The Architects' JOURNAL for May 6, 1954 ARCHI



standard

contents

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

COMMENT NEWS and

Diary News

Astragal's Notes and Topics

Letters

Societies and Institutions

SECTION TECH.NICAL

Information Sheets Information Centre

Current Technique

Questions and Answers

Prices

The Industry

PHYSICAL PLANNING SUPPLEMENT

BUILDINGS CURRENT STATISTICS HOUSING

Appointments Architectural Wanted Vacant and

[VOL. 119 No. 30881 ARCHITECTUR AL PRESS THE 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1. 'Phone: Whitehall 0611

> Price 1s. od. Registered as a Newspaper.

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

Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1. Institution of Heating and Ventilating Engineers. 49, Cadogan Square. IGE IHVE Sloane 8266 Sloane 1601/3158 Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1. Euston 2450
Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783 IIBD Institute of Landscape Architects. 12, Gower Street, W.C.1.
Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, ILA I of Arb Strand, W.C.2. Temple Bar 4071 Museum 7197/5176 Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197/5176
Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3. Avenue 6851
Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172
Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128
Inland Waterways Association. 14, Great James Street, W.C.2. Chancery 7718
Lead Industries Development Coursell. Each University Street W.C.2. IOB IR ISE IWA LIDC Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.

Whitehall 7264/4175 Multehall 7264/4175

London Master Builders' Association. 47, Bedford Square, W.C.1. Museum 3891

Modern Architectural Research Group (English Branch of CIAM). Secretary:

Trevor Dannatt, 6, Fitzroy Square, W.1. Euston 7171

Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. Whitehall 3400 LMBA MARS MOA

Ministry of Education. Curzon Street House, Curzon Street, W.1.

Ministry of Health. 23, Savile Row, W.1.

Ministry of Housing and Local Government. Whitehall, S.W.1.

Ministry of Labour and National Service, 8, St. James' Square, S.W.1.

Whitehall 4300

Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.

Gerrard 6933 MOE MOH MOHLG MOLNS MOS MOT Ministry of Transport. Berkeley Square House, Berkeley Square, W.1. MOW Ministry of Works. Lambeth Bridge House, S.E.I. R
NAMMC Natural Asphalte Mine-Owners and Manufacturers Council.

94-98, Petty France, S.W.1. Mayfair 9494 Reliance 7611

Abbey 1010 National Association of Shopfitters. 9, Victoria Street, S.W.1. Aboby 4813
National Buildings Record. 37, Onslow Gardens, S.W.7. Kensington 8161
National Council of Building Material Producers, 10, Princes Street, S.W.1.Abbey5111
National Federation of Building Trades Employers. 82, New Cavendish Street, NAS NBR NCBMP NFBTE Langham 4041/4054 W.1.

National Federation of Building Trades Operatives, Federal House,
Cedars Road, Clapham, S.W.4. Macaulay 4
National Federation of Housing Societies. 13, Suffolk St., S.W.1. Whitehall INational House Builders Registration Council. 82, New Cavendish Street, W.1. NFBTO Macaulay 4451 Whitehall 1693 NFHS NHBRC

Langham 4341 NPL. Molesey 1380

National Physical Laboratory. Head Office, Teddington Mo National Sawmilling Association. 14, New Bridge Street, E.C.4. National Smoke Abatement Society. Chandos House, Buckingham Gate, NSA City 1476 NSAS S.W.1. Abbey 1359

National Trust for Places of Historic Interest or Natural Beauty.
42, Queen Anne's Gate, S.W.1.
Political and Economic Planning.
Reinforced Concrete Association.
42, Queen Anne's Gate, S.W.1.
44, Petty France, S.W.1. NT Whitehall 0211 Whitehall 7245 PEP Abbey 4504 Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. RIAS

Edinburgh 20396 RIBA Royal Institute of British Architects. 66, Portland Place, W.1. Royal Institution of Chartered Surveyors. 12, Great George St., Langham 5721 S.W.1. RICS

Whitehall 5322/9242 Royal Fine Art Commission. 22A, Queen Anne's Gate, ...W.1.
Royal Society. Burlington House, Piccadilly, W.1.
Royal Society of Arts. 6, John Adam Street, W.C.2.
Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.
Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. W.
Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1. RFAC Whitehall 3935 Regent 3335 RS RSA Trafalgar 2366 RSI Sloane 5134 RIR Wimbledon 5101 SBPM

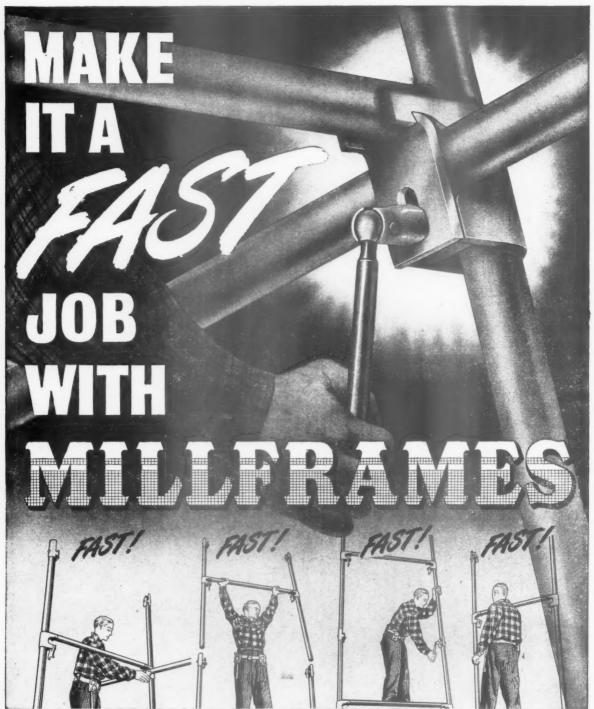
Victoria 2186 SCR Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8. Western 1571

SE Society of Engineers. 17, Victoria Street, Westminster, S.W.1. Abbey 7244 SFMA School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3. Mansion House 3921

SIA Structural Insulation Association. 32, Queen Anne Street, W.1. Society of Industrial Artists. 7, Woburn Square, W.C.1. Scottish National Housing. Town Planning Council. Langham 7616 SIA SNHTPC Langham 1984 Scottish National Housing.

Hon. Sec., Robert Pollock, Town Clerk, Rutherglen. Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.
Holborn 2646 SPAB win and Country Planning Association. 28, King Street, Covent Garden, W.C.2.
Temple Bar 5006 TCPA

Timber Development Association. 21, College Hill, E.C.4.
Town Planning Institute. 18, Ashley Place, S.W.1.
Timber Trades Federation. 75, Cannon Street, E.C.4.
War Damage Commission. 6, Carlton House Terrace, S.W.1. TDA City 4771 TPI Victoria 8815 City 5051 Whitehall 4341 **ZDA** Zinc Development Association. Lincoln House, Turl Street, Oxford. Oxford 47988



Horizontal tube inserted in Millframe Coupler. Half-turn the spring steel plate—it's fast!

Going up. The next Millframe slides quickly into position on the verticals of H-FRAME below.

Half-turn plate, tighten bolt. Millframes are then secured to give standard lift height of 6'.

Millframes of special lightfauge steel tube give high speed erection and dismantling.

MILLS SCAFFOLD CO. LTD.

(A Subsidiary of Guest. Keen and Nettlefolds, Ltd.)

Head Office: TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON, W.G. (RIVerside 5026/9)

Agents and Depots: BELFAST BIRMINGHAM BOURNEMOUTH BRIGHTON BRISTOL CANTERBURY CARDIFF COVENTRY CROYDON DUBLIN GLASGOW HULL ILFORD LIVERPOOL LOWESTOFT MANCHESTER NEWCASTLE NORWICH PLYMOUTH PORTSMOUTH READING SHIPLEY SOUTHAMPTON SWANSEA YARMOUTH





We have but one string to our bow. And when you come to think of it, whoever heard of a really efficient bow requiring more than one string?

In this case the "string" is asphalte. We specialise in asphalte. Nothing else. We do not lay linoleum, felt, tiles, rubber flooring, wood blocks, we just lay asphalte. You see, we hold the opinion that nobody can give 100% attention to more than one thing at a time. And we

Gne string to a bow

Concentrate on **asphalte** — have done for years.

Obviously, anyone who has specialised successfully for so long in **asphalte** must know quite a lot about it. So, next time the question of **asphalte** arises, why not

Call in Val De Travers

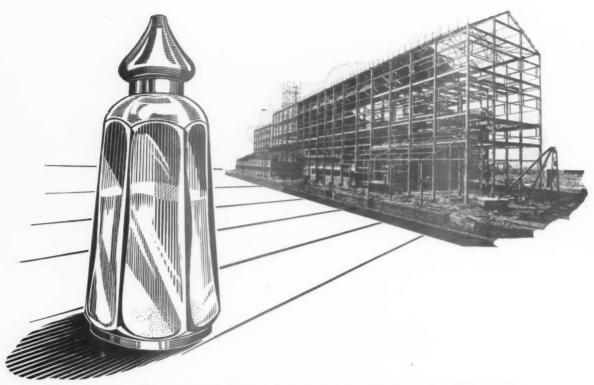
VAL DE TRAVERS ASPHALTE

21-22 OLD BAILEY, LONDON, E.C.4

Phone: City 7001 (10 lines) Grams: Traversable, Telex, London BRANCHES: BIRMINGHAM, CANTERBURY, EXETER, GLASGOW LINCOLN, LIVERPOOL, MANCHESTER, NEWCASTLE-ON-TYNE



BIG BUSINESS NEEDS BIG BUILDINGS



STEELWORK for SALT

The use of salt goes back to the dawn of human history and its refinement and manufacture today is on a scale necessitating buildings such as this factory at Stoke Prior built for I.C.I. Ltd., Salt Division, by



CONSTRUCTIONAL ENGINEERS

Registered Office and Works: MANCHESTER 17. Telephone: TRAfford Park 2341 (10 lines)
London Office: 68 Victoria St., S.W.I. Tel: Victoria 1331/2 Technical Offices: BIRMINGHAM, LOUGHBOROUGH

dm WD. 33



Evolene paints are recommended for internal
or external surfaces where maximum durability
is required in a finish which gives a
pleasing high gloss decorative effect.

Insist on Evolene paints for maximum decoration
and protection. Send for leaflet 1008



EVODE LIMITED . GLOVER STREET . STAFFORD

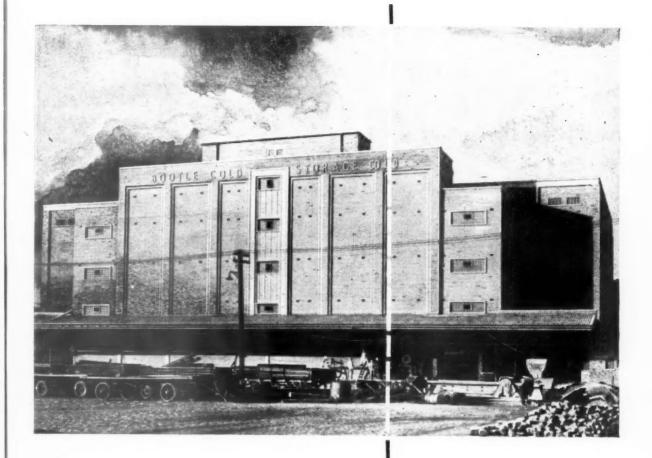


are specified by those who demand perfection in decoration. Consistently recognized as the standard by which others are judged, the range includes Walpamur Water Paint, the most popular of flat finishes, Duradio Enamel Paint, a high gloss protective finish and Muromatte Flat Oil Paint, a readily washable, smooth matt effect. There are other paints, enamels and varnishes in the Walpamur range especially formulated to meet every need.



BY APPOINTMENT PAINT AND WATER PAINT MANUFACTURERS TO THE LATE KING GEORGE VI

THE WALPAMUR COMPANY LIMITED . DARWEN AND LONDON



CANADA STORES, LIVERPOOL

by courtesy of the Bootle Cold Storage Co. Ltd.

Architects: Messrs. Montagu Evans and Son.

FRANKIPILES

THE FRANKI COMPRESSED PILE COMPANY LIMITED
39 VICTORIA STREET LONDON S.W.1
Telephone: Abbey 6006-9 · Telegrams: Frankipile, Sowest London

And in AUSTRALASIA . B. W. INDIES . RHODESIA . S. AFRICA



FRANKI (Driven) Piles
FORUM (Bored) Piles
MIGA (Jacked) Piles
R. C. Foundations

AND WE HOLD THE JOB UP

NC

W.311

Are you fully informed about OIL FIRED HEATING?

Combining very high combustive and functional efficiency with immaculate cleanliness, oil firing has for some time offered the appropriate, if not the economic, answer to most heating problems. Today, with unlimited supplies of inexpensive fuel oil flowing from refineries in Britain, it claims your recognition on the score of economy too.

RUNNING COSTS MINIMISED

Far cheaper than gas or electricity, although as clean as either, oil firing compares extremely favourably with solid fuels in terms of calorific value and reduced overheads. While the calorific value of coal, for example, ranges widely from approximately 10,500 to 14,000 B.Th.U. per pound, the far less variable net calorific value of oil fuels lies between approximately 18,350 and 20,000 B.Th.U. per pound. With Hydra oil firing equipment—which can be completely automatic—maintenance is cut to minutes, fuel is burned only when heat is needed, fuel storage space is minimised and the problem of ash disposal is finally disposed of.

FOR CENTRAL HEATING OR PROCESSING

Installation — or conversion — whether for central heating or industrial processing — is normally straightforward, although it naturally demands specialised knowledge and skill. Hydran Products have had 25 years' experience of research, manufacture and installation. Their knowledge and advice is always at your service.

CENTRAL HEATING

Hydra automatic oil firing equipment has brought new standards of clean, efficient heating to flats, hotels, schools, offices, theatres and cinemas. In service stations and bus depots, such as those of LONDON TRANSPORT and HENLY'S LTD., Hydra burners are operating wholly or partly on waste sump oil.

INDUSTRIAL PROCESSING AND FOOD MANUFACTURE

Heat which is flexible, clean and precisely controlled is provided for widely differing processes by Hydra burners. The many factories in which they are installed include those of IMPERIAL CHEMICAL INDUSTRIES LTD. (Paints Division), PARIPAN LTD., BRAND & CO. LTD., and SMITH'S POTATO CRISPS LTD.

A note from your secretary will bring you, by return, a booklet describing the principles and advantages of Hydra oil firing.

HYDRAZOILFIRING

EQUIPMENT

HYDRAN PRODUCTS LTD · HYDRA WORKS · STAINES · MIDDLESEX

Telephone: Staines 503

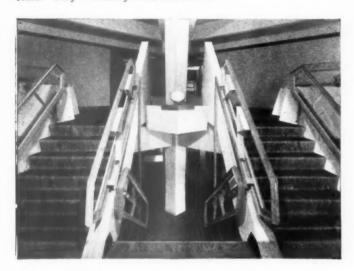
TSW 7

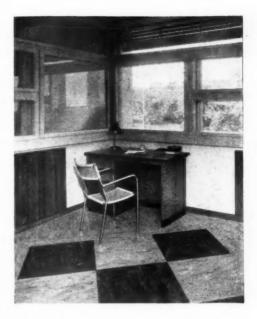
OLY-FLOR' Fits any wear

If you are looking for flooring which is decorative but yet capable of standing up to concentrated traffic, you undoubtedly need "POLY-FLOR". Lengths 5' wide of this Vinyl flooring can be unrolled on any flat surface. It has a high degree of dimensional stability and does not curl or crack. "POLY-FLOR" is also available in precision die-cut tiles in various sizes.

The sterling qualities of "POLY-FLOR" has produced foreign currency for years past, and although only very recently made available to the Home market by virtue of increased production, already leading Architects and Builders are recommending its use for projects in the United Kingdom. Produced in 16 beautiful marbled colours. colours permeate the whole thickness of the material and cannot wear off. Under constant use day in and day out the appearance of "POLY-FLOR" can be maintained merely with a wipe or a polish.

Pass these advantages on to your clients. First impressions will delight them, and they will still be thankful for your advice in years to come. May we send you further details.





- ¥ "POLY-FLOR" withstands extreme climatic conditions.
- * "POLY-FLOR" is not affected by oil, grease, or other substances likely to affect the surface of most other floor coverings.
- * "POLY-FLOR" will not support com-
- * "POLY-FLOR" can be easily wiped clean and polished to any degree required.
- ¥ "POLY-FLOR" can be laid on any even floor, it is fairly resilient and non-slip.
- → "POLY-FLOR" is produced in sixteen marbled colours. These colours are permanent and throughout its depth and the pattern will not wear away.

Building Research Establishment reports on its laving properties: " after 6 months there was no sign of buckling and there were no measurable changes in either length or width".

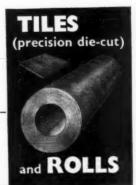


L FLOOR COVERING

Sole Manufacturers:

MES HALSTEAD

WHITEFIELD, MANCHESTER. Tel: Whitefield 2251/4



Hardwoods from Africa

Mahogany, Utile, Sapele, Obeche

We obtain our African Hardwoods from one of our subsidiary companies, who are actual producers of these woods in British West Africa. Thus we are able to import timber of known quality and maintain the reputation we have built up during the past three-quarters of a century. African Hardwoods are once more plentiful and we can meet the requirements of every branch of Industry. LOGS, PLANKS, STRIPS SCANTLINGS, BOARDS,



Denny Mott & Dickson Limited

Importers & Stockists of Hardwoods, Softwoods, Plywood & Wallboards

ADELAIDE HOUSE, KING WILLIAM STREET, LONDON, E.C.4

Telephone: MANSION HOUSE 7961

Belfast, Birmingham, Bristol, Cardiff, Glasgow, Hull, Liverpool, Manchester, Newcastle, Preston, Southampton

Lightweight Structural Building Material

Thermalite has been developed specifically to meet the need for a rational walling material. It combines the functions of load-bearing and thermal insulation and enables the architect to design structural external walls, with high thermal resistance, at a cost comparable with brickwork or concrete. Thermalite consists essentially of a large number of uniformly sized nonintercommunicating air cells, the walls of which are formed of a particularly strong and durable siliceous material. During manufacture the material is cured in high pressure steam which makes it chemically and physically stable. Because of its unique properties it is possible, using Thermalite as a structural material, to achieve a degree of Thermal Insulation hitherto only obtainable by the use of specialised insulation materials in conjunction with the normal structural concrete or brickwork.

> THERMALITE FOR LIGHT WEIGHT · FOR STRENGTH FOR INSULATION · FOR ECONOMY

For further details and technical data apply to

THERMALITE LIMITED

SHEPHERDS HOUSE LANE, EARLEY, READING, BERKS. Telephone: Reading 62694

The Thermalite process which has been developed in the laboratories of John Laing and Son Limited is protected by British Patents Nos. 648280 and 648299 and is also patented throughout the world

WHAT THERMALITE IS

- 1 A light weight load bearing insulating building material.
- 2 The size of blocks are nominal, $18' \times 9 \times 3'$, $18' \times 9 \times 4'$ and $18' \times 9' \times 6'$.
- The weights of blocks are, 3' blocks—14 lbs. 4' blocks—19 lbs. and 6' blocks—28 lbs.
- 4 It has a compressive strength of 750/800 lbs. per sq. inch and a modulus of rupture of 160 lbs. per sq. inch as delivered.
- 5 It has a high Thermal restivity. Two 3' leaves of Thermalite with 2' cavity have a "U" Value of 0.15—equal to more than 40' of brickwork.
- 6 It is a stable weather-resistant material.
- 7 It is easy to cut, chase, saw and work. Nails and screws can be driven direct.
- 8 It is incombustible.
- 9 It is vermin proof.

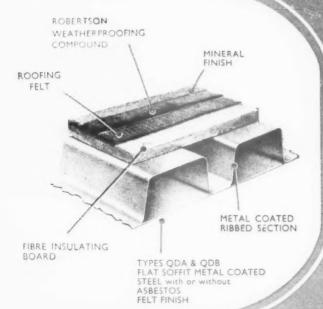
WHAT THERMALITE DOES

- 1 It saves fuel cost in heating of buildings.
- 2 It gives greater comfort in dwellings.
- 3 It reduces site labour costs.
- 4 It carries floor and roof loadings because of its strength.
- 5 It enables easy and direct fixing of joinery and fittings etc.
- 6 It saves structural steel and/or mild steel reinforcement.

The same

- 7 It saves in foundation design.
- 8 It reduces the risk of condensation.

WAY ROBERTSON @ DECIS IS Specified



- It is a steel deck of prefabricated unit construction
- Ribbed or flat soffit metal coated or asbestos felt finished
- Speedily erected
- Lightweight and rigid
- Permitting wide spacing of supports
- Insulated and weatherproofed by the Robertson method

full technical
data in leaset Q.D.1

available on request



ROBERTSON THAIN LTD

ELLESMERE PORT WIRRAL CHESHIRE

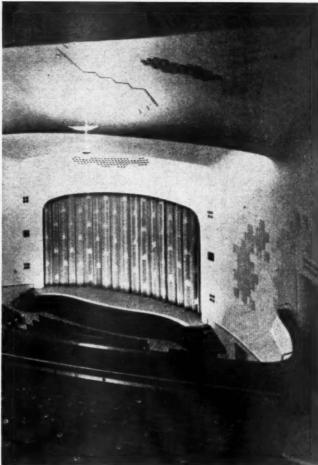
Sales Offices. LONDON GLASGOW BELFAST BIRMINGHAM NEWCASTLE LIVERPOOL SHEFFIELD MANCHESTER CARDIFF EXMOUTH

Agents in most countries throughout the World.

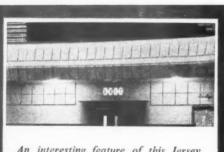








what a difference good sound insulation can make!

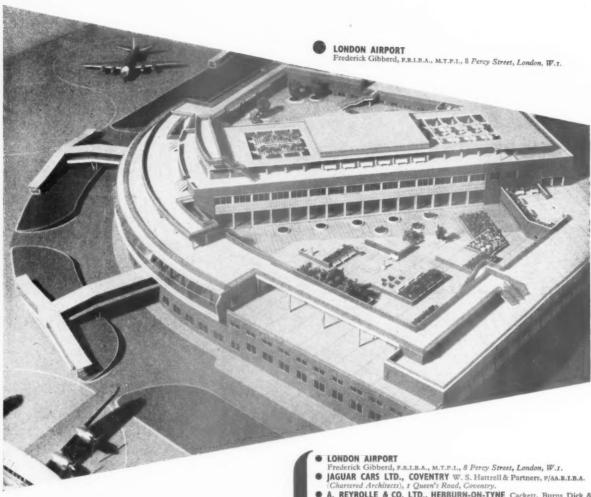


An interesting feature of this Jersey cinema is the arrangement of Paxtiles the full width of the balcony front. Used in this way Paxtiles give an unusual and attractive decorative effect, as well as providing excellent acoustical correction.

Good sound insulation is good business in the cinema industry. In this installation in the Odeon Cinema, Jersey, C.I. (Architects: Messrs. T. B. Bennett & Son) cinema patrons enjoy the best acoustic treatment that sound engineers can devise. Here, Newalls (Regd. Brand) Paxtiles are applied to Auditorium and Circle Foyer Ceilings, and walls of Auditorium, Circle and Stalls, to afford not only first class sound insulation but an attractive finish as well. Newalls have made a special study of cinema and projection box sound insulation and, as manufacturers of sound insulating materials with experienced personnel for the application of them, can offer an acoustic service which many cinema owners have used to good effect.

Where there's a SOUND INSULATION problem

NEWALLS INSULATION CO. LTD. Head Office: WASHINGTON, CO. DURHAM. A member of the Turner & Newall organisation Offices and Depots at London, Glasgow, Manchester, Newcastle upon tyne, Birmingham, Belfast, Bristol & Cardiff. Agents and Vendors in most markets abroad



FRENGER

● A. REYROLLE & CO. LTD., HEBBURN-ON-TYNE Cackett, Burns Dick &

Mackellar, F/F/A.R.I.B.A. (Chartered Architects), 21 Ellison Place,
Newcastle-on-Tyne. POWERS SAMAS, LONDON
 Michael Barnett, Esq., A.R.I.B.A., 329 High Holborn, London, W.C.1.

• C. A. PARSONS LTD., NEWCASTLE s Research & Design Division

• ALUMINIUM LABORATORIES, BANBURY

Sir Percy Thomas & Son, PP/A.R.I.B.A. (Architects), 10 Cathedral Road, Cardiff.

• LEWIS'S LTD., LIVERPOOL G. de C. Fraser, Son & Gearey, A/A.R.I.B.A. (Chartered Architects), 27 Dale Street, Liverpool.

NATIONAL BANK OF AUSTRALASIA Gordon & Gordon, F.R.I.B.A. (Architects and Surveyors), Finsbury House, Blomfield Street, London, E.C.2.

WILLERBY & CO. LTD., DERBY

C. J. Epril, F.R.I.B.A. and Associates, 55 Pall Mall, London, S.W.I.

DE HAYLLAND AIRCRAFT CO. James M. Monroe & Son, A.R.I.B.A. (Chartered Architects), 6 Spring Gardens, London, S.W.I.

LONDON SESSIONS HOUSE (Architect to the Council, J. L. Martin, M.A., PH.D., P.R.I.B.A.), with W. S. Durnford, P.R.I.B.A.), Senior Architect, General Division, and R. J. Dickson, M.I.H.V.E., Heating and Ventilating Engineer.

ATLAS ASSURANCE CO. LTD. Waterhouse & Ripley, PP/F.R.I.B.A., Staple Inn Buildings, High Holborn, London, W.C.1.

• DUAL PURPOSE BUILDINGS

Northern Ireland Hospitals Authority.

A. C. WICKMAN LTD., COVENTRY W. S. Hattrell & Partners, F/AA.R.I.B.A. Road, Coventry.

ARMAGH GIRLS' HIGH SCHOOL

• ST. BEES SCHOOL, CUMBERLAND

n & Wright, L./A. A.R.I.B.A. (Chartered Architects), 13 Castle St. Carlisle

BRITISH ALUMINIUM CO. LTD. (Research Laboratories, Chalfont Park)
 Architectural Dept., Norfolk House, St. James's Square, London, S.W.1.

PATHOLOGICAL LABORATORY, BOLTON
Frank Bradley, A.P.I.B.A. (Architect), Bunns Lane, London, N.W.7.
Park Bradley, A.P.I.B.A. (C.)

FRENGER CEILINGS LTD 67 GREAT RUSSELL STREET, W.C.I. Chancery 5534

As fresh as



The next time you see a Queen Anne or Georgian house looking as fresh as paint and as sound as a bell, ask yourself why. Two hundred . . . two hundred and fifty years is a long time to resist the destructive inroads of the weather. Outside paint is more than a beauty treatment, it has a job to do, a job of protection. And the passage of the years proves one thing without doubt — White Lead Paint Lasts.

It does not crack or flake, which means fewer repaints and less expensive ones, since burning-off and therefore labour costs are kept to a minimum.

White lead paint lasts. Magnet White Lead Base HARD GLOSS Paint is the up-to-date version of this trusty friend. Hard Gloss. Lasting Protection. A range of 32 intermixable colours.

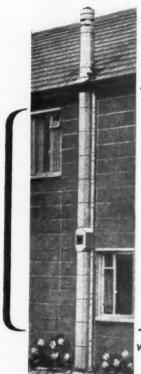


ASSOCIATED LEAD MANUFACTURERS LIMITED



LONDON · NEWCASTLE · CHESTER

TRUE FLUE - PATENTED PRECAST EXTERNAL FLUE



an Outstanding problem solved!

This is an economical and efficient Boiler Flue of pleasing appearance which can be bolted quite simply to an external wall. Each section is easily handled and no elaborate scaffolding is required.

The Flue has a refractory lining and is well insulated to overcome the condensation troubles so often experienced with asbestos or iron flue pipes and can be erected at a fraction of the cost of a brick stack.

Although this is one of our most recent developments we have already supplied approaching 2,000 of these flues to various local Authorities and Contractors.

Write for illustrated booklet and price list to the address at the foot of this page.

Also TRUE FLUE

This THREE-FOLD labour saving and efficient device is made of heat resisting refractory concrete and forms a stream-lined connection between the fire and the flue.

- The Restricted Throat is scientifically designed to ensure maximum heat retention and economy in fuel.
- 2 This unit eliminates the labour involved in forming the Gather-Over in brickwork above the fireplace opening. When placed in position over the fire-back it forms a base for TRUE-FLUE circular rebated linings or for the 9in. by 9in. parged flue as shown.
- 3 The Lintol has a wair-shaped front and is of sufficient width to afford adequate seating on jambs with all normal fireplace openings. The face of the Lintol is recessed to provide an insulation space at the back of the fireplace surround.

FOR MANY YEARS these TRUE-FLUE TRIPLE UNITS have been increasingly specified by numerous local Authorities and Architects. They were employed in the tests carried out by the Ministry of Fuel and Power on a large range of heating appliances and are also specified by the Ministry of Works, Metropolitan Police, British Railways and London County Council. During the past four years we have supplied approximately 15,000 complete flues to the latter Council alone.



REMEMBER—We are specialists in all matters relating to flues and can give you the benefit of nearly half a century's experience. We shall be pleased to design your stack in TRUE-FLUE construction (with or without convector heating), free of all cost to yourselves.

For further information please apply to:-

RUE FLUE LTD., CONVECTOR HOUSE, ACACIA ROAD, ST. JOHN'S WOOD, N.W. 8.

TELEPHONE: PRIMROSE 71601/2

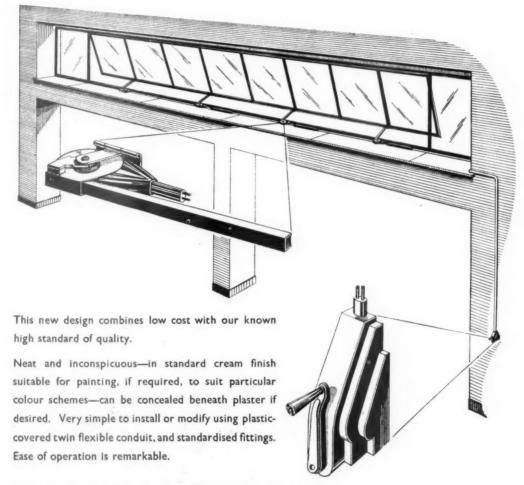
0

INTRODUCTION TO THE



TWIN CABLE GEAR

We are presenting this new product which will be available very shortly



For further details and prices write or 'phone our Contracts Department. Sole Manufacturers:

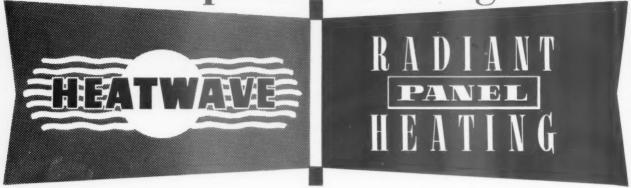
RENSCONTROLS

TUNSTALL ROAD · EAST CROYDON · SURREY

Telegrams: UNICONTROL, SOUPHONE, LONDON Telephone: ADDiscombe 3051/4

Australian enquiries to: S. K. SHEPHERD, G.P.O. BOX 1.000-H, MELBOURNE.

Presenting more important advantages of

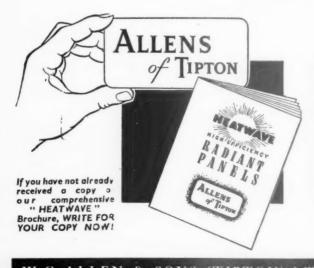


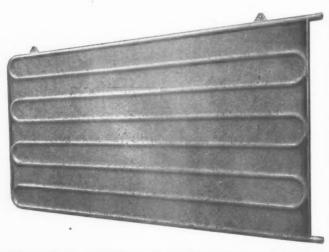


High temperature Radiant Panel Heating is becoming more and more recognised as the most efficient, practical and economical method of heating large spaces in Industrial Buildings, Factories, Machine Shops, Foundries, etc.

The advantages of "HEATWAVE" Radiant Panels give emphasis to their suitability for this form of heating. Made in TWO types (single and double-sided), they represent high temperature panel heating at its best and these further advantages will be readily appreciated by Architects, Heating Engineers, etc.

- There are no moving parts.
- No cold draughts are created if the steam supply is temporarily interrupted.
- Practically no maintenance required.
- No electrical wiring or switchgear has to be installed and maintained.





W.G. ALLEN & SONS (TIPTON) LTD. PRINCES END WORKS TIPTON STAFFS.

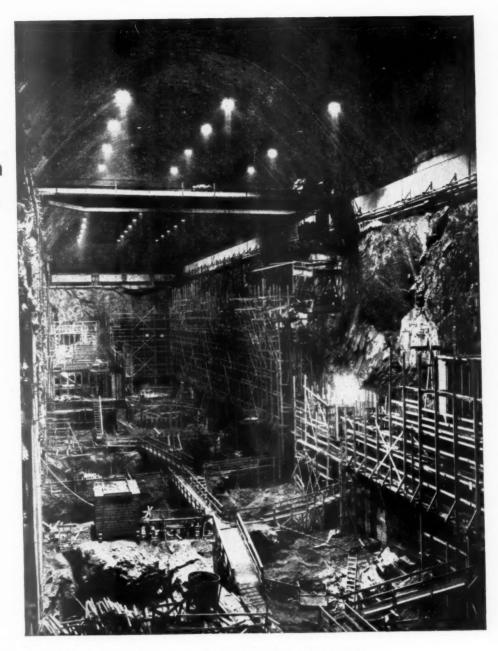
aluminium adventure

al and

Made resent urther nitects,

upply

to be



powerhouse inside a MOUNTAIN

Excavated inside the heart of Mount Du Bose, British Columbia, this huge man-made cavern will eventually house 16 hydro-electric turbines and generators, with a total capacity of over 2,000,000 horse power.

Already, on the other side of the mountain range, the water level is gradually rising in a 350 square-mile storage reservoir of rivers and lakes, formed by reversing an entire river system. The water will flow into a 10-mile tunnel drilled through the mountain and plunge 2,585 vertical feet—16 times

the height of Niagara—to drive the turbines of the Kemano underground power house.

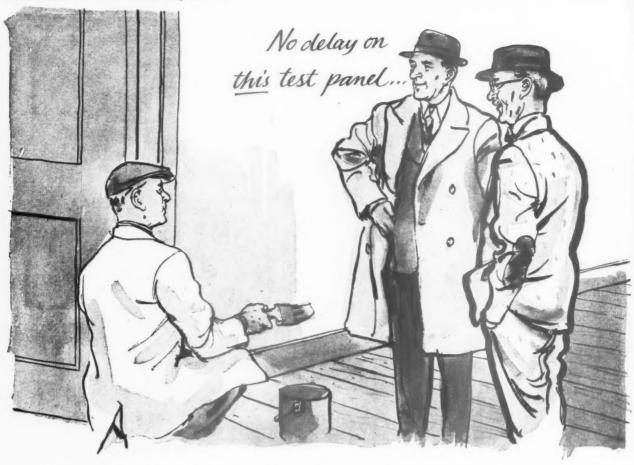
From Kemano, a 50 mile transmission line will carry the power across rocky terrain and over a 5,300 ft. mountain pass to the great new smelter of Aluminum Company of Canada Ltd., at Kitimat—capable when fully developed of producing 500,000 metric tons of Aluminium a year for the markets of the world.

Aluminium Union Limited



Incorporated in Canada

THE ADELPHI, STRAND, LONDON, W.C.2. AN ALUMINIUM LIMITED COMPANY PRINCIPAL BRITISH COMMONWEALTH DISTRIBUTOR OF ALUMINIUM



ROBBIALAC COLORIZER PAINTS have many advantages. For example; in cases where the architect requires to see test panels painted out for approval, particularly where several colours are being employed, the decorator can at once obtain a small quantity of Robbialac Colorizer paint and, with the appropriate tubes of colourant, paint out the test panels in a matter of hours. It does not matter which Robbialac finish is chosen for the test. For the decorator can, in all cases, obtain a small quantity of grey or white base paint and use the appropriate colourant tubes to strike the required shades at once. And

should the colour fail to be approved, the decorator can again — in a matter of hours — apply a lighter, or darker, or completely different shade. Robbialac Enamel, Eggshell Enamel and Suede Finish are all available in 999 colours — with a correct Undercoat for each one; Robbialac Emulsion Paint comes in 99 colours.

THE ARCHITECTURAL BUREAU of Jenson & Nicholson Ltd. offers a complete colour advisory service and will liaise with executives and contractors if required. A book on Robbialac Colorizer Paints specially written for Architects is available on request.



ROBBIALAC C



the modern paint

CONTROLLED LIGHT for Architectural Schemes



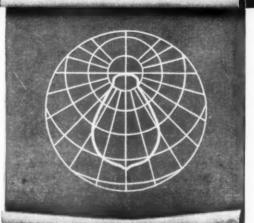
The Holophane Controlens system of lighting employs a scientifically designed pattern of prisms to control efficiently and accurately the light distribution and output of the fitting.

ed, ate lac

nd

60

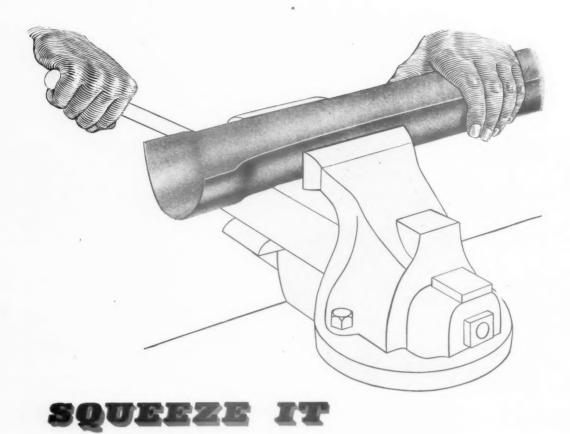
This semi-recessed In-Bilt unit is ideal for interior schemes where an inconspicuous source is required for general or localised illumination. By using different lens plates the light can be directed on to any surface. Obtainable in single or grouped units, they are applicable to any architectural plan. Our technical advice service is at your disposal.



HOLOPHANE LIMITED

SCIENTIFIC ILLUMINATING ENGINEERS

ELVERTON STREET, WESTMINSTER, LONDON, S.W.1. Phone: VICtoria 8062. Grams: Holophane Sowest London



Take a Birmid gutter and squeeze it
in a vice—you'll find that it will take a lot of
punishment before a crack appears. This Birmid toughness means
that transit and site breakages are almost unknown. Yet, for all their strength,
Birmid RWG are light and very easy to handle, keeping labour charges
down to the minimum. Birmid gutters and fittings are die-cast
and made of the finest quality materials and workmanship,
for long service. Safe, secure, and of lasting
good appearance, they appeal to the builder,
plumber, and householder alike, for
Birmid RWG are the practical

BIRMID RAINWATER GOODS

BIRMID WORKS · SMETHWICK 40 · STAFFS

choice for all-round economy.



by men who would accept the secondrate and those who look beyond today and ask for a measure of true dignity that will last into the lives of future generations—the men, in short, who prefer quality, to illusory savings on first cost—will find the answer in Reconstructed Stone by Ellis of Leicester.



JOHN ELLIS & SONS LIMITED 21 NEW WALK LEICESTER TEL.: LEICESTER 56682. LONDON OFFICE; 29 DORSET SQ. N.W.1.





Architect : Gordon Jeeves, Esq.

No. 4 in a series of Ford & Walton's famous buildings.

To Ford & Walton Ltd., belong the engineering skill and resources used to build Celanese House, in Hanover Square, and many other notable buildings. The services of Ford & Walton Ltd., are available to anyone considering the building of factories and flats, shops and offices or any construction project. Finance is provided in suitable circumstances.



ESTABLISHED OVER HALF A CENTURY

Offices: 3, Buckingham Palace Gardens, London, S.W.1. Telephone: SLOane 0630/0639 Works: Warton Road, Stratford, London, E.15

FROM THE SNOWCEM FILE:-

The Marfleet Refinery at Hedon Road, HULL



The bright and business-like appearance of this modern Owned by Messrs. British Cod Liver Oils (Hull and Grimsby) Ltd. factory has been achieved by a treatment with silver grey Snowcem applied by brush on concrete.

SNOWCEM is easily applied to concrete, cement rendering, or suitable brickwork by brush or spray. In seven colours: White, Cream, Deep Cream, Buff, Pink, Silver Grey and Pale Green.



SNOWCEM WATERPROOF GEMENT PAINT Decorates and protects at 10W cost * BRITISH CEMENT IS THE CHEAPEST IN THE WORLD

THE CEMENT MARKETING COMPANY LIMITED Portland House, Tothill Street, London, S.W.1 or G. & T. EARLE LTD., WILMINGTON, HULL. THE SOUTH WALES PORTLAND CEMENT & LIME Co. Ltd., Penarth, Glam.

T4353R

right

SPECIALIST ADVISORY SERVICE



BACKED BY 34 YEARS' EXPERIENCE

We offer you Immediate Delivery from STOCK

DOORS & GATES

of all descriptions including:

PANELLED DOORS (Canadian Door Stock and Deal) FLUSH DOORS (Plywood and Hardboard faced)

Prepared for locks or fitted if required.

OAK (Doors and Gates)

We are now holding large stocks of Plywood and Blockboard in Warehouses situated in the London, Manchester, Liverpool and Newcastle-on-Tyne areas.

These Stocks are available, free of all licencing restrictions, in a very wide range of thicknesses, sizes, grades and manufactures.

We specialise in the importation of popular sizes, 72" \times 36", 72" \times 48", 84" \times 48" and 96" \times 48" in thicknesses $^{3}/_{16}$ ", $^{1}/_{4}$ ", $^{3}/_{8}$ ", $^{1}/_{2}$ " and $^{3}/_{4}$ " suitable for the Building Trade, in addition to Blockboards, which we can supply in a variety of attractive woods in sizes as large as $67'' \times 201''$.

Full details of these Stocks will be gladly provided on request.

FIBRE BUILDING BOARDS

Hard, Insulating and Laminated Boards, in the following well-known trade-marked brands:

"UNITEX" Ivory Faced (Swedish)

"VIKING" (Swedish)

"KENMORE", "JUMBO", "BEAVER" and

"DONNACONA" (Canadian) **ENAMELLED HARDBOARDS** PERFORATED HARDBOARDS **ACOUSTICAL TILES**

Main Distributors of FORMICE and "TRAFFOLYTE" Decorative Laminated Plastic Sheets. Prompt Delivery from our Southall Warehouse in the following finishes:-

ORMICA

"Linette" "Onyx"

"Coarse Linette"

"Woodgrain"

"Softblow"

TRAFFOLYTE

Ste

Ste

Th

rea

we

ago Ro

inv

an

Ru

"R.U. Cream"

"White"

"I.U. Ivory"

"K.U. Green"

We can also supply "BOSCOPRENE 503 CEMENT", "BOSCOTEX PRIMER 5R" & "EVO-STIK" Adhesive for veneering formics to table tops, counter tops etc.

Chipboard

Made on the only continuous process machine, giving very competitive prices.

 $\frac{3}{8}$ ", $\frac{1}{2}$ " and $\frac{3}{4}$ " in standard lengths of 8', 10' and 12'. Any length cut provided minimum order of 100 sheets for each length.

Bartrev either plain, painted or veneered, is ideal for partitioning, linings, ceilings, flooring, etc., in domestic, office and industrial buildings.

> Stocks are available for immediate delivery at attractive terms to Merchants.

for resilient Industrial Floor surfaces.

We invite your enquiries for any or all of the above, and will gladly send on request price lists, literature and samples, or instruct our local Representative to call on you.

We also offer you our SERVICES in:

We have our wide range of MeTcO Metal Fixing Systems for the lining of roofs and walls and for flat ceilings, selection from which can meet any requirements in these fields.

Our MeTcO Partitioning is a sectional built-up system of components, taking all configurations, of extremely high salvage value when rearrangement or removal is desired, and designed for plain infillings or special panels of various materials, with either single or double glazing.

Acoustical Correction and Sound Quietening problems are dealt with by our various sound absorbent materials.

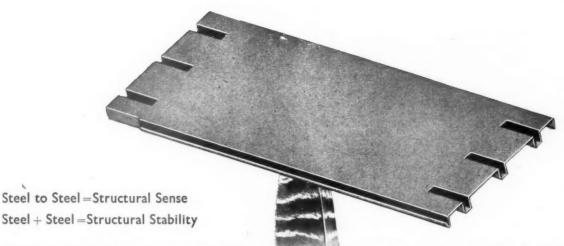
In these fields, we are organised to take charge of complete estimating and design, and the execution of the final job. Your enquiries accompanied by full data and preferably drawings are invited, and our Consulting and Technical Service is at your disposal.



LONDON, W.C.2 EFFINGHAM HOUSE, ARUNDEL STREET, STRAND,

Telegrams: "Themetraco, Estrand, London,"

Telephone: TEMple Bar 5303 (8 lines)



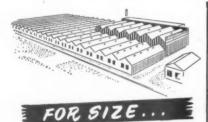
RUBEROID STEEL ROOF DECK

The Ruberoid Company Ltd. realised the possibilities of light-weight steel roofing units 25 years ago and the modern Ruberoid Steel Roof Deck represents a tremendous investment of long-term research and development.

Ruberoid Steel Deck has been used

for some of the most outstanding roofing contracts in the world, including India, Singapore, Iraq, Java, South Africa, France, Belgium, and the Argentine. There is not a town or city in the British Isles which does not contain buildings roofed with Ruberoid Steel Deck.

THE ROOF WITH REGORD PERFORMANCE



Many of the largest roofs in the world are of Ruberoid Steel Deck as, for instance, the 50acre roof of a building for the Ministry of Aircraft Production Factories.



Because of its simple construction and the lightness of the individual units, Ruberoid Steel Deck can be erected in record time. A 34,000-sq.-yd. factory roof was completed in 27 working days.



Ruberoid Steel Deck lends itself to every type of roof surface, curved, flat or pitched. On the Bristol Brabazon hangar, for instance, it was employed on all the sloping, flat and vertical areas.

See our Stand No. B 423 at the B.I.F.

R.123



The Ruberoid Contract Department places its wide and long experience with all types of roofing problems freely at the disposal of architects: consultations at the design stage can, and often do, result in structural economy. The Department undertakes the supply and fixing of Ruberoid Roofing specifications on any scale from convenient centres throughout the British Isles.

Write for Illustrated Brochure No. 343.

THE RUBEROID CO. LTD., I, COMMONWEALTH HOUSE, NEW OXFORD ST., LONDON, W.C.I



RUBERY OWEN

. a name in Structural Steelwork



RUBERY, OWEN & CO., LTD., DARLASTON, SOUTH STAFFS. Service Bureaux also at London, Birmingham, Coventry, Southampton.



MEMBER OF THE OWEN ORGANISATION.

TIME IS MONEY!

NOW-quicker work, better finish with

NEW PLASTIC-SURFACED WEUTOS





EVERY GENUINE WEYROC BOARD BEARS THE WEYROC LABEL

PLASTIC - SURFACED

Well of (Regal

THE AIRSCREW COMPANY & JICWOOD LIMITED
WEYBRIDGE . SURREY

TELEPHONE: WEYBRIDGE 1600
TELEGRAMS: AIRSCREW, WEYBRIDGE



A tall tale? No!

SECULATE ACTUALLY PREVENTS CONDENSATION

For a substance to prevent condensation by setting up a barrier between the air - no matter how moist - and the surface on which it is applied sounds a bit far-fetched, but it's an established fact. We have proved the case for Seculate time after time, under the most adverse conditions. Seculate is quickly and easily applied by brush or by trowel. It is quick-drying and gives an even finish or it may be stippled to obtain a textured surface. It adheres well to metal, stone, concrete, plaster, cement and wood. It is washable, durable, mould-resistant, fire resisting and will not flake, even under intense vibration. Write to us for literature.

SECULATE ANTI-CONDENSATION COMPOUND

Supplied by BRITISH LEAD MILLS LIMITED

BYRON HOUSE, 7-8-9, ST. JAMES'S STREET, LONDON, S.W.I. WORKS: WELWYN GARDEN CITY, HERTS. ALSO WARRINGTON, LANCS.

CRC ISC



For good looks and long life plan for

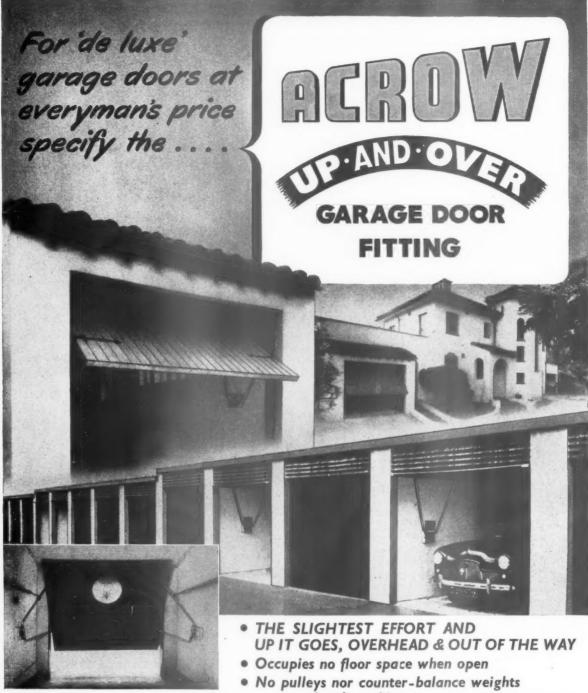


LINOLEUM

"THELMA" stands for The Linoleum Manufacturers' Association, 127 Victoria Street, London, S.W.I.

For further information write to the Association or to any of the following members:—

BARRY OSTLERE & SHEPHERD LTD., KIRKCALDY · DUNDEE LINOLEUM CO. LTD., DUNDEE · LINOLEUM MANUFACTURING CO. LTD., 6 OLD BAILEY, E.C.4 · MICHAEL NAIRN & CO. LTD., KIRKCALDY · NORTH BRITISH LINOLEUM CO. LTD., DUNDEE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LTD., FALKLAND. FIFE · JAS. WILLIAMSON & SON LTD., LANCASTER



WHEN you subtract from the cost of the fitting, the saving effected by having a single-leaf-door of light construction, there is little difference between the total cost of this modern easy-tooperate door and the clumsy, rapidly deteriorating, old-fashioned two-leaf type.

- -there's nothing to wear out or go wrong
- Simple to fix -IT'S THE GARAGE DOOR OF TODAY AND TOMORROW

PRICES ex-works MODEL 1: requiring a minimum clearance of

MODEL 2: requiring a minimum clearance of 2 in. above head of door: £11.9.3

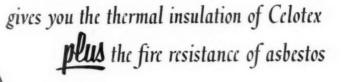
descriptive literature sent on

Less trade discount to builders; and reduction for quantity

ACROW (ENGINEERS) LTD., SOUTH WHARF, PADDINGTON, LONDON, W:2: AMBassador 3456 (20 lines)

22-24, City Road, Bristol, 2. (Bristol 24595) Whorlton Grange, Street, Hunslet, Leeds, 10. (Leeds 76514) Whorlton Tyne, 5. Tyne, 5. (Newcastle 86-9493)
130, Coventry Drive, Glasgow, E.I. (Bridgeton 1041) (Deansgate 7054) (Walsall 6085) 14, Park Place, Manchester, 4. Carl Street, Walsall, Staffs. Duncrue Street, Belfast. (Belfast 45211)

CELOTEX Fire Resistant Insulating Board



Celotex Fire Resistant Insulating Board is the result of intensive research to meet industry's need for a building board giving fire protection and thermal insulation. Made with a core of tough, durable Celotex cane fibre Insulating Board, sheathed on both sides with asbestos felt, it retains all the world famous qualities of Celotex insulation. The outward appearance is attractive with high light-reflecting surface which may be further decorated if required.

Easily cut and handled, it is the outstanding choice for wall, roof and ceiling linings and for partitions in buildings of every description—and it is available at a really economical price.

SPREAD-OF-FLAME
TEST, CELOTEX FIRE
RESISTANT INSULATING
BOARD—RATED CLASS
1—SHOWED NO SPREAD
OF FLAME WHATSOEVER!

- * CORE OF CANE FIBRE INSULATION
- * ASBESTOS SHEATHED ON BOTH
- * ATTRACTIVE LIGHT REFLECTING SURFACE
- * CAN BE EASILY DECORATED IF REQUIRED

Write for further details, samples and the address of your nearest distributor.

SIZES AND THICKNESS Lengths: 6, 7 and 8ft. Widths: 2 and 4ft. Thickness: 1/2 in.

ANew

CELOTEX

Product

MADE IN GREAT BRITAIN BY CELOTEX LIMITED, STONEBRIDGE PARK, LONDON, N.W.10 TELEPHONE: ELGAR 5717



"The Best Gloss Paint in the World"

BRITISH PAINTS LIMITED

Portland Road, Newcastle upon Tyne, 2. Telephone: -25151

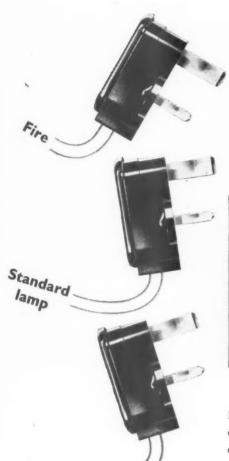


LONDON: CREWE HOUSE, CURZON STREET, W.1. Telephone: GROSVENOR 6401/5

• SEE OUR EXHIBIT AT THE BUILDING CENTRE, 26, STORE STREET, TOTTENHAM COURT ROAD, LONDON, W.C.1.

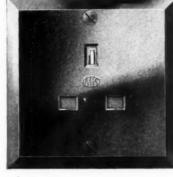
MK96DHB

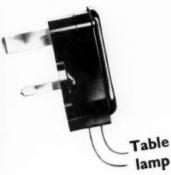
Too many plugs



chasing too few sockets







Electrical appliances play a great part in modern living. Their benefits cannot be enjoyed if too few sockets are provided. This can also lead to dangerous interference and unskilled wiring extensions. Post War Building Studies No. 11 (issued by H.M. Stationery Office) recommended the following as the *minimum* number of sockets for the ordinary small dwelling.

LIVING ROOMS

DOUBLE BEDROOMS 3

SINGLE BEDROOMS 2

KITCHENS

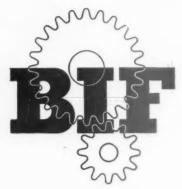
3 (2 if not intended for use as a living room)

Our advice on accessories for ring-circuit wiring is freely available to architects.



M. K. Electric Limited, Wakefield Street, London, N.18. Edmonton 5151





MAY 3-14

STAND - R9
(EARLS COURT)

Using Messrs. Craig & Rose's

standard materials,

this 'Burgess' house was

Decorated throughout by

MULLEN & LUMSDEN LTD

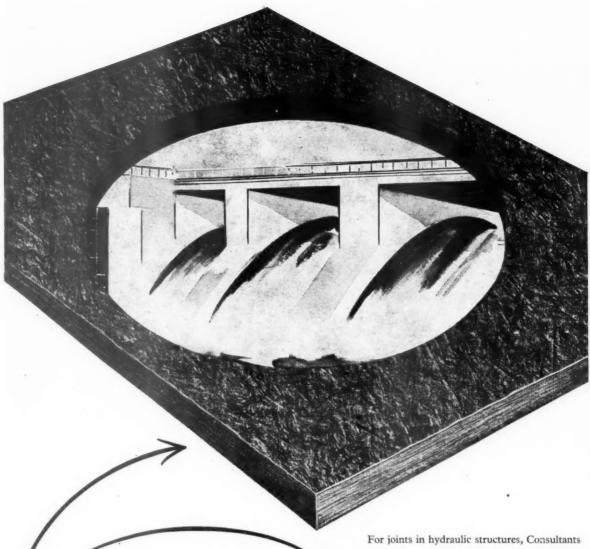
41 · EAGLE STREET · HIGH HOLBORN · LONDON · WCI Telephone : CHAncery 7422·3·4

We will be pleased to receive your enquiries for all Decorative Works

SMALL WORKS DEPT.: COPTIC STREET, LONDON, W.C.I

SOUTHAMPTON:
151 ROMSEY ROAD, SHIRLEY
SOUTHAMPTON 73176

JOINERY WORKS:
GRESHAM WORKS, SOUTH NORWOOD
ADDISCOMBE 1264



There is only one Flexcell

as

For joints in hydraulic structures, Consultants specify Flexcell, Expandite Rubber Waterstops and flexible scaling compounds.

Its highly cellular structure enables Flexcell to compress without extruding, and it recovers rapidly to fill the joint. It comes to the site pre-cut for use and is easy to handle. Flexcell is the first choice of Consulting Engineers and Architects on account of its low cost and durability under the most extreme conditions of service.

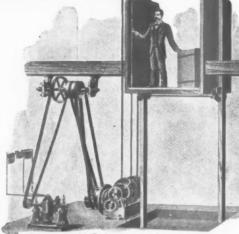
* Manufactured Specially by Celotex Ltd.

* Write for technical information to the Sole Concessionaires in the United Kingdom

EXPANDITE

CHASE ROAD · LONDON · N.W.IO · TELEPHONE ELGAR 4321





From an old Pickerings catalogue



Specialists in vertical transport for 100 years

still as modern as the minute

PICKERINGS LIMITED, GLOBE ELEVATOR WORKS, STOCKTON-ON-TEES
Telephone: Stockton-on-Tees 65278/9 - London Office: 116 Victoria Street, S.W.1. Tel: Victoria 9860

BRANCHES: BELFAST BIRMINGHAM BRISTOL DUBLIN GLASGOW HULL LEEDS
LONDON MANCHESTER NEWCASTLE WORTHING





BICC

CABLES
for every
electrical
installation

The electrical distribution system in the new Out-Patients' Department, St. James's Hospital, Balham, is recessed in accessible ducts. BICC Wiring System Cables were used throughout for all sub-circuits, and BICC Mass-Impregnated Non-Draining Cables for the mains.

Publications No. 333 "BICC Wiring Systems" and No. 308 "BICC Mass-Impregnated Non-Draining Cables" are available on request.

Electrical Contractors: Messrs, Johnson, Pearce & Co., Ltd., 4, Iverson Road, London, N.W.6.
Consulting Engineer: H. A. Sandford Esq., M.A., F.G.S., M.I.Mech.E., M.I.E.E., M.I.H V.E. M.Cons.E.
Architects: Messrs, Devereux & Davies.

BRITISH INSULATED CALLENDER'S CABLES LIMITED 21 BLOOMSBURY STREET, LONDON, W.C.I. KUSeum 1600



Ascot

the single-minded water heater

The Ascot is an expert. It specialises in giving hot water, and this it does more efficiently than any jack-of-all trades appliance.

- 1 Fuel is burned only while hot water is being drawn. The same water does not have to be re-heated over and over again; payment is made only for the water actually used.
- 2 Hot water flows the instant it is wanted. There's no waiting for a tank to heat up. That means a trouble-free hot water supply all the year round.
- **3** The supply is inexhaustible; Ascots never run cold. For as long as the tap is turned on hot water continues to flow.

There's an Ascot for every domestic need, from the inexpensive sink heater to a large multipoint that will supply all the taps in the house.

ASCOT 715

The very latest multipoint model and the world's first Balanced Flue gas water heater. Specified by 41 housing authorities for their own flats and housing schemes.

Has these outstanding advantages :-

- **1** Beautiful streamlined appearance.
- **2** Down-draughts into the room impossible.
- 3 Products of combustion cannot get into the room.
- 4 Completely automatic, 100% safe.
- **5** Supplies all the taps in the house, and can be coupled to the pipes of an existing system at low cost.

Four of every five instantaneous gas water heaters sold are Ascots. More than a million have been installed in British homes.

- Ascots make no dirt or dust, and need no stoking.

 They are completely automatic.
- **5** As no fire need be lighted to get hot water the kitchen is always cool in summer.
- 6 An ordinary open fire and an Ascot multipoint to give an instant, endless supply to three points cost no more to install than a back boiler which supplies three points only if the tank is hot.



The Balanced Flue Ascot 715 can be installed in a bathroom with complete confidence.

That's proof of Leadership

ASCOT GAS WATER HEATERS LIMITED . 255 NORTH CIRCULAR ROAD . LONDON NWIG

A member of the PARNALL Group of Companies



One of a range

of Falks contemporary lighting fittings

designed by J. M. Barnicot M.S.I.A of Falks

0



91 FARRINGDON ROAD, LONDON, E.C.1, AND BRANCHES

ARCHITECTS WHO HAVE SPECIFIED COLT VENTILATION

E. H. Montague Ebbs,

Leach, Rhodes & Walker,
A./L./L.R.I.B.A.

W.J. Morley & Son, F.R.I.B.A. Frederick Sheldon, F.R.I.C.S.

Teather & Hadfield, F./L.R.I.B.A.

Harry S. Fairhurst & Son, F./A.R.I.B.A.

E. Emrys Edmunds, R.F.I.B.A. Cecil Handisyde, A.R.I.B.A., A.A.DIPL.

Dudley C. March, L.R.I.B.A.

Clement Williams & Sons,
F.R.LC.S.

Andrews & Gale, A.R.I.C.S., F.R.I.B.A.

F. L. Charlton and J. L. Crowther, F./A.R.I.B.A.

Hetherington & Wilson, A./L.R.I.B.A.

Orman & Partners, F. A.R.I.B.A.

W. Stephen Thomas, A.R.I.B.A.

R. C. Beaumont, A.R.I.B.A.

Dancey & Meredith, L.R.I.B.A.

Floyd, Robson & Paul,

Harold Pittaway, A.R.I.B.A.

A. K. Tasker & Austin Child, F./A.R.I.B.A.

Harry Bloomer & Son, F. A.R.I.B.A.

K. Luther Davies, A.R.I.B.A.

W. David Hartley, F.R.I.B.A. Ivan F. Roberts, A.R.I.B.A.

J. Walton Taylor & Son, L.R.I.B.A.

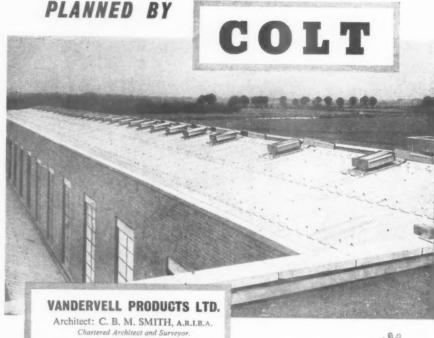
H. Marcus Brown & Lewis, L./L.R.I.B.A.

Elliott, Cox & Partners, F.R.I.C.S., A./L./F./R.I.B.A.

Ley, Colbeck & Partners, F./F.R.I.B.A., A.A.DIPL., F.R.I.C.S.

Spence & Price, A./A.R.I.B.A.
Willmott & Robertson,
F./L.R.I.B.A.

THERE ARE OVER 7,000 MAJOR INDUSTRIAL ORGANISATIONS WITH NATURAL VENTILATION



COLT SR-type Ventilators were included in the design of the new factory for Vandervell Products Ltd.

This Heavy Duty Roof Extractor Ventilator provides continuous positive extraction at all times. It has concave aero-foil curves to harness both the free power of the wind and the power of thermal currents within the building. Its appearance is such that it does not detract from the clean lines of the building in any way.

COLT'S wide experience in the ventilation of all types of buildings throughout industry is at your disposal. Why not take advantage of it?

FREE MANUAL with full specifications of the wide range of Colt Ventilators, available on request from Dept. A.24/173

Take
advantage
of
experience
gained in
every type
of Industry
— call in

COLT

to help solve your ventilation problems

COLT

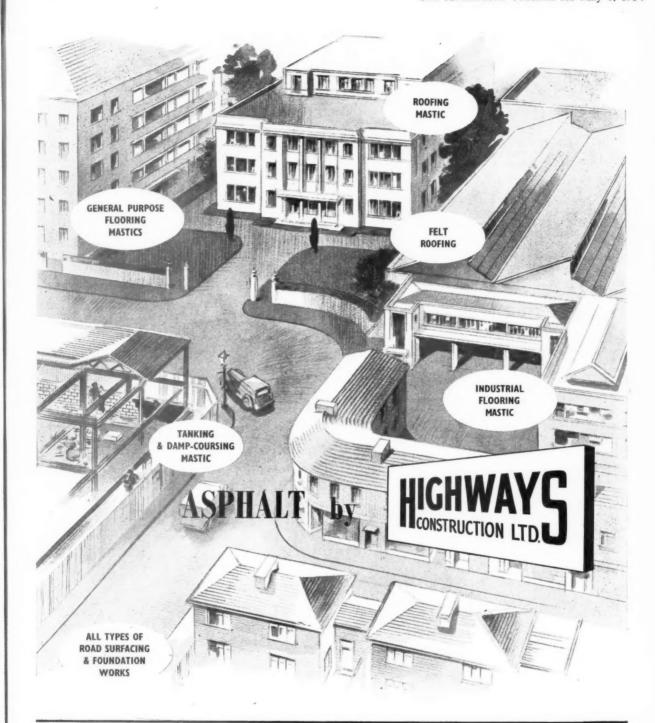
THE SPECIALISTS IN PLANNED NATURAL



VENTILATION

COLT VENTILATION LTD . SURBITON . SURREY . ELMbridge 6511.5

Also at: Birmingham, Bradford, Bridgend (Glam.), Bristol, Dublin, Edinburgh, Liverpool, London, Manchester, Newcastle-upon-Tyne, Sheffield and Warwick.



GLASGOW:

e

e

ery

ır on

1 - 5 pon-A.24 WATERLOO CHAMBERS, 19 WATERLOO STREET.

NEWCASTLE:

4ROYAL ARCADE, PILGRIMSTREET.

MANCHESTER:

AGECROFT COMMERCIAL ESTATE, WHIT LANE, PENDLETON, SALFORD 6.

HIGHWAYS CONSTRUCTION LTD.

HEAD OFFICE

IDDESLEIGH HOUSE, CAXTON STREET,
WESTMINSTER, LONDON, S.W.I.
ABBEY 4366

BIRMINGHAM:

LOMBARD HOUSE, GT. CHARLES STREET.

CARDIFF:

FERRY ROAD.

BRISTOL:

80 PARK STREET.

the SOFONO Range

OF CONTINUOUS BURNING FIRES

The SOFONO FIRE

Well known to your customers is the famous Sofono Fire which burns all night, every night, heats the water and burns economically all types of solid fuel. In 12", 14", 16" and 18" sizes to fit most fireplaces.

A trivet and closure are available as extras.





Archit

The SOFONO

DROP FRONT

(PATENTED)

This model gives full room radiation and the patented drop front also serves as a trivet if desired. The fire bars can be lifted out for cleaning and no front brick is necessary. In 14", 16" and 18" sizes.

No extras are required for this model.

The SOFONO

LO-FRONT

FIRE

Designed specially for those who prefer a "lower" and less expensive fire. It will burn all night and heat the water for the whole household. A new simplified type of air control is incorporated in this model, and is very easy to operate. A dual purpose trivet which also acts as a closure cover is available as an extra. In 12", 14", 16" and 18" sizes.

These fires are backed up by powerful National Press and Consumer Journal advertising. Electros and stereos of the advertisements or individual appliances are available on request and also attractive literature and showcards.



These fires can be seen at our London Showrooms, 4 Stratford Place, London W.1

All models are available in attractive shades of lustrous and vitreous enamels

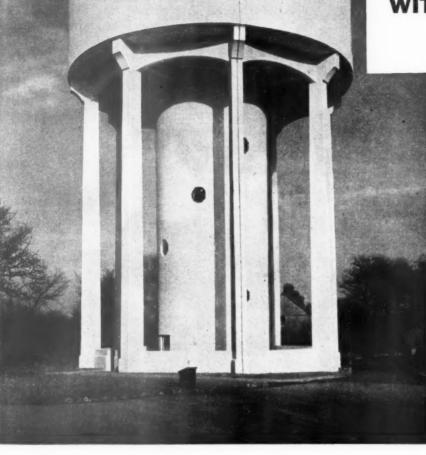
GRANGE-CAMELON IRON CO., LTD., FALKIRK



Architects: Bierrum & Partners.
Contractors: Decorators Specialists, W.14.

THE EXTERIOR OF THE

NORTH WALSHAM WATER TOWER IS PAINTED WITH STORE



SILEXINE STONE PAINT



Stone, finely ground, is the basis of Silexine Stone Paint. With Silexine you literally *paint with stone*—hence its outstanding protective quality. Silexine Stone Paint is supplied in twelve decorative colours, or in special shades to order. It can be applied to concrete, stucco, brick, plaster, asbestos, cement, etc.

SEE OUR EXHIBIT AT THE LONDON BUILDING CENTRE.

SILEXINE PAINTS LIMITED . RICHFORD STREET . LONDON . W.6 Shepherds Bush 4461

Specifications and notes on surface preparation, together with a report on tests carried out by the Building Research Station, are given in a booklet sent free on application. Information regarding other Silexine products, particularly S.P.E.C. (Silexine Plastic Emulsion Coating) a durable satin-like finish for interior walls, is also freely available.





Langdon Crescent School, East Ham (Kitchen & Dining Room Block) Architect: J. W. Taylor, F.R.I.B.A.

School walls must stand up to hard wear!

THERE are many other considerations too—economy in initial outlay, maintenance costs and hygiene. GLAZEMENT Cement Glaze is probably the most economical and decorative surface treatment available to-day. Its unbroken surface offers no cracks or crevices for dirt or germs and when stippled or spotted offers no enticement to wall scribblers. It is easily washed down and neither laboratory fumes nor splashes affect the non-stainable glazed surface. That is why Langdon Crescent Secondary School, the largest school undertaking in Europe, solved their wall-surface problems in corridors, ablutions, lavatories, showers, kitchen and dining rooms, etc., by applying

7,000 yards of

GLAZEMENT

CEMENT GLAZE WALL FINISHES

Write for illustrated "Glazement" brochure giving full information on surface treatment and costs,

ROBB'S CEMENT ENAMEL FINISHES LTD.

245 VAUXHALL BRIDGE ROAD, LONDON, S.W.I.

Telephone: TATE Gallery 0091/2. Telegrams: Glazement Souwest London.



SCOTLAND:

W. C. Simpson & Son Ltd., 30-42 Haymarket, Surrey Place, Edinburgh. Edinburgh 62006.

NORTHERN IRELAND: Concrete Industries Ltd., 107a Shore Road, Belfast. Belfast 76681.



The "floating" spindle principle means added convenience and beauty



This patented device eliminates the use of grub screws. It ensures an exact and rattle-free fitting, automatically adjustable to any normal door thickness.

The diagram above illustrates the principle—the knob or lever rotates about the neck, which is moulded in one piece with the rose or back plate, which in turn is secured by screws to the door. The spindle engages with square holes inside each knob or lever.



A selection of Lacrinoid door furniture is now on display at the Building Centre, 26 Store St., W.C.I.

LACRINOID

TRADE MARK

LACRINOID PRODUCTS LTD., GIDEA PARK WORKS, GIDEA PARK, ESSEX
Telephone: HORNCHURCH 2981 Telegrams: LACRINOID, ROMFORD

Whatever the construction

ib

or

ch

LS

vn



$there \emph{'s}\ need for\ \mathtt{SECOMASTIC}\ at\ the windows$

Differential movement between the windows and the openings in which they are fitted is bound to occur whether the structure is a traditional or a prefabricated one.

This is the reason for the almost universal acceptance of the need for bedding or pointing window frames and surrounds with mastic. Once the need is accepted, it pays to use SECOMASTIC because 10 years' laboratory research and field experience has resulted in a mastic which will not fail through hardening, cracking, perishing or powdering.

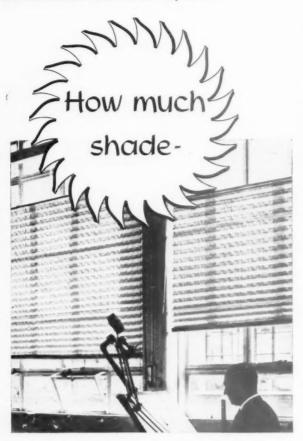
Remaining plastic and firmly adherent to any building material, SECOMASTIC will maintain a weathertight seal by conforming to all normal structural or thermal movements. These same properties have resulted in SECOMASTIC's wide use also for sealing lap joints in sheet roofs, structural expansion joints, prefabrication and for top-sealing glasshouses etc.

Copies of the booklet "The Use of Mastics in Building" are freely available to those interested. Please address all enquiries to the Architectural Department.

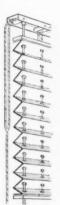
SECOMASTIC can be rapidly, simply and economically applied by caulking gun loaded with full-sized cardboard cartridges.



SECOMASTIC LIMITED. · 15 UPPER GROSVENOR STREET · LONDON · W.1 Telephone: MAYFAIR 4027



- and where?



An "Accordo" blind moves up from the bottom and/or down from the top. Guide rods at either side obviate flapping. No moving parts; all metal parts rustless. Of continuous pleated fabric; rot-proof and vermin-proof; self-dusting owing to bellows-action of pleats. Can be face-fixed or reveal-fixed (needing depth of only 1\subsetential in.). Suitable for horizontal lay-lights, sloping roof-lights. Widths up to 15ft.; in a range of attractive shades. Now widely installed in hospitals, schools, offices, etc., at home and abroad. Write for details of "Accordo" Sun Blinds; also of "Accordo" Dark Blinds, specially designed to provide light obscuration for laboratories, etc.

ACCORDO

Blinds

NO DUSTING

ACCORDO BLINDS LTD.

(A subsidiary of Hills (West Bromwich) Ltd.)

845, LONDON ROAD, THORNTON, HEATH, SURREY, THO 6242-3-4

T.A.6363

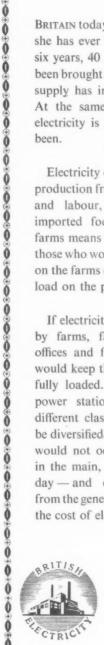
THE FARMER

and the Balance of Power

BRITAIN today has more electricity than she has ever had before. In the past six years, 40 new power stations have been brought into operation and power supply has increased by 50 per cent. At the same time, the demand for electricity is greater than it has ever been.

Electricity on the farms means more production from our existing resources and labour, and less reliance on imported food. Electricity on the farms means more home comforts for those who work on the land. Electricity on the farms contributes to a balanced load on the power stations.

If electricity were more widely used by farms, factories, shops, homes, offices and for street lighting — this would keep the generating plant more fully loaded. The demands on the power stations coming from these different classes of consumers would be diversified. That is to say the loads would not occur simultaneously but, in the main, at different times of the day — and continuous full output from the generating plant would reduce the cost of electricity.



ELECTRICITY SPOSPERITY

xlviii



-the most versatile structural medium.

JOHN BOOTH & SONS (BOLTON) LTD., HULTON STEELWORKS, BOLTON Telephone: BOLTON 1195 LONDON: 26 VICTORIA ST., WESTMINSTER, S.W.1. Telephone: ABBEY 7162

New factory for the Imperial Typewriter Company Ltd., HULL Architects: Messrs. Priestman and Lazenby



Ideal for industrial roofs with large expanses of glazing and valley gutter construction, Thermacoust has the following advantages:



- No purlins are needed with spans up to 7 feet
- Easily cut and worked, saving time and roofing materials
- An attractive surface allows it to be exposed as a ceiling without loss of insulating efficiency
- Fire resisting and classed Grade I in test for rate of flame spread

Thermacoust 2" channel reinforced ROOFING SLAB

> We invite you to write for information Sheet N.S.3. Our advisory service will be pleased to assist you in finding economical ways of using Thermacoust roofing

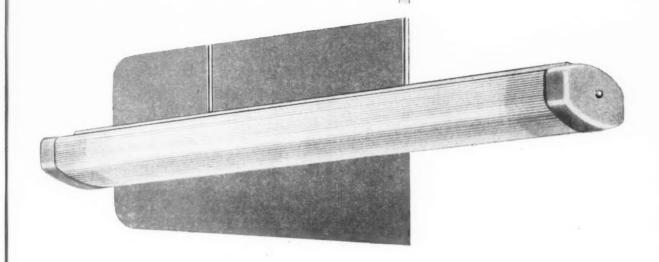
Thermacoust Limited

39 Victoria Street, London, S.W.I. Telephone: ABBey 2738

⊗ 271/11A.

a distinguished FLUORESCENT

FITTING



Clean simple lines ideally suited to modern offices and shops. Light is well diffused and completely free from glare.

F41000 Twin 80w. reeded opal Perspex enclosed fitting suitable for ceiling or pendant mounting. Complete with switch start control gear.

£23.14.0 P.T. £3.5.1 extra.

Osram tubes extra.





There are many good British Paints!

Some are better than others, some cheaper, some give greater coverage, others a more lasting finish. Few, however, combine so many advantages under the one head as do the 'KING-STON' range—backed by more than 100 years of experience and research.

If you do not already specify 'KING-STON,' may we, in your own interests (and ours, of course) let you have the fullest details of their beauty and durability of colour and finish, their ease of application, their exceptional covering capacity and consequent over-all economy?

Write for these details, or ask our representative to call and give you chapter and verse on the various finishes specially prepared for any problem that is likely to face you.

Specify Sanderson's Kingston Paints 'Kinslac' Finish, 'Kingston' Durable Gloss, 'Kinsheen' Plastic Emulsion Paint



Lithocrete

MASTIC ASPHALT

REGD

HEAVY DUTY



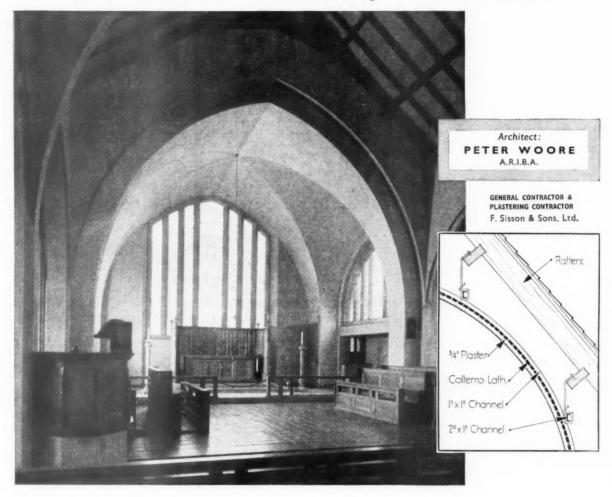
THE LIMMER & TRINIDAD

LAKE ASPHALT CO. LTD.

STEEL HOUSE, TOTHILL ST., WESTMINSTER, S.W.I.

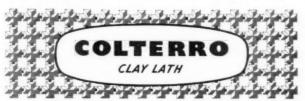
Branches throughout the British Isles.

ALL SAINTS CHURCH, MARLPOOL



This delightful groined ceiling was suspended from the timber roof members on a grillage of Colt standard channel sections. Varying radii or complicated profiles present no difficulty with COLTERRO Lath. It is flexible and easily formed, allowing the Architect complete freedom of design. The robust wire mesh and positive 'key' of the clay crosses provide the finest base for good plastering.

COLT DESIGN AND FIX CEILINGS, WALLS AND FABRICATED STRUCTURES WITH...



"it's the KEY that grips the PLASTER"

W. H. COLT (LONDON) LTD., SURBITON, SURREY. Telephone: ELMbridge 6511-5



COMPREHENSIVE TECHNICAL BROCHURE

For big savings in concrete formwork

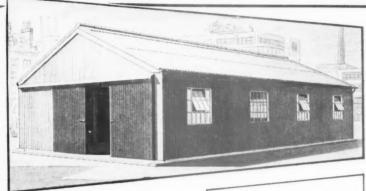
If concrete is your business you will find this latest Rawlplug Company publication of great value and interest. It is packed with practical, down-to-earth information on shuttering problems, together with details of Rawlties, Rawloops and Rawlhangers. May we send you a copy? Apply on your letterheading, send business card or state trade or profession.



THE WORLD'S LARGEST MANUFACTURERS OF FIXING DEVICES

THE RAWLPLUG COMPANY LTD . CROMWELL ROAD . LONDON . S.W.7

CONSIDER A THORNS BUILDING



A typical Building 60' x 30' x 12'

We specialize in supplying any size or shape of one storey shedding, with or without wall sheeting. Foundations and erection work undertaken if desired. Ask Thorns to quote for your next steel-building requirement.



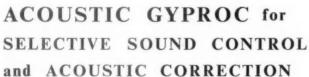
A MODERN NEW FACTORY

has been equipped especially for the production of prefabricated steel building structures of all kinds. We shall be pleased to quote for inexpensive standard buildings or for structures based on your own designs. Our Erection Service has also been extended to cope with additional site work. Estimates free.

J. THORN & SONS LTD.

(Dept. 188), BRAMPTON ROAD BEXLEYHEATH · · · KENT Phone Bexleyheath 305 Est. 1896

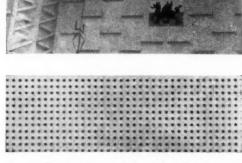




The photographs show Acoustic Gyproc applied to walls and ceiling in one of the Studios at the B.B.C. Building, Alexandra Road, Swansea.

Architect: Cyril A. Hughes, L.R.I.B.A., in association with B.B.C. specialists.

Contractors to B.B.C. (on completion of restoration by R. B. Burden Ltd. for Swansea Corporation): Bennett Brothers (Contractors) Ltd., Swansea.



Acoustic Gyproc (illustrated above) is a fire-protective gypsum plasterboard panel containing small perforations of specific diameter and optimum centres, allowing the correct admission of sound waves to an absorbent backing. Acoustic Gyproc has an ivory surface for immediate decoration.

Makers of thermal insulation and acoustic products including GYPKLITH Wood Wool Slabs, GYPKLITH Acoustic Tiles, GYPKLITH Fluted Panels, INSULEX and ZONALEX Mineral Loosefill Insulation Materials, ACOUSTIC GYPROC, ZONAPLAX, VERMICULITE Insulating Plaster, DEKOOSTO Acoustic Plaster.

GYPROC PRODUCTS LIMITED

Head Office: Westfield, Upper Singlewell Road, Gravesend, Kent. Telephone: Gravesend 4251-4. Telegrams: Gyproc, Gravesend. Glasgow Office: Gyproc Wharf, Shieldhall, Glasgow, S.W.1. Telephone: Govan 2141-3. Telegrams: Gyproc, Glasgow. Midland District Sales Office: East Leake, neat Loughborough. Telephone: East Leake 231. London Office: Morris House, 1-5 Jermyn Street, London, S.W.1. Telephone: Whitehall 8073-4.



Matched to the job Yet you pay no more at every point

A CROMPTON LIGHTING FITTING is more than a holder for a lamp. Each is a piece of equipment designed for particular lighting needs and particular working conditions. Design of reflector, method of mounting and materials used all match the duty. It brings you the right lighting at lowest possible operating cost.

'PERMAWHITE' ADDS LIGHT AND LIFE

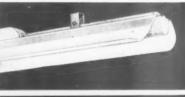
'Permawhite' is a new stoved enamel with permanent, high reflecting efficiency, and freedom from corrosion. Yet you pay no more for Crompton fittings.

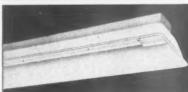
Switch to

GHTING FITTINGS

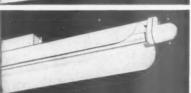
CROMPTON PARKINSON LTD · CROMPTON HOUSE · ALDWYCH · LONDON · W.C.2

Telephone: CHAncery 3333









Open End Metal

Dispersive Reflector Finished all over in Permawhite'. For one 80 watt 5 ft. lamp. With closed top (AK 1111) or For one with slotted top for some upward light (AM 1111). Price complete with s start control gear £8.10.0 (AK 1111).

'Perspex 'Dispersive Reflector Diffuser High resistance to corro-

right resistance to corro-sion. All - round light. Easy cleaning. In two models. For one or two 80 watt 5 ft. lamps. Prices complete with switch start. control gear from £12.5.0

Open End Fitting with 'Perspex' Side Screens For one 40 watt 4 ft. lamp. Gives main distribution downwards with ample diffused light all round. Metalwork 'Permawhite' finished. Price complete with switch start control gear £10.10.0 (BT 1413).

Vapour and Dust-proof Fitting

All vulnerable parts sealed All vulnerable parts sealed from atmosphere. Choice of reflectors in vitreous enamel, 'Perspex' or white hard P.V.C. For one 80 watt 5 ft. lamp. Prices complete with switch start control gear from £16.8.8 (AV 1113).



There is no good substitute for

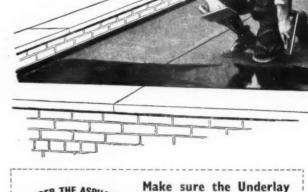
BLACK SHEATHING FELT

the time-tested UNDERLAY for ASPHALTE

The three essentials for an asphalte roof or floor are—good asphalte, good craftsmen and — Black Sheathing Felt Underlay. Since Edwardian times architects have specified and asphalters have used Black Sheathing Felt, the traditional and timetested underlay. One thickness provides perfect insulation, giving maximum time for hot asphalte to be worked. One thickness gives complete isolation from the screed.

- PLEASANT
 TO HANDLE
- DOES NOT FRACTURE
- DOES NOT ABSORB MOISTURE
- DOES NOT SHRINK

Specify, use





IS BLACK SHEATHING FELT

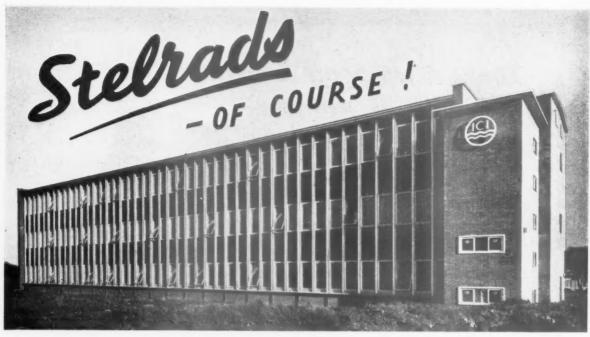
All rolls bear this sign; it is the architects' and asphalters' assurance of top quality underfelt. Accept no substitute for Black Sheathing Felt.

BLACK SHEATHING FELT

THE PERFECT UNDERLAY FOR MASTIC ASPHALT ROOFS AND FLOORS

Manufactured by:

Permanite Ltd., London; John Rogers Ltd., Belfast; D. Anderson & Son Ltd., Manchester; Engert & Rolfe Ltd. London; John Erskine Ltd., Belfast; Robt. McCalmont & Sons Ltd., Belfast; F. McNeill & Co. Ltd., London.



General View from the West of I.C.I. Plastics Division, New Research Laboratory, Welwyn Garden City, Herts.

Architect—S. D. Jefferiss Mathews, O.B.E., F.R.I.B.A., A.R.I.C.S., of J. Douglass Mathews & Pts. Consulting Engineer—Felix J. Samuely, B.Sc., A.M.I.C.E.

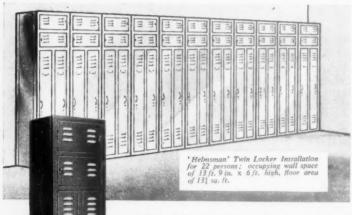
Main Contractors-Holland & Hannen & Cubitts Ltd. Heating Contractors-Messrs. Matthew Hall & Co. Ltd.

STEEL

RADIATORS BRIDGE ROAD . SOUTHALL . LTD

STELRAD WORKS Telephone: SOUTHALL 2603-4

Telegrams: "STELRAD", PHONE, SOUTHALL



Save MONEY and 37 1°/ WALL SPACE ON **CLOTHES** STORAGE!

Telephone: LARKSWOOD 4411/4



Each Twin Locker Unit provides separate accommodation for the clothing and personal belongings of two persons. Fitted with modern streamlined SLIDEX Handle with 3-Point Latching, lockable with padlock. Standard size: 72 in. x 15 in. x 12 in. deep. Wide choice of colours and other sizes. LIST PRICE £4.15.0 per person. (£9.10.0 per Twin Locker.) (Traditional 6-Lever Lock in lieu or in addition if required.) Other 'Helmsman' Products: Shelving: Open-type; solid sides; solid back and sides; Cupboards; Bin Units; Cabinets; All-steel Desks. Full details gladly sent on request, or 'phone Mr. Quin at Larkswood 4411.

nsman STEEL CLOTHES LOCKER (Patent No. 699842)

Discounts for quantities; special quotations for complete installations; prompt delivery; normal commercial credit terms to business undertakings.

BAWN & COMPANY BYRON WORKS, BLACKHORSE LANE, LONDON, E.17.



of two dlock. .15.0 nired.) ; Bin 4411.





- ♠ Low-cost dry construction
- Pre-cut to size to save time on site and avoid cutting to waste
- 3 Light weight is combined with great strength and rigidity
- Wall framing, required at 4 ft. centres only; Roof supports, at 4 ft centres (pitched); at 2 ft. centres (flat)
- Surface ready for immediate decoration.
 No screeding required on roof decks
- 6 Good fire-resistance classification
- High degree of sound absorption
- Exceptionally high thermal insulation

reasons why

MORE AND MORE
ARCHITECTS ARE
INSISTING ON

STRAMIT BUILDING SLABS

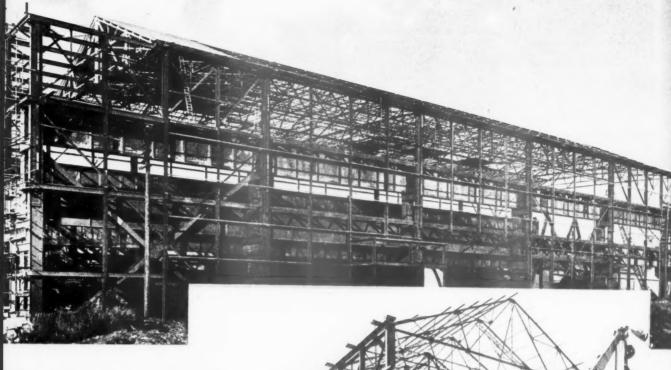
2" THICK · 4ft. WIDE · ANY LENGTH (Stock Lengths are 8ft., 9ft. & 10ft.)

Available from stock through leading merchants

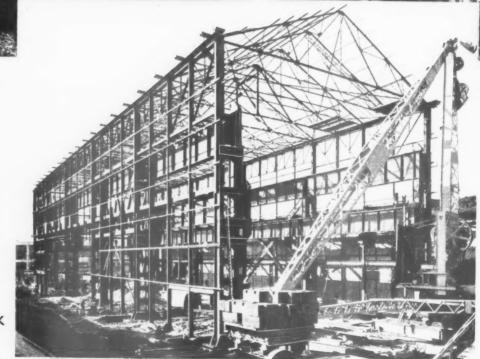
ROOFS
AND CEILINGS
PARTITIONS
WALL LININGS

*
Cistern and Tank
Laggings, etc.,

Send NOW for YOUR copy of our fully detailed TECHNICAL FOLDER (AJ 554) and Building Research Station Reports.



Building for ASEA
ELECTRIC
LIMITED,
LONDON, E.17
250ft. long by 70ft. wide
Weight of steelwork 1000 tons



Architects: Elliott Cox & Partners. Consulting Engineers: Bylander & Waddell. Contractors: W. J. Cearns Ltd.

STEELWORK BY

REDPATH BROWN

LONDON OFFICE: 3 DUNCANNON STREET, LONDON, W.C.2





T h E b w b A co thi the n d the w y



THE ARCHITECTS' JOURNAL

EDITORIAI BOARD: (1) Consulting Editor, F. R. Yerbury, O.B.E., Hon. A.R.I.B.A. (2) Town Planning Editor, Dr. Thomas Sharp, L.R.I.B.A., P.P.T.P.I. (3) House Editor, J. M. Richards, A.R.I.B.A. (4) Executive Editor, D. A. C. A. Boyne. (5) Technical Editor, R. Fitzmaurice, B.S.C., M.I.C.E., Hon. A.R.I.B.A. (6) Editor Information Sheets, Cotterell Butler, A.R.I.B.A. (7) Editorial Director, H. de C. Hastings.

GUEST EDITOR (CONVERSIONS): (8) Felix Walter, F.R.I.B.A.

SPECIALIST EDITORS*: (9) Planning (10) Practice (11) Surveying and Specification (12)
Materials (13) General Construction (14) Structural Engineering (15) Sound
Insulation and Acoustics (16) Heating and Ventilation (17) Lighting (18)
Sanitation (19) Legal.

Assistant Editors: (20) Chief Assistant Editor, Kenneth J. Robinson, (21) Assistant Editor (Buildings), L. F. R. Jones, (22) Assistant Editor (Information Sheets), Lance Wright, A.R.I.B.A., (23) Photographic Department, H. de Burgh Galwey, W. J. Toomey (24) Editorial Secretary, Monica Craig.

* To preserve freedom of criticism these editors, as leaders in their respective fields, remain anonymous

9, 11 & 13, Queen Anne's Gate, Westminster, London, S.W.1 Whitehall 0611

No. 3088 May 6, 1954 VOL, 119

Subscription rates: by post in the U.K. or abroad, £2 10s. 0d. per annum. Single copies, ls.; post free, ls. 3d. Special numbers are included in Subscriptions; single copies 2s. post free 2s, 3d. Back numbers more than 12 months old (when available), double price. Half yearly volumes can be bound complete with index in cloth cases for 25s. 0d.; carriage, ls. extra.



THE ROYAL ACADEMY

Why don't more good designs get hung in the Royal Academy's Summer Exhibition?* The answer is simple: because they don't get submitted. And why don't they get submitted? Only because most architects look on the Academy as a rather tired joke. If you compare this year's exhibition with those of earlier years you will find that the standard has improved. But it will not improve sufficiently until the bad designs and those that are good of their kind, but far too trivial to be hung, are displaced by . . . your own work perhaps. ASTRAGAL hopes to see you represented next year.

* See pages 538 and 543.

SIR DAVID'S SERMON

Sir David Eccles certainly gave the corporation of Coventry a stiff pi-jaw when he declined to withdraw the licence to rebuild the cathedral, and ASTRAGAL cannot help feeling that an oldfashioned talking-to was exactly appropriate to the situation. The recent behaviour of Coventry Corporation-over civil defence as well as the cathedralhas had about it an air of Kier-Hardie revival, a sentimental attempt to put the clock back to the good old days of whiskered tub-thumping. This is not to cast any aspersions on the possible rightness of the Corporation's attitude, but simply on the atmosphere of corny melodrama in which that attitude has been made known.

In making the rhetorical query "But can we be sure that a cathedral would be so useless? Is it always right to prefer things seen to things unseen?", Sir David was administering a properly head-masterish rebuke to a group which would have given a much better impression of meaning what it said if, instead of timing its remarks for maximum embarrassment value, it had maintained a steady, vociferous and well-reasoned opposition to the cathedral project ever since it was first mooted.

DON'T FENCE HIM IN

A special correspondent in *The Times* was obviously upset to have to report that elm-axer Eccles has now turned his attention to removing the yew hedge (which hides a wire fence) round St. James's Park. He implied that Sir David Eccles only found favour for such action within his own Ministry. But adverse criticism of the hedge was

clearly expressed in *The Architectural Review's* excellent article on St. James's Park as long ago as November, '51, and was backed by this column and all those who admire the work of Nash and suspect the æsthetic sense of market gardeners and horticulturists.

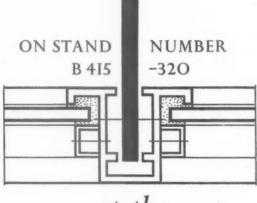
Even without the yew hedge there remain three wire fences between Birdcage Walk and the park. Cannot these go too? One might well ask if this park needs a ring fence at all in the accepted sense, and whether greater reliance could not be placed on moral and psychological barriers than on wire mesh-or any other-fences (which-to carry things to a logical, preposterous conclusion-would have to be six foot high, and barbed, to deal with crowds really effectively, especially on public occasions). Sir David is, apparently, still making up his mind about the most suitable kind of railings to substitute for yew and wire. If his advisers have not the courage to suggest doing without a fence (and it would be nice to hear their arguments for one) then for Nash's sake let us have no more than a post and (single) rail.

And now we have given support to Sir David, what about a favour in return? A simple request, just (we hope) a question of pulling some drawings out of the old plan chest: the publication of the planting (trees and shrubs) plans for the Kensington, Hyde, Green and St. James's parks for 1955, 1975, 2000 and 2055—plus some sketches. . . . It would be very comforting to public opinion to know that

See HOPE'S WINDOGRID

ing

System of Continuous Fenestration



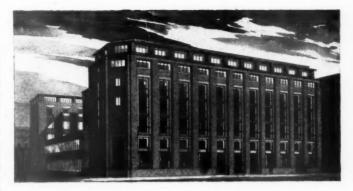
at the

CASTLE BROMWICH, MAY 3-14

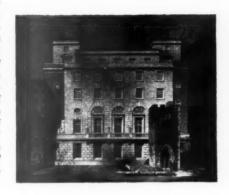
HENRY HOPE & SONS LTD

Smethwick, Birmingham & 17 Berners Street, London, W.1

These schemes for buildings in the City of London are on view at the Summer Exhibition of the Royal Academy, which, in the true words of John Russell (writing in the Sunday Times) "has given its approval to what is, in effect, the spoliation of the City of London and the neglect of an opportunity such as has not been given to us since the Great Fire of 1666." (Top: left, building for The Financial Times, Cannon Street, by Professor A. E. Richardson; right, the Bankers' Clearing House, E.C.3, by Austen Hall. Bottom: left, Banking Hall, Barclays Bank, Exeter, by W. Curtis Green, Son and Lloyd: right, Heathcoat House, Savile Row, W.1, by William J. Biggs (Stone, Toms and Partners).









the MOW was carrying out a longterm landscape policy, because trees (slow, inefficient, untidy-leaved Dame) are remarkably long-term too.

NICE FOR THE NIGHTINGALE

Congratulations to Westminster-and how long it has been since this could conscientiously be said-for their tidying-up of Berkeley Square. No fussy little flower beds-sensibly wide paths and a prettily painted-up little central gazebo. And from the published minutes of the Works Committee we learn that the Council are now being asked to decide whether they will or will not keep the Coronation coloured lamp-posts which proved "so pleasing in appearance," or adopt some other variation from the previous standard aluminium.

Passers-by will have noticed a few experiments outside the City Hall, presumably for Councillors' votes, and it will be interesting to see the outcome. How nice, anyway, to see that echoes of Coronation colour and gaiety still sound in the council chambers of local authorities, once again proving how right-as usual-Lethaby was when he remarked that there was nothing like a national festival for restoring civic pride.

BOOKS FOR ARCHITECTS

C. H. Aslin made last week his public debut as RIBA president elect-(or at least that's what Mr. Yerbury told us he was)—by opening a pleasant little book exhibition jointly organized at Store Street by the National Book League and the Building Centre. It consists of about 300 architectural books now in print, and although it is rather undercaptioned and more like a book-shop than an exhibition, ASTRAGAL warmly recommends it.

Some of you may be interested to see that the total cost of such a collection and many of the books are surely "must" reading for the would-be cultured architect-is about £300. Thank goodness for libraries.

NOT-SO-SILLY SUFFOLK

If you are designing a stately home or a grass-drying plant in the administrative county of West Suffolk (ASTRAGAL, who has East-Anglian connections, will never admit that West Suffolk is a real county) you are eligible for an award given by the Council of the aforementioned county. The award is open to

> Rodrigo Moynihan's portrait of Howard Robertson, President of the RIBA, is on view at the Royal Academy's Summer Exhibition.

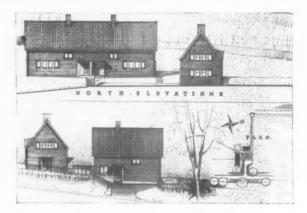
all architects responsible for buildings, residential or commercial, erected in West Suffolk by private enterprise in the year ended December 31, 1953, and its aims are: to encourage good local architecture and building, to stimulate public interest in good building, and to encourage developers to employ the services of an architect-and one must concede that the third aim falls very agreeably on the architectural ear.

Further details from the County Planning Officer, Shire Hall, Bury St. Edmunds; the assessor is Rowland Pierce, and the only thing the regulations don't say is what the award con-









sist

pla the Ha

NO So lea Co pet offi and £5, an To Ch Co Ha

int

pla

in try ab iro

in

T

ac

na

th

of



The Royal Academy

What do we look for in the Architecture Room at the Royal Academy's Summer Exhibition? If we go there looking for a display that is representative of the profession's work, we certainly find it. Consider, for example, these designs from the current exhibition. At the top of the page is a model of the excellent scheme for Sheffield University by Gollins, Melvin, Ward and Partners. Above left, and left, is the strange restoration of the City Temple (by Lord Mottistone) with its part-Odeon interior. And above right is an efficient but unimportant scheme, by John Strubbe—without even the news interest of the City Temple—which the hanging committee must surely have scraped from the bottom of the barrel. It is obvious that the committee took longer to reach the bottom of the barrel this year; the general standard of exhibits is slightly higher. But why isn't the exhibition packed with the best of the country's architecture? Not because the outstanding designs are rejected, but because they are not submitted. If architects want an Architecture Room at Burlington House, where the layman can be dissuaded from thinking of neo-classical horrors as good buildings, it is up to them to do something about it. The bad and the insignificant could easily be crowded out if the majority of architects stopped thinking of the Academy as an annual joke.

sists of—so have a go, you might get a medal, or a blue-and-white enamel plaque with your name on it affixed to the building, or a civic dinner in Shire Hall, or goodness knows what.

NO COMPETITION

Some private architects in Devon, it is learned, are perturbed that the County Council will not consider holding a competition for the Council's proposed new offices to be built on "20 acres at Bellair and Coaver, Exeter, at a possible cost of £5,000,000," proposing instead to select an architect from a "short list." The Torquay Herald & Express quote the Chairman and Vice-Chairman of the Council (Sir John Shelley and G. C. Hayter-James) as saying, respectively: "competition would be against the interests of the Council" and "a good firm of architects, with plenty of work, would not bother to go in for a competition."

The Council has very rarely, if ever, given work to private architects since the war, so the local boys should not complain of the lack of a competition but rather congratulate the Council on not automatically giving the work to the County Architect-no offence to him intended, please. (Though they might try and straighten out the ideas of the above-mentioned councillors, who are, ironically enough, honorary members of the Devon and Cornwall Society of Architects.) The "short list" from which the Council will select the architect for this plum job will make interesting reading: half local firms, and half London ones, in all probability. There's no doubt that architect Smith, of Torquay, is not nearly so impressive, nor even probably as expensive, as Mr. Smith, architect, of London, and councillors will normally have the latter every time.

Whether this is just a case of prophets being unhonoured in their own county, or the golden magic of a metropolitan address, or just an honest belief that they will get a better building from a famous name—("How can they tell?" will say the locals "unless they give us a chance?")—ASTRAGAL wouldn't like to guess—but it seems unlikely that a job of such a size can ever go to a small office.

ASTRAGAL

POINTS FROM THIS ISSUE

The Royal	Academy	Summer	Show	pages	535,	537,	538, 541 ai	ad 543
Comments or	the Repai	rs and	Rents	Bill			pa	ge 542
Article on sk	irting hea	ting				* *	pa	ge 557

The Editors

A REGRETTABLE ARCHITECTURAL DISSERVICE

THE earnest, conscientious and, in parts, sound, report titled Architectural Services by the Metropolitan Boroughs (Organization and Methods) Committee is so shot through with half-baked reasoning and false assumptions that the appropriate committees of the RIBA should attempt officially to correct some of the errors which have crept into what is obviously a sincere and well-meant document. The report seems to have been produced from a most mundane viewpoint by writers with little or no creative sense whatsoever. In the space available it is cally possible to indicate superficially this commonplace approach to architecture. For instance, the report recommends the use in a new design of plans, layouts and details (subject to "modifications depending on the nature and site of each scheme") prepared in connection with other schemes in order to shorten the time given to designing. But it is surely a fundamental part of the training of a good architect that he is constantly improving the quality of his plans and details, and old drawings are re-used only when they cannot be improved upon at that point in the architect's programme. Designs remain unmodified because they are good, not because it saves time to use them over and over

And then again, the report recommends that councils should consider "the use of architectural competitions only if they are undertaking the development of a large site or the erection of a building of major public significance for which a high standard of architectural design is desirable" (our italics). Surely a high standard is always desirable, indeed, essential? Surely the simple answer to the question of when to hold a competition is that the competition system is a useful way of relieving staff if they are about to become temporarily overloaded with work, or if a design is quickly required for a specialized type of building of which the existing staff and local private firms are unfamiliar.

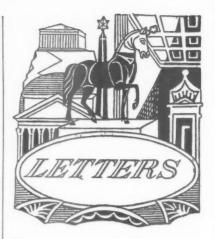
Reference is made to the disruptive effect of frequent staff movement from office to office. This movement is accepted, and the report proposes: an organization of staff to ensure continuity of work (i.e., several assistants on every design, so that if one goes the remainder can carry on); "reducing to a minimum the delay . . . between one officer leaving . . . and a replacement taking up his duties"; and introducing "an informal 'trainee' scheme for architects." Now the reason for the frequent movement of staff is because of the desire for wider experience and more pay and responsibilities.

These are the fundamental problems which this report should have tackled. It is evident that the Metropolitan Boroughs are determined to keep their salary bills low by employing a considerable proportion of juniors, probationers and students in their architect's department. Indeed, to add to the supply, they suggest taking boys straight from school or after National Service who could attend night school or could "study during any slack periods in the office . . . with the help and guidance of the senior architects." When the profession is struggling to ensure the success of whole-time architectural school training at university rather than technical school level, such a proposal is, to put it mildly, somewhat retrogressive.

The report compares "team" and "group" methods of office work. The team, it states, consists of senior architect, assistant architect, architectural assistants, drawing office junior (what the JOURNAL usually calls a "pyramid") and the group largely of fully qualified architects with a few junior staff (indeed, much as discussed in the Journal by the Guest Editors in '52). The report, needless to say, condemns the group on grounds of costs (" each member . . . will expect the grade appropriate to an architect in charge of the design of a scheme although working as such for only part of his time"); and because of friction between members of the group; and the difficulty of planning a flow of work to ensure that "each architect is fully occupied" and gets assistance when required.

It must, of course, be difficult for the local authority mind, so used to the concept of big fleas, little fleas, ad infinitum, to visualize the ability of professional men to work as a group on a basis of equality, mutual confidence, and frank criticism. It is by this method that the best architectural work in this country has been produced since the war. But perhaps one should be grateful that this O and M committee found space to mention group working at all.

One other important point remains. The report suggests that the "cost for the preparation of new schemes, including staff overheads and clerical assistance, but excluding costs of accommodation, should be, on average, no more than twothirds the scale fee [our italics] appropriate to the type of work being carried out." It is not shown how this figure is arrived at, and, to nip in the bud arguments between public and private architects, the RIBA might institute an enquiry into the whole question of the rival costs of using public and private architects. It is obvious, at least to the economist, that the private architect, without the guarantee of continuity of work, is carrying a greater risk and therefore should be paid the higher. But the figure of one-third more cannot be readily accepted without much more concrete evidence. When it comes to public and private offices competing against each other on grounds of costs there is a very real danger of offices economizing the easy way—the way which three-quarters of the profession most dread-by cutting salaries and reducing staff. Such dangers to the profession could be avoided if more information was made available.



D. Cooper, A.R.I.B.A.

R. N. Iredale, A.R.I.B.A.

D. Jennings Smith, A.R.I.B.A.

Edgar Lewy

Basil Taylor Librarian, Royal College of Art

Timothy Rendle, A.R.I.B.A.

Picking your Leaders

SIR,-I would like to congratulate the editors on their decision to give publicity to the views of candidates for election to the RIBA council (see AJ, April 29).

The RIBA, at long last, appears to be

becoming aware of its responsibilities as a professional body, and your action gives members an opportunity to vote objectively, and to make certain that this trend is encouraged and strengthened.

It is a great pity that the views of repre-sentatives of allied societies and societies in alliance with the RIBA are not known. form a large proportion of the council, and as far as the majority of RIBA members are concerned, their seats are gained by a most indirect method of election.

Perhaps a candidate will advocate an investigation?

Coventry.

SIR,—Knowledge of the policy adopted by candidates for the council will be a great help to members of the RIBA living far from Portland Place. Mere architectural ability is, unfortunately, no indication of an appreciation of the complex professional problems confronting the council today, nor does a vote cast for a candidate because he has, at least, been known to speak at a lecture, mean that he is suitably qualified for a seat on the council

I would like to go further than your request for a statement for publication, and suggest that the RIBA should circulate, with voting papers, an official statement of policy made by each candidate.

R. N. IREDALE.

Scotland.

Wilts

SIR,-Your invitation to nominees for the forthcoming RIBA council elections to outline their views on certain important issues will, I am sure, be welcomed by a great many members who are anxious to use their vote, but know little, if anything, of those for whom they are voting beyond their ability as architects. For this reason it is to be hoped that candidates will respond.

D. JENNINGS SMITH.

D. COOPER.

sued 1

featur Amste

of E stamp of No

> Wille torial The June Lon

Pevs of ta whic Thir Revi allov to c been broa Coll its s no r bein men by a to il grap paro

SIR " Of to F reco arch

Ke

in. sup Do thos sign

cone

and

Architectural Post

SIR,—This postage stamp, which was issued by the Netherlands post office on April 30, features the architect H. P. Berlage (Bourse, Amsterdam, etc.). The drawing is the work of Edgar Fernhout, Amsterdam, and the stamp is part of a set of five values, in aid of Netherlands Social and Cultural Funds.



The others depict Martinus Nijhoff (poet), Willem Pijper (composer), J. Huizinga (historian), and Vincent Van Gogh (painter).

The issue was photogravure-printed by Messrs. Enschede, of Haarmel, and remains

on sale at all Dutch post offices until June 30.

EDGAR LEWY.

London.

A Wrong Implication

SIR.—The April issue of The Architectural Review contained an article by Professor Pevsner analysing and criticising the series of talks English Art and the Picturesque which I broadcast some months ago on the Third Programme. As no response to that can appear before the June issue of the Review, I should be grateful if you would allow me, in the columns of the Journal, to correct an impression which may have been gained by some readers from paragraph nine of Professor Pevsner's article. The implication is that in the course of my broadcasts I made criticism of the Royal College of Art and of the work of some of its students. In fact, my scripts contained no mention of the College or of the work being done there. I think it also proper to mention that the example of graphic design by a former student of the College, chosen to illustrate and amplify that same paragraph was, in fact, made as a joke or parody—and commissioned as such.

BASIL TAVIOR

Kent.

Fashion and Plate Glass

SIR,—May I quote ASTRAGAL (March 25)? "Of the unsuccessful entries, that of Louis de Soissons was true to form. Any visitor to Plymouth or the Royal Academy should recognize the type."

I see in this passage an alarming trend that is everywhere in evidence today in architectural criticism. A trend which is concerned with fashion and plate-glass at any price, and one that forces me to ask is it good design we are really interested in. Is our reckless enthusiasm for the superficial characteristics of "modern" blinding us to our aim of good architecture. Do we, in fact, really prefer buildings with flat roofs, glass and steel facades and no qualities of order, proportion and scale, to those that, possessing these qualities of design, possess also pitched roofs and moulded stone trimmings. Let us be rational, obviously the medium is of little importance and it is the quality of the artist that matters. Brick and stone? steel and glass? it is up to the designer. If we and posterity want some reward for eye and intellect from our new architecture, I suggest that we must be less concerned with "type," school or degree of modernity, and more with the design ability that the chosen form exnresses

TIMOTHY RENDLE.

ASTRAGAL replies: While largely agreeing with Mr. Rendle. I fear that he misunderstood my sentence which he quotes at the beginning of his letter. This was intended to imply that any visitor to Plymouth— where most, if not all, of the schools given out to the private architects were designed by Louis de Soissons—would recognize the kind of school design peculiar to the de Soisson office.

$N \in W$

New President

Peter Shepheard has been appointed president of the AA for its 108th session. His period of office begins on June 1.

CCA

Symposium on Mix Design

The CCA's Symposium on Mix Design and Quality Control of Concrete will be held from May 11-13 at the Empire Rooms, Tottenham Court Road, W.1.

MOE

Regulations for School

New regulations for the standards of school premises came into force on April 26. These replace the last regulations, issued in 1945, and do not represent any drastic departure in principle. There is, however, a significant reduction in the playing field areas and the gymnasium has been cut out from one- and two-form entry secondary schools.

BRS

Single Stack Plumbing

On Monday, April 26, a demonstration of single stack plumbing for multi-storey flats was given at Queen Anne's Mansions, Westminster. Sir Herbert Manzoni, Chairman of the Building Research Board, presided, and A. F. E. Wise, of BRS, and J. Croft, chief sanitary inspector of the LCC—those responsible for the research work—explained the system. The causes of trap unsealing being fully understood, it is now possible to install five-storey stacks without anti-siphonage stacks and branches. The gathering was invited to watch a discharge from 60 ft. up, passing a basin and a w.c. branch in transparent piping, and observe that the seals remained intact. The design criteria which permit this are broadly those contained in BRS Digest Nos. 48 and 49 and in BSCP 304, but a more full account will be given in the Technical Section in a future Mr. Wise and Mr. Croft presented a paper on the subject to the Scarborough Health Congress on April 29. Further reference to this advance in building tech-Further nique is made in the Technical Section leader on page 557.

GOLF

RIBA v. BAGS

The annual match between the RIBA Golfing Society and the Building Alliance Golfing Society was held at Camberley Heath on April 27 and resulted in a narrow win for the BAGS

Of the singles matches in the morning the architects won 9, lost 10 and halved 3; the foursome games resulted in 5 wins each with 1 game halved. Thus the Building Alliance Golfing Society scraped home by 15 matches to 14, winning the final foursome by the last put on the 18th green.

ROYAL ACADEMY

Summer Exhibition

Among the designs exhibited in the Architecture Room at the Royal Academy's Summer Exhibition, Burlington House, is Bucklersbury House, designed by Owen Campbell-Jones; development for the University of Sheffield, by Gollins, Melvin, Ward and Partners; chemistry laboratories for Cambridge University, by Easton and Cambridge University, by Easton and Robertson; London Airport passenger building, by Frederick Gibberd; the engineering college for Rangoon University, by Raglan Squire and Partners (see last week's JOURNAL), and Basil Spence's Coventry Cathedral.

Also exhibited are the following:—The

cheshire Foundation Home, Liss, Hampshire, W. H. Wakins, Gray and Partners; Secondary Technical School, Roe Green Lane, Hatfield, for Hertfordshire County Council, Howard Robertson; Houses at Sutton Bingham Reservoir for the Yeovil Rural District Council, John A. Strubbe; New Police Station Council, John A. Strubbe; New Police Station at Hornchurch, for Essex County Council, R. O. and C. M. Vine; Clothworkers' Hall; E.C.3, Whinney, Son and Austen Hall; Metropolitan Police Housing: Tower House Site, Highgate, Sydney J. Hanchet; Metropolitan Police Housing: Buxton House, Snaresbrook Road, Charles R. Fowkes; Memorial to the Missing, Dunkerque Cemetery, Philip Hepworth; Banking Hall, Barclay's Bank, Exeter, W. Curtis Green, Son and Lloyd; Entrance to Regent's Park Barracks, N.W.1, Louis de Soissons; The Leathersellers' Company: a Proposal for the and Lloyd; Entrance to Regent's Park Barracks, N.W.1, Louis de Soissons; The Leathersellers' Company: a Proposal for the Reconstruction of the Livery Hall, Louis de Soissons and Partners; Parish Church and Hall, Twydall Green, Gillingham, Arthur Bailey; Lord Mayor Treloar College, Froyle, Hampshire, W. Curtis Green, Son and Lloyd; Royal Observatory, Herstmonceux: Time and Nautical Almanae Building, Brian O'Rorke; Offices, No. 20 Albert Embankment, London, Sir Thomas P. Bennett; Phaleron War Cemetery, Athens, for the Imperial War Graves Commission: the War Cross and Terraces, the Entrance and the Cross and Terraces, the Entrance and the Memorial to the Missing, Louis de Soissons and Partners; Bridstow Bridge, Ross-on-Wye, and Partners; Bridstow Bridge, Ross-on-wye, Arthur Bailey; University of Reading, White-knights Park: Faculty of Letters, Howard Robertson; House at Reigate, John R. Stammers; Broadstairs Modern Secondary School, Woodroffe, Buchanan and Coulter; Building for the Royal Geological Society of Cornwall, Penzance, E. Vincent Harris; Woburn Abbey, Bedfordshire; Reconstruction and Alterations A. E. Richardson: The tion and Alterations, A. E. Richardson; The tion and Alterations, A. E. Richardson; The Financial Times: proposed new Building, Cannon Street, E.C.4, A. E. Richardson; Redevelopment: Nos. 14-15, Stratford Place, London, W.1, Ronald Ward and Partners; Keighley Technical College, Hubert Bennett; The Rebuilding of the City Temple: interior

(Continued on page 543)

CONVERSIONS

Our Guest Editor for the year, Felix Walter, who will be writing another article on the conversion of old buildings for next week's JOURNAL, asked Ernest Watkins for his comments on the Housing Repairs and Rents Bill. Mr. Watkins writes on this subject below. (On the left is a sketch by Gordon Cullen—published full-size on March 11—showing the types of property whose conversion Mr. Walter will be discussing during the year.)

The Housing Repairs and Rents Bill has now passed through the Commons and is before the Lords, and it is unlikely, therefore, that its main provisions will hereafter be substantially changed. The Bill represents an attempt by the government to stimulate the further repair and improvement of existing house property by the offer of incentives, and to the private owner the incentives take the shape of improvement grants and higher rents.

Part I of the Bill is mainly concerned with the detailed amendment of the Housing Acts of 1936 and 1949. Housing authorities have, the government feels, a dual responsibility, to take action themselves, and to encourage and aid private owners to take action over their own properties. Clauses 1 to 6 of the Bill extend the powers of the local authorities, and the extensions lie mainly in the direction of giving local authorities more flexible powers. Clause 1 requires each authority to prepare, within twelve months, its own plans for slum clearance. Clauses 2, 3 and 4 give the authorities greater power to recondition houses in clearance areas for continued occupation on a temporary basis in lieu of immediate demolition, and Clause 5 enables an authority to allow an owner to recondition a house which would otherwise fall to be demolished. Clauses 7 and 8 deal with the finance of the operation and provide for Exchequer grants against expenditure under these heads, broadly on the basis of the Treasury paying half the annual charges involved. Clause 9 clarifies the elemental amenities to be considered in determining the standard of fitness for human habi-

Clauses 13 to 15 are clauses that revise the Housing Act, 1949, in the matter of improvement grants. To qualify for an improvement grant under the 1949 Act, a reconditioned house had to be made fit for an estimated further life of thirty years; that period may now be reduced to as low as ten, if the local authority so decides, and there is a corresponding reduction in the length of lease which an appli-

cant for a grant must hold. The maximum for grants is raised, but, in normal cases, the authority's grant is not to exceed half the cost of the work, with a limit of £400 over each housing unit created. In estimating the total cost for grant purposes, professional fees may be included as part of it (an innovation). The duty of the local authority to lay down the maximum rents for the new dwelling remains, and new dwellings created with the aid of a grant will be subject to the Rent Acts, but the annual return allowable to an owner on his own fresh investment in reconditioning is increased from 6 per cent. to 8 per cent. of the total cost.

Part II of the Bill makes amendments to the Rent Restriction Acts and the clauses of major interest are those which allow a landlord to raise the rent of a statutory tenancy (Clause 22) and which free from rent control for the future newly-created dwellings, both freshly built and coming into existence from a conversion scheme (Clause 34).

Clause 22, and the section of the Act which will result from it, will have to be read carefully and in detail by all those who believe that it will enable them to increase the standard rent of their properties. In outline, before a landlord can claim an increase in rent from a protected tenant he must be prepared to show that the property is in good repair and that he has spent in repairs to it either three times the "statutory repairs deduction" (set out in the Third Schedule to the Bill) in the previous twelve months or six times the statutory repairs deduction in the previous three years. If he can, he may increase the rent by an amount equal to twice the statutory repairs deduction for that property, but the total rent when increased must not exceed twice its gross annual value. The statutory repairs deduction is a pro-portion of the annual value of the property and it varies from some 50 per cent. of the value at the lower end of the scale to 24 per cent. at the higher. A notice of increase of rent may be challenged by a tenant, and the

county court is the final arbiter of any dispute.

of the mou

Gard

Loui

Chu

Lave

Stok

S. F

Can' A. I Gara

Clause 34 has been mentioned above. Freedom from the Rent Acts is given to houses and "separate and self-contained premises produced by conversion" completed after the Act comes into force (they may have been started before). Clause 32 of the Bill also takes out of the scope of the Rent Acts houses owned by local councils, by New Town development corporations, by housing associations incorporated under the Industrial and Provident Societies Act, 1893, and by charities, while they remain in that ownership. Clause 37 allows a tenant of premises converted with the aid of an improvement grant to demand a premium on a transfer of his lease if it is for a term exceeding 21 years, and Clause 38 extends the power of a tenant holding under a statutory tenancy to recover as a capital sum on a transfer of his holding what he has paid for improve-The final clause of general interest is Clause 39. This entitles an owner who provides services to a protected tenant on a pre-war tenancy to apply to a rent tribunal for an increase of rent where he can show that the cost of the services he is bound by agreement to render (covered by an inclusive rent) has increased since the rent was fixed.

DIABY

Library Group: Identification of unknown drawings. At the RIBA, 66, Portland Place, W.1. 6 p.m. May 10

The Society's House and Earlier Homes. (Peter Le Neve Foster Lecture.) John N. Summerson. At the RSA, John Adam Street, W.C.2. 2.30 p.m. May 12

British Industries Fair. At Earls Court. Daily: 9.30 a.m. to 6 p.m.

UNTIL MAY 14

The Design of New Schools. C. H. Aslin. At the RSA, John Adam Street, W.C.2. 2.30 p.m. MAY 19

Exhibition of Polish Architecture. At the RIBA, 66, Portland Place, W.1. Monday to Friday: 10 a.m. to 7 p.m.; Saturday: 10 a.m. to 5 p.m. May 21-June 4

(Continued from page 541)
of the New Church, Lord Mottistone; Plymouth Head Post Office, Christopher J. Woodbridge; Warehouse Extension, Island Street, Nottingham, Colin St. C. Oakes; Flats and Maisonettes at Digswell for the Welwyn Garden City Development Corporation, Louis de Soissons and Partners; St. Austin's Secondary Modern School for Boys, Charlton, Clayton and Black and Daviel; Proposed Church and Hall, Bentley, Staffordshire, Lavender, Twentyman and Percy; New Laboratories for the National Coal Board, Stoke Orchard, Cheltenham, Howard Robertson; Oxford University: Library for Special Faculties, Sir Hubert Worthington; Tilbury-Grays Telephone Exchange, Walter S. Frost; House at Shackleford, Surrey, Philip Hepworth; St. Columba's Church of Scotland, Sir Edward Maufe; Christ's College, Cambridge: new Turret in Third Court, A. E. Richardson; Postal Sorting Office and Garage, Thorpe Road, Norwich, Thomas F. Winterburn; Extension to St. Joseph's Church, Roehampton, David Stokes and Partners; Shop Premises, Broadmead, Bristol, Colin St. C. Oakes; Proposed Public House,

be

gs

ll.
ift

n-

ıy

en n-

es ed so ets

VC

s,

nt

p. es ea Xng er is eal n 0fo se st eunt

oe,

12 rt. 14 in.

ay

Brighton, Robert Atkinson and Partners; Proposed new Premises for the Royal College of Obstetricians and Gynaecologists, Regent's Park, N.W.1, Louis de Soissons, R.A., and Partners; Entrance Portico, Fife, Oliver Hill; design for proposed new East End, with Memorial Reredos, St. James' Church, Elmers End, Kent, Percy Gray; The Bankers' Clearing House, E.C.3, Austen Hall; New Studio Building for the British School at Rome, Minoprio and Spencely and P. W. McFarlane; Croydon Technical College: West End, Robert Atkinson and Partners; St. Theresa's Secondary Modern School for Girls, Lewisham, Clayton and B'ack and Daviel; Sylvan Hill Housing Scheme, Croydon, Leonard C. Holbrook; Offices: Heathcoat House, Savile Row, W.1, William J. Biggs (Stone, Toms and Partners); Treatment Works for the Yeovil Rural District Council, John A. Strubbe; Design for a Bridge over the River Cherwell at Oxford, Raymond Erith; Block of 44 Flats, Snow Hill, Bath, Terence W. Snailum; Cheshunt Secondary Modern School, Graham Dawbarn (Norman and Dawbarn); Ashburnham House, Bedford, for the Bedford Corporation, Max Lock and

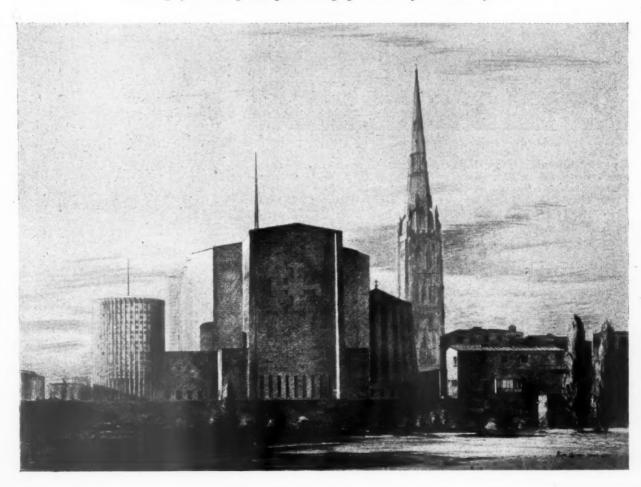
Partners; Eight Houses, London Road, Ascot, for the Commissioners of Crown Lands, Clifford Culpin; Fourah Bay College, Sierre Leone: Great Hall, Library and Chapel, Graham Dawbarn (Norman and Dawbarn); Research Laboratories at Salfords, Surrey, Graham Dawbarn (Norman and Dawbarn); Uxbridge Crown Building, Reginald E. Rossell; proposed new buildings for the North Bedfordshire College of Further Education, Stanley V. Goodman; Willington Power Station, for the British Electricity Authority, Farmer and Dark; the new Ulster Hospital, Belfast: South Elevation, Frederick Gibberd; design for the Redevelopment of Marine Parade, Dover, William F. Howard; proposed Grammar School, Bromsgrove, Worcestershire, F. R. S. Yorke, E. Rosenberg, and C. S. Mardall; Metropolitan Police Single Men's Residence, John I. Elliott; Archer's Court County Secondary School, Dover: Howard Lobb; Archer's Court Secondary School, Dover, Howard Lobb.

Photographs of exhibits appear on pages

Photographs of exhibits appear on pages 537, 538 and from this page to page 547. ASTRAGAL comments on the exhibition on page 535.

ARCHITECTURE AT THE ROYAL ACADEMY

A selection of the designs on view in the Architecture Room at the Royal Academy's Summer Exhibition, Burlington House, is published on the following pages. More pictures appear on pages 537 and 538. ASTRAGAL comments on page 535. (Below, a drawing by Basil Spence of his design for Coventry Cathedral.)



ARCHITECTURE AT THE ROYAL ACADEMY: FLATS



Drawn by Gerald W. King



Drawn by I. A. L. Neyroud.

Top: left, Ashburnham House, Bedford, for Bedford Corporation, by Max Lock and Partners; right, 44 flats, Snow Hill, Bath, by Terence W. Snailum. Above, Metropolitan Police Housing, Buxton House, Snaresbrook Road, by Charles R. Fowkes. Right, Sylvan Hill Housing Scheme, Croydon, by Leonard C. Holbrook. Below, design for redevelopment of Marine Parade, Dover, by William F. Howard.



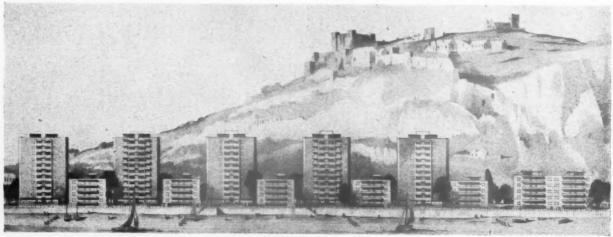
Rig Sch shi Ro. bot

and N. Pa

Drawn by Lawrence Wright.



Drawn by F. H. Evans.



Drawn by F. H. Evans.

AND SCHOOL AND COLLEGE BUILDINGS

Right: top, proposed Grammar School, Bromsgrove, Worcester-shire, by F. R. S. Yorke, E. Rosenberg and C. S. Mardall; bottom, proposed new premises for Royal College of Obstetricians and Gynaecologists, Regents Park, N.W.1, by Louis de Soissons and Partners Partners.



Drawn by K. J. Kapolka.

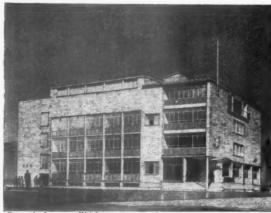




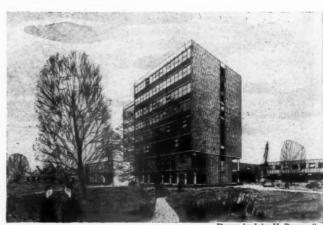
Left: top, St. Austin's Secondary Modern School for Boys, Charl-ton, by Clayton and Black and Daviel; bottom, University of Reading, Whiteknights Park: Faculty of Letters, by Howard Robertson.



Below: left, Keighley Technical College, by Hubert Bennett; right, proposed new buildings for North Bedfordshire College of Further Education, by Stanley V. Goodman.



Drawn by Lawrence Wright



Drawn by John H. Bramwell

ARCHITECTURE AT THE ROYAL ACADEMY: MISCELLANEOUS



Drawn by Lawrence Wright.

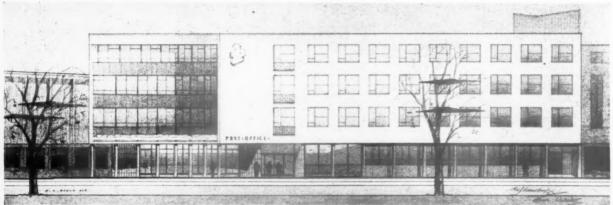
Above, warehouse extension, Island Street, Nottingham, by Colin St. C. Oakes, who also designed the shop (right) for Broadmead, Bristol. Below, Royal Observatory, Herstmonceux: Time and Nautical Almanac Building, by Brian O'Rorke.



Drawn by J. D. M. Harvey



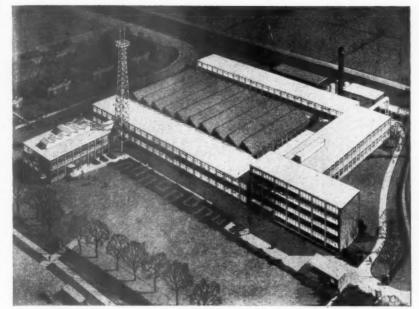
Drawn by Brian O'Rorke



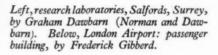
Drawn by W. R. Haden.

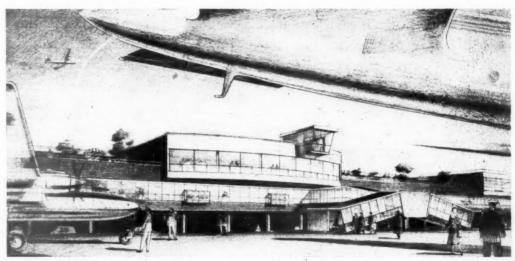






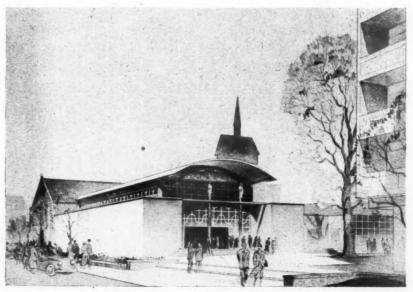
Drawn by Lawrence Wright.





Drawn by G. C. Bodgener.

Left: above, Plymouth head post office, by Christopher J. Woodbridge; below, model of chemistry laboratories, Cambridge University, by Easton and Robertson. Right: Extension to St. Joseph's Church, Roehampton, by David Stokes and Partners.



Drawn by Frank Hoar.

FLATS

in LOUGHBOROUGH ROAD, BRIXTON, LONDON, S.W.9

designed by EDWARD ARMSTRONG and FREDERICK MACMANUS

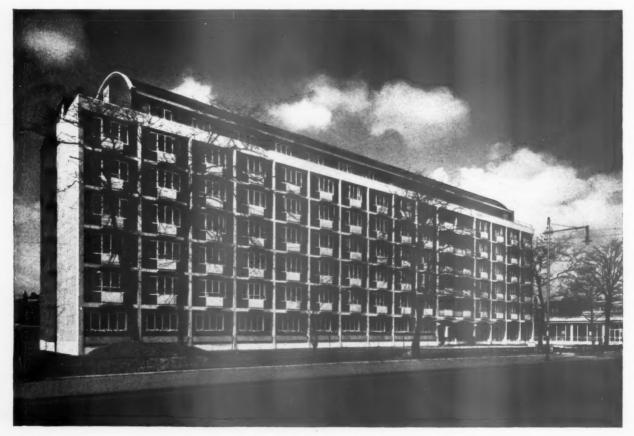
assistant architect, E. HOWARD SADLER, assistants-in-charge ALLAN MURRAY

and COLIN S. BURGESS, consulting engineers, BYLANDER and WADDELL

quantity surveyors, W. C. INMAN and PARTNERS

Iveagh House, at the corner of Loughborough Road and Wiltshire Road, Brixton, consists of flats for single persons; it has been built for the Guinness Trust on a site of 1.96 acres and with a frontage of 350 ft. The building is divided into three distinct parts, namely, the main seven-storey block, which is on a north-south axis parallel with Loughborough Road, the single-storey restaurant and kitchen block to the north and the three-storey staff wing to the north-west, connected by a covered way. The scheme is under the control of an experienced superintendent, who occupies the ground floor flat in the staff block.



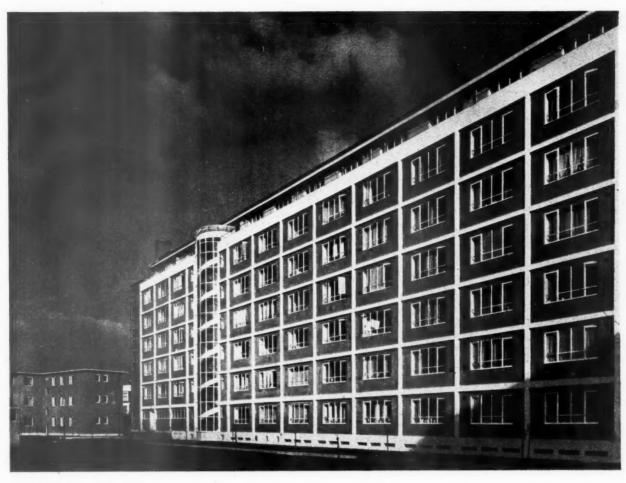


A

2. 6

i i

Sit



Above, the main block from the south-west. The staff block on the left.

KEY

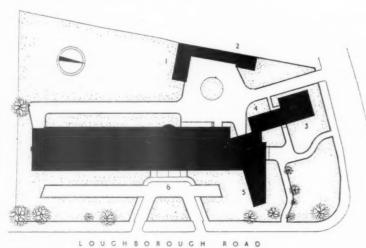
r

I. Stores

4. Visitors' Rooms
5. Restaurant

2. Cycle Shed
3. Staff Block

6. Seven-storey Block



Site plan

SITE.—Roads and paths on the site are of tarmac except for the paths to the restaurant and staff block, which are of York crazy paving. The only access to the west side of the site is through gates to the north road, in the north-west corner of the site. A chain link fence will border the site along the pavement until the privet hedge, which has been planted, has been properly established. The best of the trees found on the site have been preserved and new trees and shrubberies, together with lawns and borders have been planted.

PLAN.—The main block contains 161 flats on seven floors, consisting of 139 one-room flats and 22 two-room flats. The first to fifth floors have identical accommodation, namely 24 one-room flats and 2 two-room flats; the remainder of the two-room flats are on the top floor. All lettable accommodation is centred in the main block for economy of central heating, domestic hot water and other services. In order to leave as much of the external flank walls as possible free for the dwelling space, all bathrooms are placed against the central corridor walls and,



Above, the east facade of the seven-storey block. The main entrance extreme right.

FLATS

in LOUGHBOROUGH
ROAD, LONDON, S.W.9
designed by E. ARMSTRONG
and F. MACMANUS

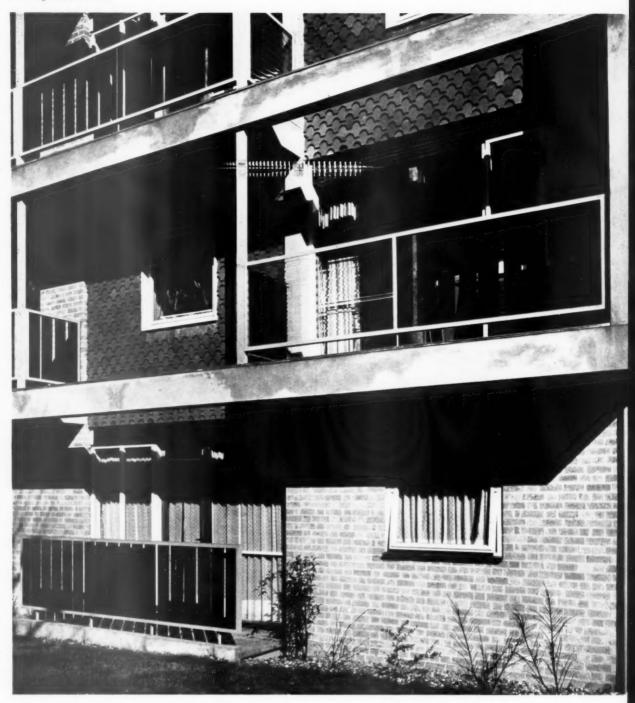
together with entrance lobbies, are mechanically ventilated by means of vertical ducts connected to horizontal extract ducts in the space formed by the barrel-shaped roof. Alternate concrete piers are U-shaped on plan and contain plumbing ducts, accessible from central corridors. As the flats are designed for single working women and there is a self-service restaurant, it was considered unnecessary to provide a self-

contained kitchen in any of the flats. Each flat contains a specially-designed kitchen cabinet containing a larder, ventilated through the external wall, storage cupboards, cooker, sink, shelves and a pull-out work top. The centre work-space of this fitting can be concealed when not in use by a roller-shutter, which automatically turns off the stove when closed. The three-storey annexe contains 3 three-room flats for the superintendent, two porters





TILE HUNG WALL PANELS: FLATS AT RICHMOND Eric Lyons, architect

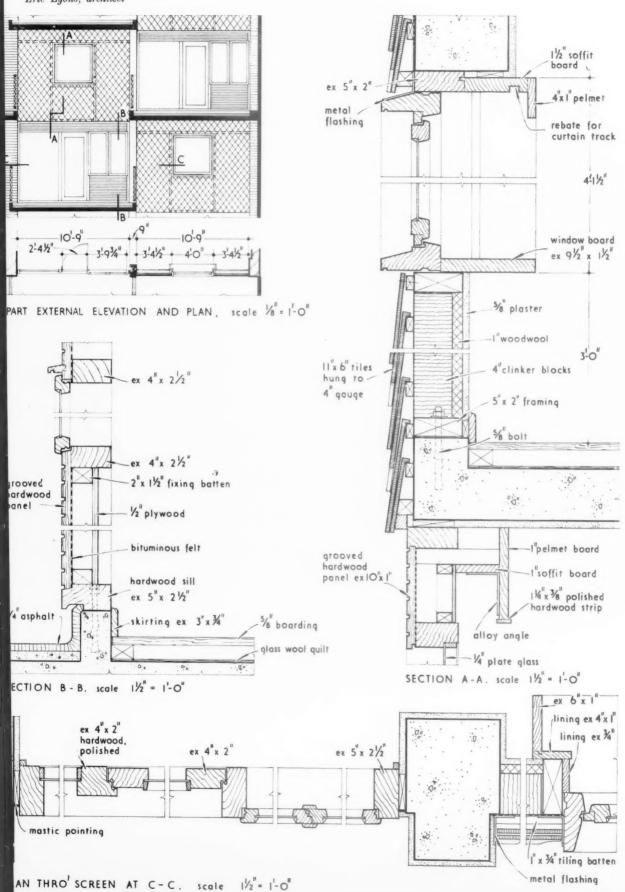


The panel wall behind the tile hanging consists of a timber framing with a clinker block and woodwool infill.

The picture-frame window is a standard heavy-section casement.

TILE HUNG WALL PANELS: FLATS AT RICHMOND

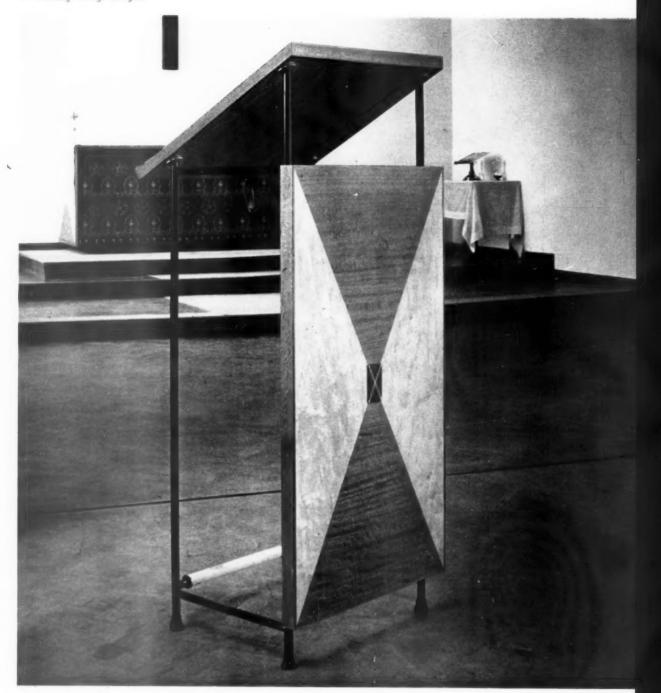
Eric Lyons, architect



FURNITURE AND FITTINGS: 42

LECTERN: CHURCH HALL AT STEVENAGE NEW TOWN

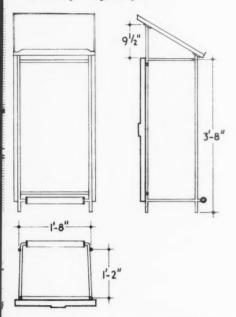
D. Stirling Craig. designer

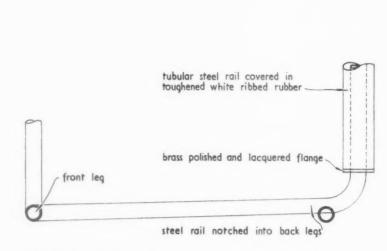


The frontal panel is finished with Lagos managany and birch veneers, polished with clear wax. The central medallion is perspex, the St. Andrew's cross being engraved on the reverse side and the raised parts sprayed with blue cellulose. The rubber covering to the foot rest is a standard section manufactured for perambulator handles.

LECTERN: CHURCH HALL AT STEVENAGE NEW TOWN

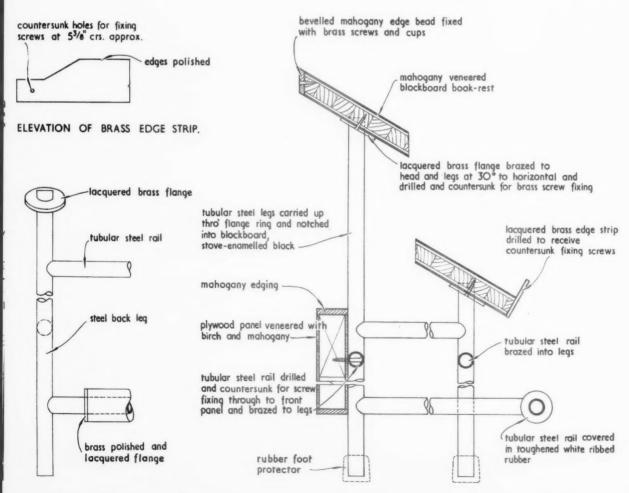
D. Stirling Craig, designer





HORIZONTAL SECTION THROUGH LEGS.

KEY PLAN, SECTION AND BACK ELEVATION. scale $\frac{1}{2}$ = 1-0"



PART BACK ELEVATION, scale 1/4 full size

SECTION.



and to the cat in for prim work cook an e

FL in L desig

Sixt

Typ

Gro

Bas

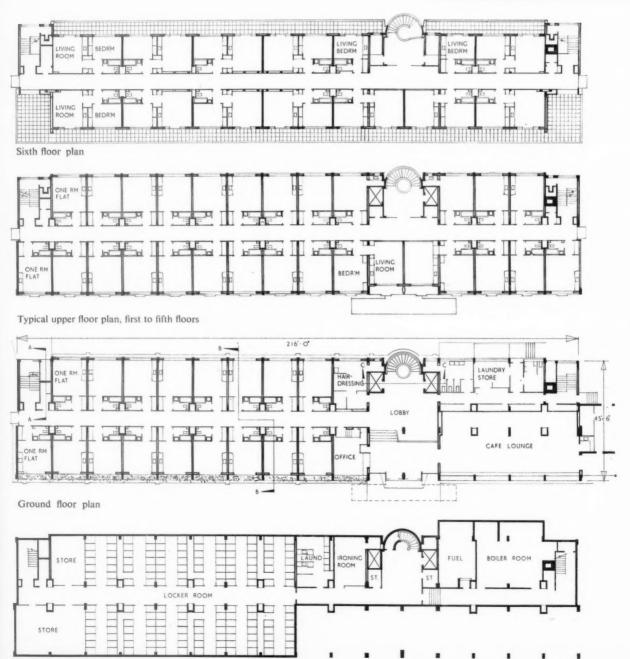
and their families, and also furnished single bedrooms for the use of visiting relatives and friends, who can eat in the restaurant and have the use of these rooms for short periods. Although the restaurant is primarily for the use of tenants, who are mostly working women with little time for housework and cooking, it will also be open to the public, who have an entrance on the north side. Other amenities include a laundry, ironing room, locker rooms,

Right, the north facade of the tall block. In the centre is the public entrance to the restaurant and on the right the three-storey staff and visitors' block.



FLATS

in LOUGHBOROUGH ROAD, LONDON, S.W.9 designed by E. ARMSTRONG and F. MACMANUS



Basement plan [Scale: 13" = 1'0"]

FLATS

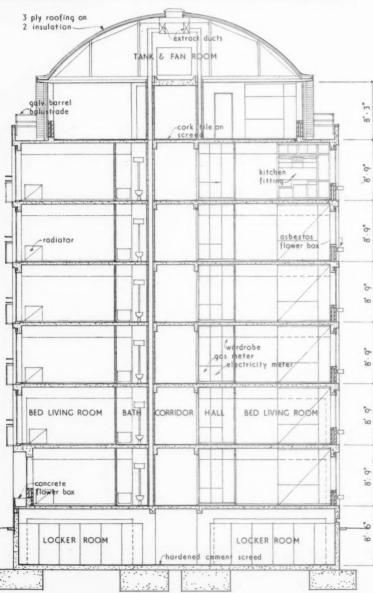
in LOUGHBOROUGH ROAD, LONDON, S.W.9 designed by E. ARMSTRONG and F. MACMANUS

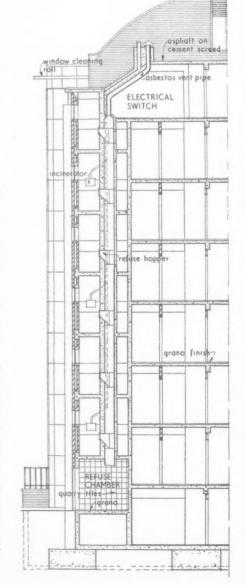
Below, reinforced concrete canopy over main entrance from Loughborough Road.



a large lounge and hairdressing saloon.

CONSTRUCTION.—The reinforced concrete frame is exposed on the front and rear elevations and the basement has 8 in. r.c. walls and slab. The canopy over the main entrance is also of r.c., floors are of 5-in. thick solid r.c. and the three staircases are cast in situ concrete. There is an expansion joint on each side of the section containing the main circular staircase and these extend from the top of foundations to eaves level. The curved roof houses eleven water tanks of 800 gallons each, an expansion tank for the heating and hot water installations, and the ventilation plant. These are supported on a r.c. slab beam over the central corridor, 11-in. thick below the tanks and with upstands on either side to form a tray. Under the





ventil thick trusse

wool expos panel

bricks

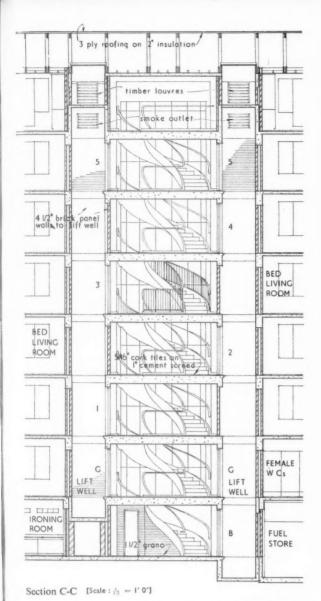
tile ir

slabs,

cavity
13½-in
slabs

have l

Sections A-A and B-B [Scale: 1'0"]

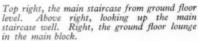


ete nd he ors ses on the he oof an

iter аге tral

rith

the

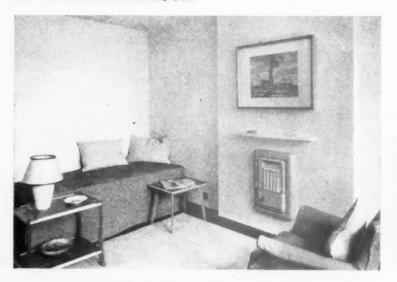






ventilating plant the slab is increased to 125 in. thick. The construction of the roof is of timber trusses at 6-ft. centres with edge reinforced woodwool slabs spanning between. Within the grid of the exposed structural framework the front and rear panel walls are recessed $4\frac{1}{2}$ in. These walls are formed of straight-jointed brown wire-cut facing bricks externally, a 3½-in. cavity and a 3-in. hollowtile inner skin. The end wall to the flats east of the corridor is faced with 2?-in. thick precast concrete slabs, the remainder of the end walls are of 11-in. cavity brickwork. The staff block has walls of 13½-in. load-bearing brickwork and floor and roof slabs of solid r.c. The restaurant and kitchen also have load-bearing brick walls and r.c. in situ columns.







FLATS

in LOUGHBOROUGH ROAD, LONDON s.w.9

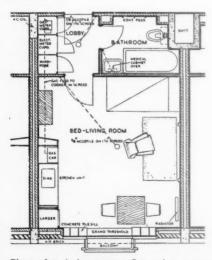
designed by E. ARMSTRONG and F. MACMANUS

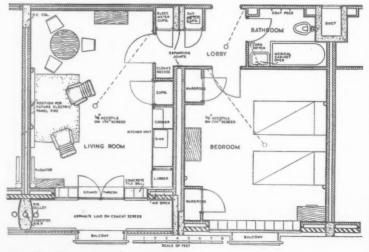
Above, three photographs of the full size mock-up which was built while the block was under construction. Electric fires have been substituted for the gas fires seen here.



The covered way has solid r.c. roof slab supported on one side by the kitchen wall and on the other by steel columns. One end is supported on a 10-in. cavity wall in facing bricks on both sides with a pattern formed by 11-in. sq. fireclay flue liners.

FINISHES.—The main barrel-shaped roof is finished with three-ply grey-green mineral roofing felt over a ½-in. cement screed. As a precaution against fire the roof space was divided into three sections by covering both sides of two roof-trusses with sheets of å-in. thick fire-resisting board. Each section of roof space is lit by a glass dome light. The external walls of sixth floor flats are set back 5 ft. 2 in. from the face of the main concrete frame and consist of an outer skin of buff multi-rustic wire-cut facing bricks, a 2-in. cavity and a fletton brick inner skin. The parapet wall is of 7-in. r.c. capped with a white precast concrete coping. Walls between flats consist of two leaves of 3-in. hollow-tile blocks with a 3-in. cavity between. Between flats and the





Plans of typical one-room flat and two-room flat over main entrance [Scale: |" = 1'0"]

concre in cha noise of 3insula on ex struct paper consis suppo The All e ceme on th boxes 83-in 1-in.

> with tiles

> room

men

treac

centra

- W

Gro

-1

 \exists

Pla

central corridor, partitions are of 3-in. solid clinker concrete. The ventilation extract plants are housed in chambers treated to prevent the transmittance of noise to dwellings below by the use of a separate floor of 3-in. thick concrete carried on 11-in. cork insulation and walls are finished with 3-in. plaster on expanded metal, kept clear of the 9-in. brick structural walls by means of 11-in. of corrugated paper nailed to battens. The ceiling insulation consists of 3½-in. dry sand plugging on boards supported between the structural joists by battens. The underside is plaster on expanded metal. All external concrete is treated with two coats of cement paint. The ground floor panels of the flats on the east side are set back behind concrete flower boxes and the fletton external skin is faced with 83-in. sq. dark blue eggshell glazed tiles with 4-in. wide white joints. Internally floors are finished with brown plastic tiles in all flats, red marble lino tiles in corridors, entrance hall, office and ironing room and oak parquet in the lounge. From basement to first floor the main staircase has terrazzo treads and risers, while above first floor level the

rted

ther

o-in.

th a

is

fing

sses Each The in.

kin. h a een

the

T

3

S.

finish is white granolithic. Escape staircases are paved with granolithic and walls are fair-faced brickwork and concrete-treated with stippled plastic texture, gloss painted. Corridors are plastered, with walls painted dove grey and ceilings off-white. In the

Below, fitting which forms a part of every flat living room. The working part, which can be entirely closed by a roller-shutter, does not contain an electric water heater in the flats since hot water is supplied from a central boiler house. Bottom, staff block from south west.

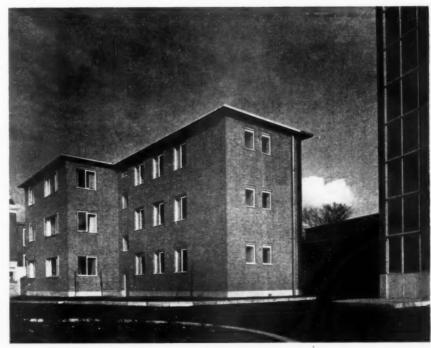




Ground floor plan, staff block, upper floors similar



Plan of restaurant and kitchen block Scale: 214" = 1'0"]







Top, entrance hall and waiting space. In the background the door to the lounge. Above, entrance hall and window to enquiry office. Right, part of the restaurant, showing kitchen servery. The north walls of the restaurant and entrance hall are painted dark blue.

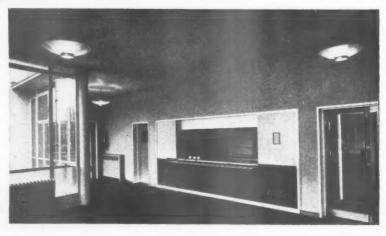
FLATS

in LOUGHBOROUGH ROAD, LONDON s.w.9

designed by E ARMSTRONG and F. MACMANUS

flats, walls, ceilings and woodwork are painted cream, except bathrooms which have duck egg blue walls and ceilings. Doors and skirtings are painted grey. In the entrance hall the north wall is painted with dark blue emulsion paint and the south wall is light grey, the central free-standing column is painted glossy yellow. Panelling on the columns in the lounge and surrounding the lift wells on the ground floor is natural finish polished Douglas fir. In the lounge the back wall is papered red, with a white line motif. The staff block has a ground floor which is floating and is covered with a layer of bitumen felt under a 2-in. screed and the north and west walls of bedrooms are lined with 1-in. woodwool slabs to provide additional insulation. In the flats the partitions are 2-in. hollow tile whilst those to the visitors' rooms are 3-in. solid clinker concrete. The restaurant has a floor finish of gurjun wood blocks with hardwood skirting. Kitchen walls to the top of door height are finished with white glazed tiles; above this height there is vermiculite plaster. The expansion joints have a 1-in. gap formed when casting by inserting 1-in. soft board as permanent shuttering.

SERVICES.—The two lifts both serve to the fifth floor, but stop at alternate floors. The motor rooms are housed within the roof space. Wherever possible services and drainage have been kept out of sight, whilst remaining easily accessible. Bathroom plumbing is run in the U-shaped columns on either side of the central corridors. Services to the cabinet kitchens and rainwater pipes are housed behind a removable panel at the end of the fittings and in the larder units respectively. Central heating and hot-water are supplied from a boilerhouse in the basement of the main block. Boilers burn solid fuel and have automatic stokers. Rents are 15s. a week for one room and 25s. for two rooms. General contractors Humphreys, Ltd. Sub-contractors page 564.



TECHNICAL SECTION

Plumbing, like electrical systems, has been one part of building technique which the architect in the ordinary course has left very largely to the man on the site. He may decide where the pipes are to run, but the ultimate mysteries of size, fall and junction type are a matter between the plumber and the sanitary inspector. Design was in any case a matter of trial and error for no one knew precisely what caused trap unsealing. Thus current practice had evolved for multi-storey buildings a formidable convolution of pipes in which every single trap was vented; a practice crystallised in most building bye-laws. Long and painstaking investigation by BRS and the LCC over the past four years has revealed what actually happens in plumbing systems and in November, 1952, single stack designs intended for two-storey buildings were outlined in BRS Digests 48 and 49. It is now confirmed that observance of the same principles allows unvented traps to be perfectly safe on five storey (and even higher) installations.

The implication for the architect is that he should now detail the plumbing as precisely as he would the joinery. The implication for the pipe manufacturers is that they can now evolve a range of fittings which will simplify assembly and installation.

This week's special article

inted blue inted inted rall is n is ns in

s fir. ith a floor

r of orth t-in. tion.

nker

ing.

hed

nere

ints

ert-

ith

tor

ver

out

thon

he

ed

gs

ıt-

se

rn

n-

23 HEATING AND VENTILATION skirting heating

The number preceding the week's special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant Information Centre items. Further and earlier information can be found by referring to the index published free each year.

Skirting heating, which is common practice in America, is relatively new to this country. This week James Godfrey, ARIBA, discusses the virtues of this type of heating, and gives a detailed account of a skirting heating installation which he has installed in his own house at Welwyn Garden City.

Skirting heating, or "baseboard" heating as it is termed in the USA is a system of heating rooms by long low panels heated by hot water or steam and placed at skirting level. The panels virtually take the place of the traditional skirting and consequently are inconspicuous in appearance compared with normal radiators. The heated panels may be of cast iron or steel and may be eminently radiant or convective in their heating effect, according to the

detailed design of the units. The cast-iron units invariably have the waterways designed as an integral part of the unit; the steel panels often serve merely as a cover for a finned heating pipe and in such circumstances are invariably of the convective type. In essence the fully radiant type (generally known as the R type) has a simple profile exposed to the room to minimize convection currents, and for the same reason is sealed at top and bottom when

fixed. By contrast, the convector type (RC) has openings top and bottom to allow air to circulate freely behind the back of the panel. The heat emission of the RC type may be 1½-2 times that of the R type of comparable size for the same flow tem-

perature.

Heating by skirting units has been prominent in America for some time and in that country many of the leading heating appliance manufacturers now appear to make one or other of the established types of heater. By contrast there appear to have been only a few installations in this country, been only a few installations in this country, mostly of an experimental nature. They include, installations in a few local authority houses at Ipswich, an installation in a private house at Highgate, N.6, for Walter Segal and an installation in the writer's house at Welwyn Garden City which will be described in detail later. A school at York has also been equipped with skirting heaters of the RC type. skirting heaters of the RC type.

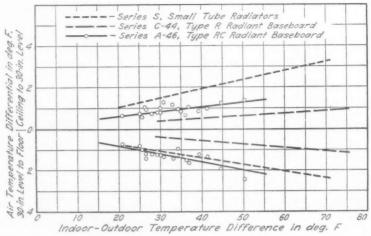
PERFORMANCE OF SKIRTING HEATERS

GENERAL NOTES

The advantages claimed for skirting heater systems compared with more conventional methods of heating are the commendably low temperature gradients, the comfortably warm conditions at floor level, the uniformly constant temperatures obtainable even in the face of changing outdoor tem-peratures and the absence of draughts. Brief reference to some tests carried out in the USA and in this country suggest that these claims are not unreasonable. For instance, results of tests on a skirting heating installation in an experimental house at the Engineering Experiment Station, University of Illinois, gave (for R type units) average temperature differences measured at points just above the floor and just below the just above the floor and just below the ceiling of the order of 2 deg. F; by substituting RC type units the temperature differences were approximately 4-5 degrees F. By comparison, temperature differences of about 5½ deg. F. were measured under the same conditions for an installation of recessed radiators. Similar results were obrecessed conditions for an installation of recessed radiators. Similar results were obtained on further tests in the USA on five houses of differing sizes and layout and have also been confirmed by measurements made by officers of the Building Research Station at Ipswich. In the last mentioned example, temperature differences of example, temperature differences of the order of 1-3 deg. F. were logged for the radiant type (R) skirting units and differences of about 4-2 deg. F. for convection type (RC) units. Fig. 1, which is reproduced from the account of the tests, at Illinois University, indicates graphically the range of temperature differences relations. range of temperature differences obtained in three bedrooms with the three different forms of heating. Data for the floor below showed similar characteristics except that the floor to ceiling temperature difference was 1-2 deg. greater.

The uniform temperatures obtainable with skirting heating installations and the absence from draughts is generally attributed to the extended heated surface. In this connection there is some advantage in the R type compared with RC type as the lower heat emission of the former calls for a longer run of skirting. MacLeod and Eve (USA) in the tests on five houses mentioned above measured average air velocities of between 17-24 feet per min. at 3 inches above floor level in the centre of the room and velocities not much higher, immediately above the skirting heaters. These velocities are well below the air speeds generally considered to give rise to complaints of draughts

(i.e. 60 ft. per min.).
With regard to running costs, reports of fuel consumption show that skirting installations are no more expensive to run than comparable installations employing



Graph showing second storey air temperature differentials recorded in the I.B.R. Research Home of the University of Illinois.

conventional radiators. In the houses at Ipswich for instance, those with ordinary In the houses at radiators had a total solid fuel consumption averaging 2·3-3·0 cwt. per week compared with 2·2-2·5 cwt. per week for the houses equipped with skirting heaters.

The actual shape of the layout of a skirting heating installation seems to have little effect on the efficiency of the system although a simple house plan clearly makes for economy in heat by reducing the amount of outside walling.

Skirting heater installations can be designed effectively for either gravity or iven circuits. The main advantages pump driven circuits. of the last mentioned are that there is a quicker response from the system to changes in demand and the pipe sizes can be reduced. Pump driven circuits are the rule in America.

GENERAL DESCRIPTION OF HOUSE

The site is about 370 ft. above sea level and is sheltered from the north by a wood and has a slight continuous fall to the south and east. The exposure may be described as normal although one of the corners of the site is rather exposed to the prevailing south-west winds which due to the disposition of trees and surrounding property tend to be concentrated on this corner of the site. The soil is a shrinkable clay overlying a sand layer at a depth of

The house has a total floor area of 1,500 sq. ft. and the ground and first floors are roughly of equal area. The plan of the house has been made as compact as possible to help reduce heat losses and to simplify the heating layout. The main rooms face S.S.E. with the exception of the kitchen which faces N.E. and the study which faces S.W. The ground floor plan is of the open type except for the kitchen and study which are completely enclosed. Advantage has been taken of the site contours to increase the height of the living room to 9 ft. 3 in., other rooms on the ground floor are 8 ft. 0 in. high and on the first floor 7 ft. 9 in.

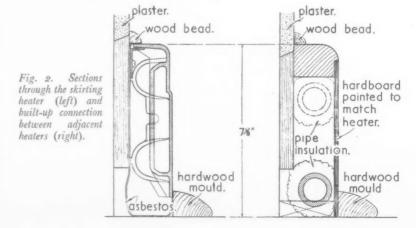
Special points of interest are the large window which is double glazed to minimise heat loss and the positioning of the two chimney stacks in the centre of the plan for The boiler flue has been the same reason. lined with a 6 in. diameter glazed earthenware drainpipe as a precaution against con-densation. To date no condensation has densation. To date no condensation has been seen, possibly because the chimney is in a central position and does not cool so readily, and possibly because the fuel is stored under cover.

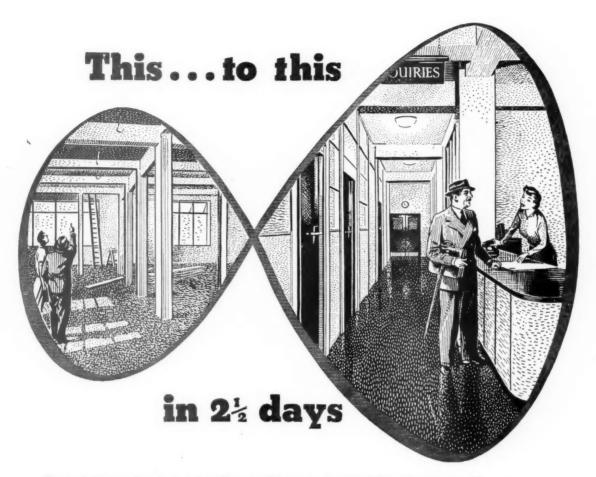
The bedrooms are permanently vented to the roof space by openings in the ceilings screened by fine mesh expanded metal. The foundations are 12 in diameter short

bore piles going down to a depth of about 8 ft. and supporting a lightly reinforced con-crete ground beam. This form of founda-tion was chosen because of the shrinkable clay soil and the proximity of young trees, and is common to a number of houses in the immediate vicinity.

the immediate vicinity.

The main walls generally are of 11 in. cavity construction with 4½ in. clay brick outer leaf and 4½ in. clinker concrete inner leaf. The inner leaf of the wall on the S.S.E. elevation up to first floor level has





For quick transformation in office or factory, choose "Compactitioning" —the new partitioning service that gives you these four freedoms:

FREEDOM TO CHOOSE—With "Compactitioning" you are not tied to any particular material. There's a choice of materials (and finishes) to suit the needs of your job. Materials used in "Compactitioning" include "Compactite", "Holoplast", "Plimberite", "Stramit", corkboard and plasterboard.

FREEDOM TO CHANGE— "Compactitioning" gives you solidity with mobility. It is easy to dismantle and re-erect to meet changed requirements.

FREEDOM FROM LICENSING—"Compactitioning" units are free of all licences and available by the foot or by the mile.

FREEDOM FROM TROUBLE—Your problem, big or small, can be solved in our drawing office. This tailor-made service costs no more because partitioning is built up from standardised components. This reduces site work and cuts down disturbance in occupied premises.

WHEN YOU DECIDE TO DIVIDE-USE

PARTITIONING BY COMPACTOM

COMPACTOM LTD., OXGATE LANE, CRICKLEWOOD, LONDON, N.W.2. PHONE: GLADSTONE 2600

BRITISH "SASGO" DOORS

Leaders in Quality for 30 years

★ BRITISH "SASCO" PANELLED INTERNAL AND EXTERNAL DOORS TO BSS 459 Pt. I, 1954

Pattern 4 Doors:

Parana Pine Stiles/Redwood Rails

Parana Pine Timber throughout

Pacific Coast Door Stock for painting or staining and varnishing

IN FOUR

VARIETIES OF

TIMBER

★ BRITISH "SASCO" INTERNAL DOORS

Parana Pine Framing throughout, Patterns 22, 44, 55, 66, 99 FIVE PRE-WAR

PATTERNS

★ BRITISH "SASCO" AND "MARVELITE"

FLUSH DOORS

FIVE TYPES OF FACES. FIVE

TYPES OF CORES

★ BRITISH "SASCO" DOORS

Pre-war exterior range of patterns in Swedish Redwood

TWENTY PATTERNS

AND SIZES

SEND NOW for illustrated list and prices. Special terms to merchants.

Order your Hardboard Flush, Plywood Flush and Panel Doors at the same time.

Have you got your "Sasco" door wall chart? If not—send us a P.C.

SOUTHERNS

BOLD SAW MILLS, WIDNES

REGIONAL STOCKS AT: BRISTOL, DUDLEY, MANCHESTER, GLASGOW

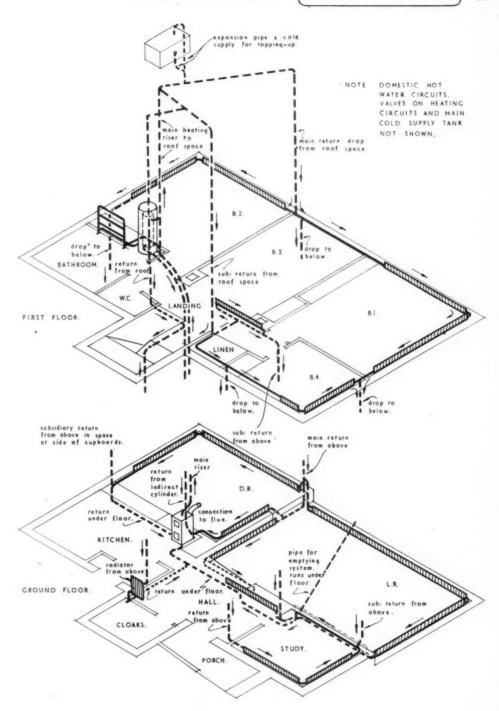


Fig. 3. Isometric sketch showing the layout of the installation.

been increased to 6 in. to offset the large window openings. Internal partitions are mainly brick on the ground floor and clinker concrete on the first floor.

The ground floor consists of 4 in. oversite concrete on 6 in. hardcore and is overlaid with a coal tar pitch damp-resisting membrane and 2 in.-3 in. cement-sand screed to receive the floor finishes of thermo-plastic tiles and wood blocks respectively.

The first floor is of normal wood joist construction with 1 in. t. and g. boarding and plasterboard ceiling.

Single-lap concrete interlocking tiles to B.S. 550 on $1\frac{1}{2}$ in. \times 1 in. battens on roofing felt supported by TDA design timber trusses

comprise the roof. The whole of the first floor ceiling is insulated by 4 in. nominal thickness glass wool loose-fill laid between the ceiling joists.

the ceiling joists.

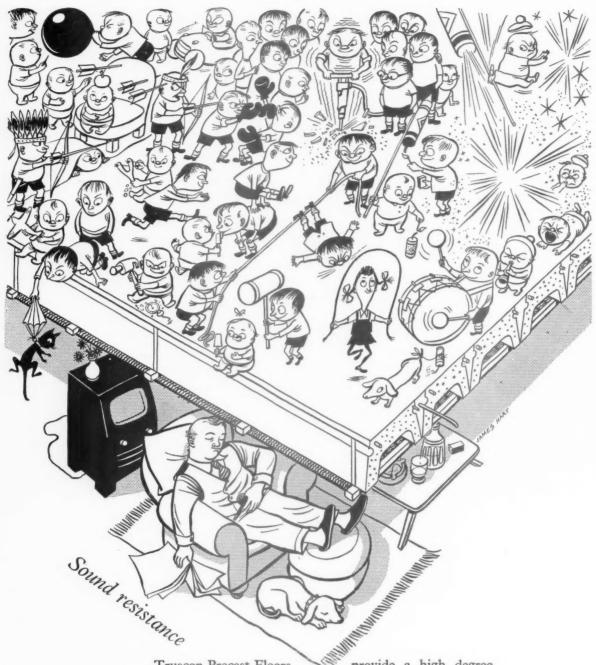
The Table I on page 561 gives an indication of the thermal insulation values of the main parts of the structure and the total heat loss. The values in column 1 are computed from published laboratory figures, but are probably near enough for all practical purposes.

THE HEATING INSTALLATION LAYOUT

The system is designed as a gravity system and to save on piping the panels are connected in series. Connecting the heaters in

parallel would mean either raising the panels to allow the pipes serving them to run underneath or forming ducts in the floor.

As shown in Fig. 3 the main flow pipe from the boiler in the kitchen runs direct to the roof space, whence it travels just above the ceiling to three return drops. The main return drop serves the two main bedrooms, the living room and dining room; the subsidiary drops, the landing, bedroom 4 and the study, also the ground floor cloaks (by wall radiator only). The hall is served by the return pipe from the study and living room. The bathroom is directly over the kitchen and is heated by a towel rail. The kitchen is heated from waste heat from the



Truscon Precast Floors provide a high degree of insulation against sound. Many other advantages are achieved by the use of Truscon Floors, full details of which will gladly be supplied on request.

TRUSCON

the proved precast floor

THE TRUSSED CONCRETE STEEL CO. LTD.

TRUSCON HOUSE, LOWER MARSH, LONDON, S.E.I.
Telephone: WATERLOO 6922

Q 4·869

boiler, which is covered by a vitreous enamel casing, but is unlagged.

The return pipes reach the boiler by ducts in the kitchen and hall floors, elsewhere the pipes serving the heaters are easily accessible. The main return drop in the living room is normally concealed by a curtain hung from the ceiling between the dining room and living room.

In the living room an open fire is provided to form a focal point and for topping up in severe cold spells.

The boiler is a manually fired No. 6 New

The boiler is a manually fired No. 6 New Carlton boiler with water cooled grate (capacity rated at 59,000 B.T.U's) and is fitted with a Crane Satchwell Auto Regulator which controls the primary air supply at the back of the boiler. This regulator gives a clear indication of boiler flow temperature and is simple and positive in action.

HOT WATER SUPPLY

Hot water is provided on the indirect system from the same boiler to a 40-gallon cylinder in a cupboard in the bathroom. A 3-kW. electric immersion heater is provided for summer water heating. The cylinder is provided with a standard type sectional insulating jacket.

The skirting heaters are of the radiant type in cast iron and are formed in sections 2 ft. long being site assembled into the desired lengths by means of push nipples and tie bolts. Special end enclosures are provided to conceal the piping connections at each end of a panel. The end enclosures are bolted directly to the ends of each length of units and have removable doors providing access to the vent valve, union elbow and supply valve. The net height of each unit is 6 in. Corner cover plates are provided where each section returns round a corner (see Fig. 5). No convector heaters were used in this installation, but a wall radiator was installed in the cloakroom under the stairs.

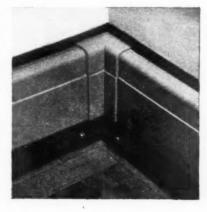
The heaters are hung on small metal brackets fixed to wood grounds flush with the plaster, and are also retained in position by long screws driven at an angle into the grounds. During fixing a strip of asbestos paper is placed at the back of each panel (before the hangers are fixed) for the full height of the unit and is lapped over the top flange where it is held in position by a wood mould. The main duty of this asbestos paper is to provide an air seal at the top of the heater to minimize the possibility of dirt streaks from warm air leaking up the back of the panel (see Fig. 2).

For the present installation sapele is used for the base moulding which is made rather larger than is customary to serve as a skirting where there is no heater. Sapele is rather subject to distortion and a better choice would have been teak or ordinary mahogany. One or two of the base moulds actually had to be replaced after a while because of distortion. To allow for movement of the wood block floor the base moulds in the dining room and living room are fixed with brass screws and washers to the wood blocks, the hole being made larger than the screws. In the hall and study the base moulds are fixed by Bostik adhesive to the thermo-plastic tiles. Where the heaters do not extend the full length of the wall the intervening space is filled with a hardboard and wood profile covering the flow pipes.

Consideration was given to the possibility of providing additional insulation behind the heaters, but at the time this was not found practicable. In the low outdoor winter temperatures experienced in the USA the edge losses would render such provision essential, but in Britain it is questionable whether the extra expense is justified. In the present case the total thermal resistance of the wall immediately behind the heater,



Fig. 4 (above). Main return pipe serving the dining room and living room circuits. Fig. 5 (below left). Cover plate on angle. Fig. 6 (below right). Valve for controlling radiator.





The LEADERFLUSH





NEVER TWISTS

RAIN MARKS OR KNOTS AL PAINTING SURFACE AINTENANCE COSTS FULL LEADERFLUSH GUARANTEE

Available in small or large quantities at the keenest prices in the country

WRITE NOW FOR QUOTATIONS

LEADERFLUSH

Britain's finest | Grade I Panel Doon

Telephone: Ilkeston 623 (3 lines)

NOTTINGHAM

Telegrams: "LEADAFLUSH ILKESTON"

COGENT

Gla Ceil

allov "U is a

FUE

TABLE I—Giving Analysis of Heat Loss from House

	Thermal transmittance Living room		Dining room		Kitchen		Hall		Study		Cloaks						Total heat loss	
	B.T.U./ft. hr./°F.	Area sq. ft.	Heat loss	Area sq. ft.	Heat less	Area sq. ft.	Heat loss	B.T.U./hr./°I										
External walls	0·25 0·21	111 110	28 23	86 52	21 11	136	34	32	-8	127	32	106	26					
Glass in windows	1.00	15	15	54	54	29	29	-		21	21	6	6					
Double glazing	0.5	98	49		-	-	-	-		-	-	-	_					
Bay, top and bottom	0.12	24	3	_			_	-	_	-								
Ground floor	0·20 0·15	283	42	143	21	136	27	94	_19 	85	_17	36	_7					
External doors	0.5		-	-	-	19	9	20	10		-		-					
Ventilation, c. ft./hr.	2·5 air changes per hr., 0·018 B.T.U./c. ft./	6,166	111	2,740	49	2,200	40	1,800	32	1,520	27	472	8					
Heat loss total B.T.U./hr./F.		_	271		156	_	139	-	69	-	97	_	47					779
							FIRS	T FLO	OR									
		Bedro	om 1	Bedro	om 2	Bedro	om 3	Bedro	om 4	W.	c.	Line	en	Bathr	oom	Lanc	ling	
External walls	0.25	170	42	232	58	42	10	131	*33	31	8	31	8	110	27	129	32	
Glass in windows	1.00	39	39	34	34	28	28	16	16	6	6	-	-	11	11	21	21	
Ceiling and roof	0.08	178	14	169	14	138	11	80	6	16	1	14	1	67	5	137	11	
Ventilation, c. ft./hr.	2.5 air changes per hr., 0.018 B.T.U./c. ft./	3,412	61	2,712	49	2,437	44	1,317	24	290	5	271	5	1,007	18	1,802	32	
Heat loss total, B.T.U./hr./F.		_	156	_	155	-	93	-	79	_	20	-	14	-	61	-	96	674

Boiler rating, 59,000 B.T.U.s per hour.

allowing for the sealed air cavity, gives a "U" value of approximately 0·16. There is also the point that stray heat from the skirting unit helps to warm the portion of the inner leaf immediately above it which then becomes a source of low temperature radiant heat, and also helps to keep the cavity dry.

The temperatures obtained during a typical cold spell are given in Table II. The open fire was in use during the time of the evening readings. These temperatures were obtained during the first winter shortly after completion of the building when it was still in process of drying out. Some recent additional figures, including relative humidity, may be of interest (see Table III).

FUEL CONSUMPTION

The fuel consumption for the first winter averaged about 3.2 cwt. per week over a heating season of twenty-seven weeks. The fuel used was coke and anthracite mixed.

During the last winter the average fuel consumption has averaged about 2-9 cwt. for a similar period of twenty-five weeks. The drop may be attributed partly to a milder winter, to increased skill in firing the boiler and in all probability, a drier house.

The general impression was that the system gave a very satisfactory performance. There was no feeling of stuffiness even when the temperatures were above 67 deg. F. There was a noticeable absence of draughts and no complaints of cold feet. The system was flexible in operation and responded quite well to manual control. An improvement would be to instal a circulating pump as the flow and return pipe sizes could then

TABLE II—Temperature Distribution During a Cold Spell

	8.00 hr.	14·00 hr.	20 · 00 hr.	Maximum	Minimum
	Deg. F.	Deg. F.	Deg. F.	Deg. F.	Deg. F.
L.R. 1	52	55	59	60	
L.R. 2	57	63	66	67	57
Hall	57 55	63	59	61	55
Study	51	52	54	55	51
Kitchen	56	66	69	61 55 76	55
Dining room	53	56	60	61	53
B. 1	51 56 53 50 52	47	49	61 53 56 63 56	48
B. 2	52	51	54	56	54
B. 3	61	60	62	63	61
B. 4	50	53	52	56	50
Landing	61 50 58	52 66 56 47 51 60 53 53	66 59 54 69 60 49 54 62 52 59	61	52 57 55 51 55 53 48 54 61 50 58
Mean temp	54	55.5	58-6	60.8	54

Boiler water temperature, 160 deg. F.

TABLE III-Temperature and Relative Humidity.

Date		Fe	bruary	19, 1954			February 20, 1954							
	8.0	00 a.m.		9	·00 a.m	1.	8	·00 a.n	١.	9·00 p.m.				
Readings	Relative humidity, per cent.	Wet, °F.	Dry,	R.H., per cent.	Wet,	Dry, °F.	R.H., per cent.	Wet, °F.	Dry °F.	R.H., per cent.	Wet,	Dry, °F.		
Outdoors (under porch)	96	42.5	43	92	38	39	84	37	39	92	32	33		
Living room	48	53	64	42	54	67	42	51	63	41	53	66		
Kitchen	49	55	66	46	52	63	43	52.5	64 · 5	41	53	66		
Bathroom	58	57	66	49	55	66	44	53	65	42	51	63		
Bedroom 1	55	53	62	48	52	62.5	51	53	63	41	52	64		

Note.—Living room open fire on for 9.00 p.m. readings.





isi cu

THE PHOENIX TIMBER CO.LTD.

FROG ISLAND · NEW ROAD · RAINHAM · ESSEX · Telephone: RAINHAM · Essex 3311

be reduced. It was found in practice that little was to be gained by shutting off in-dividual heaters in unoccupied rooms during

very cold weather.

The decorations have not long been completed but it does not appear that streaking of the walls is likely to be much of a prob-lem. The only evidence of dirt streaks so far is above a short length of heater in the living room where the seal at the back of the top bead is defective as a result of slight displacement of the bead. According to the observations on the tests carried out at Illinois, after a complete heating season of nine months no dirt patterns were discernible on the walls above the radiant R type heaters, and slight marking of the walls in some rooms where RC type heaters were installed. With the conventional type recess radiators however, the characteristic dirt patterns were apparent and curtains above radiators required cleaning. The imabove radiators required cleaning. pression was given that with the radiant type skirting heaters little or no dirt streaking of walls should occur if the design water temperature is 200 deg. F. or less

REFERENCES.

"Heating a Basementless House with Radiant Baseboard," by R. H. Weigel and W. S. Harris. Heating, Piping and Air Conditioning (USA), Nov., 1948.

Nov., 1948.

"Radiant Baseboard Heating and Effects of Reduced Thermostat Setting and Open Bedroom Windows at Night." by R. H. Weigel and W. S. Harris. University of Illinois Engineering Experiment Station, Bulletin Series No. 391.

"Baseboard Radiation Performance in Occupied Dwellings, by G. S. MacLeod and C. E. Eves. Heating, Piping and Air Conditioning (USA), 1950.

"House-Heating Trials on Skirting-Heating Installations," by A. W. Pratt and I. W. L. Heating and Ventilating Engineer, Nov., 1951.

Nov., 1951.

"Baseboard Heating," by A. W. Pratt, to be published later.

INFORMATION CENTRE

A digest of current information prepared by independent specialists; printed so that readers may cut out items for filing and paste them up in classified order.

10.112 design: building types INDUSTRIAL DESIGN

Form in Engineering Design. J. Beresford-Evans. (Oxford, Clarendon Press and Geoffrey Cumberlege, 1954. 10s. 6d.)

Intended for the engineering draughtsman, this is an excellent little book combining a good approach to design with a down-to-earth view of its practical aspects. Architects who turn their hand to industrial design should not be above learning from a publication based on experience and good sense and very well written and illustrated.

11.36 materials: general BUILDING BOARDS FIRE RISK

Fire Tests on Building Boards. National Building Studies Special Report, No. 22. (HM Stationery Office, 1954. 1s. 3d.)

Tests to show fire risks with various build-

ing boards and various forms of paint and fire retardant finishes. Results help in a realistic interpretation of BS 476, "Surface Spread of Flame Tests," (See also articles in AJ for March 25, 1954.)

13.116 materials: timber NEW HARDWOODS

The "New" Timbers. B. Alwyn Jay. (Wood. Mar., 1954.)

The introduction of a multitude of new timbers during the post-war period led to a period of confusion for the user, who found it difficult to choose from a variety of unfamiliar types with weird names. Tests by FPRL and a fair period of experience have helped to sort the sheep from the goats. Although softwood is no longer rationed, a number of these newer woods will continue to be useful The article by Mr. Jay describes some of these most likely to be used. He divides them into five classes from light weight at less than 36 lb. per cu. ft. to heavy: special purpose at over 50 lb. per cu. ft. Brief notes on properties and uses are given and a most useful data sheet lists some 38 types with information on origin, sizes, weight, description, durability, strength, workability, and usage.

13.117 materials: timber ADHESIVES

The Durability of Adhesives for Wood. R. A. G. Knight. (Timber Technology, Mar., 1954.)

Describes testing procedures at FPRL, including methods of accelerated testing. General findings on durability of the various types of timber adhesives under varying degrees of exposure. For severe exposure on'y phenolic and resorcinol glues give long-term satisfaction.

15.117 materials: applied finishes, treatments PAINTING METALS

Painting Metals in Buildings. BRS Digest No. 64. (HM Stationery Office, Mar., 1954.

Based on BS Code of Practice, this Digest deals more particularly with the preparation of surfaces before painting either in factory or on the site. It covers both ferrous and non-ferrous metals. Although it contains useful information, it is in some ways so comprehensive that it becomes difficult for the architect to apply the knowledge in practice. It would have been very helpful if it could have included suggestions for architects' specifications for some of the everyday cases of painting of metals.

17.101 construction: general WALL TILES

Metal Wall Ties. B.S. 1243:1954. (British Standards Institution. 2s. 0d.)

Revision of earlier Standard this now includes three patterns of tie, the well known twisted strip one, the 'butterfly' wire type and a newer type of stouter wire known as the double-triangle type. All are made in either 6 in. or 8 in. overall length. Appendices give details of testing for adequacy of zinc coating of galvanized ties.

19.176 construction :: details ROAD JOINTS

The Temporary Sealing of Joints in Concrete Roads on Housing Estates. P. L. Critchell and R. S. Millard. (Roads and Road Construction, Dec., 1953.)

On housing estate roads the most severe traffic occurs while houses are being constructed and during this period grit and stones often get worked into the expansion joints and result in considerable damage when the road sections expand. This article describes investigation by the Road Research Laboratory into using temporary joint seals during the time when roads are especially liable to such damage. It is of importance to architects responsible for housing estate work and is also of re'evance in cases such as concrete access roads to schools and other buildings where similar conditions may occur during the building construction period.

25.106 water supply and sanitation SEPTIC TANKS

Memorandum on Principles of Design for Small Domestic Sewage Treatment Works. MOHLG. (HMSO. 1953. 9d.)

Methods of, and plant design for, the treatment of sewage from small groups of houses in isolated locations. Maximum size. 300 Special conditions which affect design. Siting of the plant. Useful details of septic tank designs. Notes on secondary treatment by irrigation. Illustrated.



An alphabetical index covering Information Centre items and special articles published in the Technical Section during the twelve months ended December 31, 1953, is being prepared. Readers who wish to have a copy—it is free of charge -should complete the form below and post it to the Technical Editor, THE ARCHITECTS' JOURNAL, not later than May 10, 1954.

Please send me the Information Centre Index

	letters)		
(Diceie			

Address (Block letters)

Readers requiring up-to-date information on building products and services may complete and post this form to the Architects' Journal 9, 11 and 13, Queen Anne's Gate, S.W.1



I am interested in the following advertisements appearing in this issue of "The Architects' Journal." (BLOCK LETTERS, and list in alphabetical order of manufacturers names please.)

Please ask manufacturers to send further particulars to :-

NAME

PROFESSION or TRADE

ADDRESS

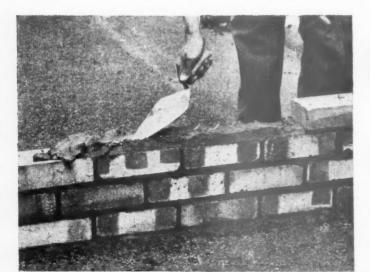
6.5.54

Buildings Illustrated

Flats at Iveagh House, Loughborough Road, Brixton, London, S.W.9, for the Guinness Trust. (Pages 548-556.) Architects: Edward Armstrong and Frederick MacManus, F.F.R.I.B.A. Assistant Architect: E. Howard Sadler, A.R.I.B.A., A.M.I.STRUCT, E. Assistants-in-charge: Allan Murray, A.R.A.I.A., Colin S. Burgess. Consulting Structural Engineers: Bylander and Waddell. Quantity Surveyor: W. C. Innan & Partners. Clerk of Works: P. L. Jewell. General Contractors: Humphreys Ltd. Sub-contractors: airbricks to separate kitchens, Stuart's Granolithic Co. Ltd.; aluminium cover to internal expansion joints, Metal Mouldings Ltd.; asbestos cowls, Cellactite & British Uralite Ltd.; ash hoist, George Johnson Ltd.; booster pump, Broadwall Engineering Co. Ltd.; dispince of the Bilond Covers, Broads Manufacturing Co. Ltd.; curtain track, John Garlick (1910) Ltd.; cycle blocks, Stelcon (Industrial Floors) Ltd.; dome roof lights, Pilkington Bross. Ltd.; doors. Humphreys Ltd.; door mats, United London Workshops for the Blind (Sales) Ltd.; electric incinerators. Saniguard Appliances Ltd.; electrical for the Blind (Sales) Ltd.; electric incinerators, Saniguard Appliances Ltd.: electrical installation, Berkeley Electrical Engineering Co. Ltd.; external notice boards, framing, Light Steelwork (1925) Ltd.; external notice Light Steelwork (1925) Ltd.; external notice boards, Venesta Ltd.; external tiling. Carter & Co. (London) Ltd.; extract fan for drying cabinets, Keith Blackman Ltd.; flooring, Armstrong Cork Co. Ltd., (Accotile), Korkoid Decorative Floors Ltd., (Linotile), Broads Manufacturing Co. Ltd. (Windsor), and Horsley Smith & Co. (Hayes) Ltd. (wood block); garden work, grass seed, trees and shrubs, Garden Landscapes (London) Ltd.; gas installation, South Eastern Gas Board; hairdressing installation and

equipment, Henry Serventi Ltd.; heating, hot water and ventilation, G. N. Haden & Ltd.: reconstructed stone, concrete facing blocks, Stuart's Granolithic Co. Ltd.; ironing room fittings, E. & H. Grace Ltd.; ironmongery, door furniture, Nettlefold & Moser Ltd.; ironwork (main stairs, balustrade, site gates, railings and fuel hoppers) Light Steelwork (1925) Ltd.; ironwork, escape stairs balustrade, balcony, parapet and external stair balustrades, S. W. Farmer & Son Ltd.; kitchen fitting units and hall cupboards, Built-In Fixtures Ltd.; lettering, The Supersine Co. Ltd., Signcrafts Ltd., Buckleys (London) Ltd., A. & G. Edgington (Leicester) Ltd.; lifts, Hammond & Champness Ltd.; metal windows and doors, The Crittall Manufacturing Co. Ltd.; refuse hoppers, Haywards Ltd.; roof insulation, Fibreglass Ltd.; roofing, Permanite Ltd.; safe, Griffiths Safe Co. Ltd.; sanitary fittings. Thomas O'Brien & Co. Ltd.; timber handrail to circular stair, F. J. Lewis Ltd., wallpaper, Arthur Sanderson & Sons Ltd.; electric fires. Ltd.; ironwork (main stairs, balustrade, site Arthur Sanderson & Sons Ltd.; electric fires, General Electric Co. Ltd.; electric mes, machines, Hoover Ltd.; flue blocks, The Marley Tile Co. Ltd. (suppliers); fluted asbestos, Turners Asbestos Cement Co. Ltd.; bestos, Turners Asbestos Cement Co. Ltd.; gas drying cabinets, supplied by South East Gas Board; gas cookers (staff), Sidney Flavel & Co. Ltd., gas coppers (staff and laundry), W. H. Dean & Son Ltd.; glass, Aygee Ltd.; internal and external decorations, A. J. Lucas & Son; light fittings, supplied by Berkeley Electrical Engineering Co. Ltd.; paint, Imperial Chemical Industries Ltd.; plastering, J. H. Jenner & Co. Ltd.; plumbing, Ellis (Kensington) Ltd.; prepast concrete (meas-(Kensington) Ltd.; precast concrete (measured), Glostone Ltd.; special light fittings, S.L.R. Electric Ltd.; television and wireless installation, British Relay Wireless Ltd.; wall paint, Duresco Products Ltd., and Fleet-wood Paints Ltd.

SAVE TIME and **CEMENT** or LIME



with

FEBMIX ADMIX **MASONRY MORTAR**

Masonry Mortar is made by mixing "Febmix Admix" with sand and cement. Its plasticising action allows a reduction in cement content, or the omission of lime in mortar mixes without loss in workability. Because it works so 'fatty' output is increased without extra

The mortar is rain and frost proof and is not prone to cracking and crazing.

. IT COSTS YOU MONEY NOT TO USE IT .

Write for Technical Brochure

Southern Office: TUDOR PARADE, LONDON ROAD,

HOUNSLOW, MIDDLESEX. Phone: HOU 0082



(GREAT BRITAIN) LTD.

Northern Office: ALBANY ROAD - CHORLTON-CUM-HARDY MANCHESTER 21. Phone: Chorlton 1063

BISON floors, beams and pre-cast frame structures are made by the largest flooring specialists in the country who are also by far the largest manufacturers of constructional prestressed concrete in the World



LONDON

Green Lane Hounslow, Middlesex Hounslow 0171

LEEDS

Stourton Leeds, 10 Leeds 75421

CONCRETE LIMITED

combine speed with low cost through five strategically situated works . . .

LICHFIELD

Dovehouse Fields Lichfield, Staffs. Lichfield 2404

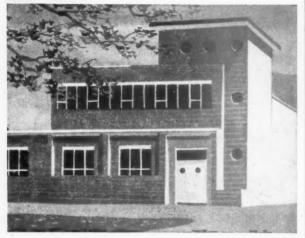
FALKIRK

Etna Road Falkirk Falkirk 1585

EDINBURGH

Sighthill Industrial Estate, Edinburgh Craiglockhart 1729

Is your paint problem one of colour, texture or durability?



ALL three problems have their importance in relation to the job in hand. All three can be solved by the one range of products—the fine quality paint finishes made by John Hall & Sons (Bristol & London) Ltd.

BROLAC HIGH GLOSS ENAMEL PAINT for interior and exterior surfaces, is the most waterproof and weatherproof paint obtainable. It contains Hankol (based on Tung Oil—world-famous for its resistance to water) which makes it impervious even to sea air, city smoke and kitchen steam. By skilful blending of the Hankol medium with the best of the new alkyd resins, Brolac remains the finest protective high gloss finish while being one of the easiest and most economical to use.

MURAC MATT OIL FINISH provides a rich, 'dull-sheen', longlasting surface that can be washed, rubbed and scrubbed without damage. The ideal finish for school and hospital walls, where very frequent cleaning is necessary.

MURAC P.E.P. — plastic emulsion paint (p.v.a.) — has all the useful characteristics of p.v.a. Emulsion plus an exceptional density which is due to its 100% content of primary pigment. Murac P.E.P. gives a fine-ground beauty of finish and 'dull-sheen' matt surface. Owing to its perfect intermixability it has exceptional colour selectivity, as shown by the 120 Colour System, in which 120 colour mixings are shown individually on a charted plan. Details available on request to our Sales Dept.



JOHN HALL & SONS (BRISTOL & LONDON), LTD., HENGROVE, BRISTOL 4

CONDER STEELWORK



Factory for the Defence Programme 195ft, x 135ft.

Architects: Green & Rudgley
Botley

VIS

Here

It i

It

subm

Town

De

final servi

video

of ev

a fev

cost

work

entai

exter

signa

cord

W

small



Transport Depot with Two Ton Crane Architects: A. F. Hare & Partners, at Midspan. Marston Valley Brick Co. Ltd, London, W.1



Bus Garage Lovegrove & Lovegrove Ltd.

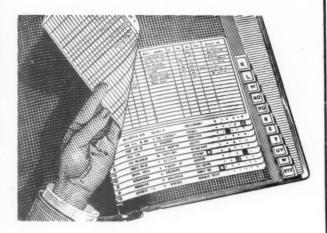
Architects: Wm. Stanbrook Newbury

All types of Light and Medium Steelwork Excellent Service and Competitive Prices

CONDER ENGINEERING CO. LTD.
WINNALL Telephone: WINCHESTER

ARCHITECTS

Job/Control Progress Record From Enquiry to Completion



VISIBLY CONTROLLED ON ONE RECORD

Here is a completely new record for Architects-designed in conjunction with Architects.

It is a simple visible record which controls every undertaking, small or large, from start to finish.

It shows at sight progress on each job: drawings and plans submitted, licences obtained, approvals from Public Health, Town and Country Planning and Central Land authorities.

Details of contractors involved, their estimates or tenders, final costs, etc., are all controlled. Water, gas and other services available-drawing office costs, fees, etc.-are all provided for. In short, one small record gives the visual history of every single undertaking.

This and similar records are available in panels holding just a few jobs or in books and cabinets housing thousands. cost involved is little. More important, perhaps, the clerical work involved is very little, certainly far less than normally entailed.

Where preferred, such records can be slotted into files which house correspondence, plans, etc., such files having flat tops extending the full width of the file for instant vision and colour signalling, thus providing visibility PLUS filing.

Full details will be sent if you will just jot "Architects' Records" on your letterheading and send to address below.



(\nannon\ystems

VISIBLY BETTER RECORDS

THE SHANNON LTD. 28 Shannon Corner, New Malden, Surrey This month we use our space for a summary of information for architects and consultants. It might seem useful enough to be cut out and put in your reference file. (Please use the request slip* for immediate needs.)

- HEAT CONTROL?

- HEAT USAGE?

- HEAT RECOVERY?

TECHNICAL SOURCES

FILING

FOR

LINE

THIS

Our field is mainly steam and hot water for space heating and for process installations.

We are always glad to co-operate technically on questions of heat control, heat usage, and heat recovery.

There is a headquarters Technical Advisory Department at Cheltenham; throughout the British Isles our Resident Engineers are within easy reach.

We publish technical handbooks and other data (the two most recent are a 32-page Bulletin "Steam for Process" and a Pocket Manual "How to Fit Steam Traps"). Copies are

Also free of charge are three Correspondence Courses; two on steam and steam utilisation, the other on temperature

The mailing list is open for our bi-monthly periodical eam Topics". No charge. "Steam Topics

WHAT WE MANUFACTURE

From among the heat control and heat transfer equipment made by Spirax-Sarco Ltd., perhaps the following are of particular interest:

STEAM TRAPS

Balanced-pressure thermostatic (self-adjusting).
Balanced-pressure thermostatic combined with strainer.
Liquid-expansion thermostatic

(adjustable).
Closed-float mechanical with steam-lock release.
Combined float and thermo-

Inverted Bucket mechanical. Open-top Bucket mechanical.

PIPE STRAINERS

For condensate, water, air, oil, gas, etc.

APPARATUS FOR AIR
REMOVAL
Thermostatic air vents for air in steam.
Float air vents for air in hot-

water systems

AUTOMATIC PUMPS (Operated by steam or compressed

For lifting condensate to higher

For draining sump holes. For draining vessels under

SIGHT GLASSES

Primarily for condensate, secondarily for certain liquid flows.

FLASH VESSELS
For the collection and distribu-tion of flash steam.

STEAM SEPARATORS

COMPRESSED AIR TRAPS
For draining water from compressed air mains and receivers.

THERMOSTATIC CONTROLS (Self-contained, liquid-expansion operated.)

Modulating Controls for steam, hot water, brine, etc. On/Off Controls for steam. Modulating Controls for high-temperature hot water. Control of accelerated hot-water systems directly from outside temperature (the 'E.T.O.'). Steam and water Mixers for hot-water tanks. Blending Valves for delivering mixed flows of hot and cold liquids.

liquids. Diversion Valves for engine and other cooling water circuits.

Spirax-Sarco Ltd CHELTENHAM

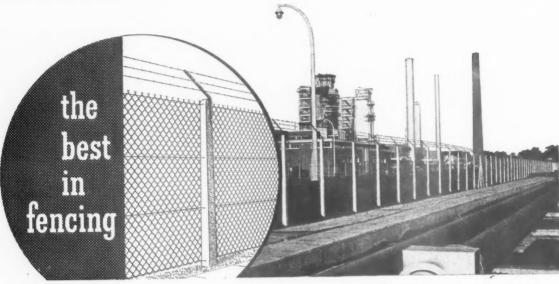
Phone: Cheltenham 5175-6 Grams: Spirax Cheltenham LONDON OFFICE: 28 Victoria Street, S.W.1. Abbey 6101-3832

- REQUEST SLIP

*Please supply

NAME:

ADDRESS :



manufactured and Erected by PENFOLD

Once again another important fencing project is entrusted to Penfold—this time at Anglo-Iranian's Kent Oil Refinery nearing completion on the Isle of Grain.

The 7ft. high Fencing, Reinforced Concrete Posts, Angle Iron Bent Heads and Fittings were all made at our Watford Factory and erected by teams of our specialist erectors.

For sliding

preci itself

KING

FENCING AND ENGINEERING LTD.

IMPERIAL WORKS · BALMORAL ROAD · WATFORD · HERTS. Telephone: Watford 2241 Telegrams: "Penfold, Watford"

INFORMATION SHEETS free on request

INCREASE HOUSE SPACE by 20% LOFT ACCESS STAIRS POPULARLY KNOWN AS LOFT LADDERS

by the **FIRST** and **ORIGINAL** inventors

Patentees and Manufacturers

LOFT LADDERS LTD

The loft can increase the living space of the average house by at least 20 per cent.

With a Loft Ladder, access is as safe and easy as walking up the stairs. Information sheets, issued on request, show in detail how this space may be made available both in new work and conversion.

Write for full particulars and prices of the various types.

Price from £14 • 0 • 0
Our Loft Ladders are now free of Purchase Tax.

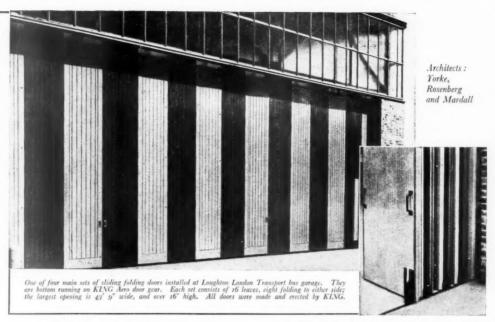
LOFT LADDERS LTD

The first and original inventors of Loft Ladders and Loft Access Stairs.

BROADWAY WORKS, BROMLEY, KENT

Tel.: RAVensbourne 2624

They
glide on
KING
Gear
with the
greatest
of ease



For smooth, easy handling, for space-saving and all-round efficiency, folding and sliding doors like these at Loughton bus garage are the choice of architects and builders today. And they choose KING Sliding Door Gear for good reasons. It is precision-built to give years of effortless trouble-free gliding action. It has proved itself in factories, hospitals, garages and private houses everywhere. There's a KING door set for every need, for Straight, Folding or 'Around-the-Corner' doors.

KINGS STRENGTHEN YOUR HAND



Covered by British Patents

WRITE FOR ILLUSTRATED BOOKLETS: GEO. W. KING LIMITED, 201 ARGYLE WORKS, STEVENAGE, HERTS. TELEPHONE: STEVENAGE 440

MONK

WARRINGTON AND LONDON

Are organised and equipped to carry out

CIVIL ENGINEERING · REINFORCED CONCRETE
AND BUILDING CONSTRUCTION

This organisation has been responsible for the construction of many major projects at Home and Overseas

A. MONK & COMPANY LIMITED

Head Office: Padgate, Warrington.
Telephone: Warrington 2381.

London Office: 75, Victoria Street, S.W.1 Telephone: Abbey 2651



First and Foremost with **Stoneware Pipes**

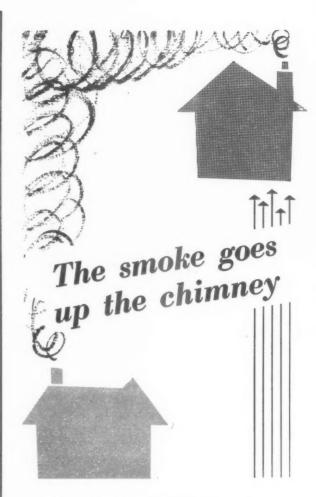
More than a century has passed since Sir Henry Doulton pioneered the manufacture of salt-glazed stoneware pipes to replace the unhygienic porous brick sewers of our towns and cities. Today, pipes made by the Royal Doulton Potteries still set the standard for excellence. Continuous research has been devoted to problems of resistance to corrosion and abrasion, smoothness of flow, and mechanical strength. Add to this vital knowledge Doulton's long manufacturing experience, and it is clear why so many plans for new towns, in Britain and abroad, include specifications for Royal Doulton salt-glazed drainage goods.

Obtainable from leading merchant distributors

For further details, write to Doulton & Co. Limited, Dept. BE, Doulton House, Albert Embankment, London, S.E.1.



Royal SALT-GLAZED DRAINAGE MATERIALS



The smoke goes up the chimney, so does warm air, but need it? The Airdun Convector Fire traps waste heat in a specially designed jacket, giving warm air which is distributed to other points in the house requiring heat. Why not incorporate the AIRDUN Convector Fire in your future designs? We will be delighted to advise you regarding specifications, installation, etc.



AIRDUN CONVECTOR

For full particulars write to ALEXANDER DUNN LIMITED Uddingston, Scotland, Telephone Uddingston 500



for all sites where PERMAMENT FENCING is required

"Winslot" is the ideal PERMANENT Fence for Industrial and Municipal sites. It is manufactured by a new method to give a consistent quality finish. Reinforcement of all units is perfectly covered by means of patent bar spacers. Units are cast in a sepia shade of brown colour which produces a mature and pleasing appearance. Available in heights from Ift. 8in. to 12ft. with or without trellis. It incurs no subsequent upkeep costs and on this basis is competitive with timber fencing.

Telephone: EMBerbrook 2211/2

The following LICENSEES have works operating to supply "Winslot" fencing to all areas in England, Wales and Northern Ireland at economical rates.

BERKSHIRE: COWLEY CONCRETE CO. LTD

DEVON: DEVON CONCRETE WORKS LTD. GLAMORGAN: THE BRITISH "FRAM" CONSTRUCTION CO. (1911) LTD.

LANCASHIRE: WETTERN BROTHERS (MAN-CHESTER) LTD.

NORTHUMBERLAND: WETTERN BROTHERS LTD.

WETTERN BROTHERS NOTTINGHAM: (NOTTINGHAM) LTD.

WORCESTER: PARKFIELD CONCRETE PRODUCTS CO. LTD.

NORTHERN IRELAND: WORKMAN LTD.

E

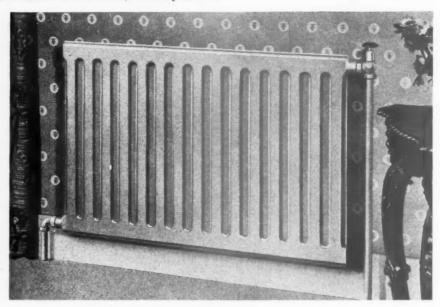
D

Enquiries invited for supply and erection. Send for "Winslot" illustrated Specification Folder.

CONCRETE METROPOLITAN WORKS LIMITED

IMBER COURT, EAST MOLESEY, SURREY.

THE FIRST COST IS THE LAST COST - WITH "**WINSLO**



Specify GULF LONG LIFE RADIATORS

Gulf long life Radiators are available in a wide range of Column and Wall Panel types, in any length, and in curved and angled form. Gulf specialise in producing radiators for unusual and exacting requirements.

Ask for our latest catalogue.

An Associate Company Supplies: Oil-filled Radiators for Electric (off-peak), Gas and Paraffin operation;

An Associate Company Supplies: Oil-filled Radiators for Electric (off-peak), Gas and Paraffin operation; Domestic Boilers; Electric Unit Heaters; Electric Bed Sheets; Gas and Electric Towel Rails; Room Thermometers and Temperature Controls; Weather Stripping; Draught Proofing; Inset Grates; Hurdapta' Fires and other fuel-saving equipment.

GULF RADIATORS LTD. Penarth Road, Cardiff. Tel: 20591/2
London Office and Showrooms, 229 REGENT STREET, LONDON, W.1. Tel.: REGent 1051/6

LIGHT IN WEIGHT (Ideal for wall fixing)

EASY TO PAINT, CLEAN AND KEEP CLEAN

ECONOMICAL TO FIX

COST LESS

MORE RESPONSIVE TO THERMOSTATIC CONTROL

Installed in the largest building and the largest school built since the war.





An enamel that has won a place in the front rank of decorative and protective finishes. Made in a variety of attractive shades, this enamel gives a superlative finish of lasting character. Specified by leading architects all over the country where a perfect job is the objective.

Write for descriptive literature and colour cards to the sole manufacturers:

CHARLES TURNER & SON LTD.

BLOOMSBURY HOUSE, 165 HIGH HOLBORN, LONDON W.C.1.

LENE BORAM FIRE RETARDANT COATING

PREVENTS THE SPREAD OF FLAME

and raises TIMBER, PLYWOOD and INSULATION BOARD to CLASS I Flame Spread (B.S.D. No. 476-1953)

Full particulars and instructions from:

THE TIMBER FIREPROOFING CO., LTD., MARKET BOSWORTH LONDON: 13a OLD BURLINGTON STREET, W.I

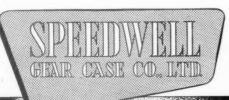
GLASGOW: QUEEN ELIZABETH AVENUE, HILLINGTON, S.W.2

NUNEATON

PLANNED LOCKERING Specification for **ARCHITECTS**

To all architects we offer our fully descriptive Information Sheets, giving details of our 'A,' 'B,' or 'C' type lockers which are suitable for all kinds of installations, Pithead Baths. Power Stations, Gas Works and amenities centres everywhere.

Heating of these lockers can be either by Plenum, Steam, Hot Water or Electric Strip-internal ducting is optional. If your lockering problem is more than usually difficult, a call by phone, post or in person will put you in touch with one of our installation engineers.



TAME ROAD, WITTON. BIRMINGHAM, 6

Telephone: EAST 2261 Telegrams: SPEEDWELL BIRMINGHAM





Quality—Service—Satisfaction

SHARP BROS & KNIGHT LTD - JOINERY MANUFACTURERS

Head Office & Works Burton-on-Trent (Tel. 4851) London Office Lion House, Red Lion Street, Richmond (Tel. 0165)

Second edition

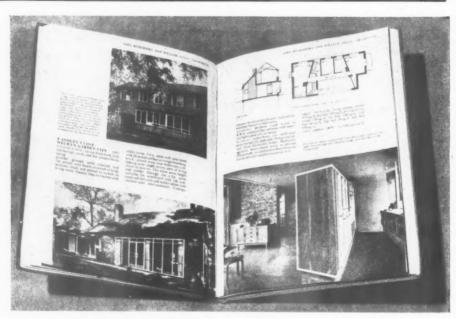
THE NEW

SMALL

HOUSE

by F. R. S. Yorke, F.R.I.B.A.

& Penelope Whiting, A.R.I.B.A.



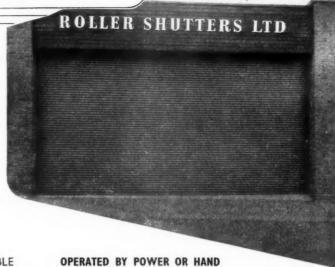
THIS SECOND EDITION OF A NEW BOOK by Mr. Yorke and Miss Whiting consists mainly of photographs and plans illustrating the most interesting small houses that have been built since the War—mostly in this country but also a few good examples abroad. A short text accompanies each illustration and describes details of construction, equipment, and the materials used. Where possible costs are given. The book is presented in a way that will make it as useful to the architect in private practice as to the architect engaged on public housing schemes for local government and other authorities. Size $9\frac{1}{2}$ ins. by $7\frac{1}{4}$ ins. 144 pages including 128 pages of halftone and line illustrations. Second edition. 25s. net, postage 10d. inland.

THE ARCHITECTURAL PRESS, 9-13 Queen Anne's Gate, London, S.W.1.

AN INSTALLATION BY

POINTS TO REMEMBER ROLLING SHUTTERS

- * QUALITY AND VALUE
- * SPEEDY AND EASY OPERATION
- **★** ADAPTABILITY
- **★** UNOBSTRUCTED ACCESS
- **★** COMPLETE PROTECTION
- * MINIMUM OF MAINTENANCE
- * ILLUSTRATIONS AND ADVICE AVAILABLE



ROLLER SHUTTERS LTD., 239-242, GREAT LISTER ST., B'HAM, 7. PHONE: ASTON CROSS 4061-2.

LONDON ASSOCIATES:
POTTER RAX LTD., WILTON WORKS, SHEPPERTON ROAD, LONDON, N.W.I.

The Kayenco

"SUPERB 70"

Gas Fired, Central Heating and Domestic Hot Water

BOILER

SETS A NEW HIGH STANDARD
IN GAS FIRED BOILERS

- "SUPERB" Appearance
- "SUPERB" Performance
- "SUPERB" Life

ins

V.1.

Fully Automatic Finger Tip Control. Safe, Reliable, Efficient. Abolishes Dust, Dirt. Smoke, Grime, and Drudgery.

Leaflets and Showcards on request to Dept. A.J.

FREDERICK KAY (ENGR.) LTD.

NASHLEIGH WORKS, CHESHAM, BUCKS.

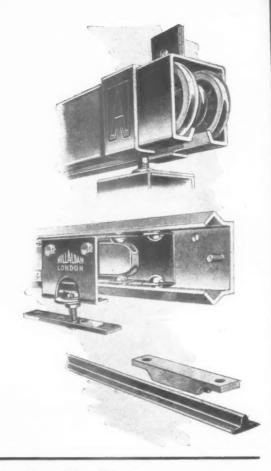
PHONE: 920-1





FOR EVERY DOOR THAT LIDES

E. HILL ALDAM & CO. LTD., BRITANNIC WORKS, EARLSFIELD, LONDON, S.W.18.



NEW FLOORS FOR OLD

WE RENOVATE · REPAIR · RENEW

PARQUET FLOORS — STRIP FLOORS

RUBBER FLOORS — BLOCK FLOORS

JOINTLESS FLOORS — CORK FLOORS

ASPHALTE FLOORS — LINO FLOORS

IN FACT EVERY TYPE OF FLOOR

QUOTATIONS WITH PLEASURE

FLOOR SANDPAPERING MACHINES FOR HIRE

The very latest labour saving machines fitted with efficient dust collecting units and electric motors to suit all voltages

HIRE TERMS ON REQUEST

FLOOR RENOVATIONS LTD

34-36 LAURISTON ROAD, LONDON, E.9
DEPT. 55
AMHERST 5471-2

For Cooking, Hot Water & Space Heating Specify the ...

"XL-TALBOT" COMBINATION GRATE





The "XL-TALBOT" is an entirely new design of the popular 38" × 38" Side-oven Combination Grate, being continuous burning on Coke, Coal or any other solid fuel. It gives an open or closed fire as desired, providing an abundant supply of hot water, with ample cooking facilities.

Approved by the

Ministry of Fuel *

and Power

The above illustration shows this model with cast iron mantel and curb with solid doors which are finished in various attractive vitreous enamels. Lustre enamel finishes are also available. This model can also be supplied with Tiled doors, Hearth Tiles and all Tiled Surround.

Please write for full particulars to:-



SAMUEL SMITH & SONS LTD.

BEEHIVE FOUNDRY

SMETHWICK, 41, STAFFS.





in the Free Trade Hall



esign

uous

Coal

fuel.

or ired,

dant

ater,

king

ASSOCIATED FIRE ALARMS LIMITED

ST. ANDREW ROAD, WALTHAMSTOW, LONDON, E.I7

Branches in: Glasgow, Leicester, Manchester & Liverpool.

summon the Brigade to the exact location.

May we send full particulars?

SERVICE IN ALL MAIN CITIES

TAS/AF.46.



CUPRINOL LTD., 33 BRUTON STREET, LONDON, W.1



The SUPER TOGO illustrated here is a streamlined design incorporating the nationally proved and trusted principals of operation long featured in the stan-dard NEW TOGO Door Closer. We recommend this pattern to those requiring a modern. easily cleaned, efficient unit.



P.H.M. 3095 One size only for ordinary doors up to approx. 100 lbs. in weight.

An old & Trusted friend

THE NEW TOGO

Made in four sizes for doors of varying weights and finished in Brown or Gold Bronze, Statuary Bronze and Chromium Plated.

Write for list TS 80.

PARKER WINDER

80 BROAD ST., BIRMINGHAM, I Telephone: MIDland 5001

LONDON: 16, Grosvenor Place, S.W.1.

(BLAckfriars 9478.)

MANCHESTER: 16, John Dalton Street, Manchester, 2.

This BLUEPRINT

Cut your costs by protecting Blueprints, Notices, Documents, Bookcovers, Charts, Drawings, and all printed matter with Morane Transparent Heatsealing Plastic Skin.

WASHABLE HIGH-GLOSS SURFACE •INSTANTANEOUS TIRM BOND TO PAPER, CARDBOARD, ETC. •CAN BE FIXED BY UNSKILLED LABOUR.

Plastic material now available for lamination of identification cards, calendars, price tickets, etc.

SEND NOW FOR FULL DETAILS OF

ane Transparent

MORANE PLASTIC CO. LTD.

21 WOODTHORPE ROAD · ASHFORD · MIDDLESEX

Tel.: Ashford Middx. 2727 & 3391

A Florible P.V.C. TILE FREE FROM RUBBER

Fibrolene Flooring has proved, after rigorous test, to give complete satisfaction. Judge for yourself from these outstanding qualities.

High resistance to acids, alkalies, oils and greases.

Hard wearing, warm to the tread, fadeless, resilient, non-absorbent.

- FOR HOSPITALS
- KITCHENS
- LABORATORIES
- BATHROOMS
- CAR SHOWROOMS
- OFFICES
- MILK BARS

FLOOR TILES



Imperial Chemical Industries Limited, Billingham Division Staff Canteen.

FIBROLENE, HARTFORD MILL, WESTON STREET, BOLTON, LANCS. PHONE: BOLTON 5000



cting

arts, nted

ans-

Skin.

ACE

LED

on of

Help to cut housing costs

- LOWEST INITIAL COST 'PRESTEX'
 joints cost less than any comparable joints.
- LABOUR COSTS reduced—simply insert copper tube (BS659) and tighten with ordinary spanner.
- SAFETY and SIMPLICITY joints do not weaken copper tube or restrict bore; can be made and re-made with the same copper cone.
- RELIABILITY PROVED—millions used during the past 20 years. Approved by Ministry of Works, Metropolitan Water Board, and most leading authorities.

Full range of patterns and sizes $(\frac{1}{2}"-2")$. Compare these typical list prices:

½" 40 Str. C/C Coupling1/4½	each
3" 40	33
1" 41 Str. C/Iron/Fem1/2	22
3" 42 Str./Male Iron/C1/5½	22
½" 44 Elbow, C/C1/8	33
½" 50 Tee, C/C ends2/6	22
½" 58X Backplate Elbow, C/Iron2/7½	39
½" 59 Stopcock C/C BS 10106/6½	22
3" 35 Tank Coupling	

Ask your merchant for trade discounts. In case of difficulty, a postcard to us at Doncaster or London will bring you a catalogue and the name of your nearest stockist.



The name is the guarantee

BELMONT WORKS · DONCASTER

London Office: Prestex House, Marshalsea Road, S.E.I



Let's be sensible about water heating!

A boiler that heats the water, but doesn't warm the kitchen simply leaves the housewife cold—unless you install a second source of heat—and that doesn't sound like economic planning! Every Architect (particularly if he is responsible for planning houses to a tight budget) knows that TAYCO provides efficient, economical water heating and a useful measure of space heating as well. There is a range of nine TAYCO boilers, including two with thermostat control. Capacities are from 21,000 to 70,000 B.T.U's. per hour.

on approved lists

TAYCO

for

Commonsense Water Heating

Write for full technical information:

ROBERT TAYLOR & CO. (IRONFOUNDERS) LTD

66, Victoria Street London, S.W.1 Telephone: Victoria 3972

and Larbert Scotland

STRUCTURAL STEELWORK

PADDINGTON IRON WORKS (1948) LTD

NORTH WHARF RD., PADDINGTON, LONDON, W.2. Phone: PAD 8486-7



BARKING BRASSWARE CO LTD . RIVER ROAD . BARKING . ESSEX

structure in building

by W. Fisher Cassie and J. H. Napper. Foreword by W. A. Allen. THE SECOND of a series of 3 books on building construction published at the recommendation of the Text and Reference Books Committee of the R.I.B.A. The authors do not attempt to give the formulae and methods of analysis and design used by the structural engineer; rather, they provide the architect and student with mental pictures of how structures behave. 8% ins. by 5% ins. 268 pages, over 150 illustrations. 30s. net, postage 8d.

THE ARCHITECTURAL PRESS 9-13 Queen Anne's Gate, Westminster SW1



Expert treatment of

CL

13, sho mon pap

Pu

M

VI Appet but (st Cool and Cool

ap Co £88 All am Co Lo M at ic

timber decay

The insidious workings of the Death Watch Beetle are often not apparent until serious damage has been done. Only the scientific use of a penetrating and persistent insecticide will eradicate these borers. "WYKAMOL" polychlornaphthalene can be confidently recommended and the experience and technical skill of our staff is at your disposal.

Send for free Technical Brochure:
"The Control of INSEGT and FUNGAL DESTROYERS OF TIMBER."

FREE FIRE

INSURANCE

A rafter in the roof of Chichester Cathedral showing damage by the Death Watch Beetle.

For advice and further details write to:

RICHARDSON & STARLING, LTD. Member of the British Wood Preserving Association HYDE STREET . WINCHESTER . Tel.: 2537

contemporary colours COLOURS

We have studied every aspect of the ARCHROME (Munsell) Range of Colours, and have made a speciality of their production.

We are regularly specified.

Technical details on application to:

TURNER, KING SHEPHARD & LTD.

Paint, Enamel & Varnish Manufacturers, 82 VICTORIA STREET, LONDON, S.W.I. Vice ia 2100-6040





With the present-day high cost of building materials and labour, BATLEY Multiple Concrete Garages offer tremendous economies. Employing the well-known Batley principle of tongued and grooved concrete units which are simply bolted together on a firm level foundation, these garages can be erected by unskilled labour in hours instead of days. Fitted with Up and Over or hinged doors as required. 5 YEARS

No. of Total Cost £ s. 125 0 180 0 345 0 510 0 675 0 Clear Height 16ft. 3in. by 16ft. 4in. 24ft. 3in. by 16ft. 4in. 48ft. 3in. by 16ft. 4in. 72ft. 3in. by 16ft. 4in. 96ft. 3in. by 16ft. 4in. 6ft. 3in. 6ft. 3in 6ft. 3in

Plus £55 per additional garage to any number required in one block. Also available with a clear height of 7ft. 9in., and alternative length of 19ft. if required.

ATTRACTIVE DEFERRED TERMS. — Free delivery in England and Wales.

Send for full details and brochure to: ERNEST BATLEY LTD. 63, COLLEDGE RD., HOLBROOKS, COVENTRY Telephone: 89245/6.

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's

aper. Replies to Box Numbers should be addressed tre of "The Architects' Journal," at the address given above.

Public and Official Announcements

25s. per inch; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she or the employment, is excepted from the provisions of the Notification of Vacanies Order, 1952.

BRITISH ELECTRICITY AUTHORITY.
EASTERN DIVISION.
Applications are invited for the following superannuable post in the Generation (Construction)
Department at Divisional Headquarters in North London: --SENIOR DRAUGHTSMAN (ARCHITECTURAL)

SENIOR DRAUGHTSMAN (ARCHITECTURAL)
Grade 4, £704-£819 p.a.
The commencing salary (which includes London
Weighting) will depend upon experience and
qualifications.
Candidates should have had experience in the
design, construction and detailing of industrial
type buildings.
Applications giving age, details of qualifications
and experience, to the Controller, British Electricity Authority. Eastern Division, Northmet
House, Southgate, N.14, to arrive by 14th May,
1954.

W. N. C. CLINCH.
Controller.

MIDDLESEX COUNTY COUNCIL—COUNTY
ARCHITECT'S DEPARTMENT.
ASSISTANT ARCHITECT required, A.P.T.,
VIII (1785 to 2860 p.a., plus London weighting).
Appointment at grade minimum. Established,
pensionable, subject to medical assessment and
prescribed conditions. Must be Registered Architect, and experience in design of Educational
buildings an advantage. Application forms
(stamped addressed envelope foolscap) from
County Architect, 1, Queen Anne's Gate Buildings,
Dartmouth Street, S.W.1, returnable by 17th May
(quote N.400 AJ). Canvassing disqualifies. 2469
MINISTRY OF HOUSING AND LOCAL

quote N.400 AJ). Canvassing disqualifies. 2469

MINISTRY OF HOUSING AND LOCAL GOVERNMENT ARCHITECTS (SENIOR AND MAIN GRADES) for special work with MINISTRY OF HEALTH. The Civil Service Commissioners invite applications for three pensionable posts in London: (a) Senior Grade, (b) and (c) Main Grade. Posts (a) and (b) are for specialised duties in a new Research Group to study design, planning, and construction of hospitals; (c) is for general architectural duties. For all posts some experience of Hospital work, including modern methods and new materials, is expected, and for post (a) this should be extensive and recent. For post (a) candidates must also be able designers. Age, for post (a) at least 35 on 1st May, 1954; for posts (b) and (c) at least 30 on that date. All candidates must be Registered Architects (by examination) and either F.B.I.B.A. or A.R.I.B.A. Salary: (men), including extra duty allowance, where payable; post (a) £1,485-£1,575, posts (b) and (c) £1,680-£1,426. Somewhat lower for women. Promotion prospects.

rospects.
Application forms and further particulars from Application forms sion, Scientific Branch, 30, 40 Burlington Street, London, W.I. quoting No. 4325/54. Applications to be returned by 12th Old Burlin S4325/54. June, 1954.

SURREY COUNTY COUNCIL.
Applications are invited for the following

Applications are invited for the following appointments:—

(a) PRINCIPAL
ASSISTANT ARCHITECT.
Combined Grade IX and X. Commencing salary: £840×£40/50 to £1.050 p.a., plus London weighting. Applicants must be Members of the R.I.B.A., and experienced in organisation of work.

(b) ASSISTANT ARCHITECT, Grade VII.
Commencing salary: £735×£25 to £810 p.a., plus London weighting. Applicants must be Assoc. Members of R.I.B.A., and have had good training and adequate experience in design and construction of modern buildings.

(c) ARCHITECTURAL ASSISTANT, Grade IV. commencing salary: £580×£15 to £625 p.a., plus London weighting. Applicants must be of good general training, and preference will be given to those who have passed Inter. R.I.B.A.

(d) ASSISTANT QUANTITY SURVEYOR. Grade VI. Commencing salary: £580×£15/20 to £760 p.a., plus London weighting.

(e) ASSISTANT QUANTITY SURVEYOR. Grade V. Commencing salary: £620×£15/20 to £670 p.a., plus London weighting.

Applicants should have experience of taking off, site measuring, and preparation of interim valuations and final accounts; and for Grade VI must have passed the Final Examination of the R.I.C.S.

Applications, giving full details and present salary, accompanied by copies of three recent testimonials. should be sent to the County Architect. County Hall, Kingston-upon-Thames, not later than 15th May, 1954.

COUNTY BOROUGH OF BARNSLEY.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.
APPOINTMENT OF CHIEF ASSISTANT
ARCHITECT.
Applications are invited for the appointment of
CHIEF ASSISTANT ARCHITECT, in the
Borough Engineer and Surveyor's Department, at
a salary in accordance with A.P.T., Grade VIII (£785-£860)

a salary in accordance with A.P.T., Grade VIII (£785-260).

Applicants should be Associate Members of the Royal Institute of British Architects, and have had considerable experience in the design and layout of Municipal Housing Estates and other Public Buildings.

Housing accommodation will be provided for the successful candidate, if necessary, and a car allowance will be paid in accordance with the Scheme for Casual Users.

The appointment will be subject to (a) the Scheme of Conditions of Service for A.P.T.C. Staff; (b) any other general conditions of employment in operation within the Corporation from time to time; (c) one month's notice on either side; and (d) to the Local Government Superannuation Acts, for which purpose the successful examination.

Applications, stating age, qualifications, present and previous appointments, experience, etc., and giving the names of two persons for reference, should reach the Borough Engineer. Town Hall, Barnsley, not later than Wednesday, 12th May, 1954.

1954.
Canvassing will disqualify, and applicants should disclose whether they are related to any member or senior officer of the Council.

A. E. GILFILLAN,
Town Clerk.

April, 1954.

April, 1954.

AIR MINISTRY WORKS DEPARTMENT requires ARCHITECTURAL ASSISTANTS in Design Branch. Applicants should be experienced in planning and preparation of working drawings and details for permanent and semi-permanent buildings. Professional quals. an advantage. Vacancies mainly London, few Provinces. Appointments carry liability for overseas service, for which allowances payable. Salaries up to £780 p.a, for men, £618 for women. Starting pay dependent upon age, quals. and experience. Extra duty allowance or overtime payable. Reasonable prospects of promotion. Posts temporary and non-pensionable, but have long term possibilities. Competitions held periodically to fill established vacancies. Applications from natural born British subjects only, quoding A/C, and stating age, quals. and previous appointments, giving dates and stating type of work one. to Air Ministry, S.2(h)/NA, Cornwall House. Stamford Street. London S.E.1.

WARWICKSHIRE COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.
Applications are invited for the following appointment:

PLANNING ASSISTANT. Grade IV (£580-£625

appointment:— PLANNING ASSISTANT, Grade IV (£580-£625

PLANNING ASSISTANT, Urade Ay per annum).

The person appointed will be stationed at Warwick, and will be engaged on the County Development Plan.

Annicants should hold an Intermediate professional qualification, preferably that of the Town Planning Institute, and should have had several years' practical experience.

The appointment is subject to the provisions of the Local Covernment Superannuation Act. 1937, and the National Scheme of Conditions of Service.

Service.

Applications, together with the names and addresses of two persons to whom reference may be made, should be sent to J. J. Brooks, M.I.Mun.E., M.T.P.I., County Planning Officer, Northerate, Warwick, not later than Tuesday, the 18th May 1954.

Canvassing, directly or indirectly, will be a disqualification.

L. EDGAR STEPHENS

L. EDGAR STEPHENS, Clerk of the Council.

Shire Hall Warwick. 30th April 1954.

30th April 1954. 2503
GOVERNMENT OF NORTHERN IRELAND.
MINISTRY OF FINANCE—DIRECTORATE OF
WORKS.
ARCHITECTURAL ASSISTANTS.
Applications for unestablished nosts are invited
from ARCHITECTURAL ASSISTANTS. with
recognised training and fair experience.
Successful candidates will be eligible for appointment to nensionable posts from time to time, and
to a higher grade on obtaining professional qualifications.

to a higher grade on obtaining professional qualifications.

Salary: up to £628 per annum: starting pay according to age qualifications and experience.

Preference will be given to candidates who served in H.M. Forces in the 1914-18 or 1939-45 wars, provided that such candidates are, or within a reasonable time will be, able to discharge the duties efficiently.

Avoilications giving date of birth and full details of training and qualifications, should be sent to the Director of Establishments, Ministry of Finance. Stormont.

2434

WORCESTERBUIRE COUNTY COUNCIL.
COUNTY ARCHITECTS DEPARTMENT.

Applications are invited for the post of ARCHITECTURAL ASSISTANT, Grade A.P.T., IV (£880-£925 d.a.). Further particulars and application forms may be obtained from L. C. Lomas, F.R.I.B.A. County Architect, 14, Castle Street, Worcester, not later than 15th May, 1954. (0.90.)

NORTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD.

TWO SENIOR ASSISTANT ARCHITECTS required on the staff of the Regional Architect. Salary grade: £875×£30—£1,025, plus London weighting, £40-£50. Commencing salary at minimum of scale.

Applicants should be Associate Members of the R.I.B.A., and have had considerable experience in a senior capacity in design and construction. Preference will be given to those with recent experience in the design of new hospitals and associated buildings.

Preference will be given to be a preference will be design of new hospitals and associated buildings.

Apply to Secretary, North-West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, by 17th May, with names of two referees.

LONDON ELECTRICITY BOARD require
BUILDING FOREMEN in the Western Sub-Area
to be based at Chelsea, S.W.S. General experience of all building trades and knowledge of
Building Regulations, 1948, essential. Preferably
should have had some supervisory experience.
Salary: N.J. (B. & C.E.) Committee, Foreman,
Grade 2—6575 p.a. Application forms from
Personnel Officer, 46, New Broad Street, E.C.2.
Please enclose addressed envelope and quote ref.
M/2877/A. (2007)

CITY OF CARDIFF.

APPOINTMENT OF ARCHITECTURAL
ASSISTANT (HOUSING).

Applications are invited for the following appointment in the City Surveyor's Department,

eis:—
ARCHITECTURAL ASSISTANT (HOUSING).
A.P.T., Grade 7 (£735-£810 per annum).
Candidates should possess the minimum qualifications and experience prescribed by the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services for posts in the above-mentioned grade.

Clerical Services for posts in the Conference of the Conditions of Appointment may be obtained from the undersigned.

Applications, accompanied by the names and addresses of three referees, and endorsed "Architectural Assistant (Housing), A.P.T., Grade 7." must be delivered to the undersigned not later than the 17th May, 1954.

S. TAPPER-JONES, Town Clerk.

City Hall, Cardiff. April, 1954.

April, 1954.

LONDON COUNTY COUNCIL require (i) an ARCHITECTURAL ASSISTANT, and (ii) LAND-SCAPE DESIGNERS for the preparation of surveys sketch schemes, working drawings and specifications for buildings and ancillary works in parks and open spaces, and layouts of new parks, sports grounds and garden areas to housing estates, schools. Salaries up to £673, according to experience and qualifications. Application forms from Chief Officer. Parks Dept., Spring Gardens, S.W.L. (490)

LANCASHIEE COUNTY COUNCIL

Gardens, S.W.I. (490)

LANCASHIRE COUNTY COUNCIL—
PLANNING DEPARTMENT.
PLANNING ASSISTANT (ARCHITECTURAL),
A.P.T., Grades V-VI (620-4760), required at Manchester. Candidates should possess an architectural qualification. Salary according to qualifications and experience. Applications, giving experience, qualifications, present salary, and two referees, to County Planning Officer, East Cliff County Offices, Preston, by 17th May, 1954. 2440

County Offices, Preston, by 17th May, 1994. 2440

MIDDLESEX COUNTY COUNCIL—COUNTY
PLANNING DEPARTMENT.
CHIEF PLANNING ASSISTANT required
(A.P.T., VII, 4765 to 4840 p.a. if 26 years or
over). Should have good experience and full
quals. in Planning, Architecture, or other appropriate subject. Established, pensionable, subject
to medical assessment and prescribed conditions.
Application forms from County Planning Officer,
10, Great George Street, London, S.W.I., returnable
by 20th May (quote N.398 AJ). Canvassing disqualifies. 2468

BOROUGH OF BARKING.

DEPARTMENT OF THE BOROUGH
ARCHITECT.
SENIOR ASSISTANT ARCHITECT. Grade
A.P.T., VI (£695 to £760 per annum, plus
London weighting).

Applications are invited for the above post.
Candidates must be A.R.I.B.A., with considerable practical experience of general Municipal
work, including housing, and have been restaff.

Application forms together the supervision of architectural

sponsible for the staff.

Application forms, together with full details on the appointment, can be obtained from the Borough Architect, Town Hall, Barking, and completed forms are to be returned to the undersigned not later than Monday, 17th May, 1954.

E. R. FARR,

Town Clerk.

2484

ENGINEERING DRAUGHTSMAN required in the Architectural and Constructional Section of the Engineer's Department. Should be capable of assisting in the design of new buildings and alteration to existing buildings, and preparation of working drawings. Salary: £432-£567 per annum. according to experience (N.J.B. Schedule "D." Grade 6), superannuable. Apply within fourteen days, stating age. experience, present salary and position, to Emil Braathen, Sub-Area Manager, Midlands Electricity Board, 14, Dale End, Birmingham, 4.

SENIOR ARCHITECTURAL ASSISTANT.
Applications are invited for the appointment of a Senior Architectural Assistant, in the Borough Engineer's Department, at a salary in accordance with Grade V. A.P.T., namely: £620 per annum, rising to £670 per annum by annual increments.

annum, rising to £670 per annum by annual increments.

Applicants should be Registered Architects or hold the final examination of the R.I.B.A., with a good experience in Municipal Housing.

The appointment is subject to the National Scheme of Conditions of Service, the provisions of the Local Government Superannuation Acts, the passing of a medical examination, and one month's notice on either side.

Applications, suitably endorsed and accompanied by three recent testimonials, must reach the undersigned not later than first post on 17th May, 1954.

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

HOUSING ACCOMMODATION WILL BE PROVIDED IF NECESSARY.

EDWIN V. CARTER.

Town Clerk.

"Dinsdale." Marine Terrace, Blyth.

"Dinsdale." Marine Terrace. Blyth.

Northumberland.

CITY OF LEICESTER.
CITY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments in the Housing Section, Municipal Offices, Charles Street, Leicester:—
(a) ASSISTANT ARCHITECT, A.P.T., Grade VI (£695-£760 p.a.). Applicants must be Registered Architects, and preference will be given to those holding recognised architectural qualifications and with housing experience.

with housing experience.

(b) ASSISTANT QUANTITY SURVEYOR,
A.P.T., Grade VII (4735-4810 p.a.).
Applicants must be Chartered Quantity
Surveyors.

Applicants must be Unartered goodeness.
Surveyors.

(c) SITE MEASURING SURVEYOR (BUILD-INGS), A.P.T., Grades I-II (£490-£565 p.a.), according to experience.

(d) CLAIMS CLERK, A.P.T., Grade I (£490-£555 p.a.). Applicants must have had experience in a builder's office, and acquired a sound knowledge of building materials and costings.

The appointments will be subject to the National Scheme of Conditions of Service, passing a medical examination, and to one month's notice on either side.

side.

Applications, stating age, experience, qualifications, past and present appointments, with present
salary, together with copies of two recent testimonials, should be sent to the undersigned not
later than Friday, 14th May, 1954.

J. H. LLOYD OWEN,
City Architect.

10 Loseby Lane Loicester.

10, Loseby Lane, Leicester.

CITY OF CARDIFF.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT (EDUCATION).
Applications are invited for the following

approximent in the City Surveyor's Department, vis.:—
ARCHITECTURAL ASSISTANT (EDUCATION). A.P.T., Grade 5 (£620-£670 per annum). Candidates should possess the minimum qualifications and experience prescribed by the National Joint Council for Local Authorities' Administrative, Professional, Technical, and Clerical Services for posts in the above-mentioned grade. General Conditions of Appointment may be obtained from the undersigned. Applications, accompanied by the names and addresses of three referees and endorsed "Architectural Assistant (Education). A.P.T., Grade 5." must be delivered to the undersigned not later than the 22nd May, 1954.

S. TAPPER-JONES,
Town Clerk.

City Hall, Cardiff. April. 1954.

April. 1954. 2502

BOROUGH OF LUTON.
APPOINTMENT OF SENIOR ASSISTANT
QUANTITY SURVEYOR.
Applications are invited for the above appointment (salary: A.P.T., VII-VIII, 2735-886).
Candidates should be Chertered Quantity Surveyors, and have considerable experience in all branches of work. A knowledge of valuation and estates work an advantage, but not essential.
Applications, in candidates' own handwriting, stating age, undiffications and experience, with names of two referees, to be sent to the Borough Engineer, Town Hall, Luton, by 22nd May, 1954.

A. D. HARVEY.

Town Clerk.

GLOUCESTERSHIRE COUNTY COUNCIL.
ARCHITECTURAL ASSISTANT. Inter. Exam.
R.I.B.A. General experience in design and construction. N.J.C. Service Conditions. Grade IV.
Medical examination. Motor car driving licence.
Apply, giving age, present position, salary, and
date appointments, names and addresses two
persons for references. County Architect, Shire
Hall, Gloucester, by 12th May.
GUY H. DAVIS,
Clerk of the County Council.
2463

LONDON COUNTY COUNCIL.
ARCHITECTS DEPARTMENT.
Vacancies for ARCHITECTS in Schools and Housing Divisions. Salary to £721.
Particulars and application forms, from Architect (AR/EK/A/2), County Hall, S.E.I. (374.) 2205

BRITISH ELECTRICITY AUTHORITY.

EAST MIDLANDS DIVISION.
Applications are invited for the following positions within the Division:—

ENGINEERING DRAUGHTSMEN (CIVIL).
Construction Department. (Vacancy No. 1/54/AJ).
Candidates should have experience in design and detail of reinforced concrete structures, piled and slab foundations for heavy plant, culverts, cable subways, etc., for general building construction drainage and sanitation schemes, associated with official and administrative buildings.
The salary will be in accordance with Grade 5 (2567-2671 per annum) or Grade 6 (2433-2557 per annum) of Schedule D of the National Joint Board Agreement.
ENGINEERING DRAUGHTSMEN (ME-CHANICAL), Construction Department. (Vacancy No. 2,54/AJ).
Senior Draughtsmen are required in the Mechanical Section of the Construction Department at North Wilford Power station. Candidates should have experience in one or more of the following:—

(1) Design and layout of Power Station equip-

ollowing:—

(i) Design and layout of Power Station equipment, including turbo-alternators, boiler plant, coal and ash plant, and general station auxiliaries.

(ii) H.P. and L.P. steam and feed pipework. Condensing plant and feed heating systems.

(iii) Conveyor plant, coal handling systems, and material handling of station auxiliary equipment.

(iii) Conveyor plant, coal handling systems, and material handling of station auxiliary equipment.

The salary will be in accordance with the National Joint Board Agreement, Grade 5 (£567-£671 per annum) and Grade 6 (£433-£567 per annum) of Schedule D. according to experience. ENGINEERING DRAUGHTSMEN (ELECTRICAL), Construction Department. (Vacancy No. 3564, 450).

Candidates should have experience in the preparation of layouts and diagrams for the installation of E.H.T. and L.T. switchgear, transformers, E.H.T. and L.T. cables; knowledge of protective gear systems would be an advantage.

The salary will be in accordance with the National Joint Board Agreement, Grade 5 (£567-£671 per annum) and Grade 6 (£433-£567 per annum) of Schedule D. according to experience. DRAUGHTSMAN. Transmission Department, (Vacancy No. 46/54/J.).

Draughtsmen are required in the Transmission Department at this Divisional Headquarters. Experience on the design and construction of H.V. sub-stations or overhead transmission lines an advantage.

Salary, according to experience and ability.

perience on the design and provided the substations of overhead transmission lines an advantage.

Salary, according to experience and ability, within Grade 6 (£433-£567 per annum) or Grade 5 (£567-£671 per annum) of Schedule D of the National Joint Board Agreement.

Closing date for receipt of applications is 17th May, 1954.

The above positions will be pensionable within the provisions of the British Electricity Authority and Area Board Superannuation Scheme.

Applications should be submitted on the official form, which may be obtained from the Divisional Establishments Officer, British Electricity Authority, P.O. Box No. 25, British Electricity Authority, P.O. Box No. 25, British Electricity House, Barker Gate, Nottingham, and should be returned to the undersioned by the date stated. Please quote Vacancy Number.

L. F. JEFFREY.

Divisional Controller.

BRACKNELL DEVELOPMENT
CORPORATION.
Applications are invited for the post of INSPECTOR OF WORKS in the Chief Architect's Department. Salary in the range £660-£860, according to qualifications and experience. The successful applicant will be in charge of all Clerks of Works supervising architectural works, will be resunosible for the handing over of all housing and for such other work as may be delegated to him by the Chief Architect.
A sound and extensive knowledge of building construction and considerable experience in the supervision of building works of all types is required. An architectural or building management background would be an advantage.
Superannuation schemes. Medical examination. Housing available in due course. Apply by 14th May, 1954, giving age, education and qualifications; experience and appointments held (with dates and salaries), and two referees, to General Manager. Brackgell Development Corporation, Farley Hall, Binfield, Bracknell, Berkshire. 2438

METROPOLITAN BOROUGH OF
WANDSWORTH.
ASSISTANT ARCHITECTS.
Applications are invited for the appointment

Applications are invited for the appointment of:

(a) SENIOR ASSISTANT ARCHITECT.

A.P.T. VII/VIII (2765-2890 p.a.).

(b) ASSISTANT ARCHITECT. A.P.T., Va/VI (2660-2790 p.a.).

Applicants for both posts should be Associates of the R.I.B.A., and have had considerable experience in the design and planning of housing estates, particularly multi-storey blocks of flats and/or other framed buildings, and in the supervision of their erection. Applicants for (a) must also have had experience in the control of staff.

Application forms, obtainable from the Borough Engineer, must be returned to me by 24th May, 1954.

1954. R. H. JERMAN, Town Clerk. Municipal Buildings, Wandsworth, S.W.18. 2485

R.I. Div Asse Sur

Boa bilit ficar clud men nam the Par 1954

T

tect £800 the short Pidate Titici allo in suit

hav

Tov

ASS £670 pro exp A gen lay mus of H Cle by

exp

R.I pra hav R.I

I. 8

Ex

tionsal Division 14

CITY COUNCIL OF NAIROBI.

APPOINTMENT OF TOWN PLANNING AND BUILDING INSPECTION STAFF.

THE CITY ENGINEER'S DEPARTMENT

(TOWN PLANNING SECTION).

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

(a) ASSITANT CITY PLANNING OFFICER, at a consolidated salary of £1,350 by £50 to £1,450 per annum, plus special temporary allowance, which is at present £350 per annum.

(b) BUILDING SURVEYOR at a consolidated salary of £995 by £35 to £1,350 per annum, plus \$450 to £1,350 per annum, plus \$450 to £1,350 per annum, plus \$450 to £1,350 per annum, plus special temporary allowance, which based on the commencing salary of £995 is £35 fos per annum, plus special temporary allowance, which based on the commencing salary in each case to be determined in accordance with the qualifications and experience of the successful candidate.

Applicants for appointment (a) will be required, as occasion arises, to deputise for the City Planning Officer, and must be Members or Associate Members of the Town Planning Institute and hold an additional qualification in architecture, engineering or surveying, and should have had experience in the office of a Local Planning Authority, particularly in the preparation of a development plan.

Applicants for appointment (b) will be required to take charge of the Building Inspector's Office under the City Planning Officer, and they must be Associate Members of the Royal Institution of Chartered Surveyors (Sub-Division III—Buildings), or hold similar qualifications. Applicants should have up-to-date experience in a Building Inspection Office of a Local Authority, together with a comprehensive knowledge of all forms of building construction, drainage and ventilation.

The appointments are permanent established boosts, but will be subject to a probationary period

together with a comprehensive knowledge of all forms of building construction, drainage and ventilation.

The appointments are permanent established posts, but will be subject to a probationary period of six months' service. The appointments will be subject to Council's Code of Working Regulations. Conditions and Terms of Service. The successful applicants will be entitled to four weeks' paid leave per annum. They will be allowed to accumulate such leave up to a maximum of thirteen weeks for the purpose of overseas leave, and will be permitted to proceed overseas for such leave at their own expense.

Membership of the Staff Superannuation Scheme is compulsory, the officer's rate of contribution being 7½ per cent, of consolidated salary. Membership of the Employees' Medical Scheme is compulsory for staff and their dependents after confirmation of appointment.

The successful applicants will be required to pass a medical examination before they are appointed.

Applications, stating age, marital status, qualifications and experience, accompanied by a recent photograph and copies of certified testimonials, should be addressed to the Town Clerk, P.O. Box 651, Nairobi, so as to reach him not later than the 7th June, 1954.

Town Hall, Nairobi.

Town Hall. Nairobi. 24th April, 1954.

24th April, 1954.

24th April, 1954.

STAFFORDSHIRE COUNTY COUNCIL.
COUNTY PLANNING AND DEVELOPMENT
DEPARTMENT.

Applications are invited for the appointment of
PLANNING ASSISTANTS, on A.P.T., Grades
III-IV (£550 to £625 per annum), in the Central
Area Planning Office at Stafford and the Southern
Area Planning Office at Wolverhampton.

Applicants for the appointment should have
had training in an Architect's, Engineer's, Surveyor's or Planning Office, and preference will be
given to those who have passed the Intermediate
Examination of the Town Planning Institute or
its equivalent.

Applicants should give details of age, education and training qualifications, present and previous appointments and experience, and the
names of two persons to whom reference can be
made. Applications, in which relationship to any
member or senior officer of the County Council
must be disclosed, should be sent to D. W. Riley,
County Planning and Development Officer, 41a,
Eastgate Street, Stafford, not later than the 11th
May, 1954.

T. H. EVANS,
Clerk of the County Council

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

DERBYSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
ADDications are invited from QUANTITY
SURVEYORS for appointments on A.P.T. Grades
VIII (£785 to £860 per annum), VII (£735 to £810
per annum), and VI (£695 to £760 per annum).
Applicants must have passed the Final examination of the Royal Institute of Chartered Surveyors
(Quantities) and have had 5 years' experience. It
is essential that applicants have a thorough knowledge of the preparation of estimates, taking off
quantities for all trades, measuring up, and final
accounts.

accounts.

The appointments are subject to the terms of the National Joint Council's Scheme of Conditions of Service, the provisions of the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass a medical examination.

ment Superannuation Act. 1937, and the successful applicants will be required to pass a medical examination.

Applications, on forms to be obtained from this office. must be received by 24th May, 1954.

F. HAMER CROSSLEY, Dipl.Arch.
(L'pool), F.R.I.B.A.,
County Offices, St. Mary's Gate, Derby. 2486

LEEDS REGIONAL HOSPITAL BOARD.
Applications are invited for the following permanent (superanuable) appointment in the department of the Regional Architect (Philip B. Nash. AR.I.B.A.).
ONE SENIOR ASSISTANT QUANTITY SURVEYOR. Salary: £875×£30—£1,025 p.a.
Applicants must be Corporate Members of the R.I.C.S., having qualified in Quantities (Subbivision III), or under certain circumstances be Associate Members of the Institute of Quantity Surveyors. The successful applicant will be incharge of the Quantity Surveying Section of the Board, and the principal duties will be responsibility for estimates, valuation of interim certificates and the settlement of final accounts.
Applications, giving all relevant particulars, including training and experience, present appointment and salary, war service if any, and the mames of two referees, should be forwarded to the Secretary, Leeds Regional Hospital Board, Park Parade, Harrogate, not later than 24th May, 1954.

NORTHERN IRELAND HOUSING TRUST.

ASSISTANT ARCHITECT.
The Trust has a vacancy for an Assistant Architect, Grade II, on the salary scale of £725×£25-£800. Candidates must be Associate Members of the Royal Institution of British Architects, and should have experience of housing projects.

Preference will be given to ex-Service candidates.

usites.

The person appointed will be required to participate in a contributory Superannuation Scheme, allowing for the reciprocal transfer of benefits in Local Government Superannuation Schemes in

Assistance in obtaining housing accommodation with the cases.

Assistance in obtaining housing accommodation may be given to the successful candidate.

Forms of application, which should be returned not later than 29th May, 1954, may be obtained from the General Manager, Northern Ireland Housing Trust, 12, Hope Street, Belfast.

2488

CITY OF WAKEFIELD.
CITY ENGINEER'S DEPARTMENT.
Applications are invited for the following permanent appointments:—
(a) PRINCIPAL QUANTITY SURVEYOR,
Grade A.P.T., VII (£735-£810), commencing at £735.

Applicants must be qualified Quantity Surveyors, with a wide experience on Housing, Schools, and other Municipal buildings.

(b) JUNIOR ARCHITECTURAL ASSISTANT, Grade A.P.T., II (£20-£565), commencing at £520. Applicants should be good draughtsmen, and have some Municipal experience.

Applications, giving full particulars of appointments and experience, along with names of two referees, to be received by 19th May, 1954.

HOUSING ACCOMMODATION WILL BE CONSIDERED IN RESPECT OF APPOINTMENT (a).

W. S. des FORGES.

Town Hall, Wakefield.

Town Hall, Wakefield. 2489

BOROUGH OF SWINDON.

BOROUGH ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of ASSISTANT ARCHITECT, Grade A.P.T., V (£620-£670 per annum), required for a large development programme in connection with the proposed expansion of the Borough.
Applicants should have had experience in general architectural work, particularly in the layout of estates and the design of dwellings, and must be Associate Members of the Royal Institute of British Architects.

HOUSING ACCOMMODATION is available.
Applications on forms obtainable from the Town Clerk, Civic Offices Swindon, must be returned by the 20th May, 1954.

NATIONAL COAL BOARD, EAST MIDLANDS

by the 20th May, 1954.

NATIONAL COAL BOARD, EAST MIDLANDS DIVISION, Architects' Department, Nottingham, require ARCHITECTS. Appointment will be in salary grade appropriate to qualifications and experience, viz.—
(a) £600 £25—£650 £50—£900, or
(b) £325 £25—£650 (exceptionally to £800).

For (a) candidate must be Corporate Member of R.I.B.A., with not less than 1 year's subsequent practical experience; for (b) candidate should have passed Intermediate Examination of R.I.B.A., and have not less than 3 years' subsequent practical experience.
(S.V.315.)

QUANTITY SURVEYING ASSISTANT, Grade 1. Temporary appointment.
Salary grade: £525 £25—£650 (exceptionally to £800).

Salary grauding Should have passed Intermediate Examination of R.I.C.S., and have not less than 3 years' subsequent practical experience.

(S.V. 314)
Applications, stating age, education, qualifications, experience and present appointment, with
salary to Secretary, N.C.B., East Midlands
Division, Sherwood Lodge, Arnold, Notts., within
14 days of publication. Mark envelope with
appropriate "S.V." number. Original testimonials 14 days of public appropriate "S.V." should not be sent.

LONDON COUNTY COUNCIL.
ARCHITECT'S DEPARTMENT.
(a) PLANNING OFFICERS, Grade III (up to

(a) FLANNING OFFICIALS, date 111 days PERC 10s.1.

(b) PLANNING ASSISTANTS (up to £721). Professional qualifications: A.R.I.B.A., A.R.I.C.S. and/or A M.T.P.I. required. Application forms and particulars from Architect (AR/RK/P/4), County Hall, S.E.I. (1322) 1330

COUNTY OF ESSEX.

ILFORD COMMITTEE FOR EDUCATION.

The Essex County Council invite applications for the post of ARCHITECTURAL ASSISTANT in the offices of the Borough Engineer of Ilford. Candidates should have passed the R.I.B.A. Intermediate Examination, or its equivalent, at one of the recognised Schools of Architecture, and have worked in an architectural office for a period of not less than two years.

The scale of salary will be in accordance with the National Joint Council, A.P.T. Division, Grade IV, £580×£15-£625, plus the appropriate London Area allowance.

Applications should be made on a form to be obtained from, and returned to, the Borough Education Officer, Education Offices, Town Hall, Ilford, together with copies of not more than three recent testimonials, within 14 days of the appearance of this advertisement.

Architectural Appointments Vacant 4 lines or under, 7s. 6d.; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she or the employment, is excepted from the provisions of the Notification of Vacanies Order, 1952.

UNIOR ASSISTANTS and APCHIERCE

excepted from the provisions of the Notification of Vacanies Order, 1952.

JUNIOR ASSISTANTS and ARCHITECTURAL DRAUGHTSMEN required by Multiple Shop Co. in the London area. Excellent working conditions, staff canteen, superannuation, 5-day week. Experience required in surveys, a in. scale working drawings and details under supervision. Please reply, stating age and salary required, to Box 2150.

PEQUIRED for Architects' office, Central London area, young qualified ASSISTANTS interested in design and construction. Write, stating experience and salary required. Box 2325.

ENIOR AND JUNIOR ARCHITECTURAL ASSISTANTS and Draughtsmen or women required in busy office in the Home Counties. Some experience essential. Large varied practice. Please state experience and salary required. Box 237.

SENIOR ARCHITECTURAL ASSISTANT
required, full experience in preparation of
Working Drawings, Details, and supervision of
office and Industrial Buildings in the London
Area. Good knowledge of construction and design
essential. Apply in writing giving full particulars of qualifications, age, experience and salary
required to Box 9829.

A RCHITECTURAL ASSISTANTS: one senior qualified. Two intermediate standard for Belfast (Northern Ireland) office. Please reply stating details of experience, salary required, etc.

Box 2429.

A RCHITECTURAL ASSISTANTS required for busy practice engaged upon schools, industrial buildings, offices, etc. Write, giving full particulars of qualifications, experience and salary required, to Johns & Slater, F./A.R.I.B.A., 32, Foundation Street, Ipswich.

R ONALD WARD & PARTNERS require several ARCHITECTURAL ASSISTANTS, intermediate standard. Apply Sloane 8291, or 17, Lowndes Street, S.W.I. 2419

A RCHITECTS in Portsmouth require ASSISTANTS for Industrial and Commercial work. Apply, with full particulars and salary required, to Box 2382.

to Box 2382.

REQUIRED, at once, ARCHITECTURAL Office experience essential. Good draughtsman, working drawings and details. Good salary paid. West Lancashire area, Private practice. Write, with details. Box 2375.

ASISTANT required in progressive practice, Wil. for interesting domestic, commercial and industrial work. Experience essential, preferably qualified or final standard. Salary according to ability. Phone HUNTER 0451 or write Box 2443.

SENIOR ARCHITECTURAL ASSISTANT re-SENIOR ARCHITECTURAL ASSISTANT required for London offices. Salary: £850-£900. Good draughtsman, experienced, and capable of undertaking work with minimum supervision. Full details to Box 2365.

ARCHITECTURAL ASSISTANT, of Interstandard, required for London offices. Salary: £550-£600. Some office experience essential, and must be neat draughtsman. Full details to Box 2366.

ASISTANT required, of Inter. standard. Good draughtsman, with at least 3 years office experience, essential. Salary up to £520, according to age and experience. Apply in writing, stating age and experience. Apply in writing, stating age and experience. Apply in writing, tating age and experience. Apply in writing, F.R.I.B.A., 22, Chancery Lane. W.C.2.

ARCHITECTURAL ASSISTANT, between for Architects' Denartment of a large Firm of Civil Engineering Contractors situate in the Midlands. The successful applicant must have a sound knowledge of construction in both the Industrial and Domestic field, with an aptitude for design and be a quick and accurate Draughtsman. This post offers excellent prospects in a progressive and expanding Company in the development of their own estates. Reply in writing, stating age, qualifications, experience, and present salary, to Box 2364.

A RCHITECTURAL STAFF required for wide range of work in Architects' Department. Salaries: £500.£900 p.a., dependent upon experience and ability.

ARCHITECTURAL DRAUGHTSMEN and JUNIORS also required for duties entailing assistance in the preparation of working drawings and details for New Tradition Housing, Multistorey Flats and Maisonettes, Salaries dependent upon experience and ability.

All appointments on permanent basis in Hammersmith. Write, giving brief details of qualifications and experience, to Chief Architect, deorge Wimpey & Co., Ltd., 27, Hammersmith Grove, London, W.6.

COLLINS, MELVIN, WARD & PARTNERS OLLINS, MELVIN, WARD & PARTNERS of the responsible posts on large and unusual projects to ASSISTANTS with initiative, imagination and experience of working drawings, especially interested in Contemporary Architecture. Reply by letter, giving full particulars, salary required, and telephone number, to 15, Manchester Square, London, W.1.

2558

ARCHITECT'S ASSISTANT required in West

A RCHITECT'S ASSISTANT required in West End office, Should be good draughtsman, with some knowledge of design and construction. Please write, stating age, experience, and salary required, to Box 2374.

ARCHITECTURAL ASSISTANT required, to Box 2374.

ARCHITECTURAL ASSISTANT required, stating previous experience and salary required, to Graham Crump & Denis Crump, F./A.R.I.B.A., 43, George Street, Croydon, Surrey. 2361

SENIOR ASSISTANT urgently required, preferably A.R.I.B.A., in West End Architect's office. Please telephone LANgham 2636 for interview. 2481

interview. 2481

ARCHITECTURAL DRAUGHTSMAN required for Building Contractors Design
Office. Duties to include the design of NonTraditional Houses and assist in the administration and development of the Company's NonTraditional Housing Programme. Additional experience in Civil Engineering draughtsmanship
an advantage. Work varied and interesting for
right applicant. Replies, stating present position, salary, etc., to Personnel Officer, Myton
Limited, Newland, Hull. 2442

EXPERIENCED ASSISTANT required. have sound knowledge of construction and be a good draughtsman. Salary according capabilities. Reply to E. D. Lyons, L. Israel T. B. H. Ellis, 26, Seymour Street, London, W.

ARCHITECTURAL ASSISTANT of about Intermediate mouth Architects. Standard required by Ply-Full particulars to Box 2449.

ARCHITECTURAL ASSISTANT required in A Westminster office of Consulting Engineers for work in connection with designs of Power Stations, Industrial Buildings, Administrative Office Blocks, etc. Apply stating age, experience and qualifications. Box 2445.

ARCHITECTURAL ASSISTANT

ARCHITECTURAL ASSISTANT required Inmediately in busy and varied practice in South Fension Scheme in operation. Apply with full particulars. Box 2459.

ARCHITECTURAL ASSISTANT required Inter, R.I.B.A. Standard. Experience in large housing contracts desirable. Write stating age, experience and salary required to Personnel Manager, Taylor Woodrow Homes Ltd., Ruislip Road, Southall, Middlesex. WAXlow 2636. 2444.

SENIOR ARCHITECTURAL ASSISTANT required immediately in busy and varied practice in South Yorkshire. Final R.I.B.A., essential, and some office experience desirable. Salary according to qualifications and experience. Pension Scheme in operation. Apply with full particulars. Box 2459.

JUNIOR ARCHITECTURAL ASSISTANT required immediately in busy and varied practice in South Varied Practice varied practice in South Varied Practice in South Varied Practice varied practice in South Varied Practice varied practice in South Varied Practice varied varied practi

JUNIOR ARCHITECTURAL ASSISTANT required immediately in busy and varied practice in South Yorkshire. Intermediate R.I.B.A. qualification essential and a minimum of three years' office experience. Salary in accordance with qualifications and experience. Pension Scheme in operation. Apply with full particulars. Box 2460.

Scheme in operation. Apply with full particulars. Box 2460.

I IVERPOOL — ARCHITECTURAL ASSIST-ANTS required—Senior and Junior. Salary according to experience and ability. Full details to G. de C. Fraser, Son & Gearey, Charlered Architects. 27. Dale Street. Liverpool. 2458

A SSISTANTS required with experience in contemporary design. Intermediate and Final R.I.B.A. standard. Five-day week. Interesting and varied work. Applications stating age. experience and salary required to be sent to William Blair. B.Arch.(Lvpl.), A.R.I.B.A., 8, St. James' Street, Derby.

A RCHITECT'S ASSISTANT required.

Street. Derby. 2455

ARCHITECT'S ASSISTANT required, reply stating are, experience and salary required to—Burgess, Holden and Watson, Chartered Architects. Beaconsfield, Buckinghamshire. 2456

ARCHITECTURAL DRAUGHTSMEN capable of working from sketches required in West End office of major oil Company. Men with good educational background who wish to make Architecture their career will be considered. Age limits 23-28. Salary according to age and experience. Pensionable. Luncheon Club. Write in detail quoting No. 49 to Box No. 7614, c/o Charles Barker & Sons Ltd., 31, Budge Row, London, E.C.4.

UGANDA.—Qualified ARCHITECT, preferably bachelor, school trained, able to take charge of Branch Office if required. Salary: £1,000 per annum, plus share of profits after probationary period. Apply to Box No. OSS 31/2, Overseas Technical Service, 5, Welldon Crescent, Harrow.

A SSISTANT required with all-round experience A for general Practice, good draughtsman, capable of preparing working drawings and details, salary according to capabilities. F. Greenwood, A.R.I.B.A., 18, The Green, Richmond, RIC.: 6318.

EIU.: 6316.

SENIOR ARCHITECTS' ASSISTANTS.—
Charles B. Pearson & Son of Manchester and Lancaster, require qualified Architects immediately in their Manchester office. Some experience of Hospital work an advantage but not essential. Apply stating age, experience and salary required to 24, Loxford Street, All Saints, Manchester.

2470

Manchester. 2470

SALARY £900-£1,000. SENIOR ARCHITECin the design and construction of flats an advantage. Co-partnership firm, with opportunities for keen man. Apply in writing, with full details of experience to Co-operative Planning. Ltd., 73b, South Side, Clapham Common, S.W.4. 2491

ARCHITECTURAL ASSISTANT required S.E. London, must be experienced in preparation of plans for Estate Development and Surveys. Write full details and salary required to Box 2472.

DRAWING OFFICE STAFF required for Architects office, Wembley area. Preferably liner.-standard R.I.B.A., R.I.C.S. Office experience essential. Salary according to experience. Box 2473.

O'LALIFIED and experienced SENIOR ASSISTANT required by provincial private practice with varied works in hand. Apply giving full details and salary required to Deacon & Laing, 9, St. Paul's Square, Bedford.

Laing, 9, St. Paul's Square, Bedford. 2414

NORTHERN RHODESIA.—Two unqualified
ARCHITECTURAL ASSISTANTS, several
years' experience. Salary: £720 p.a., plus bonus,
fare out. Apply to Box OSS 19/2, Overseas
Technical Service, 5, Welldon Crescent, Harrow,

REQUIRED, immediately, one SENIOR and giving references, experience, and salary required, to Phillip A. Cranswick, A.R.I.B.A., A.M.T.P.I., 21, Suffolk Street, London, S.W.1. 2517

RCHITECTURAL ASSISTANT required, with

A knowledge of construction and able to produce drawings quickly and accurately. Preferably with about two years' office experience. Salary between £400-£500 per annum. Apply Powell & Moya, ABB. 3156.

NORTHERN RHODESIA.—Firm of Architects require for their KITWE office a SENIOR ARCHITECTURAL ASSISTANT (30-40) with some administrative experience, at a commencing salary of £950. Free passage out. Apply Box OCSS 37/8. Overseas Technical Service, 5, Welldon Crescent, Harrow.

A RCHITECTURAL ASSISTANT required for private practice in Worcester, capable of carrying out work from sketch drawing to final account. Please give full particulars, including salary required. Box 2514.

ARCHITECTURAL ASSISTANT required in busy West End office engaged on commercial work. Able to prepare sketch schemes and working drawings. Ability to prepare perspectives an asset. Reply. stating age, experience, and salary required, to Box 2512.

MAROBI.—Leading firm of Architects required unalified SENIOR ARCHITECTURAL ASSISTANTS, with at least 5 years' experience. Salary according to qualifications, experience, etc. bonus, and leave scheme. Apply Box OSS 17/6, Overseas Technical Service, 5, Welldon Crescent, Harrow.

Crescent, Harrow.

A RCHITECTURAL ASSISTANT required in the West End office of Percy Bilton, Ltd. Salary about £500-£600, according to experience. Work would entail preparation of drawings, details and specifications for wide range of buildings, including houses, estate layouts, flats, and offices. Write, giving experience and other useful information, to Staff Architect, Percy Bilton, Ltd. 113, Park Street. W.1.

A RCHITECTURAL ASSISTANT required immediately for varied practice. At least Intermediate standard, with three years' office experience. Salary according to ability and experience. A. R. Dannatt & Son, Chartered Architects, Prudential Buildings, 65A, Duke Street, Chelmsford.

EXPERIENCED SENIOR ASSISTANT required, capable of carrying out work from sketch plan to completion, in a private practice dealing with commercial work, offices, shops, factories, etc. Please write, stating experience and salary required, etc. Lewis Solomon, Son & Joseph, 21, Bloomsbury Way, W.C.1.

A RCHITECTURAL ASSISTANT required in London Architects Office. Hospital experience an advantage but not essential. Write stating age, experience, qualincations and salary required to W. H. Watkins, Gray & Partners, 19, Grosvenor Place, S.W., or telephone Sloane 1840 for appointment.

Grosvenor Place, S.w., or telephone
for appointment.

JUNIOR ASSISTANT required for architect's
office in westminster district. Apply stating
experience and salary required to Box 2477.

experience and salary required to Box 2477.

A RCHITECTURAL ASSISTANTS with not less than two years' experience required immediately. Salary according to exorcience and qualineations. Apply to:—W. Curtis Green, R.A., Son & Lloyd, 5, Pickering Place, St. James's Street, S.W.L.

S ENIOR ARCHITECTURAL ASSISTANT, first class draughtsman, experienced in design and construction of large commercial and industrial buildings required by Architects in Westminster. Box 2479.

and construction of large commercial and industrial buildings required by Architects in Westminster. Box 2479.

JUNIOR ARCHITECTURAL ASSISTANT, Inter.-standard, first class draughtsman with knowledge of construction and detailing for large commercial and industrial buildings required by Architects in Westminster. Box 2480.

ARCHITECT ASSISTANT required for Kanpala, Uganda, Salary about £700 per annum and bonus. Three years' contract and passage paid. Single man preferred. Apply R. S. Cobb. F.R.I.B.A., Mill End. Kidlington, Oxon. 2471.

UALIFIED ARCHITECT ASSISTANT required for practice which deals extensively with commercial work. Previous London experience essential. Salary up to £1,000 p.a., according to experience. Write Box 2500.

PLYMOUTH Architects require male JUNIOR ASSISTANT, capable preparing usual drawings and details for industrial and domestic work, under principal's supervision. Salary, according to experience, £400.£450. Details, stating salary, to Box 2496.

REQUIRED in country town, South Midlands, Inter. stage. Accommodation can be made available. Apply Box 2494.

BIRMINGHAM firm of Chartered Architects requires SENIOR ASSISTANT. Inter. to Final stage. Also JUNIOR, to Inter. stage. Accommodation can be made available. Apply Box 2494.

BIRMINGHAM firm of Chartered Architects requires SENIOR ASSISTANT required for work and selection writing experience and salary required, to Box 2493.

ARCHITECTURAL ASSISTANT required for Worcester office. Intermediate standard, with at least three years' office experience. Knowledge of alteration work and specification writing desirable. Good salary to suitable applicant. Reply to Willis. Llewellyn Smith & Water, 103. Old Brompton Road, S.W.7.

ACCHITECTURAL ASSISTANTS required in Central London office with, wide range of

A RCHITECTURAL ASSISTANTS required in Central London office with wide range of work. Applicants must be capable of producing working drawings and supervising work. Wages will be paid commensurate with ability. Please write, stating age, salary required, and experience, to Box 2490.

ARCHITECTURAL ASSISTANTS, advanced Intermediate or Final standard, required. Varied work, including schools, churches, factories housing. Apply Jennings, Homer & Lynch, 3 and 5, Church Street, Brierley Hill, Staffs. Tel.: Brierley Hill 7545/6.

Architectural Appointments Wanted

Architectural Appointments Wanted

ARCHITECT, with wide international experience in most aspects of the profession, including housing, schools, prefabrication, industrial design and interiors, wishes to participate in projects or research—architectural or industrial. Free lance, group or part-time. Box 2384.

SENIOR ARCHITECT, A.R.I.B.A. (36), seeks responsible position with private architects or company. School trained, with 15 years' varied experience in private practice. Contemporary outlook, Capable of taking charge of contracts, office administration and staff control. Box 877.

EXPERIENCED SENIOR ARCHITECTURAL ASSISTANT (31), clean draughtsman, and able to manage contracts, contemporary outlook, seeks responsible progressive position, with prospects, in the London or South Country areas, salary in the region of £750 per annum. Please write Box 867.

TAFF ARCHITECT requires similar position with Multiple or Commercial firm, London or South. Thoroughly experienced in commercial and domestic work. Surveys, Reports, Specifications, etc. Able to organise, administer and control office. Box 879.

A SSISTANT, part Special Final, desires change. Wide experience in general practice; working drawings, details, specifications, surveys, levelling, supervision, accounts, etc. Married, car driver. Present salary £680.

Box 2522.

Senior Architectural Assistant (school trained), 20 years' experience in preparation of working drawings, details, supervision of office and industrial buildings, laboratories, etc.; good knowledge of construction and design, seeks permanent and responsible position in London area. Box 868.

A. R.I.B.A., public school and University education, 4 years' experience, requires interesting, responsible, and remunerative posts. S.W. London or Surrey preferred. Box 2519. SENIOR

Other Appointments Vacant 4 lines or under. 7s 6d.; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a managed 18-64 inclusive or a woman aged 18-69 inclusive unless he or she or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

THE MIDLAND JOINERY WORKS, LTD., Burton-on-Trent, have a vacancy for an ex-perienced ESTIMATOR (preferably) with all-round knowledge of the technical side of a joinery

round knowledge of the technical side of a joinery undertaking.

The appointment would be progressive, and, if satisfactory, may lead to executive position. This is an unusual opportunity for a young man of ability, with the will to work.

Residential accommodation is offered, together with pension scheme.

State fullest details of age, qualifications, experience, salary required, and when available.

BUILDING and Civil Engineering in one or more of the following: Structural Steelwork, Building Construction, Heavy Foundations. Apply immediately, stating age, experience, etc., to The Chief Engineer, Guest Keen Baldwins Iron & Steel Co., Ltd., East Moors, Cardiff. 223

PRAUGHTSMAN, experienced in general building details, required in Wembley district. Reply in writing, stating age and salary required, Box 2371.

ECRETARY, part-time, required in small practice, W.C.2. Experience with Architect or Surveyor essential. Simple book-keeping etc. State experience, age, and salary required. Box

QUANTITY SURVEYING ASSISTANT required immediately on staff of busy Architects' office to work under qualified Surveyor. Suit young man passed Intermediate standard studying for Final. Experience in taking off. working up, interim certificates and final accounts. Salary offered: 2500-2550, or according to experience. Unfurnished flat available if required. Apply, stating age and experience, to Ruddle & Wilkinson, F./L./A.R.I.B.A., Long Causeway Chambers. Peterborough.

TAKER OFF required large Midlands Office—Permanent Position—Five-day week—Assistance with accommodation if required. Salary (836-£1,000. Write stating age and experience. Box 2415.

VACANCY arises for Articled Pupil (Architectural or Building Surveying) in City Firm.

Box 1720.

SENIOR QUANTITY SURVEYOR, to take charge of department. Apply Jennings, Homer & Lynch, 3 and 5, Church Street, Brierley Hill, Staffs. Tel.: Brierley Hill 7545/6. 2498

JUNIOR DRAUGHTSMAN required, with experience in Shop Fitting work. Must be good draughtsman, with design ability. Salary about 210 per week, according to experience. Apply in first instance to G. M. Boon, A.R.I.B.A., Chief Architect, Lotus, Ltd., Shoe Manufacturers, Stafford.

PRIVATE SECRETARY required by Senior own initiative and only experienced, competent person should apply. 5-day week. Write—A.E.T.F., 17, Fitzhardinge Street, Portman Square, W.1.

4 21

A

ESTIMATOR with experience in building construction and quantities required by old-stablished firm of Specialist Sub-Contractors, south Manchester. Prospects for man with initia-ive. State experience, age and salary. Box 2475.





THE BRITISH BATA SHOE COMPANY LTD. require experienced draughtsman in store design for the design and detailing of shops for the United Kingdom and overseas. Contributory pension scheme. Accommodation, available in Staff itotel for single man. Apply, giving age, experience and salary required to—Staff Manager, East Tilbury, Essex. 2441

S

ty

es st.

on D., ll-

if ais of

er

le. 513

ng ce el-

ral ley

tc.

ce.

7ay

e-ist-

ec-

ley 498

ex-ood out

in

ers.

Tilbury, Essex.

SENIOR SHORTHAND TYPIST required
Architect/Surveyor's office aged 30/40 approx.
Commencing salary £375; free lunches. One Saturday duty in three. Apply L. Robinson, Thos.
Tilling Ltd., 15, Curzon Street. W.1. 2453

Services Offered

4 lines or under, 7s. 6d.; each additional line, 2s

EXPERIENCED LONDON ARCHITECT with own office able to give assistance to Architects, etc. Gladstone 7355. Box 1640.

TECTRICAL ENGINEER seeks part-time or professional support are invited to write to Box 2386.

SURVEY of Sites and Buildings, Detailed Drawings, Quantities, Variations Measured, Final Accounts, Specifications and Reports. Qualified Surveyor. LIV. 1839.

1352

CODD LETTERING IS ESSENTIAL for Commemorative Wall Tablets, Foundation Stones, etc. Layouts and F.S. templates prepared. Estimates given for the finished work in any material. Renowned as a Lettering Centre since 1934. Sculptured Memorials, 654, Ebury Street, London, S.W.L. Tel.: Sloane 5549.

CHARTERED QUANTITY SURVEYOR with established provincial practice having recently re-opened London office with Junior Partner would welcome opportunity of co-operating with Architects. Box 2256.

RCHITECTS, requiring mature, imaginative Box 2385.

LECTRICAL ENGINEER seeks part-time or

BOX 2285.

LECTRICAL ENGINEER seeks part-time or free-lance appointments. Consulting engineering experience—Inspections, Reports and recommendations, Specifications and supervision during progress. Hospitals, Institutions, Offices, etc. Box 2425.

etc. Box 2425.

SITE Surveys at short notice anywhere; Estate Surveys, 15 acres per week, contoured and plotted, mobile, and fully equipped; Structural Calculations; Roads and Sewer Lay-outs, plansquantities, specifications, run-off calculations and supervision; Sewerage Lift Design; isolated Sewage Disposal Units designed; reliable periodic visits to building and engineering works. All undertaken promptly and efficiently by qualified engineer. Telephone: London, LEE Green 2597.

A RCHITECT and Chartered Structural Engi-neer (University graduate), desires a posi-tion of responsibility, with view to eventual Partnership. Apply Box 2518.

Partnership. Apply Box 2518.

STRUCTURAL DESIGN.—A group of qualified
Designers, experienced in steel, light alloy, reinforced and pre-stressed concrete, offer parttime services for preparation of design schemes, drawings and calculations. Box 2521.

For Sale or Wanted

4 lines or under, 7s. 6d.; each additional line, 2s

ECONDITIONED EX-ARMY HUTS, and manufactured buildings. Timber, Asbestos. Nissen type, Hall type, etc. All sizes and prices. Write, call, or telephone, Universal Supplies (Belvedere), Ltd., Dept. 25, Crabtree Manurway, Belvedere, Kent. Tel.: Brith 2948. 6803

PRACTICE FOR SALE in East Africa. Profits approximately £1,650-1948; £2,800-1949; £4,000-1950; £4,200-1951; £5,650-1952; £10,500-1953. Genuine applicants should write to Box 2427, A.J., stating capital available and goodwill price offered, which will be considered by principal, now in U.K.

EXELINE PRINTING MACHINE. Antiquar-

DYELINE PRINTING MACHINE, Antiquar-ian size, Hall Harding "Sirius" with Developer—£40. 'Phone: Molesey 2815.

Miscellaneous

4 lines or under, 7s. 6d.; each additional line, 2s

A. J. BINNS, LTD., Specialists in the supply and fixing of all types of Fencing, Gates and Cloakroom Equipment. Harvest Works. 96,107, St. Paul's Road, N.I. Canonbury 2061.

FOR FULLY GALVANISED Chain Link always specify MASTERFOIL made to B.S.S. 1722. Fencing & Gates, Ltd., fourteen, Stanhope Gate, London, W.1. Tel, Grosvenor 4527.

PROMPT DELIVERY up to 3/400,000 multicoloured Facing Bricks offered. Minimum
orders 50,000 lots. Quotations to site submitted
following firm enquiries. Box 2416.

OFFICES to let, W.1. Self-contained basement.
two rooms, washroom & W.C. 500 square
feet, professional use only, £250 per annum inclusive, Architect or Engineer. Pad. 5320. 2451

AUTHORS invited submit M88 all types (including Poems) for book publication. Stockwell Ltd., Elms Court, Ilfracombe. (Estd. 1898.)
2482

Educational Announcements

4 lines or under, 7s. 6d.; each additional line, 2s.

R. I.B.A. and T.P.I. EXAMS.—Stuart Stanley
G. A. Crockett, M.A./B.A., F./F.R.I.B.A.,
M./.A.M.T.P.I. (Prof. Sir Patrick Abercrombie in
assn.), prepare Students by correspondence.
10, Adelaide Street, Strand, W.C.2. TEM. 1603/A

R. I.C.S., I.Q.S., and I.A.A.S. Postal Courses of all exams. including B.I.C.S. Prelimi-nary and I.Q.S. Special Test conducted by the Ellis School (Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A.), 103B. Old Brompton Road, S.W.7. KEN. 4477. Descriptive Booklet on request

LONDON COUNTY COUNCIL.

QUALIFYING EXAMINATION FOR THE OFFICE OF DISTRICT SURVEYOR.

An examination for certificates of proficiency to perform the duties of DISTRICT SURVEYOR will be conducted in London in the week commencing 18th October, 1954. The minimum age limit for candidates is 25.

Possession of this certificate is necessary for appointment to positions as District Surveyor (Salary scale £1,215 to £2,200 a year) or as Assistant District Surveyor (salary scale £1,027 to £1,168 a year).

Subsequent examinations will be held annually. Apply to The Architect to the Council (AR/ED/PH), County Hall, Westminster Bridge, S.E.I., for application forms and further particulars. (510)

COURSES for all R.I.B.A. EXAMS.
Postal tuition in History, Testimonies, Design, Calculations, Materials, Construction, Structures, Hygiene, Specifications, Professional Practice, etc. Also in general educational subjects.

Principal: A. B. Waters. M.B.E., G.M., F.R.I.B.A. 1939 OLD BROMPTON RD., LONDON, S.W.7 Phone: KEN 4477

MODELS

ESTAB. 1883.

John B. THORP RY 98 GRAY'S INN ROAD, TOWN PLANNING
PUBLIC BUILDINGS
ESTATES and
INTERIORS TELEPHONE: HOLBORN IOU





STONE, MARBLE & GRANITE MASONRY

Architectural Lettering, Building, Church Cleaning and Restoration

PRESTONS

(Nunhead) Ltd.

109 Gibbon Rd., Nunhead S.E. 15. Phone: NEWcross 0481

-HEATING

HOT WATER SUPPLIES AND VENTILATION

for

INDUSTRIAL . COMMERCIAL AND PRIVATE BUILDINGS

CHAS. P. KINNELL

& CO. LTD

65, 65a SOUTHWARK ST. LONDON, S.E.I.

90

Phone : WAT 4144

WARERITE

VENEERED BOARD

The robust structural material for all types of fabrication.

WARERITE

HANDY PANELS

For renovating existing tables and counters.

WARERITE

PLASTICS are made for the job in

a full range of patterns. Write for your copy of:
"Installing Warerite
Laminated Plastics"

WARERITE LIMITED . WARE . HERTS WA.B

THE TYROL HAND OPERATED Pat. No. 510492

FOR APPLYING TYROLEAN

OPEN TEXTURE (ROUGH CAST) **FACINGS**

- LIGHT WEIGHT
- RAPID COVERAGE
- SIMPLE TO USE
- EASY TO CLEAN

PRICE £9.18.0 each delivered free any part of U.K.

Enquiries TYROL SALES LTD, 2 St. Benet

Chambers, la Fenchurch Street, London, E.C.3. ENGLAND Tel: MANsion House 2735.

Steel furniture for Church and Municipal Bodies,

Canteens, Cafes, Sports Clubs

FOLD - A - BYE
NEST - A - BYE

Sebel Products Ltd, 177 West Street, Erith, Kent

Alphabetical Index to Advertisers

1 1 1010 1 1 1 1	PAGE	**** * * * * * * * * * * * * * * * * * *	PAGE		PAGE
Accordo Blinds, Ltd	xlviii	Fibrolene, Ltd.	lxxxii	Permanite, Ltd	-
Acrow Engineers, Ltd	xxxii	Finch, B., & Co., Ltd		Phoenix Timber Co., Ltd	lxvii
Airscrew Co. & Jicwood, Ltd	xxix	Floor Renovations, Ltd	lxxx	Pickerings, Ltd	xxxviii
Allen, W. G. & Sons (Tipton), Ltd	xviii	Ford & Walton, Ltd.	xxiv	Dwogtong (Munhood) I td	
Aluminium Union, Ltd.	xix	Franki Compressed Dil. Co. T.d.		Prestons (Nunhead), Ltd	lxxxix
Architectural Press, Ltd., The lxxvii	. AIA	Franki Compressed Pile Co., Ltd	vii	Prodorite, Ltd	
		Frenger Ceilings, Ltd	xiv	Radiation, Ltd.	
Arens Controls, Ltd.	XVII	Gas Council, The		Rawlplug Co., Ltd., The	liv
Ascot Gas Water Heaters, Ltd	x1	General Electric Co., Ltd., The	li	Redpath Brown & Co., Ltd	lx
Associated Fire Alarms, Ltd	lxxxi	Grange-Camelon Iron Co., Ltd., The	xliv	Pontokil I td	
Associated Lead Mfrs., Ltd	XV	Gulf Radiators, Ltd	lxxvi	Rentokil, Ltd.	xci
Barking Brassware Co., Ltd	lxxxiv	Gyproc Products, Ltd.	lv	Richardson & Starling, Ltd	lxxxiv
Batley, Ernest, Ltd.	lxxxiv	Hall John & Sone (Drietal & Landon)	1.0	Robbs Cement Enamel Finishes, Ltd	xlvi
		Hall, John, & Sons (Bristol & London),		Robertson Thain, Ltd	xii
Bawn, W. B.	lviii	Ltd.	lxx	Roller Shutters, Ltd	lxxix
Birmid Industries, Ltd	xxii	Halstead, James, Ltd	ix	Ruberoid Co., Ltd., The	xxvii
Black Sheathing Felt Campaign	lvii	Harvey, G. A. & Co. (London), Ltd		Rubery, Owen & Co., Ltd	xxviii
Booth, John, & Sons (Bolton), Ltd	zliz	Highways Construction, Ltd	xliii		
Boulton & Paul ,Ltd		Hill, E., Aldam & Co., Ltd.	lxxx	Sanderson, A., & Co., Ltd	lii
Blackburn, Thos., & Sons, Ltd		Hobbs Hart & Co I td		Sebel Products, Ltd	lxxxix
Braby, Fredk., & Co., Ltd.		Hobbs, Hart & Co., Ltd.	xei	Secomastic, Ltd	xlvii
		Holophane, Ltd.	XXI	Shannon, Ltd., The	lxxi
Brandts, Wm. & Co. (Wallply), Ltd	xci	Hope, Henry, & Sons, Ltd.	lixf	Sharp Bros. & Knight, Ltd.	lxxviii
British Electricity Authority	xlviii	Hydran Products, Ltd	viii		
British Insulated Callenders' Cables, Ltd.	XXXXIX	Jenson & Nicholson, Ltd	XX	Silexine Paints, Ltd.	xlv
British Lead Mills, Ltd	XXX			Smith, Saml., & Sons, Ltd	IXXX
British Paints, Ltd	XXXIV	Kay, Fredk. (Eng.), Ltd.	lxxix	Snowcem	XXV
British Plaster Board, Ltd., The		King, Geo. W., Ltd	lxxiii		lxxxviii
British Plimber, Ltd		Kinnell, Chas. P., & Co., Ltd	Ixxxix	Southerns, Ltd	lxiv
		Kwikform Ltd	-	Speedwell Gear Case Co	lxxvii
Broad & Co., Ltd	***	Lacrinoid Products, Ltd	as loss i	Spencer, Lock & Co., Ltd. (Royal Board)	lxxxix
Celotex, Ltd	IIIXXX	Lacrinold Froducts, Ltd.	xlvi		
Cement Marketing Co., Ltd	XXV.	Laing, John, & Son, Ltd.	xcii	Spirax-Sarco, Ltd.	lxxi
Chance Bros. ,Ltd.		Lead Sheet & Pipe Council		Steel Radiators, Ltd	lviii
Colt Ventilation, Ltd.	xlii	Leaderflush, Ltd	· lxvi	Stott, James, & Co. (Engrs.), Ltd	
Colt, W. H. (London), Ltd.	liii	Limmer & Trinidad Lake Asphalte Co.,		Stramit Boards, Ltd	lix
Compactom, Ltd	lxiii	Ltd	lii	Tarmac, Ltd	
		Lindsays Paddington Ironworks (1948).	***	Taylor, Robt., & Co. (Ironfounders),	
Concrete, Ltd.	lxix	Ltd.	lxxxiv		1
Conder Engineering Co., Ltd	lxx			Ltd	lxxxiii
Crane, Ltd.		Linoleum Manufacturers' Association	XXXI	Thermacoust, Ltd	1
Croggon & Co., Ltd.		Loft Ladders, Ltd.	lxxii	Thermalite, Ltd	xi
Crompton Parkinson, Ltd	lvi	London Brick Co., Ltd	-	Thorn, J., & Sons, Ltd	liv
Cuprinol, Ltd.	lxxxi	McCarthy, M., & Sons, Ltd		Thorp, John B	lxxxix
Cuthell, D. M., & Co., Ltd.	xci	Mallinson, Wm., & Sons, Ltd	-	Timber Fireproofing Co., Ltd	lxxvii
Denny, Mott & Dickson, Ltd.	X X	Marley Tile Co., Ltd.		Tretol, Ltd.	144.41
Doulton & Co., Ltd.	lxxiv	Merchant Trading Co., Ltd., The	xxvi	True-Flue, Ltd.	xvi
	IXXIV	Motorpolitan Consents Works I 4d		Thereard Company Steel Co. 144	
Dreadnought Fireproof Doors (1930),		Metropolitan Concrete Works, Ltd	lxxv	Trussed Concrete Steel Co., Ltd	lxv
Ltd	-	Mills Scaffold Co., Ltd	ii	Turner's Asbestos Cement Co., Ltd	
Dunn, Alexander, Ltd	lxxiv	M.K. Electric, Ltd	XXXV	Turner, Chas., & Son, Ltd	lxxvi
Ellis, John, & Sons, Ltd.	xxiii	Monk, A., & Co., Ltd	lxxiii	Turner, King & Shephard, Ltd	lxxxiv
Ellis School of Architecture	lxxxix	Morane Plastic Co., Ltd	lxxxii	Tyrol Sales Ltd	lxxxix
Ellison, George, Ltd	lxxxix	Mullen & Lumsden, Ltd	xxxvi	Val De Travers Asphalte Paving Co.,	
Esavian, Ltd.	lvi	Myton, Ltd.	TYYALI		222
		Novohotel Apphalta Co. I td. Wha		Ltd., The	111
Evode, Ltd.	V	Neuchatel Asphalte Co., Ltd., The		Walpamur Co., Ltd., The	vi
Expandite, Ltd.	xxxvii	Newalls Insulation Co., Ltd	xiii	Warerite, Ltd	lxxxix
Falk Stadelmann & Co., Ltd	xli	Parker, Winder & Achurch, Ltd	lxxxii	Wheatly & Co., Ltd	
FEB (Gt. Britain), Ltd.	lxviii	Peglers, Ltd.	lxxxiii	Wood, Ed., & Co., Ltd	iv
Fibreglass, Ltd		Penfold Fencing & Eng. Co., Ltd	lxxii	Zine Alloy Rust Proofing Co., Ltd	xe
Don A		- (***	m .	-	

For Appointments (Wanted or Wacant), Competitions Open, Drawings, Tracings, etc., Education, Legal Notices, Miscellaneous Property, Lands and Sales, Ixxxvi, Ixxxvii, l.

YOURS for the Asking

LEARN HOW TO:-

SPECIFY,

TEST,

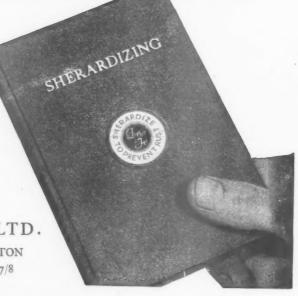
USE,

SHERARDIZING

ZINC ALLOY

RUST PROOFING CO. LTD.

SHAKESPEARE STREET, WOLVERHAMPTON TELEPHONE: WOLVERHAMPTON 20647/8 ALSO AT LONDON & ROCHDALE.



AGE

XVIII

IVVIII

ILVVIII

ILVXXIX

XXIII

ILVXIX

XXIII

ILVXIX

XXIII

ILIX

XXIII

ILIX

XXIII

Rente and s

REN

FE

KILLS



Rentokil Timber Fluid kills beetle, egg and grub and successfully prevents all future attack. Use the proven insecticide and be free of Woodworm.

For expert advice, write, call or phone:

WOODWORM AND DRY ROT CENTRE (A.J.), 23 Bedford Square, Lundon, W.C.I Tel: LANgham 5455/6

RENTOKIL FUR NITURE CREAM - the insecticidal polish whic protects against Woo dworm attack and in addition gives a beautiful, durabl gloss with little effort—will not "bloom" or fingermark.

RENTOKIL

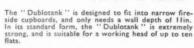
FETCHAM, LEATHERHEAD, SURREY

Meeting Modern Requirements

PATENT APPLIED FOR

IS SUITABLE FOR INSTALLATION IN BUILDINGS WITH

HEAD OF WATER UP TO 10 FLATS!

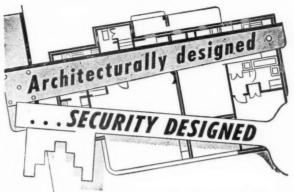


- Low initial cost. Costs only a few shillings more than ordinary circular tank of equal capacity.
- The increased strength of the new "Dublotank" has been made possible by new methods of manufacturing with no increase in price.
 - Designed to fit any fireside cupboard, thus giving higher efficiency because of short flow and return piping from the boiler.
 - Suitable for installation in buildings with head of water up to ten flats.
 - ls supplied with standard immersion heater boss and plug; fitted felt lagging now part of standard model.

SPECIFICATION

Size.—Hin. high by 23in. wide, by 11in. back to front, and made to British Standard Specifications. Maximum test pressure 100 lbs. per square inch. Unit complete with three lin. tappings for flow, return and hot drawoff, also one 2½in. tapping with plug for immersion heazer.

"QUICKHEAT" COPPER BOILERS 34 QUEEN STREET, EDINBURGH PHONE: CALEDONIAN 7285



Buildings of sufficient importance to be designed by an Architect should obviously contain adequate provision against unlawful entry.

That is best done by specifying Hobbs Hart security equipment as installed in such prominent places as

* BANK OF ENGLAND TOWER OF LONDON * HOUSES OF PARLE

and leading Banks and commercial buildings.

We shall be glad to consult with you on all your security problems.



Staffa Road, Leyton, London, E.10 Showrooms - 76 Cheapside, London, E.C.2.

The "ALL WOO ARDEO



BUY WISELY ~ BUY RIGHT YOUR PROBLEMS SOLVED BY~FIBONITE

Sole Selling Agents in the U.K.

WM. BRANDTS (WALLPLY) LTD., 36, Fenchurch Street, London, E.C.3.



FACTORIES. Factory at Darlington for Patons and Baldwins Ltd.





SCHOOLS. Kells Secondary Modern School, Whitehaven, West Cumberland.



OFFICE BUILDINGS. Offices for the London, Cape and New York Trust (Pty.) Limited.



HOSPITALS. King George V Merchant Seaman's Memorial Hospital, Malta.



BANK PREMISES. Bank premises in Mauritius for Barclays Bank (Dominion, Colonial and Overseas) Port Louis.



JOHN LAING AND SON LIMITED

Building and Civil Engineering Contractors

GREAT BRITAIN, CANADA

UNION OF SOUTH AFRICA, RHODESIA

