing disgualifies. DNDON CONNEY CONNEY

Canvansing disqualifies. 555 LONDON COUNTY COUNCIL. VACANCIES FOR PLANNING STAFF IN THE ARCHITECT'S DEPARTMENT FOR WORK ON THE COUNTY OF LONDON PLAN. Applications are invited for a number of posi-tions in the following grades:-PLANNING OFFICER (Grade III). Up to 5500 a year (basic). TECHNICAL ASSISTANT. Up to £420 a year (basic)

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(basic). Commencing rate of pay will be according to galifications and experience. Cost-of-living addition, at present £78 to £90 a year (men), and £63 to £84 (women), are payable in addi-

There will be opportunities for competing, on There will be opportunities for competing, on merit, in due course for permanent appointment and for positions in the higher grades on the occurrence of vacancies. Successful candidates will be subject to the Council's Superannuation and Provident Fund. The planning work involved includes assistance in the detailed development of Reconstruction Area schemes, and the preparation of revised soning plans.

A knowledge of current town planning legis-lation is desirable in all cases, and candidates for Grade III positions should possess archi-tectural or surveying or town planning qualifica-

tions. Other things being equal, preference will be given to candidates registered under the Disabled Persons (Employment) Act, 1944, and ac-Service men and women will also receive special consideration. Application should be made to the Architect to the Council, County Hall. Westminster Bridge. S.L. for form of application (enclosing stamped addressed envelope), returnable not later than ten days from this date. Carvassing disqualifies. State Note Note Note Note 100 (1990)

 days from this date.
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 Carvassing disqualifies.
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 CITY OF NOTTINGHAM.
 CITY CF NOTTINGHAM.

 CARDICAL CARACTARY
 CARDINEER'S DEPARTMENT.

 Applications are invited for the post of Chief Architectural Assistant, at a salary of £1,000 per annum, plus cost-cliving bonus, of at present.

 Applications are invited for the post of Chief Architectural Assistant, at a salary of £1,000 per annum, plus cost-cliving bonus, of at present.

 Applications will be considered only from Architectural Assistant, and who are Fellows or Associates R.I.B.A.

 The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the National Joint Council's Scheme of Conditions of Service. and the uncessfal candidate will be required to pass a medical examination.

 Applications, stating age and full details of experience and qualifications, together with copies of testimonials, should be received by Mr. R. M. Flach, O.B.E., M.I.C.E., City Engineer and Surveyor, Guidhall, Nottincham, not later than Priday, 31st January, 1947.

 The Mathematical Science Circlex

Town Clerk. Guildhall, Nottingham. 1st January, 1947. 683

SPALDING RURAL DISTRICT COUNCIL. ARCHITECT'S DEPARTMENT. Applications are invited for the appointment of a full-time TECHNICAL ASSISTANT, in the Architect's Department, at a commencing salary of £345 per annum, plus cost-of-living bonus (at present £59 168.), rising on 1st April, 1947, to £390 per annum, plus bonus, when the appoint-ment and salary will be in accordance with Grade III of the A.P.T. Division of the National Joint Council Scale, rising to a maximum of £435, plus bonus. Candidates shoul have a sound and practical nowledge of architectural and quantity surveying work. The main duties will be to prepare Bills of Quantiles, Estimates, Valuations and settle-ment of Accounts in connection with the Council's Housing Schemes, and generally to work under the direction of the Council's Architect and Building Surveyor. The appointment will be subject to the Local Government Superanuation Act, 1937. Applications, stating age, qualifications and experience, and carliest date on which duties ould be commenced if appointed, together with copies of two recent testimonials, must reach the undersigned not later than 30th January, 1947. Leren Clerk to the Council. The Orescent, Spalding, Lincs.

The Crescent, Spalding, Lincs.

THURROCK URBAN DISTRICT COUNCIL. SURVEYOR'S DEPARTMENT. Applications are invited for the following

Applications are invited for the following appointments:-(a) CHIEF PLANNING ASSISTANT, at a salary in Grade V of the A.P.T. Division of the National Scale of Salaries, viz., 2460 per annum by £15 to £510 per annum, plus bonus, with ex-perience in the preparation and administration of planning schemes, interim development and ribbon developments control, and in planning generall

generally. (b) ARCHITECTURAL ASSISTANT, at a salary in Grade V of the  $\Lambda$ .P.T. Division of the National Scale of Salaries, viz,  $\pounds 460$  per annum, by  $\pounds 15$  to  $\pounds 510$  per annum, plus bonus, with experience in the preparation of drawings, speci-

COUNTY BOROUGH OF SOUTHEND-ON-SEA. EDUCATION COMMITTEE. MUNICIPAL COLLEGE. Principal: P. F. R. VENABLES, Ph.D., B.Sc., F.R.I.C.

Applications are invited for the following, to commence duties as soon as possible :--HEAD OF THE DEPARTMENT. Fellow or Associate Member of the Royal Institute of British Architects. Candidates should have teaching and administrative experience, and con-siderable professional experience in architecture. Salary, Grade II (subject to approval of Ministry of Education). Head of Department. Burnham Technical Scale, 2750 by £25 to £850. LECTURER IN ARCHITECTURE. Fellow or Associate Member of R.I.B.A. Professional ex-perience easential, and full-time or part-time teaching experience desirable. Salary, Burnham Technical Scale. The post may lead, subject to satisfactory service, to a post of special responsibility or a senior assistant-ship.

post of special response on the undersigned on special response of the special response of the undersigned on the undersigned on the receipt of a stamped and addressed foolscap envelope. Applications should be returned to the Principal as soon as possible. H. BOYFS. WATSON, Chief Education Officer.

Education Office, Warrior Square. Southend-on-Sea. 13th January, 1947.

747

Amended Advertisement. CITY OF BATH. CITY ENGINEER'S DEPARTMENT-ARCHI-TECTURAL SECTION. Applications are invited for the following appointments, at the salary grades stated. In each case the grade offered will be based upon the qualifications and experience of the candidates interviewed.

interviewed. (a) SENIOR a) SENIOR ARCHITECTURAL ASSISTANT. lary £460-£510 (Grade V), or £535-£600 (Grade

(b) JUNIOR ARCHITECTURAL ASSISTANT. alary £330-£375 (Grade I), or £360-£405 (Grade Sala II).

(b) JUNIOR ARCHITECTURAL ASSISTANT. Salary 230-2375 (Grade I), or 2360-2405 (Grade II). Cost-of-living bonus is payable in respect of each appointment, and is at present £1 3s, per week. The Corporation have recently decided to take certain steps designed ultimately to assist successful applicants for technical appointments in securing housing accommodation. The persons selected will be required to pass a medical examination before the appointments ion's Superannuation Fund. Applicants for appointment (a) should have had previous experience with a Local Authority and be Registered Architects and Associates of the R.I.B.A. possessing good general experience of architectural design and construction, par-ticularly in the devolopment and completion of Housing Estates. Candidates for appointment (b) should have passed the Intermediate examination of the R.I.B.A., and possess some housing experience. Applications, endorsed with the names of the appointment applied for, should bave passed the Intermediate and should arrive not later than 1st February, 1947. They should state age, qualifications, experi-ence, and when available if appointed. Copy of one testimonial and names of two referees should be included. Canvassing, directly or indirectly, is prohibited. Canudates should backers on the ror not, to the;

should be included. Canvassing, directly or indirectly, is prohibited. Candidates should disclose whether or not, to their knowledge, they are related to a member of the City Council, or to a Chief Official The National Scale of Salaries and Conditions of Service have been adopted by the Council. J. BASIL OGDEN,

Guildhall, Bath. 8th January, 1947.

Town Clerk.

 8th January, 1947.
 724

 LEEDS SCHOOL OF ARCHITECTURE. (LEEDS COLLEGE OF ART).

 Applications are invited for the undermentioned posts, in the Leeds School of Architecture. Can-didates should preferably have been trained in a recognized school of architecture, and be Associates of the R.I.B.A.
 1) FULLTIME LECTURER AND STUDIO INSTRUCTOR in Architectural Design and Con-struction. Special qualifications in Advanced Building Construction. Steel and Reinforced Concrete and/or Acoustics will be an additional recommendation.

 (2) LECTURERS AND STUDIO INSTRUC-TORS in Architecture.

TORS Candidates will be required to lecture in sub-tists to be arranged, and to instruct in the

jects to be arranged, and to instruct in the Studio. Burnham Salary Scale: Men £315-£15-£55; women, £282-£12-£444, with additions for full-time architectural school training. War service and up to 10 years' professional experience may be counted as teaching service in fixing the com-mencing salary. Opportunities for promotion to Senior Lectureships and posts with responsibility "likuwances"

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allowances. Further particulars and application forms may be obtained by sending stamped addressed envelope to The Director of Education, Education Offices, Leeds, 1. 706

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buildings. Grade II (A.P.T. Division), 2360 per annum, rising to £465, plus the current cost-of-living bonus. (b) TWO JUNIOR ASSISTANT ARCHI-TECTS, General Division of the National Scale, etc., £65 to £300 per annum, according to age, plus the current cost-of-living bonus. The scheme of Condition of Service of the National Joint Council for Local Authorities' Administrative. Professional, Technical and Clerical Services, is at present applicable to persons appointed on the established staff. The appointments will be subject to the provision of the Local Government Superannua-tion. The appointments will be subject to the provision of the Local Government Superannua-tion Act, 1937, and the persons appointed will be sequired to pass a medical examination to the satisfactions, staff, gave, cualifications, full drates of experience, and giving the names of three professional references, should be delivered to the undersigned not later than Saturday, 1st February, 1947. WILSON KENYON, Tone Clerk

## WILSON KENYON, Town Clerk.

Municipal Buildings, Poole, Dorset.

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BOROUGH OF KING'S LYNN. ARCHITECTURAL ASSISTANT. Applications are invited for the appointment of Supartment of the Council, at a salary in accord acce with Grade I of the A.P. and T. Division of the National Joint Council Scale of Salaries (230-675, by annual increments of £15), plus commencing salary within the grade will be according to the candidate's qualifica-tions and experience. Applications should have networks of the present for the sould have any set of the state of the sould have set of the intermediate examination of the Royal method experience in architectural work state of British Architects, and must have set of the proving to the candidate's qualifica-institute of British Architects, and must have set of the proving the the set of the secret set of the proving the the secret set in a sould be required to pass a medical ex-sent and specifications and experience and the details of qualifications and experience the full details of qualifications and experience and the full details

### Town Clerk

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Town Hall, King's Lynn. 13th January, 1947.

13th January, 1947. 142 OXFORDSHIRE COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT. Applications are invited for the appointment of a Junior Assistant, in the County Planning Department of the County Council. The salary will be according to Grade I of the Administra-tive, Professional, and Technical Division of the National Joint Council's Scale of Salarles, £330 per annum, rising by three annual increments to £375 per annum, plus bonus. Applicants should be neat and expeditions draughtsmen. Preference will be given to those having previous experience in a planning office, and who have knowledge of surveying and level-ling.

The post will be superannuable, and the success-ful candidate will be required to pass a medical examination. Applications, stating age, qualifications, and

Applications, heating age, quantications, and details of experience, accompanied by copies of three recent testimonials, should be forwarded to the County Planning Officer, County Hall, Oxford, hot later than the first post on the 27th January, 1947

F. G. SCOTT, Clerk of the Council.

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County Hall, Truro. 3rd January, 1947.

BOROUGH OF COLCHESTER

BOROUGH OF COLCHESTER. BOROUGH ENGINEER'S DEPARTMENT. ARCHITECTURAL SECTION. Applications are invited for the following temporary appointments :-(a) QUANTITY SURVEYOR. Salary, Grade VI, commencing £535 per annum. (b) ASSISTANT QUANTITY SURVEYOR Salary, Grade I, commencing £300 per annum. Both appointments rank for bonus, at present £59 16s. per annum, in addition to salary. Applicants for (a) should hold appropriate pro-fessional qualifications, and be accustomed to the preparation of Bills of Quantities. Specifications, Estimates, and settlement of final measurements in connection with Housing and General Building Works.

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HAROLD COLLINS, Assoc. M.Inst.C.E., Borough Engineer. Town Hall, Colchester. 6th January, 1947.

DUNDEE COLLEGE OF ART. SCHOOL OF ARCHITECTURE. The Governors of the Dandee Institute of Art and Technology invite applications for the posi-tion of LECTURER AND STUDIO INSTRUC-TOR, mainly for Constructional Subjects. Applicants should be members of the R.I.B.A., and should preferably hold a Degree or Diploma of a recognized School of Architecture, or an equivalent qualification in their special subjects. Salary scale : Men. 2450 by 215 to 2685; women. 2400 by 215 to 2575. Placing will be according to qualifications and experience. Applications should be made not later than Wednesday. 12th February, 1947, on the prescribed form. copies of which with full particulars may be obtained from the undersigned.

be obtained from the undersigned. GEORGE H. THOMSON, Clerk and Tre

Treasurer.

Bell Street, Dundee. 14th January, 1947.

BOROUGH OF NELSON. APPOINTMENT OF ARCHITECTURAL ASSISTANT. Applications are invited for the appointment of Second Architectural Assistant, in the Borough Surveyor's Department, at a salary in accordance with Grade IV of the National Scale, 4420-215-2465, plus cost-of-living bonus, at present E59 158, per annum. Candidates should have had experience in housing and general work. Applications, giving detailed particulars of experience and qualifica-tions, endorsed "Architectural Assistant," with copies of three recent testimonials, to be delivered to the undersigned on or before Saturday, 2th February, 1947. February, 1947.

F. W. ROBERTS, Town Clerk.

755

Town Hall, Nelson, Lancs. 15th January, 1947. 768

## NANTWICH URBAN DISTRICT COUNCIL. ENGINEER AND SURVEYOR'S DEPART-MENT.

ENGINEER AND SURVEYOR'S DEPART-MENT. Appointment of :--(a) ARCHITECTURAL ASSISTANT. (b) ENGINEERING ASSISTANT. Applications are invited for the above appoint-ments in the Engineer and Surveyor's Depart-ment, at a salary in accordance with A.P.T., Grade II, of the National Scale, viz., 2500-2405, plus bonus (at present 259 168, per annum). A Council house will be made available for the successful applicant, if required. Candidates for appointment (a) must have bare architectural training, and be capable of preparing working drawings, details, specifica-tions, etc. For appointment (b) candidates should have bare according training. T is anticipated that the appointments will be for a period of at least three years. Applications, on forms to be obtained Surveyor, By T.P., A.M.T.P.I., Engineer and Surveyor, By T.P.J., Barlineer and Surveyor, By T.P.J., Barlineer and Surveyor, By T.P.J., By T.B.C., By Charlow 1 MENT. MENT.

14th January, 1947.



COUNTY BOROUGH OF WEST HARTLEPOOL. BOROUGH ARCHITECTS DEPARTMENT. APPOINTMENT OF JUNIOR ARCHITEC. TURAL ASSISTANT. Applications are invited for the position of Junior Architectural Assistant, in the Borough Architect's Department, at a salary in accordance with Grade A.P.T. I on the National Scales, namely, £330 per annum, rising by annual incr-ments of £15 to £375 per annum, plus ihe appro-priate cost-of-living bons, which at the present time amounts to £59 16s. Candidates should have passed the intermediate examination of the Royal Institute of British Architects, and preference will be given to appli-cants having previous experience in Local Govern-ment.

nt. The appointment will be subject to one month's tice in writing on either side, and the successful ndidate will be required to pass a medical amination. The appointment is subject also the provisions of the Local Government Super-metion Act, 1037 notice candidate

candidate will be required to pass a medical examination. The appointment is subject also to the provisions of the Local Government Super-annuation Act, 1937. Applications, endorsed "Junior Architectural Assistant," stating age, qualifications, and experi-ence, together with copies of not more than three testimonials, should be delivered to the under-signed not later than 6th February, 1947. Canvassing, either directly or indirectly, will be a disqualification. ERIC J. WAGGOTT.

ERIC J. WAGGOTT, Town Clerk.

Municipal Buildings, West Hartlepool. 10th January, 1947. 728

 of estimates for nonsing centre, scheme, and other buildings.
 (b) Preparing estimates and measuring, repairs, and minor works under schedule of price (experience of War Department or Office of Works schedules) ence of v schedules).

ence of war Department or Omce of Works schedules).
(e) Management of housing contracts of considerable value, interim valuations for payments, measurements of variations, and settlement of final accounts.
(d) Measurement of roads and sewers and housing work on sites for new cottage estates, preparation of interim and final bills on schedules (experience of E.W.O. and bonusing, measuring, and adjusting sub-contracts and progressing).
Forms of application may be obtained from the Acting Clerk of the Council at County Hall, Westminster Bridge, S.B.1. (stamped, addressed, foolscap envelope required). Preference will be given, other things being equal. to registered disabled persons. (86) 734

to registered disabled persons. (86) 734 KINGSTON-UPON-HULL EDUCATION AUTHORITY COLLEGE OF ART AND CRAFTS. Principal: S. I. HEMMING, A.R.C.A.(Lond.). Required, to commence duty as soon as possible. TINSTRUCTOR. Applicants should be members of the R.I.B.A., preferably with the degree or diploma of a recognized School of Architecture. Previous experience in lecturing on architectural subjects, or professional practical experience, is desirable. Salary in accordance with the Burnham Scale. In fixing the initial salary account would be taken of time previously spent in teaching and in pro-forms (which must be returned within fourteen days of the date of this issue) can be obtained on receipt of a stamped, addressed, foolscap envelope. from the Director of Education, Educa-tion Offices, Guildhall, Kingston-upon-Hull. 736

CUMBERLAND COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT. Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT, in the County Architect's Department. The salary will be in accordance with Grade II of the National Salary Scales, namely £360 per annum, rising by annual increments of £15 to a maximum of £406. together with a cost-of-living bonus, at present £59 16s. per annum. £59

259 16s per annum. The appointment will be, subject to the pro-visions of the Local Government Superannuation Act, 1937, and to the National Service Conditions, and the person appointed will be required to pass a medical examination.

a medical examination. Applications must be made on a form obtain-able from the County Architect, 4, Alfred Street North, Carlisle, and should be returned to him duly completed, together with copies of not more than three recent testimonials, not later than the 5th February, 1947. G. N. C. SWIFT, Clerk of the County Council. The Courts, Carlisle.

The Courts, Carlisle. 7th January, 1947.

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# J. E. RICHARDS, Town Clerk. 741

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## J. CAMERON, Town Clerk.

Town House, Inverness. 3th January, 1947. COUNTY BOROUGH OF DARLINGTON BOROUGH SURVEYOR'S DEPARTMENT-ARCHITECTURAL ASSISTANT. Applications àre invited for the appointment of an Architectural Assistant, on Grade V of the National Scale of Salaries, £460-£510, plus cost-of-living bonus of £59 198. 3d. per annum. The successful candidate will be required to pass a medical examination.

The successful candidate will be required to pass a medical examination. Preference will be given to candidates who have passed the Associateship Examination of the Royal Institute of British Architects. Applications, endorsed "Architectural Assis-tant," giving names and addresses of three referees, should be delivered to the Town Clerk, 11. Houndgate, Darlington, on or before the 10th February, 1947. Canvassing, directly or indirectly, will dis-qualify. 743

Canva qualify.

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BOROUGH OF CHELMSFORD. ENGINEER AND SURVEYOR'S DEPART-MENT. Applications are invited for the following per-manent appointments within the scale stated, plus cost-of-living bonus, at present £59 16s. (a) QUANTITY SURVEYOR. Grade IV, salary £60, £45 per anounce

plus cost-of-living bonus, at present 259 16s. (a) QUANTITY SURVEYOR. Grade IV, salary 2420-2455 per annum. (b) ARCHITECTURAL ASSISTANT. Grade III, 239-2435 per annum. Applicants must have the recognized qualifica-tions and experience for the appointments, which are subject to the provisions and conditions of service of the National Joint Council for Local Anthorities' Administrative, Professional, Technical and Clerical Services, and will be terminable by one month's notice on either side. Applications, stating age, qualifications, present and previous appointments, and general experi-ence, together with copies of three recent testi-monials, should be forwarded to reach the under-signed by not later than Monday, 3rd February, 1947. Canvassing in any form will disqualify. VINCENT J. WILLIS. M.Inst.M. & Cy.E., Bough Engineer and Surveyor. Municipal Offices, Rainsford House, Duke Street, Chelmsford. 14th January, 1947. COUNTY BOROUGH OF DEWSBURY.

 14th January, 1947.
 751

 COUNTY BOROUGH OF DEWSBURY.

 BOROUGH ARCHITECT AND BUILDINGS

 SURVEYOR'S DEPARTMENT.

 APPOINTMENT OF ASSISTANT ARCHITECT.

 Applications are invited for the appointment of a Permanent Assistant Architect, in the Educa-tion Section of the Borough Architect's Depart-ment, at a commencing salary in accordance with A.P.T. Grade V (2460-£510 per annum) of the National Scheme of Conditions of Service, plus cost-of-living bonus (at present £59 198. 3d. per annum). Previous experience in the design and erection of Schools will be considered an ad-vantage.

vantage. The appointment will be subject to one month's notice on either side, and to the provisions of the Local Government Superannation Act, 1937. The successful applicant will be required to pass a medical examination. Applications, stating and experience, together with copies of two recent testimonials. to be sent to the undersigned not later than Saturday, 8th February, 1947, endorsed "Assistant Architect (Education)." HOLLAND BOOTH

HOLLAND BOOTH, Town Clerk.

Town Hall, Dewsbury. 13th January, 1947. 756

 Town Hall, Dewsbury. 13th January, 1947.
 756

 THE RURAL DISTRICT COUNCIL OF GODSTONE.
 FORMATIONE.

 ENGINEER AND SURVEYOR'S DEPART-MENT.
 Splications are invited for the undermen-tioned appointments:--ONE ARCHITECTURAL ASSISTANT. Salary.

 A.P.T. Grade II. 230-215-2405.
 ONE GINEERING ASSISTANT. Salary.

 A.P.T. Grade I. 430-215-2405.
 ONE GINEERING ASSISTANT. Salary.

 A.P.T. Grade I. 430-215-2405.
 ONE GINEERING ASSISTANT. Salary.

 A.P.T. Grade I. 4230-215-2405.
 ONE JUNIOR GENERAL ASSISTANT. Salary.

 Misc., Grade I. 4255-215-2500.
 Plus a cost-of-living bonus.

 Plus a cost-of-living bonus.
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 Pointectural Assistants will be employed wholly on housing work, and the Engineering Assistants are required on schemes of sewerage and sewage disposal. Proference will be given be and the schemes of severage and sewage disposal.

 Assistants are subject to this.
 The Council have adopted the National Scale of Salaries and Conditions of Service. and the splorithments are subject to this.

 Applications, stating age, quasitientions and exiting age, quasitienting age, quasiting age, quasiting age, and the fortary.</t

F. W. WALPOLE, Clerk of the Council.

Council Offices, Oxted, Surrey. 14th January, 1947 745

14th January, 1947 745 BUCKS COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT. Applications are invited for the appointment of a Female SHORTHAND-TYPIST, at a salary in accordance with the Clerical Division of the National Scale of Salaries, 2525×212-2288 per annum, plus cost-of-living bonus, at present 248 5a, per annum. Applicants must be fully qualified, and prefer-ably experienced in an Architects' or Quantity Surveyors' office. The appointment is permanent, and subject to :--

to (a) The National Scheme of Conditions of

Service. (b) The Local Government Superannuation Act,

(b) The Local Government Superative Structure (c) The successful candidate passing a medical examination.
 Applications, stating age, qualifications and experience, with copies of two recent testimonials, should reach the County Architect, County Offices, Aylesbury, not later than 11th February, 1947.
 GUY R. CROUCH.
 Clerk of the Bucks County Council.
 County Hall, Aylesbury.
 14th January, 1947.

EAST GLAMORGAN JOINT PLANNING COMMITTEE. Applications are invited for the following 

Applications are invited for the following appointments:-(a) SENIOR PLANNING ASSISTANT (Engin-eering). The conditions of employment for both appoint-ments are in accordance with the National Scheme of Conditions of Service for Local Authorities Services, and the salaries are : Grade V, A.P. & T. Division, i.e., 2460, rising by 2510 per annum, plus war bonus, at present 259 16s. per annum, plus war bonus, at present 259 16s. per annum, plus war bonus, at present 259 16s. per annum. The appointments will be subject to the pro-visions of the Local Government Superannuation Authorities Services, and the subject to the pro-visions of the Local Government Superannuation Applicants for both appointments must be Cor-porate Members, by examination, of the Town Planning Institute, and should have had con-siderable experience in the preparation of planning schemes for both new development and redevelopment areas. Applicants with engineering and/or surveying qualifications, or appointment (b). Applications, endorsed "Senior Planning Assistant (Architectural)," as the case may be, stating age, qualifications, present and previous appointment, particulars of experience, and the suppointment, particulars of experience, and the appointment, particulars of experience, and the suppointments, particulars of experience, and the suppointments, particulars of experience, and the adventer than the first post on Monday, the lot day of February, 1947. The Clerk of the Committee. Toth January, 1947. CITY OF STOKE-ON-TRENT.

 14th January, 1947.
 759

 CITY OF STOKE-ON-TRENT.

 Applications are invited for the following per-maneta appointments in the Reconstruction De-vatisfactory medical examination, to the pro-vatisfactory medical examination, to the pro-vation Act, 1937, and will be terminable by one orach position is as set out below, and in each orach position is as set out below, and in each mana increments of £20 to £600;

 "Annal increments of £15 to £500;

 "Annal increments of £15 to £300;

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HARRY TAYLOR, Town Clerk.

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BOROUGH OF YEOVIL. APPOINTMENT OF PERMANENT ARCHI-TECTURAL ASSISTANT. Applications are invited for the appointment of an Architectural Assistant, at the salary based on Grade IV of the National Joint Council present 559 16s. Housing accommodation will be the National Joint Council present 559 16s. Housing accommodation will be made available. Applicants must be Associates of the R.I.B.A., good draughtsmen and sur-design and preparation of working drawings. The appointment will be enbiect to the Local double of quantities, measuring up for interim and have a good knowledge of building construc-tion supervision of building works, preparation and final certificates for Housing Schemes and the appointment will be enbiect to the Local Government Superannuation Act, 1937, and be the successful candidate must pass a medical ex-tination. Forms of application may be obtained the undersigned and sent with coise only during the recent testimonials not later than the nodersigned and sent with coise only there recent testimonials not later former. Marcent Superany, 1947. Marcent Superany

# THE POLYTECHNIC, 309, REGENT STREET, W.L. SCHOOL OF ARCHITECTURE, SURVEYING, AND BUILDING,

AND BUILDING. Required, as soon as possible, a full-time TEACHER OF SURVEYING AND BUILDING SUBJECTS. Candidates should possess a pro-fessional qualification in Surveying. Salary in accordance with the Burnham (Technical) Scale for London, subject to the usual deduction of 5 per cent. for Superannua-tion. Forms of application which doubt the

tion. Forms of application, which should be re-turned not later than 17th February, 1947. may be obtained by sending a stamped foolscap envelope to the undersigned. J. C. JONES, Director of Education.

 Director of Education.

 764

 METROPOLITAN BOROUGH OF POPLAR.

 APPOINTMENT OF ARCHITECTURAL ASSISTANT (GRADE A.P.T., V).

 Applications are invited from duly qualified architects for the above permanent staff appointment, in the Borough Engineer and Surveyor's permanent of the Council.

 The Bary attaching to the post will be in accordance with Grade V of the A.P.T. Division of the National Scale of Salaries, viz., 2460 per annum, rising by two annual increments of £15 followed by one of £20 to a maximum of £510 per annum and cost-of-living bonus, which is at present £59 los, per annum.

 Chaldets must have had extensive experiences, preferably under a local authority.

 The appointment will be subject to the successful candidates must have had extensive experiences of the Peplar Borough Council Super annuation Acts, 1911 to 1937, and the successful candidate will be required to pass a medical extension. Termination of the appointment will be subject to an enoth's notice on either side. Applications, endorsed "Architectural Assistant, Grade V," stating age, qualifications and past employment, and accompanied by copies of three recent testions and past employment, and accompanied by copies of three recent testions and past employment, and

AT.
 Canvaasing members or officers of the Council any form will disqualify.
 S. A. HAMILTON, *Town Clerk.*

Poplar Town Hall, Bow Road, E.3. 14th January, 1947. 769

## Architectural Appointments Vacant

Four lines or under, 5s.: each additional line, 1s. 6a.

HENRY C. SMART & PARTNERS, Archi-tects. 120, Moorgate, E.C.2, require Assis-tant; working drawings, details, surveys, etc. Write, stating age, experience, and salary re-quired. 913

APPLICATIONS are invited by the Co-opera-tive Wholesale Society. Ltd., for appoint-ment of STRUCTURAL ENGINEERING ASSIS-TANTS, in their Manchester Architect's Depart-ment; applicants should have experience in the design and detailing of structural steel, re-inforced concrete and foundation works; salary up to £500 per annum, according to qualifications, exclusive of cost-of-living bonus; successful candi-dates will be required to pass a medical examina-tion for entry into compulsory superannuation scheme. Applications, stating age. qualifications and experience, to C.W.S., Ltd., Architect's De-partment, 1, Balloon Street, Manchester, 4. C30.

A RCHITECTURAL ASSISTANTS required; A must be able to prepare working drawings; houses from sketch plans; salary according to experience. Saunders & Reiss-Smith, Architects, 70, Hill Park Crescent, Plymouth. 631

A PPLICATIONS are invited for the appoint. A PPLICATIONS are invited for the appoint-ment of Assistant to the Technical Editor, "Architects' Journal"; applicants must be first-class draughtsmen, possess a sound know-ledge of building practice, and be interested in the preparation of technical data; salary accord-ing to qualifications and experience. Application should be made to the Technical Editor, The Architectural Press, Ltd., 13, Queen Anne's Gate, Westminster, S.W.1. 215

**E** X P E B I E N C E D ARCHITECTURAL DRAUGHTSMAN required; must have thorough knowledge of building construction, and be capable of preparing detailed working draw-ings and specifications from sketch designs for large commercial and industrial buildings; know-ledge of estimating and preparing of bills of quantities an advantage; salary according to ex-perience. Write, stating ase, qualifications. full details of experience, and when available, to Box 571. Box 571.

SURVEYORS.-London Architects have war damage work; salary, £500-£625 per annum. Write, stating age, experience, and when free. Box 645.

WANTED, immediately. ASSISTANT EDITOR for Architectural Journal, with literary and organizing ability; knowledge of architecture and the architectural profession essential, but need not be qualified architect; some journalistic or literary experience and knowledge magazine production useful. Box 210. WANTED,

A RCHITECTURAL or CIVIL ENGINEER-ING DRAUGHTSMEN required: know-ledge of reinforced concrete, steel work. Apply: Midland Tar Distillers, tid., Birmingham Road, Oldbury, near Birmingham. 653

Road, Oldbury, near Birmingham. 553 ARCHITECT'S ASSISTANTS, R.I.B.A., Final or Intermediate standard, required in ex-panding country practice (present staff of six), for working up and taking charge of good class domestic, including alterations and restorations, farm buildings and layouts, and R.D.C. (village) housing; state age, experience, and when free; salary £4/£10 per week, according to ability. G, Forsyth Lawson, L.R.I.B.A., 25a High Street, Banbury, Oxfordshire. 680

A SSISTANT, qualified or near-qualified, wanted in busy Tonbridge practice; agricultural, conversions, domestic, housing. W. A. Bassett and Peter Berner, L./A.R.I.B.A., A.M.T P.I., 47. High Street, Tonbridge.

LONDON (W.1) Architects require SENIOR ASSISTANT, with up-to-date knowledge of the Housing requirements of Ministries and Local Authorities, to work up and supervise a number of small contracts; scope for advance-ment. Details of salary required and experience to Rev 725. to Box 725.

FIRST-CLASS DRAUGHTSMAN required for Information Sheets: applicants must possess a sound knowledge of building practice, and be interested in the preparation of technical data; salary according to qualifications and experi-ence. Application should be made to The Technical Editor, The Architectural Press, Itd... 13, Queen Anne's Gate, Westminster, S.W.1. 216

J UNIOR ARCHITECTURAL ASSISTANT re-quired at once; Peterborough. Apply, stating age, experience, and salary required, to Box 692.

S URVEYOR'S ASSISTANT required; age 25-30; capable of cubing buildings for fire insurance purposes and general routine duties; salary, £6 6s. weekly. Box 726. SURVEYOR'S

Salary, 25 08. weekly. Box 726. Required by the second se

A RCHITECTURAL ASSISTANT required in A West Country office for busy and expanding general practice; Inter. R.I.B.A. Standard; good draughtsman; able to make surveys and prepare working drawings; five-day week. Full par-ticulars of experience. salary required, etc., to Box 731 Box 731.

A BCHITECT, Central London, requires a qualified Assistant, to take charge of a general practice; measuring up and simple sur-veying essential; state age and experience and salary required. Box 732.

A RCHITECT'S SENIOR ASSISTANT required in London Staff Architect's office of large London organisation; work in all parts of London and Provinces; permanent position and pension scheme subject to 12 months' satisfactory service; salary 2475-2550 per annum, according to experi-ence; applicants should state previous experi-ence and positions held in chronological order. Box 738. RCHITECT'S SENIOR ASSISTANT required

A RCHITECTURAL ASSISTANTS and DRAUGHISMEN required for busy Firm, with varied practice; salary 26 to 29 per week, according to experience and ability. Apply by letter in first instance to A. E. Cogswell & Sona, F.R.I.B.A., F.S.I., Prudential Buildings, Ports-month. mouth.

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Mouth. 748 A RCHITECT FOR FAR EAST.—Messrs. Butter-field & Swire require fully qualified Architect for service in Hong Kong or China; age not ex-ceding 34; single man preferred; saiary dependent upon age, experience, on basis sterling pay, plus liberal dollar allowance, adjusted quarterly, accordance cost of living; good prospects. Apply in writing, staling age, education, qualifications, John Swire & Sons, Ltd., 8, Bilitter Square, tondon. London 750

260 2 ARCHITECTURAL ASSISTANTS required immediately; qualifications at least Inter-mediate Standard R.I.B.A.; salary according to experience and qualifications. Scherrer & Hicks, FF./R.I.B.A., 310, Upper Regent Street, W.1. 754 MALAYA.—Required, for commercial post, qualified ARCHITECT, with A.R.I.B.A.; single man preferred; good prospects. Write Box 2R.946. DEACONS ADVERTISING, 36, Leadenhall Street, E.C.3.

Street, E.C.3. 758 A BCHTFECTURAL ASSISTANT wanted in busy Country Practice, to assist in prepara-tion of housing schemes; must be 3 good draughtsman, and have knowledge of surveying and levelling and able to drive a car; applica-tions from seniors or juniors entertained; salary according to ability and experience. Parkinson & Doe, L./A.R.I.B.A., Huntingdon. 761 COMPETENT ARCHITECTURAL ASSISTANT required immediately. Architect's Office

COMPETENT ARCHITECTURAL ASSISTANT required immediately, Architect's Office, South-West London; salary according to experi-ence. Write G. Watt, A.R.I.B.A., 7, Windermere Avenue, S.W.19. (Tel.: LIB. 1435). 762 DONDON ARCHITECTS, with varied general practice, require Male ASSISTANT im-mediately; R.I.B.A. Intermediate standard. with pre-war general office experience; good draughts-man; able to prepare working drawings quickly and accurately; experience on large housing and flat schemes an asset; salary 28 8s. per week, with efficiency bouns yearly. Apply by letter before 15th February, giving full particulars of age, training, qualifications. experience and war service, to Stewart & Hendry, F./AA.B.I.B.A., 90, Fenchurch Street, London, E.C.3. 763

### Architectural Appointments Wanted

WOMAN ARCHITECTURAL ASSISTANT (20. Inter. R.I.B.A.), good draughtswoman, re-quires spare-time work of any architectural or artistic nature; London area; excellent refer-ences. Box 219.

E XPERIENCED ARCHITECT'S ASSISTANT

 XPERIENCED ARCHITECT'S ASSISTANT

 (28) seeks appointment; Inter. B.I.B.A.

 (Construction, Science and General History);

 to commence part-time, if possible. Box 220.

 SUSSEX. Hants or Dorset.-Experienced

 ARCHITECTURAL ASSISTANT (10 years), aged 27, requires responsible position in the foregoing counties. Box 226.

 ACHITECT'S ASSISTANT (22) requires requires responsible position in the foregoing counties. Box 226.

 ACHITECT'S ASSISTANT (22) requires requires requires responsible position in the foregoing counties. Box 226.

 ACHITECT'S ASSISTANT (22) requires requires requires responsible position in the foregoing counties. Box 226.

 ACHITECT'S ASSISTANT (22) requires requires requires responsible position in the foregoing counties. Box 226.

 ACHITECT'S ASSISTANT (22) requires requires requires requires response area; good experience of factory and domestic (Council housing) design and construction, details, etc.; site work, levels, surveys, etc.; quick, neat draughtsman.

 Please state salary offered to Box 227.

 STUDENT, BL.BA. (22).
 6 years' general ax 

THEAS STATE SALARY Offered to Box 227. STUDENT, R.I.B.A. (22), 6 years' general ex-perience, seeks position with Central London architects; available immediately. Box 222. ARCHITECTURAL ASSISTANT, 6 years' experience in Factory, Domestic and Com-mercial design, Surveys, Details, Specificati as and quantities; appointment required in Midlands area. Box 223. Area. Box 223. K veving; slight experience; low salar-CHIEF ARCHITE

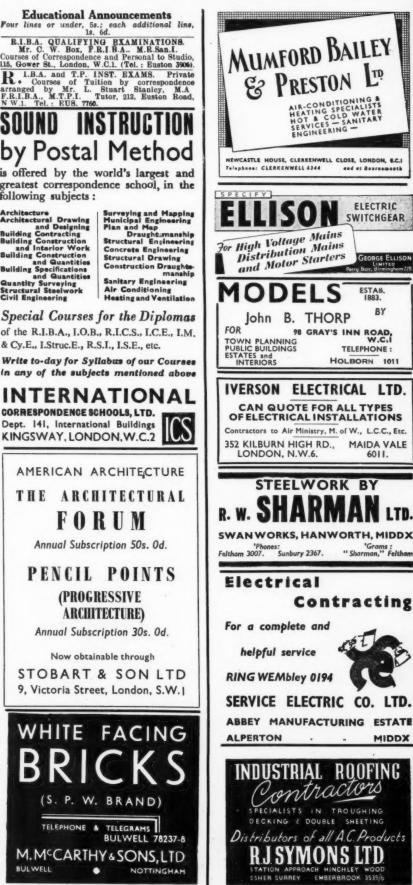
accepted. Box 224. CHIEF ARCHITECTURAL ASSISTANT. University Diploma, seeks change: 15 years' experience high-class work, large housing schemes, faits, conversions, schools, hospitals, factories, etc.; accustomed complete charge; excellent references; London area or South of England preferred. Box 228.

### **Other Appointments Vacant**

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

S HORTHAND-TYPIST wanted in Staff Archi-tect's and Surveyor's Dept. in London; per-manent position after period of satisfactory service; salary according to age and experience. Reply in writing to Box 739.

JUNIOR SHORTHAND-TYPIST wanted for UNIOR SHORTHAND-TYPIST wanted for Architect's office: high speeds not essential, but applicant must be accurate and willing to assist in general office duties. Telephone or write: E. W. Armstrong, F.R.I.B.A., 19, Man-chester Square, London, W.1. (Welpeck 320.)



## Other Appointments Wanted

Four lines or under, 2s. 6d.; each additional line, 18.

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758 ed in JOHN CARTER, Specialist in Architectural Perspectives. Paddington 2702. 702 **EXPERIENCED TYPIST**, own typewriter, would like work from Architects and Sur-reyors; specifications, schedules, bills, and general typing. Mrs. Bransdon, 12, Bloomsbury Square. W.C.L. 737

W.C.I. PROFESSIONAL assistance offered; Land surveys, Working-up Drawings; Quantities, etc.; 20 years' experience design and construction public works. Box 757. A RCHITECTURAL METAL WORK A DRAUGHTSMAN (34) seeks change; accommodation wanted for wife and child if outside London area. Box 770.

### For Sale

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Four lines or under, 5s.; each additional line, 18. 6d.

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Canondary 2061-3. "CAN I HELP YOU!" I have on my staff Praughtsmen, Building, Estimating, Land, Measur-ing and Quantity Surveyors. Write C. F. Rumble, 29(3), Whitehall, S.W.1. Tel.: Whitehall 8514.

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Box 749. **B**RICKS, Tiles and Allied Products: Agencies required; knowledge of building trade and personal connection amongst builders' merchants and the industry generally; London 20 mile radius. F. C. Needham, 40, Hatherley Road, Sidcup. Telephone: Footscray 2394. 225

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BRIXTON SCHOOL, OF BUILDING ASSOCIATION. RE-UNION. A Reception and Dance is to be held on Satur-day, 8th March, 1947, at the Bedford Hotel, Baham. S.W. Past Students. from all sections of the School, will be cordially welcomed. Ticksts, price 5s. (including buffet), obtainable before ist March. from the Hon. General Secretary, Brixton School of Building, Ferndale Road, S.W.4. 752

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

14. 6d. B.I.B.A. QUALIFYING EXAMINATIONS. Mr. C. W. BOX, F.B.I.B.A.. M.R.San.I. Courses of Correspondence and Personal to Studio, 115. Gower St., London, W.C.1. (Tel.: Euston 3906). R.I.B.A. and T.P. INST. EXAMS. Private arranged by Mr. L. Stuart Stanley, M.A. F.R.I.B.A., M.T.P.I. Tutor, 212, Euston Road, N.U.1. Tel.: EUS. 7760.

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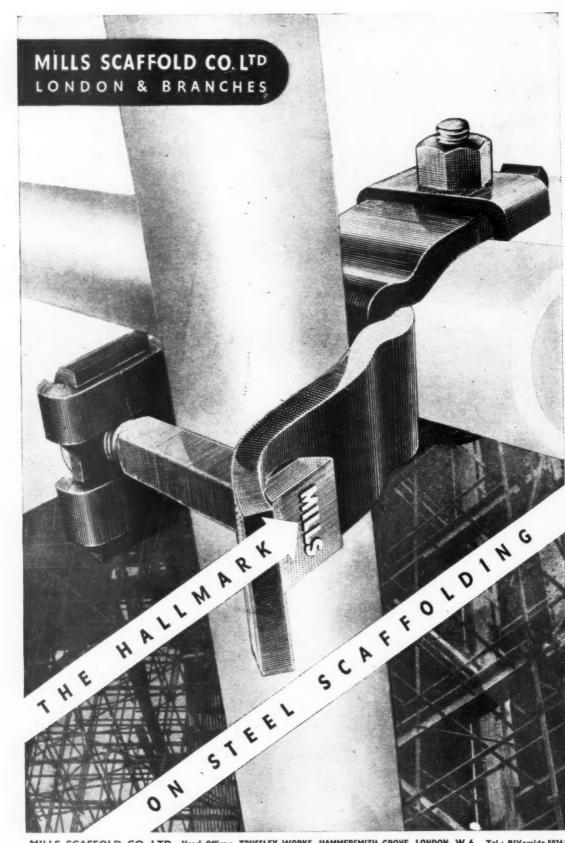
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