ARCHIT

NEFMAI



tandard

contents

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

NEWS and COMME.NT

Astragal's Notes and Topics

News

Diary

Societies and Institutions

TECHNICAL SECTION

Information Sheets Information Centre Current Technique Working Details

Questions and Answers

Prices

The Industry

CURRENTBUILDING

Major Buildings described: Details of Planning, Construction, Finishes and Costs

Buildings in the News Building Costs Analysed

Architectural Appointments Wanted Vacant and

[VOL. 122 No. 31501 PRESS THE ARCHITECTURAL 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.I. 'Phone: Whitehall 0611

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

glossary of abbreviations of Government Departments and Societies and Committees kinds, together with their full address and telephone numbers. The glossary is pubof all kinds, together with their full address and telephone numbers. lished 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. Sloane 8266 IHVE Sloane 1601/3158

IIBDID Incorporated Institute of British Decorators and Interior Designers Incorporated Institute of British Decorators and Interior Designers.

Drayton House, Gordon Street, W.C.1. Euston 2450

Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783

Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street,

Strand, W.C.2. Temple Bar 4071 ILA I of Arb

Institute of Builders. 48, Bedford Square, W.C.1. Temple Bar 4071
Institute of Quantity Surveyors, 98, Gloucester Place, W.1. Welbeck 1859
Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3. Avenue 6851
Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172
Institute of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128
Lead Development Association. Eagle House, Jermyn Street, S.W.1. Whitehall 7264/4175 IOB IQS IRA

LDA Whitehall 7264/4175

London Master Builders' Association. 47, Bedford Square, W.C.1. Lead Sheet and Pipe Council. Eagle House, Jermyn Street, S.W.1. LMBA Museum 3891 LSPC Whitehall 7264/4175

MARS MOA MOE

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
Ministry of Education. Curzon Street House, Curzon Street, W.1. Mayfair 9400
Ministry of Health. 23, Savile Row, W.1. Mylitehall, S.W.1. Mylitehall 3400
Ministry of Housing and Local Government. Whitehall, S.W.1. Whitehall 4300
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
Ministry of Transport. Berkeley Square House, Berkeley Square, W.1. Mayfair 9494
Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 7611
Natural Asphalte Mine Owners and Manufacturers Council. MOH MOHLG MOLNS MOS MOT MOW

NAMMC National Association of Shopfiters. 9, Victoria Street, S.W.1. Abbey 1010
National Buildings Record. 31, Chester Terrace, Regent's Park, N.W.1. Welbeck 0619
National Council of Building Material Producers. 10 Storey's Gate, S.W.1. Abbey5111 NAS NBR NCBMP

National Employers Federation of the Mastic Asphalt Industry.

21, John Adam Street, Adelphi, W.C.2. Trafalgar :
National Federation of Building Trades Employers. 82, New Cavendish Street
W.1. Langham 4041/4 Trafalgar 3927 NFBTE Langham 4041/4054

National Federation of Building Trades Operatives. Federal House
Cedars Road, Clapham, S.W.4. Macaulay 44:
National Federation of Housing Societies. 12, Suffolk St., S.W.1. Whitehall 169
National House Builders Registration Council. 82, New Cavendish Street, W.1. NFBTO Macaulay 4451 NFHS Whitehall 1693

NHBRC Langham 4341 National Physical Laboratory. Head Office, Teddington. Mo National Smoke Abatement Society. Chandos House, Buckingham Gate, N.P.L. Molesey 1380

NSAS Abbey 1359 NT National Trust for Places of Historic Interest or Natural Beauty.

Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 0211
Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245
Reinforced Concrete Association. 94, Petty France, S.W.1. Abbey 4504
Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. PEP RCA

RIAS Fountainbridge 7631 Royal Institute of British Architects. 66, Portland Place, W.1. Langham 5721 Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1. Whitehall 5322/9242 RIBA RICS

Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1. Whitehall 3935 Royal Society. Burlington House, Piccadilly, W.1. Regent 3335 Royal Society of Arts. 6, John Adam Street, W.C.2. Trafalgar 2366 Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1. Sloane 5134 Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101 Society of British Paint Manufacturers. Grosvenor Gardens, S.W.1. Victoria 2186 Society for Cultural Palations with the USSP. 144 Kenington Structure London W.8. RFAC RS RSA RSI RIR

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

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

Structural Insulation Association. 32, Queen Anne Street, W.1. Langham 7616 Scottish National Housing. Town Planning Council.

Hon. Sec., Robert Pollock, Town Clerk, Rutherglen. Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. Langham 7616 SIA SNHTPC

SPAB Holborn 2646 **TCPA**

Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.
Temple Bar 5006 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. Zinc Development Association. 34, Berkeley Square, W.1. TDA City 4771 Victoria 8815 TPI TTF City 5051

Whitehall 4341 WDC Grosvenor 6636 ZDA

MILLPROPS make it

a FA57

job

ТУРЕ	HEIGHT		APPROX.	SAFE LOAD IN TONS	
	FULLY	FULLY EXTENDED	WEIGHT IN LBS.	FULLY	FULLY EXTENDED
Α	5 ft. 7 ins.	9ft. 9ins.	50	5.00	4.12
В	8 ft. I in.	12 ft. 3 ins.	58	5.00	3.57
С	10 ft. 7 ins.	14ft.9ins.	72	5.00	2.17

Head Plate for Beam Prop showing Specially Strengthened Web.

- Robust and dependable
- High Tensile Steel Pin
- Adjusted by Nut and Handle
- In three sizes
 Standard and
 Beam Types
- Individually tested to Safe Load

AVAILABLE FOR SALE OR HIRE IMMEDIATE DELIVERY MILLS SCAFFOLD CO. LTD

(A subsidiary of Guest, Keen & Nettlefolds, Ltd.)

Head Office: TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON, W.6. (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

DIFF TER UTH



Some of the Architects who have specified

COLT

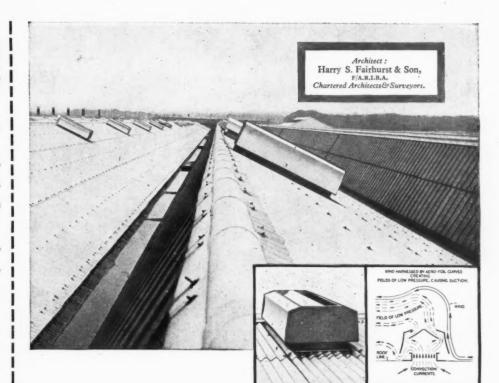
ventilation

- H. A. Rees, A.R.I.B.A.
- A. Budge Reid, A.R.I.B.A., A.M.T.P.I., A.R.I.A.S.
- Sir Percy Thomas & Son, F./A.R.1.B.A.
- W. H. Watkins, Grey & Partners, F./F.R.I.B.A.
- Alan W. Pipe & Sons,
- L.R.I.B.A.

 Donald P. Reay, A.R.I.B.A.,
- M.SC.B.ARCH.
 Sainsbury & Chamberlain,
- L./F.R.I.B.A.

 Norman & Dawbarn,
- F.R.I.B.A.
- W. J. Reed, F.R.I.B.A. Robert Sharp & Son.
- A./L.R.I.B.A.
 Sydney G. Scales,
- A.R.I.B.A.
 A. J. Seal & Partners,
- F./F.R.I.B.A.

 J. W. Spink, F.R.I.B.A.



LEYLAND MOTORS LTD. LEYLAND

L. Hugh Wilson, O.B.E., A.R.I.B.A., A.M.T.P.I. Canterbury City Architect

Frederick Sheldon, F.R.I.C.S.

Thomson, McCrea & Sanders, F./A.R.I.B.A.

Priestman & Lazenby, A./A.R.I.B.A. Reavell & Cahill,

Reavell & Cahill, F./F./A.R.I.B.A.

Spence & Price, A./A.R.J.B.A.

Roper Spencer & Hall,

F./A.I.A.A.

Norval R. Paxton, M.C.,
F.R.I.B.A.

J. Mansell Jenkinson & Son, F./A.R.I.B.A.

C. A. Pilkington, L.R.I.B.A.
Nottingham City
Architect

E. W. Roberts, F.R.I.B.A. Nottinghamshire County Architect

R. Scrivener & Sons,

C. H. Simmons, A.R.I.B.A.

A. C. H. Stillman, F.R.I.B.A.

Francis J. Meeson,
A.R.I.B.A.

W. S. Hattrell & Partners, F./A./A.R.I.B.A.

A. E. Powell, A.R.I.B.A., A.I.STRUCT.E.

P. Nolan Powell & Alport, A./A.R.I.B.A. . . . one of over 7,000 major industrial organisations

with natural ventilation planned by

COLT

In considering the ventilation of the giant new factory for Leyland Motors the Architect required a system of air extraction which would not only provide good distribution of ventilation, but would also be maintenance free, fully rain-proof and would not detract from the appearance of the building.

The COLT SRC/3080 Natural Controllable High Duty Roof Extractor Ventilator was selected as it adequately filled all of these requirements and 160 of these ventilators were subsequently installed.

COLT'S wide experience in the ventilation of all types of buildings both new and existing is at your disposal. Why not take advantage of it?

FREE MANUAL, with full specifications of the wide range of Colt Ventilators is available on request from Dept. A34 150



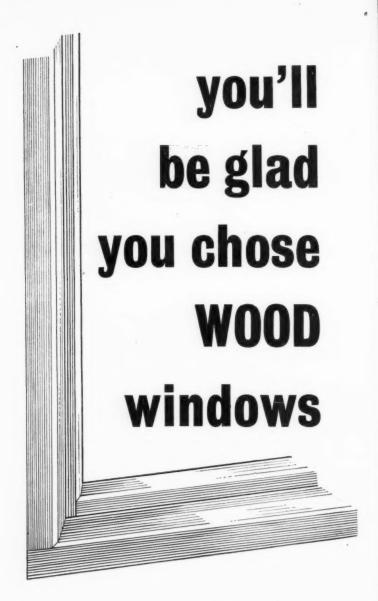
COLT

THE SPECIALISTS IN PLANNED NATURAL

VENTILATION

COLT VENTILATION LTD • SURBITON • SURREY • TELEPHONE: ELMbridge 6511-5

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



Especially when manufactured by



SHARP BROS. & KNIGHT LTD.

London Office: LION HOUSE, RED LION ST., RICHMOND, SURREY.

Head Office and Works: BURTON-ON-TRENT, STAFFORDSHIRE.

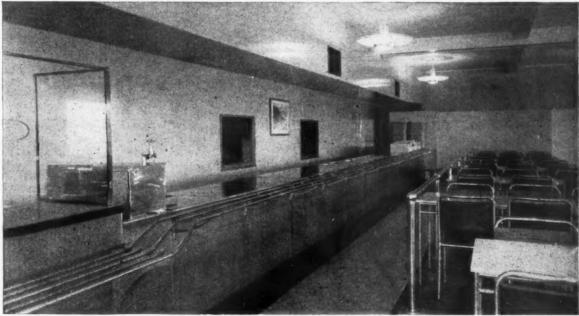
There is no substitute for ...



IMPACT Trade Mark

528

The most widely used adhesive for bonding in situ



By courtesy of Ford Motor Company Ltd., Dagenham, Essex. The photograph shows the Canteen Servery.

EVO-STIK IMPACT Adhesive 528 has been used exclusively for bonding 'Formica' to vertical and horizontal surfaces, in the new styled Canteen of Ford Motor Company Ltd. The terrific bond stength of EVO-STIK IMPACT Adhesive 528 and the quick setting time has achieved outstanding results for permanently securing laminated plastic sheeting.

It is simple to use on site, provides quick and easy installation without the use of sustained pressure and is acid resistant. It is immune to high temperatures and is water and oil proof-there is no substitute for EVO-STIK IMPACT Adhesive 528.

Available in gallon and quart containers from all reputable Builders Merchants and 'Formica' Distributors,



EY.

RE.

OUR WORD-YOUR BOND

Write or phone for Instruction Sheet No. 106



ficially recommenaeu, FORMICA' De La Rue Laminated Plastic

EVO-STIK 'IMPACT' is the Registered Title of Adhesives manufactured by :-

EVODE LTD. (INDUSTRIAL ADHESIVES DIVISION) GLOVER STREET, STAFFORD Telephone: 1590/1/2 Telegrams: Evode, Stafford London Office: 1 Victoria Street, London, S.W.1.

SPECIALISTS IN SYNTHETIC RUBBER ADHESIVES



Bartrev the chipboard supplied in any length

Bartrev is now widely used in all kinds of building. It is shown here being laid on TROFDEK roofing at Deering Secondary School, Wilford, Nottingham, designed by R. M. Finch, O.B.E., M.I.C.E., City Engineer.

The board was supplied by William Evans and Company Limited.

For further information write to one of the Bartrev distributors any of whom can supply to any part of the country.

THE MERCHANT TRADING CO. LTD. Effingham House, Arundel Street, London WC2 Telephone: Temple Bar 5303 (8 lines)

WM. EVANS AND CO. (Distributors) LTD.

52 Stanley Street, Liverpool 1 Telephone: Central 5171

THE METAL AGENCIES CO. LTD. Avon Works, Winterstoke Road, Bristol 3 Telephone: Bristol 64611

MONTAGUE L. MEYER LTD. 14 Buckingham Street, Adelphi, London WC2 Telephone: Trafalgar 7766

L. P. THOMAS CO. LTD. 12 Dixon Street, Glasgow C1 Telephone: Central 6092-3

H. T. TENNISON AND CO. LTD. 21 Story Street, Hull Telephone: Hull 36902-3

THE BRITISH DOOR MARKETING CO. LTD. Shobnall Road, Burton-on-Trent Telephone: Burton 4851







Painting Asbestos Cement?

Here's a chap who knows Tretolin is a "natural" for the job. It's not just an ordinary painting problem because asbestos cement is alkaline and attacks ordinary paints. Not Tretolin though—Tretolin is one of the toughest paints available and stands up to alkalinity and the most severe conditions—even on roofs. Above all it's made *specially* for painting asbestos cement—without special primers—so write today for leaflet No. TA/2 and colour range.



NO SPECIAL PRIMERS

Available in Munsell Colours

TRETOL LTD., TRETOL HOUSE, THE HYDE, LONDON, N.W.9.

Tel: Colindale 7223 (10 lines)

Works: SLOUGH



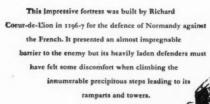
Messrs. Owen Owen of Coventry

Architects Hellberg & Harris, F/A.R.I.B.A.

GEORGE PARNALL

AND COMPANY LIMITED

CRAFTSMEN AND DESIGNER'S



the keep of the chateau gaillard

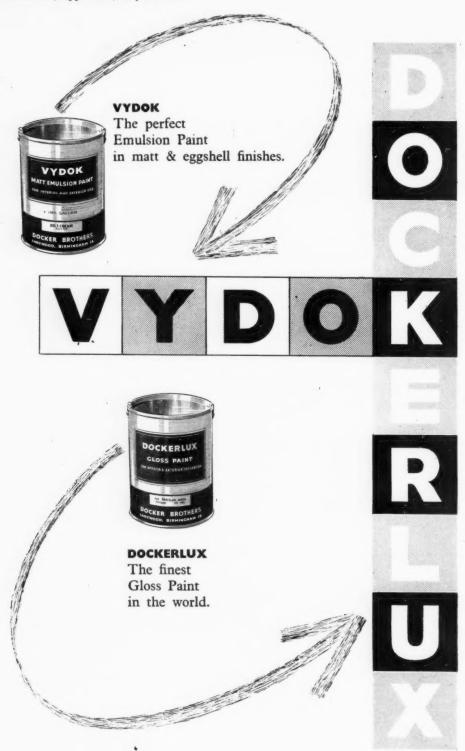
Comfortable and efficient circulation is achieved in building today using lifts and escalators by



J&E Hall Limited

Lift, Escalator and Refrigerating Engineers

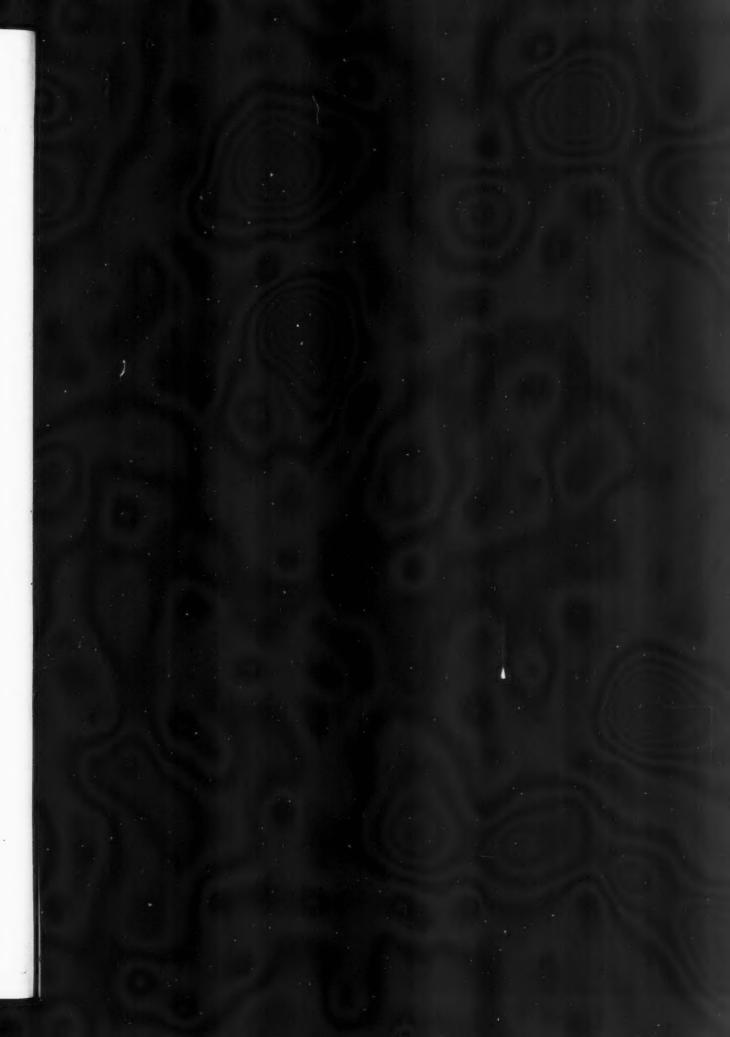
DARTFORD KENT



We have been sending a lot of our new colour cards out recently. If,you did not get your copies please let us know.

DOCKER BROTHERS, LADYWOOD, BIRMINGHAM, 16.

LONDON SHOWROOMS 17 BERNERS ST., W.I.





fresh views on flooring

expressed by

F.H.K. HENRION (in this issue)
OLIVER COX
FELLO ATKINSON
HUMPHREY SPENDER
PRUNELLA CLOUGH
LAURENCE SCARFE

and edited by
Sir Hugh Casson R.D.I., M.A., F.R.I.B.A.

In seeking a theme for a series of features on fooring as an integral element of interior design, the manufacturers of Semastic Tiles commissioned Sir Hugh Casson to make his recommendations.

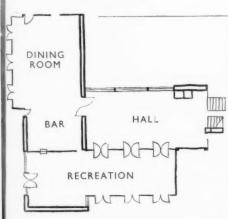
He proposed that a number of leading designers be given the opportunity to express their views on this matter by designing floors for a number of imaginary projects which he himself would suggest by way of initial plans and briefings. He has, therefore, in association with these designers, prepared plans for: an Airport Waiting Lounge

a Youth Hostel Dayroom · a Works Canteen a Restaurant · a Clinic · a School Entrance Hall Each of the six designers selected has been invited to choose one of these projects and to consider it from the aspect of floor-design in order to demonstrate the scope of Semastic Decorative and Vinyl Asbestos Tiles.

The materials which may be used are as follows:

Semastic Tiles: Decorative and Vinylex grades. These are thermo-plastic, resin-bonded tiles which are available in a very attractive colour range, in plain and marbled finishes. By cutting to shape and by contrasting and blending colours, design possibilities are virtually unlimited.

Vinyl Asbestos grade. One of the latest developments in floor surfacing, Vinyl Asbestos Tiles are designed to combine the greatest visual appeal with years of faultless service. In devising the balanced range of nineteen colours there has been close collaboration with the British Colour Council.



C4 5 SE

THE PROBLEM AS SET TO F.H.K. HENRION

This project is a Hostel for agricultural students and workers. It is linked up with a rural development plan and is an attempt to provide some of the amenities of urban living for those men and women who work on the land. As the accommodation is primarily for single men and women who are not often catered for it was thought that it should be concentrated, as in a block of flats, so that the various services and amenities could be shared; a certain amount of accommodation is also provided for newly married couples and childless couples.

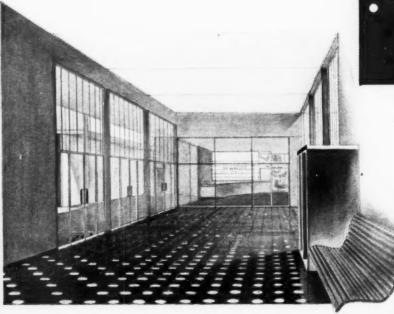
Dining and recreation facilities are combined, though there is a separate rest room for women and a smoking room for men. Storage space is provided for each resident for trunks and other belongings. There is also a flat for a resident supervisor and another for a caretaker and his family. There is a large garage and work-shop facilities for repairing tractors and other farm vehicles.

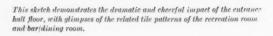
The hostel is set in its own grounds with a carefully laid out garden. The perspective view is from the hall looking into the recreation room and the dining room, which has its own bar. Recreation may often take the form of organised games and dancing, so a hard-wearing, smooth surface is an asset.



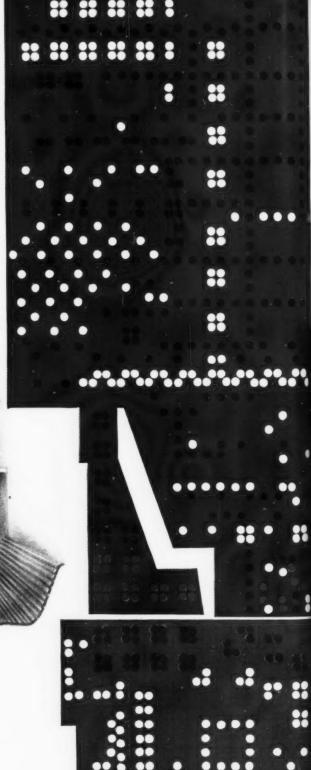
F.H.K. Henrion

YOUTH HOSTEL DAY ROOM





Reprints of this series can be obtained from :
J. A. Hewetson & Co. Ltd
Hollis Bros. Ltd
,
Horsley Smith & Co. (Hayes) Lta
Pilkington's Asphalte Co. Ltd
Semtex Ltd
The Trinidad Lake Asphalt Co. (North Western) Ltd
The Limmer & Trinidad Lake Asphalt Co. Ltd
The Western Trinidad Lake Asphalt Co. Ltd



The basic unit is a 9-inch square tile with a coloured disc set in off-centre so that two sides of the tile become its tangents. This simple basic device allows for an extraordinarily high number of different combinations, i.e. four tiles can be put together in 256 combinations, each resulting in a different pattern. A pattern of more tiles will accordingly have a scope of practically countless pattern-forming combinations. Naturally this technique involves a great deal of precise work by highly skilled craftsmen in cutting the tiles and inserting the coloured discs. It would not be proposed on a large scale where economy was a first consideration.

In the examples shown three adjacent floors are laid in three colours and the basic tile of each floor has a disc either black or white, or one of the adjacent floor colours. Thus it is made possible that each floor surface can be carried on both in colour and in pattern into the neighbouring floor. It is possible to break up the floor area of a large hall into more intimate areas without losing its unity altogether.

The attempt has been made to have a formal pattern in the entrance hall, which loses itself halfway in the area whilst a dominant white pattern carries across the black into the terracotta flooring of the bar and dining-room.

As the glass walls of the hall make it possible to look into the other two rooms, the fact that both the terracotta and blue pattern break into the black floor surface, and that in turn the black floor surface is continued into the other two rooms, both combine and separate the three floor areas visually; a result which follows on the floor the architect's intention and conception of the relationship of walls and spaces.

From the examples shown it can easily be seen how this simple tile device can be arranged in formal symmetrical patterns or in rather carpet-like arabesques, or a combination of the two; it can add to the formal character of a building, or can make a large space informal by breaking it up into pattern, texture and colour.

Sir Hugh Ga This very striking an that, even when work a repetitive from the are virtually no limit when the imagination with the skill of the le combinations of the b of strong contrasts is that it effectively can

Sir Hugh Casson sums up

This very striking and well-argued design demonstrates that, even when working within the apparent restrictions of a repetitive floor tile unit and a stock range of colours, there are virtually no limits to the freedom of expression possible when the imagination of a designer is happily combined with the skill of the laying team. In this scheme innumerable combinations of the basic device are possible and the use of strong contrasts is not only decorative but practical in that it effectively camouflages dirt and footmarks—an important point in a room of this kind. Obviously—as the designer himself points out—so intricate a pattern involves a great deal of work and skill in laying, and in some wastage of materials. There are occasions and places, however, as in this case, when additional expense is justified by the decoratively dramatic results obtained.



Please write for fully illustrated leaflet

(Granwood Flooring Co. Ltd. is a member of British Steel Constructions Group of Companies).

* GRANWOOD FLOORING CO

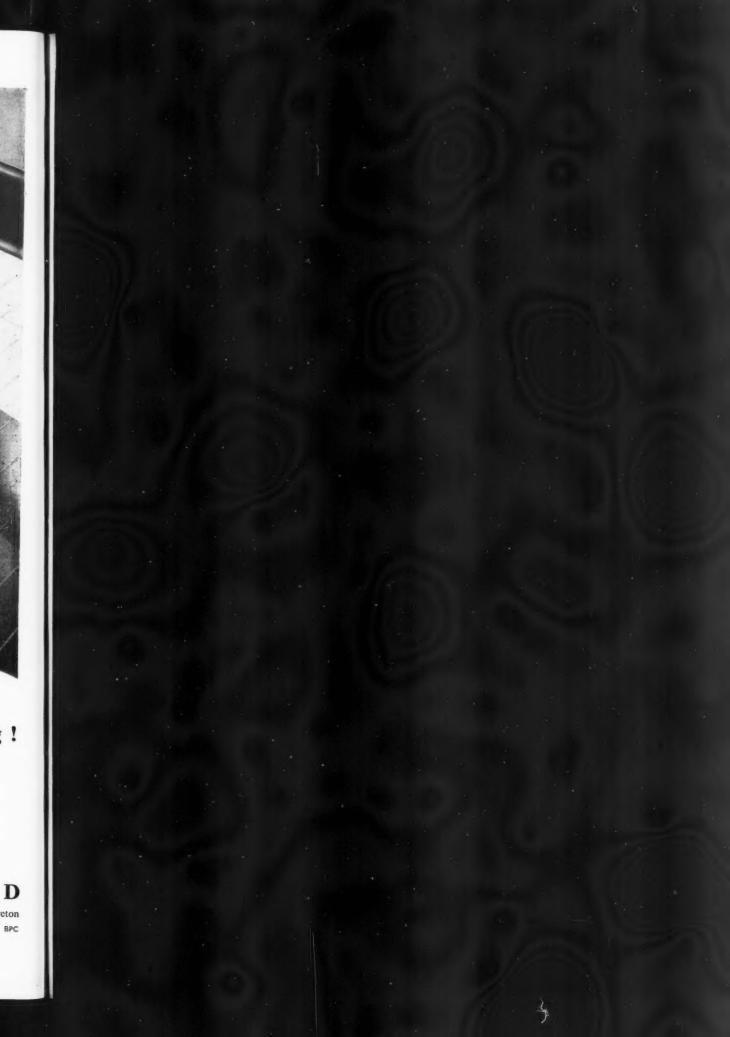
RIDDINGS · DERBY

Telephone: Leabrooks 341/2/3 Telegrams: Granflor, Alfreton

London and Registered Office: 9 CLARGES STREET, W.1 Telephone: GROsvenor 5469 (2 lines)

BPC

LTD





CLAY TILES —

for eight centuries

England's roof...

In a mechanical world it is refreshing to realise that the method of manufacture of Hand-made clay tiles has changed little over the centuries, each tile being moulded individually and shaped by hand alone. Competition demands a more modest alternative and the machine-made tile provides the answer. Hand-made or machine-made, you can be sure that centuries hence the tiles will still be doing their job, handsomely, steadfastly. There's nothing more supremely reliable than a clay tiled roof.

CLAY lasts

ACME clay roofing tiles combine the traditions and experience of centuries with modern manufacture and service. They are made from Staffordshire Etruria marls—acknowledged to be the best clay in the world for tile manufacture. Their colour, burnt in at high temperatures is absolutely permanent. Their superior strength saves on site breakage and maintenance. ACME tiles are available, with immediate delivery from stock, in a wide range of colours with fittings to match. Ask for the ACME catalogue, containing much valuable technical information.



Private residence at Mollington.

ACME clay roofing tiles

DOWNING'S range of roofing tiles includes:—

ACME M.M. ROOFING TILES
ACME SANDSTORM ROOFING TILES
ACME HAND-MADE SANDFACED & ACME REDFLOOR QUARRIES.

G. H. DOWNING & Co. Ltd. (Dept. C1), Box No. 3, BRAMPTON HILL, NEWCASTLE-UNDER-LYME, Staffs.

* Telephone: Newcastle-under-Lyme 65381





Remember

I was telling you about Bitite?

Well it does all that Dussek claim for it. It's given me complete waterproofing on the gutters, and these last few weeks have certainly tested it.

Are you kidding? Do you know if they do anything for waterproofing walls?

Yes. They've got one or two products. The one I'm using is called 'Plasbestos'. It's a cold-laid emulsion. You put it on with a brush straight from the drum.

Hm-as easy as that?

Yes—I've used it all over the Meadow Lane site, and I reckon I'm getting about 50 super yards to the hundredweight, say 5 super yards to the gallon.

Well, that's fair enough. How is it on price?

All depends how you look at it. I'm not saying it's cheap, but for the job it gives, it's worth every penny. Anyhow, they'll let you have details and you can work it out for yourself.

I think I will.

You do—and if you're doubtful about anything, don't be afraid to ask their advice. They really are very helpful. See you later!

DUSSEK BITUMEN & TAROLEUM LTD.



EMPRESS WHARF, BROMLEY-BY-BOW, LONDON, E.3. Telephone: ADVance 4127. Telegrams: Trinidite, Bochurch London.

Warrington: Loushers Lane, Wilderspool: Glasgow: Barrhead South Goods Station. Cardiff: 18 Park Grove. Branches, Associated Companies and Agents in: Australia, Belgium, British East Africa, Denmark. Malta G.C.. New Zealand, Norway, South Africa, Sweden and West Africa.





This NEW boiler gives you protection inside and out

STEEL OUTSIDE
TO WITHSTAND
FIRE CORROSION

COPPER INSIDE
TO WITHSTAND
WATER CORROSION

The COPPER CLAD STEEL Boiler is a new introduction into the field of fireback boilers, and stove and range boilers. Hitherto these have been made of copper, steel, or cast iron.

Each of these materials has its special claims and is used according to the demands of circumstance.

The COPPER CLAD STEEL Boiler has a copper inside to withstand corrosive action by water and a steel outside to withstand corrosion by fire and fumes. The inside seams are silver-alloy brazed and the outside seams are welded. The COPPER CLAD STEEL Boiler combines the advantages of the copper and the steel boilers.

COPPER CLAD STEEL BOILERS by

ite?

t's

ld-

per

N, E.3.

ast Africa,

. 190.

Telephone: Stalybridge 2231. Telegrams: Cylinders, Stalybridge.

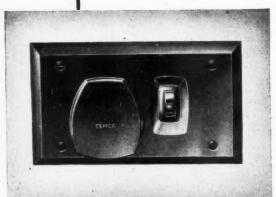
RANGE BOILERS LTD.

(AND SUBSIDIARY COMPANIES)

STALYBRIDGE . CHESHIRE

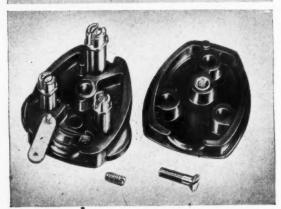
RBIE





A. C. SWITCH SOCKETS & PLUGS





- ★ 5 and 15 amp. 3-pin to B.S.546
- * Surface and Flush
- * Single and Double Pole
- * Brown and Cream
- * Neat, attractive, individually packed
- ★ Designed for easy wiring
- ★ High quality at low price

If you have not received details of these new TEMCO Switch Sockets and Plugs, please write for the full descriptive leaflet.

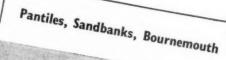
Manufactured by

TELEPHONE MANUFACTURING CO. LTD and Marketed by their Sales Organisation:

T.M.C.-HARWELL (SALES) LTD. 37 UPPER BERKELEY STREET, LONDON, W.I

Telephone: PADdington 1867/8/9

FROM THE SNOWCEM FILE:-





A typical example of the type of house which makes one long to get away Built by H. J. Hillman, Canford Cliffs from the hustle and bustle of city life and enjoy the leisure of the sea-side. Its clean, bright Snowcem-treated walls complete the perfect setting.

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

d

D

1:

.1

SNOWCEM WATERPROOF CEMENT PAINT

Decoration PLUS protection at LOW cost * BRITISH CEMENT IS THE CHEAPEST IN THE WORLD

does, not brush, peel or flake on

THE CEMENT MARKETING COMPANY LIMITED Portland House, Tothill Street, London, S.W.I

or G. & T EARLE LTD., HULL

THE SOUTH WALES PORTLAND CEMENT & LIME CO. LTD Penarth, Glam.

ex-

bright uired.



BEACON

STEEL DOOR FRAMES

Hitherto, the standard range of Beacon Steel Door Frames have been made of 16g steel sheet. Following the news that most of the larger American Door Frame Manufacturers had changed over to 18g steel, we have carried out a series of experiments both in our Research Laboratories and on a building site, to discover whether the lighter gauges would be suitable for use in this country.

These experiments have shown that the lighter frames are of ample strength, and experience both in transport and "building in" have satisfied us that they are not liable to distortion during erection.

We, therefore, offer a complete range of 18g Door Frames identical in all other respects with our 16g range, at lower prices.

JOHN THOMPSON BEACON WINDOWS LIMITED

WOLVERHAMPTON

now available at LOWER PRICES

Members of the Metal Window Association

SEAFLEX Nooling PUTTY

Door

wing

rame

have

earch

ether

this

ames

sport

not

Door

nge,

TED

This non-hardening Putty remains pliable throughout its life and provides durable seal which accommodates the extremes of structural and thermal movements caused by climatic conditions on very exposed structures. It is recommended for fixing "INSULIGHT" double glazing units. Seaflex is of a soft consistency and is applied in the same way as normal putty. Seaflex remains adherent to glass, wood and metal without cracking, crumbling, shrinking or flowing, and has a considerably longer life than ordinary putty on the frame. Frames may be easily removed for maintenance since Seaflex remains pliable.



The Palace Cinema, Southport glazed by DUXBURY, HARTLEY & Co. LTD., Salford. SEAFLEX Supplied by CHARLES LIGHTFOOT Ltd. Manchester.

For glazing Wood or Metal Rooflights & Greenhouses ... and for Bead glazing

Specification Sheets forwarded on request.

SEALANCO (ST. HELENS) LTD. ST. HELENS. TEL. 2432 & 7782 LANCS.

The largest exclusive manufacturers of Putty & Compositions in Gt. Britain "INSULIGHT" is the registered trade mark of Pilkington Bros. Ltd.

xxi



The Finch

Clofit

solves the

cloakroom problem

The Research and Development Division of the Finch Organization conceived and devel-

> units in conjunction with a number of leading architects and civic authorities. The result is a range of units that provide a complete answer

> oped these versatile and adaptable cloakroom

for any municipal or industrial cloakroom

problem in a form that can be accommodated

FOR FURTHER INFORMATION

within most cloakroom plans.

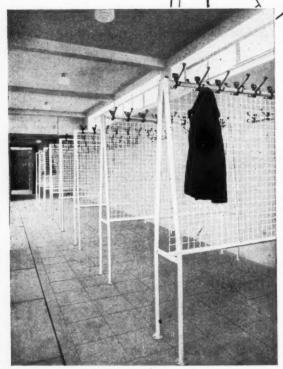
please write or phone for our descriptive 16 p.p. Booklet, which gives detailed specifications.



VERSATILE For permanent or temporary installation, and in a variety of heights—"Clofit" provides the ready-made answer.

INEXPENSIVE Mass demand enables us to produce the "Clofit" units on a mass-production basis you benefit by getting individually tailored units at an incomparably low price.

ADAPTABLE Each basic unit can easily be modified for specific industrial needs.

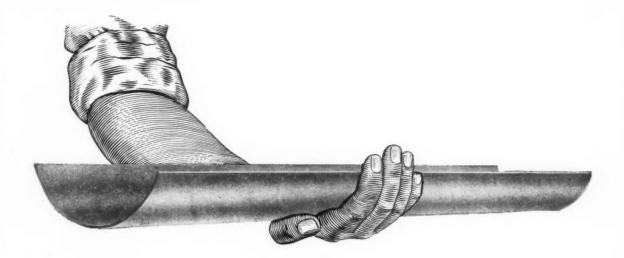


A view of the cloakroom in the new Marconi Building at Basildon, Essex.

B. FINCH & CO. LTD., Belvedere Works, Barkingside, Essex

VALentine 8888 (30 Lines)

Showrooms: FINCH CORNER, 679/687 EASTERN AVENUE, ILFORD, ESSEX



LIFT IT

of

1-

m

ng

a

m

ed

Birmid Rain-Water Goods, with their exceptional lightness, reduce time taken for erection and keep handling-charges down to the minimum. And yet they are not fragile or easily damaged, so that breakages in transit or on site are almost unknown. Birmid Aluminium Alloy Rain-Water Goods are precision made of the finest quality materials and workmanship, and designed for lasting service. Their use ensures accurate, safe fitting and no deterioration even in the worst winter! For all-round economy—materials, labour, time—BIRMID is the practical choice.

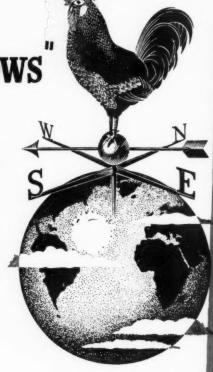
BIRMID RAINWATER GOODS

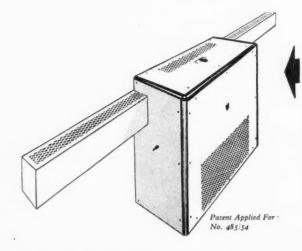
BIRMID WORKS . SMETHWICK 40 . STAFFS

Which ever way the wind blows

We can give you the conditions you are looking for; you can select from our range of Air Treatment equipment units that will create just whatever atmosphere you may require—where and when it is needed.

The Biddle range of Air Treatment equipment covers Heating, Cooling, Ventilating, Dehumidifying and Humidifying, and in each case models are available for industrial, domestic, commercial, medical or marine applications.





The Biddle "Wideflo" forced convection heater, offsets down-draughts and cold spots, oftencaused by large modern window schemes. The extended side ducts ensure a very wide distribution of warm air, and are available in lengths from between 6 to 10 feet (each side of the cabinet). The unit, which can be supplied with the ducts fitted in any horizontal position, between the one shown, down to skirting board level—is for use on steam or hot water systems.

BIDDLE

AIR TREATMENT

creates the right atmosphere.

F. H. BIDDLE LTD., 16 UPPER GROSVENOR STREET, LONDON, W.I.

(Sales division of British Trane Co. Ltd.)

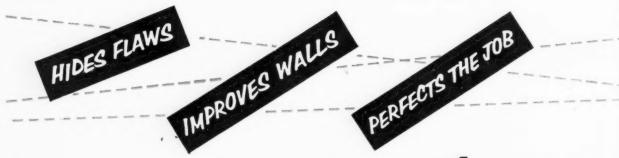
Telephones: Hyde Park 1651/5

Cables: Efbiddle, Audley, London.





the foundation of successful paperhanging



Now you can line and size in operation

Why do two jobs when one will do? POLYLINA does away with the double task of sizing and hanging lining paper. Now with no extra cost you can make every job a perfect one, without added labour or materials. There's nothing else like Polylina on the market!

POLYLINA DOES TWO JOBS IN ONE

What Polylina is -

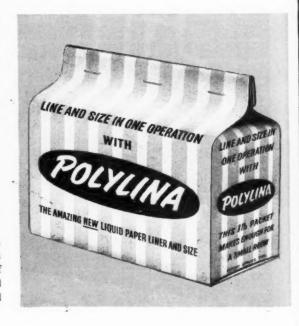
Polylina is a fibrous, cellulose material. Easily mixed with water, it forms a smooth paste. Apply with a coarse brush on any wall or ceiling surface. When dry the paperlike film needs no further sizing or rubbing down. Any surface from gloss paint to rough cast or pebble surfaces can be made suitable for papering with POLYLINA.

SAVE STORAGE SPACE TOO!

One packet does a small room
—two for a larger room. Thirty six
packets store in just over two cubic
feet—equivalent lining paper would
take seven cubic feet.

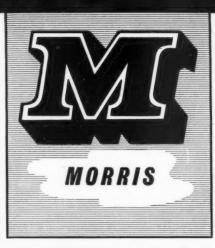
Add charm to distemper and ceiling whites without extra cost.

For richer colour and texture, also additional elasticity which prevents flaking, just mix one part of Polylina dough into four parts liquid distemper or ceiling white. No need to size first.



EASY TO MIX - EASY TO USE

Forms a perfect surface for all paperhanging



ng

on

ng

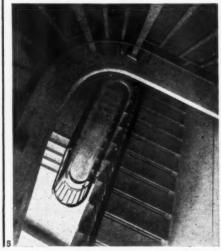




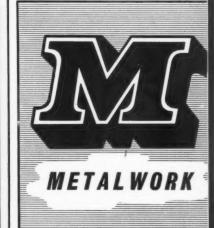












- 1 David Greig Sign. Architects: Robert Paine & Partners, A.R.I.B.A.
- 2 & 3 Bishop Ward School. Architects: Messrs. Sterrett & Blouet, A/A.R.I.B.A.
- 4 & 5 Pearl Assurance House, Canterbury. Architects: Messrs. Ernest Bates & Wm. G. Sinning, F/A.R.I.B.A.
- 6 Swimming Pool Metalwork 'S.S. Arcadia'. Architects: Messrs. A. McInnes, Gardner & Partners.

THE MORRIS SINGER COMPANY LTD · FERRY LANE WORKS, FOREST ROAD, WALTHAMSTOW E.17 • Tel: LARKSWOOD 1055



For Imaginative Lighting

Talk to PHILIPS

Philips will be happy to design for you - there is no charge

Some of the more imaginative lighting schemes of recent years have been the result of close co-operation between architects, electrical contractors, and the Philips Lighting Design Service.

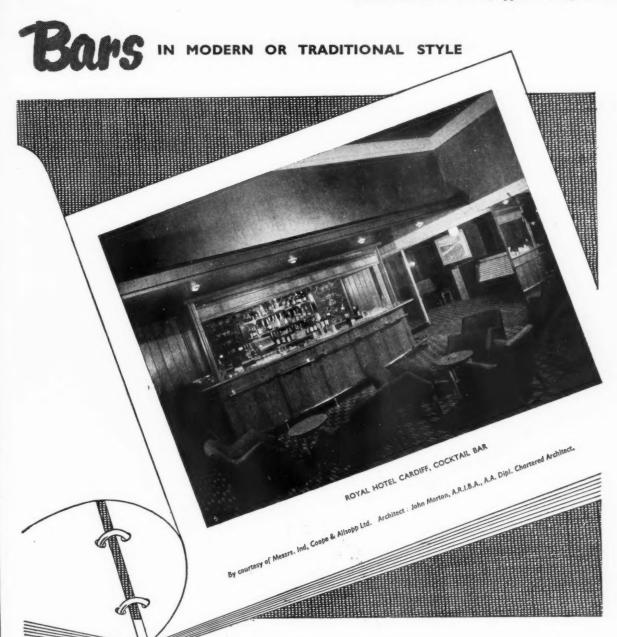
The advice and assistance provided by this Philips Service is entirely free, and experienced lighting engineers in each Philips branch area are at your service. In addition, a fully qualified architect with special experience of lighting in its relation to architecture and colour is available to co-operate with you.



PHILIPS ELECTRICAL LTD

LIGHTING DIVISION . CENTURY HOUSE . SHAFTESBURY AVENUE . LONDON . W.C.2

Tungsten, fluorescent, blended and discharge lamps & lighting equipment · Radio & Television Receivers · "Photoflux " flashbulbs, etc.



The cocktail bar has a curved front in vertical teak veneer with a series of short hand-bag shelves in teak supported by polished brass brackets. The counter top is in 'Raindrop Red' Warerite with teak margins. The false ceiling, which incorporates vent grilles and light reflectors, is supported at the front by two moulded teak pillars. These act as guides for the block board shutters which, when raised, are concealed in the false ceiling. The central mirror to the backfitting is flanked by marble panels fitted on the splay. The display shelves supported by polished brass brackets are in teak and glass.



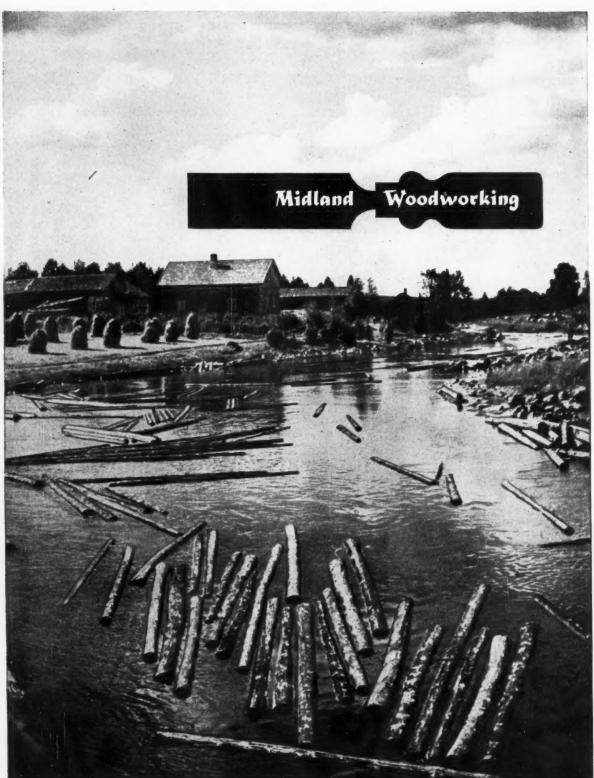
BRITAIN'S BIGGEST BAR FITTERS

.C.2

Head Office: DALEX WORKS, COLESHILL STREET, BIRMINGHAM 4. London Office: 109-115, BLACKFRIARS ROAD, S.E.I.

Branches at: Bristol, Cardiff, Hanley, Leeds, Liverpool, Manchester, Newcastle-on-Tyne, Nottingham,
Portsmouth, Preston, Sheffield, Glasgow, Edinburgh.





THE MIDLAND WOODWORKING CO. LTD., MELTON MOWBRAY

Specialists in high-class joinery for the Building Trade



lt's been a long, long time...

Since the days of the old flushing apparatus, the lavatory cistern has happily become a streamlined, smoothly functioning fitting in keeping with the contemporary style. The newest Lawley plastic cisterns are worthy successors to the trusty objets d'art made by Lawleys over seventy years ago; for all their changed appearance, however, traditional quality is still an essential

> part of their make-up. Prices? In the contemporary manner, to meet today's almost universal need for economy.



de

CRC 22

Our illustrated folder gives details of four Lawley models, in plastic, to suit all water regulations. We shall be pleased to forward copies on request.









Model HL P





Model WB P

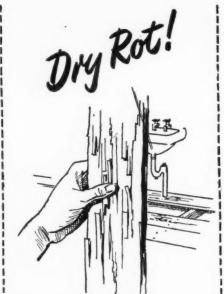


pioneers in cistern manufacture since 1881

& J. LAWLEY LTD., BRITANNIA WORKS, SAMS LANE, WEST BROMWICH

xxxi







To keep wood safe from all forms of rot and decay, use PRESOTIM

Presotim is a decorative wood preservative produced from a series of highly refined coal-tar oils blended to provide extra-deep penetration even when applied by brushing.

Presotim is effective against timber decay whether caused by fungi, exposure, or attack by insects such as Death Watch Beetle and Furniture Beetle.

Presotim is recommended for use both outdoors and indoors. Presotim (exterior quality) is suitable for pavilions, outbuildings, fences, gates, boats, barges, and for roof timbers in houses. Presotim (interior quality) preserves panelling, doors, skirtings, etc., without obscuring the natural beauty of the grain.

Presotim is prepared in a special "neutral" grade which makes it especially effective for old and valuable timbers such as church roofs and panelling, where it protects without altering the characteristic colour of the wood.

Presotim-treated timber can be polished or varnished as required.

For work where a thoroughly reliable, well-tried wood preservative is needed, Presotim offers to architects, builders and others long-term protection against decay at very low cost.



Manufactured by

HOW PRESOTIM IS SUPPLIED

Presotim is marketed in small containers, 5, 10, and 40-gallon drums. It is available in neutral grade, three shades of brown and twelve other attractive colours.

Prices from 4/- per gallon in 40-gallon drums.

THE NATIONAL COAL BOARD

For further details and advice on any technical problem, please write to National Coal Board, By Products, National Provincial Bank Buildings, Docks, Cardiff





hich bers ith-

d as

cts,

y at

20, 30, 60 & 100 AMP.

S.E.C. FUSEBOARDS

IN PRESSED STEEL CASES

THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2



All over the world

.... Mather and Platt Steel Rolling Shutters solve the problem of providing large openings with a neat robust covering which can be operated quickly and easily. The electrically operated shutter illustrated was supplied recently for Bokaro Power Station, near Calcutta, and is thirty feet high, and twenty two feet wide.



Steel Rolling Shutters

Write for descriptive literature to:-

MATHER & PLATT LTD. Park Works ' Manchester, 10



SPECIALISTS IN THE RECONSTRUCTION, SHEETING AND GLAZING OF ALL TYPES OF INDUSTRIAL ROOFS—INCLUDING WATERPROOFING BY THE MASTICON PROCESS

Industrial Engineering Ltd. have more than 30 years specialised experience in the maintenance, reconstruction and water-proofing, by the Masticon process, of industrial roofing, gutters and glazing. This practical experience is backed by a country-wide organisation, the services of which are at your command at all times.

Wherever your works are situated, a permanent staff of skilled labour is available immediately. Consultations with Technical Advisory Departments and District Representatives, inspection of roofs, a complete report, a specification of the work considered necessary, and estimates are available without charge or obligation.

Write for Brochure giving full details

INDUSTRIAL ENGINEERING LTD. · HEAD CFFICE: MELLIER HOUSE · ALBEMARLE STREET · LONDON, W.1 · Phone: HYDE PARK 1411

Branches in all principal industrial centres



SMITH'S



The most adaptable System of Suspended Hollow Concrete Floor and Roof Construction for large and small spans.

Midland Associated Company & Licensees,
PARKFIELD CONCRETE PRODUCTS CO. LTD.,
St. Peter's Road,
NETHERTON, nr. Dudley, Worcs. 'Phone Dudley 4315.

SMITH'S

2 WAY REINFORCED

FIREPROOF FLOORS LTD.

IMBER COURT, EAST MOLESEY, SURREY

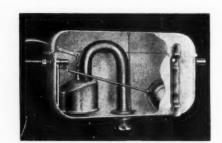
Telephone: EMBerbrook 3306

Telegrams: TRIANCO EAST MOLESEY



I'VE KNOWN 'EM FOR TWENTY YEARS AND THEY'VE ALWAYS BEEN GOOD

Fordhams are styled to today's tastes, pressed from a single sheet of steel, and fitted with the famous syphonic mechanism with fewer moving parts than any other cistern. No wonder they are in such demand. Send today for the fully illustrated colour sheets showing the entire range of favourite Fordhams.



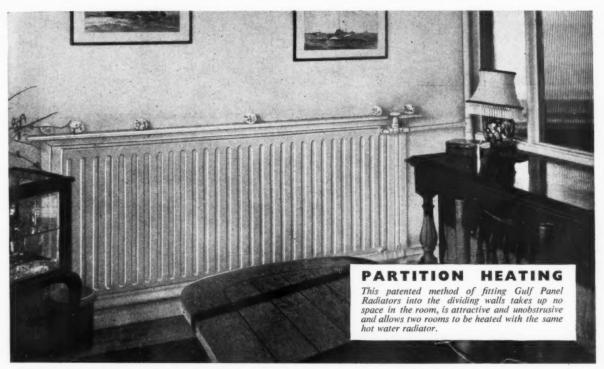




THAT'S WHY I STILL PREFER TO

FIT A Fordham

FORDHAM PRESSINGS LTD · DUDLEY RD · WOLVERHAMPTON · TEL: 23861



New hot water Panel Radiators heat two rooms at the same time

LONG LIFE · COST LESS LIGHT IN WEIGHT **IDEAL FOR WALL FIXING** EASY TO PAINT, CLEAN AND KEEP CLEAN **ECONOMICAL TO FIX FROST PROOF** MORE RESPONSIVE TO

SUITABLE FOR INTERMITTENT HEATING HIGH PROPORTION RADIATION TO CONVECTION

THERMOSTATIC CONTROL



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 specialize in producing radiators for unusual and exacting requirements. Gulf are installed throughout the country and in the largest building built since the war.



INSTALL

LONG LIFE RADIATORS

Please write for details and catalogues to:-GULF RADIATORS LTD., 229 REGENT ST., LONDON, W.I Tel: REGent 1051/6

Head Office and Works:

PENARTH ROAD, CARDIFF. Tel: 20591/2

BALANCED HEAT

Gulf Panel Radiators provide the perfect balance of radiation and convection to ensure the highest standard of heat comfort coupled with efficiency of operation and maximum fuel economy.

An Associate Company, Hurseal Ltd., supplies: Oil-filled Radiators for Electric (off-peak), Gas and Paraffin Operation, Domestic Boilers, Electric Warm Air Heaters, Electric Bed Sheets, Gas and Electric Towel Rails, Room Thermometers and Temperature Controls, Cylinder Jackets and Insulation Materials, "Hurdapta" Fires, Weather-stripping and Draught-proofing.

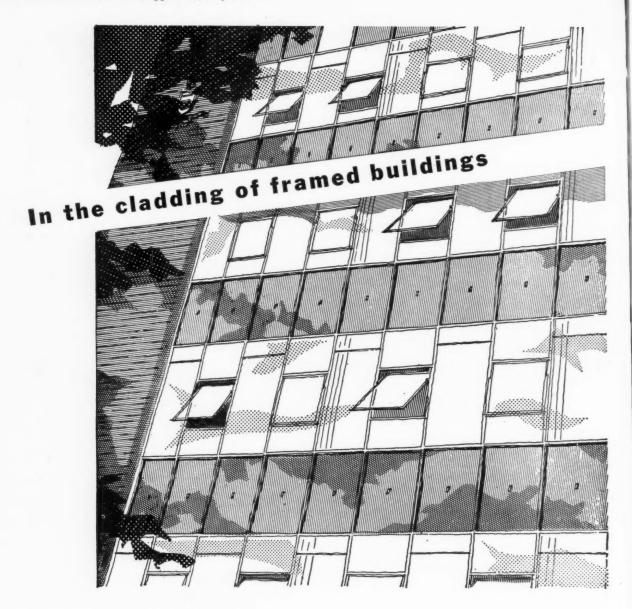
The New Hurseal scientifically shaped

'HURDAPTA' CONVECTOR OPEN FIRE

with adjustable restricted throat saves loss of heat up the chimney.

Recent official field tests have proved that this type of fire is 70% more efficient than old-fashioned grates or modern inset fires. Many users report fuel savings up to 50% with in-creased heat and comfort. The Hurdapta heats by convected warm air and direct radiation, giving open fire comfort with stove efficiency. It fits any fireplace and is ideal for new homes, flats or conversions. Please ask for full details.





SECOMASTIC

provides lasting protection at the joints

The many new techniques for cladding framed buildings developed during the past few years have one problem in common.

In this type of construction there is usually appreciable and constant movement at the joints. Yet these must remain lastingly weatherproof if failure is to be avoided. Where the facing material is non-absorbent, the importance of the correct treatment of the joints against weather penetration is nothing less than vital, as it is on the joints that the whole onus of water resistance is thrown.

The most economic and convenient solution to the problem is to seal such joints with mastic. But, since the maintenance-free life of the building will be de-

termined by the life of the mastic used, the mastic to be used should be chosen with as much care as the facing material itself.

Any mastic losing adhesion or plasticity within a few years is not suitable for joints in wall cladding. The mastic must remain 'alive' for decades—not years—if costly maintenance is to be avoided.

The Architectural Department of SECOMASTIC Limited has studied the special problems connected with the sealing of joints in Wall Cladding, and is in a position to advise architects not only on the particular grade of Secomastic best suited to a specific case, but also on methods of application.

SECOMASTIC LIMITED, BRACKNELL, BERKSHIRE Telephone: BRACKNELL 910 (Slines)



They chose WOOD floors

ing

tic

ted

to of

- * A good hardwood floor stands up to a lifetime of hard wear.
- * It is quiet, warm and comfortable underfoot.
- * It is a pleasure to look at.
- * It can be cheaply and easily maintained in perfect condition.

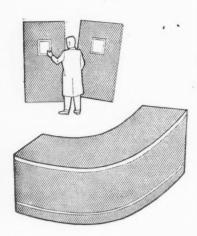


ISSUED BY THE TIMBER DEVELOPMENT ASSOCIATION LIMITED, 21 COLLEGE HILL, LONDON, E.C.4, AND BRANCHES THROUGHOUT THE COUNTRY IN CONJUNCTION WITH THE HARDWOOD FLOORING MANUFACTURERS' ASSOCIATION

The "WARERITE SPECIALIST"

service for-Architects · Builders · Joiners

Twenty-eight years' experience has proved that laminated plastics veneers require expert press-bonding and fabrication. 'Contact' or 'impact' adhesives are no substitute for synthetic-resin cement, a veneering press, and expert 'know-how', which are all essential if the laminated plastics are to do the wonderful job they can do.

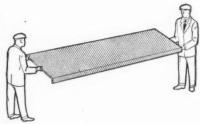


Warerite Limited have just made the first of several increases in production that will greatly improve deliveries. To ensure that this material is freely available to architects, builders and joiners, in the form of expertly press-bonded Warerite-faced plywood and blockboard, etc., they are appointing a number of 'Warerite Specialists'. These firms are experienced in press-bonding and fabricating Warerite laminated plastics.



Warerite Limited, and the 'Warerite Specialists', offer you the following service:

- 1. Technical advice on the most suitable type of WARERITE material to use.
- 2. The prompt supply of WARERITE veneers, expertly *press-bonded* with synthetic resin cement to high-grade plywood or other suitable cores. These WARERITE-faced materials are supplied in sheets 8 ft. x 4 ft. or in cut sizes and shapes ready to install, or as complete bar and counter tops, fitment tops, table tops, flush doors, etc.



- 3. The supply of sheets, or cut sizes, of WARERITE veneers to firms who are equipped, and prefer, to undertake the highly specialised work of veneering laminated plastics to plywood. The most popular WARERITE patterns can be supplied from their stocks.
- 4. To supply from stock, sheets or cut sizes of WARERITE Handy Panels for 'on-site' resurfacing work.



WARERITE LIMITED

(Unit of Bakelite Limited)

Head Office: Ware, Herts. Tel:Ware 502

SALES OFFICES:-

12-18 Grosvenor Gdns., London, S.W.1.

Tel: Sloane 0898

187-9 Broad Street, Birmingham, 15.
Tel: Midland 5911

Royal Exchange, Manchester, 2. Tel: Blackfriars 5174/7

29 St. Vincent Place, Glasgow, C.1.

Tel: City 6825

WARRITE is a registered trade mark of Warrite Limited



WARERITE Panels

" solid plastics panels mainly used for wall surfaces erected in plastics or metal beadings.



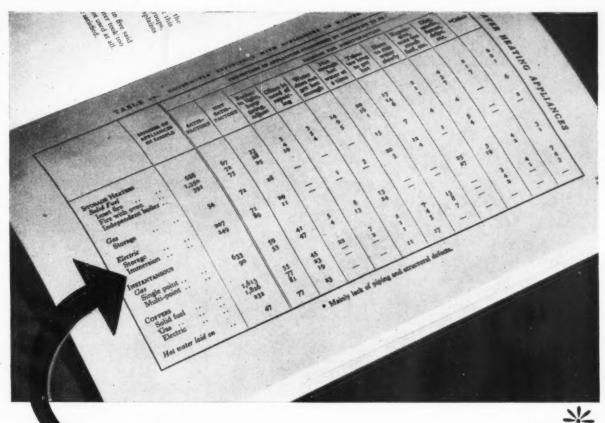
WARERITE Veneered Boards

Structural materials. Consist of WARERITE Veneers bonded to plywood or blockboard cores. Usually "" or similar thicknesses.



WARERITE Handy Panels

WARRITE Veneers readybonded to 4mm. plywood. Suitable for covering existing wooden tops, using normal wood-to-wood glue joining technique.



Statistics speak*

for Electric Immersion Heaters

"Amongst the piped appliances the immersion heater was thought satisfactory by the highest proportion."

The above paragraph from an official Government Report* on domestic water heating is evidence that the consumer wants immersion heating as a supplementary system. The investigation found that 89 per cent. of the housewives using immersion heaters found them satisfactory. The next highest proportion of satisfied users for any appliance was 75 per cent., whilst others were as low as

53 per cent.

It is not surprising that the economical, easily installed, clean, and entirely automatic immersion heater is so popular nor that it has been endorsed in such an emphatic manner by unbiased government research.

By specifying B. N. E. Immersion Heaters you can be sure that you are meeting popular demand with an extremely efficient appliance. You will know that every heater carries the reputation of an organisation with over 75 years' experience in the electrical field; experience in the electrical held; a firm with depots throughout the country staffed by qualified men ready to give you advice and service without obligation. Ask for publication HD 23 which gives full details of B.N.E. Immersion Heaters and Circulars.

National Building Studies Special Report No. 8 "An Inquiry into Domestic Hot Water Supply in Great Britain" (H.M. Stationery Office)



ELECTRICS

The Domestic Appliance Section of JOHNSON & PHILLIPS LTD.

NEWARTHILL

MOTHERWELL

SCOTLAND



Why should you specify

Radiation's new automatic boiler?

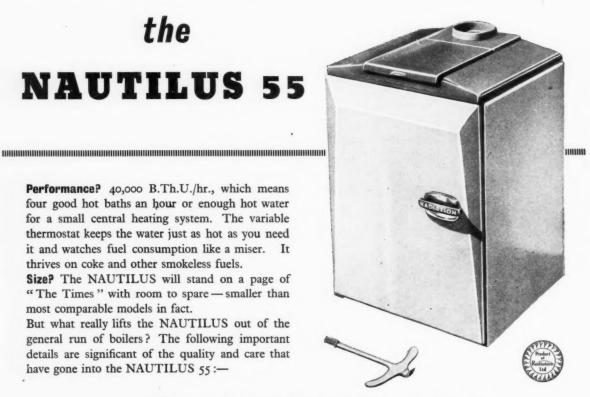
the

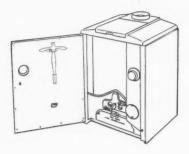
NAUTILUS 55

Performance? 40,000 B.Th.U./hr., which means four good hot baths an hour or enough hot water for a small central heating system. The variable thermostat keeps the water just as hot as you need it and watches fuel consumption like a miser. It thrives on coke and other smokeless fuels.

Size? The NAUTILUS will stand on a page of "The Times" with room to spare - smaller than most comparable models in fact.

But what really lifts the NAUTILUS out of the general run of boilers? The following important details are significant of the quality and care that have gone into the NAUTILUS 55:-





- * Strong rotating firebars actually crush clinker and stones, really do eliminate the need to let the fire out and at last relieve the householder of one more regular chore.
- ★ The water jacket completely surrounds the fire and all waterways can be thoroughly cleaned without breaking the water connections.
- The ashpan collects all the ashes.
- The large, hinged fuelling cover is at a comfortable height

In every detail, the NAUTILUS 55 measures up to the exacting standards of the Radiation Research Laboratories and passes their exhaustive Field Tests.

That is why you should specify the NAUTILUS 55 made by



PIONEERS OF SMOKE REDUCTION

Full details from RADIATION GROUP SALES LIMITED, SOLID FUEL DIVISION. PRODUCTION CENTRE: PARK FOUNDRY, BELPER, NR. DERBY

BUILD SPEEDILY & ECONOMICALLY



STRUCTURAL STEELWORK

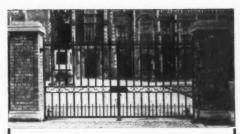
We have specialised in the manufacture and erection of purpose-made Structural Steelwork of all types for over a century and a quarter, and our lengthy experience is always at your service. Whatever your requirements—from a steel-framed agricultural building made from standardised components, to a single-storey factory building specifically made to your requirements—if Hill & Smith Ltd. handle the job you can be sure of a pleasing building of real quality, speedily and economically erected, and designed to give lasting service. Illustrated

literature is available to Architects on request, and all enquiries will receive our prompt personal attention.



HILL & SMITH LTD

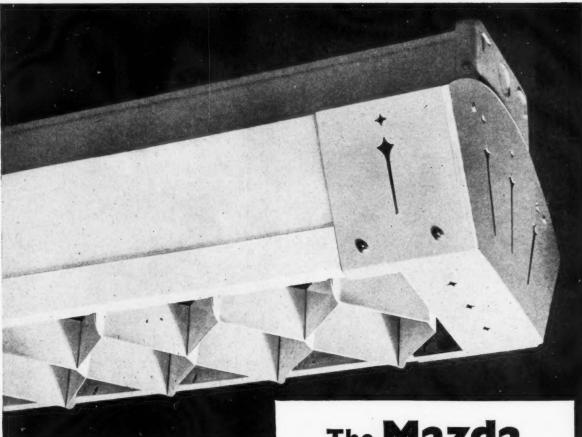
BRIERLEY HILL, STAFFORDSHIRE.



ORNAMENTAL GATES

An important section of our organisation is devoted to the design and manufacture of ornamental gates, entrance gates, matching railings and factory building fencing. We shall be pleased to produce designs to suit your own specific requirements. Literature on request.

Telephone: BRIERLEY HILL 7251-2



This new Mazda Fluorescent Diffuser Fitting, the F.1236, is very reasonably priced. One of a family of fittings with interchangeable diffusers of varying designs, it is especially suitable for schools, offices and hospitals—wherever economy of installation is essential, as well as good appearance and sturdy construction.

Mazda

Fluorescent lamps stay brighter longer



THE BRITISH THOMSON-HOUSTON CO. LTD.

Crown House, Aldwych, London, W.C.2 (Member of the A.E.I. Group of Companies)



The **Mazda** F.1236 Diffuser Fitting

for more economical installation



Design provides simple lift-and-engage attachment to channel, without removing the lamps.

Metal honeycomb louvers

finished in hard gloss enamel with two side panels of translucent 'Perspex'.

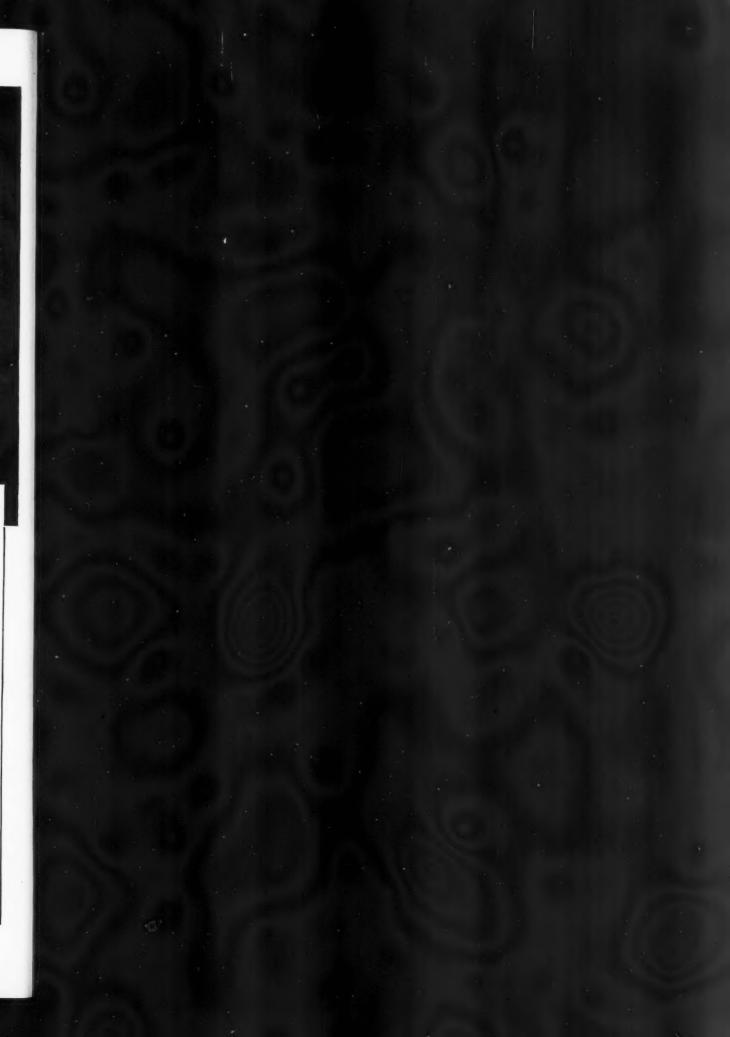
Easier maintenance

Diffuser releases from either side and hangs clear of lamps, leaving them readily accessible for maintenance.

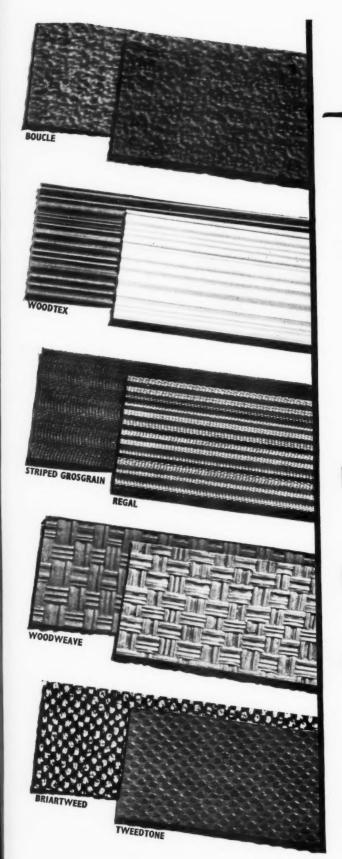
Switch-start or Instant-start

BTH Lamp Auxiliary Gear ready wired for either one or two 80-watt fluorescent lamps. BTH fixed lamp holders with retractable lamp shields as standard equipment,

Leaflet DL9630-6 gives details







ntroducing

VINYL COATED FABRIC

AMERICA'S GREATEST FURNISHING AND DECORATING MEDIUM

- ★ won't scuff, fray, peel, crack
- can be draped, pleated, folded
- wipes clean with a damp cloth
- is practically indestructible
- flame resistant
- SUPPORTED VINYL FUSED FABRIC -needs no lining-stays soft and pliable

AS A WALL COVERING

Vicrtex creates a wall surface of arresting design that is fadeproof and wipes clean with a damp cloth-making the most delicate shades practical in Vicrtex!

AS UPHOLSTERY FABRIC

Vicrtex is soft and supple for easy contour shaping-it is ideal for every type of upholstery from dining chairs to original design creations.

AS A NEW TREATMENT ANYWHERE

From baby carriages, radios, bars, tables, cabinets to automobiles and handbags-Vicrtex is creating new dimensions in design to stimulate new buying interest in every field!

Manufactured Exclusively

1000

ANNIESLAND · GLASGOW W.3

Telephone: Scotstoun 5501-6



THE ARCHITECTS' JOURNAL (Supplement) July 14, 1955

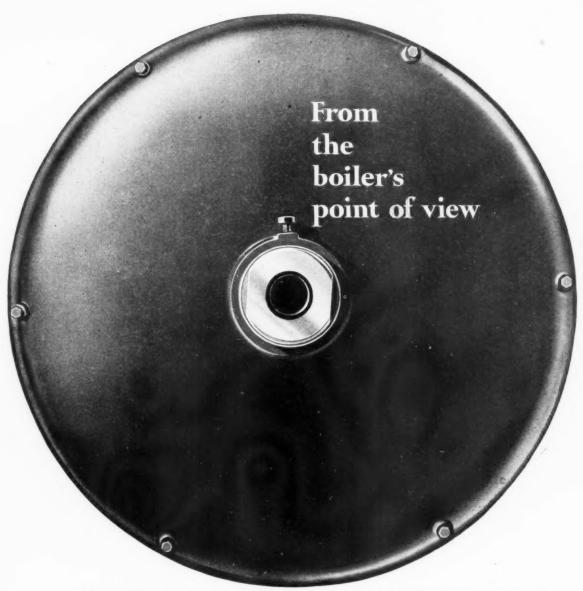
mithson

aint

mulsion

Architects are invited to write for the SMITHSON HANDBOOK OF PAINTS & PAINTING PRACTICE TO THOMAS SMITH AND SON LIMITED

238-240 WHITECHAPEL ROAD, LONDON, E.I. TELEPHONE: BISHOPSGATE 3717-8-9



... a Hydra burner means maximum efficiency. In addition to the normal advantages of oil-firing, Hydra's design provides these special advantages:

★ FINGER-TIP CONTROL OF ENTIRE RANGE OF HEAT ★ NO JETS TO GLOG ★ NO FILTERS TO GLEAN ★ BURNS ANY VISCOSITY FUEL (INCLUDING 100% WASTE) WITHOUT CHANGING THE SELF-CONTAINED HYDRA BURNER

For thirty years, Hydra burners have been precision engineered to a constant standard of supremacy.

Leading industries throughout Britain use HYDRAS OIL FIRING EQUIPMENT for topmost efficiency and utmost economy

Send today for booklet about "Britain's foremost oil-firing equipment".

Special methods of application for Cochran and other vertical boilers. Enquiries invited.

HYDRAN PRODUCTS LTD., STAINES, MIDDLESEX · Telephone: STAINES 502/3

INCLUDE THIS

PERMUTIT in your Plans ..

for Schools, Canteens, Self-service Laundries,

Old Persons' Homes and buildings of similar size.

The Permutit type I.D.G. Base Exchange Water Softener is particularly suitable for installation in many smaller buildings. Its output varies with the

hardness of the raw water, but is usually sufficient for a daily demand of up to 5,000 gallons. Maintenance is simple and can be undertaken by unskilled staff.

This Permutit Plant will effect substantial running economies in any building where water is used for heating, washing or domestic services. It prevents the formation of scale in pipes and valves; economises soap, soda and detergents; and simplifies cleaning operations and dishwashing.



If you would like more information regarding the Permutit type 1.D.G. Water Softener, please write for a copy of Technical Publication No. 64. We shall also be pleased to send details of softener: suitable for large buildings.

The PERMUTIT Co. Ltd., Dept. Z.X. 187 Permutit House, Gunnersbury Avenue, London, W.4.

Telephone: CHIswick 6431

AGAIN AND AGAIN ROBERTSON Q-DECK IS SPECIFIED

ROBERTSON

1111111

for modern roof construction

with exclusive features

- FLAT SOFFIT FELTED SOFFIT FOR SEVERE CORROSIVE CONDITIONS
- MECHANICAL JOINTING OF SIDE LAPS
- LONG OR SHORT SPANS
- UNIQUE WEATHERPROOFING
- SPEEDILY ERECTED

WRITE TODAY FOR DESCRIPTIVE LITERATURE

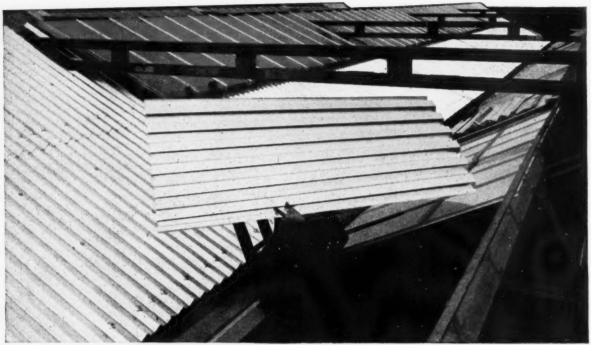
ROBERTSON T

ELLESMERE PORT · WIRRAL · CHESHIRE

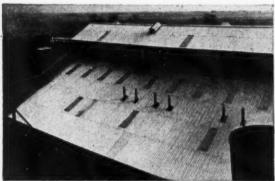
Telephone: Ellesmere Port 2341. Telegrams: Robertroof, Ellesmere Port-

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

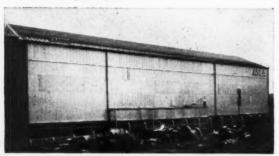
Agents in most countries throughout the world



A roof at the Huddersfield works of Messrs. W. H. Heywood & Co. Ltd., being covered with Noral 'Industrial' sheet.



This roof at the British Sugar Corporation Ltd., Selby, Yorks. was recently clad with Noral 'Industrial' sheet by Industrial Engineering Ltd.



Roof and walls clad with Noral 'Mansard' Sheet for ASEA Electric Limited, London, E.17, by the Manchester Slate Co. Ltd. Architects: Elliott, Cox and Partners.

No Cover Charge

With most factories the "cover charge"—for costly painting every few years — is one burdensome addition to overheads that far-sighted industrialists are seeking to avoid.

Take these three factories. Their managements have made sure of big annual savings for years to come—simply by using Noral corrugated sheet. It needs no painting and cuts maintenance charges to the bone.

If you are planning a new roof—or indeed an entire new plant—it's well worth sending for free copies of our booklets "Noral Corrugated Sheets" and "The Durability of Aluminium in Building" to Sales Development Division, Northern Aluminium Company Ltd., Banbury, Oxon.

Accredited Roofing Agents (HEAD OFFICES)

INDUSTRIAL ENGINEERING LTD., MELLIER HOUSE, ALBEMARLE STREET, LONDON, W.I. JOHN BLAND & CO. LTD., EAST MOORS, CARDIFF. THE BODDY ROOFING CO. LTD., 81, ESSEX ROAD, LONDON, N.I. W. H. HEYWOOD & CO. LTD., BAYHALL WORKS, HUDDERSFIELD. MANCHESTER SLATE CO. LTD., LANCASTER ROAD, DIDSBURY, MANCHESTER, 20.

Northern Aluminium

COMPANY LIMITED





ne

ts

ts

to

It

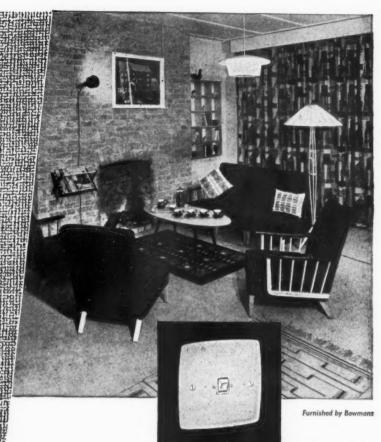
es

ed

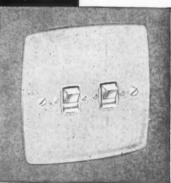
ee

0

m



Rooms like this—modern rooms—demand modern switches.
And what could be more attractively efficient—than MINIAC?
These competitively priced assemblies win on all counts. They are silent in operation, yet have positive action; quality built; superbly styled. The units shown—switches and plates combined—are simple to install, and incorporate either one or two gangs covering any variation of control—I-way, 2-way, intermediate or bell push. All assemblies can be accommodated in wood or metal boxes and have 2\frac{2}{2}^m centres to B.S. 1299



MINIAC switch assemblies

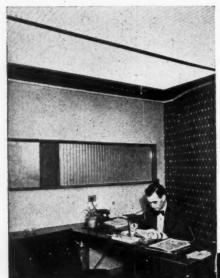
made by the House of



Write for leaflet LA.1973 to:

Simplex Electric Co Ltd Oldbury Birmingham & Branches

A TO COMPANY



Courtesy: Scottish Industries Exhibition.

The Lumenated Ceiling offers the following advantages:

- Ideal for showrooms, shops, offices, foyers and similar applications
- An excellent method of modernising old, high ceilinged premises
- In new buildings, structural ceiling requires no special finish—it is hidden
- · Easy access to lighting fittings
- Durable, dust-repellent, easy to clean and maintain
- Non-inflammable
- Air conditioning and acoustic systems easily incorporated

Our Advisory Service is available at all times to produce recommendations for every type of installation.

Full technical data and specifications are available on request to our London office.

Ceiling and Lighting combine to form the *new*

LUMENATED CEILING



Courtesy: Dolcis Ltd.

Here at last is an entirely new lighting technique in keeping with contemporary design, and present-day emphasis on good lighting. With the LUMENATED CEILING, there is no glare, no shadow and no 'high spots'. A pleasant, even light of correct intensity is diffused from the entire ceiling area. For showrooms and shops, it overcomes the usual 'mirror' effect of the front window. No light fittings are visible and the ceiling is attractive whether the light is on or not.

LUMENATED

GEILINGS LIMITED



LONDON OFFICE: 4 LLOYDS AVENUE, E.C.3. TEL: ROYAL 1927 HEAD OFFICE: THERMOTANK LTD., HELEN STREET, GLASGOW

1 L4

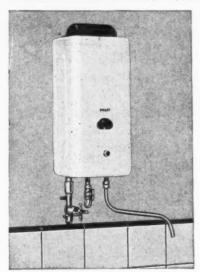
When you specify

INSTANTANEOUS GAS WATER HEATERS

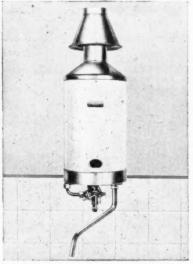
you specify dependability

There are solid reasons for the dependability of Ewart water heaters. They are built to give long service with the minimum of maintenance.

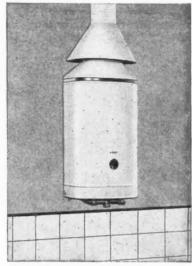
- * They have self-clearing steatite-tipped Bray burners that resist corrosion and blockage. The types of heat-exchanger employed are simple and designed to maintain a full flow of air and products of combustion, and thus obviate fouling of the flueways.
- * Automatic gas governors are fitted to these Ewart water heaters to prevent over-gassing and ensure consistent performance, thereby prolonging the life of the heating bodies.
- * Where pilot safety devices are fitted they are of exceptionally robust design. Alternatively, the interlocking tap safety device is of a well-tried pattern.



EWART M75. A sink water heater. Can easily be adapted as a multipoint to supply two sinks or handbasins—through existing taps if desired.



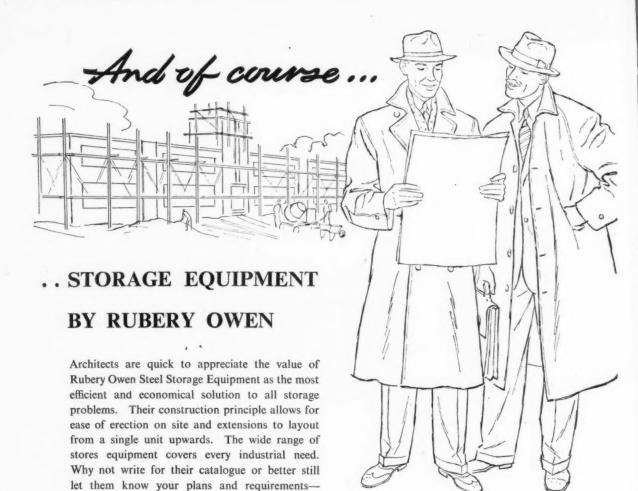
EWART SI40. A low-priced highly efficient instantaneous bath water heater. Will also supply adjacent handbasin through swivel spout.

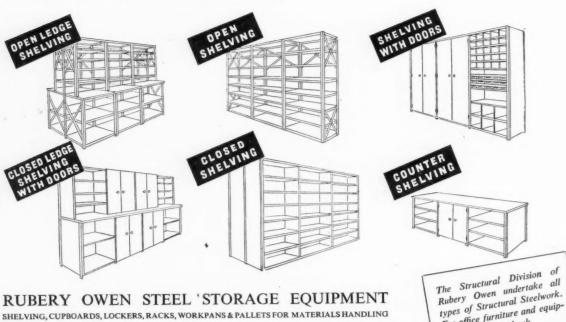


EWART M210. A multipoint water heater which will supply instant and endless hot water in bathroom, kitchen, cloakroom, etc.

famous for over 120 years!

EWART AND SONS LTD . WORKS ROAD . LETCHWORTH . HERTS





RUBERY OWEN STEEL 'STORAGE EQUIPMENT

remember, they are specialists in this sort of thing.

SHELVING, CUPBOARDS, LOCKERS, RACKS, WORKPANS & PALLETS FOR MATERIALS HANDLING

RUBERY, OWEN & CO. LTD.

Industrial Storage Equipment Division, WHITEGATE, WREXHAM, NORTH WALES. Tel: Wrexham 3566-8

For office furniture and equip-

ment consult Leabank.

This ice rink is keen on non-slip!





However much the patrons of the Ayr Ice Rink slip and slide on the ice, they are sure of a firm foothold on the entrance stairs. For the owners have taken the wise precaution of fitting double channelled Ferodo Stairtreads. Protective aluminium nosings outline each step; two wide treads of attractive but tough, red composition, give a firm, confident grip to the wettest shoe . . . safely speed the feet of the most impatient youngster.

And, after the day's traffic, a quick wash down and the Ferodo Stairtreads look as if they had just been laid.

Do you know enough about the 'seen and felt' safety and extreme durability of Ferodo Stairtreads? Send for Catalogue 888 giving details of all types, and the fine range of coloured compositions available—red, green, grey, brown, black,

blue and white. Should you have any problems to discuss, a technical representative will be only too pleased to call on you

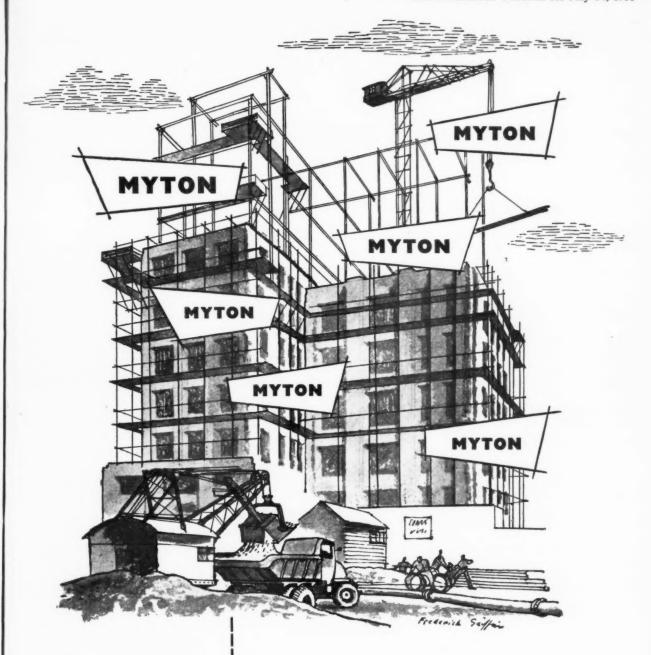


FERODO Non-Slip Stairtreads



When a high degree of thermal insulation is required Insulating Gypsum Plasterboard should be used. If you have not received a copy of National Building Studies No. 22 (Fire Hazard of Internal Linings) write to one of these addresses . . . The chill of the night gives way to chill of the spine. What else besides life can be saved from the flames? That will depend to a great extent on the nature of the internal lining. If only Gypsum Plasterboard had been used it would have held back the flames and given everybody time to think and act.

PLASTER PRODUCTS (GREENHITHE) LIMITED. GREENHITHE, KENT Greenhithe 2251/5
THE BRITISH PLASTER BOARD (MANUFACTURING) LIMITED, BATH HOUSE, 82 PICCADULLY, W.1 Grosvenor 7050
IMPERIAL CHEMICAL INDUSTRIES LIMITED, MILLBANK, LONDON, S.W.1 Victoria 4444
GYPROC PRODUCTS LIMITED, WESTFIELD, UPPER SINGLEWELL ROAD, GRAVESEND, KENT Gravesend 4251



You'll be seeing more and more of

It is of considerable interest and significance that

MYTON LIMITED are now a part of the TAYLOR WOODROW

GROUP OF COMPANIES, with all the valuable

advantages which automatically spring from membership

of that vast organisation

MYTON

MYTON LIMITED Building and Civil Engineering Contractors

Now a member of the TAYLOR WOODROW GROUP

HEAD OFFICE: NEWLAND, HULL

Choosing an Emergency Lighting System?

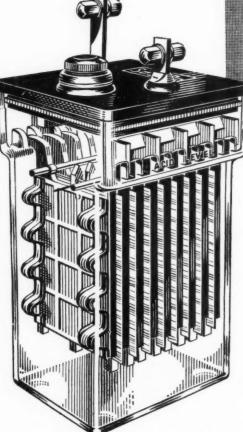
Specifying an emergency lighting system is a specialist job—and specialists are there to give you advice if you make use of the P. & G. 3-Point Service.

THE P&G SERVICE INCLUDES:

- Technical advice either as a detailed specification or as a second opinion on any projected scheme.
- 2 Complete equipment. 3 Regular inspection and report.

P. & G emergency lighting equipment is automatic and instantaneous in operation, and the special P. & G. Closed Top Cell makes for the simplest possible maintenance; it is the ideal battery cell for emergency lighting in Hospitals, Cinemas, Theatres, Public Buildings, Concert Halls, Schools, Factories, Offices, Hotels, etc.

P. & G. also supply self-contained battery and charger cubicles for fire alarms, telephones and electric clocks.



The P. & G. Closed Top Cell has a lid of moulded Dagenite composition with a rubber joint ring, and rubber gaskets between the terminal pillars and lid, to render the lid acid-tight.

ENQUIRIES TO

Pritchett & Gold and E.P.S. Co. Ltd

(BATTERY MAKERS SINCE 1882)

137 VICTORIA STREET · LONDON · SWI

The WIDE range of CARTER interior glazed tiles

The Carter Group make glazed tiles both at Poole and at Stoke-on-Trent. At POOLE, interior tiles are made in white and cream earthenware glazes and enamel glazes. The two earthenware colours are always glossy, but the enamel colours can be supplied with either glossy or eggshell surfaces in both plain and mottled colours. The normal range consists of about eighty colours.

The STOKE tiles are made from a buff clay, and the colour range is completely different from the Poole series. About sixty colours are available in glossy and matt surfaces, both plain and mottled. No earthenware glazes are made at Stoke, and it is not usually wise to try to intermingle Stoke and Poole tiles in a scheme: being made by different processes, the tiles do not marry happily.

A leaflet giving the principal sizes and shapes in which Carter Glazed Tiles are produced is available.

These tiles are also dealt with extensively in the General Wall and Floor Tile Catalogue.



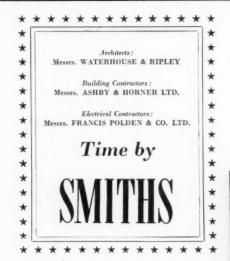
PG27-

CARTER & CO. LIMITED, POOLE, DORSET

J. H. BARRATT & CO. (1927) LTD., BOOTHEN TILE WORKS, STOKE-ON-TRENT

The tile manufacturing companies of THE CARTER GROUP

CTIO

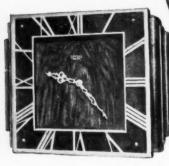


Severely damaged by fire after enemy action on the 10th of May, 1941, part of the Atlas Assurance Head Office building has recently been restored. Happily the original architectural features were preserved, and an attractive arcade included. Smiths Clocks are a feature of the new offices, as will be seen in these illustrations.

Smiths Clocks are available in a wide range of interior and exterior models, or can be made to the Architect's design whenever desired.



A General Office



Main Entrance to Building



Main Entrance Hall



JUPITER

Flush fixing Wall Clock with hand-cut circular fret zone. 12" dial. Bronze or gilt figures.

SHERBOURNE

Surface fixing Wall Clock Walnut finish case with gilt zone and hands. Plate glass front. H. 16" W. 20" D. 2\frac{1}{2}".



Ground Floor Office

SMITHS ENGLISH CLOCKS LTD., SECTRIC HOUSE, LONDON, N.W.2 The Clock & Watch Division of S. Smith & Sons (England) Ltd.

There are three types of GYPROC Lath -the perfect base for Paristone and Gypstone Plasters A high degree of fire resistance is afforded by plain GYPROC Lath plastered with either Paristone or Gypstone, but for special purposes an even greater degree of fire protection can be obtained by using GYPROC Perforated Lath, plastered with Paristone. Where thermal insulation is a specific requirement, GYPROC Insulating Lath, with a bright aluminium veneer on one side, PERFORATED should be used. GYPROC Lath with its specially designed edges does not require scrimming before plastering. All GYPROC Lath is supplied in bundles containing 6 sheets, easily carried by one man. Dimensions 16" wide, lengths 42", 48" and 54". Write for leaflets P326 & P317. INSULATING

Makers of acoustic and thermal insulation products including Gyproc Insulation Plasterboard, Acoustic Gyproc, Gyproc Slotted Acoustic Tiles, Gyprith Wood Wool Slabs, Gyprith Fluted Panels, Insulex and Zonalex Loose Fill Insulation, Gyptite Vermiculite Insulating Plaster, Dekoosto Acoustic Plaster.

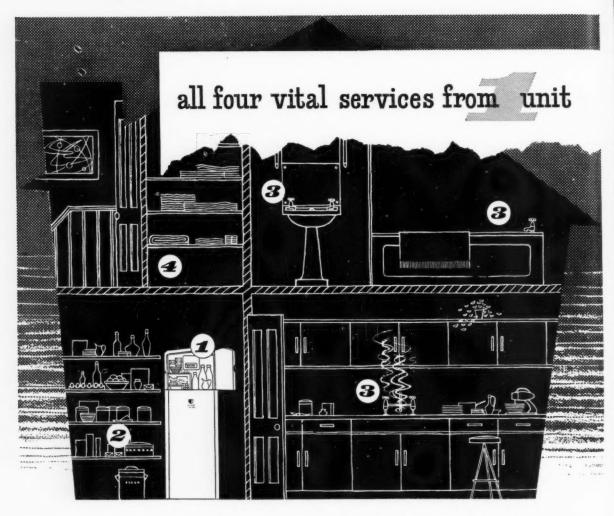
r Office

) Ltd.

eries.

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 near Loughborough. Telephone: East Leake 231. London Office: Bath House, 82 Piccadilly, London, W.1. Telephone: Grosvenor 4617-9.



the Brentford Duo-Therm heat pump

- REFRIGERATOR
 Capacity: 2½ cu. ft. Ample room
 for milk bottles, etc. Ice-making
 facilities. Situated at shoulder
 level—the ideal height.
- COOL STORAGE

 Maintains a larder of about 120 cu. ft. at approximately 48° F. Handles about 5,500 cu. ft. of dry air per hour.
- HOT WATER

 The unit's 30-gallon water-tank provides up to 120 gallons per day of water kept at 140° F. As the Duo-Therm is entirely self-contained, no further hot-water tank is required.
- LINEN CUPBOARD
 WARMER
 Sited in the airing cupboard. Acts
 as a heat leak.

Powered by a 1/3 h.p. hermetically-scaled unit—consumption 360 watts. A fan is incorporated at the back of the unit, to ensure constant and even air circulation within the larder.

The Brentford Duo-Therm is the first truly practical domestic application of the Heat Pump principle. Installed in the pantry, the Duo-Therm not only provides enough constant hot water for the average household plus an ample-size refrigerator . . . but also keeps the whole pantry space at a low temperature, so offering unrivalled facilities for hygienic food storage. All from one single unit, all at a running cost of only half that of electric water heating alone. A revolution in domestic economy, the Duo-Therm offers new scope to the progressive architect. Write for full details.

SEND NOW FOR THIS FULLY-ILLUSTRATED BROCHURE!

BRENTFORD REGD. TRADE MARK

HEAT-PUMP

Produced by BRENTFORD ELECTRIC LTD., KIDBROOKE PARK ROAD, LONDON, S.E.3

Specialists in Heat Pump Developments



BARE SITE BECOMES BUSY OFFICE IN TWO HOURS

At 8 a.m. on a bare building site a contractor's agent waited for the site offices essential for the efficient administration of a large contract. By 10 a.m. he and his staff were busy working in spacious, well equipped Terrapin offices. The exceptional speed with which Terrapin Mobile Buildings can be erected is due to their unique method of pre-fabrication. Each unit is assembled, right down to the last fitting, before it leaves the factory. As a result a standard unit 410 sq. ft. in area can be erected ready for occupation in one hour. The units can be used singly or coupled together to form site offices, dormitories, dining halls, ablutions, etc. And they can be moved from site to site without disassembly or removal of their internal fittings.



HOW TERRAPIN MOBILE BUILDINGS CAN SAVE YOU...

TIME ...

MOBILITY: Each unit is easily transported on a standard commercial vehicle. Can be re-located without disassembly. HIGH, SPEED ERECTION: Each unit arrives fully assembled and can be erected by unskilled labour under supervision in one hour. SPEEDY OCCUPATION: With fittings ready - installed there is minimum time lag between erection and occupation.

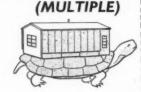
AND MONEY

Coupled to form multiple buildings of any size for a wide variety of purposes. DURABILITY: Each unit is constructed in selected softwood timbers strongly reinforced with steel. RECOVERY VALUE: Recovery value of buildings and internal fittings is 100% (less normal wear and tear) after use on any site. ECONOMY: Average cost of erection is 2-3% of capital value. Removal costs are similar.

TERRAPIN

MOBILE

BUILDINGS



For full details of Terrapin (Multiple) Mobile Buildings send for illustrated brochure and price list on this coupon:

Please send me your illustrated brochure and price list:

NAME.

COMPANY...

ADDRESS

TERRAPIN LTD., 10 PORTMAN SQUARE, LONDON, W.1. PHONE: WELBECK 7996-7



Architects: Messrs. Charles S. Errington, L/A.R.I.B.A. Assistant in charge: K. Kennedy, A.R.I.B.A.

is going up fast all over the country

5 DAYS—7,000 sq. ft. of Wallspan grid went up!

Speed was essential in building three extra floors on Messrs. Clarke, Chapman & Co. Ltd.'s drawing and office building. Speed was the Architects' primary reason for choosing Wallspan. The Wallspan grid covers the elevation illustrated, a similar one on the other side of the building, and two smaller walls. And all this Wallspan was erected in five days by six men!

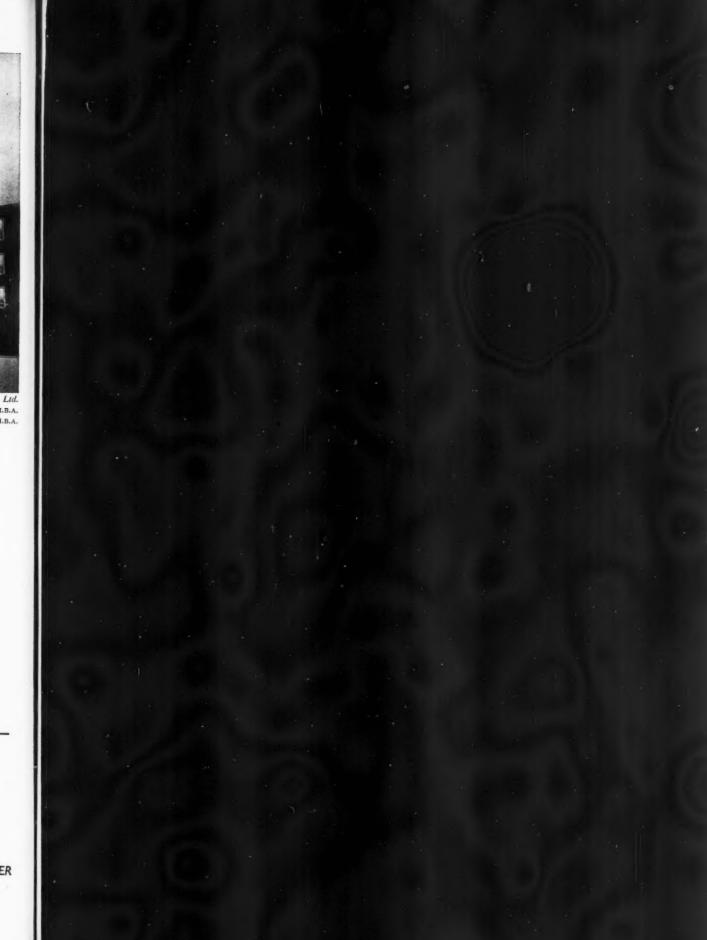
Other factors which influenced the Architects were the necessity for giving the maximum light and the need to create an architectural effect on the already existing building.

The installation was completed with aluminium windows, plate glass glazed direct, and Plyglass infilling panels. All the aluminium is in standard finishno need for maintenance.

Wallspan was the quickest way of putting up these permanent walls. It can be just as quick for you!

WALLSPAN curtain walling

WILLIAMS & WILLIAMS LIMITED . RELIANCE WORKS . CHESTER





WOOD - nature's best building material

RED PINE

a wood remarkable for its versatility . . . at once structurally strong and beautifully grained.



TYPICAL USES

panelling, stairs, floors, firm red knots exposed beams, mouldings, trims, cupboards, Easy to work, holds built-in furniture

Exterior siding, doors, takes good finish windows and trim

Structural timbers

Railway wagons, flour and grain-milling equipment, agricultural imple-

Boxes and crates, tanks and silos

Telephone poles and piling (treated)

311

SPECIAL ADVANTAGES

Interior decoration, Warm straight grain,

screws and nails well,

Low shrinkage and dimension stability

Particularly suitable for load-bearing members in house, commercial and industrial construction

Seasons remarkably well without accompanying seasoning defects

FOR FURTHER INFORMATION

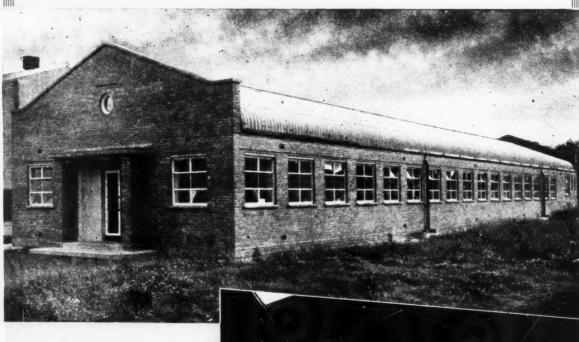
concerning Canadian woods contact The Commercial Secretary (Timber), Canada House, Trafalgar Square, London S.W.1

Reproduced here is figure of Canadian Red Pine

This advertisement is one of a series featuring Canadian Douglas Fir, Spruce. White Pine, Pacific Coast Hemlock and Western Red Cedar

TIM 3

STANDARD STEEL FRAMED BUILDINGS



The adaptability of the Coseley Standard Steel Framed Building is shown in these illustrations. Standard Spans range from 30ft, to 75ft., with 8ft. to 20ft. height to eaves. Lean-to and canopy extensions can be supplied at standard roof slope. Lengths in multiples of 12ft. 6in. and widths in multiples of Standard spans.



COSELEY

- * ADAPTABLE
- EXTENDIBLE
- ECONOMICAL
- DURABLE

ENGINEERING CO. LTD.

LANESFIELD WOLVERHAMPTON ENGLAND • • Telephone: BILSTON 41927-8-9 LONDON OFFICE: 27, OLD BOND STREET, W.1. • Telephone: GRO. 3626-7-8

LIGHTWEIGHT

incombustible ceilings



Modern methods, modern structures, demand lightness, and that is where ASBESTOLUX comes in. Lessening weight, lending itself to prefabrication, reducing costs by eliminating wet work . . . these are its strong points.

Lightness, strength and inertness are important:
ASBESTOLUX has all these properties and —
most important of all — incombustibility.

These ASBESTOLUX ceiling panels, screwed up to suspended tee sections, provide this big store with a strikingly accurate ceiling.



ASBESTOLUX ceiling panels screwed to suspended tee sections at the Lewisham branch of British Home Stores.

Ceiling contractors:
Tentest Fibre Board Company Limited

dry construction needs

ASBESTOLUX

INCOMBUSTIBLE ASBESTOS INSULATION BOARD

THE CAPE ASBESTOS COMPANY LIMITED

114-116 PARK STREET . LONDON . W I . Telephone GROsvehor 6022

and at Blackfriars House, Parsonage, MANCHESTER 3 - Tel: Blackfriars 9355/6 - Eagle Buildings, 217 Bothwell Street, GLASGOW C2 - Tel: Central 2175 - 246a Corporation Street, BIRMINGHAM 4 - Tel: Central 8168



YOU ARE INVITED
TO WRITE
FOR FURTHER DETAILS.



The advantages of speed and economy derived from the use of standard components—such as windows, doors, partitions and sanitary fittings—are well known. In the case of many industrial buildings, standardisation can now be extended to the whole structure permitting a rate of erection that would be impossible with conventional methods. Providing for future extensions is also considerably simplified.

The Arcon Development Group, as a result of long research and field work, has produced a series of standardised structures based on a 40-inch module. These offer considerable flexibility in layout, and a wide range of spans suitable for large or small buildings. Welded tubular steel construction is incorporated in the framework to provide a light but permanent structural system.

The Arcon Service includes the supply of standard structural details, calculation drawings, detailed erection manuals and site supervision by skilled erectors. Costs can be accurately estimated at the outset, and Arcon standardised components are available for immediate delivery from stock.

Standardised structures for Industrial Building

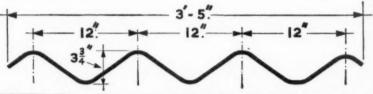
TAYLOR WOODROW (BUILDING EXPORTS) LTD., 41 WELBECK STREET, W.1. TELEPHONE: WELBECK 9211 (6 LINES)

TO TW

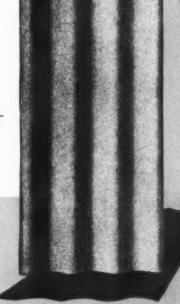


A MODERN Reinforced Asbestos-Cement corrugated roofing with purlins at 6' 6" centres.

The deep corrugations, generous side lap and closely fitting end lap make "EVERITE" Doublesix Corrugated Sheeting very suitable for comparatively low pitched roofing.



		L	A	LA					
Standard lengths	***	***		***	***	***	6'0"		and 8'0"
Standard width			***	***	***	***		3'5"	nominal
Nett. Covering width	***						***	***	3'0"
Corrugations per sheet			***				***		4
Pitch of corrugations	***	***		***	004	***	***	***	12"
Depth of corrugations		***	***		000		***		31"
Thickness of material	***				***		***	1"	nominal
Side lap	***						000	***	5"
End lap - minimum	***		***		***			***	6"
Weight per sq. yard a	pprox.			***			***		35 lb.
Weight per 100 sq. ft.				***	***	***	***	•••	476 lb.



TURNERS ASBESTOS CEMENT CO LTD A MEMBER OF THE TURNER & NEWALL ORGANISATION

TRAFFORD PARK

MANCHESTER 17

You can do great things for walls

at a
surprisingly
low cost
with the new
MARLEY
wall tiles

Thermoplastic and flexible. Easily fixed with adhesive. Standard size: $4\frac{1}{2}'' \times 4\frac{1}{2}'' \times \frac{1}{46}''$. In a range of pastel shades with decorative strips and angles in stronger colours.

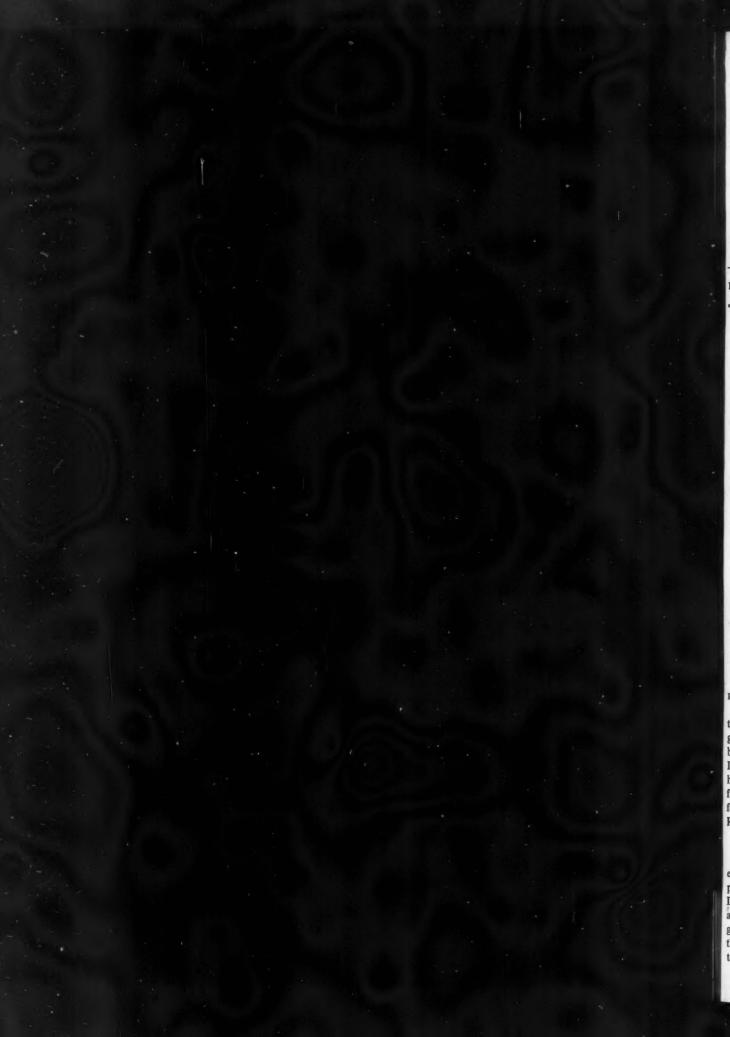
Ask our representative to call and show you samples.

The Marley Tile Company Ltd., London Road, Riverhead, Sevenoaks, Kent.

Sevenoaks 2251.









THE ARCHITECTS' JOURNAL

EDITORIAL BOARD: (1) Consulting Editor, F. R. Yerbury, O.B.E., Hon. A.R.I.B.A. (2) House Editor, J. M. Richards, A.R.I.B.A. (3) Executive Editor, D. A. C. A. Boyne. (4) Editor, Information Sheets, Cotterell Butler, A.R.I.B.A. (5) Editorial Director, H. de C. Hastings.

Guest Editors (Costs): (6) N. Stanley Farrow, M.B.E., M.I.O.B.; A. W. Cleeve Barr, A.R.I.B.A.; James Nisbet, A.R.I.C.S.; Ivan Tomlin, A.I.B.E.; E. F. L. Brech, B.A., B.SC. (ECON.), M.I.I.A.

B.SC.(ECON.), M.I.I.A.
TECHNICAL EDITOR: (7) Lance Wright, A.R.I.B.A.
SPECIALIST EDITORS*: (8) Planning (9) Practice (10) Surveying and Specification (11)
Materials (12) General Construction (13) Structural Engineering (14) Sound
Insulation and Acoustics (15) Heating and Ventilation (16) Lighting (17)
Sanitation (18) Legal

Assistant Editor (Buildings), L. F. R. Jones, (21) Assistant Editor (Production), W. Slack. (22)
Assistant Editor (Information Sheets), V. A. Groom. (23) Assistant Editor (Costs),
J. Carter, A.R.I.B.A. (24) Photographic Department, H. de Burgh Galwey, W. J.
Toomey. (25) 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. 3150 July 14, 1955 VOL. 122

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 30s. 0d.; carriage, ls. extra.



ROYAL FILLIP

The annual convocation ceremony at the Royal College of Art was an even grander occasion than usual this year because the principal speaker was the Duke of Edinburgh who received an honorary fellowship. At the same time four honorary associateships were conferred, including one on Sir Howard Robertson.

Highlights of the ceremony were the extremely witty speech by the principal, Robin Darwin, who welcomed the Duke by saying that his acceptance of a fellowship would give a royal fillip to good design, and the address given by the Duke himself who, when referring to the evolution of a more critical

approach to the appearance of everyday things—and the evident need of it—was so up-to-date as to employ the term "Subtopia." It is proof of a long-felt want that this term, coined in the June number of *The Architectural Review*, should have attained such distinguished currency already.

And what a pleasure it was to be reminded that in the Duke of Edinburgh we have a royal personage who, on the subject of science, industry, design and the contemporary world generally, knows what he is talking about instead of escaping into meaning-less clichés.

HOUSE ON THE HOME

Well-heralded with handouts the Home Service feature on "The Shape of a House" proved to be something of a washout after all. The programme was too thick and complicated for a start, with recorded conversations sandwiched piecemeal into a main conversation between Mr. Colin McInnes and Miss Honor Wyatt, so that one never knew on which level of unreality the programme was proceeding, and the recorded inserts were never big enough -three sentences and an um-ah from a builder, forty words from an architect, random snippets from the Ideal Homes Exhibition, three phenomenal evasions from a Building Society spokesman, and so forth-never big enough for anyone to get off the cliché-platitude level and develop an idea.

Everybody, architects, builders, financiers, scientists and public, seemed to be passing the buck with the trained alacrity of a Varsity three-quarter line, with an occasional scrum-down to hack

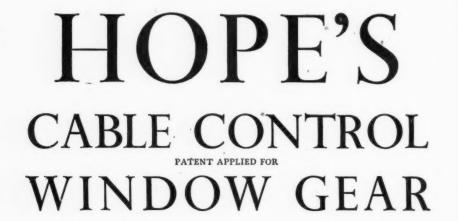
away at old friends like traditional-versus-contemporary, and nobody can have finished the programme any wiser than they began it. Two major mistakes—the BBC's firm belief that the Home Service audience is too stupid to listen to anything except chit-chat; and Symposiomania, the belief that if you record enough different contradictory and unrelated opinions on one piece of tape you will have recorded something important—which, on the analogy of enough apes and enough typewriters might even be true, but you'd need several light-years of tape to get it.

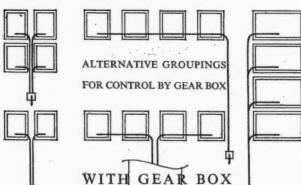
The only person who emerged from this shambles with honour was Osbert Lancaster who summed up by pouring scorn on all and sundry, and announced that the general impression emerging from the discussion was one of total chaos—how right he was.

MAN IN MOTION

The Silly Season affects the art-galleries quite as badly as it affects the newspapers in most years, but the presence in Oxford and London this year of a large number of distinguished foreign critics who are over here for the annual conference of the Association Internationale des Critiques d'Art has caused a certain stiffening of morale, and there are some unusually good exhibitions to be seen at the moment.

Quite apart from Wildenstein's spectacular show of Late Mannerist and Early Baroque painting from Rome, which is still on, and must be seen by all visual-arts practitioners of one-upmanship, because it includes yet another unknown Carravaggio unearthed by the tireless Denis Mahon, the ICA





FOR TWO OR MORE VENTILATORS OF ALL TYPES

NEAT POSITIVE

WITH SLIDING KNOB FOR SMALL VENTS WITH 9" MAX. **OPENING**

SIMPLE

INCONSPICUOUS



WITH SLIDING bronze HANDLE FOR LARGER **VENTILATORS** OF ALL TYPES



HENRY HOPE & SONS LTD

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

MEMBER OF THE METAL X WINDOW ASSOCIATION













The winter campaign of building and refitting at the Festival Gardens, Battersea, has produced quite a crop of new buildings: top, left and right, the Riverside Restaurant extension (designed by J. C. Kennedy, LCC Parks Dept.); above, left and right, the Alpine Restaurant (designed by Kenneth Graham), an unexpected decision to stop being Festival, see this week's frontispiece on page 38; right, the rebuilt and improved Tree Walk (designed by Lawrence Kenchington) and extreme right, one of the new shelters, also designed by J. C. Kennedy, which seems to have struck a right balance between municipal practicality and gardenesque fantasy.





have imported from Durham University a not-so-silly exhibition called Man, Machine and Motion, a grand omnium-gatherum of photographs of men going, or about to go, somewhere rather fast, or rather far-fetched, in vehicles winged, wheeled or otherwise.

This is the sort of exhibition which cannot miss, for-apart from being mounted in a wickedly elegant framestructure of considerable mechanical ingenuity-it contains enough aircraft of the strut-and-string variety and motor-cars of the milk-float epoch to have all the architectural teddy-boys there in force, and enough space-fiction and aqua-lung pictures to have ASTRA-GAL muttering, "Technology, you gorgeous beast" again, and a largely co-incidental portrait gallery of the heroes of one's Fifth-form years-Malcolm Campbell, Gottleib Daimler,

Clem Sohn the bat-man, Louis Bleriot, and the rest.

METAL IN MOTION

ASTRAGAL, for one, likes his motionmachines to be plain and sensible, rather than adventurous and fantasticated, but is prepared willingly to concede that the "adventure of transportation" as represented by this exhibition, is worthy to be saluted. Not quite so certain that one is prepared to concede also the fantastication of transport, ASTRAGAL went along to hear what sort of case Reyner Banham could put up for American automobiles in a lecture (also at ICA) called "Metal in Motion."

The Banham thesis, that automobile styling must be judged as a popular art was supported by side-elevations of popular film-stars, science-fiction illustrations, corset advertisements, and a good deal of erudition about market

research-as well as a certain amount of sniping at the architectural profession and at COID. A great deal of it was entirely convincing, but only, as he himself insisted, if one is prepared to judge Borax and Chrome by their own standards-which most people, one suspects, would be loth to do. On the other hand, his insistence that one should not judge things, which are not fine art, by fine-art standards seems reasonable enough, and made at least one member of the audience realize how often in the past he has been guilty of damning as slick or superficial some piece of design which could not, in its terms of reference, last long enough to become Fine Art anyhow.

RECRUITING BUILDERS

Nigel Birch, the Minister of Works, has proved himself a most able successor to Sir David Eccles, although his character might be described as a trifle more muted than that of the present



Farewell Festival Style

The newest building at Battersea Gardens-flattered by the photograph above, for most of its exterior lacks the wrought-iron whimsies that have collected around the entrance—is the Alpine Restaurant. Nobody minds a good restaurant, and eating is part of the ritual of enjoyment, but in a setting where the foundations of a new architecture of pleasure were so firmly laid in Festival year, why must we have this creaking return to a style which had already worn thin in the 'thirties? Fancy dress in architecture can have its virtues, when worn with a Victorian or

even a Butlinesque swagger, but the Alpine Restaurant looks like an attempt to give the public whatever it is a committee of middle-grade civil servants thinks they might possibly like. In the background the bold fairground plasticity of the Centaur Pavilion, and the crisp technology-and-space-frame head of the lamp-standard, mock the false genteelism of the restaurant—let us hope their lesson will be learned this time, and no more Battersea bricks will be dropped in the Festival Gardens. (See also ASTRAGAL, page 37.)

Minister of Education. ASTRAGAL once had the good fortune to meet Nigel Birch not long after he was appointed Minister, together with some of his closer colleagues in the Ministry, and was immediately struck with his awareness and grasp of current architectural problems. On building high in central areas, on contemporary design, on landscape gardening, on the issues which worry the editors of The Architectural Review, on the value of research and development work in building. On these and many more subjects he demonstrated that he possessed

that breadth of understanding which is

so desirable in a client-and what is a

Minister but one of the largest and most

influential of clients? He also has a

refreshing sense of humour and a com-

forting appreciation of good food.

ASTRAGAL was reminded of most of these virtues when he heard Nigel Birch open a small exhibition at the Building Centre recently. The purpose of the exhibition, which is entitled "Building -A Skilled Creative Job" is to interest boys of school-leaving age in the various building crafts. It has been organized by the BC, in collaboration with the MOW, the LMBA and the heads of the building schools in the London area. It is the ambition of the LMBA to recruit 2,000 boys to the industry a year. Minister Birch, however, while welcoming the idea of having the exhibition, made one or two shrewd comments. He pointed out that mechanical tools could take a lot of drudgery out of building work, but asked whether all sites were "as mechanized as they might be, and worthy of the type of boy which the industry must attract if it is to carry out at a proper cost its programme of industrial development and slum clearance?" He asked whether apprenticeship arrangements were up to date, and pointed out that the Building Apprenticeship and Training Council had been asked to report on this matter.

He concluded by reminding the audience that while the exhibition was concerned only with craftsmanship, the apprentices' opportunities (if any) for "supervisory work leading to management in the full sense" should not be forgotten. Three neat blows in the chinks of the average builder's armour.

The Editors.

PUBLIC VERSUS PRIVATE ARCHITECTS

 ESPONSIBLE members of the RIBA Council and committees go out of their way to avoid any possibility of stirring up antagonism between public and private architects. This is natural enough, because they realize how easily the profession could be split in two over this issue. Nevertheless it might be a rather better policy if the RIBA discussed this question of public versus private architectural practice openly and unashamedly, rather than attempt to hush the whole matter up and pretend that the trouble does not exist.

We are convinced that half the cause of ill-hidden trouble between public and private architects is due to ignorance of each other's scope and problems. Not long ago the principal partner of a large London office, which has produced some of the best post-war work, was arguing with the chief architect of a very large local authority. "Where you official architects are lucky," said the private architect, "is in not being so dependent on the goodwill of clients. Why, I've had a client come back and complain about a detail six years after the building was finished." "That is nothing," replied the official architect, "we live with our mistakes for ever, even if they are made by our predecessor we are blamed for them, our committees are fully as critical as any private client." The incident is slight, but illustrates how unalike the public and private architects imagine themselves to be, and how little they understand of each other's world.

What does the public architect imagine when he visualizes the private architect? A man who spends his life in clubs and bars, angling for jobs, a man who has forgotten how to draw, but is good on the golf course. His buildings are designed by sycophantic juniors, whom he will dismiss, or whose salaries he will reduce, as soon as work becomes slack, but each of whom is egged on by the hope that he will become

a partner in time and share in the huge profits.

And how does the private architect visualize the public architect? The chief he knows as a colourless man who hadn't the strength of character in the economically difficult 'thirties to make the grade and so drifted into local authorities, usually under the borough engineer. He does no designing, but spends his life in committee, endeavouring to build up a vast office as the larger the office the more he gets paid, irrespective of the amount of work done. He keeps all the best work for his own office, but the awkward jobs-the jobs which might look bad on the books-he gives out, with feigned generosity, to private architects. His assistants are those who are prepared to cure their faults at the public expense. Overpaid and under-worked they rise in status, not through work, but through peregrination. They fill their evenings and lunch and tea hours with private commissions, many of which they have acquired through their official job.

And how do these two kinds of architects see themselves?

urant t is a might round chnok the

esson oricks also

Handling those key social requirements, housing and schools, the public architect sees himself as very well-placed for moving the county another inch or so towards Utopia. The continuous building programme not only guarantees him employment, and enables him to concentrate on the job in hand without wasting energy job-getting, but it also enables him to undertake a certain amount of development work, thereby increasing architectural standards all round. The private architect sees himself as the Great Man of the profession. A bundle of energy, working all hours, he strives to keep the office fully employed. His buildings, over which he ponders night and day, are the architectural monuments subsequent generations will be sure to preserve. Generous, upright, industrious and artistic, he personifies the architect to every man-in-the-street.

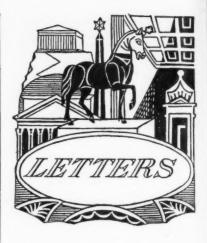
These comparative descriptions may strike the reader as far fetched. Let him then read the Journal's correspondence column. Hardly a week goes by without evidence of the misunderstanding which prevails in architects'minds about the public and the private office. The sooner the RIBA undertakes a study of both types of office and discovers the faults, frailties and successes of both, the sooner the profession will become united in fact and not just in name. At the moment, ignorance and inefficiency are doing the profession no good, either within its ranks or in the eyes of the public.

COST RESEARCH AT THE RICS?

At the recent conference of chartered quantity surveyors, AJ Guest Editor James Nisbet called for the establishment of a permanent home for cost research at the RICS. He was protesting at the shelving of research proposals by the quantity surveyors committee of the RICS and their suggestion that responsibility for research lay with the Building Research Board (see AJ July 7). Indeed the preoccupations of the surveyors' gathering were in sharp contrast to those of the British Architects' Conference at Harrogate, where the need for published systematic cost information was repeatedly stressed.

There is much of the cost problem that requires the resources and the scientific skills assembled at BRS for its proper investigation. But an immense amount of cost information—the basic material for research—lies in the hands of the quantity surveyors themselves. If this were collected—with proper safeguards for its confidential nature—analysed and published, its use in everyday work could greatly strengthen that public confidence in the two professions that the RICS (and the RIBA) so rightly seek. If architects now expect from their quantity surveyors something more at the design stage than a foot super or foot cube price (hedged about with qualifications and disclaimers) the RICS is surely the appropriate body to see that its members are suitably equipped.

We would like to see the RICS respond to the appeal at the Harrogate Conference by announcing the formation of a study group at 12, Great George Street.



" Mark Tapley"

" Poached"

A. E. Ward, Secretary, Institute of Registered Architects.

" Unqualified Assistant"

Colin P. L. Davis

Paule Vézelay, Delegate for the Groupe Espace in Great Britain

Public v. Private Architects

SIR,—This is about private and official practice. I am for private, one hundred per cent., in spite of everything. Should I fail to make the grade I would try a different kind of job: Queen's Messenger or something. Some architects have a sort of natural or inspired magnetism which attracts work of all kinds. Most are probably like me, with no short cuts and having great need for continual concentration, optimism and sense of humour. We are not spoon-fed or featherbedded in any way and do not ask it but strive with what we get to become good architects: with patience and our share of luck, when it comes, we hope to succeed. We do not expect it to be easy, and by Heaven, it is not.

Heaven, it is not.

After seven years' war service and three years as a staff architect I made my personal attack on life, with licensing and all the other odds stacked up high. The odds have shortened a little now but amongst the jobs I have done the following, in shorthand,

were some of those that got away:

1. Alterations to country house. Client's wife died.

2. Entered for big competition. Failed to recognize premiated designs from competition conditions.

New cocktail lounge for well-known hostelry. Clients failed to agree on design policy. Wrong one won.
 New canning factory. South African

4. New canning factory. South African rains failed to stop and ruined fruit crops. Client went broke.

5. Contemporary ranch-style country house for rich client with French wife. Protracted negotiations with local authority via a property agent, during which the p.a. took a deposit from client, then sold all the turf. Client then had bad business break and withdrew: took six months and a writ to recover the deposit.

6. Extensions to second canning factory. Permission refused by County Planning Office.

Extensions to house at Coombe Hill.
 Client changed his mind about staying there.
 Conversion of large country mansion into

flats. Client turned out not to be true owner:

nats. Client turned out not to be true owner: very shady affair.

9. Sports Club. Client suddenly ceased to be accessible: transpired he was in custody on charges of fraud.

on charges of fraud.

10. House in Bucks. Client omitted to mention another firm had been invited to draw up plans: withdrew.

11. New Factory. This was being eased in my direction by Mutual Influential Friend.

M.I.F. proved insufficiently I. and company erected factory using own building manager and large contracte.

and large contractor.

12. Private house. Recommended to client

12. Private house. Recommended to client by heavily committed firm: nil result. Most of us go through this sort of thing in one way or another and survive, even thrive on it: one learns to appreciate the rewards of potential success. Maxwell Ayrton once told me he reckoned that proportionate to the day there are no more architects now than there ever were, only far more assistants. I think he was right. I think also that official offices should be kept as small as possible and the bulk of the work put out to private architects. The the work put out to private architects. The main reason I think this is that even with the most inspired direction the official climate is as a general rule unsuitable for dedicated professional men and women.

Outside the Renaissance, a time apart, name

me one really immortal official architect of any period. Now consider the legion of the immortals. As for official architects doing private work in their spare time, good luck to them. It shows where their hearts lie and makes every kind of sense. In any event I am, as I said, for private practice and for a profession predominantly of really professional progressions.

professional people.

In consideration for the above details from my office files I ask leave, Sir, to sign myself,

" MARK TAPLEY."

SIR,—The letters in your issue of June 23 from "Poacher" and Allen E. Souter throw a revealing light on the question of private work carried out by architects employed by local authorities. At the recent RIBA AGM, the President indignantly challenged AGM, the President indignantly challenged a speaker to "produce any factual evidence of one single case" of such practice. Considering that a previous speaker, at the same meeting, stated "in my present position I have no choice but to drop my pencil at 5 p.m. and dash off home, because I have a couple of private jobs on the go," one would have thought the President would have thought the President would have been satisfied with this evidence. Presumably he will now take note of the two above-mentioned letters.

ects

official

d per I fail

Ferent some-

atural work with d for sense

atherit but

good re of

cceed. d by

three

rsonal

ll the

have

jobs hand,

lient's

ed to com-

nown

lesign frican

crops.

house acted

ia a took

with-

cover ctory. nning

here.

into

sumably he will now take note of the two above-mentioned letters.

"Poacher" suggests that if he and his salaried colleagues did not privately undertake small house design, such work would not go to the private architect, but to the speculative builder. Such a statement is not only ludicrous but dangerous in its implication. There are till believe it are represented. tion. There are still, believe it or not, many private architects with small practices who delight in undertaking the small private house and providing their clients with the services that they rightly expect. Does "Poacher" honestly maintain that he can equal such services? Is he prepared, indeed able, to visit showrooms with the client and wife, to advise on and choose sanitary ware, ironmongery, wallpaper, floor coverings, etc., to meet representatives on site during normal working hours? Is he satisfied that he can provide adequate supervision without interfering with his normal duties? His reference to small houses as "pitiful commissions" can only lead one to assume that his services are equally pitiful. As a private architect who takes a pride in the architecture of the small house, I can only express my disgust with such views.

with such views.

Both Mr. Souter and "Poacher" imply that they undertake private work as a stepping stone to private practice. Whilst not doubting their honourable intentions, I would venture that warm many of their ture to suggest that very many of their colleagues regard such work merely as a

means of supplementing their normal salaries. A permanent job, good holidays, and an ultimate pension, coupled with the odd private job on the side is a picture that not many will resist. Is it not obvious that with hardly any overheads the poacher is prey to the unscrupulous client. A reduction in fees of one or two per cent. would still leave a handsome profit, and how does one stand up to the client, who says—"After all why shouldn't you reduce your fee, you're only doing this job part-time."

I would ask Mr. Souter to view the present situation through the eyes of the small private practitioner. He will see that a vast amount of work is now being carried out by the architects' departments of the local authorities and Nationalized Boards. He will view with apprehension the "all in" services being offered by the large Contractors, and will in passing, question whether the architects employed on the staffs of such firms are happy about the ethical aspect of their employment. He will observe that the big jobs that are left over will go to the larger private offices, but he will console himself with the thought that he can still practice architecture on the medium and small job, and perhaps in the process earn a reasonable living for himself and his family. His assurance is short-lived, for he will then come across the Building Surveyor in the local Council office who is doing a "nice little factory extension in his spare time," and the council architect in the office next door who is "doing a couple of nice private houses in his spare time."

In due course, no doubt, Messrs. Souter and "Poacher" will achieve their ambitions, and will become private architects. I wish them luck—they will need it.

" POACHED."

London.

The Reason

SIR.—In your issue of March 24 you had a letter under the heading "Will Private Practice Disappear"? Could it be because this question is asked in all seriousness that the societies of private architects in Stoke, Plymouth and London have been formed?

London.

Incompetent Bosses?

SIR,-Referring to three dismal stories concerning incompetence on the part of archi-tects, O. Evans Palmer glibly states, in his letter headed "Incompetent Assistants," that "Enquiry soon showed that it was in each case an unqualified assistant who was primarily responsible." As it is the assistants (qualified or otherwise) who do most of the work this is not surprising. But they are not responsible (to the client), it is the boss who is responsible—that is what he is

It is a poor boss who blames his assistant and as the old army adage says: "there aren't any bad soldiers, there are only bad officers."

" UNOUALIFIED ASSISTANT."

SIR,-O. Evans Palmer seems to be making heavy weather of a fundamentally simple problem (AJ, June 30). Any architect who feels he is plagued by incompetent or irresponsible assistants—whether qualified or unqualified—has the remedy in his own hands: the sack.

hands: the sack.

One might, however, consider the problem from another angle. Is the architect himself so devoid of personality that he cannot command the respect and loyalty of first-class assistants? One cannot acquire a sense of responsibility if one is denied all opportunity to take it. No assistant worth his salt will remain for long with an architect who refuses to delegate responsibility.

It is only the dwarfs of the profession who cannot or will not put trust in their assistants, and they have only themselves to blame when their offices finally degenerate into a graveyard for timid, unimaginative, hack draughtsmen.

COLIN P. L. DAVIS.

London.

Groupe Espace

SIR.—I hope I may reply to ASTRAGAL s statements about The Groupe Espace, pub-

statements about The Groupe Espace, published in your issue of April 21.

The British Groupe Espace was inaugurated early this year. Like the Groupes already formed in Switzerland, Italy and Sweden, it is independent from the parent body in Paris which was founded in 1951, yet its aims are the same.

There is a membarship of moderate the

There is a membership of modern architects

There is a membership of modern architects (the word modern is chosen, the word contemporary is discarded) and of painters and sculptors from the vast and growing field of non-figurative artists.

Non-Figurative Art dates from 1912 and modern architecture from a slightly later date, yet they have developed side by side. The work of the pioneers in all three professions created a Renaissance, and their influence is spreading to almost every field. fluence is spreading to almost every field of modern design in its varied manifesta-tions; such names as Walter Gropius and Jean Arp and many others among some two hundred members, are proof of this influence.

Architect members of the Groupe Espace remain perfectly free to commission works from any contemporary artists or to collaborate with them, while artist members of the Groupe remain equally free to accept commissions from or to collaborate with the Groupe remain equally free to accept commissions from, or to collaborate with architects whose designs are neo-Georgian, or out-dated, yet it is reasonable to suppose that many modern architects and Non-Figurative artists—especially those who wish to become members of the Groupe Espace— will welcome the opportunity of closer

collaboration.

There is no "party line," no "playing at politics" whatever interpretation is chosen for that word—no "expert Parisian art slogan," no "orders from Paris," and no "splinter Groupe Espace," as ASTRAGAL

There is an alliance of artists and architects in many parts of the world.

There is a belief that isolation is bad, and that better collaboration between the three professions must be of value.

There is a desire to explore new possibilities for the use of lines, form and colour and their relation to space.

their relation to space.

PAULE VEZELAY.

London.

[ASTRAGAL replies: It occurs to me that Mme Vézelay may think that the words politics and party-line were meant to be taken literally. It was, of course, only artpolitics and an aesthetic party-line which were intended—Mme Vézelay's flat statement that non-figurative art "dates from 1912" is a good example of the latter in action. As for the rest of the letter, ASTRAGAL is relieved to know that some of the more extravagant stories about Groupe Espace are untrue, but wishes that Mme Vézelay had been less disingenuous on the subject of the English "splinter." She was present herself when the greater part of the English section resigned en masse, and she knows that they resigned partly because of her interpretation of the word modern, and partly because they did not wish to have all their decisions referred to HQ in Paris for approval. The existence of this breakaway group, which now numbers some forty persons, can hardly be denied, but it is perhaps unfair to call it a splinter group because its working membership now outnumbers the residual members of English Groupe Espace by about four to one.]



MARS

City Exhibition

The "Turn Again . . ." exhibition (see ASTRAGAL, June 30) was opened by the Lord Mayor on Tuesday. Staged by the MARS Group and set up in the courtyard of the Royal Exchange, its object is to persuade business interests in the City to turn their backs on their sad post-war record and to adopt new techniques and all that they imply in rebuilding the City.

In his opening speech the Lord Mayor said "London remains what it is today—a national and an international centre of com-

national and an international centre of commerce, industry and finance—because it has constantly adapted itself to changing circumstances, and remained young.

"The problems we have to deal with—of over-concentration and congestion—are not insuperable, and no worse than can be found in other thriving capitals, but their solution calls for energy, fresh minds and a contemporary outlook.

We would be foolish not to use to the full the resources at our disposal to solve the problems of traffic, to improve working conditions, and to re-equip the City as a modern centre. If this involves changes and creates new and unfamiliar forms, we should welcome them as a sign that we are alive and moving with confidence into a future that we have helped to create.
"In this way only will we keep the City

of London forever young and beautiful."
In another speech at the opening ceremony
Sir Colin Anderson, a director of the Midland Bank and of the Orient Line and vicechairman of the Tate Gallery Trustees, said
"That the Lord Mayor should have come

in person to open this exhibition is a positive assertion by our leading citizen that the manner of the rebuilding of the City is a matter of the first importance to all of us, and not merely to those who want the best return from the area they themselves are rebuilding.

"I was not an originator of this exhibi-tion. I greatly wish I had been; its aim is so exactly on the target. But I am glad that, at any rate, I have this opportunity—as one who is in business in the City—to support it publicly.

In this past year we have seen growing around us here what seems far too high a proportion of large blocks of an unacceptable utilitarian and materialistic character. Yes, they share a character. They represent that well-known thing, the Lowest Common Denominator—and that is why one can scarcely tell one thing from t'other.

"They have made us ask ourselves: Are we, in the City, to be denied our share of imaginative planning and of interesting, even life-enhancing contemporary buildings?

"Or are we to wait patiently in the hope that these blocks, of which we complain,

are merely the catch-penny forerunners of a more distinguished and less eagerly run-up company? Can we feel that the City even knows what it could have in the way of modern planning and modern buildings

modern planning and modern buildings?

"The war has put at our disposal the most dramatic of all opportunities for city planning. Are we going to be worthy of it? That's what this exhibition is about. It is designed to save our having to travel to see for ourselves what other cities—with less opportunity than ours—have managed to do.
"No need to go to Rotterdam—no need to visit Coventry—still less the Americas. Here, in our midst, the camera will tell us plainly enough what modern town-planning and architectural techniques can mean. It

and architectural techniques can mean. It will assure us that we can still lift this city into the metropolitan category its status deserves.

"This is within our scope if only we mean to have it. We have the architects. The fine new schools, factories and housing projects prove it. We have a duty to use similar prove it. We have a duty to use similar civic and private imagination within these world-famous acres of the City. We are not too poor in pocket. Let us not prove inadequate in spirit and in achievement.

The exhibition, which comprises large photostats of the best that has been done in office building here and abroad, will remain open until the end of the month.

OBITUARY

Professor Gustave Magnel

We learn with regret that Professor Gustave Magnel died at Ghent on July 5. Professor Magnel, whose name at least will be familiar to readers of the Journal, was born in Belgium in 1889. From 1912 to 1919 he worked in London with D. G. Somerville and Co. and in 1919 he returned to Belgium to take up a post at his own University of Ghent, first as Master and later as Professor and director of the laboratory for reinforced concrete. He is best known as the inventor of the system of prestressed concrete which bears his name. Latterly he has become the leading exponent of prestressed steelwork. He enjoyed a world-wide practice and was a director of the Pre-Compressed Concrete Engineering Company of Canada and of Stressed Concrete Designs Ltd. of London (see page 61 for a further apprecia-

USSR

Housing Experts Visit Britain

The first Russian housing delegation to visit the UK arrived in London on July 11 Visit the UK arrived in London on July 11 for a 12-day visit. They have come at the invitation of the Government following a resolution of the UN Economic Commission for Europe providing for the exchange of mutually beneficial visits by specialists. delegation will spend the first seven days in the London area and will then pass to Scot-land and to various centres of the north of England. In the course of their stay they will (inter alia) visit the LCC, Harlow New Town, the Building Centre, BRS, and some factories making prefabricated houses; they will take part in some discussions at the Ministry of Housing and will be received by the RIBA.

Later in the year UK housing experts are to pay a return visit to Russia.

CONCRETE

Advanced Courses

In 1954 the Department of Technology, City and Guilds of London Institute, began a course in concrete practice. At the start of the 1955-1956 session a second year

course will begin, for the benefit of students who want a more advanced knowledge of the subject. Students will normally be expected to have completed successfully the first year course before entering for the second one. Full particulars (price 6d.) can be obtained from the Institute at Gresham College, Basinghall Street, E.C.2.

NIALL MONTGOMERY

Dublin News-Letter

The news from Dublin is secret and profane, but mostly secret—secret Town Plan, secret municipal buildings, secret high flats, secret politics; only the architects are profane. Now read on: THE TOWN PLAN

A draft town plan, with an "estimate" of £18,000,000 approximately, was submitted to the City Fathers in April of this year and adopted by all thirty-five of them, although one of their number, who left although one of their number, who left early, told the reporters that when it was demonstrated "with lantern slides, maps and diagrams by Dublin Corporation's Town Planning Officer, Michael O'Brien, only half a dozen turned up." (Afterwards the councillor apologized, secretly.) No ordinary citizen has seen the scheme, but a High Court ruling of 1952 requires its production by July, 1955. (History: Abercrombie and the Kelly Brothers produced the winning design for

Brothers produced the winning design for a Town Plan, 1914; were appointed by the a Town Plan, 1914; were appointed by the Corporation to prepare a sketch development plan, 1938; did so, 1940, when the Corporation accepted it and resolved to make a planning scheme. For twelve years thereafter the City tortured citizens wishing to acquire and develop city sites with refusals anchored to the word "scheduled." Asked "Scheduled for what?" they would reply: "We wouldn't know until a Town Plan is adopted." Citizen Smith, millionaire owner of Modern Homes Ltd., asked the High Court: "Scheduled for what?" Let's get out of these brackets.) High Court: "Scheduled foget out of these brackets.)

get out of these brackets.)
It says there will be road widenings, two new bridges across the Liffey, acquisition of sites for housing—over a short period—reservation of private and public open spaces, of spaces for car parks and for municipal offices, and—for gladness—it is added that "Professor Sir Patrick Abercrombie, who is still the Corporation's planning consultant, has seen the plan and reported favourably on it."
What's coming up? Ring roads? The

What's coming up? Ring roads? The word "reservations" in the published report is unhappy in its evocation of the Indian-style camps the Corporation have pitched around the suburbs in the last twenty years. Who knows; they may even implement Sir Hugh Lane's immodest proposal of thirty years ago to cover in the river with an art gallery "designed" by Edwin Lutyens!

(This is unfair—Town Planning Officer and his staff are cultivated, intelligent, hardworking people, but are such characters allowed to design a Town Plan, thereby usurping the function of file-bound clerks pride-bound politicians? (This is unfair too.))

(Non-architectural item evoked many voices in these brackets: Mayor Wagner flashed through Dublin on his way home, brightened the leaden June skies by commenting on the cleanliness of Dublin's streets and by this story: A Jew and a Scot, old friends, meet accidentally in New York of the many years calculate with York after many years, celebrate with a tremendous dinner at an expensive restaurant. The Jew beckons to the waiter at the end of the dinner, but the Scotsman says: "No, I'll pay." Next day the papers carry the heading: CRAZED SCOTSMAN SHOOTS JEWISH VENTRILOQUIST.)

MUNICIPAL OFFICES

Architects are keeping a respectful, if slightly jaundiced eye on that "space

udents wledge rmally d.) can resham

RY

d pron flats. te" of

mitted s vear them, o left maps ation's 'Brien rwards but a

gn for by the veloped to vears ishing with

s pro-

uled. would Town onaire d the s. two

ion of open d for it is Aberation's n and

The lished of the have last even t pron the by

Officer ligent. acters clerks s un-

Mayor s way blin's and a New ith a res-

ter at tsman MAN Γ.)

al, if space

strated of the city's buildings?)
But—perhaps because they're younger,
1755?—the birds in No. 20 Dominick Street

reserved for municipal offices" in the Town Plan. Last January the Corporation adver-tised urgently for a consultant architect to tised urgently for a consultant architect to take over from their overworked designers the planning and supervision of new civic buildings, net floor area 150,000 square feet. Applicants were asked to quote a firm time for completion of working drawings and specification! The site is wonderful, south of the river, sloping from Christchurch down to the quay wall, almost opposite the Four Courts. Architects, many of whom could not tell a gadrooned voussoir from a prolapsed pendentive, secretly felt that time spent in devising a building for that historic commanding site would not be wasted. May 8 the papers carried a story that work would shortly start on the civic building and that it "will rise up in height from the quay to two tower-like superstructures of seven or eight storeys high at the top of the hill, at the Christchurch side of the square" and it "will embrace a large courtyard. All that sounds like working drawings completed—and of the school of Hieronymus Bosch, with full-sizes by James Ensor—but it doesn't say who the architect is. The City Manager an iron. take over from their overworked designers James Ensor—but it doesn't say who the architect is. The City Manager, an iron man un-prone to pander to the frivolous curiosity of ratepayers, has just retired—

HOUSING SITES

rumour says to Byzantium.

That "acquisition of sites for housing— over a short period" in the draft Town Plan is not devoid of interest either. Cor-Plan is not devoid of interest either. Corporation last November—own staff too busy: see above—advertised for consultants to do flats on three important sites—Bridgefoot street, on the south bank adjoining the new civic buildings site, Dominick and Buckingham streets, north of the river. Seven months passed and no official announcement of appointments was made, although it is rumoured that Michael Scott and Desmond FitzGerald have been asked to deal with the two biggest sites Bridgefoot to deal with the two biggest sites, Bridgefoot and Dominick streets.

and Dominick streets.

Dominick street, grandest canyon in the metropolitan chapter, drops suddenly southeastwards from the great north road just before it crosses the river on the axis of the old City Hall. It's even a canon in the musical sense, each brick, each wall, each window, each house, each side of the street taking up the same subject successively sucwindow, each nouse, each side of the street taking up the same subject successively, successfully, in strict imitation. And in No. 20 more music, transition from Handel to Mozart, delirium of rococo stucco with accent on birds—"birds peacefully feeding their young or rising with clamorous wing from the staircase walls stridently shrinking from the staircase walls, stridently shrieking at the passer-by; they circle the ceilings in graceful flight or with fierce beak and talons engage in death grapples with dragons" says engage in death grapples with dragons' says Dr. C. P. Curran; top expert on Dublin and its plaster. (These cheers for the old City are not always echoed by the City's official architects. Here is criticism—from a report of the January inquiry into a Corporation clearance order for Pimlico and Marrowbone lane. "... he had inspected all these houses and he found that most of all these houses and he found that most of them were defective structurally and some of them dated to 1734. It would not be worth while to repair them. Most of them worth while to repair them. Most of them were of the old Hugenot and pseudo-Georgian type." (Sic, please—"Hugenot" and "pseudo.") Seventy years ago, in the writer's boyhood, it was customary, when fire broke out in the retort houses or in the tar works of the Dublin Gas Company to lock all gates lest by any evil hap the Fire Brigade might effect entrance. Cultural bodies charged with the care of antique Hibernian fabrics tend to view the approach of the official architect with similar fear. of the official architect with similar fear. (Should such buildings be put . . . out of bounds for architects?) Why was merulius permitted to weep the heart out of Royal Hospital Kilmainham, oldest and most fene-

aren't immediately threatened, hemmed in though the house is with tenements. But perhaps it's because the tenements are strictly for the birds and it only remains to decant the great street through the camera's glass eye, and on to the hot-pressed Whatman, and garnish with deathless prose, the while watching Professor FitzGerald searching for phœnixes parked in the debris.

In effect it is this archæological concep-

tion of the slums as a phænix-park that he and Michael Scott will have to fight, and fortunately they are the very men for the The trouble is that central Dublin is practically Dominick multiplied by the number of streets, which so fascinates those fugitives from the mountains of Kerry and Belfast who govern us that they scratch the houses down into the gardens and then glue new workers' flats to the backs of the street walls with Bostik. They rip out doors, fan-lights, window reveals, railings, paint the bricks cardinal red, point them up in white cement, paint the windows green, build rusticated concrete block walls on the pavements edge, and there, for only a half-a-million pounds per block you have a lovely late Victorian slum!

PRESERVATION

The other well-bred answer is exemplified by a company who occupy nine pages of the 'phone book and have gradually squeezed their headquarters into an L-shaped block, eighteen houses by eight, four storeys, varying heights, brick fronts. They have been very good boys, under the sensitive guidance of two architects, and—in the slack hour—a passer-by would just think rich cousins apparently, and on good terms too, give all their work to the same painter—how un-typical! But the rich cousins loaded their floors with thermal storage heaters and filing cabinets, got their architects to build a handsome skyscraper in the mews, and expected to live happily ever after. The floors—old, courteous, unused to heat or such live loads—are bowing themselves out, murmuring "W L over the eight!", the walls are losing their figures and the very best example of architectural good manners the town has seen is now kept together with tie-bars, struts, shores, pins, needles and an old prayer. So where are The other well-bred answer is exemplified together with tie-bars, struts, shores, pins, needles and an odd prayer. So where are you? The Venetian Villas exhibition came you? The Venetian Villas exhibition came here in March and took the winds thereof with beauty. (Ah, yes, one felt, photographs of Irish country houses, one hadn't known there were so many large ones, and the gardens look strange!) One by one the Irish country houses are coming under the hammer and ending up under the crozier (no, not the sickle). Churches in use and houses occupied as dwellings are specifically excluded from protection under the National excluded from protection under the National Monuments Acts, but the occupation of the Irish country house as a dwelling is an occupation for which time and the Land Commission have completely disqualified at least one type, namely the Irish country gentleman. The latest house "threatened" is Dunsandle, early 18th century with good plasterwork and joinery. Should one care? Preservation of occupied dwelling houses would obviously require legislation, would certainly need a policy. Is it fair to wave one's arms wildly in the air and demand that in all cases table, glasses, wedding cake, exquisite lace dress and veil remain in positive 3 from the policy of the state of the sta tion? If so, then all the slums must stay. Pending what? Is Bonaparte still in Elba? (That brings us to the Nelson Pillar.)

The Nelson Pillar, a Doric folly complete with cage to contain citizens attempting suicide from the Admiral's deck and some excellent lettering on its podium, is the glory of O'Connell Street and the counterpoint of its distinguished neighbour, the General Post Office—both are designs of Francis Johnston—but of the present writer's life no year has passed unmarked by irredentist proposal for the monument's undoing—removal to Hill of Howth (by steam tram), to Featherbed mountain (by funicular) to Bath (by chair) all have been mooted, unmooted. This year's suggestion—i.e., that Wolfe Tone, chef de brigade, armée de la République, be piped aboard in stone effigy—comes from bushiest Australia, poses difficult contractural and procedural problems, demands not a first much less a second thought. (Could a first, much less a second thought. (Could it be converted into flats?)

DESIGN OF FLATS

DESIGN OF FLATS

There are maps in the Town Planning Office masked with sites for proposed flats, say those who have dropped in for a cup of tea and returned with a Rejection Notice. What sort of flats? (For the brave gnu world before us could anything be better than mud flats, please?) Up to now municipal taste has been for the four-storey block, design based on someone's old Fairisle pullover, but early this year a bargeful of aldermen and burgesses, fascinated by the idea of the point block—they had not thought so many dehydrated votes could be packed into such large silos!—set sail for England to study the high flat in its pen, discuss its philosophy with the responsible druids. A few official architects, who stowed away under the furlined robes, came back with stories of great palaces for the proletariat shadowing the meadowed banks of Thames (—the Champs LCC?—) of central heating, gold door furnity LCC?—) of central heating, gold door furniture, plurality of water-closets and at least two bathrooms per artisan's flat, of money being no object measured against the happiness of the worker. (It can't happen here-we have a Conservative Government.)

MAN HOURS

Someone said that in Chandi-garh recently a giant caterpillar tractor was beaten on time and costing by 700 non-white men, women and children. Hence the Pyramids. The real results of the Fall of the Bastille are in sight—the labourer's refusal to handle more than one 18 in. by 9 in. by 9 in. block per hour, and the consequent ultimate reduc-tion of lebensraum to 8 ft. by 2 ft. 9 in. by 5 ft. per modular man. Meanwhile metropolitan Dublin resounds to the booming of the serf, striking. The builders' providers went out in March for an extra £1 and settled went out in March for an extra £1 and settled at the end of April for 8s. 6d., whereupon the builders asked for an increase of 5d. on their basic three and eleven an hour. At least one sophisticated contractor informed the unions that he would work through the strike, would pay at the end thereof the increase agreed, retrospectively—would pass it on to the public, immediately, respectfully. In June the building workers settled for threepence. (Maybe we should breed smaller people and less of them?) (Maybe we should breathe less?) breathe less?)

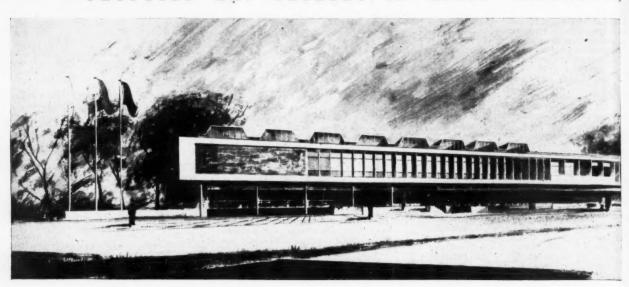
HOSPITALS

And, speaking of breathing, hospitals have been adrenalin to Irish architects ever since Mr. Joseph McGrath left the Government in Mr. Joseph McGrath left the Government in which he was Minister for Industry and Commerce to found a new religion, the Irish Sweep. Now, when lesser industrialists are, literally, handing in their binoculars to the Official Receiver, Mr. McGrath—like that other great Irish church leader, the Aga Khan—has only the best horses; his stud, the Sunday Times save is probably the the Sunday Times says, is probably the strongest in Europe.

strongest in Europe.
The top Dublin Architects—e.g., Vincent Kelly and T. F. Inglis, Michael Scott, Robinson, Keefe and Devane, O'Connor and Aylward, Alan Hope, Downes and Meehan—have all built fine big hospitals. Robinson, Keefe and Devane are just finishing a Children's hospital at Crumlin, Dublin (304 beds, £1,000,000) and a genito-urinary unit to complete their urbane, brick-corsetted Meath Hospital in the city. Hope corsetted Meath Hospital in the city. Hope has finished the excellent Clondalkin Hospital, is working on another large one, St. Lawrence's Cabra; his other work on city hospitals has been much admired, particularly the orthopædic unit at the Rotunda. Eoghan Buckley is responsible for a very

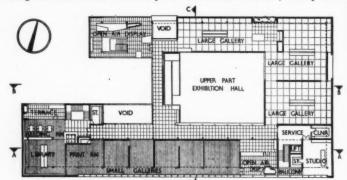
(Continued on page 45)

PROPOSED ART GALLERY IN KINGS CRESCENT,

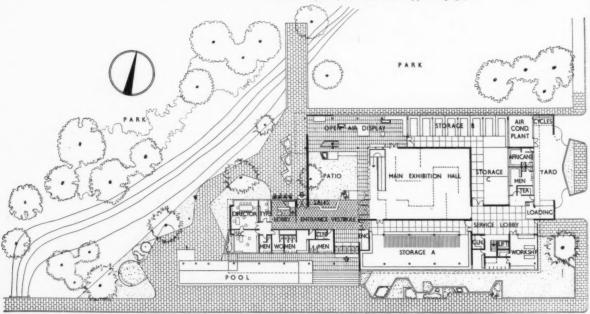


On this page and opposite are illustrated the first prize winning design in the competition organized by the Board of Trustees of the Rhodes Centenary Gallery. The assessors were N. L. Hanson and J. N. Cowin, of Johannesburg, and the winners H. G. Montgomerie and P. L. Oldfield, of Salisbury. The competition aroused great interest among architects in the Rhodesias and twenty-nine designs were submitted. The assessors, in their report, point out that the main elements of the plan, as defined in the programme, were of an order which should have made possible a relatively simple solution. Most competitors, however, found it to be beyond their capacity to solve certain problems inherent

in the programme, and few succeeded more than partially in meeting the conditions. The chief difficulty apparently lay in the dual approach from Kings Crescent to the south and from the Park to the north, both of which

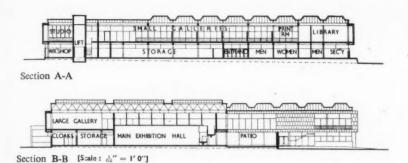


First floor plan (for sections see opposite page)



Ground floor plan and site layout [Scale: 4" = 1'0"]

SALISBURY, SOUTHERN RHODESIA



had to lead to a central control point without the use of a large circulation The interior planning of the gallery hinged on the provision of good

g the

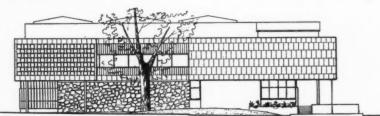
from

which



natural lighting, which is seldom achieved in existing galleries. The winning design, the assessors considered, has not only overcome almost all the problems of the programme, but has even turned them to positive account in evolving a creative design of the highest order. The main and distinguishing characteristic of this scheme is the placing of all display spaces immediately below the roof of the building. Thus the first floor contains most of the exhibition space, while the main exhibition hall extends from ground floor to roof. The architects of the winning design took into consideration the following factors in planning the gallery, apart from those given in the conditions of the competition: (a) that the principal views are to the north and west, (b) that all galleries should have availability of top or clerestory lighting, (c) that public circulation should be continuous, but that visitors should not have to pass through all galleries in order to get to a particular gallery, (d) that galleries and open air display would command a better view of the park if placed on the first floor, (e) that a ramp would be an ideal form of vertical circulation, (f) that a basement should be avoided due to the risk of flooding in the rainy season. R.C. columns, beams and slabs with non-load bearing partition walls will be the basic structure. The first floor slab will cantilever 4 ft. 6 in. from the centre of the perimeter columns, which will be free-standing to allow continuous glazing to most ground floor rooms. The estimated cost is £159,500, which is approximately 4s. Id. perft. cube (742,830 cu.ft.).





[Scale: 1" = 1'0"] West elevation

News—(continued from page 43)

good orthopædic hospital at Clontarf, Dublin.

Yes, hospitals are quite the thing, so much so that immediately after the war, when there was some work here for architects, the Government "sat in" too, designed its own sanatoria, built three, spent X million pounds. The twenty millions which came from Hospitals Trust (1940) Ltd. probably helped—even if it didn't help architects to stay in private practice. stay in private practice.

So it was high time, and a good thing too, that the Triennial Gold Medal of the Royal Institute of the Architects of Ireland should Institute of the Architects of Ireland should be for a hospital—previous medals were for a church, by Frederick Hicks, Esq., an airport terminal building, by Desmond Fitz-Gerald, a factory by Alan Hope. T. P. Kennedy's medal is for St. Luke's Cancer Hospital in Rathgar, Dublin: it's a grand design, subtly and delicately executed. Here is something distinctively national and is something distinctively national and characteristic: an Irishman's home is his The official feeling seems to be hospital. nospital. The official feeling seems to be that illness is the Irish way of life—even rheumatism has become a sort of philosophy (not to be confused with Romanism, which is a class distinction)—and "work" is now the absentee's most dreaded occupa-tional disease, rare in its incidence. (This is unfair.)

CHURCH BUILDING

And what of the spirit, imagined lease-holder of the corporeal hereditament? Catholics, emancipated early in the last century, filled Dublin with large, noble churches; their priests, until the establishment of the Royal College of Maynooth, were graduates of Irish Colleges at Sala-Louvain. Emancipated Paris, manca. Catholics in this century have been herded into new and costly stone pens of the school of Max Ernst, department of Nightmare. Hieratic worry about this situation is thought to have inspired a competition for a Dublin suburban church held last year. result-erection in that sub-urb Apparent of a temple of unearthly beauty, school of Shangri-la; real result—commissioning of T. J. Ryan, author of the winning design, to build churches in two dioceses outside the Tibetan see of Dublin.

Watchers at profane level await Michael Scott's new Abbey Theatre: it is rumoured that the old Modulor has played a part in that the old Modulor has played a part in its conception (there should be something here about a Celtic Twilight sleep for its delivery, but let's hurry on. . .) and that it will resemble its funereal predecessor in size if not in eccentricity and in having an inset Peacock, or minuscule theatre, for the kind of plays the Abbey was founded to produce, namely impossible plays. Michael Scott is the very man for this job too—he was an actor before he embraced the life of pleasure of a hag-ridden baukunstler.

ure of a hag-ridden baukunstler.

Another old house, the Gaiety, is also in dry dock (Evocation of additional nonarchitectural story: One of its managers, enormously popular in the gay Edwardian days, retired, was forgotten, died. At his funeral the stage carpenter said to the writer's father: "If this had happened in his lifetime the bloody house would have been packed!") Now, on the advice of its doctors—Corporation Grand Inquisitors, Building Surveyors, Fire Chiefs—the Gaiety doctors—Corporation Grand Inquisitors, Building Surveyors, Fire Chiefs—the Gaiety is having its gallery extracted, its lobbies widened, its face lifted. The surgeon is Jack Aylward, a really fabulous fellow, génial in the French as well as the English sense; he has just created a new Odeon (the State), on which his assistant architect was Rupert Charles (winner of Shell's Filling Station competition), several hospitals for Dublin Corporation, a few large schools for the Christian Brothers—and he is the man who changed Davy Byrne's public house into a black-face loungerie!

PROPOSED STORE



CRICKET

RIBA v. AA School

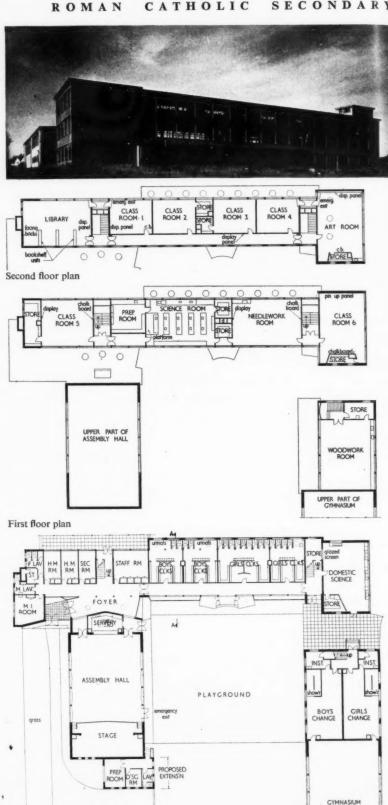
From Bedford Square the students set out for the match in a Volkswagen. It was necessary to know where to go, which was Boreham Wood, and how to get there, which was via the lofty Shangri-La of Hendon was via the lofty Shangri-La of Hendon Central and along a string of roundabouts, finally turning off the A1 at the Home for Retired Horses. A bottle of unspecified white wine (vintage 1952), discovered on the floor of the Volkswagen and passed round, possibly eased sensibilities through arterial suburbia. So possibly did copies of Architectural Design (it's cheaper than the Review) and so certainly did cricket the Review) and so certainly did cricket talk, the captain, Case (4th year), surprising himself with the discovery, on consulting his team list, that the mysterious player over was himself.

The RIBA XI arrived in as many private cars (they are all in private practice and it is the hope of the captain, C. A. R. Norton, of Hammett & Norton, that official Norton, of Hammett & Norton, that official quarters will shortly come forward with some players). Roger Norton won the toss from Case and withdrew for consultations in the dressing room before deciding to put the students in to bat. This decision developed uphappily for the RIBA. Graduating himself to opening hisman and with ing himself to opening batsman and with a reliable student umpire posted at each end. Case, nonchalantly flouting not a few orthodox principles of batsmanship and hitting with the vigour you might expect of a chucker-out at Billy Butlin's, raced to his 50 before lunch. He was assisted by Winktey, and both finally fell to the circumspect, conscientious bowling of Norton himself, his various other bowlers suffering violences.

After lunch—for the students who fancied Brewer's Roadhouse there was pork and two veg. all on for two bob—Nicholls (l.b.w. to Francis), Dalton (bowled by a slow long hop), Knott (bowled Batty) and Gibson (c. Holmes, b. Batty) all reached double figures, Gibson a tall cappling wildly chosered a tall, gangling, wildly cheered Gibson, youth, doing so with defiant gaucherie. All this and more and 15 extras brought the students on to a final total of 163—Norton

4 for 35.

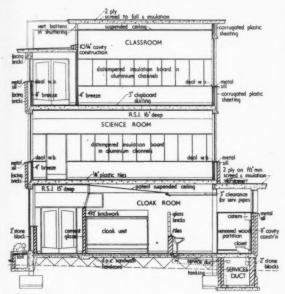
Perhaps the RIBA could have won this match—witness their 236 for 9 declared against a strong LMBA XI; they certainly ought not to have lost it. Disaster when their openers came out was almost instantaneous. Close in at short-leg, Fraser held a hot one from P. R. Davison (Raglan Squire & Partners) off Case. 4 for 1. Behind the wicket, Knott snapped up L. G. W. Bishop off Gibson. 5 for 2. Then almost at once Gibson bowled Batty (in almost at once Gibson bowled Batty (in practice with his father in the Minories). 9 for 3. R. H. Holmes (Hammett & Norton) and the man on loan from the AJ were hoping for a stand when the latter, after a glorious Bradmanesque cover drive, ignomi-niously collapsed with cramp and had to hobble off, which spoilt the rhythm of re-(Continued on page 48)



Ground floor plan [Scale: 10"]

CAR PARK

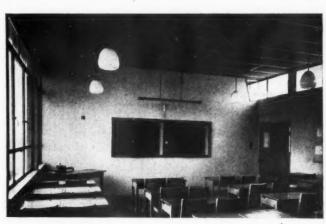
MODERN SCHOOL AT CORBY, NORTHAMPTONSHIRE



Section A-A [Scale: 12" = 1'0"]

The Roman Catholic Secondary Modern School in Occupation Road, Corby, was designed for the R.C. Diocesan Trust, by Gotch, Saunders and Surridge, to serve the expanding population of the New Town. The photograph on the opposite page shows the three-storey classroom wing from the south. Top right, a view across the hard playground from the west, with the assembly hall on the left; above right, a classroom on the second floor; below, the south-east facade of the three-storey block, from first floor level; and below right, the assembly hall, looking towards the stage. The site, which has an even fall towards the south-east, commands an excellent view to the south across a valley, beyond which the New Town civic centre is being built. There is a canteen north of the playground. The building is steel framed and the stanchions, consisting of 7-in. by 3-in. welded channels, are exposed externally. The steelwork is treated with a metallization process which





makes its resistance to corrosion equal to that of the galvanized metal windows, which are fixed direct to the frame. The roof of the second floor corridor is slung from the main steel frame and the corridor internal wall is non load-bearing. External walls are brick with an outer skin of corrugated plastic sheeting in places. Although building costs were met by the Roman Catholic Authorities, the requirements of the MOE were strictly adhered to. The school was built as part of the 1951 programme (when the net cost per place limit was £240) at the highest permitted cost per place. The number of sq. ft. per place is 88·2. The general contractors were Bernard Sunley & Sons Ltd. Sub-contractors on page 67.





New s-continued from page 46

covery for Holmes, who soon missed a straight one from Case. 30 for 4. There was now no holding Case. Immediately was now no holding Case. Immediately he struck again, bowling Roger Norton for a blob. 30 for 5. And with no one knocking Gibson off his length at the other end he flailingly and long-leggedly managed to despatch G. R. Linfield (David Esdaile & Co. Ltd., the fibrous plaster firm), W. W. Atkinson and H. E. S. Francis, in all cases making the ball do something, but perhaps not quite so much as was stated in defence at the time. On his return the AL man not quite so much as was stated in defence at the time. On his return, the AJ man foolishly helped a short ball from Nicholls on to his stumps. 45 for 8. Now there was only James and Byewaters' charming representative, D. le M. Brock to suggest with an innings of 17 not out what batting mastery there might have been, because poor Douglas Taylor was brutally winkled out by Case and the AA had won by 86 runs—Case 4 for 23, Gibson 5 for 18. In the Volkswagen, going back, naturally there the Volkswagen, going back, naturally there was jubilation which was followed up forth-with. It was the first time they had beaten the RI.B.A. for many a long year. Good luck to them.

ROBIN MUDIE.

DIABY

Turn Again. MARS Group exhibition at the Royal Exchange. Monday to Saturday. 10 a.m.—5 p.m. UNTIL JULY 30 10 a.m.—5 p.m.

Turn Again. Discussion on MARS Group exhibition. Speakers: Kathleen Raine, Dr. J. Bronowski. Chairman: Stephen Spender. At the ICA, 17-18, Dover Street, W.1. 8.15 p.m. Members 2s., guests 3s. July 14 Housing Course. Organized by the Housing Centre Trust. At the Conference Hall, the County Hall, S.E.1.

Hall, the County Hall, S.E.I.

JULY 20. First Session; 10.30 a.m.—12.30
p.m.: The Citizen's Responsibility for
Housing. Chairman: H. C. Shearman.
Opener: Mrs. Mary Stocks. Speaker: Mrs.
Henry Brooke. Second Session, 2 p.m.—
3.30 p.m.: Comfort and Appearance within
the Dwelling. Chairman: Lady Eccles.
Speaker: Sir Gordon Russell.

JULY 21. Third Session, 10.30 a.m.—12 noon: Management and Social Problems of Housing. Chairman: Alderman R. M. Rees. Speaker: Miss E. P. Cockburn. Fourth Session: 2 p.m.—3.30 p.m.: Architecture and the Appearance of Housing Estates. Speakers: Lt.-Col. R. A. Jensen, Mrs. S. M. Hayward.

July 22. Tour to Harlow New Town. Leave County Hall 9.30 a.m., arrive back

Presentation of Housing Medal Awards. By Duncan Sandys, Minister of Housing and Locel Government. At the RIBA, 66, Portland Place, W.1. 3 p.m. July 20 (Postponed from July 6)

Developments in the Manufacture and Uses of Portland Cement. Film and lecture arranged by the Guild of Surveyors. At the BC, 26, Store Street, W.C.1. 7 p.m.

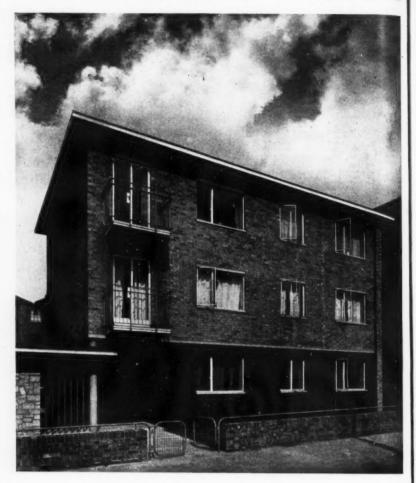
JULY 15

Students' Work and Members' Work. Two exhibitions at the AA, 36, Bedford Square, W.C.1. Monday to Friday 10 a.m.—6 p.m. Saturday 10 a.m.—2 p.m.

JULY 16 TO 28. AUGUST 3 TO 12

Art to Industrial Design. Decorative Review of two current exhibitions at the RCA and the Italian Institute. By Charles Mitchell of the Warburg Institute, London University. On the BBC Third Programme. 7.30 p.m.

POLICE MARRIED QUARTERS IN KENTISH



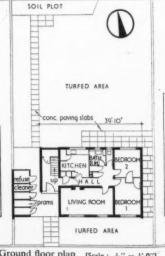
This block of three flats for police families consists of a ground floor flat with two bedrooms, a staircase hall, pram stores and, to the north a walled garden. On each upper floor is a three bedroom flat. The photograph above shows the south and west facades seen from Lawford Road and below is the main entrance at the south-west corner of the block. Walls are of 11-in. cavity brickwork, floors

roof slab and staircase are of reinforced concrete and the front wall to the pram sheds is of random stonework.





First floor plan



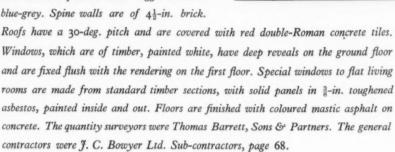
Ground floor plan [Scale: 18" = 1'0"]

TOWN, LONDON, N.W. 5 AND SELHURST, LONDON, S.E. 25

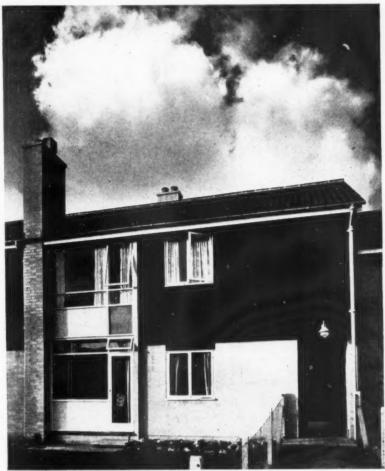
The flats were designed by J. Innes Elliott, Chief Architect, New Scotland Yard, C. R. Fowkes, Deputy Chief Architect, and G. A. Weinmann, Senior Architect. Quantity Surveyors, Thurgood, Son & Chidgey. The general contractors were George Barker, (Builders) Ltd. Sub-contractors on page 68. The police married quarters illustrated on this page, at 254-264, Holmesdale Road, Selhurst, were also designed by the same architects. The block, which contains four flats flanked at either end by a two-storey house, is seen from the south-east in the photograph right and from the south, below. The site, which is in a residential district of Victorian houses, is divided to the south of the building into private gardens for each house and flat. Ground floor external walls, party walls, and first floor party walls are of 11-in. cavity construction, with facings of light cream flint-lime bricks. First floor external walls, including lintels, are constructed of 6-in. "H"-shaped load-bearing hollow clay blocks, finished externally with 3-in. rendering. This rendering is stippled and emulsion painted either nigger brown or blue-grey. Spine walls are of 41-in. brick.

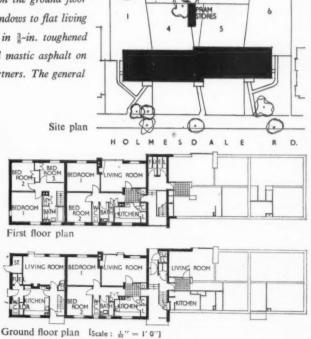
TISH

0"1











In this their eighth article, the JOURNAL'S Guest Editors (Costs) consider the Quantity Surveyor's contribution to control of building costs. They describe his early 19th century origin, outline the technical and social changes since that time, and show how the scope of his duties has remained substantially fitted to circumstances which no longer predominate. Finally, the article suggests how those duties can be developed to meet new needs, preparing the way for article 9, "Cost Planning."

THE COST OF BUILDING:

QUANTITY SURVEYOR'S CONTROL OF COST

ment was the increased popularity of the

With the greater insistence that money should be well spent, the quantity surveyor's role as cost adviser is becoming more and more important, and it is this aspect of his work which is at present receiving much attention. Many of the costing methods used in the past are losing their effectiveness and efforts are being made to find more scientific and analytical méthods which it is hoped will quickly and effectively indicate the effect on cost of comparatively minor changes in planning and specification. While the quantity surveyor has been recognized as a cost adviser for some time, it is, historically speaking, a new role which has yet to be fully developed.

Origin of the quantity surveyor

The beginnings of the quantity surveying profession are likely to be found early in the 19th century when the architect was still responsible for all aspects of a job from the early sketch plan stage to the settlement of the final account. At that time there were no general contractors as we know them today, each trade was quite separate and was always so employed. After the architect's approximate estimate had been approved by the client, it was the custom for him to make the best bargain he could with each tradesman, and, on completion of the job, he would measure the works and determine the value of the final account. The accounts, however, were frequently prepared by clerks and pupils in the architect's office with only the minimum of supervision, and the tradesmen under these conditions found it necessary to measure the works and to check the architect's accounts. In the course of time the tradesmen found it was to their advantage to employ individuals with special skill and experience to do this work. These "measurers," as they became to be known, safeguarded the builder's interests and, with the architect's failure to take the accounting of his jobs seriously, the demand for their services grew steadily, and the increase in their employment was greatly assisted in and around London by the large volume of building work occasioned by its rapid expansion during the early part of the century. As the century advanced the character of their employment changed, and the first steps were taken towards professional status. An important factor in this improve-

lump-sum system of contracting by one general contractor. The Government, on the score of economy and despatch, had encouraged the system during the Napoleonic Wars by requiring all jobs to be under the control of one responsible contractor. Even so, the system was still regarded as "something new" in the 1830's, and it was considered necessary for the quantities to be prepared jointly by two surveyors-one nominated by the builders and one by the architect. Indeed, this practice of employing two surveyors was maintained by the War Department well into the 1880's. But the practice does not appear to have gained general approval, since it appears usual for builders to make their own arrangements for the preparation of quantities-usually by mutually agreeing upon the nomination of one surveyor whose bill of quantities would be available to them all. Bills of quantities thus came into being, not because of the use they might be to either employer or architect, but because the builder required them to calculate his tender. Quantity surveying, as it was then practised, was a service required and demanded by the builder, and it was upon his initiative that the surveyor was employed. An echo of this can still be heard from the NFBTE, who advise their members not to tender for jobs exceeding £3,000 (with two exceptions) without being supplied with a bill of quantities. And it is interesting to note that many specialist firms without the traditions of the late 19th century do not demand a bill of quantities from the employer, no matter what the cost of the job might be. The situation had not changed when later in the century it became usualpresumably to maintain secret tenderingfor the architect to nominate the surveyor. In fact, it is significant that, as the builder lost his right to nominate the surveyor, he began to demand that quantities should form part of the contract, and that they should be adjusted for any errors which should come to light. Hitherto, the builder had accepted full responsibility for his own quantities. Apart from the employer not having an interest in the quantity surveyor's services, he frequently objected to his employment. No doubt this was one reason why the surveyor's fee was included in the builder's tender and paid by the builder out of his

first certificate. Even today one may experience this method of paying the surveyor, although it has been falling into disuse. The architect was not expected to use the bills of quantities, and steps were sometimes taken to prevent him from seeing the priced bills. This practice, however, could have unfortunte results for the employer, as in the case of the architect who, to save money, decided to substitute cement rendering for glazed bricks. When the bills were opened to prepare the final account it was found that the builder had not priced the glazed bricks, and what had been expected to yield a considerable saving turned out to be a substantial extra. Fortunately there is now a more liberal attitude to the use of Bills of Quantities, and such events rarely happen.

Changes in building technique

Nowadays, both employer and architect recognize the direct advantages which flow from the employment of a quantity surveyor in addition to the indirect advantages he obtains by providing the builder with a bill of quantities. This is a different situation from that existing during the 19th century, and the change is largely due to the difference in the economic climate and the availability of materials and techniques. In the past, the employer and architect did not have the wide range of choice in materials, services and techniques which is now available to them. Loadbearing brick, stone or timber were probably the only practical structures, materials were relatively few and well-tried, services were few and simple, and planning did not change much as the demands of a stable society were well known. Except for size, one type of building was much the same as any other. The architect therefore was not obliged to make a choice from a wide range of alternatives, and the employer, by a simple comparison, could satisfy himself that he was paying a reasonable price. But a "reasonable" price had a different connotation in those days. With building following a set pattern, the only practical method of selection was probably by financial competition, and this, of course, accorded with the strong competitive atmosphere of 19th century England. An atmosphere which promoted the commercial maxim "Buy in the cheapest market and self in the dearest."

THE CARPENTER'S AND JOINER'S WORK.

-	Dimension	3.0	CONTE	NTS.	TITLES.					
	Ft. 1 22 19	8 8	Fr. 445	In- 9	Naked flooring of the parlour;					
	20 18	8	385	9	Boarded flooring of ditto.					
	5 4	64	23		Hearth to be deducted from the boarded flooring.					
2	23 20	44	948	10	Naked flooring of the upper rooms.					
2	21 19	4	824	10	Boarded flooring of ditto.					

The Carpenter's and Joiner's Bill.

			_		
Sers.	Pt.	In.			
14	84	8 of naked flooring, at - per square,	***	-	-
12	26	8 of boarded flooring, at - per square,	-	-	-
11	62	10 of ceiling joists, at - per square,	-	-	-
14	41	10 of roofing, at - per square,	-	-	-
	199	6 of stairs steps, at - per foot,	-	-	-
	92	9 of balustrade, at - per foot,	-	-	-
	117	4 of doors 6 pannelled, at - per foot,	man	-	-
	51	4 of doors 4 pannelled, at - per foot,	-	-	-
	206	6 of door and window casings,			
		at — per foot,	-	-	-
	182	7 of architraves, at - per foot,	-	-	-
	131	4 of window sashes, at - per foot,	-	***	-
		£.	-	-	-
1			-	-	-
	14 12 11	14 84 12 26 11 62 14 41 199 92 117 51 206	14 84 8 of naked flooring, at — per square, 12 26 8 of boarded flooring, at — per square, 11 62 10 of ceiling joists, at — per square, 14 41 10 of reofing, at — per square, 199 6 of stairs steps, at — per foot, 92 9 of balustrade, at — per foot, 51 4 of doors 6 pannelled, at — per foot, 51 4 of doors 4 pannelled, at — per foot, 206 6 of door and window casings 207 6 of architraves, at — per foot,	14 84 8 of naked flooring, at — per square, — 12 26 8 of boarded flooring, at — per square, — 11 62 10 of ceiling joists, at — per square, — 14 41 10 of reofing, at — per square, — 199 6 of stairs steps, at — per foot, — 92 9 of balustrade, at — per foot, — 117 4 of doors 6 pannelled, at — per foot, — 51 4 of doors 4 pannelled, at — per foot, — 206 6 of door and window casings, at — per foot, — 182 7 of architraves, at — per foot, —	14 84 8 of naked flooring, at — per square, — 12 26 8 of boarded flooring, at — per square, — 11 62 10 of ceiling joists, at — per square, — 14 41 10 of reofing, at — per square, — 199 6 of stairs steps, at — per foot, — 92 9 of balustrade, at — per foot, — 117 4 of doors 6 pannelled, at — per foot, — 51 4 of doors 4 pannelled, at — per foot, — 206 6 of door and window casings, at — per foot, — 182 7 of architraves, at — per foot, —

Abstract of the Carpenter's and Joiner's Work.

This abstract must be made in the same manner as that of the Masonry; viz. by collecting all the articles of the same price into one sum, making the proper deductions, &c. &c.

Naked Flooring.

Feet.		
		parlour floor.
		upper floors.
90	1	stair-case.
1,00)14,84	8	sum.
14 sq	uar	es, 84 feet, 8 inches

Boarded Flooring.

12 sq	uares, 26 feet, 8 inches.
1,00)12,26	8
. 58	4 hearths to be deducted
1285	0 sum.
74	5 stair-case.
824	10 upper floors.
385	9 parlour floor.
	Inches-
	0

Ceiling

Fig. 1 (above and left). Portions of taking off, abstract and bill pages from "A Treatise on Practical Mensuration," by A. Nesbit, published in 1816. The author also deals with masonry, brickwork, slating, and plastering. Fig. 2 (below). Portion of a bill of quantities given in "Rules to be Observed in Planning and Fitting Up Schools," published by the Committee of Council on Education in 1871.

Price and value

the

early

and

inces

n be

exeyor, suse.

imes

riced have is in oney, for ed to that icks, con-

sub-

w a

s of

flow surages

th a

tua-

cen-

the

the

. In

not

ials,

ail-

ical

and

and

dewn.

was tect

oice

the

uld

on-

d a lith

nly bly

rse.

OS-

cial sell

en.

While the actual amount of the lowest tender was undoubtedly of some consequence, it was not nearly so important as the fact that it represented the "cheapest" price. Today, the local authority and State employers who have largely replaced the aristocratic and mercantile employers of the 18th and 19th centuries are not satisfied with merely getting the cheapest price. They must be convinced that the money available is being employed in the best possible way. Value has replaced cheapness, and this has made new demands on both the architect and quantity surveyor. The increasing use of proprietary materials and methods of construction with the consequent change in the area of financial competition, has increased the responsibility of the professions to make sure that the employer is not paying an unreasonable price; and the quantity surveyor in particular is usually regarded as best fitted to carry the responsibility. It is in this field that we think the quantity surveyor can play a greater part. The growth and success of the profession has been due in the main to a situation, as we have previously indicated, in which the most important factor has probably been financial competition for more or less identical materials or components obtainable from

QUANTITIES for PLAN A., for a SCHOOL ROOM 27 ft. 6 in. by 17 ft., with Class ROOM 16 ft. by 12 ft. PORCH, OFFICES, and WALL between the YARDS; the external Walls of Buildings 1½ brick thick.

			Executar, Bricklayer, and Mason.	£		d.
Ids.	FL	O cube,	Dig, throw out, fill in, and ram	2	S.	16.
39 Jods	0	0	Ditto, ditto, and cart away			
8	144	O sup.	Reduced stock brickwork in mortar, principally in 1½ brick walls, the bricks of the fronts to be selected and finished with a neat struck joint, and to be flush pointed inside for limewhiting		-	
0	140	0 ,,	Rough cutting			
5	0	0 "	Brick on edge paving on hard dry rubbish 9 in. thick, and grouted			
0	268	O run.	Extra only to splayed edge to bricks for plinth and			
			openings		1	
			Centering and cutting to 3 ft. segment head axed arches			1
			to openings in 1½ brick walls; openings 5 ft. wide - Ditto ditto 2 ditto 4 ft.		1	
			Ditto ditto I small ditto Ditto ditto I, 3 ft, opening in I brick wall -		-	
			Core 2 flues. Set 2 stoves		1	1
			Dig and stein in \(\frac{1}{2}\) brick a well 2 ft. 6 in. diameter, 15 ft. deep, with curb, windlass, bucket, and rope, &c., complete.	. 4		-
			Provide for drains and sundries		1	-
0	15	0 sup.	Rubbed York hearth and back hearth		1	1
0	9	6 run.	Solid York tooled step, 13 in. by 7 in			
	No.	4.	Ends of steps pinned in, 4 mortice holes, 4 notchings to slabs, 2 chimney-pieces, p. c. 25s. each, and fixing		1.	
		* 6			-	-
			Carried to summary	£	1 .	1

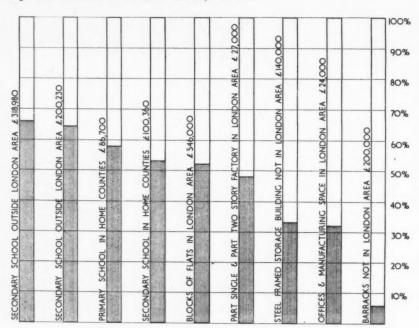


Fig. 3. Graph showing the proportion of cost taken by prime cost sums (shaded portions) in 9 contracts. These represent, in the main, architect-nominated sub-contractors and suppliers much of whose work is not normally measured in the bill of quantities.

a variety of sources. This situation has been changing for some years, and the effects of the changes are already being felt.

The changed nature of financial competition has resulted in the quantity surveyor measuring less and less of a particular contract. The bills of quantities, therefore, incorporate more and more P.C. sums, with which the quantity surveyor is, only too frequently, little concerned until the final account.

Prime cost sums

The measured work is in itself not wholly competitive, since both material prices and labour rates are usually standard to all builders competing for a particular contract. Financial competition in this sphere is therefore mainly limited to organization which in value must be a relatively small proportion of a contract. If builders are to be chosen more or less on the efficiency of their organizations, many builders will ask if there is not a more direct and less expensive method of making the choice.

The P.C. sums, as we mentioned in a previous article ("Why Building Costs," AJ, February 17), account for a high proportion of the total value of a contract (Fig. 3). Many of them are not the subject of measurement or examination by the quantity surveyor for two reasons. First, because many of the works covered by P.C. sums are of a proprietary or patented nature and obtainable from only one firm or at a fixed price, and, secondly, because the works are Specialized Services, Structures, etc., which are designed and executed by a specialist firm, in which case the firms take what measurements they think necessary to calculate tenders. Whilst these conditions

apparently do not cause much serious concern amongst the q.s. profession at the present time, they produce a situation in which the quantity surveyor becomes less able to carry the responsibility of satisfying the client that he is paying a reasonable price. In addition, they detract from his usefulness as a cost adviser, since the quantity surveyor's knowledge of costs must depend to a large extent on the number and content of priced bills of quantities available to him.

All work to be billed

For example, the quantity surveyor is rarely in a position to advise on the costs of heating or electrical installations, and this is probably due to the fact that he rarely sees a priced bill of quantities for these services, and this in turn is accounted for by his failure to measure the work. It is therefore our opinion that, to give the client the assurance that he is paying the right price for the right article, bills of quantities should be prepared for all works whether proprietary or otherwise. We do not say that the bills of quantities must be prepared by the client's quantity surveyor-although we think it is desirable and to everybody's advantage—but it is essential that bills listing the various items constituting the building with their amounts and prices should be prepared, and approved by the client's quantity surveyor.

With these bills the employer or his representative can see what he is actually going to get, and how much he is to pay for it, and can judge whether it represents value for money. If it does so, the employer will have the satisfaction of accepting a tender without a feeling that a lack of informa-

tion may conceal an unreasonably high profit obtained at his expense. When all the tenders and bills of quantities have been received, the basic data thus provided can be analysed in a relatively simple manner by elements,* so that the client can readily compare the cost and quality of his building with others.

vid

ha

ad

co

sto

ins

eff

in

th

to

al

ar

In

re

in

The good will resulting from this method should be of some advantage to the firm submitting the tender. Furthermore, the preparation of the priced bill and its inspection by the employer's representative would safe-guard the firm against having to submit distasteful claims because of undermeasurement or underpricing as well as guaranteeing the employer against being charged high sums because of errors in the other direction.

Costs at the design stage

A building of any size being the product of the application of a large and increasing variety and volume of knowledge and skills, it is now very difficult for the average architect to be sufficiently competent in them all to design a building in all its detail single-handed. Nor can he be expected to be abreast of the wide range of costs or have the time to study and analyse them. Just as he must rely upon obtaining advice from specialist consultants, he must now rely upon the quantity surveyor for advice concerning the costs of buildings; and the nature of this advice will vary with each stage of a job.

During the preliminary stages when the client looks to his professional advisers to tell him how much accommodation his money will buy, the quantity surveyor will be expected to produce the necessary information concerning the costs of different types of accommodation, kinds of construction, services, finishings and fittings, so that a sound and reliable decision can be made. Subsequent to this decision, the architect will expect advice which will assist him to design the building required within the costs discussed with the client. This advice must be in some detail long before the final sketch plan, so that the architect can pro-

^{*} The term " elements" is used in this Bulletin to mean the items the cost of which it is the purpose of cost analysis to reveal and compare. A fully priced bill of quantities presents in great detail every item of labour and material necessary for the proper execution of the job. Bills of quantities, however, are too complicated and too detailed to provide a ready description of the basic components of school construction. They are written up by trades and according to rules which do not necessarily bear any uniform relation to the needs of school building. An architect tends to think in terms of functions and of the means by which he can perform those functions. For example, he sees as one function the exclusion of rain and weather and he looks to a roof to perform this task. is, for the purposes of cost analysis, immaterial to him whether the roof be of timber and tiles or of concrete and asphalt. He is primarily concerned to know how much it has cost to roof in the building. In a bill of quantities, the cost, distributed by trades, will be borne, in one case by the carpenter and roofer trades, and, in the other, by the concretor and asphalter trades. Thus, where the estimator builds up his tender by adding together a large number of relatively small items, classified by trades, cost analysis must reverse this process and break down the tender into groups of material and labour classified according to the functions they perform. These groups have been described as " elements.

high ill the been d can anner eadily build-

ethod firm the nspecwould subunderell as being in the

roduct easing skills, archiem all singleto be have ust as from

con-

d the

n the ers to n his or will ry infferent istructo that made. chitect im to

must final pro-

nean the alysis to uantities material Bills of detailed enents of des and ear any ing. An do of the ons. For rain and task. It

ther, by
here the
a large
des, cost
lown the
eccording
ave been

t Study.

rete and v much vantities, vide the right amount of money. Before embarking on sketch plans, he will wish to be advised, for example, of the difference in costs between building two-storey, fourstorey and sixteen-storey high, between structure A and structure B, between heating system C and system D, and of their effects upon each other. This information will be required, not as isolated pieces of information, but in relation to the cost of the whole project. Clearly, it would not be possible for the individual quantity surveyor to have available from his own experience all the necessary information, and corporate action would be necessary to collect, record and disseminate the available information. In brief, the architect will require to be satisfied that each element of the building is receiving its proper share of the total sum in relation to its function and importance, and that he is including in his design only that which the client can afford. The importance of this has been recently stressed by an action in the High Court,* where a local authority was awarded substantial damages against an architect who had designed houses costing considerably more than the limit allowed by the Ministry of Housing and Local Government and the local authority.

As we stated at the beginning, we do not think that the quantity surveyor has adequately developed his techniques for giving this advice, Normally he finds it difficult to operate until the architect has produced a sketch scheme with details of a proposed specification. For many architects this is not enough, and the next article, which deals with cost planning, will describe a method designed to assist the architect to control costs during the design stage. This will automatically involve the quantity surveyor in a greater responsibility for the cost of a job, and on this account he should be present at the preliminary meetings of architect and client when costs are discussed. Some architects would go further and suggest that, owing to the importance of cost, the quantity surveyor should share the architect's contractual responsibility in this matter.

The established methods of quantity surveying and of preparing bills of quantities have been flexible enough to absorb many changes, but they are still dominated by the craft and site processes employed during the mid-19th century when present-day quantity surveying techniques were being established. The contents of bills are concerned very largely with only these older processes, and many of the services and building techniques introduced since 1900 rarely appear as measured work, and this appears to suggest that they have not been assimilated by the quantity surveying profession. This would be regrettable if it were to continue as the quantity surveyor's services would not be available for an increasing volume of work. To counteract this tendency, steps should be taken to establish post-graduate and other courses, on the lines of those already initiated by the RIBA and the AA, to keep

quantity surveyors up to date with new techniques and developments.

The quantity surveyor and prefabrication

Few bills of quantities have been prepared by quantity surveyors for factory-produced buildings, but it would be quite wrong to assume that bills are unnecessary. Bills are still being prepared-perhaps in a different form-but much of the work that the quantity surveyor used to do is now being done by the specialist firm from whom there is an increasing demand for the quantity surveyor's services. It is unfortunate that the demand cannot be adequately satisfied because of professional codes of conduct. If the client's quantity surveyor is to vet the Specialist bill of quantities, as we suggested earlier, it is of great importance that properly qualified quantity surveyors should be members of the specialist firm.

The most successful of these buildings consist of standard components which may be arranged in a great variety of ways and the cost of the building can be speedily calculated by counting and pricing the components. Factory-produced buildings are likely to provide one of the best answers to the architect who must design to a cost since the price of each component could be available from a standard price list. It is hoped that when demand stabilizes, manufacturers will be able to publish manuals describing their components and methods of erection on the lines of the wartime bridging handbooks, with a price list in addition. With

* Wilks r. Thingoe RDC.

Fig. 4. A revised form for the bill of quantities. The bill is arranged not by trades but by elements, in a sequence which as nearly as possible follows the sequence of building operations. Columns to the left of the rate column are available to the builder's estimator for use in contract planning. They would be used to enter prices for material; labour; plant; overheads and profit. Annotation of the bill allows it to become a combined bill and specification.

Between stanchion bases 37, 30, 26, 27 and 28 also between module line 57-stanckion 8-9 also between bases 9, 13, 22, 28. To form pocket for fixing perimeter stanchions. To ground beam between stanchions 2 and module line 57, also between stanchion 24 and module line 65. Ditto between stanchions 24 and module line 65. Ditto between stanchions 24 and module line 65. Ditto between stanchions 25 and 26. Between bases 8 and 9 also between 28,27,26, 30 and 37. Between bases 9,13,22 and 26. All ground beams. A Formwork as described to side of ground beam. Formwork as described to side of ground beam. Ditto to end of ground beam. Ditto to side of ground beam exceeding 3" but not exceeding 6" high. Concrete (1:2:4 1½" aggregate) in 8" x 2" thick blinding under ground beam. Ditto 8" x 2" thick blinding under ground beam. Ditto 8" x 3" do. Cwts. Qrs. Lbs. A Find Diameter mild steel rods in ground beam.	and the second		-		. 1	ORKS	BELOW GROUND FLOOR LEVEL (Contd.)				£	8
Between stanchion bases 37, 30, 26, 27 and 28 also between module line 57-stanckion 8-9 also between bases 9, 13, 22, 28. To form pocket for fixing perimeter stanchions. To ground beam between stanchions 2 and module line 63. Ditto between stanchions 2 and module line 63. Ditto between stanchions 2 and 24. Between bases 8 and 9 also between 23 and 24. Between bases 9,13,22 and 28. All ground beams. A		Var	da F	eet		ROUN) BEAN					
fixing perimeter stanchions. To ground beam between stanchions 2 and module line 57, also between stanchion 24 and module line 63. Ditto between stanchions 2 and 24. Between bases 8 and 9 also between 28,27,26, 30 and 37. Between bases 9,13,22 and 28. All ground beams. Ditto to end of ground beam. Ditto to eide of ground beam exceeding 3" but not exceeding 6" high. Concrete (1:2:4 1½" aggregate) in 5" x 2" thick blinding under ground beam. Ditto 8" x 2" thick blinding under ground beam. Ditto 8" x 3" do. All ground beams. Ditto 8" x 3" do. All ground beams.	37, 30, 26, 27 and 28 also between module line 57-stanckion 8-9 also between bases 9,				-	lup						
stanchion 2 and module line 57, also between stanchions 2 and and module line 63. Ditto between stanchions D 24 - Ditto but exceeding 6 and not exceeding 9 high. Setween bases 8 and 9 also between 28,27,26 and 37. Between bases 9,13,22 b F 11 - Ditto 8 x 3 do. All ground beams. G 1 7 In 2 Diameter mild steel rods in	fixing perimeter	9		24	-	M	Ditto to end of ground beam.	4				
23 and 24. Between bases 8 and 9 also between 28,27,26	stanchion 2 and module line 57, also between stanchion 24 and	c	P	07	-	Run	exceeding 3" but not exceeding					
also between 28,27,26. 30 and 37. Between bases 9,13,22 F 11 " Ditto 8° x 3° do. and 28. All ground beams. G 1 3 7 In 2" Diameter mild steel rods in		D		24	-		Ditto but exceeding 6" and not exceeding 9" high.					
and 28. Civits. Qrs. Lbs. All ground beams. G 1 3 7 In 2 Diameter mild steel rods in	also between 28,27,26,0	E	13	-	-		in 5" x 2" thick blinding					
All ground beams. G 1 3 7 In 2 Diameter mild steel rods in		P .	11	-	-		Ditto 8" x 3" do.		1	2 .		10
					Lbe 7							

54]	THE	ARCHITECTS'	JOURNAL	for	July	14,	1955
					general		

		5.0			Kossee bis per Übe	ulispa
A Hijasa	1 Ferzigfatia d Wandelemente		Work	Bustolis	-	
Profesor 101	Authorwandulament voll, buids Salten Authorsaron, obence also Stirractor	- Je Stitck Phonesis				
	olt Auflennite sungshilder, die tweete Stirnsette zur Verbindung mit den auschließenden Elementen, der Dathkanstruktion und der Zunktwente	Artest				
rorgeohen		Region				
		Suprem				101
	Außenwundulement voll. eine Seits alt Außenseite, die andere Seite Innon-	in Stack Phones		-		
seite für Welter oder Schlefrieme, rechts und	soite für Wahn- oder Schlefräume, rechts und links zur Verbindung mit	Artest			-	
	desanderen Bessenten bzw. Dechkonstruktion und Fundamenten vorgesehen	Ragion			-	
		Sec.			+	
				1 .		
	Wandstement voll, zur Trennung zwischen zwei Häusern, eine Oberfäche zit Wand vom Wohnzaum, die andare fesonhemmend ausgebilden	je Salck Heserie	-		-	
		Artes			-	
		Region	_			
		Summ		1		163
Hauetüre, der Stocklichte 0,84/1,94 m mit Dopp- außen mit lotrechten 4 cm breiten Riemen aus		ja Stück Plotors	d .			
	außen mit lotrechten 4 cm breiten Riemen aus naturbelamenem Hartholt	Arbeit	-			
	verbrettert, beschlagen mit 3 kraftigen Bandern und Zeiftrylinderschloß sowie Weißmatzildrückern und derüber befindlichen festvereisstem Ober-	Region				
ticht 166 Außenwendelement wie Per. 102, mit eingebeur	Sechiq .	Summ				104
	Außenwendelement wie Pos. 102, mis eingebeuten 75 cm, helsen Verbund-	je Stock Hours		T	T	
	kuppflügef über die genze Breite des Elements, oben gehängt, nach zußen zufschlagend mit 2 Ausspreizstungen und 2 Westimetall-Halboliven, grundlert	Arbeit			1	
	und einmei mit Standolferbe gestrichen sowie Beistellung von Hartholt- alseinkten	Region		1 .		
		- turns		1		106
-	Authorwandelement wie Pos. 105, mit eingebessem Varbundelppflügel, jedech	st States Honers	4	1	1	
130 cm hoch	tm hach	Arbeit			-	
100		Region	-			
62		Summe			-	
	*					100

Fig. 5. A page from a tendering document issued by the Austrian Productivity Centre for the building of prefabricated houses in Austria. The descriptions (101, 102 etc.) refer to components each of which is priced as follows: Werk: off-site work; Baustelle: on-site work; Insgesamt: total; Material; Arbeit: labour; Regien: overheads. This page deals with wall and window units.

this information, precontract planning would be enormously simplified with a substantial saving in time.

The purpose of the bill of quantities

The quantity surveyor is frequently criticized for the method he adopts, often by the less-experienced architect, who sometimes imagines that both time and money can be saved by bypassing the surveyor and sending a drawing to a specialist firm with a request to submit a price in a week or two. The work of calculating the amount of labour and materials-the purpose of the bill of quantities-must still be done, and the cost of this will be included in the price. If this calculation is done in a haphazard method by unskilled estimators, or if insufficient information is provided or insufficient time allowed, the client is almost bound to suffer. If sufficient time or information is lacking, the architect cannot expect a keen price, nor should he be surprised if he has to accept what a firm decides to give him, or has to face a substantial extra.

Standardization and efforts to design economically-it is claimed-cannot be shown in bills of quantities. While it is often true that they are not shown, this is more usually due either to the architect's failure to inform the quantity surveyor or a slavish following of the Standard Method of Measurement. Both faults can be readily overcome by more frequent meetings of the assistants, who are actually carrying out the work. It is no doubt true, however, that the quantity surveyor is often out of sympathy with what the architect is trying to do, and this may be due to the strictly traditional nature of the quantity surveyor's textbooks and training. The student quantity surveyor rarely rubs shoulders with the student architect, and may not get the opportunity to discuss the aims and objects of individual architects until he is well advanced in his profession. A common training for part of their student days might go a long way to a better understanding of each other's work.

It is always surprising to find so many builders who are prepared to submit tenders-often with stated contract periodson the basis of bills of quantities incorporating a considerable value of work to be carried out by unknown and unnamed subcontractors. Before a contractor can calculate his contract period and his overheads, he must know what each subcontractor is going to do and how and when he is going to do it. Bills of quantities which do not name the principal sub-contractors place an unreasonable risk upon the builder tendering, and support his excuse that any fault or delay by a sub-contractor during the construction period is the architect's responsibility.

It has been rigorously maintained that the only functions of a bill of quantities is to assist the builder to arrive at his tender and to price variations thereafter. Nothing therefore should be done which would affect this function

Builders, however, now use bills of quantities for other purposes: for ordering materials, for planning the work, for bonusing and as a specification in the absence of the proper document. The architect, because of the importance of cost, also uses the bill much more than he ever did before.

A bill of quantities could therefore be a much more useful document if-without detracting from its primary function-it were written in such a way that it could assist the builder and architect in these matters, and so help to conserve manhours and money. (See Fig. 4.)

Annotated bills, incorporating specification notes, have long been advocated, but do not seem to be readily acceptable. More recently, attempts have been made to write the bills in a form more appropriate to the sequence of operations by preparing them by elements and the Austrian Productivity Centre has produced a most interesting document combining plans, specifications and bills of quantities arranged by groups of components corresponding to elements. The Austrian document goes even further and sub-divides the price between factory and site, and into labour, materials and overheads. (See Fig. 5.)

It is our opinion that much could be accomplished to speed organization and costing if bills of quantities could be written in a different form to suit the many uses to which it is now put, but for which it was never designed.

The quantity surveyor, like the other members of the building industry, is now faced with the problem of finding the most appropriate methods of dealing with new demands and greater responsibility. There are, fortunately, encouraging signs that he is rising to the occasion, but much remains to be done.

HOUSE

in CHARTERS ROAD, SUNNINGDALE, BERKS.

designed by JAMES A. CRABTREE

in association with WESTWOOD, SONS and HARRISON



- 1

3 1

> 1 1

1 1

J

bricated

Werk: ds. This

ecause es the re. be a ut det were assist atters, s and cation lo not cently, ills in uence y ele-Centre ument ills of ompo-The r and y and overccoming if in a which never memfaced рргоnands ortunng to done.

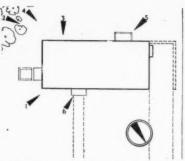
From the south, viewpoint 2.

The architect was asked to provide a three-bedroom house with as large a floor area as possible for under £3,000, and succeeded in producing a scheme with a total floor area of 1,300 sq. ft., costing £2,950. The house has been built on a site containing a large number of young trees and a variety of shrubs. A small stream runs across the length of the site. The general contractors were G. Leslie Soan; for sub-contractors, see page 68.

From the east, viewpoint 1.



Below, viewpoint 4, from the garden on the south side with the canopied entrance to the utility room on the right. Change of structure to the left defines the living and dining rooms on the ground floor with master bedroom and landing above. Bottom left, viewpoint 3, the juxtaposition of ship lapped horizontal softwood boarding and second hand London facing stocks. The boarding, sills and main framing members are stained and finished with two coats of C.27 rubberised varnish. Softwood casements are painted white and the common brickwork plinth is to receive a black bituminous paint. Bottom, centre, viewpoint 6, entrance door showing painted T & G soffit boarding to zinc covered canopy. Reeded glass panels to both door and side panel. Precast concrete canti-

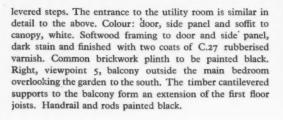


Key plan showing photographic viewpoints







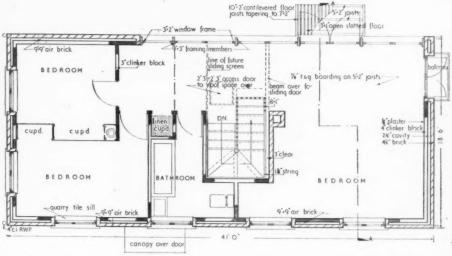






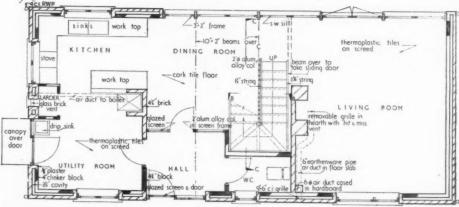
Left, looking from the living room towards the kitchen. Provision has been made to hang a fully glazed sliding partition between the stair area and the living room. Open shelving is also to be erected at a later date between the kitchen and the dining room. Mottled black composition tiles provide the floor finish to the living room with cork tiles (sealed and waxed) to the dining area. The slow burning open fire on the left receives ducted air from the outside via a 3 in. S.G.P. which terminates in an adjustable grille set in the tiled hearth. Cast iron radiators run continuously beneath the sill board to both living and dining room areas. Colour: Tiling to fireplace, heather brown. Chimnev breast and wall adjacent, Red (7.5 K 4/16 Munsell Range). Remaining walls and ceilings to living room and dining room, broken white. Kitchen area, primrose yellow. Softwood subframes and casements, white gloss. Softwood open staircase and extended balusters, lightly stained and cellulosed. Below left, looking from the dining room area through the staircase to the living room. Softwood has been used for 'all joinery and is finished in a variety of ways depending upon function and exposure.



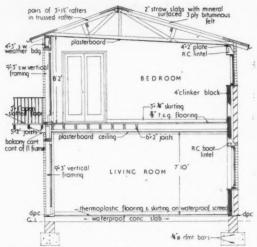


First floor plan

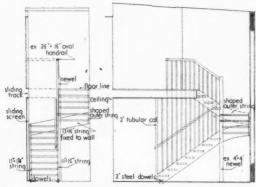
HOUSE AT SUNNINGDALE



Ground floor plan [Scale: | " = 1'[0"]



Section A-A [Scale: | " = 1' 0"]



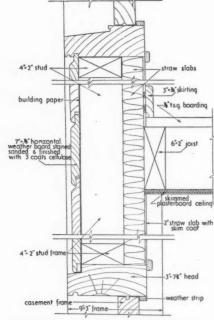
Section B-B Section C-C



Looking from the living room towards the "dog leg" open tread softwood stair. The reeded glass panel screen to the right divides the entrance hall from the dining area adjacent to the stair.



Landing on first floor overlooking garden to the south. Softwood T & G boarded floor on timber joists to receive linoleum at later date. Skim coated plaster board panels occur above and below the window line and form the ceiling. Colour: Return wall at the end of the landing, red 7 5R 14/6 (Munsell Range). All other exposed surfaces, broken white with the exception of the stained and cellulosed stair.



Detail of wall section south wall between ground and first floor [Scale: $1\frac{1}{2}$ " = 1'0"]

e right

ent to

ceiling

round

CLIENT'S BRIEF: his stated requirements

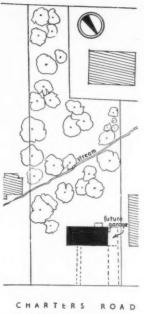
A three-bedroom house of maximum floor area, for a sum not exceeding £3,000. It must be possible to unite dining- and living-rooms to form one large room. The kitchen must overlook rear garden. The house is likely to be extended later to incorporate an additional bedroom and a garage. The client is to be personally responsible for the provision of certain fixtures (e.g. glazed screens, shelving, pelmets, etc.) and the completion of many of the decorations.

SITE: topography, surroundings, access, planting

A gently sloping site on low-lying, well wooded ground, crossed by a stream midway along its length. The site is at right angles to an existing minor road and measures 290 ft. \times 90 ft. Adjacent property contains a variety of speculatively built housing.

PLAN: general appreciation

In addition to satisfying his client's specific requirements (listed above) the architect attempted to give the client maximum isolation and to create a feeling of spaciousness within a comparatively small area.



CHARTERS ROA
____TO Sunningdale

Site plan

MAIN CONSTRUCTION

				ting a light low pitched timber roon. Softwood, selected by the archite				
Load bearing elemen	-	Location		Beam spans	Column			
Cavity wall On all sides of			3	Composite timber joists 16 ft. 6	in.			
Softwood timber frame A part of south		A part of south wall or	uly			od timber frame with s at 6-ft. centres		
Foundation type		Loca	ation	Sub-soil	Depth	of top of foundation		
Strip foundations on 2/g-in. Ø M.S. the other			nerally	Sandy gravel with patches of w sand and running sand at 7 ft. below average ground level	et I ft. 6 level	in. below finished ground		
Outer wall type		Location	Materia	ı		Finish		
Cavity load bearing On all		On all sides of building	2½-in. c	clinker block inner skin		Flush-pointed		
Timber frame with spandril infil A part of south only		A part of south wall only	4-in. ×	rizontal ship lapped softwood weath 2-in. s/w framing fronted with buil per-covered strawboard with plaste	ding paper	Stained and clear cellulosed		
Roof type	Location		Mate	rial	Finish			
Unequal pitch	Cover	Covering whole of building				rfaced bituminous felt on 2-in red straw board		
Floor structure	loor structure Location Material				Finish			
Solid			d core 6-in. mesh reinforced concrete slab The			stic tiles and cork tiles		
Suspended	First floor	beams at 6-ft. co	entres	forming composite timber dary joists at 18-in. centres	§-in. T & C	G softwood boarding		
Internal wall type Location		Location		Material	Finish	Finish		
4-in. and 3-in. thick lightweight Generally concrete blocks		Generally	Lightweight concrete		Plaster	red both sides		
4½-in. brickwork		Generally	Common brickwork		Plaster	red both sides		
		Entrance hall, living relanding	oom and	Softwood and reeded glass to entrance hall Hardwood and plate glass to liv	polish	Oil-painted softwood and wax- polished hardwood		

Ceiling types

Nailed plasterboard, scrim-jointed and skim plastered

Location

room and landing

In all rooms

ARTIFICIAL LIGHTING

Source and fitting type	Location
Tungsten. Shades to be selected by client later	Wall brackets generally used, mounted 6 ft. 6 in. above F.L. No. 3 ceiling points located in WC, utility room and kitchen
Wiring and switching type	Power supply type
TRC carried in floors and thence in screwed conduit in walls. Flush pattern switches in CI boxes	Public mains. Lighting and power on a 13-amp. ring main with all points using standard socket outlet

NATURAL LIGHTING

Wall glazing	Location	Reasons and comments
32 oz. in softwood frames	To all walls	Large pane sizes necessitated the use of heavy-weight glass. Natural ventilation provided by side-hung casement-lights. Light control achieved by use of gauze curtains

THERMAL INSULATION

Types	Location	U-Value	
4½-in. brickwork, 2½in. cavity, 4-in. lightweight concrete, §-in. plaster	Three-quarters of external walling	0.25	
I-in. boarding, building paper, 4-in. × 2-in. timber studs, 2-in. strawboard	Remainder of external walling	0.17	
Bituminous felt, 2-in. strawboard and &-in. skim coated plaster board below	Roof	0.15	

HEATING AND VENTILATION: artificial and natural

Criteria

600 with outside

Location

Ground floor

CI column radiators Electric tube skirting radiators Slow combustion open	First floor (bedrooms) Living room	65° with outside temperature at 32° F.	Approx. 3 per hour	Air was ducted to the open fire in the living room to assist in the elimination of draughts. The clients have expressed great satisfaction with the heating of their house where an open plan has enabled upper rooms to achieve	
fire				comfortable heating conditions when warmed air from the ground floor has been naturally convected	
Boiler type and capacity		Fuel type		Stoking method	
Crane. No. 5 (New Carlton)		Solid. Coke, coal an	nd anthracite	Hand	
Water heater type			Location		
Solid fuel boiler and N	o. 2 single point gas hea	ters	Utility room, b	bathroom and kitchen	
Hot water storage type	Location	1	Materials	Capacity	
Indirect cylinder	Linen c	upboard on first floor	Copper	40 gallons	
Pipes and jointing types					
Copper-compression us	sed generally				
Cold water storage	Location	1	Materials	Capacity	
Tank	Roof		Galvanised iron (lagged	60 gallons	

Air Changes

Air was ducted to the open

COLOUR

Heat exchanger type

CI column radiators

COLOUR		
Paint types	Where used	Describe colour treatments
Plastic emulsion	Walls and ceilings	Only part of the decoration was carried out under contract; the client completed the remainder of the scheme himself. Living room and dining room, broken white. Red
Hard gloss oil	Doors and woodwork generally	7.5R4/16 (Munsell Ref.) was used adjacent to the fireplace and to one wall of the stair-well. Kitchen, primrose yellow. Mottled black composition tiles in living-room

TIME SCHEDULE

TIME SCHEBOLD				
Contract signed	Work commenced	Work completed	Type of contract	Comments
May 21, 1954	May 24, 1954	January, 1955	RIBA (without quantities)	Weather and general site conditions caused delay

COST

A Bill of Quantities was not used in this contract and so it is not possible to include a cost analysis covering the various items. The architect went out to tender on a specification having obtained a number of PC sums covering such items as sanitary equipment, floor finishes, electrical installation and heating. The successful contractor returned a price of £2,900 and the final account has been settled at £2,950

Gross cost	External works	Net cost	Floor area	Cost per foot super	
£2,950	£.60	€.2,890	1,263 foot super	45.7 shillings	

TECHNICAL SECTION

We cannot allow the death of Professor Gustave Magnel (see page 42) to pass without a salute from the Technical Section of this JOURNAL. Apart from his personal achievements as a designer, Professor Magnel was the prophet of quality design in concrete. It is largely due to him that in concrete design the countries of northern Europe have chosen the path of high quality and light weight in contrast to North America where the choice has been speed of placing with consequent low strength and heavy weight. Professor Magnel used to stigmatise this practice by saying that Americans don't make concrete, they make soup.

Latterly Professor Magnel has become the leading exponent of prestressed steel, and it is a melancholy reflection that only a few months ago we requested from him and received an article on this subject which, alas, we are unable to print as it is too technical for architects to follow.

8 ESTIMATING materials' prices

Current prices for measured work will appear on July 28.

Prices of materials and measured work last appeared in the Journal on February 10 and February 24 (continued on March 3) 1955, respectively.

open

the led

used

llation

Current rates of wages and market prices of materials prepared by Davis, Belfield and Everest, Chartered Quantity Surveyors. Rates for measured work will be published in the JOURNAL for July 28.

Rates of Wages rose on April 18, 1955 and are now as follows:-LONDON DISTRICT Labourers. Craftsmen Within 12 miles radius ... 3s. 7d. 4s. 1½d. 4s. 1d. 3s. 61d. From 12-15 ,, 4s. 11d. 3s. 7d. LIVERPOOL and DISTRICT . . A^2 A^3 A1 GRADE CLASSIFICATIONS A 4s. $11\frac{1}{2}$ d. 3s. 11d. Craftsmen .. 4s. 0d. 3s. 10½d. Labourers .. 3s. 5½d. 3s. 5d. 3s. 4½d.

Prices vary according to quality and the quantity ordered.

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

CONCRETOR

Cements

Portland to B.S. 12, 6 tons and over	per ton	96/6
Rapid hardening to B.S. 12, 6 tons and over	22	104/6
Aquacrete water repellant, 6 tons and over	**	129/-
Aluminous to B.S. 915, 1 ton lots	,,,	299/6
Sulphate resisting cement, 6 tons and over	77	129 /-
Snowcrete, 1 ton lots	22	257 /-

Above prices include for delivery to Charing Cross in non-returnable paper bags or cotton sacks.

Aggregate and Sands, etc. (Full Loads)

4" (down)	Wasl	ned, crus	hec	and grad	led shi	ngle		
		2, Table	2		****		per yard cube	20/1
1½" Ditto .		****	****		****	****	99	19/2
3 " Sharp			to	B.S. 882,	Table	3	22	23/2
Vermiculit			****	****	****		per ton	667/6
Brick hard	core	****		****		****	per yard cube	
Ashes	***	****		****	****	****	**	10/6

(For Sands for Bricklaying and Plastering, see respective trades)

Floor Blocks

							. 4"	6"	7"
Floor l	olocks,	12"	×	12"	****	per 1,000	698 /-	936 /-	1,138/-

Reinforcement

Home trade maximum basis price for rods to B.S. 785, \(\frac{5}{3}'' \) diameter and u mills delivered to station or siding	pward	ls, ex	per ton	£32	13	0
Extras for:—						
Under 5 to 7 diameter	****	****	99	£1	12	0
Ditto 7 and over 3 diameter	****	****	22	£1	19	6
2// 1 11 // 11				00	0	0

	****	****	****	99	£1	12	0
Ditto 7 and over 3 diam	eter		****	22	£1	19	6
and over 11 diameter	****	****	****	99	£2	9	6
12" and over 16" diameter	****	****	****	22	£2	19	6
5 and over 3 diameter 32 and over 4 diameter	****	****	****	22	£3	7	0
and over 1" diameter	****			22	£3	17	0
l" diameter		****		22	£4	7	0
Under 1" to 3 diameter	****	****	****	22	£6	4	6
. 10				**			

Fabric Reinforcement

	16.35 lb.	9.32 lb.	4.71 lb.	1.83 lb.
Steel wire mesh fabric to B.S.	0.149	4 13 0 7	0 (=1	1 147
1221, Part A. per yd. super	8/48	$4/10\frac{7}{8}$	2/54	1/478

BRICKLAYER

Common Bricks

Common stock		****	****	****	****	р	er 1,000	132/10
Rough stocks	****	****	****	84.58	****	****	99	174/4
Mild stocks		****	****	****	****	****	99	215/10
Sand limes	****	****		****	****	****	72	112/-
Phorpres pres	sed :	flettons	****	****	****	****	99	113/-

Facing Bricks

Hand-selected sand limes	****	****	****	****	per 1,000	148/-
Phorpres rustic flettons		****	****	****	22	138/-
Stocks, first hard	****	****	****	****	91	271/4
Stocks, second hard		****	****	****	22	250 /4
Southwater pressed sandfa	ced re	ds	****	****	99	316/
Dorking pressed sandfaced	mult	icoloure	d facir	ngs	22	253 /6

Engineering Bricks

Lingfield eng Southwater						per 1,000	235/	-
pressed)			****	****	 4	99	304/	_
Blue pressed	bricks	to B.S.	130	1	 ****	111	514/	6

Glazed Bricks

White, ivory	or b	rown, 9	× 27	" × 41"	delive	ered		De	st y	uui	iy.
London a									£	8.	d.
Headers	****	****	****	****	****	****	per	1,000	74	0	6
Stretchers	****	****	****	****	****	****	-	99	75	4	0
Seconda an	ality	ahove r	ricon l	100/							

BRICKLAYER (continued)

Limes and Sands

			1 ton lots
†Lime, greystone, to B.S. 890	****	per ton	114/6
†Lime, chalk, ditto	****	**	114/6
*Lime, hydrated, ditto	****	99	127 /-
Washed pit sand to B.S. 1200	****		cube 23/2
* Including paper bags.			
† Hire of jute sacks charged at 1	6 and	credited at	1/6. If left, charged
at 1/9.			,

Sundries

10 s.w. gauge	galvanize	ed butt	erfly ty	pe wa	ll tie	es to			
B.S. 1243						****	per 1.	000 10	06/-
B.S. 1243 Wall ties, galv	anized, 8	" × 3"	× 1".	to B.S	. 124	13	per cv	vt.	78/9
Damp proof co	ourse slat	es:	0 /			Im	ported	We	lsh
Size 14" ×	9"	****	****	****	per	100	43/-	81	/3
Size 14" × ,, 14" × 4	13"						21/-	36	/3
Hessian base	bitumen	damp	course	to	**				
B.S. 743					per	yard	super	5	/1
					9"	× 3	" 9" ×	6" 9"	' × 9"
Terra-cotta ai Galvanized ca	rbricks			each					
Galvanized ca	st-iron ai	rbricks				3/4	6/7	T .	8/6
Galvanized e									
ventilators	****					3/5	5/8	3	8/6
Wall reinforce	ment sur	oplied i	nstand	lard re	llse	onta	ning 25	vard	s lineal
‡ 2" wide b									
‡2½" wide b	lack japa	nned	****	****	****				4/5
‡ Greater v	vidths pr	o rata	21" pr	ice, ca	rria	ge pa	id on o	orders	of £7.
Discount for o	-		- 1	1					

Partitions, etc.

		ranmons,	eic.				
Clinker concrete Hollow clay to		yard super	$\frac{2''}{3/7}$	$\frac{2\frac{1}{2}''}{4/2}$	3" 5/-	$\frac{4}{6/2}$	
1190 (keyed)		29	4/3	4/6	5/2	-	41"
Moler (keyed) Leca blocks		22	14/3	15/-	16/-	19/3	21/-
Solid Hollow		10	$\frac{6}{7}$	7/- 8/6	8/- 9/6	10/-	
Building blocks							4"
6 cavity Normal quality			1	per y	ard su 2"	2½"	6/7
Minimum deliver per yd. super	y, square	yards,	* 5/	0 400	325	275 9/2	250 10/3

PAVIOR

2" coarse gravel for paths .			per yard cube	21/3
3" fine ditto	****	5175 X127	99	23/9
Clean granite chippings to	o B.S. 1201,	Table 4		
(in 5-ton loads)			per ton	43/3
Red quarry tiles 6" × 6" >	x 7", to B.S.	1286	per yard super	14/-
Ditto $6'' \times 6'' >$,,,	12/-
Buff quarry tiles, 6" × 6"	× 7", to B.S.	1286	22	17/3
	× 5, to B.S.		99	14/6
2" Noelite paving in mixed		***	**	
random sizes			**	13 /-

DRAINLAYER

Clay Land Drain Pipes to B.S. 1196

					3"	4"
Pipes in 12" lengths	****	****	per l	,000	223/6	294/6

Salt Glazed Stoneware Pipes and Fittings

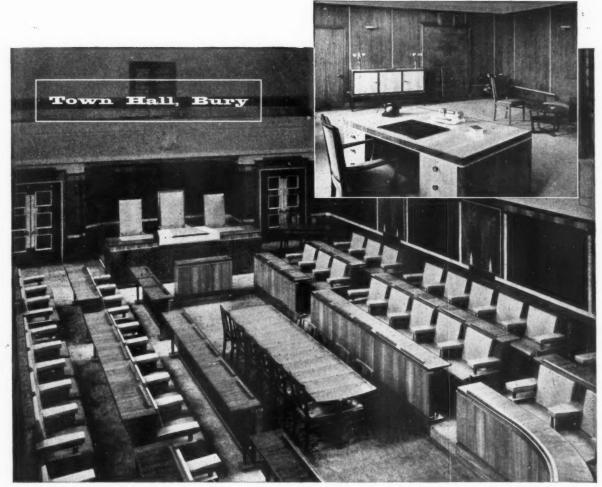
The following percentages to be added to the Standard List prices.

Orders for 2 tons and	Orders under 2 tons 100 pieces	Orders under 2 tons less than 100
Seconds Quality 67½% less 15%	upwards 97½% less 15%	pieces 107½% less15%
Best Quality 67½% British Standard Quality67½%+10%	$97\frac{1}{2}\% + 10\%$	$107\frac{1}{2}\%$ $107\frac{1}{2}\% + 10\%$
Tested Quality $67\frac{1}{2}\% + 37\frac{1}{2}\%$ British Standard Tested $67\frac{1}{2}\% + 47\frac{1}{2}\%$	$97\frac{1}{2}\% + 37\frac{1}{2}\% 97\frac{1}{2}\% + 47\frac{1}{2}\%$	$\frac{107\frac{1}{2}\% + 37\frac{1}{2}\%}{107\frac{1}{2}\% + 47\frac{1}{2}\%}$

Cast Iron Drain Pipes and Fittings

S	ocket	and s	pigot p	ipes to	B.S. 437	7:			
			er 9 ft.		9 fts.	6 fts.	4 fts.	3 fts.	2 fts.
	1	1	17	4"	68/-	49/-	38/1	29/4	23/4
	2	0	1	6"	100/6	76/8	59/9	47/7	35/7
	3	3	21	9"	186/-	152/6	126/7	97/6	

Pre-war quality for Post-war work



Architects: Jackson & Edmonds F/F.R.I.B.A.

Contractors: Spencer & Clarke Ltd.

Decorative woods which we supplied for panelling and furniture include Tasmanian Blackwood, English Ash and Elm Burrs, straight grain Elm, Planetree and Bubinga.

William Mallinson and Sons Ltd.

TIMBER AND VENEER MERCHANTS
MANUFACTURERS OF PLYWOOD, ARMOURPLY, PANELS, COMPOSITE PARTITIONING AND INSULATING BOARDS

130-150 HACKNEY ROAD LONDON, E.2

Telegrams: "Almoner," London

Telephone: Shoreditch 7654 (10 lines)

charged

06/-78/9 elsh /3 6/3

5/1 $" \times 9"$ 5/3 8/6 8/6 8 | 6 8 | 6 8 | 6

3/6 4/5 of £7.

3 21/-4" 6/7 3" 250 10/3

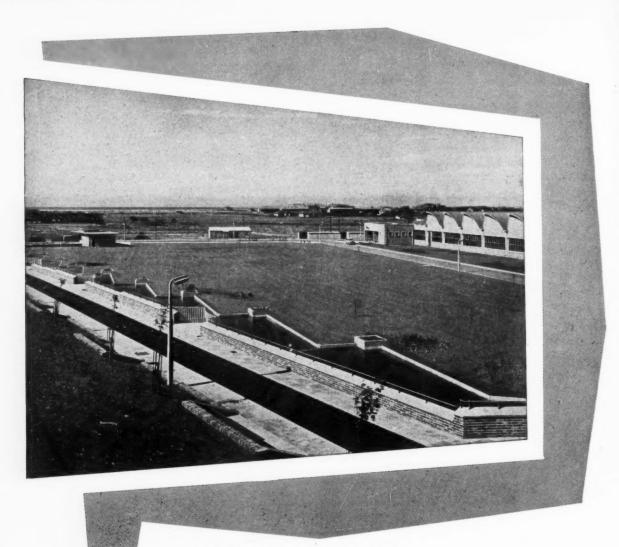
21/3 23/9 43/3 14/-12/-17/3 14/6

13/-

ices.

less 100 es ess15% % 10% 37½% 47½%

2 fts. each 23/4 35/7



C. J. Wilkinson Esq., Staff Architect, Cadbury Bros. Ltd. G. A. Jellicoe Esq., Landscape Consultant. General Contractors: J. Gerrard & Sons Ltd., Swinton, Manchester.

AT the new factory for Messrs. Cadbury Bros. Ltd., in Moreton, Wallasey, 'PUDLO' Brand Powder was used in the reinforced concrete walls and floor of an ornamental waterway. It was also used in the reinforced concrete weirs which were placed 44 feet apart to form a series of waterfalls. This waterway is decorated with Flower Boxes and Lily Ponds. The composition of the waterproofed concrete was:—1\(\frac{3}{2}\) parts washed and sereened River Mersey sharp sand. 3\(\frac{1}{2}\) parts of \(\frac{3}{4}\)" to \(\frac{3}{2}\)" graded double washed and screened crushed gravel, reinforced with B.R.C. fabric. 5 lbs. of 'PUDLO' Brand Powder to each 100 lbs. of cement.



Descriptive booklet sent on request.

CEMENT WATERPROOFING POWDER

The most reliable fire cement is 'FEUSOL'. Have you tried it?

The word 'PUDLO' is the registered Trade Brand of Kerner-Greenwood & Co. Ltd., by whom all articles bearing that Brand are manufactured. Sole Props. & Manufacturers:—

KERNER-GREENWOOD & CO., LTD., KING'S LYNN, NORFOLK

DRAINLAYER-(continued)

Tonnage Allowances :-	Ton	nage	Alloy	vances	:
-----------------------	-----	------	-------	--------	---

Orders	up	to	2	tons	nett.

			4"	6"	9"
***	***	each	15/6	41/3	115/6
****	****	99	27/6	66 /-	171/-
2.000		22	101/6	155/6	335 /-
		99	39/9		
ck inlet	****	22	8/3		
****	****	99	325/3		
	d "P"	d "P"	d "P" ,,	each 15/6 , 27/6 , 101/6 d " P " , 39/9 ck inlet , 8/3	each 15/6 41/3 , 27/6 66/- , 101/6 155/6 1 " P " , 39/9 ck inlet , 8/3

^{*} These prices are subject to 2½% plusage.

Channels in Brown Glazed Ware

Standard list + same percentages as "Best" quality salt-glazed Stoneware pipes.

White Glazed Channels

Orders under £30, makers' list value. Standard list + 32½%.

Manhole covers and frames

Size of load	Unit price
35 tons	190/7
5 tons	101/7
Single seal Flat type	Double seal Flat type
	~ 4
34/10	49/8
62/6	87/10
53/1	79/4
96/10	137/6
	35 tons 5 tons Single seal Flat type 34/10 62/6 53/1

MASON

Yorkstone

Building quality Robin Hood and Woodkirk Blue Stor	
Blocks scrappled, random sizes per foot cube	12/9
Add for blocks to dimension sizes ,,	1/6 (each dimension)
Templates with sawn beds, edges rough (up	
to 4 ft. super and not over 2' 6" long) ,,	14/3
Templates with sawn beds, sawn one edge ,,	16/6
Price f.o.r. Yorkshire, railway rate to London Station	,
per ton. (Minimum 4-ton loads)	67/8
Bath stone in random blocks	

lonk's Park		****	****	****	per foot cube	8
Aldhelm Boy	Ground				-	

Delivered on rail at South Lambeth Station.

Portland stone in random blocks, average 20 feet cube

Whitbed	****			****	per foot cube	8/31
Delivered on	rail at N	Vine Elm	s Station.			

Somerset stone in random blocks

Doulting	 ****	****	****	 per foot cube	8/9

Artificial Stone to B.S. 1217

	227 00	jecomo	DIONE IO 1	2.00		
41" × 4" Sill, sunk,	weathe	ered,	throated	and		
grooved		****	****		per foot run	3/3
9" × 3" Ditto	****		****	****	99	4/11
2" × 12" Coping,	weath	ered	and twice	e		
throated			****	****	99	4/3
3" × 12" Ditto	****	****	****	****	99	6/6
5" × 12" Saddlebac	k copi	ng, t	wice thros	ited	22	9/8
6" × 12" Ditto		****	****	****	99	10/9

SLATER, TILER AND ROOFER

					Slates			£	8.	d
				Slates to	B.S. 680	****	per 1,000 actual			0
20"	×	10"	Ditte	 ****	****	****	99	89	0	0

SLATER, TILER AND ROOFER (continued)

Tiles

Best hand-made sandfaced $10\frac{1}{2}'' \times 6\frac{1}{2}''$ red roofing tiles ex works	221 /6
Machine-made sandfaced best red tiles	221,0
with continuous nibs, $10\frac{1}{2}'' \times 6\frac{1}{2}''$ ditto	183 /-
Delivery to London sites 37/- to 45/- per 1000	
Bridgwater hand made red sandfaced	
pantiles, in 6-ton loads	878 /-
Bridgwater hand made red sandfaced	
Double Roman tiles, in 6-ton loads	1,156/6
Congrete plain tiles 101" v 61"	150 /-
Ditto interhabing tiles 15" v 0"	
Ditto interlocking tiles, $15'' \times 9''$	435 /-
Ditto Double Roman Tiles ,,	737 /-

Asbestos-cement

*6" corrugated	sheets.	grev	 	per vard super	6/-

^{*} Prices are for minimum two-ton loads, and are subject to 5% trade discount.

Felt

Reinforced roofing felt to B.S. 747	per yard sup.	1/6
Roofing felt (1-ply bitumen) to B.S. 747, Part I		1/6
Bituminous hair felt to B.S. 747, Part II	**	9/9

CARPENTER AND JOINER

Wall boards

1 Imported Fibre board		****		5,000 to 15,000 sq.	ft.
(per 100 sq. ft.)	****	****		41/6	
1 Imported Hardboard (per	100 sc	. ft.)	****	40 /-	
3" Imported Hardboard (pe	er 100 s	a. ft.)		57/6	
* 3 " Semi compressed asl	bestos	cement	flat	~. / ~	
building sheets, grey, size	8' × 4	,		per yard super 3/4	
* 1" Ditto		****	****	4/6	

^{*} Prices are for orders of 2 tons and over. Subject to 5% trade discount.

Sundries

"Sisalkraft" standard grade	****	****	****	per yard sup.	$-/10\frac{1}{2}$
"Sisalkraft" subsoil grade	****	****	****	22	$-/6\frac{1}{2}$
"Sisalation" single sided	****	****		99	$1/10\frac{1}{2}$
"Sisalation" double sided	****	****	****	99	2/10
Fibre glass Bitumen bonded		****	****	99	1/91

Timber

Softwood for	Carpentry	y (aver	age p	rice)	****	per std.	£95
Softwood for	Joinery (ditto)			****	99	£107
Tongued and	Grooved 8	Softwoo	od Flo	oring ((ditto)	99	£107
*First Quality	Europea	an Oak	****	****	per ft.	cube 25	/- to 40/-
*Teak	****	****	****	****	99	40	0/- to 80/-

^{*} Prices vary considerably depending on specification.

Standard Panelled and Glazed Wood Doors to B.S. 459, Pt. I

Type 4			size	2'	6''	×	6	6'	×	11/2"	****	****	each	35/3
Type 2	X	G	size	2'	6"	X	6'	6"	X	2"	****	****	99	42/9
Type 4	X	G	size	2'	6"	X	6'	6"	×	2"	****	****	99	49 /-

In lots of from 1 to 11 inclusive.

Wood Windows

N 26 V	size 1' 5\frac{1}" × 2' 6\frac{1}"	****	****	****	each	21/10
2 26 V	size 4' 0\frac{1}" × 2' 6\frac{1}"		****	****	**	43/8
N 40 V	size 1' 5\frac{1}" × 4' 0\frac{1}"		****	****	99	24/8
3 40 V	size 5' 11\frac{1}{4'} \times 4' 0\frac{1}{4''}	****		****	99	76/7
4 40 V	size 7' 10\frac{1}" \times 4' 0\frac{1}"	****		****	99	96/3

In lots of from 1 to 20 inclusive.

Kitchen Units

No. 1	size 3' 6	8" × 2' 8"	× 1′ 7″		each 166/3
No. 2	size 3' 6	3" × 2' 8"	× 1'7"	****	,, 115/3
No. 4	size 2' 8	3" × 1'9"	× 1′7"	****	,, 102/-
No. 5	size 3' 1	10"× 1'9"	× 1'7"		,, 88/7
No 7	ping R! P	2/ V 1/0/	V 1/ 77		199 /#

Prices include for tops and plinths.

In lots of from 1 to 15 inclusive.

British North Greenland Expedition chose FIBREGLASS

insulation against intense cold.



The 'Weasels' which were used by the British North Greenland Expedition had cabins of double plywood panelling, filled with two 1-inch layers of bitumen-bonded Fibreglass, compressed to 1½ inches. The 'Caboose' was also insulated with Fibreglass, between double aluminium sheet. In both cases it was the same bitumen-bonded Fibreglass used so extensively, and successfully, in house and factory insulation.

FIBREGLASS LIMITED, RAVENHEAD, ST. HELENS, LANCS. ST. HELENS 4224 FACTORIES AT ST. HELENS, LANCS. AND POSSILPARK, GLASGOW

					Th	e	Arc	hite
STEEL AND IRONWO	RKER							
Basis price for rolled steel	ioist sections					£	s.	d.
	o 50 ft. lengt		x mill	s per				
Extra for sizes:—				-				
9" × 7", 10" × 8", 12" 14" × 6", 14" × 8", 13 16" × 6", 16" × 8", 18	$5'' \times 5''$, $15''$	\times 6",						
$18'' \times 8''$, $20'' \times 6\frac{1}{2}''$,	20" × 71"		Add pe	r ton			10	0
$5'' \times 4\frac{1}{2}''$, $7'' \times 3\frac{1}{2}''$, $13''$	× 5"		**	22			15	0
$5'' \times 5''$, $12'' \times 5''$, $22''$	× 7"		22	99		1	0	0
$3\frac{1}{2}'' \times 3\frac{1}{2}''$, $6'' \times 4\frac{1}{2}''$, $7''$	× 4", 8" ×	4",					_	
9" × 4", 10" × 5"	****		99	22		1	5	0
4" × 3", 10" × 4½"			22	22		1	10	0
$4\frac{1}{2}'' \times 4\frac{1}{2}'', 5'' \times 2\frac{1}{2}'', 5''$	× 3"	****	55	29		2	-	0
$6'' \times 3'', 24'' \times 7\frac{1}{2}'' \dots $ $4'' \times 4''$	****		2.2	22		2	0 5	0
		****	22	99			10	0
3" × 3" 4\frac{1}{4}" × 1\frac{1}{4}"	****	****	22	22		3	5	0
$3'' \times 1\frac{1}{2}'', 4'' \times 1\frac{3}{4}''$	***		9.9	2.2		-	10	0
70 1 1 1 1 1	****		x mill	c nor	ton 9		4	6
4000	****			-		10	-	6
colid stool o		****	9.9	99		12	4	6
			22	29			^	
All de	livered Stati	on or S	iaing.					
Sta	ndard Metal	Windo	208					
Rustproof type								
Type ND2F, $4'0'' \times 3'$	31"	****	****	each	46 /	-1	to 6	1/4
" ZND2F, 4′ 0″ × 4	' 0"		****	12	52 /	-1	to 6	9/4
Prices vary with size of ord	der, those giv	en are	maxim	um ai	nd mi	ni	mu	m.
PLASTERER								
1 LAST LICEN	Plaster and	Cement						
			1	-ton	4	-1	on 1	0
			1	oads	5 to			
						10	ads	
Thistle (browning) to B.S.1	1191, Class B	per to	n I	57/9		1	40/	3
Gypstone to B.S.1191, Cla	188 B	99	1	57/6		1	40/	
Paristone (haired) to B.S.1		9.9	1	60/-		1	42/	6
Ditto (unhaired)		22	1	57/6		1	40/	-
Cretestone bonding plaster		23	1	67/6		1	50 /	-
Sirapite (coarse) to B.S.11		23		54/3		1	38/	3
Ditto (fine) to B.S. 1191		29	J	62/3		1	46/	3
Keene's Pink to RS 1191	(lagg I)		6	06/6				

PLASTERER		
Plaster and Cement		
	1-ton	4-ton to
	loads	5 ton 19 cwt
		loads
Thistle (browning) to B.S.1191, Class B per ton	157/9	140/3
Gypstone to B.S.1191, Class B ,,	157/6	140 /
Paristone (haired) to B.S.1191, Class B ,,	160 /-	142/6
Ditto (unhaired) ,,,	157/6	140 /-
Cretestone bonding plaster n	167/6	150 /-
Sirapite (coarse) to B.S.1191, Class C ,,	154/3	138/3
Ditto (fine) to B.S. 1191, Class C	162/3	146/3
Keene's Pink to B.S.1191, Class D	206/6	/
Keene's White to B.S.1191, Class D	212/-	
Cullamix (Tyrolean Finish), 1-ton lots	,	
and upwards per ton from	184/3	to 217/9
Sundries		
Sharp washed sand to B.S.1198	ner va	rd cube 93 /9
Cow Hair	ner cu	vt. 97/6
Expanded metal lathing, 9' $0'' \times 2'$ $0'' \times 1$	l"	
mesh × 24 gauge 75 to 149 150-299	per yo	d. sup. 2/8½
75 to 149 150-299	300-5	99 Over 600
3" Plasterboard (base board yards yards	yard	s yards
or lath) per yard super 2/8 2/6		
per yard super 3/4 3/2	3/1	2/11
per yard super 3 /4 3 /2 Plasterboard nails 12 G	per c	ewt. 121/-
Hessian Scrim cloth in 100-yard rolls,		
3½" wide	per 1	roll 7/9
Wall Tiles		
The following prices are subject to 25 per cent.	addition	
Standard quality white glazed 6" × 6" × 3" per	vard sur	per 18/6
Cream glazed 6" × 6" × 3"		
Eggshell or glossy glazed $6'' \times 6'' \times \frac{3}{8}$ in.		, 26/3
00 0 0 0		20/0

PLUMBER	Lead a	nd (Copper				
3½ lb. and upwards milled of 5 cwts. to under 1 ton	in shee	ets t		per cv	wt.	142	-
Hot rolled copper sheeting lots (4' \times 2' sheets), to B			00		400	8.	d.
Dista			23 wire gau	ge, per ton		0	0
	***		24 wire gau	ge, "	426	15	0
Zinc sheeting in 1-ton lots	****	****	14 gauge	99	123	0	0
	Cast 1	ron	Goods				
Percentage Adjustr							
Rainwater Goods (painted Soil goods (coated or uncoa					21%	,	

	Mild S	Steel Rainwa	ter God	ods	
Gutters		0 lengths)	****	****	Standard List Less 25%
Pipes and Fittings	(,,	,,)	****	****	Less 25%

Asbestos-Cement Rainwater Goods

The following prices are subject to $12\frac{1}{2}\%$ trade discount. Orders over £30 are subject to $17\frac{1}{2}\%$ trade discount.

PLUMBER (continued)

		nai	nwater I	vpes			
				Diamete	er		
		2"	21"	3"	4"	6"	
6' 0" lengths	****	7/6	8/-	9/8	12/10	25/9	each
10' 0" "	****	11/10	12/10	15/-	21/6	43/-	19
			Gutters				
Half round gut 6ft. lengths	tters ea	3" ch 5/-	4" 5/11	$\frac{4\frac{1}{2}''}{6/1}$	5" 7/2	6" 10/-	8" 12/4

INTERNAL PLUMBER

up to 4" bore to B.S.602				****	per cwt.	143/6
Light lead pipe ditto	****	10.00	1000	****	per cwt.	145/6
Lead pipe to B.S. 1085	****	****	****	****	per cwt.	151/6
Polythene tubing, normal a	gauge	e in				
quantities of 500 ft. to 99	99 ft.		1"	2	" 1"	11/
quantities of 500 ft. to 99 per 100 ft		****	62/6	123/	- 158/6	250/6
Ditto, heavy gauge ditto per 100 ft						_
Drawn lead traps with bra				200 /	200 10	
to B.S.504			11"-61	b. 1	1"-6lb.	2"-71b.
S. trap 14" seal		each	6/1	0.1	8/2	13/11
3" deep seal		99	8/2	1	9/81	15/104
Drawn copper traps to	B.S.	1184	8/2 11″		11 "	2"
S. trap li seal		each	24/6		27/4	
" 3" deep seal		99	26/6		29/4	47 /-

Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc. Fittings and tubes ordered in long random lengths are subject to

the following Tubes:	0		" to 4"	Fittings:			
Class B	****		161%	Lightweight	****	plus	10%
" C	****	****	4 %	Heavyweight	***	plus	171%
Galvanized				Galvanized:		-	
99	" C			Lightweight	****	plus	223%
Galvanized	malleab	le fitt	tings	Heavyweight	****	plus	301%
	Less 35	% les	s 61% plus	40%.		-	
Copper tubi	ng to B.	8. 659	and 1386.	Basic price per lb.		****	3/31

GLAZIER

Sheet	Glass,	cut	to size	(ord	inary	glazing	quality), to	B.S.	952,	Section	A
18 oz.			****	****	****	****		per	foot	supe	r -/	53
24 oz.	***		****	****	****	****	****		99			77
32 oz.			****	****	****						i	/1

Polished Plate Glass, ordinary substance, approximately $\frac{1}{4}$ ", to B.S.952, Section A.

In plates not	exceedi	nø:		Glazing	Selected	Silvering quality
o c.			er foot sup		4/3	5/1
5 ft. super			11	4/5	5/2	6/2
45 ft. super		****		5/1	5/9	6/11
*100 ft. super		****	11	5/6	6/9	8/10
or 96 in., both		-	-	B.S.952.		
						10
Section B-	standar	a pati	terns, white	3	per foot si	iper -/9
is or t rolle	d plate	, patte	erns, white	****	99	1/-
3" or 1" rolle	sh cast,	patter	ns, white	****	99	1/-
4" Georgian	wired	cast,	patterns	, white,		
Section D	8488		****	****	22	1/21

Attention is drawn to reductions in certain glass prices offered by manufacturers for acceptance of specified minimum quantities of one size and substance delivered to one address at one time.

1" Georgian wired polished plate, Section D
1" wired cast

PAINTER

White ceiling dis	stemper		****		****	per cwt.	5	29 /-	-
Washable disten	aper		****	****		per cwt. f	rom 11	12/-	-
Primer, general	purpose		****	****	****	per gallon		13/	õ
Ready mixed, w	hite lea	d pain	t		****	22	(32/-	-
Flat oil paint	****	****	****	(444	****	99		39/-	-
Emulsion paint	****	****		****	****	99	4	14/-	_
Hard gloss paint	t:							,	
Undercoat	****	****	****	****	****	22	4	12/-	-
Finishing	****	****	****	****	****	22	4	14/-	
White Portland	cement	paint	****	****	****	per cwt.		71/-	-

F.R.I.C.S., F.I.Arb.

THESE ARE THE DOORS FOR THE MODERN OFFICE

More Light and Plenty of Privacy

"Armourcast" Glass Doors are ideal for internal use in offices, hospitals, showrooms: anywhere, in fact, where contemporary and functional features of design can help to create a lighter, brighter atmosphere. The pleasantly dappled surface ensures that, although it is possible for people to see at a glance whether a room is occupied or not, they can see nothing clearly. "Armourcast" Doors also help to avoid those accidental collisions that can occur at moments of office pressure. Their plain modern design includes no ledges or trimmings which can catch the dust: nothing could be more hygienic or easier to clean.

"ARMOURCAST" Doors are made from 3 "Rough Cast Glass, toughened for additional strength, and equipped with hinge and lock fittings in Bronze Metal Antique finish. Standard sizes are 78" x 30" or 78" x 33". Non-standard sizes can be made to order.



'ARMOURCAST' Glass Doors

PILKINGTON BROTHERS LIMITED ST. HELENS, LANCS.



For further information on the use of glass in building, CONSULT THE TECHNICAL SALES AND SERVICE DEPT., ST. HELENS, LANCS. (PHONE: ST. HELENS 4001) OR SELWYN HOUSE, CLEVELAND ROW, ST. JAMES'S, LONDON, S.W.I. (PHONE: WHITEHALL 5672-6) "ARMOURCAST" is a registered trade mark of Pilkington Brothers Limited. Supplies are available through the usual trade channels.

A.C.O.I.

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.

4.81 planning: urban and rural CITY CENTRES

New City Centres in Europe. By Le Grebler. (Urban Land, vol. xiv No. April, 1955. Urban Land Institute, U.S.) The first of a series of essays on the results of a six-months' tour by the author of 28 European cities.

Mr. Greb'er is Associate Director of the Institute for Urban Land Use and Housing

Studies at Columbia University.
His essays would appear to complement the series of studies which were published in the series of studies which were published in THE ARCHITECTS' JOURNAL in 1952 to 1954; but his series has been extended to include the reconstruction of cities in Holland, France, Germany and Italy as well as England. It is apparent that the author has drawn fully on the AJ series of articles for some of his information. His commentary, however, is of the greatest interest, inasmuch as he has seen the picture as an outsider and on a wider plane than the U.K. sider and on a wider plane than the U.K. front only. Moreover, naturally his immediate reaction is to contrast or to compare reate reaction is to contrast or to compare re-construction in Europe with the practice in the USA, where large-scale redevelopment of areas has been so affected by the in-fluence of the motor car.

fluence of the motor car.

The dominant fact which emerges from Leo Grebler's survey is basically the conservatism and the inherent vitality of the urban centre in Europe. As he writes: "the shadows of doubt cast over the future of our own central areas are non-existent or invisible. Not only is the vast majority of centres re-built on the old site but they are larger in physical area or provide more facilities for the accommodation of central urban functions. The new cores are less urban functions. The new cores are less congested, but they have not lost in import-

By zoning and other means the European centres have been tidied up, but not essen-tially much more. In England this zoning tendency has been carried to a greater extreme than elsewhere, and one agrees with Grebler when he writes: "one wonders also whether zoning in such detail, in addition to burdening the planner with demands for accuracy which he can rarely meet, does not derrive, contract the interest livelines. deprive a centre of the interest, liveliness, and trade potentials that come from a reasonable admixture of activities."

We shall look forward to seeing and re-

viewing further essays.

8.42 surveying: specification QUANTITY SURVEYING FOR STUDENTS

Elementary Quantity Surveying. Ralphs, ARICS. (Pitman. 25s.)

This text-book is intended primarily for the student Quantity Surveyor but will also be of value to the Architect who is making a serious and detailed study of quantity surveying technique.

The more thoughtful reader might be disappointed to find on the dust cover that

one of the objects of the book is to stimu-late a desire for a "rigid system in methods and study," Perhaps Mr. Ralphs may be forgiven this uncompromising edict in an "elementary" text-book, but his choice of examples creates an atmosphere which does nothing to encourage the student to think in terms of contemporary design, methods or material.

There is an unnecessarily complex labyrinth of introductory matter which might well bewilder the novice. The difficulty, of course, in writing a book about quantity surveying is that the "taking off" which starts the wheels turning in the office is the more advanced and involved process, but it does come first in the order in which but it does come first in the order in which things are done. The author evidently recognizes this because he keeps his instructional chapters on abstracting and billing to the end, but, alas, fails to retain control in chapter 2 where, under the head-ing of "Squaring Dimensions," he plunges on through diverse and disconnected details of "working up," finally abandoning the exhausted reader amongst provisional and p.c. sums and sub-contractors' conditions of sale.

Once free of this hazard there is much to praise, and the chapters are clear and informative. The reader is conducted through the "taking off" of foundations, brickwork, roofs, floors, finishings, windows, doors, plumbing and drains; the use of schedules is well illustrated and much emphasis is rightly put upon description. One must also remark that the appearance of the manuscript dimensions and of the abstracting and billing is first rate.

stracting and billing is first rate.

In general it can be said that Elementary Quantity Surveying provides a comprehensive and workmanlike description of the established methods of "working up" and "taking off" as practised in the south of England, but encourages the student to look back to the past rather than forward to the future. back to the future.

14.78 materials : concrete

QUALITY CONTROL OF CONCRETE

Mix Design and Quality Control of Concrete. (Cement & Concrete Association. crete. (Ce 1955. 45s.)

Proceedings of the Symposium of May, 1954, of interest to all concerned in concrete. The Symposium on mix design and con-The Symposium on mix design and concrete quality was probably the most popular symposium to be held in the post-war era. Some 700 members registered and the discussion following the author's remarks was not only at a high level but both spirited and entertaining. This book gives the full proceedings with 22 papers, the author's introductions, the discussions in which 120, or so, speakers took part and the author's replies. With the list of participants and the speakers' index the book ticipants and the speakers' index, the book totals 548 pages. Not much of the proceedings produced anything really new, except a very good paper by Dr. Collins on the Specification of Concrete, which more or Specification of Concrete, which more or less advocated specifications of the final product rather than a host of detailed instructions on how to make the concrete. This is undoubtedly the way to specify concrete giving the full opportunity to the contractor to show his skill and produce the best answer with the materials available locally. Unfortunately, the measure of control required does not render this method suitable for use on the small site where suitable for use on the small site where the Architect is more likely to be in personal control and the flow of concrete not fast enough to get a high average product. On the whole the book is well worth 45s, in that it covers every aspect of mix design and quality control but, with C. & C.A. resources behind it, a lower price would have allowed it to have a far wider cir-culation to the voqueer element culation to the younger element.

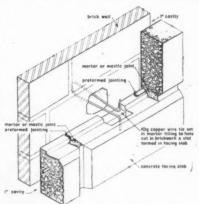
THE INDUSTRY

From the Industry this week Brian Grant reports on a C & CA booklet on concrete facing slabs, a new gear for lifting garage doors, a lamp catalogue and a new range of machine-made fabrics.

CAST CONCRETE FACING SLABS

During the last few years precast concrete slabs for facing framed buildings have been used to an increasing extent and in order to provide more information on their proper use the Cement and Concrete Association has recently produced a booklet on the subject.

So far as surface treatment is concerned.



Attaching facing slab to brickwork. Drawing from the C & CA booklet.

the method used to expose the aggregate depends upon the type of finish required. Smooth surfaces can be obtained by grinding with carborundum stones, while for fine textures the surface can either be scraped or finished with a felt-covered wood float. Medium to coarse textured finishes can be provided by spraying the slabs with water before the concrete has hardened or by wire brushing them after the concrete has partly hardened. Where coarse textures are needed, the aggregate can be embedded in a layer of sand placed in the bottom of the mould, the thickness of the layer depending upon the size of the aggregate to be used and the depth of exposure required. The mould is then filled with concrete and when the slab is removed the sand is either brushed or washed away, thus leaving the aggregate exposed but firmly held in the concrete. So far as colour is concerned, the relative importance of cement and aggregate depends upon the surface treatment. In a smooth, untreated surface the colour of the cement is the dominating factor, but even if the aggregate is fully exposed, the colour of the cement matrix is still important and must be considered when the aggregate is chosen. While natural grey cement can be combined

A.C.O.I.



satisfactorily with a number of aggregates, the use of white or coloured cements extends the range of possible colour combinations. The colours in which cement is available range from white to shades of cream, pink and buff, and to reds, browns and black.

With aggregates there is a wide choice of colour, the most economical being the natural gravels and rocks normally used as concrete aggregates and road stones. These in themselves offer a very considerable colour range and can, if necessary, be supplemented by natural building stones or, where really strong colour values are reguired, by special natural rocks and minerals and artificial materials such as crushed brick or tile. The booklet contains useful illustrations and notes on the choice of a suitable aggregate size, and also has a table which relates the size of the aggregate in inches to the maximum distance from which the texture is visible with normal eyesight.

About half the booklet is devoted to constructional details, with numerous photographs of completed jobs and perspective sketches to show how the slabs have been fixed and waterproofed. Altogether this booklet is extremely well produced and should be remarkably useful. (The Cement & Concrete Association, 52, Grosvenor Gardens. London, S.W.I.)

LIFTING GARAGE DOORS

There are now on the market a number of sets of "up and over" gear for use with garage doors. One of the latest is the Flyover, designed for doors weighing up to 180 lb. and not exceeding 7 ft. 6 in. high. Runners mounted at each side of the top of the door run in horizontal tracks, and the movement of the bottom of the door is controlled by heavy steel arms, which are counterbalanced by adjustable springs. The control arms are set so that the first movement of the bottom of the door is outwards rather than upwards, and ample clearance is thus provided over the back of the car while the door is being opened. The

counterbalance springs are adjustable by tension bolts for varying door weights, and the door will stay in any position without flying up or falling down. The door is hung in a 3 in. × 3 in. timber framework, and no headroom above this amount is required for clearance. The doors can be made completely weatherproof, steel weather strips being provided with each set of gear. The door is locked by a T handle on the outside and this operates twin spring latches which engage a striker plate at each side of the door. Angle braces are also provided with each set of gear and should be used to prevent sagging in the centre when a pair of swing doors is converted into a single flyover door. The price delivered with all fittings is £14 13s. 6d. (E. Hill Aldam & Co., Ltd., Britannic Works, Haslemere Avenue, London, S.W.18.)

ELECTRIC LAMPS

The current edition of the Mazda lamp catalogue illustrates every type of lamp, from the miniatures used in radio sets as indicator lamps to 10 kW. photographic studio floodlights listed at about £33. The catalogue is divided into sections so that it is easy to find what is wanted and full dimensions are given of every type of lamp. The list also illustrates fluorescent fittings, lampholders, lamp auxiliary gear, street lighting lanterns and floodlights. (The British Thomson-Houston Co. Ltd., Crown House, Aldwych London. W.C.2.)

MACHINE-MADE TAPESTRY

Few makers of fabrics are prepared to carry out designs to order, for relatively short lengths of material. This service is provided by British Replin Ltd., who are producing a machine-made tapestry. The material is not cheap; in plain colours it costs about 25s. a yard and in intricate designs up to as much as 75s. It has, however, a very good life. It has the appearance of very fine tapestry: a fine rib runs the length of the cloth, 15 ribs going into 1 in. of

material. The material width is 50 in. The warp and weft are hidden by the intertwining surface yarn which provides the colour and pattern, allowing the warp and weft to take the strains and stresses while the surface yarn receives the wear. It is produced in wool, worsted, silk, cotton or fibre mixture. It is very satisfactory, apparently, as upholstery or eyen as carpeting (for which purpose it is gummed to 4-in. foamed rubber. Cost: plain colours, 30s. approx.). It can be used as curtaining, but being heavy and stiff it hangs best in long lengths and being a tapestry, needs a lining to conceal the loose threads on the back. In the photo below left it is shown as a plain material, coloured snuff-brown, as upholstery for a chair designed by Dennis Lennon. The smaller picture shows a typical simple pattern of clock-faces in yellow, white, red, two greys and a black. Up to six colours can be used on each rib of the material but allowance should be made when designing patterns, for the square stitches typical of tapestry design and the consequent difficulty of carrying out curves along the length of the cloth. The range of colours is contemporary and excellent. (Machine-made Tapestry, 20, Belvedere Terrace, Ayr, Scot-

Announcements

Mr. J. W. W. Lyde, A.R.I.B.A., A.A.DIPL., has joined as a partner the firm of Messrs. L. A. Culliford & Partners, of 47, Essex Street, Strand, W.C.2. The other partners of the firm are Mr. L. A. Culliford, F.R.I.B.A., F.R.I.C.S., A.M.T.P.I., Mr. L. A. Chackett, F.R.I.B.A., F.R.I.C.S., and Mr. Richard Henniker, M.A., F.R.I.B.A.

The address of Mr. R. W. Whitehouse, DIP.ARCH., A.R.I.B.A., is now 32, Bendee Road, Neston, Wirral, Cheshire.

Corrections

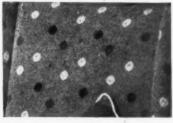
In Information Centre for June 23, p. 865, the number against "Glossary of Acoustical Terms" should have been 22.76, not 22.75.

In Information Centre for July 7, p. 30, the number against "Landlord and Tenant Act, 1954" should have been 7.43, not 7.183.

Buildings Illustrated

Roman Catholic Secondary Modern School in Occupation Road, Corby, Northamptonshire, for the Roman Catholic Diocesan Trust. (Pages 46-47.) Architects: Gotch, Saunders & Surridge, F./A./A.R.I.B.A. Quantity Surveyors: Gotch, Saunders & Surridge. General Contractor: Bernard Sunley & Sons Ltd. Clerk of Works: J. Challenger. General Foreman: F. R. Goodingham. Sub-contractors: dampcourses, The Ruberoid Co. Ltd.; waterproofing materials, roofing felt, tanking, William Briggs & Sons Ltd.; concrete blocks, Constone Ltd.; reinforced concrete, The Trussed Concrete Steel Co. Ltd. (suppliers); bricks, The Blaby Brick Co.; artificial stone, terrazzo tiles, The Excelsior Stone Co. Ltd.; structural steel, Redpath Brown & Co. Ltd., Hills (West Bromwich) Ltd. (roof trusses); "Corroplast" (panel infilling), Holoplast Ltd. (supplied by Hall & Co. Ltd.); metallization, Schori Metallising Process Ltd.; decking to assembly hall and gym blocks, William Briggs & Sons Ltd.; partitions, Venesta





Left, a chair designed by Dennis Lennon and upholstered with the plain tapestry, coloured snuff-brown, produced by British Replin Ltd. Above, detail of material with pattern in yellow, white, red, two shades of grey, and black

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 :-

PROFESSION or TRADE

ADDRESS

Ltd.; glass, Pilkington Bros. Ltd.; woodblock flooring, Hollis Bros. Ltd.; patent flooring, Mundet Cork Products Ltd. (cork floors), Hollis Bros. Ltd. (Semastic floors); central heating, Weatherfoil Heating Systems Ltd.; gas fixtures, gasfitting, The East Midlands Gas Board; boilers, Radiation Ltd.; plumbing, Arthur Scull & Son Ltd.; sanitary fittings, Adamsez Ltd.; stairtreads, The Adamite Co. Ltd., and Hollis Bros. Ltd. (suppliers of Semastic tiles); door furniture and signs, Wing & Webb Ltd.; casements, window furniture, Henry Hope & Sons Ltd.; bells, clocks, Gent & Co. Ltd.; rolling shutters, G. Brady & Co. Ltd.; plaster, Glennon Bros. Ltd.; metalwork, Metal Craft Ltd., and Dryad Metal Works Ltd.; tiling, Carter & Co. (London) Ltd.; textiles, Philips Warehouse (Kettering) Ltd.; wallpapers, John Line & Sons Ltd.; furniture, L. W. Collyer; decorations, A. G. Miller & Sons; school fittings, Geo. M. Hammer & Co. Ltd. and H. Hunt & Son Ltd.; cloakroom fittings, Cloakroom Equipment Ltd.; precast stone kerb and paving, Alexander Stone Co. Ltd.; timber handrail, L. W. Collyer; ventilators, Colt Ventilation Co. Ltd.; formico, Denny Mott & Dickson Ltd.; display panels, Eastwood Specialists Ltd.; glazing, Faulkner Greene Co. Ltd.; flish doors, Leaderflush Ltd.; fletton bricks, London Brick Co. Ltd.; electrical installation and joinery, Bernard Sunley & Sons Ltd.; Palorite Tyleglaze, Quickset Water Sealers Ltd.; tarmacadam, Scudamore & Luck; Plymax panels, Venesta Ltd.; electric light fittings, Charles White (London) Ltd.

Police Married Quarters at 9-11, Lawford Road, Kentish Town, London, N.W.5. (Page 48.) Architect: J. Innes Elliott, B.ARCH., A.R.I.B.A., Chief Architect and Surveyor, New Scotland Yard. Quantity Surveyors: Thurgood Son & Chidgey. General Contractor: George Barker (Builders) Ltd. Clerk of Works: Mr. McNeill. General Foreman: Mr. Smith. Sub-contractors:

asphalt, Lawfords Asphalt Co. Ltd.; reinforced concrete, The British Reinforced Concrete Engineering Co. Ltd.; bricks, Chas. Arnold (Isleworth) Ltd.; partitions, grates, Broad & Co. Ltd.; patent flooring, Neuchatel Asphalt Co. Ltd.; plumbing, Chas. Thomerson; sanitary fittings, Ashley Brandon (Kensington) Ltd.; door furniture, Lockerbie & Wilkinson (B'ham) Ltd.; casements, The Crittall Manufacturing Co. Ltd.; plaster, Plastering Ltd.; metalwork, Finch & Co. Ltd. (balustrading), Messrs. A. J. Binns (fence and gates); shrubs and trees, Turfsoil Ltd.

Police Married Quarters, at 254-264, Holmesdale Road, Selhurst, London, S.E.25. (Page 49.) Architects: J. Innes Elliott, B. Arch., A.R.I.B.A., Chief Architect and Surveyor, New Scotland Yard; C. R. Fowkes, A.R.I.B.A., A.M.T.P.I., Deputy Chief Architect, New Scotland Yard; G. A. Weinmann, Dipl. Ing.. (Arch.), A.R.I.B.A.; quantity surveyors, Thomas Barrett, Sons & Partners; general contractors, J. N. C. Bower Ltd.; sub-contractors: electrical installation, Thorpe & Thorpe Ltd.; asphalt flooring, Crater Asphalte Co.; pathing and planting, The Garden Landscapes Ltd.; sundry fittings, Ashley Brandon Ltd.; precast concrete fire surrounds, Wadcrete Ltd.; fires and grates, Broad & Co. Ltd.; ironmongery, Lockerbie & Wilkinson Ltd.

House in Charters Road, Sunningdale, Berks. (Pages 55-60.) Architect: James A. Crabtree, A.R.I.B.A., in association with Westwood, Sons & Harrison, F./F./F./F.R.I.B.A.; Consulting engineer, Ian Cocking, A.H.I.STRUCT.E., M.S.E. (CIV): General contractors, G. Leslie Soan; Sub-contractors: special roofing, Stramit Boards Ltd.; roofing felt, The Ruberoid Co. Ltd.; glass, Pilkington Bros. Ltd.; patent flooring, Armstrong Cork Co. Ltd.; waterproofing material. Vitretex Surfaces Ltd.; grates, Bratt Colbran Ltd.; boiler, Crane Ltd.; paint, Vitretex (England) Ltd.

Popularity Curve

Typical of Heal's imaginative treatment of clients' special furnishing needs is this gracefully curved boardroom table, recently designed and made for A. S. Orr & Co. Ltd., Bamber Bridge, Lancs.

Working in collaboration with the Architects, Lillie & Kirkham, L.R.I.B.A., of Preston, Heal's based the design on the growing popularity of a central chairman's position, with a table shaped to combine intimate grouping with unobstructed vision. The table is topped with natural hide, the chairs are red hide, and the panelling is in Indian laurel with mahogany mouldines.

A visit to our Contracts Showrooms will show you just why so many of today's leading architects and industrialists bring their furnishing and decorating problems to Heal's. Our booklet Furniture for Special Needs is available to architects on request.



HEAL'S CONTRACTS LTD

WHEN SPACE AND TIME ARE LIMITED

d.; reininforced

bricks, artitions, flooring, lumbing,

Ashley urniture, d.; case-

Finch A. J. d trees,

254-264, S.E.25.

Elliott,

Fowkes, rchitect, inmann,

ity sur-

artners;

er Ltd.; allation,

flooring,

planting, dry fit-

concrete

nongery,

e, Berks. Crabtree,

od, Sons

nsulting

e Soan:

Stramit

roid Co.

patent

es Ltd.:

Crane

1666

This compact speedy system of Visible Records provides an answer

Time and space are usually at a premium in the busy Architect's office. There are Clients waiting to be seen—plans to approve—contractors to interview—applications to be made. A hundred details clamour for attention. And only too often the answers seem to be in as many different places.

Here is an opportunity to solve these problems with a system as simple as it is efficient.

Every detail of a contract from enquiry to completion can be contained in one loose-leaf record. And this record is *visible* which means that no sooner is information required than it is at your disposal.

Hundreds of these records are contained in one loose-leaf binder measuring only 15in. by 12in., and any one can be referred to in three seconds.

As the binder opens, the record is selected instantly. The visible edge bears particulars of the Contract and the body of the record will tell you:—

- 1. Full details of client.
- 2. Particulars of interviews.
- 3. Date of commission.
- Dates of applications for domestic services and date granted.
- 5. Applications to Local Authorities with dates.
- 6. Full list of client's requirements.
- 7. Nominated sub-contractors and suppliers.
- 8. Certificates, dates and amounts.
- Full details of sketch plans, working drawings, etc.

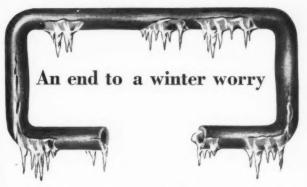
But here, too, space is limited and the list of advantages is long. Let it be sufficient to say that this system is one that every Architect whatever the size of his business, will appreciate. Would you like full details? Just write Architects Visible Records on your headed notepaper and post it to the address below.



VISIBLY BETTER RECORDS

The Shannon Ltd.

24 Shannon Corner, New Malden, Surrey



Water pipes of 'Shirene' never burst however hard the frost

With 'Shirene' plastic tubing, burst water pipes are now a thing of the past. Although so tough as to be virtually indestructible, 'Shirene' has sufficient "give" to accommodate the pressure of water turning to ice. Think of the damage and inconvenience property owners and householders will be saved. 'Shirene' is also much cheaper than conventional piping. Flexible, many times lighter than metal and far easier to work, it takes a big load off the plumber's shoulders. Builders' and plumbers' merchants too will find they're on to a good thing with 'Shirene'. Additionally, 'Shirene' is the perfect medium for agricultural supply lines, industrial or chemical plumbing, and all kinds of cold liquid conveyance. It is non-toxic, and quite unaffected by most acids. alkalis, salt water, air or soil.

Whiteor colours can behad in a wide range of standard sizes up to 12". Larger sizes specially made. Coils of 50', 100', 250', and up to 500', each wrapped in hessian and labelled with full details. Immediate delivery of all standard sizes in all coil lengths.



'Shirene' is a product of Shires, the largest manufacturers of moulded cirterns in Europe. For full details and trade terms write to:

DEPT.A.1, SHIRES & CO. (LONDON) LTD., GREENBOTTOM WORKS, GUISELEY, YORKS. (Factories also at London and Stoke) Shires (Ireland) Ltd., Stannaway Drive, Crumlin, Dublin.

S

_ 30



Picture of a Catesbys craftsman laying lino That is the adhesive he is spreading. Knowing the right adhessive for a particular sub-floor and having the men to apply it correctly is the most important single thing in perfect lino laying.

Catesbys knowledge of linoleum adhesives goes back 60 years. When they lay your lino, it stays laid.

Catesbys Linoleum Contracts

TOTTENHAM COURT ROAD . LONDON . W1 . MUSEUM 7777

There's more to Thermal Storage than buying a few heaters...

THERMODARE ADVISORY SERVICE IS AT YOUR DISPOSAL

Although the principles of Thermal Storage are known to most architects, some guidance on its installation is often helpful. We at Thermodare specialise in this method of heating and will supply complete heating schemes with working drawings whenever required. It is beneficial to all concerned if we can be called in at an early stage. A preliminary discussion without obligation will often save time and expense later.







A range of Five Models.





Qualified Thermodare Technicians will provide you with a complete heating scheme—with plans.

THERMODARE

THERMODARE (GREAT BRITAIN), 79 PETTY FRANCE, LONDON, S.W.I.

THE ONLY SPECIALISTS IN THERMAL STORAGE UNIT HEATING

Telephone:



CONTACT PYNFORD LTD FOR A Complete Foundation Service

- INVESTIGATIONS AND **★** SITE that are clear and to the point.
- DESIGNED * FOUNDATIONS to suit all site conditions
- * FOUNDATIONS CONSTRUCTED quickly and accurately
- **★**UNDERPINNING by the proved PYNFORD METHOD

For further details write or 'phone

Site Investigations, Site Clearance, Foundation Design and Construction. Tests During Construction. Piling and Underpinning. Controlled Mining Subsidence Jacking, Control, Plant Hire, Structural Alterations.

Pynford Limited Foundation Engineers

74 LANCASTER ROAD, STROUD GREEN, LONDON, N.4. Tel: ARChway 6216/7

Recessed lighting fittings specially designed for Guy Aldis, A.R.I.B.A., A.A.Dipl., Architect to East Anglian Hospital Board. Fittings used in Little Plumstead Colony Mental Hospital. lighting for special installations Hume Atkins can advise on lighting schemes and prepare proposals and estimates, including the preparation of special designs in appropriate styles. A wide range of commercial lighting fittings for tungsten and fluorescent lamps is also available by Hume Atkins

Announcing the New TRIANCO Automatic Boilers

A revelation in efficiency, economy and dust free operation

After prolonged research and exhaustive tests, Trianco Boilers, both domestic and industrial types, now provide the most efficient means of ensuring the maximum heat release from solid fuel of various types. The new models, employing the newest techniques in operation, are scientifically designed and provide the complete answer to economical, efficient controlled heating.

Efficient—Automatic thermostatic control—
heat output only when required. Highest
efficiency factor due to complete fuel completion.

There are types to

heat output only when required. Highest efficiency factor due to complete fuel combustion at high temperatures ensuring smokeless combustion.

Easy to Operate—Fuel is gravity fed from hopper. De-clinkering without dust or loss of

Easy to Operate—Fuel is gravity fed from hopper. De-clinkering without dust or loss of heat by hand lever or automatically in the larger types. Uses wider variety of fuels than has hitherto been found possible in this type of Boiler—requires minimum of attention and in industrial types can be fitted with conveyor system for fuel feed and ash removal.





There are types to provide central heating and hot water for the average home or larger types to heat and provide hot water for hotels, blocks of flats, cinemas, offices or factories.

These boilers are made under pending British and Foreign Patents and exclusive licences.

TRIANCO LTD. (HEATING DIVISION), IMBER COURT, EAST MOLESEY, SURREY. EMBERBROOK 3300

NEWS

A complete electronic filter for less than \$\frac{1}{2}\left(0)(0)

Electro-Klean

PATENT. NO 626189 (OTHERS PENDING)



Air Control Installations Ltd.

RUISLIP · MIDDLESEX

Ruislip 4066 (8 lines)

BIRMINGHAM Midland 1165 & 1367.

dation

ction.

ring

rolled

dence

ctural

and

MANCHESTER
Central 0679 & 0670.

Consult us on your heating

technicians will assist you.

problems and our highly trained

NEWCASTLE Whitley Bay 23046. GLASGOW Central 2923

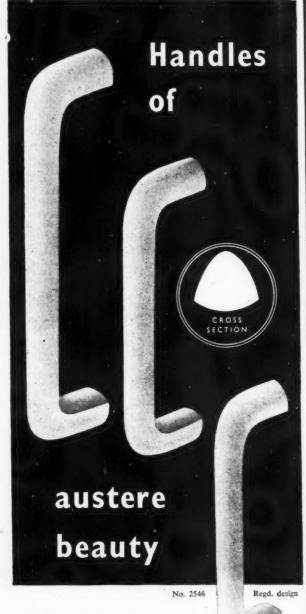
1xxxii



AIR CONTROL INSTALLATIONS LTD.
RUISLIP, MIDDLESEX
Please send me details of the ELECTRO-KLEAN

Please	send	me	details	of	the	ELECTRO-KLEAN
Name						
Title	********			*****		
Company	*******		******			
Business A	ddress	*****	*********	****		
						AT





IN THIS MODEL, ornament is eschewed; the design is simple, and elegance is achieved by the contours which take full advantage of reflected light. These handles are unusually strong, they will not corrode, and their high brilliance is lasting.

SIZES: 7 ins., 5 ins. and 41 ins.

COLOURS: Ivory, Black, Green, Brown, Mottled Brown, Red

LACRINOID

LACRINOID PRODUCTS LTD. GIDEA PARK - ESSEX

SOMETHING MISSING



LIKE AN ESTIMATE WITHOUT A RYCROFT PRICE FOR THE CALORIFIERS

d. design

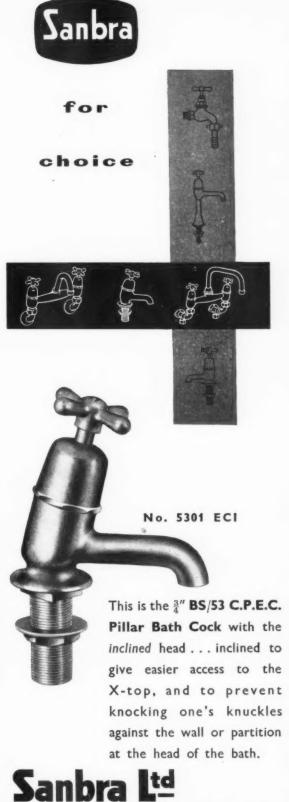
n, Red

ESSEX

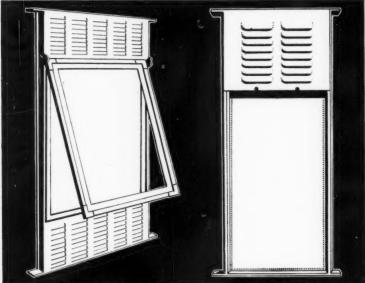
ch 2981

RYCROFT FOR **CALORIFIERS**

RYCROFT & COMPANY LIMITED RYCO WORKS THORNTON ROAD BRADFORD I TELEPHONE: Bradford 27273 (6 lines) GRAMS: Ryco Bradford



ASTON HALL ROAD . BIRMINGHAM, 6 Designers and Manufacturers of a complete range of high-quality Plumbers' Brassfoundry.



OPENING LIGHT FRAME

The 'Permavent' Venti - Light opens only from the interior and is firmly secured when closed. Available in five

FIXED LIGHT FRAME

Made in two types: with louvred panels above and below glazing, and with louvres at top only. Available in six standard sizes.

Light and ventilation COMBINED

Greenwoods' Larder Lights simplify construction and are available in various sizes for instant and easy installation. They are made in heavy gauge steel and are supplied rustproofed and primed or hot dipped galvanised. The ventilation panels are multi-louvred, weather-resisting and backed by insect-proof soreens. For light and ventilation Greenwoods have the answer and will be pleased to supply full technical data on request.

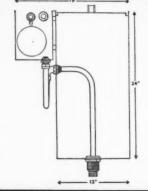
ALL-STEEL LARDER LIGHTS

VENTILATING COMPANY Equipment for Buildings, Vehicles and Ships CHAncery 8135/6/7. "Airvac", London. Designers and Manufacturers of Ventilating BEACON HOUSE, KINGSWAY, LONDON, W.C.2.

AR VENTILATIO

et you out of HOT WATER Troubles

Specified by Local Authorities. Architects and Heating Engineers throughout the country.

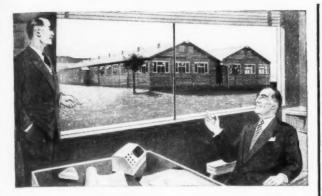


Note:- For overall width add 4 in FRONT VIEW

DURHAM CALORIFIER

PATENT

ROLYAT TANK CO. LTD. . CROMWELL ROAD . YORK



"I left the whole project to Blacknells* . . ."

"They sent a Technical Representative down here, weighed up our problem and submitted plans within a matter of days. The buildings were completely prefabricated—and up in no time. Blacknells know their job all right . . . saved us a lot of bother and considerable expense. You'd be wise to get in touch with them yourself."

> * This Technical Training Centre of 10,500 square feet was designed and erected in 8 weeks for a well-known industrial concern in the Midfands.

BLACKNELLS

PREFABRICATED BUILDINGS

H. & H. BLACKNELL LTD., DEPT. C12, FARNBOROUGH, HANTS. (TEL: 2071)

Introduced in 1934 and since specified by Government Departments, Local Authorities, Leading Architects, Builders, etc. Buildings faced with Dunbriks include Schools, Factories, Hospitals, Drill Halls, Cinemas, Flats, Office Blocks, etc.

Dunbriks are manufactured by:

London & Home Counties

DUNBRIK LIMITED, 26, Chilworth Street, London, W.2. Phone: Paddington 2471/2

Cambridgeshire, Hums, Norfolk & Suffolk

ST. IVES SAND & GRAVEL CO. LTD., 24, The Broadway, St. Ives, Hunts. 'Phones: 2261, 2262, 2270 and 2279

Dorset, S.W. Hanes, S. Wilts, S. & W. Somerset

W. E. MASTERS, Brick Manufacturers, Lytchett Minster, near Poole, Dorset. 'Phone: Lytchett Minster 291/2

Oxon, Berks, N. Wilts, Glas & N. Somerset

THE COTSWOLD BRICK & TILE CO. LTD., Standlake, near Witney, Oxon. 'Phone: Standlake 284 Standlake, near Witney, Oxon.

Post & West Ridings, Yorkshire

DUNBRIK (YORKS) LTD., Stanley Ferry, near Wakefield, Yorks. 'Phone: Wakefield 3694

Counties of Notts, Lines, Letcester, Rutland, Derby

THE HOVERINGHAM GRAVEL CO. LTD., Hoveringham, Notts. 'Phone: Bleasby 361

Scotland

SCOTTISH DUNBRIK LTD., 250, Alexandra Parade, Glasgow, E.1. 'Phones: Bridgeton (Glasgow) 1818; Dundee 81673

DUNBRIK (ULSTER) LTD., Doagh Station, Co. Antrim, N. Ireland. 'Phone: Doagh 59

Beauty ' Economy ' Permanence ' Uniformity

PLAN for CLOCKS

In the newest and best buildings the clocks are regarded both as architectural features and essential amenities; they go in before the walls are plastered. Gibson clocks are being used a great deal in this way, either as individual clocks for one or two offices (worked by small self-contained dry batteries) or on an impulse system





in which one 'Master' controls any number of 'Slave' clocks. This method is very accurate and has the advantage of being independent of power fluctuations. Available designs are good-specific designs can be carried out.

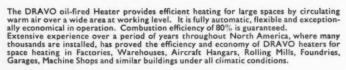
are made by BAUME & CO. LTD.

1. HATTON GARDEN, LONDON, E.C.1. CHANCERY 4331



Industrial Space Heating at much less cost

DRAVO PROVIDES THE ANSWER



OUTSTANDING ADVANTAGES OF DRAVO

Ease of Installation. No structural work, no pipework. Only fuel, exhaust and electrical connections required. Minimum floor space occupied.

Low Operating Cost. Direct fired oil-burner gives minimum efficiency of 80%. Automatic operation requiring only occasional attention. Heat provided at working level reduces roof heat losses.

Low Maintenance. Simplicity of design and rugged construction ensure long life and freedom from operating troubles.

DRAVO Heaters are available for prompt delivery in six sizes ranging from 400,000 to 1,500,000 B. Th. U's output.



MANUFACTURED BY COVENTRY RADIATOR AND PRESSWORK COMPANY LIMITED FULL TECHNICAL DATA AVAILABLE ON REQUEST NATION WIDE SALES AND SERVICE

WEATHERFOIL BATH ROAD, SLOUGH, BUCKS

HEATING SYSTEMS LIMITED

TELEPHONE: SLOUGH 25561/2/3 Branch Offices London and Coventry TELEGRAMS: WARMER, SLOUGH

no Hacking

AT LONG LAST, THE COSTLY, LABORIOUS TASK OF HACKING HAS BEEN ELIMINATED! Applied by brush or spraygun, PLASTAWELD, the NEW bonding fluid for the Plastering trade, ensures a PERMANENT bond between all types of Gypsum Plasters and Porous or NON-POROUS SURFACES including PAINTED WORK, DENSE CONCRETE, GLAZED BRICKS AND ALL SMOOTH





Provides a bond stronger than the plaster itself!

Plastaweld can be plastered at any time after drying Face coats can be applied direct on painted or smooth brickwork!

Technical and Trade Enquiries to Sole Manufacturers:

J. MANGER & SON LTD., Dept. A.J. 57d Kingsland High Street, London, E.8 Telephone: Clissold 5307.

Ixxxviii

WHENEVER PREFABRICATION

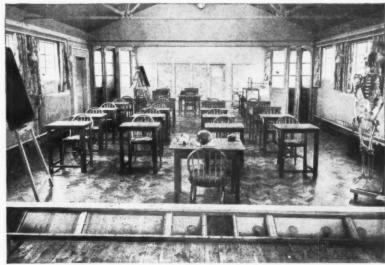
IS REQUIRED

Timber framed.
Unit construction.
Simple and quick in erection.
Weatherboard or asbestos walls.
8' 10' 12' 15' 20' 25' 30' WIDE
7' 8' 10' HIGH TO EAVES

As supplied to:
Sports and Social Clubs.
Education Authorities.
Parochial Councils.
Borough Councils.
Hospital Boards.

ALSO
STEEL FRAMED BUILDINGS
AND NISSEN TYPE BUILDINGS
FOR INDUSTRIAL USES

Specify THORNS



Photograph by courtesy of Bedford Group Hospital Management Committee.

Enquiries invited. Write for details and prices.

J. THORN & SONS LIMITED (Dept. 188)

Brampton Road, Bexleyheath, Kent.

Tel. Bexleyheath 305

BD651a

WARMTH IN THE CORNERS
WHERE IT'S USUALLY COLD

Stelrads are the most efficient method of providing heating. They are easy to install, easy to paint and keep clean, and respond quickly to temperature changes when required.

STEEL RADIATORS

ing

rk!

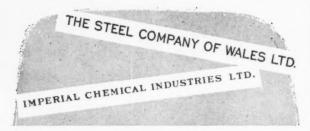
lon, E.8



Photograph by courtesy of V. A. Brown, Esq., A.R.I.B.A

With our catalogue to hand, any central heating problem can be quickly solved. Column and wall radiators are described and illustrated. Sizes and heat emissions are tabled for each reference. And if you want a column or wall radiator for bay window or corner fixing that can be managed too—only you must make a special point of writing or ask for a representative to call.

BRIDGE ROAD, SOUTHALL, MIDDX.
Telephone: Southall 2603



Time and Time again!

FOR COMPLETE RELIABILITY & ACCURACY



These world-famous organisations—and thousands more—have chosen:-

GENTS'

CONTROLLED ELECTRIC CLOCK SYSTEMS



Comprehensive illustrated literature FREE on request.

GENT & CO., LTD · FARADAY WORKS · LEICESTER
London Office & Showrooms: 47 Victoria Street, S.W.I.

Also at: BELFAST, BIRMINGHAM, BRISTOL, EDINBURGH, GLASGOW, NEWCASTLE.

Other Product sinclude: — TIME RECORDERS · WATCHMAN'S CLOCKS · PROGRAMNE i: ISTRUMENTS · SYNCHRONOUS MAINS CLOCKS · TOWER CLOCKS · FIRE ALARM SYSTEMS · STAFF LOCATION SYSTEMS · BELL & INDICATOR SYSTEMS, ETC. ETC.



these walls aren't eight foot thick!

Modern building methods or structural alterations often necessitate an efficient means of sound and thermal insulation—it is not surprising, therefore, that Rocksil is being used more widely in all types of building construction. Rocksil is ideal for the sound insulation of partition walls and for effecting discontinuous construction such as open and solid floating floors.

Rocksil is economical and simple to apply. Send for our current literature.

ROCKSIL

SOUND INSULATION

. . is what you NEED

META MICA LIMITED

CHAPEL FIELD WORKS, DUKINFIELD, CHESHIRE London Office: 50, Bloomsbury, London, W.C.1

Subsidiary of WILLIAM KENYON & SONS, LIMITED

KR 32



Two rooms
on ground level
heated
with one fire

Back to back—This illustration shows how two adjoining rooms can benefit from a single fire, air being drawn from and returned to an adjacent room thus saving both fuel and labour. The adaptability of the AIRDUN Convector allows the use of any type of surround and it can be fitted with controlled combustion or basket fires.

AIRDUN

il

il

of

r

n

ED

HIRE

ITED

(R 32

CONVECTOR FIRE

For full technical details write to the manufacturers who will be pleased to advise you on your specific heating problems.

ALEXANDER DUNN LIMITED

Bothwell Road, Uddingston, Lanarkshire.

Tel. Uddingston 500



(London) Ltd.

Drainage and Sanitary Engineers

Manufacturers of Drain Testing Appliances.

6, STAMFORD STREET, LONDON, S.E.1
Telephone: Waterloo 5261/6 Telegrams: ABRASION, SEDIST, LONDON
Also at Weirside Works, Lower Bristol Road, Bath. Telephone: Bath 7720.



Adhesives and Sealing Compounds

The word 'Bostik' is a registered trademark of

B.B. CHEMICAL CO. LTD., ULVERSCROFT ROAD, LEICESTER.

CHANNELS

B Y

BROADS

When the original Pioneers

The leading specialists

the leading specialists

the largest stockists

FOR CATALOGUE & TECHNICAL SERVICE

'Phone PADdington 7061 (20 lines)

Write: SOUTH WHARF, PADDINGTON, W.2

ENAMELLED

FOR
ARCHITECTURAL
PHOTOGRAPHY
In the North East of England



PHILIPSON STUDIOS

20, Oxford St., Newcastle upon Tyne,
Telephone Newcastle 27281

Specify TENTEST

½in., ¼in., lin. and 2in.

CANADIAN INSULATION BOARD

again fully available

THE TENTEST FIBRE BOARD CO., LTD. Fiboard House, Oakleigh Gardens, N.20. Phone: Hillside 8801 (7 lines)

Grams: Fiboard, Norphone, London

FOR INSULATION BOARD · HARDBOARD FINNBOARD · HORNITEX AND ACOUSTIC BOARD

THE FACULTY OF ARCHITECTS AND SURVEYORS

(with which is incorporated the Faculty of Surveyors of England)

Incorporated (1926) as a Professional Centre

ARCHITECTS

E D

ers

ists

ists

RVICE

. W.2

and

nei

ARD

LTD.

N.20.

ne, London

BOARD

Corporate membership is available to Architects registered in the United Kingdom and Oversea.

SURVEYORS

Examinations are held bi-annually in the following sections: Building, Land, Valuation, Municipal, Quantity, Hydrographic, and Urban and Rural Estate Management.

Important Note: Centain concessions in respect of admission to membership on practice qualifications from Surveyors engaged in the profession will apply for a limited period.

Further particulars may be obtained from:

The Secretary (K)
68, Gloucester Place, London, W.1.
Telephone: WELbeck 9966.



LAKE ASPHALT

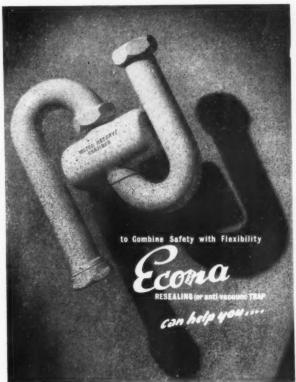
is a valuable component of good mastic, on account of its remarkable consistency and is provided for in

BRITISH STANDARDS 988: 1941 1162: 1944

Further particulars on request from

PREVITÉ & CO LTD

CAPEL HOUSE, 54 NEW BROAD ST., LONDON, E.C.2. Tel: LONdon Wall 4313



ECGNA MODERN PRODUCTS LIMITED AQUA WORKS · HIGHLANDS ROAD · SHIRLEY · BIRMINGHAM Telephone & Telegrams : Solihull 3078



Schori

flame sprayed metal and plastic coatings beat corrosion

Work done on site or in our shops. Plant and equipment supplied.

Schori

Division of F. W. BERK & CO. LTD.

Dept. D4, Brent Crescent, North Circular Rd., London, N.W.10

Telephone: ELGar 3533. Telegrams: Schori Harles London
Manchester: Trafford Park. Glasgow: Hillington Estate



MAKERS OF PRINTING BLOCKS IN LINE

HALFTONE AND COLOUR

ARTISTS · PHOTOGRAPHERS



THE ENGRAVERS GUILD LTD

WINDSOR HOUSE · CURSITOR STREET · LONDON · E.C.4

new ways of servicing BUILDINGS

Edited by ERIC DE MARE, A.R.I.B.A.

THIS IS A NEW KIND OF BOOK ON SERVICING BUILDINGS. Like its successful companion volume New Ways of Building-now in its third printing-its purpose is to fill a gap by acting as an appendix, or postgraduate course, to the existing standard publications on the subject. It presents in a single volume up-to-date knowledge in concise form on all recent developments in lighting (by JOHN BICKERDIKE), the heating of larger buildings (by J. R. KELL), house heating (by C. C. HANDISYDE), sanitation, plumbing and hygiene (by H. G. GODDARD), interior finishes (by KENNETH CHEESMAN) and miscellaneous items (by PHILIP SCHOLBERG). It is designed to be of value to architects, builders, students of architecture and building and to all who are interested in the modern servicing of buildings; even the private house owner will find herein much to interest him when contemplating improvement of his home. Again like New Ways of Building each chapter is written by a specialist on whose knowledge the reader can rely,



and the whole has been co-ordinated and edited by Eric de Maré, who is a qualified but unspecialised architect. Illustrations have been chosen, so far as is possible in a book of this kind, not merely to inform on technique, but to act also as visual stimuli to designers. Selected bibliographies have been added to each chapter in case further study is desired, and there is a comprehensive index. Size 9½ ins. by 7½ ins. 228 pages, including 44 pages of plates. Over 190 line and halftone illustrations. Price 30s., postage 8d.



INE

LOUR

PHERS

LTD

SPECIFICATION

Size 4lin. high, 23in. wide, I lìn. back to front and made to British Standard Specifications, maximum test pressure 100 lbs. per sq. in. Unit complete with 4-lin. tappings for flow, return, cold supply and hot draw-off, also 1-24in. tapping with plug for immersion heater.

D.M.CUTHELL & CO. LTD.

QUICKHEAT" COPPER BOILERS QUEEN STREET, EDINBURGH

THE 🕅 KING-P

CUT FUSE REPLACEMENT TIME TO 5 SECONDS

- Fuse immediately released by pressing hinged pin.
- No contact with wiring-no tools required.
- All pins removable for easy wiring.
- High quality durable materials throughout.
- Brown or ivory-white non-track plastic moulding.
- Retail Prices--Brown Ivory White 3/10d.

Catalogue D.S.P.1, to B.S.S. 1363, is NOW available. Send for your copy.

No other fused plug has this outstanding feature... PATENTED SHUTTERED SOCKETS to B.S.S. 1363 Patent No. 638780. Porcelain back insulator. • Minimum projection for easy wiring. • Supplied either for surface, flush, or conduit box fitting • Insulated or metal front plates. • Unswitched or switched models.

D.S.

PLUGS LT

MANCHESTER 5 and SALTERBECK, WORKINGTON

ALSO AT LONDON, GLASGOW, BELFAST, LEEDS, CARDIFF, NEWCASTLE, BIRMINGHAM

ADVERTISEMENTS CLASSIFIED

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

paper.
Replies to Box Numbers should be addressed care of "The Architects" Journal," at the address care of "The 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 18-59 inclusive unless he or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

of racancies order, 1952.

OFFICE OF THE RECEIVER FOR THE
METROPOLITAN POLICE DISTRICT.
Applications are invited for unestablished
appointments as ARCHITECTURAL ASSISTANTS (New Works and Maintenance Branches)
and also as SANITARY ENGINEERING ASSISTANTS in the Chief Architect and Surveyor's
Department.
Rates at page (2442 lbs. (cor. 23)

Department.

Rates of pay, £442 10s. (age 21) by annual increases to £695 (men) and £442 10s. by annual increases to £615 (women). Overtime of approximately £24 per annum is also payable while a 45-hour week is worked.

Conditional hours, 44 per week. Annual leave,

Conditional nours, Type Conditional Rouss, Type 24 days.

Application forms from the Chief Clerk, Architect and Surveyor's Department, New Scotland Yard, S.W.1, stating for which drawing office application is made.

9795

Yard, S.W.1, stating for which drawing supplication is made.

CORPORATION OF GLASGOW.

ARCHITECTURAL AND PLANNING

ASSISTANT ARCHITECTS.

ASSISTANT ARCHITECTS.

PLANNING ASSISTANTS.

ASSISTANT QUANTITY SURVEYORS.

Applications are invited from suitably qualified persons. Salary on a scale £515—£915, with placing according to age, qualifications and experience. The posts are superannuable, subject to medical examination. Form of application may be obtained from the Principal Administrative Officer, 20, Trongate, Glasgow, C.1.

City Architect and Planning Officer.

City Architect and Planning Officer.

MINISTRY OF WORKS require ARCHITECTIRAL ASSISTANTS for drawing offices in
London, Rdinburgh and various provincial offices,
with at least 3 years' training, some experience
in an architect's office, and of Inter. R.I.B.A.
standard. London salary, 2442 to £695 per annum;
rates elsewhere slightly less. Starting pay according to age and experience; prospects of promotion
and permanency. State age and full details of
training and experience to E. Bedford, Esq.,
C.V.O., A.B.I.B.A., Chief Architect, Ministry of
Works, 20 (F), Abell House, John Islip Street
London, S.W.1.

LONDON ELECTRICITY BOARD.

ARCHITECTURAL DRAUGHTSMAN.

Applications are invited for the above position in the Architect's Section of the Chief Engineer's Department in Central London.

Applicants should be neat Draughtsmen and preferably have had several years experience in an Architect's office.

The post is graded under Schedule "D" of the National Joint Board agreement, Grade 6—2535 10s. to £661 10s. per annum. inclusive of London Allowance.

Application forms obtainable from Personnel Officer, 46/7, New Broad Street, London, E.C.2. to be returned completed by 25rd July, 1955. Please enclose addressed envelope and quote ref: V/2002/A.

V/2002/A.

BOROUGH OF HESTON AND ISLEWORTH. APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the permanent appointment of a SENIOR ARCHITECTURAL ASSISTANT in the Department of the Borough Engineer and Surveyor. Salary in accordance with A.P.T. Grade IV (£675 × £30—£825, plus £30 London "weighting," per annum).

Other things being equal, preference will be given to applicants who have bassed the examination for the Associateship R.I.B.A., or hold a University degree or diploma in architecture accepted by that Institute.

The person appointed must have had good

tion for the Consider of the Considered to the Considered to the Landscape of the Considered to the Co

BOROUGH OF BARNES.

Applications are invited for the following temporary appointments:

(1) ARCHITECTURAL ASSISTANT—Special Grade, £650 × £25-£775 per annum plus London Weighting Allowance.

(2) ARCHITECTURAL ASSISTANT—Grade

(2) ARCHITECTURAL ASSISTANT—Grade III, 1600 × 225—2725 per annum plus London Weighting Allowance.
Candidates should be good draughtsmen and have had experience in the preparation of plans and details for general architectural work.
Applications, giving the names of three persons to whom reference can be made, must be sent to the undersigned not later than Wednesday, July 20th, 1955.

oth, 1955. R. SHEPHERD, A.M.I.C.E., F.R.I.C.S. Borough Engineer & Survey

Municipal Offices, Sheen Lane, London, S.W.14.

Sheen Lane,
London, S.W.14.

GOVERNMENT OF IRAQ
DEVELOPMENT BOARD & MINISTRY OF
DEVELOPMENT
TECHNICAL SECTION NO. 2.
Applications are invited from Qualified Candidates for the undermentioned posts in connection with design and construction of public buildings, model villages and rural housing. Applicants selected for employment will be offered a two years employment Contract on a fixed salary with free first class passages for self, wife and up to two children. There is a generous leave allowance and a high cost of living bonus maximum ID.14/per month is payable.
One Iraqu Dinar (ID.1/-) is equivalent to one pound (21) Sterling.
1. CHIEF ARCHITECT: Candidates must be registered Architects with considerable experience in design and construction and also the administration of a large office. Upper age limit 48. Salary range ID.250/- to ID.300/- per month, according to qualifications and experience.
2. ARCHITECTS: (Several vacancies). Candidates must be Registered Architects with good experience in public buildings and housing design and construction work. Upper age limit 40. Salary range ID.180/- to ID.250/- per month, according to qualifications, age and experience.
3. ASSISTANT ARCHITECTS (3 vacancies). Candidates must be A.R.I.B.A., with experience in design of all types of buildings. Upper age limit 30. Salary ID.150/- to ID.180/- per month, according to qualifications, age and experience.
4. QUANTITY ARCHITECTS (2 vacancies). Candidates must be Chartered Surveyors or possess equivalent qualifications experienced in the preparation of Contracts and measurement of works. Upper age limit, 40. Salary range ID.200/- to ID.230/- per month, according to qualifications age and experience.
5. ELECTRICAL ENGINEER: (1 vacancy). Candidates must be Chartered Surveyors or possess equivalent qualifications is age and experience.
6. RESIDENT ENGINEER (several vacancies). Candidates in the preparation of Contract Documents is also nonth, according to qualifications in all types of buildings. Street lighting, etc. Experience

according to qualifications, and age and experience.

6. RESIDENT ENGINEER (several vacancies). Candidates must have had considerable experience in the site supervision of building construction works of all types. Upper age limit 45. Salary range ID.200/- to ID.230/-, according to qualifications, age and experience.

Applications must be addressed to the Ministry of Development, Southgate, Baghdad, and should give full particulars of age, education, nationality, qualifications and experience; the names of three referees, who will furnish, on request, evidence of training, experience, etc., should be stated. Arrangements will be made to interview the selected candidates in London.

MINISTER OF DEVELOPMENT.

Baghdad.

Baghdad. May, 1955.

BRACKNELL DEVELOPMENT
CORPORATION.
Applications are invited from Corporate Members of the R.I.B.A. for the post of ASSISTANT
ARCHITECT GRADE IV—Salary £710×£40(6)×£10(1)—£96(8)

ARCHITECT GRADE IV—Salary (2010)—2950.

Superannuation scheme, Medical Examination. Housing available in due course. Apply by 22nd July giving age, education and qualifications: experience and appointments held (with dates and salaries) and names of two referees to the General Manager (A.A.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. 1752

COUNTY BOROUGH OF SOUTHAMPTON. BOROUGH ARCHITECT'S DEPARTMENT. Applications are invited for the following Applications are invited for the following appointments:—

(a) SENIOR ASSISTANT ARCHITECT, Grade

2750-4900). SENIOR ASSISTANT ARCHITECTS, Grade (a) SENIOR ASSISTANT ARCHITECTS, Grade (c) ARCHITECTURAL ASSISTANTS, Grade (£550-£640).

(d) ARCHITECTURAL ASSISTANTS, Grade I (4500—4580).
Applicants should possess the appropriate qualifications for Special Classes of Officers under N.J.C. Conditions of Service.
Applicants should state their housing needs.
Application forms from the Borough Architect.
Civic Centre, Southampton, to be returned by 25th July, 1965.

COUNTY BOROUGH OF SOUTHEND-ON-SEA BOROUGH ARCHITECT'S DEPARTMENT. Applications are invited for the following estab-

ARCHITECTURAL ASSISTANT: £560 × £20-

ASSISTANT ARCHITECT: £600 × £25 £725. ASSISTANT QUANTITY SURVEYOR: £6 ASSISTANT QUANTITY SURVEYOR: £675 x

ASSISTANT QUANTITE STATE AND ASSISTANT QUANTITE STATE AND ASSISTANT QUANTITE STATE AND ASSISTANT QUANTITE AND ASSISTANT ASSISTANT

Vacancies exist for ARCHITECTURAL ASSISTANTS in the Architectural branch of the Directorate of Fortification and Works, Chessington.

torate of Fortification and Works, Chessington, Candidates must have at least three years architectural training experience in an architects office, and be of Intermediate R.I.B.A. standard. A varied programme of design is undertaken, including married quarters, barracks, hospitals, schools, clubs, layouts of estates and cantonments, for Home and Overseas.

Applicants must be British of British parentage. Salary range is £432 (at 21)—£680, plus overtime. Starting pay according to age, qualifications and experience, with annual increases subject to satisfactory service. Prospects of promotion and establishment. Canteen facilities.

State age, full details and experience to Secretary of State for War, War Office (C.5.A), R.533, Northumberland House, W.C.2.

BOROUGH OF FINCHLEY.

-CLERK OF WORKS, temporary, required in Housing and Town Planning Department. Salary within Grade A.P.T., II (£600×£25-£725), plus London weighting, according to qualifications and experience. N.J.C. service conditions. Superannuation. No housing accommodation. Practical knowledge of all branches of building trade, use of level, ability to set out and read language and the same of level, ability to set out and read language and the same of level.

plans essential.

Applications, giving age, education, experience, qualifications, and names of two referees, to:

1. Fooks, F.A.I., Housing and Planning Department, The Avenue, N.3, not later than the 21st July, 1955.

R. M. FRANKLIN. Town Clerk

Municipal Offices, N.3.

Municipal Offices, N.3.

ARCHITECTS and MAINTENANCE SURVEYORS in Government Departments. The Civil Service Commissioners invite applications for pensionable posts for about 24 Architects and 7 Maintenance Surveyors.

Candidates must be at least 25 and under 35 years of age on 1st June, 1955, with extension for regular service in H.M. Forces and up to two years for permanent civil service. Every candidate must be a Registered Architect by examination) or a Registered Architect who since registration has passed any professional examination in Architecture recognised by the Architects' Registration Council of the United Kingdom so qualifying for registration under the Architects' (Registration) Acts. For the post of Maintenance Surveyor the Commissioners will also accept Corporate Membership of the Royal Institution of Chartered Surveyors (Building Section) or candidates who have passed a degree or other examination necessary for obtaining Corporate Membership.

London salary scale (men) £675 (at age 25) 10

London salary scale (men) £675 (at age 25) to London salary scale (men) £675 (at age 25) to 21,035. Starting salary up to £930 at age 34 or over on entry. Prospects of promotion. Salaries of next higher grades are £1,035—£1,355 and £1,410—£1,575. Somewhat lower in the provinces. Women's scales lower but being increased underqual pay scheme.

Further particulars and application forms from Civil Service Commission, Scientific Branch. 38. Old Burlington Street, London, W.1, quoting No. 866-61/55. Application forms to be returned by 15th August, 1955.

So-61.55. Application forms to be returned 15th August, 1955.

ROYAL BURGH OF ARBROATH.

HOUSING ARCHITECT'S DEPARTMENT.

APPOINTMENT OF ASSISTANT ARCHITECT'S.

Applications are invited for the following appointments in the above department, with placing within the Grades in accordance with qualifications and experience.

(a) SENIOR ASSISTANT ARCHITECT. Salary 2750—2365 (A.P.T., Grades VI and VII).

(b) SENIOR ASSISTANT ARCHITECT. Salary 2665—2755 (A.P.T., Grades V and Va).

Further particulars and forms of application cambe obtained from W. R. Samson, A.R.I.B.A. Housing Architect, 32, Hill Street, Arbroath, with whom all applications must be lodged not later than Thursday, 28th July, 1955.

WILLIAM D. SMITH.

WILLIAM D. SMITH.

Town Clerk.

1879

COUNTY OF CORNWALL.

APPOINTMENT OF ASSISTANT ARCHITECT AND QUANTITY SURVEYORS IN THE COUNTY ARCHITECT'S DEPARTMENT.

ARCHITECT

ARCHITECT
Young architects seeking scope for initiative and keen to work upon a large programme of new secondary schools are invited to apply for the appointment of ASSITANT ARCHITECT at a salary in accordance with A.P.T. Grade IV (£675—

applications and applicants who have attended a full-time course at a recognized School of Architecture and have passed the R.I.B.A. Final Examination.

QUANTITY SURVEYORS

(a) One QUANTITY SURVEYOR, A.P.T. Grade IV (£675—£825 p.a.).

Candidates must be members by examination of the R.I.C.S. (Quantities) or I.Q.S. and have experience in taking off Quantities for various types of buildings.

Let You and the Architect of the State of the Lic.S. (Quantities) or I.Q.S. and have experience in taking off Quantities for various types of buildings.

Let You are the state of the

E. T. VERGER, Clerk of the County Council.

County Hall, Truro. 7th July, 1955.

D-ON-SEA. TMENT. ving estab-

60 × £20-

25 £725. OR: £600

2: £675 x

eneral or

the pro-cannuation Conditions uncil. Suc-co pass a

submitted ra Street,

GLEN, n Clerk.

L ASSIS-he Direc-

he Direc-essington, ree years architect's standard. ndortaken.

hospitale

parentage.
s overtime.
ations and
et to satisotion and

equired in nt. Salary 2725), plus ations and Super-

and read xperience.

erees, to: g Depart-n the 21st

LIN.

oplications itects and

under 35
cension for
up to two
ery candiv examinavho since
l examinachitects
and

ingdom as Architects' aintenance so accept titution of

age 25) to age 34 or Salaries 1,355 and

orms from ranch, 30, noting No. turned by 1870

H.
MENT.
HITECTS.
following
ent, with

T. Salary T. Salary

cation can .R.I.B.A.. oath, with not later

TH.

COUNTY BOROUGH OF WEST HARTLEPOOL.
Applications are invited for the following appointments in the Borough Architect's Depart-

appointments in the Borough Architect's Department:—

(a) SENIOR ASSISTANT ARCHITECT, A.P.T., V (£750—£900). Applicants should be Associates of the Royal Institute of British Architects and should have considerable experience in Local Authority architectural work, particularly in connection with housing and new schools.

(b) ASSISTANT QUANTITY SURVEYOR, Grade A.P.T., II (£550—£640).

The appointments are subject to the Scheme of Conditions of Service issued by the National Joint Council for Local Authorities' Administrative Professional, Technical and Clerical Services and the Local Government Superannuation Acts, 1937-1955. The successful applicants will be required to pass a medical examination.

Applications, stating age, training, and experience, accompanied by not more than three recent testimonials, should be submitted to the Borough Architect, Municipal Buildings, West Hartlepool, not later than noon on Friday, the 29th July, 1955. The Council is prepared to aprovide housing accommodation to the successful applicants, if required.

ERIC J. WAGGOTT,

Town Clerk.
5th July, 1955.

METROPOLITAN BOROUGH OF WANDSWORTH.
ARCHITECTURAL STAFF.
Applications invited for established appoint-

ments of: ...
(a) SENIOR ASSISTANT ARCHITECT, A.P.T.,
VII (#350-£1,130).
(b) SENIOR ASSISTANT ARCHITECT, A.P.T.,
VI (#355-£1,330).
(c) SENIOR ASSISTANT ARCHITECT, A.P.T.,

(c) SENIOR ASSISTANT ARCHITECT, A.P.T., V(£780-2950).

(d) ARCHITECTURAL ASSISTANT—Special Classes—Grade III (d) (£680-£805).

Applicants for posts (a), (b) and (c) must be Associates of the R.I.B.A. and have had 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. Experience in local authority work is desirable.

Applicants for (d) must have passed Parts I and II of the R.I.B.A. Final or Special Final Examination or their equivalent at one of the recognised schools of architecture, and had at least five years' experience, including training. Application forms obtainable from the Borough Engineer, Surveyor and Architect must reach me by 3rd August, 1955.

R. H. JERMAN.

R. H. JERMAN

R. H. JERMAN.

Town Clerk.

Municipal Buildings, Wandsworth, S.W.1.8. 1806

COUNTY BOROUGH OF HASTINGS.
TWO ARCHITECTURAL ASSISTANTS, GRADE
A.P.T. II (£560-£640 p.a.).

Applications are invited for the above Assistants, who will be engaged on new Housing and School projects. The appointment will be subject to the National Scheme of Conditions of Service, the passing of a medical examination, and to one month's notice in writing on either side.

Applications, stating age, qualifications, experience, present and previous appointments and salary, accompanied by copies of not more than three testimonials, should be forwarded to the Borough Engineer, 37, Wellington Square, Hastings, not later than the 25th July, 1955. Canvassing will be a disqualification.

N. P. LESTER,

Town Clerk.

CITY OF CAMBRIDGE.

Applications are invited for the following appointments in the Architect's Section of the City Surveyor's Department.

(a) TWO SENIOR ASSISTANT ARCHITECTS (Grade V, salary £840-£900).

(b) ONE ASSISTANT ARCHITECT (Grade III, salary £655-£725)

(b) ONE ASSISTANT ARCHITECT (Glade As, salary £625-£725).
Applicants for (a) must be Associates of the R.I.B.A., who have had at least five years' post graduate office experience and be capable of taking charge, from inception to completion, of specific large Educational and General projects. The posts will provide scope for the successful applicants to exercise ability in design, construction, administration, and supervision of building work.

work.

Applicants for (b) should preferably be Associates of the R.I.B.A. and have had good office experience of Schools or Housing work. The successful applicant is required as an Assistant for one of the posts in (a) above.

All appointments are superannuable, subject to medical examination, and terminable by one month's notice on either side.

Housing accommodation will be considered.

Forms of Application may be obtained from the City Surveyor, The Guildhall, Cambridge, to whom they should be returned not later than the 4th August, 1955.

ALAN H. I. SWIFT.

ALAN H. I. SWIFT, Town Clerk.

WARWICKSHIRE COUNTY COUNCIL.
ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:—
(a) SENIOR ASSISTANT ARCHITECTS, grade
A.P.T. IV (£675—£825).

P.T. IV (£675—£825). (b) ASSISTANT ARCHITECTS—scale £650—

ARCHITECTURAL ASSISTANTS-grade

(c) ARCHITECTURAL ASSISTANTS—graue
A.P.T. II (£560—£640).
(d) QUANTITY SURVEYING ASSISTANT—grade A.P.T. I—II (£500—£640).
The commencing salary can be within the grades according to ability and experience. All appointments are subject to the provisions of the Local Government Superannuation Acts 1937-53.
Applicants for (a) and (b) should be Registered Architects.
Applications to be on forms which can be obtained from G. R. BARNSLEY, F.R.I.B.A., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS.

Clerk of the Council.

Shire Hall, Warwick. 24th June, 1955.

URBAN DISTRICT COUNCIL OF CORBY.
DEPARTMENT OF THE ENGINEER AND
SURVEYOR.
Applications are invited for the following

appointments:—
(a) SENIOR QUANTITY SURVEYOR, Grade A.P.T., V (£750—£900), commencing at £750 per

annum.
(b) ARCHITECTURAL ASSISTANT, Grade
A.P.T., III (£600-£725), commencing at £600 per

(b) ARCHITECTURAL ASSISTANT, Grade A.P.T., III (£600-£725), commencing at £600 per annum.

The immediate building programme includes schemes for a Public Hall, covered Swimming Bath and Café, Cemetery Chapel and adjoining Staff Houses, in addition to Housing Contracts.

Housing accommodation will be made available to the successful candidates (if married).

Applicants for appointment (a) must have passed the Final B.I.C.S. (Quantities Section) Examination, and be experienced in the preparation of Bills of Quantities, adjustment of variations and settlement of final accounts. Previous experience of substantial Contracts for local authority housing is desirable.

Applicants for appointment (b) must have passed the B.I.B.A. Intermediate Examination or its equivalent at a recognised School of Architecture, and have had at least two years' experience in an Architect's office (exclusive of pupilage). Preference will be given to applicants who have reached an advanced stage in preparing for the Final Examination and who have had Testimonies of Study accepted. A contemporary outlook and all-round general experience is desirable.

The provisions of the Local Government Super-

outlook and all-round general experience is desirable.

The provisions of the Local Government Superannuation Acts, 1937/1953, will apply to these appointments.

Forms of application may be obtained from the undersigned, to whom they should be returned not later than the first post on Saturday, the 30th July, 1955.

Testimonials will be required only from applications.

July, 1955.
Testimonials will be required only from applicants selected for interview.
G. B. BLACKALL.
Clerk of the Council.
Council Offices. Corby, Northants.
2nd July, 1955.

CRAWLEY DEVELOPMENT CORPORATION require a JUNIOR ASSISTANT ARCHITECT. Salary scale £520-£570 p.a., of R.I.B.A. Intermediate Examination standard, and experienced in architectural practice. Contributory superannuation. Apply on forms from Chief Architect (Vacancy), Broadfield, Crawley, Sussex, by 22nd July, 1955. C. A. C. TURNER, Chief Executive.

xcvii

ANGLESEY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following posts in the above Department.
ASSISTANT ARCHITECT, Grade A.P.T., III (£625—£725). Preference will be given to Associate Members of the Royal Institute of British Architects, with good general experience in design and construction.
ASSISTANT ARCHITECT, Grade A.P.T., II (£560—£640). Applicants should have good experience in preparation of working drawings, and preference will be given to applicants who have passed the Intermediate Examination of the R.J.B.A.

R.I.B.A.

The posts are superannuable, and candidates will be required to undergo a medical examina-

Further particulars may be obtained from the County Architect, Shire Hall, Llangerni, Anglesey. Applications, giving names and addresses of two referees, to be forwarded to the Clerk of the County Council, Shire Hall, Llangerni, by 25th July, 1955.

COUNTY BOROUGH OF BURY. COUNTY BOROUGH OF BURY.
Applications invited for appointment of ARCHI-TECTURAL ASSISTANT, Borough Engineer's Department. Salary up to £650-£775, National Scale of Salaries, according to qualifications and

The appointment is superannuable and subject to medical examination.

Applications, stating age, details of training, qualifications and experience, together with names and addresses of two persons to whom reference may be made, must reach me not later than 16th July.

EDWARD S. SMITH,

EDWARD S. SMITH, Town Clerk.

Town Hall, Bury.

1st July, 1955.

MIDDLESBROUGH EDUCATION COMMITTEE.
Applications are invited from suitably qualified persons for the following vacancies in the Education Architect's office.
Appointments will be made within the grades as indicated, subject to qualifications and experience.

as indicated, subject to qualifications and experience.

(a) ONE SENIOR ASSISTANT ARCHITECT, A.P.T., Grade V (£750-£900).

(b) THREE ASSISTANT ARCHITECTS, Special Scale (£650-£775).

(c) ONE ARCHITECTURAL ASSISTANT, A.P.T., Grade II.

(d) ONE DRAUGHTSMAN or DRAUGHTS-WOMAN, Miscellaneous, Grade III.

HOUSING ACCOMMODATION is available for the successful applicants for posts (a) and (b), if required.

An excellent opportunity is offered for participation in the extensive Educational Building Programme, which includes contemporary Primary and Secondary Schools, Branch Colleges, Extensions to the College of Art, and Community Centres.

Programme, which includes and Secondary Schools, Branch Colleges, Extensions to the College of Art, and Community Centres.

Application forms and particulars may be obtained from the Director of Education, Education Offices, Woodlands Road, Middlesbrough, to whom completed forms should be returned not later than 21st July, 1955.

BOROUGH OF OLDBURY.

BOROUGH OF OLDBURY.

BOROUGH SURVEYOR'S DEPT.—ARCHITELTS SECTION.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT, Grade A.P.T., III (2600—2725), in the Borough Surveyor's Department. Applicants for the appointment should be good architectural draughtsmen, with experience in the preparation of working drawings and details from preliminary sketches, and should have good experience of housing and education work normally undertaken by Local Authorities and capable of administering small building contracts.

The appointment will be superannuable, subject to the National Conditions of Service and to the selected candidate passing a medical examination. Applications, giving particulars of age, qualifications and experience and the names of two referees, should be delivered to the undersigned not later than Monday, 18th July, 1955.

Municipal Buildings, Oldbury,

Municipal Buildings, Oldbury, near Birmingham. 2nd July, 1955.

BOROUGH OF SCARBOROUGH.
BOROUGH AND WATER ENGINEER'S
DEPARTMENT.
ARCHITECTURAL ASSISTANT.
Applications are invited, from appropriately
qualified candidates, for a post of Architectural
Assistant. Salary, Special Scale, £550—£775 per
annum.

assusant. Saiary, Special Scale, £650—£775 per annum.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937-1953, and to the passing of a medical examination, and will be terminable by one month's notice on either side. The Council may assist in the provision of housing accommodation.

Applications, in envelopes endorsed "Architectural Assistant," stating age, present and previous appointments, training, qualifications and experience, together with the names of two referees, must be delivered to the undersigned not later than the 26th July, 1955.

Borough and Water Engineer.

Town Hall. Scarborough.

1861

COUNTY BOROUGH OF DERBY.
BOROUGH ARCHITECT'S DEPARTMENT.
(a) SENIOR QUANTITY SURVEYOR, Grade
IV. Salary 2675—2825 per annum.
Qualifications: A.K.I.C.S. (Quantities) or
A.I.Q.S. with appropriate experience.
(b) JUNIOR QUANTITY SURVEYOR. Salary
A.P.T., II, £560—2640.
Qualifications: R.I.C.S. Intermediate Examination standard or A.I.Q.S. Experience in abstracting and billing, measuring on site, preparation of final accounts, and taking off quantities for small building works.

building works.

(c) ASSISTANT ARCHITECT, Grace

Salary £675—£825 per annum.
Qualifications: A.R.I.B.A.

(d) TWO JUNIOR ARCHITECTS. Salary
General Division (£275 at 20, rising to £400 or
£475): A.P.T., I (£500—£580); or A.P.T., II (£560—
£640), according to qualifications.
Permanent superannuable appointments, subject
to one month's notice and to medical examination.
National Conditions of Service.
Forms of application obtainable from and to
be returned to the Borough Architect, The Council
House, Corporation Street, Derby, not later than
Monday, 8th August, 1955.
Canvassing disqualifies.

G. H. EMLYN JONES,
Town Clerk.

COUNTY BOROUGH OF GREAT YARMOUTH.

APPOINTMENT OF CLERK OF WORKS.
Applications are invited for the appointment of a Clerk of Works, to act under the direction of the Borough Engineer in the supervision of the erection of flats and maisonettes.

Applicants should have a thorough knowledge of the building trade, and experience in this type of work. Membership of the Incorporated Clerk of Works' Association of Great Britain would be an advantage. The salary will be in accordance with Miscellaneous, Grade VI (£575×£15—£635), for Local Government Officers. The hours of duty to be equivalent to the hours worked by men engaged on the contracts being supervised.*

Applications, stating age, qualifications and previous experience, together with the names of two persons to whom reference may be made, should be enclosed in an envelope endorsed "Clerk of Works." and must be received by me not later than 22nd July, 1955. The Council is unable to offer housing accommodation.

FARRA CONWAY.

Town Clerk.

Town Clerk.

Town Hall, Great Yarmouth.

Town Hall, Great Yarmouth. 1st July, 1955.

Ist July, 1955.

SHEFFIELD REGIONAL HOSPITAL BOARD. Applications are invited for the whole-time post of SENIOR ASSISTANT ARCHITECT. The salary scale is at present £900×£30-£1,050, but it is anticipated that these figures will be increased by £20 at the minimum and £45 at the maximum. Candidates must be Registered Architects, and should be capable of taking charge of a block of work in the architectural department and of undertaking personally the more difficult and responsible individual projects. The appointment is subject to the Whitley Council terms and conditions of service, to the National Health Service (Superannuation) Regulations, and to one month's notice on either side. Applications, together with the names of three referees, should be sent by 30th July to the Secretary to the Board, Fulwood House, Old Fulwood Road, Sheffield. 10. 1853

House, Old Fulwood Road, Sheffield, 10. 1853

THE ROYAL INFIRMARY OF EDINBURGH
AND ASSOCIATED HOSPITALS.

ARCHITECT AND MASTER OF WORKS required to take up duty on 1st October. 1955.
Applicants must be fully qualified Architects, and be capable of controlling and co-ordinating the whole activities of the Works Department of this group of hospitals, comprising the Royal Infirmary of Edinburgh (1.157 beds). The Simpson Memorial Maternity Pavilion (169 beds). Convalescent House, Corstorphine (80 beds). Geometric Maternity Pavilion (169 beds). Convalescent House, Corstorphine (80 beds). Beechmount Hospital (46 beds), and Edinburgh Dental Hospital (38 chairs), as well as a number of outside clinics, nurses' homes, etc. Salary scale £1,050×£40 (5)×£25—£1.275 per annum on a personal basis. Full details of the duties and responsibilities and of staff employed will be supplied on application to the undersigned, with whom applications, giving full particulars and the names and addresses of three referees, must be lodged not later than Saturday, 16th July, 1955.

W. F. FERGUSON.

Secretary and Treasurer.

Secretary and Treasurer.

MINISTRY OF AGRICULTURE. P'SHERIES AND FOOD require a Temp. ARCHITECTURAL DRAUGHTSMAN in London. O.N.C. or equiv., and three years' practical experience including 6 months in a drawing office desirable. Starting salary: men from 400 (age 20)—2580 (age 28 or over). Women lower. Max. £670 (men). £590 (women). Apoly any Employment Exchange quoting Order No. Westminster 2657.

KENT COUNTY COUNCIL require ASSIS-TANT ARCHITECTS at salaries (a) £675-£825, and (b) £650-£775 a year. Candidates for (a) must be Associates of the Royal Institute of British Architects, and for (b) must have passed Parts 1 and 2 of the Final Examination of the Institute. Details and application forms from the County Architect, Springfield, Maidstone. Closing date: 29th July, 1955.

CITY OF SHEFFIELD.

APPOINTMENT OF SENIOR ASSISTANT ARCHITECT (HOUSING).
Grade A.P.T. VI. Salary £825-£1,000.
Applications are invited from suitably qualified persons for the above-mentioned appointment on the staff of the City Architect, Mr. J. L. Womersley, A.R.I.B.A., A.M.T.P.I.
The person appointed will be required to prepare layouts of housing areas, and to design, prepare working drawings, and supervise to completion all types of dwellings, including multi-storey flats. Preference will be given to applicants with considerable experience of this type of work.
The City's Housing Programme consists of (i) estates in outer areas comprising mixed development of houses and flats, (ii) estates in inner areas containing a substantial proportion of high flats, and (iii) the redevelopment of outworn areas. The appointment offers considerable scope to progressive architects possessing the requisite qualifications, design ability and experience. The post is superannuable and subject to medical examination.

Applications, stating age, education and train-

tion.

Applications, stating age, education and training, qualifications, present and past appointments (with dates and salaries), experience, and the names of two referees, should reach me by Tuesday, 26th July, 1955.

JOHN HEYS. Town Clerk Town Hall. Sheffield, 1. Town Clerk. 1867
NEWCASTLE REGIONAL HOSPITAL BOARD. ARCHITECTURAL STAFF APPOINTMENTS. (Philip H Knighton, M.B.E., A.R.I.B.A., Regional Architect.)
In connection with a large new hospital project, the Board invites applications for the following permanent (superanuable) appointments on the Headquarter's staff of the Regional Architect in Newcastle:—

Newcastle:—
(a) ASSISTANT ARCHITECT, Grade £625×£25
(7) × £30 (3) to £890 per annum.

(d) ASSISTANT ARUHITEUT, Grade £625×£25 (7) × £30 (3) to £890 per annum. (b) ARCHITECTURAL ASSISTANT, Grade £465 × £25 (1) × £20 (8) to £650 per annum. (c) ARCHITECTURAL DRAUGHTSMAN. Grade £380 × £20 (3) × £25 (2) × £20 (4) to £570 per annum. per annum.

per annum.

Commencing salary will depend upon the applicant's age and amount of practical experience.

Salary scales are expected to be increased in the

cant's age and salary scales are expected to be increased.

Salary scales are expected to be increased.

Applications stating age, qualifications, past and present appointments, present salary and details of experience and training, together with the names of three referees (of whom at least two should be architects) should be forwarded to the Secretary not later than 23rd July, 1955.

"Dunira."

Osborne Road, Newcastle-upon-Tyne, 2.

Newcastle-upon-Tyne, 2. 1883

COMMONWEALTH OF AUSTRALIA.

DEPARTMENT OF WORKS.
VACANCIES FOR ARCHITECTS.
Architects are required on Design and Construction work associated with National Defence Projects, Development Work, Government Buildings, Airports and Housing in the State of South Australia.

Salary: Salary range in Australian currency is £890—£1,310.
Commencing salaries:—

Commencing salaries:—
Diplomate, £974.
4-year University Graduate, £1,058.
Graduate with honours, £1,100.

4-year University Graduate, £1,008.

Qualifications:
Applicants should hold academic qualifications
"Fellow or Associateship elect of the Royal Institute of British Architects," or "The Diploma of a School of Architecture recognised for exemption from the Royal Institute of British Architects," in a Examination granted at a date when the School was recognised."
The above qualifications automatically entite applicants to Membership of the Australian Institute.
Conditions:
Housing available for married personnel. Subject to satisfactory service, there are, in sight, many years of employment. Further particulars regarding conditions of employment are available at Australia House.
Applications and enquiries should be addressed to:—
THE PUBLIC SERVICE BOARD

THE PUBLIC SERVICE BOARD REPRESENTATIVE.
Australia House, Strand, London, W.C.2.
Applications close on 30th July, 1955.

Applications close on 30th July, 1955. 1794

BOROUGH OF BACUP.

STAFF-BOROUGH ENGINEER'S

DEPARTMENT.

Applications are invited for the appointments
of (a) ARCHITECTURAL ASSISTANT, salary
A.P.T., II (£500-£640), and (b) ENGINEERING
ASSISTANT, salary A.P.T., I (£500-£580),
HOUSING ACCOMMODATION will be provided

vided. Conditions of appointment and application forms (closing date 27th July, 1955) obtainable from the Town Clerk, Municipal Offices, Bacup. 1765

ARCHITECTURAL ASSISTANT required for the Works Department of the University of Edinburgh, with experience in traditional buildings, alterations and laboratory fittings. Salary scale up to £750 per annum, with placement according to qualifications and experience. Superannuation scheme in operation.

Applications, in writing, should be sent to the Master of Works, University Works Department, Infirmaty Street, Edinburgh, 1.

CITY OF CHESTER-DEPARTMENT OF CITY ENGINEER.

Applications are invited for:

(1) PRINCIPAL ARCHITECTURAL ASSIS.
TANT. Salary A.P.T., Grade V (namely £750£900 per annum).
Candidates should have had
good training and experience, particularly in
school design, and should be Associates of the
R.I.B.A. or hold a University degree in Architecture.

R.I.B.A. of noin a chiverency tecture.

(2) SENIOR ARCHITECTURAL ASSISTANT. Salary A.P.T., Grade IV (namely £675-£825 per annum, commencing at £765 per annum). Candidates should have had good training and experience, particularly in school design, and should be Associates of the R.I.B.A. or hold a University degree in Architecture.

(3) ARCHITECTURAL

DRAUGHTSMAN. Salary Wiscellaneous, Grade IV (namely £465-

degree in Architecture.
(3) ARCHITECTURAL DRAUGHTSMAN,
Salary Miscellaneous, Grade IV (namely 245-£545 per annum). Candidates should be able
draughtsmen, with experience of building con-

struction.

Applications with two testimonials should reach City Engineer, 43, Northgate Street, Chester, by Friday, 29th July, 1955. Canvassing directly or indirectly will disqualify, and relationship with any member or officer of the Council must be applied to the council must

disclosed.

BOROUGH OF ERITH.

THIRD ARCHITECTURAL ASSISTANT.
Applications are invited for the appointment of Aprile Architectural Assistant, Grade A.P.T., II (2560 × 220 – £640 per annum, plus London weighting)

Applicants should hold appropriate qualifica-

Applicants should hold appropriate Applications, stating age, qualifications, previous appointments and experience, together with the names and addresses of two referees, should be sent to the Borough Engineer and Surveyor, Town Hall, Erith, Kent, not later than Monday, the 25th July, 1955.

The Council is unable to assist in the provision of housing accommodation.

J. A. CROMPTON,

Town Clerk.

1804

Town Hall, Erith, Kent.

FEDERAL GOVERNMENT OF NIGERIA.
ARCHITECTS—PUBLIC WORKS
DEPARTMENT.
Duties include the preparation of sketch plans, working drawings and detailed specifications for various types of buildings, and the carrying out of the general work of a very busy Architectural

Omce.
Appointments are on contract in the salary range £1,116 to £1,898 per annum; plus a gratuity of £150 per annum on satisfactory completion of contract.

contract.

Free first class passages are granted for the officer and his wife, and assistance up to £75 each for a maximum of two children is granted in respect of their passages or maintenance in the United Kingdom. Government quarters, if available, are provided at a rental of 10 per cent, of basic salary. Leave is granted at rate of 7 days for each month of resident service in a tour of 18-24 months.

Candidates should be A.R.I.B.A. with wide general experience. A knowledge of Hospital planning would be an advantage, although not essential.

Apply in writing to the Director of 25 and 25 are considered.

essential.

Apply in writing to the Director of Recruitment,
Colonial Office, Great Smith Street, London,
S.W.I, giving briefly age, qualifications, and experience, and quoting reference number
BCD 112/14/04.

CITY OF RIRMINGHAM.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of an ASSISTANT ARCHITECT in the General Architectural Section, which is responsible for an extensive programme, including the design and erection of large public buildings such as police and fire stations, office blocks, baths and other civic buildings. The appointment will be within Grade A.P.T., V (£750-£900 per annum), at a commencing salary according to experience.

Applicants must be Associate Members of the R.I.B.A., or hold an equivalent qualification, and must have a contemporary outlook in Architectural Design.

The post is permanent, superannuable, subject to a medical examination, and to one month's notice on either side.

Applications, stating age, present position and salary, qualifications and experience, together with the names of two persons to whom reference are be made, should reach the undersigned not later than 29th July, 1955.

Canvassing disqualifies.

A. G. SHEPPARD, FIDLER.

City Architect.

Civic Centre, Birmingham, 1.

COUNTY BOROUGH OF SOUTHAMPTON.

Civic Centre, Birmingham, 1, 1780
COUNTY BOROUGH OF SOUTHAMPTON.
BOROUGH ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:—
(a) PLANNING ASSISTANT, Grade II
(£560—£540).
(b) PLANNING ASSISTANT, Grade I
(£500—£580).
Applicants should possess the appropriate qualifications for Special Classes of Officers under N.J.C. Conditions of Service.
Applicants should state their housing needs.
Application forms from the Borough Architect, Civic Centre. Southampton, to be returned by 25th July 1955

OF CITY L ASSIS

have had cularly in tes of the

SISTANT.

-£825 per

a). Candi
and experi
should be

University

HTSMAN. lely £465— d be able lding con-

ould reach thester, by directly or aship with I must be

STANT.

qualifica-

tions, pre-cether with ees, should Surveyor, n Monday,

e provision

TON, own Clerk. IGERIA.

etch plans, cations for crying out chitectural

the salary

a gratuity

ed for the to £75 each granted in nce in the s, if avail-er cent. of of 7 days a tour of

with wide f Hospital though not

ecruitment, London, is, and ex-number

IENT.

ointment of
ne General

sible for an
design and

design and
h as police
and other
l be within
num), at a
rience.
bers of the
cation, and
n Architec-

osition and e, together m reference rsigned not

LER, Architect.

MPTON.
TMENT.
following

riate quali-icers under

ng needs. n Architect, returned by

I

CITY OF ROCHESTER.
ARCHITECTURAL ASSISTANT.
Applications are invited for the above appointment in the City Surveyor's Department at a salary in accordance with A.P.T., Grade II, of the National Scale of Salaries, viz., £560—£640 per

annum.

Preference will be given to candidates who have passed the Intermediate Examination of the Royal Institute of British Architects.

A good general experience is desirable, particularly in the preparation of drawings and specifications for municipal housing schemes.

In an appropriate case the City Council will provide the successful applicant with suitable housing accommodation.

The appointment will be subject to:—
(1) The National Joint Council's Scheme of Conditions of Service.

The appointment of the appointment of the appointment of the act o

Guildhall, Rochester. 1st July, 1955.

Ist July, 1955.

MIDLANDS ELECTRICITY BOARD.

ENGINEERING DRAUGHTSMAN required at the North Staffordshire Sub-Area Headquarters. Applicants should have had a thorough technical training and practical experience in the preparation and design of building construction drawings. Possession of a recognised qualification an advantage. Salary £510-£630 per annum (N.J.B., Schedule "D." Grade 6). Superannuable.

Apply, in writing, within 14 days, stating age, education, qualifications, experience, present position and salary, to Sub-Area Manager, Midlands Electricity Board, 31, Kingsway, Stoke-on-Trent.

A. STEPHENS,

MIDLANDS ELECTRICITY BOARD. ENGINEERING DRAUGHTSMEN required in the Architectural and Construction Section of the ingineer's Department of the Birmingham and

Engineer's Department of the Birmingham and District Sub-Area.

Applicants should be capable of assisting in the preparation of working drawings and in the design of Service Centres, Depots and Substations. Salary within the range of £510-£630 or £540-£740 per annum (N.J.B., Schedule "D," Grades 6 or 5). Superannuable.

Apply in writing, within 14 days, stating age, experience, present salary and position, to Emil Braathen, Sub-Area Manager, Midlands Electricity Board, 14, Dale End, Birmingham, 4.

A. STEPHENS.

Secretary.

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 17th October, 1955. The minimum age limit for candidates is 25.

Possession of this certificate is necessary for appointment to positions as District Surveyor (salary scales £1,400 to £2,900 a year) or as Assistant District Surveyor (salary scale £1,071 to £1,224 a year).

Subsequent examinations will be held annually. Apply to The Architect to the Council (AR,ED) CTB). County Hall, Westminster Bridge, S.E.1, for application forms and further particulars. (526) 9606

PADDINGTON BOROUGH COUNCIL require SENIOR ASSISTANT ARCHITECT, within A.P.T., Grade V (£780×£30-£930 p.a., £10 p.a. less if under age 26 years). Candidates must be A.R.I.B.A., with experience of local authority work, contemporary design, and construction of general municipal work, including multi-storey flats; supervision of large building contracts and architectural staff; Town Planning experience an advantage.

Applications, stating age, qualifications, present and past appointments, with dates and salaries, details of experience, and names and addresses of three referees, should be received by the undersigned by 29th July, 1955 (quoting A.223).

W. H. BENTLEY.

Town Hall, Paddington Green, W. 2. 1833

SENIOR ASSISTANT ARCHITECT, GRADE IV (1858) INC.

SENIOR ASSISTANT ARCHITECT, GRADE IV (1858) Interesting small office, with plenty of work. Applications, with full particulars and names of referees, from qualified and experienced men, should be sent to Douglas Calder, A.R.I.B.A., A.M.T.P.I., Architect and Planning Officer to the Isle of Man Local Government Board, Murray House, Douglas, to arrive not later than 4th August, 1955.

COUNTY OF ROXBURGH.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the undernoted appointments:—
(a) ASSISTANT ARCHITECT. Salary scale Grades V(a) to VII, with placing within the scale according to qualifications and experience. Candidates must be Registered Architects and preferably Members of the Royal Institute of British Architects.

dates must be registered aby Members of the Royal Institute of British Architects.

(b) ARCHITECTURAL DRAUGHTSMAN. Salary scale Grade I. Candidates must have a minimum of three years' training, some experience in an architect's office, and be of Intermediate R.I.B.A. standard.

The appointments are subject to the Local

R.I.B.A. standard.

The appointments are subject to the Local Government Superannuation (Scotland) Act, 1937, and to satisfactory medical examination.

Applications, accompanied by one copy each of three recent testimonials, should be lodged with the undersigned not later than 20th July, 1955.

Canvassing, directly or indirectly, in connection with the appointments will disqualify.

JAMES R. HUME.

County Offices, Newtown St. Boswells.

20th June, 1955.

1768

30th June, 1955.

EAST ANGLIAN REGIONAL HOSPITAL
BOARD.

(1) ASSISTANT ARCHITECTS (2)—Candidates
must be qualified and registered architects and
possess good general experience in design, construction and specification writing. Knowledge of
hospital work desirable. Salary £625—£890 per

annum.
(2) SENIOR ASSISTANT ENGINEER (Mechanical)—Candidates to be experienced in design and installation of heating, ventilating, steam boiler plant and services, etc., and must be A.M.I.Mech.E., or equivalent. Salary £900×£30—£1550 per annum.

£1,050 per annum.

(3) ASSISTANT ENGINEER (Mechanical)—
Candidates to be experienced in the work at (2) and should be A.M.I.H.V.E. or Graduate Members of the I.H.V.E., or equivalent., Salary £625—£890 per annum.

Candidates to be experienced in the work at (2) and should be A.M.I.H.V.E. or Graduate Members of the I.H.V.E., or equivalent., Salary £625-£890 per annum.

(4) ASSISTANT ENGINEER (Electrical)—Candidates to be experienced in design and installation of electrical engineering services and should be A.M.I.E.E., or Graduate Members of I.E.E. or equivalent. Salary £625-£890 per annum.

(5) ENGINEERING ASSISTANTS—Candidates to be experienced in work described above and possess Ordinary National Certificate (Mechanical or Electrical). Salary £465 (at age 21 or over)—£650 per annum.

(6) DRAUGHTSMEN (Engineering)—Candidates to have had suitable training and experience. Salary £380 (at age 21 or over)—£700 per annum. Additional increments within the scale based on experience and age may be granted in respect of posts (1), (3) and (4). Commencing salary for post posts (1), (3) and (4). Commencing salary for post posts (1), (3) and (4). Commencing salary for post stating age, qualifications, experience and details of present position with names of three referees to Secretary of Board, 117. Chesterton Road, Cambridge, by 2nd August, 1955.

EASTERN ELECTRICITY BOARD.

NORTHMET SUB-AREA.

ARCHITECTURAL ASSISTANT—SUB-AREA HEADQUARTERS (REF, 565).

Candidates should have had experience in the preparation of plans for building and civil engineering work for substations, service centres, workshops, offices, etc.

Salary—N.J.B. Schedule D, Grade 5 (£640—£740) plus London Allowance, applicable to a Senior Draughtsman.

The successful candidate will be required to contribute to a superannuation scheme and may

Draughtsman.

The successful candidate will be required to contribute to a superannuation scheme and may be required to undergo a medical examination. Apply, by letter, to The Manager, Northmet Sub-Area. Eastern Electricity Board, Northmet House, Southgate, London, N.14, within 14 days.

CANNOCK URBAN DISTRICT COUNCIL.

ARCHITECTURAL ASSISTANT.

Applications are invited for the above-named appointment in the Architect's Department, at a salary within Grade A.P.T., III (£600—£725), or IV (£675—£825), according to qualifications and experience.

NAME OF THE PROPERTY OF SALISBURY—SOUTHERN
Airmail applications from qualified Town Planning From Planning July 1955.

CITY OF SALISBURY—SOUTHERN
Airmail applications from qualified Town Planning South Planning July 1955.

CITY OF SALISBURY—SOUTHERN
Airmail applications from qualified Town Planners for the following post will be accepted up to and including 23rd July, 1955.

TOWN PLANNING ASSISTANT, Grade II (£1,250,250—£1,450 per annum).

Associate Membership of the Town Planning Institute, plus 12 months' practical experience since date of election to membership of such Institute.

Further information may be had from the undersigned.

CITY ENGINEER,
P.O. Box 1533 Salishury S. Phodesia

ed.
CITY ENGINEER,
P.O. Box 1583, Salisbury, S. Rhodesia.

CITY AND ROYAL BURGH OF
DUNFERMLINE.
BURGH ARCHITECT'S DEPARTMENT.
Applications are invited from suitably qualified
persons for the post of ASSISTANT ARCHITECT.
Salary on the scale £515 to £715, with placing
according to age, qualifications and experience.
The selected candidate will require to pass a
medical examination for superannuation purposes.
Applications, stating age, experience, qualifications and present appointment, together with
copies of two recent testimonials, should be
addressed to Leonard Howarth, A.R.I.B.A.,
A.M.T.P.I., Burgh Architect and Planning Officer,
6, Abbot Street, Dunfermline.
Candidates must disclose in writing whether to
their knowledge they are related to any member
or senior officer of the Town Council. Canvassing,
either directly or indirectly, will be a disqualification.

J. DOUGLAS. Town Clerk.

City Chambers, Dunfermline. 5th July, 1955.

5th July, 1955.

PEMBROKESHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the post of ASSISTANT ARCHITECT on the permanent staff.
Applicants should be Members of the R.I.B.A. by examination and/or holding equivalent academic qualifications, with experience of contemporary Architectural and/or Structural design. Salary scale, Grade V, A.P. & T. Division (£750×£30 to £900 per annum), according to qualifications and experience.

qualifications, with experience of contemporary Architectural and/or Structural design. Salary scale, Grade V. A.P. & T. Division (£750×£30 to £900 per annum), according to qualifications and experience.

The appointment, which will be subject to the provisions of the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service, will also be subject to a satisfactory medical examination. Forms of application can be obtained from the County Architect, County Offices, Haverfordwest, and should be returned duly completed to the undersigned not later than 28th July, 1955.

H. LOUIS UNDERWOOD, Clerk of the County Offices, Haverfordwest, 5th July, 1955.

SUDAN GOVERNMENT.

SUDAN GOVERNMENT.

SUDAN GOVERNMENT.

SUDAN GOVERNMENT.

SUDAN GOVERNMENT.

Applicants must have technical knowledge of the standard of National Certificate or better and have had at least three years' training in Architect's or Consulting Civil Engineer's Office, and wide experience of drawing office work in the preparation of working drawings and details, and be capable of taking out and preparation of specifications and estimates for various types of Civil Engineering Structure, preferably allied to Railway or Harbour work. Preference will be given to those with experience of reimforced concrete design. Candidates should be between 25 and 40 years of age.

Appointment will be on Short Term Contract (with bonus) for up to three years in the salary scale £800 to £E.1,350 per annum. A cost-of-living allowance, which is reviewed quarterly, is also payable. Outfit allowance of £E50 and free passages on appointment and annual leave after the first tour. (£E.1=£10s,6d.)

Further information and application form will be sent on receipt of a postcard only, addressed to The Sudan Agent in London, Sudan Honse, Cleveland Row, St. James's, London, S.W.I. annume and address in block letters.

COUNTY BOROUGH OF OLDHAM.

Applications are invited for TWO SENIOR ARCHITECTURAL ASSISTANTS within the salary scale £655–£825.

to the passing of a meurear transfer of the provided if necessary.

Applications, together with copies of two recent testimonials, or names of two persons to whom reference may be made, must reach me not later than Monday, the 1st August. 1955, in envelopes endorsed "Senior Architectural Assistant."

A. L. HOBSON,

Borough Engineer and Surveyor.

75, Union Street, Oldham.

1847

ARCHITECTURAL ASSISTANT required.

Applicants should have passed Inter. B.I.B.A. Salary scale: £465×£25 (1)×£20 (8)—£569, plus £20—£30 London weighting. Improved scale expected shortly. Commencing salary above minimum may be paid subject to certain conditions. Apply, giving age, qualifications and experience, with names of two referees, to Secretary, North-West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, by 23rd July.

WORCESTERSHIRE COUNTY COUNCIL.

Applications are invited for the following

ASSISTANT ARCHITECTS, A.P.T., IV (£675—

ARCHITECTURAL ASSISTANTS, A.P.T., II

ARCHITECTURAL ASSISTANCE (£560—£640).
Application forms and further particulars should be obtained from L. C. Lomas, F.R.I.B.A., County Architect, 14, Castle Street, Worcester, not later than 23rd July, 1955. (Z.242.)

COUNTY BOROUGH OF WOLVERHAMPTON.

APPOINTMENT OF SENIOR ASSISTANT
ARCHITECT.

Applications invited for above appointment in Borough Engineer's Department. Salary Grade A.P.T. V (£750 to £900 per annum).

Candidates should be Associate Members of the Royal Institute of British Architects.
Superannuable post, medical examination, N.J.C. Conditions of Service, terminable by one month's notice on either side.

Housing accommodation can be made available if necessary.

in decessary.

Applications stating age, qualifications, training and experience, with the names of not less than two persons to whom reference may be made, should be addressed in envelope endorsed "Senior Assistant Architect" to Borough Engineer, Town Hall, Wolverhampton, by Monday, 25th July.

A. G. DAWTRY,

Town Clerk.

Town Hall,

Wolverhampton.

CUMBERLAND COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments to the Architectural staff: N.J.C. service conditions: Posts pensionable: Subject to medical examination.

(a) A.P.T. GRADE IV: £750—£900 (2 posts).

Should be A.R.I.B.A. preferably with Schools experience.

(b) SPECIAL GRADE: £675—£825 (3 posts).

Final R.I.B.A. examination.

Applications, on forms obtainable from John H. Haughan, F.R.I.B.A., County Architect, 15, Portland Square, Carlisle, to be received by him NOT LATER than MONDAY, 15th AUGUST, 1955.

G. N. C. SWIFT.

Clerk of the County Council.

1881

NORTHAMPTON.
ARCHITECTURAL ASSISTANTS (2), A.P.T.,
II (£560-£640).

ARCHITECTURAL ASSISTANTS
II (£560—£640).
JUNIOR ARCHITECTURAL ASSISTANT,
A.P.T., I (£500—£580).
Particulars and forms of application, returnable by 25th July, may be obtained from Borough
Architect. Guildhall, Northampton.
C. E. VIVIAN ROWE.
Town Clerk.
1821

CHESTERTON RURAL DISTRICT COUNCIL.

ARCHITECT'S DEPARTMENT.

Applications are invited for the post of SENIOR ASSISTANT ARCHITECT on Grade III (or Special Grade) of the A.P.T. Division of the National Scales, i.e., £600-£725 p.a. (or £650-£775 p.a.) according to qualifications.

The appointment will be subject to the terms of the National Joint Council's Scheme of Conditions of Service, the Local Government Superannuation Acts, and one month's notice on either side.

side.

Housing accommodation may be made available if required.

Full details to be sent to the undersigned endorsed "Senior Assistant Architect," accompanied by copies of two recent testimonials, not later than Monday the 25th July, 1955.

W. H. HAYWARD,

Clerk of the Council,

County Hall, Hobson Street. Cambridge.

Cambridge.

LONDON COUNTY COUNCIL.

Applications are invited for appointment as DEPUTY ARCHITECT to the LONDON COUNTY COUNCIL on a salary scale of £2,750×£250 (biennially)—£3,250 a year, with a commencing salary in accordance with qualifications and experience. The position is permanent and pensionable. The Architect to the Council is responsible for the design, erection and maintenance of most of the architectural work required by the Council. He also advises the Council on all Town Planning matters. Application forms, giving full particulars, are obtainable from the Clerk of the Council (CL/G), County Hall, Westminster Bridge, S.E.1, and must be returned by Monday, 19th September, 1955. Canvassing disqualifies. (1083)

Architectural Appointments Vacant

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 18-69 inclusive unless he or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

A RCHITECT'S ASSISTANTS required (1 Senior and 2 Juniors) for West End Office. Write, stating full particulars and salary required. to Rock 8725.

A RCHITECTURAL ASSISTANT required in small private office. Intermediate to Final standard. Write, stating experience and salary required to: A. F. Bennett, 35, Queen's Gate Mews. London. S.W.7.

JUNIOR ARCHITECTURAL ASSISTANT equired, preferably with good knowledge of construction. Reply, stating age, salary and training: Cessford Ball, 205, Lavender Hill. London, S.W.11.

RONALD WARD & PARTNERS require several capable ARCHITECTURAL ASSISTANTS with contemporary outlook and willing to use own initiative. Salary range £400 to £800. Interesting and varied work, home and abroad. Congenial working conditions. Apply 29, Chesham Place, S.W.1. Telephone Belgravia 3361. 7023

AMUEL MORRISON & PARTNERS require ASSISTANTS of Intermediate and Final standard. Salaries comparable to Local Authority Scales; interview expenses paid. 103. Belper Scales; inter Road, Derby.

INTERMEDIATE ARCHITECTURAL ASSISTANT, conductors and shop-fitting an asset. Five-day week and L.V.s. Write Box 1840, stating age, experience of assistance and salary required.

RAMSEY, MURRAY & WHITE have a vacancy for ARCHITECTURAL ASSISTANT, about Intermediate standard, preferably with office experience. Salary according to qualifications. Apply 32, Wigmore Street, London, W.I., or telephone WELDeck 1409.

ARCHITECTURAL ASSISTANT (Intermediate

Apply 32, Wigmore Street, London, W.1, or telephone Welbeck 1409. 9823

ARCHITECTURAL ASSISTANT (Intermediate standard) required at once for varied practice in City office. Write, stating age, experience, and salary required, to Henry C. Smart & Partners, L.R.1.B.A. 120, Moorgate, E.C.2. 1611

BRITISH HOME STORES LTD. require ARCHITECT'S ASSISTANTS of various grades between 27 and 40 years of age for their Architect's Department. Salary rates from £650 to £1,000 per annum, according to experience. Applicants must have had at least four years' office experience. Positions give good opportunities for up-grading. Contributory pension scheme, non-contributory Life Assurance Scheme, and subsidised staff canteen in operation. Applicantions in writing, giving full details of age, experience, etc. to be sent to Personnel Manager, British Home Stores Ltd., Marylebone House, 129–137, Marylebone Road, London, N.W.1.

ARCHITECT'S *Department of a very large Public Company in the Middands need:—

(a) ASSISTANT ARCHITECTS.
(b) ARCHITECTURAL ASSISTANTS.
(c) ARCHITECTURAL ASSISTANTS.
(c) ARCHITECTURAL SURVEYORS (measuring and plotting property and land).
Qualifications are of less importance than ability. The work involved is of a most diverse character, ranging from the extension and alteration of existing buildings to multi-storey blocks for commercial, industrial and scientific purposes. Generous initial salaries and prospects of advancement for competent and experienced people. The posts are permanent and there is an attractive contributory pension scheme. Five-day week, sports welfare and canteen facilities. Full particulars, including salary required, to Box No. 558, c/o Smiths, 100, Fleet Street, London, E.C.4. 1740

IMPERIAL CHEMICAL INDUSTRIES, LTD., Dyestuffs Division, requires an ARCHITECTURAL DRAUGHTSMAN, of Intermediate R.I.B.A. standard, possessing a sound knowledge of structural framework design and building construction, together with experience in the preparation of working drawings and details for industrial and commercial buildings. Applications, with brief details of experience, to Staff Department, Hexagon House, Blackley, Manchester, 9.

ITCO

WANTED, in Oxfordshire office, ARCHITECTURAL ASSISTANT, male or female, approx. Inter standard. One who has some knowledge of, and is interested in, traditional and restoration work. Good prospects and scope for the right applicant, who must be keen and conscientious. Apply, stating salary required, Rox 1666.

Box 1666.

A RCHITECTURAL ASSISTANT (young) in Area Architect's Office in Bristol of Transport Organisation. Able to work with minimum supervision. Apply, stating age, previous experience, and salary required, to Box 1734.

A RCHITECTURAL ASSISTANTS required, preferably with Inter. R.I.B.A. min. and some experience in industrial buildings. Good salary and working conditions. B.S.P. Industries, Ltd. (Ref. A/36), Elstree Way, Boreham Wood. ELStree 3311/5.

BCHITECTURAL DERUGHTSMEN 1683

ARCHITECTURAL DRAUGHTSMEN required. Preference will be given to applicants having some experience in the design of
industrial buildings and housing. Write, stating
age and full particulars, to A. E. Cresswell,
A.R.I.B.A., 40, Claremont Road, Cricklewood,
London, N.W.2.

London, N.W.2. 1694

A RCHITECTURAL ASSISTANT required in Chartered Surveyor's Office in South East Inneashire for development of housing estates and small factory premises. Apply stating age, experience, and salary to Box 1754.

O LIVER LAW & PARTNERS (Chartered Architects), 36, Ebury Street. Westminster, require two or three additional ARCHITECTURAL ASSISTANTS (DRAUGHTSMEN). Architectural School or office experience essential. Salaries £600 to £800 per annum, according to experience.

AN Architectural group, engaged in industrial undertakings of a varied nature, require ASSISTANTS who are prepared to take the rough with the smooth, relieving the inevitable down to earth detailing by producing an occasional brochure, perspective or model. Salary by arrangement, Please reply Box 1690.

PROGRESSIVE and expanding London office.

PROGRESSIVE and expanding London office, with widely varied practice, requires JUNIOR and INTERMEDIATE ARCHITECTURAL ASSISTANTS. 5-day week, good salaries, Lewis Solomon, Son & Joseph, 21, Bloomsbury Way, W.C.1. HOL. 5108 or 7082. 1669

ENIOR and INTERMEDIATE standard ASSISTANTS required for busy practice engaged upon a large programme for schools, industrial buildings, offices, etc. Write, giving full particulars of qualifications, experience, and salary required, to Johns, Slater & Haward, F./A.R.I.B.A., 32, Foundation Street, Ipswich.

A SISTANT ARCHITECT required for the London Head Office of a major oil company. The work is in connection with large-scale development of service stations, involving the design of new and the re-modelling of existing stations. Should preferably be an Associate Member of the R.I.B.A., capable of supervising staff and controlling work through all stages of development. Must hold current driving licence. Pension and Life Assurance Scheme. Generous sickness benefits; luncheon voucher scheme; social club. Write, giving full details, stating age, experience and salary required, to Box 1286, quoting Ref. RO/AA 713.

EQUIRED for progressive London office.

quoting Ref. RO/AA 713.

EQUIRED for progressive London office, ARCHITECTURAL ASSISTANT. Intermediate stage or above, some office experience. Please write for interview. Box 1019.

ARCHITECTURAL DRAUGHTSMEN required by Ilford, Ltd., for Staff Architect's office. Applicants should have completed at least one year's office experience. Apply in writing, stating age, training and experience, to Ilford, Ltd., Romford, Essex.

ROMFORD, ESSEX.

A RCHITECTURAL ASSISTANTS required, at least Inter. R.I.B.A. standard, preferably with previous office experience. Salary offered 2624—2702, according to experience. Write, stating age, experience, and qualifications. Reynolds & Scott. F./A.R.I.B.A., 9, Albert Square, Manchester, 2.

Scott. F./A.R.I.B.A., 9, Albert Square, Manchester. 2.

A BUSY West-End practice with varied work in London and the Country, needs ASSISTANTS with experience and ability to handle jobs with minimum supervision. Particulars of qualifications and salary required, to Box 1581.

A RCHITECTURAL ASSISTANT required by Major Oil Company undergoing expansion, for its Sheffield office. Applicants should be of Intermediate standard, and must be capable of carrying out work on the design and re-modelling of service stations. Social Club, Pension and Life Assurance scheme, generous sickness benefits. Write, giving full details of experience, age and salary required, to Box 9662, quoting Ref. A.A. 588.

EXPERIENCED ARCHITECTURAL ASSISTANT required, with view to partnership, South-West London office. Apply in writing, giving full particulars of experience, age, and salary required, to Box 1712.

PEQUIRED by West End London Architects, experience of detailing. Keen interest more important than qualifications. Box 1233.

ARCHITECTURAL ASSISTANT'S required.

ARCHITECTURAL ASSISTANTS required stage or above, and with practical experience, particularly in traditional domestic and other work. Please write stating age, experience, and salary required to Box 9896.

ECIL Howitt & Partners, Architects, St. Andrew's House, Mansfield Road, Nottingham, require JUNIOR ARCHITECTURAL ASSISTANTS, preferably Inter. R.I.B.A. standard. Please apply in writing, giving full details and stating salary required.

O-O-PERATIVE WHOLESALE SOCIETY, LTD. ARCHITECT'S DEPARTMENT, MANCHESTER. APPLICATIONS are invited for the following appointments:

A appointments:—

(a) SENIOR ASSISTANT ARCHITECTS, with experience of work on commercial and industrial

(b) ASSISTANT ARCHITECTS, capable of pre-aring working drawings from preliminary paring working drawings from premiumas, sketches. Salaries offered up to £915 (a) and £745 (b), according to experience, with prospects of up-

according to experience, with properties grading.

Applications, stating age, experience, qualifications and salary required, to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4, 9852.

CO-OPERATIVE WHOLESALE SOCIETY, LINDON.
ARCHITECT'S DEPARTMENT, LONDON.
PPLICATIONS are invited from the following:

A PPLICATIONS are invited from the law ing:—

(a) ASSISTANT ARCHITECTS of Inter.

R.I.B.A. standard:

(b) WORKER-UP with experience of commercial/industrial buildings.

The salary range offered for the above appointments is up to £745, per annum according to age and experience, with prospects of up-grading.

Applications stating age, experience, qualifications and salary required to W. J. Reed, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society Ltd., 99, Leman Street, London, R.I.

TWO ASSISTANT ARCHITECTS for new London Branch Office. £400 to £200, depend-ing on ability. Good prospects. Write to Knapton & Deane, 45, Hillside Avenue, Worthing. 1865

COLLINS, MELVIN, WARD & PARTNERS, 515. Manchester Square, W.1. require MNHOR and JUNIOR STAFF. Competent working drawings essential. Opportunity to work on contemporary buildings. Write or telephone WELbeck 9991.

on office,

requires CHITEC. salaries. comsbury d ASSIS

engaged ndustrial full par-id salary Haward, Ipswich. 1715

for the oil com-rge-scale ring the existing Associate pervising tages of licence. Gererous e; social ing age, ox 1296,

office, Interperience.

ast one stating d, Ltd.,

ired, at eferably offered stating nolds & Man-

d work
ASSIShandle
ulars of
0x 1581.

ired by

pansion,
d be of
bable of
odelling
and Life
benefits.
age and
A.A. 588.
ASSISnership,
writing,
ge, and

chitects, ractical t more

required mediate ce, par-r work. salary

cts, St. Notting-FURAL andard. ils and 4705

LTD. ESTER.

llowing S, with dustrial

of pre-minary 745 (b), of up-

alifica-Hay, Whole-ester, 4. 9852 LTD

to age ng. alifica-Reed, Whole-n, E.1. 1210

1210 r new depend-napton 1863

on contemporary buildings. Write or telephone WELbeck 9991.

ARCHITECTURAL ASSISTANTS required, with about four years' office experience. Write or telephone giving full particulars, including age and salary, to Hasker & Hall, Architects, Welbeck Street, W.I. (WELbeck 0061). 1626

OUIS DE SOISSONS, PEACOCK, HODGES & ROBERTSON have vacancies for SENIOR and JUNIOR ARCHITECTURAL Staff in their London, Welwyn Garden City and Plymouth offices. The work is varied and covers Industrial, Ecclesiastical, Offices, Schools, Housing (Cottages and Flats). Accommodation within a reasonable time is available at Welwyn Garden City. Write, stating age, salary, and experience, to 3, Park Equare Mews, London, N.W.L.

TUNIOR ARCHITECTURAL ASSISTANT with

Square Mews, London, N.W.I.

JUNIOR ARCHITECTURAL ASSISTANT with some office experience required. Write or telephone giving full particulars, including age and salary, to Hasker & Hall, Architects, 13, Welbeck Street, W.I. (WELbeck 0661.) 1627

AN ARCHITECT'S SENIOR ASSISTANT required; experienced in building in London and capable of handling large contracts. Four figure salary contemplated. Percy V. Burnett & Partners, 12, Bloomsbury Square, London, W.C.I. ROLborn 6177.

BUCKINGHAMSHIRE firm of Architects within thirty miles of London, with a varied practice, require two qualified QUANTITY SURVEYORS. Five-day week, accommodation available. Salary according to age and experience. Please write giving fullest particulars to Box 1819.

REQUIRED at Company's Head Office, GuildASSISTANT, varied work, mainly factory. Fiveday week. Salary by arrangement. Box 1817.

CHIEF ASSISTANT required immediately for
busy private practice within 50 miles of
London. Should be qualified, experienced, car
owner/driver, and capable of taking full responsibility. Good salary and prospects for the right
man. Full particulars and salary required to Box
1813.

1813.

CAPABLE ABCHITECTURAL ASSISTANT required. Must be experienced and enthusiastic. Reply with particulars and salary required to: George Coles, F.R.I.B.A., 40, Craven Street. W.C.2.

JUNIOR and SENIOR ARCHITECTURAL ASSISTANTS required for rapidly expanding, concemporary omice. Write, giving details of age, experience and satary required, to Box 1812.

YOUNG ASSISTANT, up to Inter. R.I.B.A., standard, required to assist Staff Architect in smail Drawing Omice of a Multiple Combine with Branches throughout Great Britain. Able to work with the minimum of supervision. Occasional travelling may be involved. Apply stating age, previous experience and satary required, to Box 1858.

Box 1858.

A RCHITECTURAL ASSISTANTS required, of Intermediate K.I.B.A. Standard for work on contemporary industrial buildings. Good salaries and p.enty of opportunity for initiative. London office. Write, giving details of salary, experience, to Howard Souster & Fairbairn, 81, Piccadilly, W.1.

to Howard Souster & Fairbairn, 81, Piccadilly W.1.

Reckitt & Colman Ltd. require experiment of the consultation of the consul

experience. Please write giving full details to BOX 1820.

SIXTY-FIVE | 2OUNDS P.M. for JUNIOR DRAUGHTSMAN. Offered by leading Nairobi firm to work on large contemporary exciting schemes of office blocks, shops, cinema, etc. Preference age about 20, passed Intermediate; fare out paid. Further particulars from OSS.74/5. Overseas Technical Service, 5, Welldon Crescent, Harrow, Middx.

A RCHITECTURAL ASSISTANTS, SENIOR and JUNIOR, required in busy London office with varied practice. Good saiary and prospects for suitable applicants, nve-day week. Write Box 715 c/o 7, Copine Street, W.C.I. 782

MULTIPLE Shop Company having Branches throughout British Isles, requires ASSISTANT ARCHITECT (qualified). Experienced in design, specimeation, Staff Control. An interesting and responsible position. Five-day week, superannuation scheme, staff canteen. Apply giving full details of experience and salary required to Box 1787.

JUNIOR ARCHITECT, R.I.B.A., intermediate standard, required at Guildrord. Five-day week. Sa.ary by arrangement. Box 1818.

A RCHITECTURAL ASSISTANTS required

A RCHITECTURAL ASSISTANTS required immediately in expanding Midland practice for varied works. Pleasant surroundings and good prospects. Please send full details of training, experience, salary, etc., to Box 1814.

A SSISTANT, intermediate standard required for smail West End office. Variety of work, industrial, housing, development work on new methods, exhibitions.

Must be neat, speedy draughtsman. Opportunity for all round experience and future senior appointment.

Salary, £550 to £600 p.a. Write, giving full details to A. F. Hare, A.R.I.B.A., 24, Baker Street, London, W.L.

BRITISH RAILWAYS—LONDON MIDLAND REGION.

A RCHITECTURAL ASSISTANTS required in the Regional Architect's Office. Should preferably be qualified or have passed Inter. R.I.B.A. Must have keen interest in contemporary design, and knowledge of modern structural technique. Salary range £720—£850 p.a. Starting salary according to ability and experience. Opportunities for promotion.

Five-day week: residential contemporary

for promotion.

Five-day week; residential and other travelling facilities available.

Apply in writing, giving particulars of age, qualifications and experience, to the Chief Civil Engineer. British Railways, London Midland Region, 5A Euston Grove, Lendon, N.W.1. 1875

Region, 5A Euston Grove, Lendon, N.W.I.

ANTIOR WOODROW HOMES LIMITED, require an ARCHITECTURAL ASSISTANT (Intermediate Standard) for large scale housing development. Must be capable of producing full working drawings. Pensionable post. Write giving full details of experience, etc., to Personnel Department, Ruislip Road, Southall, Middlesex.

1856

Floors | and after

A comprehensive service for Architects

Because of the trend to all types of synthetic floors in addition to those of wood and because of the need to reduce costs, architects have found our service to be invaluable. Here in one organisation is all the information and expert advice on the proper treatment and subsequent maintenance of floors in schools, public buildings and dwelling houses. There is no other service so wide in scope and comprehensive in detail. Over 20,000 schools and many public authorities are current users. Please write for information.

FLOOR TREATMENTS LTD. 14 Easton St., High Wycombe, Bucks. Tel: High Wycombe 1617



Stainless Efficiency

ASSOCIATED **METALS**

Beautifully fabricated equipment in

STAINLESS

to your requirements, or from an extensive range of standards

Our long specialised experience permits us to quote moderate prices. PLEASE ASK FOR CATALOGUES



This is a typical household model

Phone: BELL 2004/5

LONDON: 7 Grosvenor Gardens, S.W.I. Phone: Victoria 1977/8

And at: Liverpool, Manchester, Newcastle, Belfast and Dublin

KEBN ARCHITECTURAL ASSISTANTS required for work on varied educational schemes. High standard of design, draughtsmanship and detailing essential. Qualified, or up to that standard, with several years' practical experience. Salary by arrangement. A. R. Dannatt & Son. L./A.R.I.B.A., Prudential Buildings, 65A, Duke Street, Chelmsford.

DRAUGHTSMAN—for detailing of light steel building structures, comfortable office and conditions, interesting work. Write, giving salary required and experience, Templex Holdings Ltd., 110, Kings Road, Sloane Square, London, S.W.3.

A RCHITECTURAL ASSISTANT required for varied practice in small office. At least one year's office experience. Write or 'phone T. A. Bird, A.R.L.B.A., 13, Welbeck Street, London, W.1.

A RCHITECTURAL ASSISTANT required for site staff on large power station, Bristol area. Salary according to age and experience. Apply E. J. D. Mansfield, A.R.I.B.A., Sir William Halcrow & Partners, Stanhope House, 47, 2ark Lane, London, W.I.

Halcrow & Partners, Stanhope House, 41, Park Lane, London, W.1.

A SSISTANTS required to work mainly on schools. Qualified or post-Intermediate. Starty according to qualifications. Write or telephone. Cassidy, Farrington & Dennys, 109, Great Russell Street, W.C.1 (MUSeum 7254).

BROGRESSIVE opportunities for SENIOR MEN in old established office in East Africa, engaged on large scale contemporary and traditional work. Starting salary £1,200—£1,440; free passage bonus, leave schemes, etc. Apply quoting: OSS.17/10. Overseas Technical Service, 5, Welldon Crescent, Harrow, Middlesex. 1864.

ARCHITECTURAL DRAUGHTSMAN retaining including three years' technical experience in architectural drawing. Salary £380 (age 21 and over) × £20 (3) × £25 (2) × £20 (4)—£570 plus London Weighting £20—£30. Commencing salary at minimum of scale. Improved scale expected shortly.

Apply giving age, qualifications and experience with names of two referees to Secretary, North West Metropolitan Regional Hospital Board, 11a, Portland Place. W.1, by 25rd July.

RCHITECTURAL ASSISTANT—Final Standard able to work our own in intentions and experience with names of two referees to Secretary. North West Metropolitan Regional Hospital Board, 11a, Portland Place. W.1, by 25rd July.

A RCHITECTURAL ASSISTANT—Final star dard, able to work on own initiative o Commercial and Industrial projects of conten-porary character. Leonard J. Multon, F.R.I. B.A. 6, Greenfield Crescent, Birmingham, 15.

A RCHITECTURAL ASSISTANT required for interesting and varied North London practice. Apply, giving full details of office experience and architectural training, together with salary required to Box 1950.

SENIOR and JUNIOR ARCHITECTURAL ASSISTANTS required. Salary by arrangement. Kendrick Findlay and Partners, Chartered Architects, 35, Tavistock Square, W.C.1. 1868

A RCHITECTURAL ASSISTANT required in the Architect's Department of S.W. London Building Contractors. Reply stating age, experience, qualifications and salary required to Box

ARCHITECTURAL ASSISTANT (SENIOR) required immediately for Architect's Department, F. W. Woolworth & Co. Ltd., King Street, Dudley. Appointments on a permanent basis with good prospects for applicants with initiative and having a sound practical experience. Preference given to candidates with Intermediate R.I.B.A. standard, but not essential. 5-day week. Canteen Apply District Architect. F. W. Woolworth & Co. Ltd., 4749 King Street, Dudley, stating age, experience and salary required.

EXPERIENCED ASSISTANT required in small Walsall office. A.R.I.B.A. or approaching Final. Varied work, good prospects. Apply, giving full details, when free, salary required. Box

SUFFOLK: ASSISTANT required for small progressive office, Intermediate standard and with some previous experience. Contemporary outlook preferred. Usual full particulars to Peter Berner, A.R.I.B.A., A.M.T.P.I., 6, Quay Street, Woodbridge.

Herner A.R.I.B.A., A.M.T.P.I., 6, Quay Street, Woodbridge.

CONSTONE LIMITED, South Wigston, require ARCHITECTURAL DRAUGHTSMEN for setting out cast stone. Permanent position for right men. Apply stating age, experience and salary required. Box 1773.

A RCHITECTURAL ASSISTANTS required for varied work. Intermediate and Final standard with at least two years' office experience. Apply in writing, stating age, experience, etc., and salary required, to Cordingley & McIntyre, Chartered Architects. Owengate, Durham. 1766

A RCHITECT'S ASSISTANT required for the London office of a firm of Architects with interests throughout the country, must be of Intermediate to Final R.I.B.A. standard. Superannuation scheme. Apply in writing to Mesers. Cotton. Ballard & Blow. 133a, Wembley Park Drive. Wembley. Middlesex.

MESSRS. EASTON & ROBERTSON. 53.

MESSRS. EASTON & ROBERTSON. 54.

MESSRS. EASTON & ROBERTSON. 55.

MESSRS. EASTON & ROBERTSON. 56.

R & D. HALL, F./A.R.I.B.A., Mascnic Buildings, Bangor, N. Wales, require: One qualified ARCHITECTURAL ASSISTANT and one qualified QUANTITY SURVEYOR. Interesting work in pleasant area. Ability and energy essential with salaries accordingly.

PROGRESSIVE West End office requires ARCHITECTURAL ASSISTANTS, R.I.B.A. Intermediate standard or equivalent. Preterence given to those interested in contemporary design. President of the contemporary design. ARCHITECTURAL ASSISTANT required for above with experience. Write, giving details of age, experience and salary to Box 1798.

A PPOINTMENT giving appartments for initial

age, experience and salary to Box 1798.

A PPOINTMENT giving opportunity for initia
tive and responsibility in Midland Office
with long term programme of office blocks, flats,
hotels, public buildings and industrial development. Salary range £850-£1,000.
Vacancy also for Intermediate Stage ARCHITECT, £650-£750 range, according to experience.
Box 1797.

A RCHITECTURAL ASSISTANT required, capable of assuming responsibility for industrial and commercial work. Reply, stating age, experience and salary required, to Hill, Allum & Partner, 21, Carlton Crescent, Southampton. 1830

A SSISTANT ARCHITECT, Final Standard, required in Architect's department of National firm of Building Contractors' office at Newcastle-upon-Tyne. Work in connection with rapidly expanding design estimate programme. Contemporary outlook essential. Apply Box 1844.

A RCHITECT'S. ASSISTANT required in Richester.

A RCHITECT'S ASSISTANT required in Birmediate standard, varied and interesting work. Good prospects for suitable applicant. Profit sharing scheme. Write giving details of experience and salary required to Box 1841.

ENIOR and JUNIOR ARCHITECTURAL ASSISTANTS required for general and commercial practice. Apply stating age, experience, qualifications and salary required, to Duncan Clark & Beckett, F./L.R.I.B.A., F./F.R.I.C.S., Architects & Surveyors, 7, West Stockwell Street, Colchester.

A RCHITECT'S SENIOR ASSISTANT required for a West End office to take charge of building contracts of an industrial nature. Applicants should write stating age, experience and salary required, to Box 1835.

TRIPE & WAKEHAM, 16, Fitzhardinge Street, W.1, require ASSISTANTS, either qualified or unqualified, with upwards of 2 years' experi-

A RCHITECTURAL ASSISTANTS required urgently in Hertfordshire Office. Inter-mediate stage or above. Good conditions and variety of work. Apply Box 1825.

A RCHITECTURAL ASSISTANTS required, of Intermediate and Final Standard. Salary based on qualifications and experience. Edmund Kirby & Sons, 5, Cook Street, Liverpool, 2. 1827

JUNIOR ASSISTANT required urgently in London office. Position offers excellent opportunities for a young man wishing to gain wider experience in all branches of the profession. A knowledge of building construction to second year standard is necessary. Reply giving details of age, salary required and previous experience if any, to Box 1836.

Architectural Appointments Wanted

4 lines or under, 7s. 6d.; each additional line, 2s.
A.R.I.B.A. (41), experienced contemporary design, contracts up to £200,000, control of staff. Salary about £1,250. Box 1757.

A R.I.B.A., aged 38, with good varied experifor entire output of office. Manager responsible
for entire output of office, requires a position of
similar responsibility, in a congenial office, where
industry and conscientiousness will be appreciated.
Box 1837.

A RCHITECT, excellent practical training as pupil with eminent firm of architects, and later as senior and chief assistant in other offices of repute for 25 years, engaged upon good class extensive work (London and provincial), seeks responsible position in London. First class draughtsman, designer and detailer. Enthusiastic, expeditions and artistic. Salary by arrangement. Box 1878.

SENIOR ASSISTANT requires position in progressive office in East Sussex or district. Age ENIOR ASSISTANT requires position in progressive office in East Sussex or district. Age 28, almost qualified, 12 years' varied experience, used to handling medium size contracts. Salary 4800 p.a. or according to responsibility. Box 1829.

A. R.I.B.A., wide experience in Middle East

A. E.I.B.A. desires engagement. School-trained

with some years' considerable good varied experience. Salary £650 (permanent). Box 906

QUALIFIED (B.Arch., A.R.I.B.A.), experienced and capable architect, aged 30, present salary 4750, seeks post including use of a car, London or near. All letters answered. Box 1769.

SENIOR ARCHITECT, experienced in the design of prefabricated buildings and building elements, seeks responsible position. Box 1784.

TWO ARCHITECTS, wide experience home and abroad offer services in preparing contract and presentation drawings. Quick and accurate. Terms by Agreement. Box 1876

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 Schement Send to the Ministry of Labour or a Schement Send to Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-64 inclusive or a woman aged 18-64 inclusive or a woman aged 18-67 inclusive unless he or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

excepted from the provisions of the Notification of Vacancies Order, 1952.

A SSISTANT BUILDING SURVEYOR required for the Sheffield Office of a major oil company undergoing expansion. Applicants should have a sound knowledge of building construction and bye law requirements, and be capable of carrying out surveys, preparing drawings and specifications relating to service stations. Pension and Life Assurance Scheme, generous sickness benefits, Social Club. Write, giving full details and stating age, experience and salary required to Box 1594, quoting Ref. ABS/S 720.

REQUIRED—QUANTITY SURVEYOR, able to prepare Bills of Quantities on own responsibility, at busy South Midlands office, within thirty miles of London. Living accommodation provided. State salary required. Box 1854.

THE METAL BOX COMPANY LTD. requires a TECHNICAL ASSISTANT in their Buildings and Services Division, located in London. The applicant must have good building experience, preferably with a knowledge of quantities, and be able to prepare brief specifications for constructional work, and to deal with builders' tenders and accounts. Should be familiar with bye-law requirements. Write, stating age and experience to Staff Division, The Metal Box Co. Ltd., The Langham, Portland Place, London, Wil, quoting Reference TA/1.

1889

CONSULTING Engineers require CIVIL
CONSULTING Engineers require CIVIL
ENGINEERING, STRUCTURAL, and
ARCHITECTURAL DESIGNER-DRAUGHTS.
MEN for a Major Industrial Development Scheme
in the North-East.
It is proposed to provide accommodation at a
hotel situated on sea front within 7 miles of site.
Alternatively generous subsistence allowance
would be allowed. Transport to and from site
will be provided.
Interviews will be arranged and generous
salaries offered to suitable applicants. Noncontributive Pension Scheme in operation. Reply
in first instance giving age, experience and when
available to C. S. Allott & Son, North Parade,
St. Mary's Parsonage, Manchester, 3. 1750

A LONG-ESTABLISHED Company requires

A LONG-ESTABLISHED Company requires for its Structural Systems Division a man or woman of character and personality, and approximately between the ages of 27 and 37, willing to travel in U.K., to arrange technical press reports, exhibitions, etc. Minimum qualifications are:—Inter. R.I.B.A., 12 months' office experience and ability to conduct important interviews. Interviews will take place in London, but applications, giving full particulars of qualifications and experience, should be sent to Box 1670.

CONSULTING Engineers require CIVIL ENGINEERING STRUCTURAL, and ARCHITECTURAL DESIGNER DRAUGHTS-MEN for their Manchester office for work of varied character on Major Industrial Development Schemes. A non-contributive Pension Scheme is in operation and generous salaries will be offered to suitable applicants.

Reply in first instance giving age, experience, and when available to C. S. Allott & Son, North Parade, St. Mary's Parsonage, Manchester, 3.

BUILDERS' DRAUGHTSMAN AND SUR-VEYOR required. Experience in design and construction of Buildings and Estate Development is necessary. Pension scheme in operation. Apply, stating age, experience and salary re-quired, to H. C. Janes, Ltd., 183, High Town Road, Luton.

A SSISTANT QUANTITY SURVEYOR required by major oil company in Sheffield branch office. Applicants should be prepared to act on own initiative for the preparation of approximate estimates, interim certificates and final accounts for contracts up to £10,000. Salary range to commence £600-£700 per annum. Pension and Life Assurance Scheme, generous sickness benefits, Social Club. Write, giving full details of experience, age, and salary required to Box 1488, quoting Ref. AQS/S 716.

Ref. AQS/8 716.

DRAUGHTSMAN required by The Steel Company of Wales, Ltd. (Steel Division), in their Civil Engineering Drawing Office. Candidates should have experience in the design of all types of steam and hot water systems, ventilation and conditioning of buildings. The successful applicant should be capable of working with the minimum of supervision. Attractive rates and excellent working conditions. The position is permanent and pensionable. Those wishing to apply should send full particulars of age, experience, etc., to Personnel Superintendent. The Steel Company of Wales, Ltd. (Steel Division). Abbey Works, Port Talbot, Glam.

e home and ag contract d accurate.

cant al line, 2s. ring these h a Local Scheduled in a man aged 18-59 sloyment is Notification

R required or oil com-nts should onstruction capable of wings and us. Pension is sickness ull details required OR, able

wn respon-ce, within mmodation 1854.

D. requires heir Build-n London, ng experiquantities, ations for the builders' illiar with age and l Box Co. ndon, W.1, 1880 1854. CIVIL AL, and AUGHTS-nt Scheme

etion at a les of site. allowance from site generous
NonOn. Reply
and when
h Parade,
1750

on a man lity, and 7 and 37, technical technical um quali-ths' office ant inter-ndon, but qualifica-sox 1670. CIVIL

AL, and AUGHTSwork of Develop-Pension aries will kperience. on, North ster, 3.

D SUResign and relopment operation. alary re-wn Road, 1687 required d branch o act on proximate

accounts
to comand Life
benefits,
of experi-

eel Comin their andidates
all types
all types
all types
tion and
ul applivith the
ates and
sition is
shing to
age, exent. The
Division). THE GRANADA GROUP requires a man to schedule and progress orders and contracts for building and engineering. Previous experience of this work and some knowledge of building trade essential. Good salary. Superannuation scheme. Write stating age and previous experience, to Chief Architect, Granada Theatres Ltd., 149, Regent Street, London, W.1.

QUANTITY SURVEYOR required for Area Mechanical Engineer's Office. Capable of preparing complete Specifications and Bills of quantities and taking site measurements, etc. Some experience of estimating would be an advan-

Some experience and the range £600—£900 per annum (Grade 2), according to qualifications and experience of successful applicant.

Applications giving age, qua.incations, experience and present post, to Area Establishment Officer, National Coal Board, No. 2 (Cannock Chase) Area Allport Street, Cannock, Stans., not later than 26th July, 1955.

J. M. AUSTIN-SMITH & PARTNER require or Final Standard with some office experience, to work with Surveyor in expanding Architects' office. Reply giving full particulars to 29, Sackville Street, W.1.

ville Street, W.L.

1795

STRUCTURAL DESIGNER required by The Steel Company of Wales Limited (Steel Division), in their Central Drawing Offices, at abbey Works, Port Talbot.

Applicants should have five years' experience in prawing Office work and be capable of supervising a group of Draughtsmen working on the design of general heavy industrial steelwork.

Qualified Engineers would be preferred. The position is permanent and pensionable and offers scope for advancement.

Those wishing to apply should write for official Application Form to:—

The Personnel Superintendent, The Steel Company of Wales, Limited (Steel Division), Abbey Works, PORT TALBOT, Glam.

Services Offered

4 lines or under, 7s. 6d.; each additional line, 2s. THE SITE SURVEY COMPANY, Blackheath, London, S.E.3. New Telephone Numbers:
LEE Green 7444-5. Engineering and Architectural Surveys anywhere in the country.

COOD LETTERING is essential for Commemorative Wall Tablets, Foundation Stones, stc. Designs prepared and estimates given for the finished work in any suitable material. Renowned as a Centre for Lettering since 1934. Sculptured Memorials, 67, Ebury Street, S.W.1.

SURVEY of Sites and Buildings, detailed draw-ings and levels for new and alteration work, specifications and quantities. Qualified Sur-veyor. LIV 1859.

ADY TRACER working at home offers prompt and reliable service. Ten years' experience in all types of tracing. M. Green. Tel.: Fin. 1186

PERSPECTIVES-all types undertaken with speed. London district. Box 1518.

NAMEPLATES, PLAQUES, CRESTS, etc., in bronze, brass and plastic, quotations and lay-outs submitted. Abbey Craftsmen Ltd., 78, Osnaburgh Street, London, N.W.1 Euston 5722.

ON" ARCHITECTURAL MODEL MAKERS. Speed, courtesy and reliability, with own studio. Please 'phone Erith 3843. 9640

TYPEWRITING/DUPLICATING — Specifica-tions, etc., undertaken by experts. Reason-able charges. Stone's Secretarial Services, 466, Strand. Tem. 5984.

TYPEWRITING, 4s. per 1,000 words. Phone

WORKING drawings and details prepared for jobs of any size. Speedy accurate draughtsmanship. 20 years' experience. Box 1759.

QUICK DRAUGHTSMAN, undertakes working drawings, detailing, etc., at 17s. 6d. per hour. Box 1783.

FREE-LANCE SURVEYOR offers services to Architects and Builders requiring accurate surveys and levelling of sites for housing, fac-tories, schools, etc. Box 1842.

For Sale

A lines or under, 7s. 6d.; each additional line, 2s.

RECONDITIONED 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., Crabtree Manorway, Belvedere, Kent. Tel.: Erith 2948.

Competition

ARCHITECTURAL COMPETITION.

NEW LEGISLATIVE COUNCIL BUILDINGS,
UGANDA, E. AFRICA.

THE Uganda Government invites Architects
Africa or Corporate Members of the R.I.B.A. in
East Africa to submit in competition designs for
a new Legislative Council Building, comprising
a Council Chamber and ancillary offices, to be
erected in Kampala.

Assessor, H. Thornley Dyer, F.R.I.B.A.,
A.M.T.P.I.
Premiums: £750, £500 and £250

.M.T.P.I. Premiums: £750, £500 and £250. Closing date for sending applications for con-tions: 20th August, 1955. Last day for submitting designs: 21st January, ditions:

1956.
Conditions may be obtained by application to the Clerk of Legislative Council, P.O. Box 2278, Kampala, Uganda, E. Africa.
Deposit: Three guineas, by cheque or banker's draft, made payable to The Uganda Administration.

Miscellaneous

4 lines or under, 7s. 6d.; each additional line, 2s.

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, 70,107, St. Paul's Road, N.1. Canonbury 2061.

O'ALVANISED Chain Link: always specify MASTERFOIL made to BSS 1722. Fencing & cates Ltd., Fourteen Stanhope Gate, London, W.1. Tel.: Groevenor 4527.

EXCEPTIONAL offer 3rd floor at 94, New Bond St., W.1. 1,300 sq. ft. 4950 p.a. Long lease available, perfect natural lighting suitable for drawing office. Tel. GRO. 6601.

8231

NaMEPLATES AND SIGNS, Bronze, Brass and Plastics. Church Metalwork. Quick delivery. Austin. Luce & Company, 19, College Road, Harrow, Middesex. Tel.: Harrow 3839.

A SSOCIATE offers two rooms to let, Victoria Street. Would consider sharing telephone and secretarial services if desired. Box 1886.

PREMISES TO LET

O LET.—Very light basement room, West End. suitable young architect. Heating, lighting and cleaning services, rent £150 p.a. Apply Box 1838.

A RCHITECT requires office accommodation preferably in Westminster or Charing Cross, area of 300-400 sq. ft. Box 1815.

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. 1603/4.

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.

ELLIS SCHOOL OF ARCHITECTURE Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A. 103B OLD BROMPTON RD., LONDON, S.W.7 Phone: KEN 4477 and at Worcester

MODELS

John B. THORP

98 GRAY'S INN ROAD, TOWN PLANNING
PUBLIC BUILDINGS
ESTATES and
INTERIORS TELEPHONE: HOLBORN 1011

ESTAB. 1883. THE WORLD'S GREATEST BOOKSHOP

FOR BOOKS * FAMED CENTRE FOR

Books on Art & Architecture

Depts. for Gramophone Records, Music, Magazine Subscriptions, Foreign Stamps

119-125 CHARING CROSS ROAD WC2 Gerrard 5660 (16 lines) * Open 9-6 (incl. Sats.)
Two minutes from Tottenham Court Rd. Stn.

ARCHITECTURAL

contemporary

SIGN Letters

IN A VARIETY OF METALS & FINISHES

WARD AND COMPANY

128 CHELTENHAM ROAD, BRISTOL 6 TELEPHONE 21536

by **MORRIS**

Herbert Morris Ltd

P.O. Box No. 7 Loughborough

Engineering branches in London, Glasgow Manchester, Birmingham, Leeds, Sheffield Newcastle, Cardiff, Bristol, Pundee, Liverpool Nottingham, Bury St. Edmunds, Belfast



ARCHITECTURAL MODELS CONSULT US FOR

BUILDINGS

* PLANNING

* COMPLETE LAYOUTS

MODELS OF ANY DESCRIPTION MINIKSCALE LTD., CLIFTON ST., LIVERPOOL 19

ANOTHER PRODUCT LONDON OFFICE: 167. VICTORIA ST., S.W.I. TEL. VIC. 1000 SOMMERFELDS LTD. WELLINGTON . SHROPS . TELE 1000



Alphabetical Index to Advertisers

					-
and the second second second	PAGE		PAGE		PAGE
Adams, Robt. (Victor), Ltd	ev	Foyle, W. & G., Ltd	eiii	Pilkington Bros., Ltd	Lxxvi
Air Control Installations, Ltd	lxxxiii	Furse, W. J., & Co., Ltd	ciii	Polycell Products, Ltd	XXVI
Architectural Press, Ltd., The	xciv	Gaskell & Chambers, Ltd	xxix	Previte & Co., Ltd.	
Associated Metal Works (Glasgow) Ltd.	ei	General Electric Co., Ltd., The	xxxiii	Pritchett & Gold & E.P.S. Co., Ltd	xciii
Batley, Ernest, Ltd.	cv	Gent & Co., Ltd.		Pritchett & Gold & Ed. S. Co., Ltd	lviji
			xc	Pynford, Ltd.	1xxxii
Baume & Co., Ltd.	lxxxvii	Granwood Flooring Co., Ltd., The	xiv	Radiation Group Sales, Ltd	xlii
B.B. Chemical Co., Ltd., The	xcii	Greenwood's & Airvac Ventilating Co.,		Range Boilers, Ltd	XVII
Biddle, F. H., Ltd	xxiv	Ltd	lxxxvi	Robertson Thain, Ltd	Xlix
Birmid Industries, Ltd	xxiii	Gulf Radiators, Ltd	xxxvii	Rolyat Tank Co., Ltd., The	XXXVI
Blacknell, H. & H., Ltd	lxxxvii	Gyproe Products, Ltd	lxi		
Brentford Electric, Ltd.	lxii		LAI	Rubery Owen & Co., Ltd	liv
		Gypsum Building Products Association,	1	Rycroft & Co., Ltd	XXXX
British National Electrics, Ltd	xli	Ltd	lvi	Sanbra, Ltd	IXXXV
British Reinforced Concrete Engineering		Hall, J. & E., Ltd	ix	Saunders & Taylor, Ltd	
Co., Ltd	cvi	Heal's Contracts, Ltd	lxxviii	Schori Metallising Processes, Ltd	XXXIV
British Thompson-Houston Co., Ltd.,		Hill & Smith, Ltd.	xliii	Schort Metallishik Processes, Ltd	xeiii
The	xliv	Hope, Henry & Sons, Ltd	lxxii	Sealanco (St. Helens), Ltd	XXI
Broad & Co., Ltd.	xcii	Hume Atkins & Co., Ltd.	lxxxii	Secomastic, Ltd.	
				Semtex, Ltd xi,	. Xii. xiii
Brown, Donald (Brownall), Ltd	ev	Hydran Products, Ltd	xlvii	Shannon, Ltd., The	l xxix
Burn Bros, (London) Ltd	xci	Imperial Chemical Industries, Ltd	XXV	Sharp Bros. & Knight, Ltd	
Canadian Government	lxv	Imperial Smelting Corpn. (Sales) Ltd.	lxxvii	Shires & Co. (London), Ltd.	iv
Cape Asbestos Co., Ltd., The	lxvii	Industrial Engineering, Ltd	XXXV	Shires & Co. (London), Ltd.	lxxix
Carter & Co., Ltd	lix	Ioco, Ltd.	xlv	Simplex Electric Co., Ltd., The	li
Catesbys Linoleum Contracts	lxxx			Smith's English Clocks, Ltd	lx
		Kerner-Greenwood, Ltd	lxxiv	Smith's Fireproof Floors, Ltd	XXXVI
Cement Marketing Co., Ltd., The	xix	Lacrinoid Products, Ltd	lxxxiv	Smith, Thomas, & Sons, Ltd	xlvi
Colt Ventilation, Ltd	iii	Lawley, W. & J., Ltd.	XXXI	Sommerfelds, Ltd.	citi
Coseley Engineering Co., Ltd., The	lxvi			Steel Radiators, Ltd.	LXXXIX
Cuthell, D. M., & Co., Ltd	XCV	Lumenated Ceilings, Ltd	lii		IXXXIX
Dignus, Ltd.	-	Macandrews & Forbes, Ltd	ev	Taylor Woodrow (Building Exports),	100
Docker Brothers	X	Mallinson, William & Sons, Ltd	lxxiii	Ltd	lxviii
Downing, G. H., & Co., Ltd.	xv			Tentest Fibre Board Co., Ltd., The	xeii
	civ	Manger, J., & Son, Ltd.		Terrapin, Ltd.	lxfii
Dreadnought Fireproof Doors, Ltd		Marley Tile Co., Ltd., The	lxx	Thomas done (Creat Duitain)	
DS. Plugs, Ltd	xev	Mather & Platt, Ltd.	xxxiv	Thermodare (Great Britain)	lxxxl
Dunbrik, Ltd	lxxxvii	McCarthy, M., & Sons, Ltd	ciii	Thompson, John (Beacon Windows), Ltd.	
Dunn, Alexander, Ltd	xci	Meta Mica, Ltd	xc	Thorn, J., & Sons, Ltd	1 x x x ix
Dussek Bitumen & Taroleum, Ltd	xvi	Midland Woodworking Co., Ltd., The		Thorp, John B	citi
Econa Modern Products, Ltd	xciii	Mills Scaffold Co., Ltd.		Timber Development Association, Ltd.,	
	ciii			The	XXXIX
Ellis School of Architecture		Minikscale, Ltd.	ciii	T.M.C. Harwell (Sales), Ltd.	XVIII
Ellison, George, Ltd	ciii	Montgomerie Stobo & Co., Ltd	lxxxi		
Engravers' Guild, Ltd., The	* xciv	Morris, Herbert, Ltd	ciii	Tretol, Ltd.	vii i
Evode, Ltd.	v	Morris Singer Co., Ltd., The	xxvii	Trianco, Ltd	XXXIII
Ewart & Sons, Ltd	liii	Myton, Ltd	lvii	Turners Asbestos Cement Co., Ltd	lxix
Faculty of Architects and Surveyors, The		National Coal Board, Ltd., The	xxxii	Vere Engineering, Ltd	-
Ferodo, Ltd.	lv	Northern Aluminium, Ltd.	AAAII	Vere Eligineering, Ltd.	- 04
		Northern Administration, Ltd.		Ward & Company	CIII
Fibreglass, Ltd.	lxxv	Parnall, George, & Co., Ltd.	viii	Warerite, Ltd	XI
Finch, B., & Co., Ltd	xxii	Permutit Co., Ltd., The	xlviii	Weatherfoil Heating Systems, Ltd	IXXXVIII
Floor Treatments, Ltd	ci	Philips Electrical, Ltd	xxviii	Wheeler, F. H., & Co., Ltd	
Fordham Pressings, Ltd	xxxvi	Philipson & Son		Williams & Williams, Ltd.	
A 01 000000 A 1 000000 Buy	,	a marphona we how III	and the same	Transmis of Transmissis areas	244
The Assets	A	lantad on Wassett Commetitions Comme Des	and an extension	1 1 11 11	

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Education, Legal Notices, Miscellaneous, Property, Land and Sales, see xevii, xeviii, xeix, c, ci, cii, ciii.

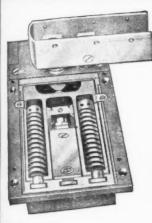


PAGE

| LEIN
| L







ALSO

- MINDOW GEARING AND FANLIGHT OPENERS
- 'X-IT' PANIC BOLTS
- LOCKS
- ODOR FURNITURE
- CASEMENT FITTINGS
- SPRING SASH BALANCES

"VICTOR" fittings are specified by all leading Architects.

"Victor"
DOOR

SPRINGS

The state of the s

NEED NOT

S-L-A-M

DOORS

An essential fitting with self-contained check for Public Buildings, Housing Schemes, Office Blocks, etc. In shallow and watertight floor patterns. Overhead types to suit every purpose.

ROBERT ADAMS (VICTOR) LTD
139 STAINES ROAD, HOUNSLOW, MIDDX

Telephone: Hounslow 5714

TIMBER CONNECTORS

Made to B.S.S.1579



"TECO" double bevelled SPLIT-RING



"BULLDOG" circular TOOTHED-PLATE



"TECO" heavy duty SHEAR-PLATE



"TRIP-L-GRIP"
framing anchors

Our "Design Manual for Timber Connector Construction" contains full technical data on the above Timber Connectors

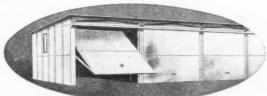
? Have you applied for a FREE copy

•

MACANDREWS & FORBES LTD.

2 CAXTON STREET, WESTMINSTER, LONDON, S.W.1 Telephone: Abbey 4451/3

.. For any site-



in any number.. BATLEY

MULTIPLE CONCRETE GARAGES

- Prices from £55
- Attractive deferred terms
- Hinged or Up and Over doors
- Fireproof, Rotproof, Waterproof
- Minimum maintenance required
- Purchased by over 220 councils

FREE DELIVERY IN ENGLAND AND WALES

Write now for illustrated free brochure

ERNEST BATLEY LTD.

63 Colledge Road, Holbrooks, Coventry Telephone: 89245/6 ERECTION SERVICE AVAILABLE



Issued by The British Reinforced Concrete Engineering Co. Ltd.

M-W.73

