

THE ARCHITECTS' JOURNAL



standard contents

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

NEWS and COMMENT

Diary

News

Architects' Commonplace Book

Astragal's Notes and Topics

Letters

Societies and Institutions

TECHNICAL SECTION

Information Sheets

Information Centre

Current Technique

Questions and Answers

Prices

The Industry

PHYSICAL PLANNING SUPPLEMENT

CURRENT BUILDINGS

HOUSING STATISTICS

Architectural Appointments
Wanted and Vacant

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

IEE	Institution of Electrical Engineers.	Savoy Place, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society.	32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers.	1, Grosvenor Place, S.W.1.	Sloane 8606
IHVE	Institution of Heating and Ventilating Engineers.	75, Eaton Place, S.W.1.	Sloane 3158
IIBD	Incorporated Institute of British Decorators.	Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects.	12, Gower Street, W.C.1.	Museum 1783
I of Arb.	Institute of Arbitrators, 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071	Museum 7197
IOB	Institute of Builders.	48, Bedford Square, W.C.1.	Monarch 7391
IR	Institute of Refrigeration.	Empire House, St. Martin's-le-Grand, E.C.1.	Abbey 6172
IRA	Institute of Registered Architects.	47, Victoria Street, S.W.1.	Sloane 7128-29
ISE	Institution of Structural Engineers.	11, Upper Belgrave Street, S.W.1.	Whitehall 7264
LIDC	Lead Industries Development Council.	Eagle House, Jermyn Street, S.W.1.	Museum 3891
LMBA	London Master Builders' Association.	47, Bedford Square, W.C.1.	Euston 2158-9
MARS	MARS Group (English Branch of CIAM).	34, Gordon Square, W.C.1.	Whitehall 3400
MOA	Ministry of Agriculture and Fisheries.	55, Whitehall, S.W.1.	Sloane 4522
MOE	Ministry of Education.	Belgrave Square, S.W.1.	Whitehall 4300
MOH	Ministry of Health.	Whitehall, S.W.1.	Whitehall 6200
MOLNS	Ministry of Labour and National Service.	St. James's Square, S.W.1.	Gerrard 6933
MOS	Ministry of Supply.	Shell Mex House, Victoria Embankment, W.C.	Abbey 7711
MOT	Ministry of Transport.	Berkeley Square House, Berkeley Square, W.1.	Whitehall 8411
MOTCP	Ministry of Town and Country Planning.	32-33, St. James's Square, S.W.1.	Reliance 7611
MOW	Ministry of Works.	Lambeth Bridge House, S.E.1.	Abbey 1010
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council.	94, Petty France, S.W.1.	Abbey 5277/8
NAS	National Association of Shopfitters.	9, Victoria Street, S.W.1.	Kensington 8161
NBR	National Buildings Record.	37, Onslow Gardens, S.W.7.	Whitehall 5111
NCBMP	National Council of Building Material Producers.	2, Caxton Street, S.W.1.	Whitehall 4041
NFBTE	National Federation of Building Trades Employers.	82, New Cavendish Street, W.1.	Macaulay 4451
NFBTO	National Federation of Building Trades Operatives, Federal House,	Cedars Road, Clapham, S.W.4.	Whitehall 2881/2/3
NFHS	National Federation of Housing Societies.	13, Suffolk St., S.W.1.	Whitehall 4041
NHBRC	National House Builders Registration Council.	82, New Cavendish Street, W.1.	Molesey 1380
NPL	National Physical Laboratory.	Head Office, Teddington.	Abbey 1359
NSAS	National Smoke Abatement Society.	Chandos House, Buckingham Gate, S.W.1.	Whitehall 0211/2
NT	National Trust for Places of Historic Interest or Natural Beauty.	42, Queen Anne's Gate, S.W.1.	Whitehall 7245
PEP	Political and Economic Planning.	16, Queen Anne's Gate, S.W.1.	Whitehall 7611
PWB	Post War Building, Directorate of.	Ministry of Works, Lambeth Bridge House, S.E.1.	Whitehall 9936
RCA	Reinforced Concrete Association.	94, Petty France, S.W.1.	Edinburgh 20396
RIAS	Royal Incorporation of Architects in Scotland.	15, Rutland Square, Edinburgh.	Welbeck 5721
RIBA	Royal Institute of British Architects.	66, Portland Place, W.1.	Whitehall 5322
RICS	Royal Institution of Chartered Surveyors.	12, Great George St., S.W.1.	Whitehall 3935
RFAC	Royal Fine Art Commission.	22a, Queen Anne's Gate, S.W.1.	Regent 3335
RS	Royal Society.	Burlington House, Piccadilly, W.1.	Temple Bar 8274
RSA	Royal Society of Arts.	6, John Adam Street, W.C.2.	Sloane 5134
RSI	Royal Sanitary Institute.	90, Buckingham Palace Road, S.W.1.	Wimbledon 5101
RIB	Rural Industries Bureau.	35, Camp Road, Wimbledon, S.W.19.	Regent 6347
SBPM	Society of British Paint Manufacturers.	20, Piccadilly, London, W.1.	Western 1571
SCR	Society for Cultural Relations with the USSR.	14, Kensington Square, London, W.8.	Abbey 7244
SE	Society of Engineers.	17, Victoria Street Westminster, S.W.1.	W.C. Chancery 5313
SFMA	School Furniture Manufacturers' Association.	13, New Square, Lincoln's Inn, W.C.	Central 4444
SIA	Structural Insulation Association.	14, Moorgate, London, E.C.2.	E.C.1. Metropolitan 8344
SIA	Society of Industrial Artists.	Room 243, Empire House, St. Martin's-le-Grand, E.C.1.	Holborn 2646
SNHTPC	Scottish National Housing & Town Planning Council.	Hon. sec., Robert Pollock, Town Clerk, Rutherglen.	Temple Bar 5006
SPAB	Society for the Protection of Ancient Buildings.	55, Great Ormond Street, W.C.1.	City 6146 (3 lines)
TCPA	Town and Country Planning Association.	28, King Street, Covent Garden, W.C.2.	Victoria 8815
TDA	Timber Development Association.	75, Cannon Street, E.C.4.	City 1476
TPI	Town Planning Institute.	18, Ashley Place, S.W.1.	Mayfair 8866
TTF	Timber Trades Federation.	81, Cannon Street, E.C.4.	City 4263/4
WDC	War Damage Commission.	Devonshire House, Mayfair Place, Piccadilly, W.1.	Oxford 47988
WEDA	Welfare Equipment Development Association.	61, St. Paul's Churchyard, E.C.4.	
ZDA	Zinc Development Association.	Lincoln House, Turl Street, Oxford.	

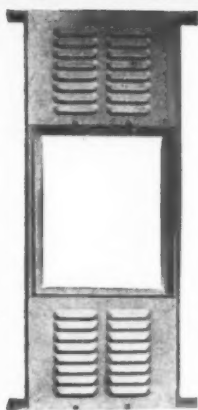
No. 2809]

[Vol. 108

THE ARCHITECTURAL PRESS
9, 11 and 13, Queen Anne's Gate, Westminster,
S.W.1. Phone: Whitehall 0611

Price 9d.

Registered as a Newspaper



TYPE MAS

GREENWOOD'S "PERMAVENT" ALL STEEL LARGER LIGHTS

LIGHT AND PERMANENT VENTILATION COMBINED

STEEL FRAMED WINDOWS ADMIT DAYLIGHT.
VENTILATION VIA WEATHER RESISTING
MULTI-LOUVRED PANELS BACKED BY
DETACHABLE INSECT-PROOF SCREENS.
IMMENSELY STRONG AND DURABLE.
MADE IN TWO TYPES AND FOUR SIZES.
DELIVERED READY FOR BUILDING IN.
FOR HOUSING, AND OTHER BUILDINGS.

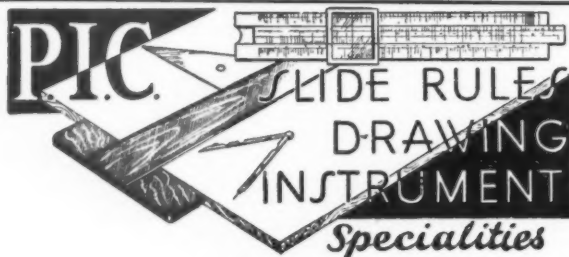
GREENWOOD'S AND AIRVAC
VENTILATING COMPANY LTD.

BEACON HOUSE • KINGSWAY • LONDON • W.C.2

TELEPHONE: CHANCERY 8135-6-7



TYPE MBS



Manufacturers of
HIGH GRADE DRAWING and SURVEYING INSTRUMENTS
SLIDE RULES, DRAWING MATERIALS
DRAWING OFFICE STATIONERY

T50

A. G. THORNTON LTD

Drawing Instrument Specialists

41 GARTSIDE ST. MANCHESTER 3

BELLS AND TOWER CLOCKS



SHELL-MEX HOUSE, LONDON
Dia. of dials 25 ft. Messrs. C. F. Joseph, Archts.

TOWER CLOCKS

of all types, with dials from 2 ft. dia. upwards

**RINGING PEALS, CHIMES
CARILLONS, SINGLE BELLS**

Please let us have your enquiries

GILLETT & JOHNSTON LTD.

CROYDON, SURREY

Founders of Famous Bells

Tel. Thornton Heath 3221 (5 lines)



EASY DOES IT

FIX

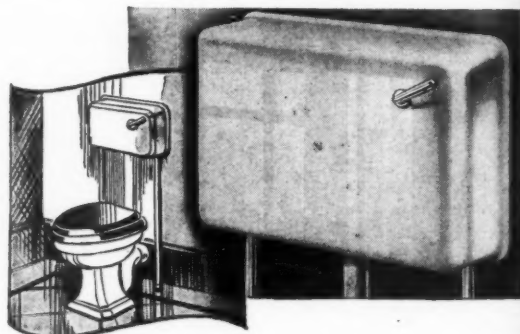
BALDWIN'S

Cast iron butt hinges

Sole Manufacturers:

BALDWIN, SON & CO. LTD., STOURPORT - ON - SEVERN

M-9-33



Elegant Efficiency

Revolutionary in design, this FORDHAM harmonises unobtrusively with the modern setting and is fitted with the unique Fordham patented copper syphon.

We call it the Fordham Panel. Scribble "panel cistern" on the back of your card and post it to us for fuller particulars.

Fordham

FORDHAM PRESSINGS LIMITED • DUDLEY ROAD
WOLVERHAMPTON PHONE: WOLVERHAMPTON 23861

MBS

IT

T'S

es

VERN

M-W-53

onises
fitted
on.

panel
it to

LOAD
23861

C

2000

2000

2000

2000

C
b

● T
b
s
● C
s
● L
C
● R

For

COME RAIN..COME SHINE



House at Crown Lane, East Burnham, Bucks,
roofed with Colt Shingles.

Architects : Tubbs, Duncan & Osburn, AAA.R.I.B.A.

Colt Shingles prove Britain's best All-Weather Roofing

- The form and nature of the shingles combine to provide a close and completely stormproof weather shield.
- Colt Shingles are only the finest carefully selected material.
- Light weight permits considerable savings of structural timber.
- No maintenance costs.
- Colt Shingles are licensed additionally to maximum timber allowance.
- Immediate delivery from stock.
- Expert advice and fixing service always available.
- Concise details on waterproof qualities, weight, insulation, etc., on request to:

W. H. COLT (LONDON) LTD., SURBITON, SURREY

Telephone : Elmbridge 6511 (4 lines)

COLT *Canadian Cedar Wood* **SHINGLES**
(CEDAR WOOD TILES)

For all DOMESTIC, AGRICULTURAL, and INDUSTRIAL BUILDINGS

**AGRICULTURAL
BUILDINGS**

DWELLINGS

SCHOOLS

**COUNCIL
HOUSES**

CHURCHES

Cargo Fleet Iron Co. Ltd.,

Sole British Manufacturers of

BROAD FLANGE BEAMS

with parallel flanges

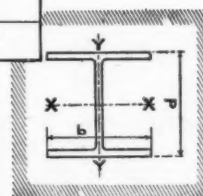


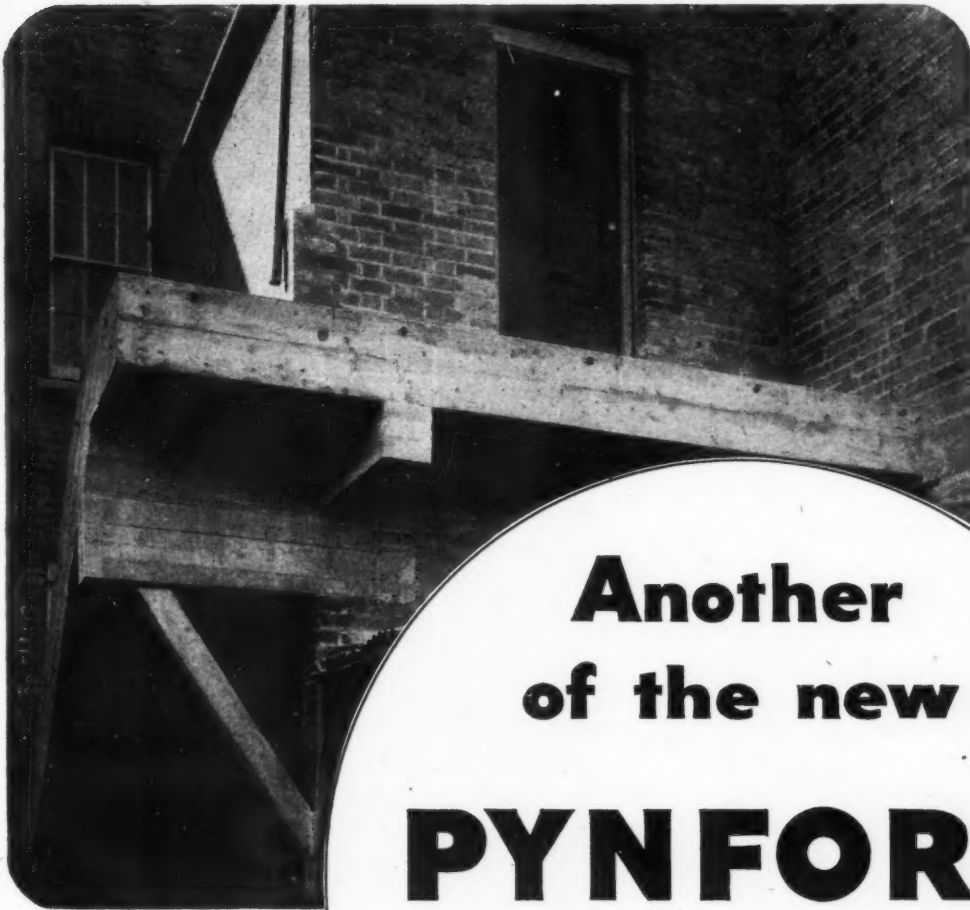
Broad Flange Beams British Rolled by Cargo Fleet can effect important economies in time, money and weight when used as Stanchions, Floor Girders, Crane Runways, etc. Are you taking full advantage of this recent development in British steelwork practice? Full details and advice gladly sent on request.

DIMENSIONS AND PROPERTIES												
Size d x b inches	Wt./lbs. per Ft. = W	Area in sq. ins.	Web Ratio Depth = Web	Thickness		Moment of Inertia - I		Modulus of Section - Z		Radius of Gyration - R.G.		Zxx Wt. (lbs.) x Depth (ins.) x 1000
				Web	Flange	X - X	Y - Y	X - X	Y - Y	X - X	Y - Y	
6 x 6	25	7.35	19.35	.31	.46	47.24	16.76	15.75	5.59	2.53	1.51	105.0
7 x 7	34	10.00	20.00	.35	.55	80.15	31.48	25.19	9.00	2.97	1.77	105.8
8 x 8	45	13.23	20.50	.39	.64	152.76	55.02	38.19	13.75	3.39	2.04	106.0
10 x 10	62.63	18.42	23.25	.43	.72	338.97	119.94	67.79	23.98	4.79	2.54	108.2
12 x 12	82.55	24.28	25.53	.47	.79	652.00	228.00	108.60	38.00	5.18	3.07	109.6
14 x 12	100	29.41	25.45	.55	.92	1048.40	265.20	149.80	44.21	5.97	3.00	107.0
16 x 12	110	32.35	29.10	.55	1.00	1504.60	288.30	188.10	48.05	6.82	2.99	106.8
18 x 12	122	35.88	30.50	.59	1.08	2094.50	311.40	232.70	51.90	7.44	2.95	106.0
20 x 12	135	39.71	31.746	.63	1.16	2808.00	334.60	280.80	55.78	8.41	2.90	104.0
22 x 12	150	44.12	33.84	.65	1.28	3768.00	348.70	342.50	61.46	9.24	2.89	103.8
24 x 12	165	48.53	34.28	.70	1.36	4857.00	393.20	396.40	65.53	9.90	2.85	100.1

Cargo Fleet Iron Co. Ltd.

Steelmakers and Constructional Engineers, Middlesbrough, Stockton & London.





**Another
of the new
PYNFORD
UNDERPINNING
METHODS**

★ PYNFORD BEAMS
are backed by two
generations of under-
pinning experience.

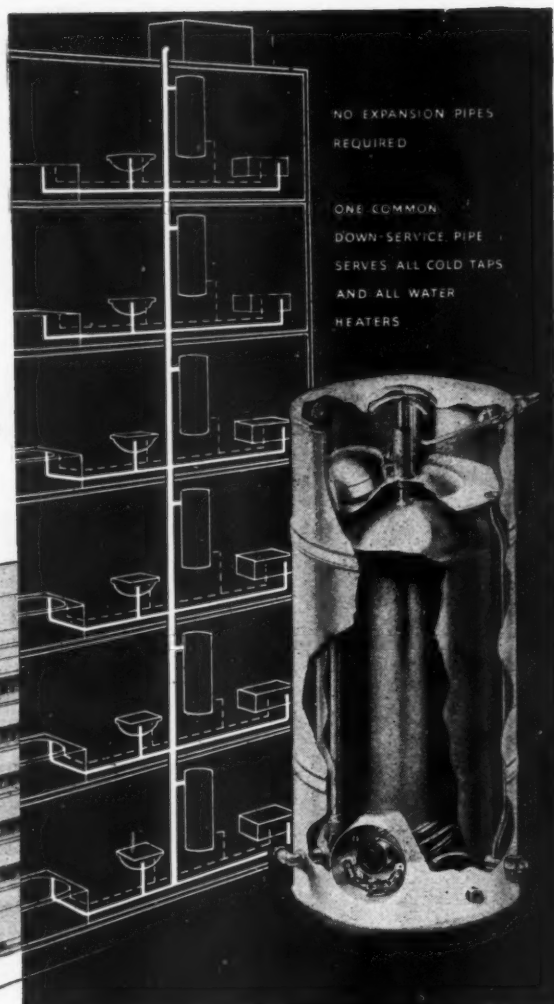
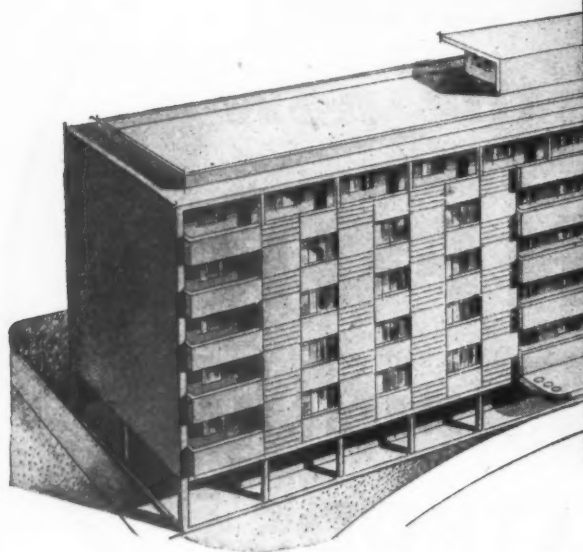
- PYNFORD BEAMS are almost a doctor.
- With PYNFORD BEAMS it was possible to underpin two walls at high level and create support for this staircase and landing.
- PYNFORD BEAMS have made possible jobs much too costly by other forms of construction.
- PYNFORD BEAMS are definitely the answer to a vast number of building problems.

PYNFORD LTD. · 74, LANCASTER ROAD · STROUD GREEN · LONDON, N.4

Telephone: ARCHWAY 2372

These new hot water systems

*eliminate expansion pipes
and separate down-service pipes*



TO SIMPLIFY building plans and save material, Sadia engineers have designed two new water heaters especially for use in blocks of flats. One is all-electric, the other is coal-electric. In each type, the cold water is supplied to the storage heater from a self-contained ball-valve tank which is built into the unit itself.

This tank is supplied direct from the common down-service pipe which feeds the cold water taps.

As the illustration shows, this system does not require separate expansion pipes from each flat to the roof tank; furthermore, one common down-service pipe can be arranged to serve all the cold water taps in the block and the feed to the water-heaters can also be taken from this common service pipe.

The ease and simplicity of installation and the immense savings in materials and labour will readily be appreciated by architects. Full details of both all-electric and coal-electric models will gladly be sent on request.

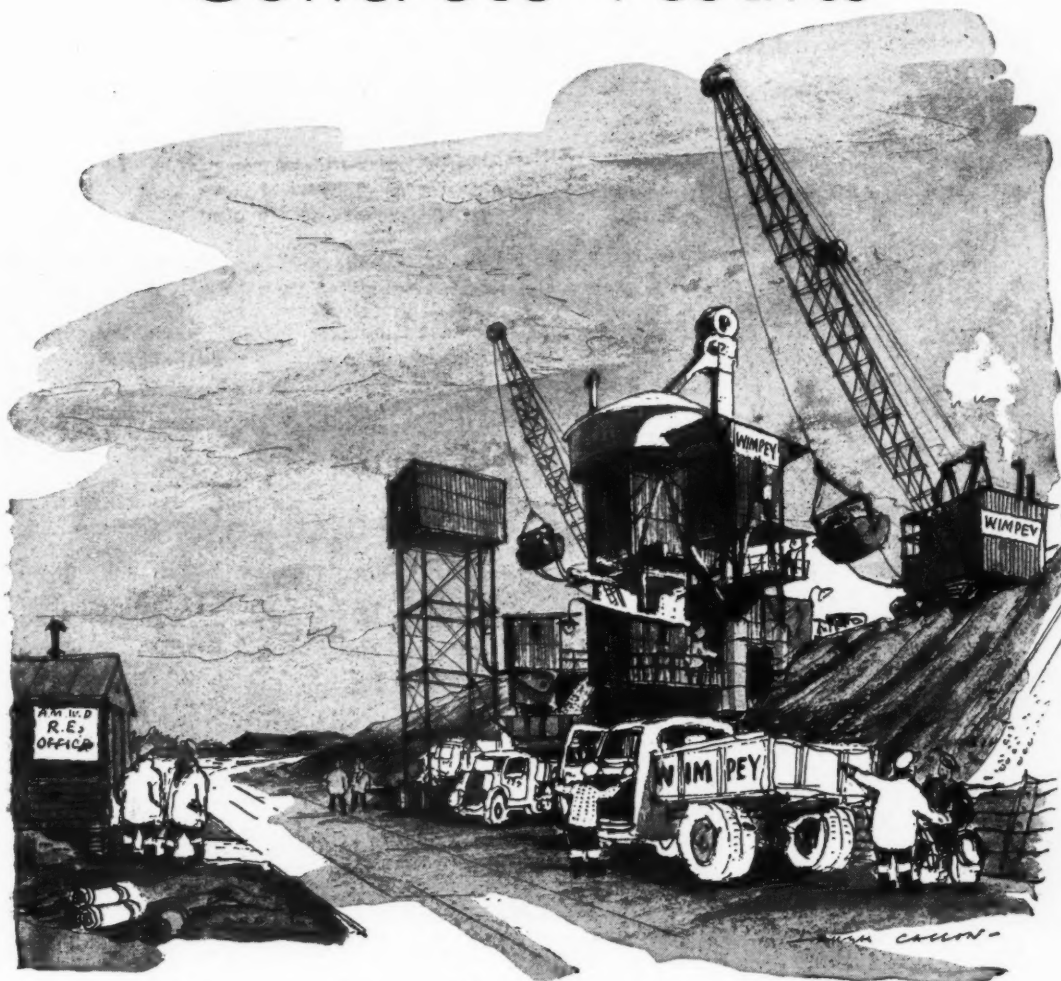
SADIA

HOT WATER BY
ELECTRICITY

Please write for fully descriptive leaflets to: AIDAS ELECTRIC LTD · SADIA WORKS · ROWDELL ROAD · NORTHOLT · MIDDLESEX

WIMPEYS AT WORK

Concrete results



This Mixer manufactures 100 cubic yards of high-grade concrete every hour. It is economical in time, labour and cost.

The whole set-up is operated by six or seven men.

WIMPEY'S immense pool of mobile modern plant helps to explain Wimpey's efficiency, economy and speed. All Wimpey's huge and flexible central resources—plant, transport, key manpower, laboratory work—are 'on tap' for any Wimpey job, large or small, anywhere in Britain. All these resources are at the command of Wimpey's seven regional offices in Britain — at Birmingham, Cardiff, Manchester,

Newcastle, Nottingham, Edinburgh and Glasgow. Wimpey's also have large foreign depots at Cairo, Baghdad and Singapore.

WIMPEY

Contractors since 1880—and now busy in the export market as well as at home

GEORGE WIMPEY AND COMPANY LIMITED, TILEHOUSE LANE, DENHAM, MIDDLESEX

Here's comfort for those who want the best

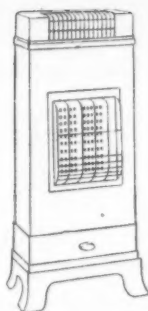
Bratt Colbran has it. Their products aren't cheap—let alone the Purchase Tax—but they are some of the most efficient and the best-looking gas fires ever made in Britain. And they're available now.



Illustrated above is the 'Lancelot' 3 unit hearth type fire.

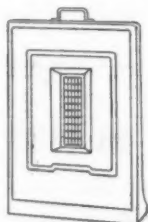
The 'Mortimer' Radiator

For home, shop or office. One or two unit sizes.



The 'Portette' Portable Fire

One or two unit screen fire. Connection by flexible tubing.



'PORTCULLIS' gas fires and radiators

For pleasing design and satisfying performance there's no gas fire to equal a 'Portcullis'.

Up to the minute in every way 'Portcullis' gas fires embody all the newest technical developments, the result of ceaseless research by highly qualified technicians.

The distinctive patterned radiant units, are exceptionally robust in construction and designed to give out the maximum heat for the gas burned. The pleasing lines of 'Portcullis' gas fires are in keeping with modern trends in design.

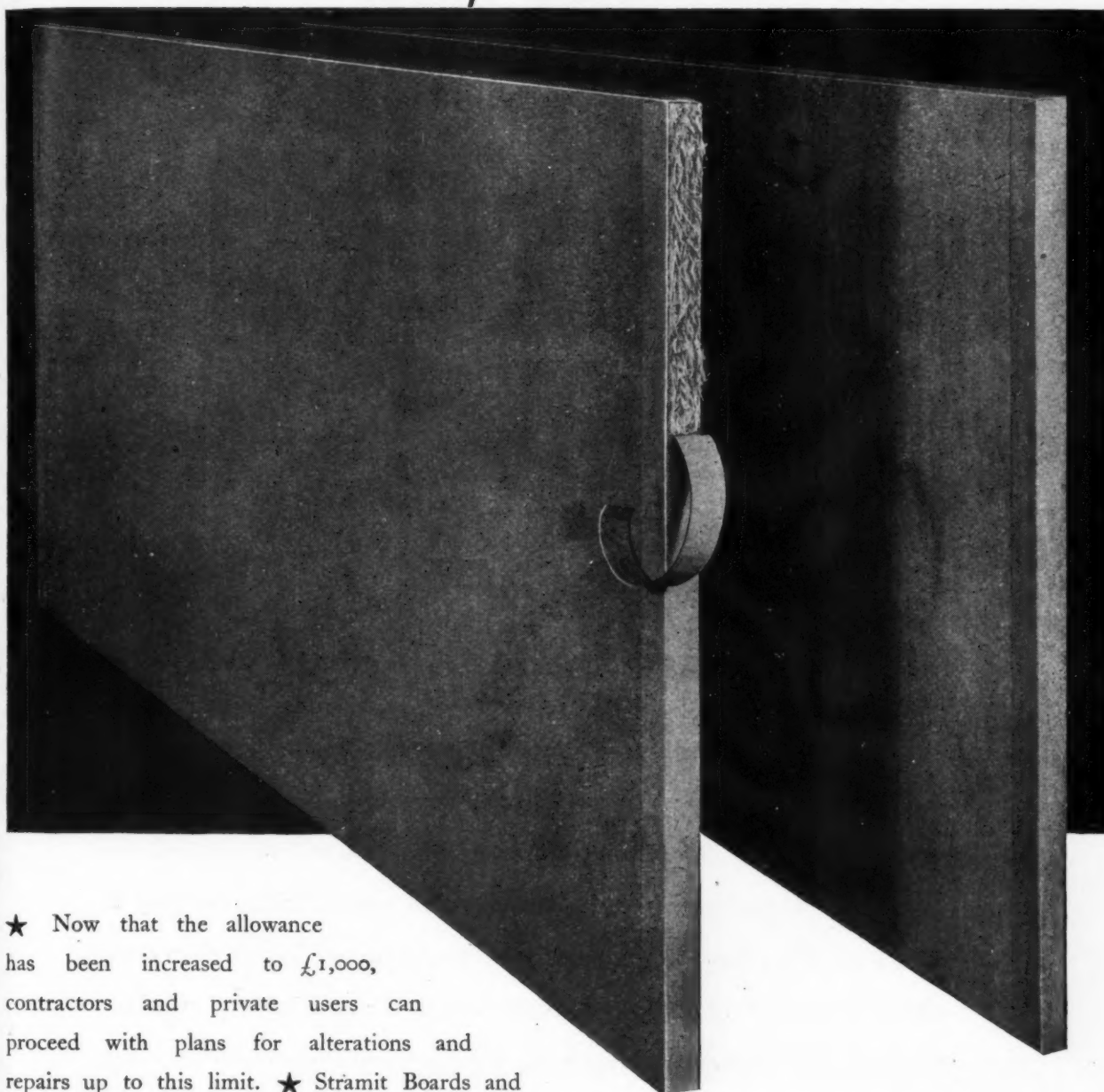
All fires are finished in finest quality. Lustral Bronze, Beige, Gold or Green.

Bratt Colbran 'Portcullis' gas fires

BRATT COLBRAN LIMITED 10 MORTIMER STREET LONDON W1. TEL: MUSEUM 9411

STRAMIT
BUILDING BOARDS

for building
economy



★ Now that the allowance has been increased to £1,000, contractors and private users can proceed with plans for alterations and repairs up to this limit. ★ Stramit Boards and Partition Jointing Sections are licence free, readily available and obviate the use of timber. Supplied in 2 in. thickness and in 8, 9, and 10 ft. lengths by 4 ft. wide.

Full particulars from any Lloyd Board distributor or:—

BOWATERS BUILDING BOARDS LIMITED

15, Portman Street, London, W.1 Tel.: WEL 8527

A MEMBER OF THE BOWATER ORGANISATION



2 HEADS are better than 1

Though we have been in the battery business for something over sixty years we are always adding to our store of useful experience. Sometimes it is something you tell us; sometimes it's a 'new angle' we are able to suggest to you. Whichever way it is, we are always ready to prove that two heads are better than one, either by providing complete specifications for any battery installation you like to name or by giving a second opinion on an existing scheme.

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

50 GROSVENOR GARDENS LONDON SW1

Batteries and
Control Panels for Emergency Lighting

P. G. 12C/48



To
build
citizens,
build
schools

WE
BUILD
IN
STEEL



CARDEN SCHOOL - BRIGHTON
The steelwork of the Assembly Hall
of the Community Centre was
fabricated and erected by us.
Architect: P. Billington, A.R.I.B.A., A.M.T.P.I.
Borough Engineer: D. J. Howe, M.I.C.E.,
M.I. Mun. E.

**BANISTER, WALTON
& CO. LTD**

STRUCTURAL STEELWORK

RIVETED ★ WELDED

LONDON, S.W.1 — 82 Victoria Street

MANCHESTER 17 — Trafford Park

BIRMINGHAM 18 — 61-63 Western Road

SISALKRAFT

for CONCRETE UNDERLAY



SUBSOIL grade Sisalkraft—the
supreme reinforced concreting
paper—a sure foundation to all forms
of concrete constructional work.

Technical details on request.

SISALKRAFT
TRADE MARK

Sole Distributors
for British Sisalkraft Ltd.

J.H.SANKEY & SON.LTD

ALDWYCH HOUSE, ALDWYCH, LONDON, W.C.2

TELEPHONE: HOLBORN 6949 (20 lines) TELEGRAMS: BRICKWORK, ESTRAND, LONDON



The *hidden* details count

See our Exhibit at The
Building Centre, 9, Conduit
St., W.I.

This simple type of hollow-core flush door is cheap, strong and looks well—but its serviceability depends on the care with which it is made. The Timber of the core must be dried to the right moisture content; the frame members accurately machined; carefully assembled, and well glued to the ply facings under the controlled pressure of the Door Press platens. These are the hidden details which count.

JOHN SADD & SONS, LTD.

HIGH-CLASS JOINERY

Windows, Doors, Mouldings, Staircases, Dressers, Kitchen Units

MALDON

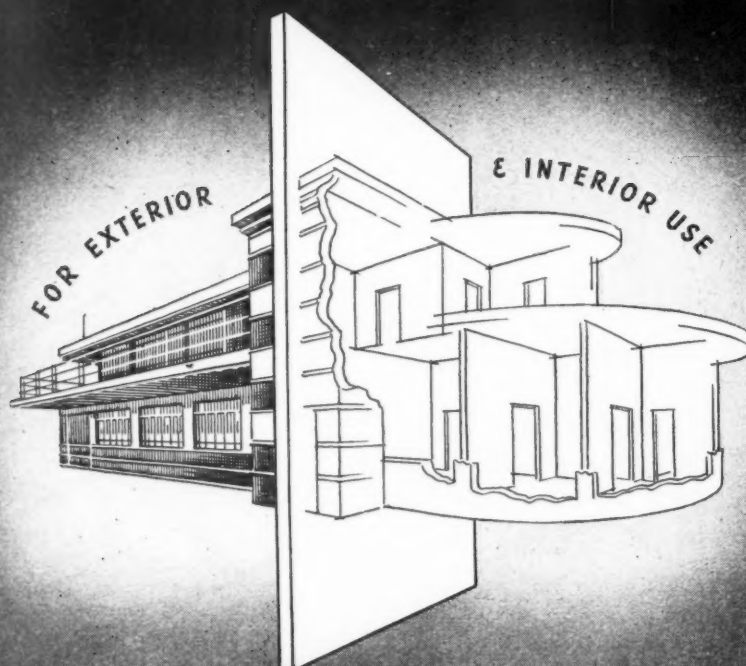
Telephone: Maldon 131 (6 lines)

ESSEX

London Office: ALDWYCH HOUSE, W.C.2.

Telephone: Chancery 7214.

Sd. XVII/7-47



SUNDEALA

*A name universally acknowledged
as denoting the supreme achievement
in scientifically waterproofed —*

BUILDING BOARDS

British made



throughout

SUNDEALA BOARD CO. LTD. ALDWYCH HOUSE, LONDON, W.C.2

Tel: CHAncery 8159.

Works: Sunbury-on-Thames, Middx.

Members of Building Board Manufacturers Association.

Rustproof Sink Unit

IN STAINLESS STEEL and ALUMINIUM



A single drainer unit fitted with stainless steel sink and drainer mounted on aluminium cabinet,

the No. 44 is the latest addition to C.S.A.'s large range of completely rustproof kitchen furnishings. Backless and without a toe recess, it is designed for taps to be fitted on the wall and can be supplied in silvasheen, cream, pastel green or blue. Overall dimensions 3 ft. 6 in. \times 3 ft. \times 1 ft. 6 in.

Retail Selling price £24. NO PURCHASE TAX.

Details of the complete range of C.S.A. Kitchen Furnishings can be had on request from C.S.A. Sales Organisation:—W.T. Scutt, 172, Edmund Street, Birmingham, 3. Tel: CEN 6357

A PRODUCT OF  INDUSTRIES LTD

Designers and Manufacturers of Kitchen Cabinets, Wall Cupboards, Broom Cupboards, Dressers, Single and Double Drainer Sink Units, Wash Hand Basins, Bathroom Wall Units, Splash Backs, etc.

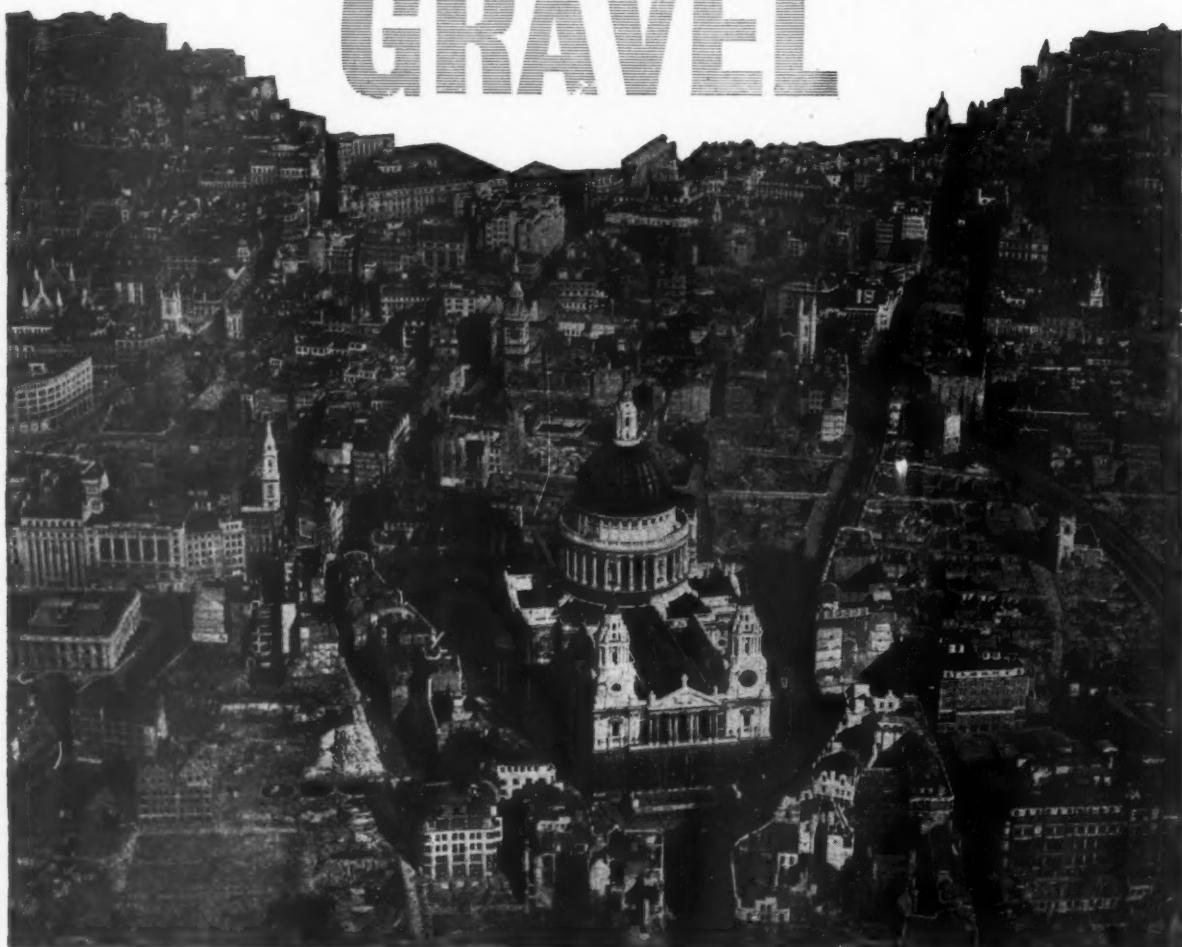
PHONE
WARWICK 500 & 501

WARWICK

GRAMS
CONSCREW WARWICK

L.G.B.

LONDON GRAVEL



***Whatever the district,
'KUTERLON' copper tubing
gives greatest resistance to corrosion***



Metal-corroding elements are present in all soils and are best resisted by copper. For this reason, 'Kuterlon' underground copper tubes will give long trouble-free service.

'Kuterlon' tubes are strong and ductile. Strong to withstand soil pressures and carry their own weight over wide spans; ductile for ease of handling and accom-

modating soil movement. Costs of installation are lowered because 'Kuterlon' tubes can be easily manipulated on the site. 'Kuterlon' is supplied in coils of 30, 45, or 60 feet, and in straight lengths up to 20 feet. Further details may be had on request.

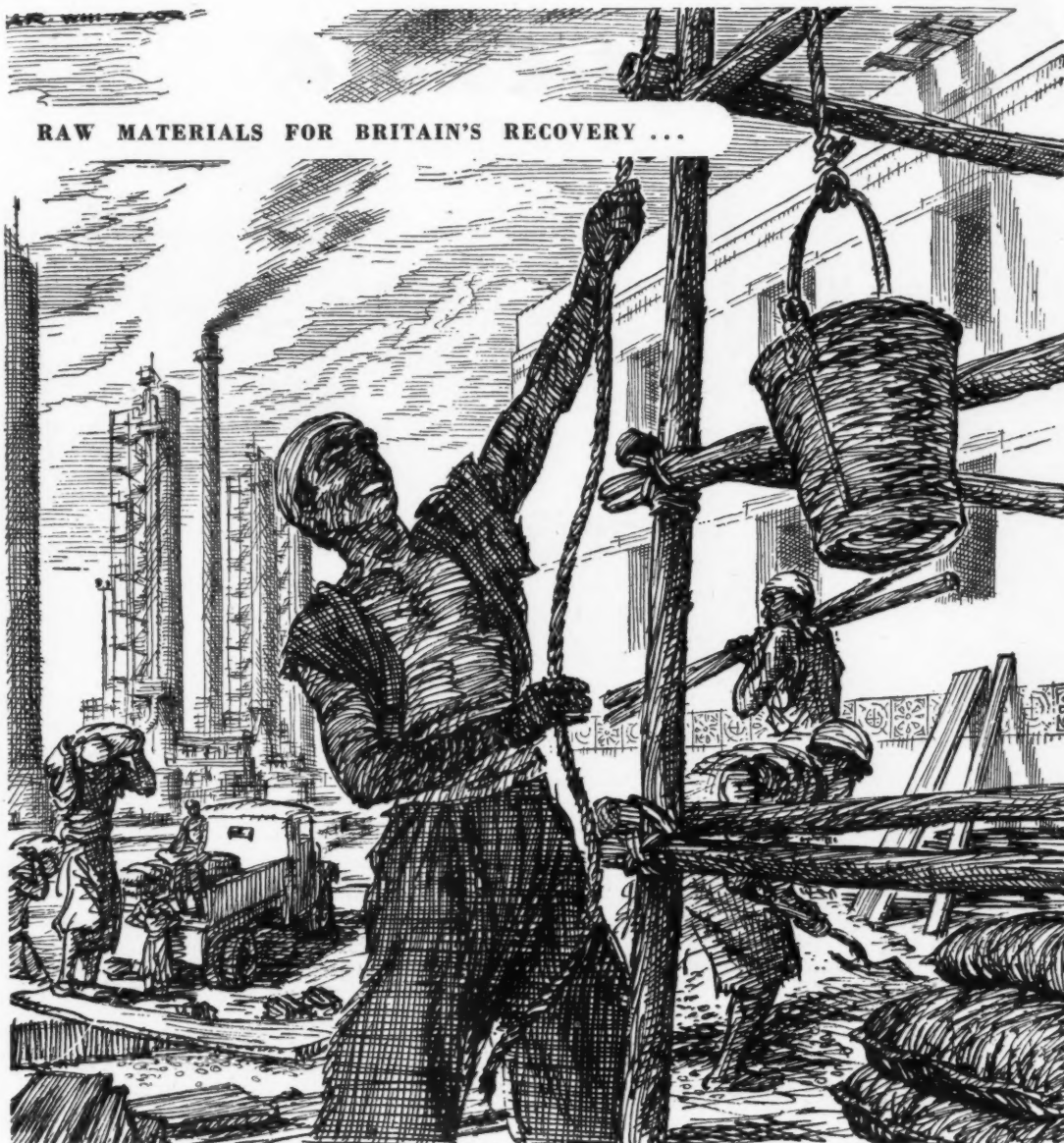


Supplies are at present restricted, but everything is being done to meet the increasing demand.

IMPERIAL CHEMICAL INDUSTRIES LTD., LONDON, S.W.1

M. 111

RAW MATERIALS FOR BRITAIN'S RECOVERY ...



B.C.12

CEMENT FOR PETROL

Penetrating into remote undeveloped areas and converting them into oil townships, complete with pumping stations, refineries, storage tanks, docks, jetties and homes for the workers, cement makes more readily available that 'liquid power' upon which our national existence depends. Thus there is a close link between the vast quantities of Blue Circle Cement exported, and the steadily increasing supplies of petrol that reach our shores.

Blue Circle service is known throughout the world. To meet the needs of oil producers a special oil-well cement is supplied.



THE CEMENT MARKETING COMPANY LIMITED • 192 ASHLEY GARDENS • LONDON • S.W.1

Introducing



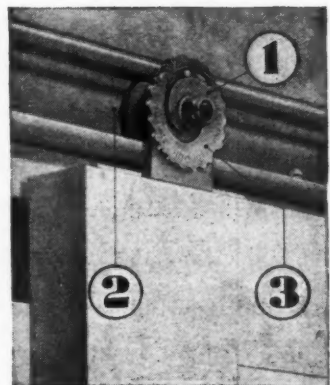
KING^{||} Homestic^{||} Sliding Door Gear

EASY TO FIX
•
NO MAINTENANCE
•
SMOOTH & SILENT
•
MODERATE COST
•
READILY AVAILABLE

1 Door trolleys are fitted with a patented vertical adjusting device giving a height adjustment of $\frac{1}{4}$ in. Adjustment is made quickly and easily by self-locking nut.

2 King Homestic Sliding Door Track is of light alloy, with adequate rigidity. It is completely rustless; supplied in standard lengths, drilled and with wood screws for fixing.

3 Trolley is designed to give smooth easy running and long life. Wheel contour fits track snugly with minimum side play. Roller fitted with self-lubricating bush.



WRITE FOR ILLUSTRATED FOLDER

GEO. W. KING LTD. D.G.B. WORKS, HITCHIN, HERTS. Phone: HITCHIN 960



It should be...

DURALUMIN
Regd. Trade Mark

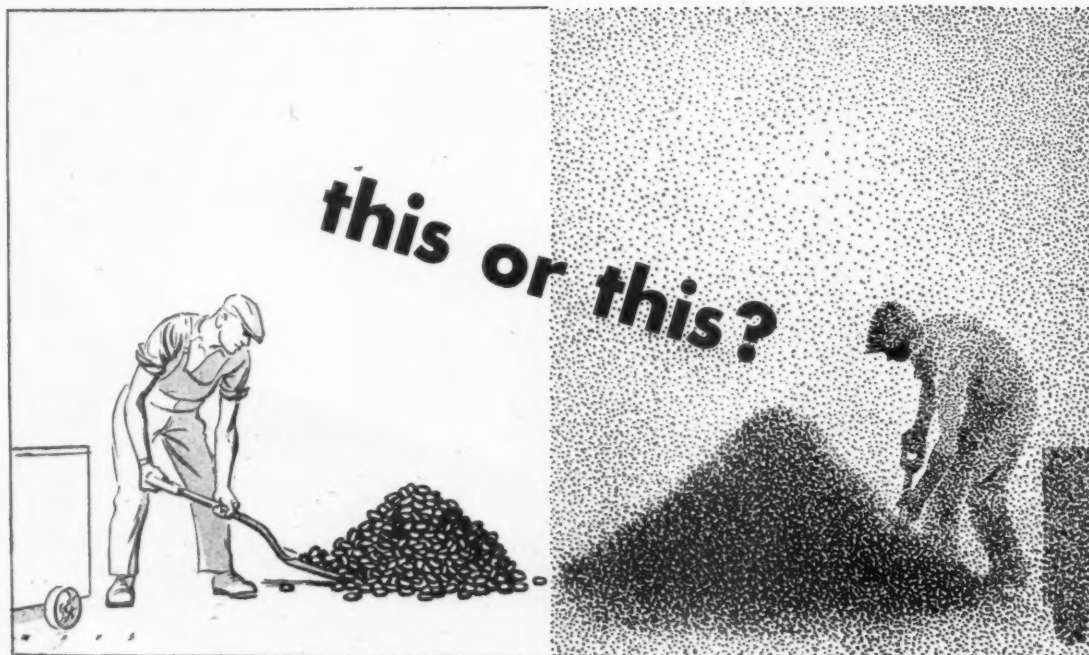
IF it is your desire to save weight without loss of strength or rigidity, or if you wish to cut down maintenance costs, or if the supply position is causing difficulty—then certainly it should be "Duralumin."

PIONEERS OF LIGHT ALLOYS IN THIS COUNTRY



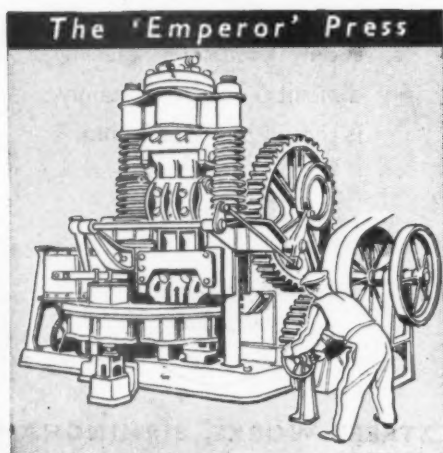
JAMES BOOTH & COMPANY LIMITED, ARGYLE STREET WORKS, BIRMINGHAM 7

which is the easier to handle . . .



The briquetting of fine pulverent materials and the pressing into special shapes and forms, as a preliminary to other manufacturing processes, is now a matter of increasing importance. The 'Emperor' Press produces as many as 30 pressings per minute. In the manufacture of Coal Briquettes the output is as high as 25 tons per

hour, and it is equally efficient in connection with the briquetting of iron, steel, brass, copper and aluminium borings and turnings. Full details are gladly supplied on request.



Sutcliffe Speakman

Sutcliffe Speakman & Company, Ltd., Leigh, Lancashire
London Office: Godliman House, Godliman St., E.C.4
Telephone: CITY 2810

B.I. Callender's Consumer's Service Unit combines in one compact assembly all the essential components of a domestic electrical sub-circuit, and is introduced at the current stage of the post-war rebuilding programme as an alternative to the haphazard use of a designer's layout as an alternative to the diversity of apparatus and haphazard installation all too often employed in the past.

To the Supply Authority it offers a standard installation, connection and service equipment and meter, coupled with protection against tampering. The installation needs have been closely studied, and the unit is particularly designed for ease in fixing and for the provision, when desired, of separate circuits. To the consumer it has the advantage of being unobtrusive while affording ample protection against shock. In fact, blown fuses are so easily replaced that the process need no longer hold the housewife.

The Unit has been designed primarily for single meter installations in the standard size and normal flexibility required with domestic A.C. circuits up to 60-amps and comprises three main sections:—

SUPPLY INTAKE CHAMBER
containing main switch and meter, and a "Off" position for the main switch.

MAIN SWITCH CHAMBER

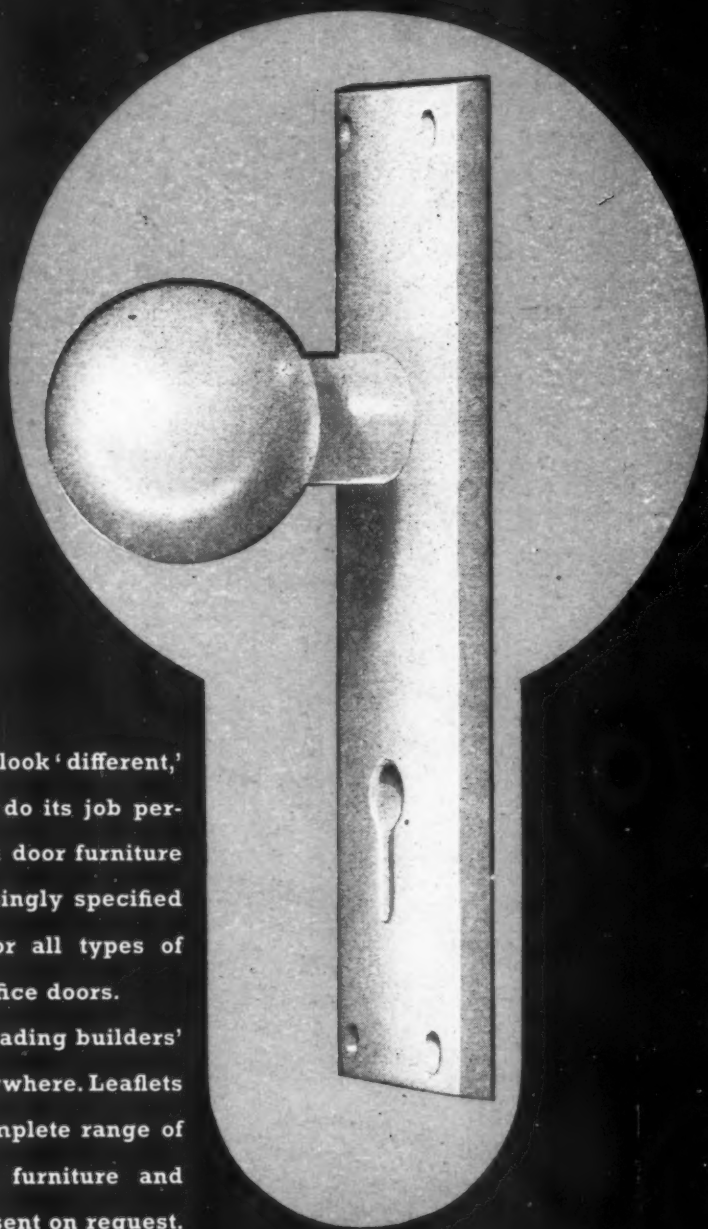
Designed to assist Supply Authorities and wiring contractors the Consumer's Service Unit simplifies installation and service maintenance work. Three important units, Supply Intake, Main Switch, and Consumer's Fuse Chambers are combined into one assembly to eliminate unsightly wiring and make possible a neat adaptable layout.

CONSUMER'S FUSE CHAMBER
containing fuses and spares, metal, robust enamelled in black as to line. Ventilation, is provided to prevent overheating if desired. Carefully connect. Conveniently fixed with the line-up in numerous spaced and connecting up to give long and live parts and connections, enclosed and protected; full provision is made for bonding and earthing. Insulating material is non-inflammable and anti-tracking.

Spare ports and outlets are blanked off by spring plates (removable from the inside only) and connections between chambers are fully insulated, the ports being bushed.

BRITISH INSULATED CALLENDER'S CABLES LIMITED
NORFOLK HOUSE, NORFOLK STREET, LONDON W.C.2

AS GOOD AS CAN BE



Not just made to look 'different,' but designed to do its job perfectly, Lacrinoid door furniture is being increasingly specified by architects for all types of domestic and office doors.

Stocked by leading builders' merchants everywhere. Leaflets showing the complete range of Lacrinoid door furniture and handles will be sent on request.

LACRINOID

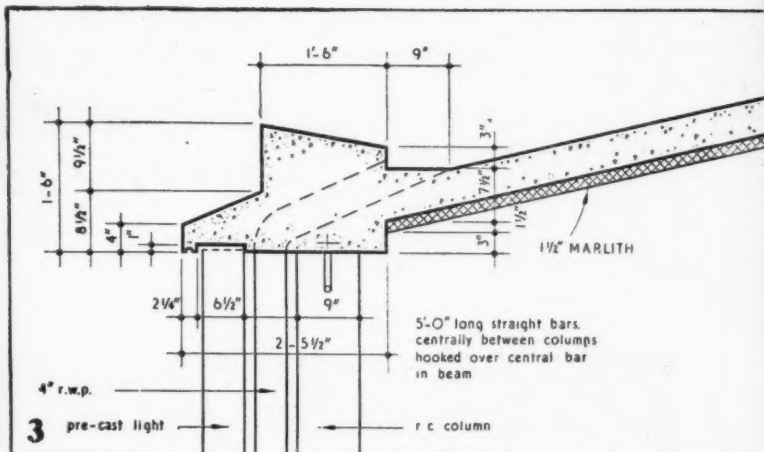
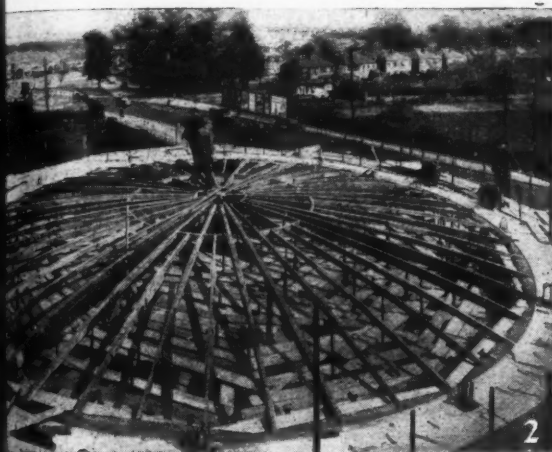
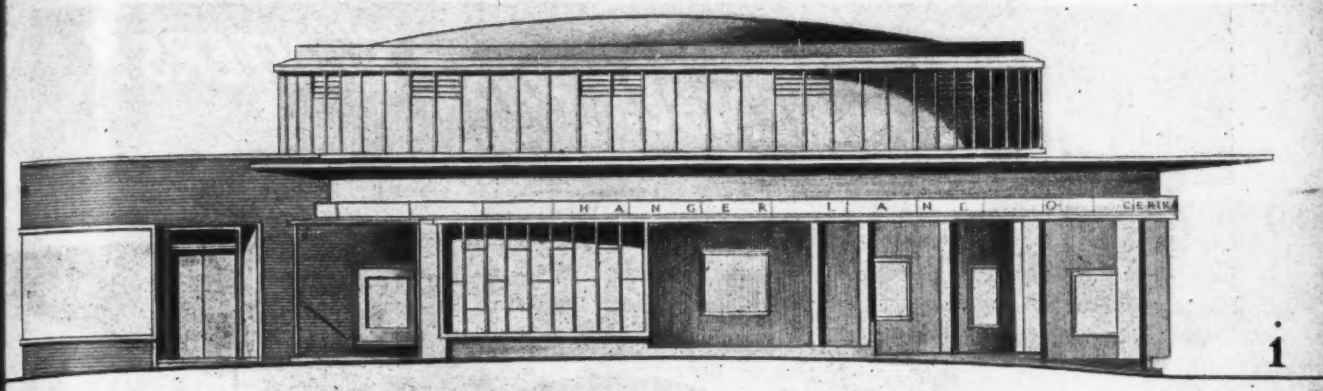
TRADE MARK

LACRINOID PRODUCTS LTD., GIDEA PARK WORKS, GIDEA PARK, ESSEX.

Telephone : Hornchurch 2981

Telegrams & Cables : Lacrinoid, Romford





PERMANENT INSULATING SHUTTERING at Hanger Lane Station

Architect : F. F. CURTIS, D.Eng., A.R.I.B.A.,
Railway Executive, (Western Region).

Asst. Architect : HOWARD CAVANAGH, A.R.I.B.A.

Assistant : P. Mac IVER.

Contractors : HOLLIDAY & GREENWOOD LTD.,
11, Buckingham Palace Gardens, S.W.1.

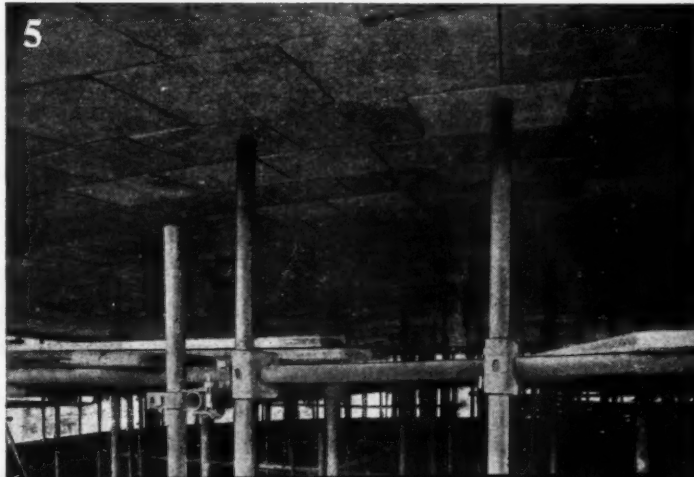
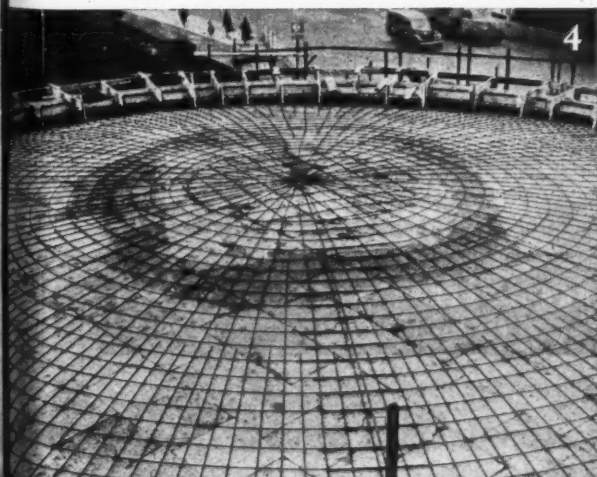
Reinforced Concrete Consultants : L.G. MOUCHEL
& PARTNERS LTD., 38, Victoria Street, S.W.1.

The illustrations show : 1. Elevation of design for permanent station. 2. Wooden formwork for the reinforced concrete dome. 3. Section through the top ring beam of the dome. 4. Reinforcement and permanent shuttering for the dome in 1 1/2" Marlith. 5. A view from underneath the dome showing the Marlith slabs before plastering.

The reinforced concrete dome is 4" thick and 44' 0" in diameter. It is cast on permanent insulating shuttering of 1 1/2" Marlith Wood Wool Slabs. These light weight building slabs conform to B.S. 1105 and are made in standard sizes of 6' 0" x 2' 0" x 1", 2" and 3". They provide a high degree of thermal insulation for walls and roofs and give an excellent key for plaster or cement rendering. Slabs of 2" or more thickness can be used as self-supporting non-load bearing walls or partitions.

MARLITH WOOD WOOL BUILDING SLABS

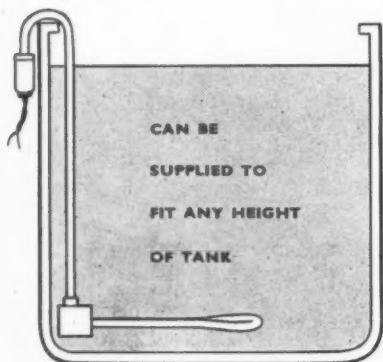
THE MARLEY TILE COMPANY LTD • SEVENOAKS • KENT Telephone : Sevenoaks 2251





REMEMBER PAST WINTERS?

The Santon "Anti-freezer" positively prevents freezing-up of all cisterns and tanks, domestic and industrial. Rust-proof and watertight. Needs no fixing. Hangs inside tank. 250 Watt., Voltages as required. Write for details of the Special Industrial types also available.



SANTON

"ANTI-FREEZER"

Connect to any supply point, A.C. or D.C., light or power.

Make sure of your share of orders for this seasonal best-seller. Order your stocks now, before it is too late!

SANTON LTD · NEWPORT · MON · TELEPHONE 71211

13996A

LIGHTNESS WITH STRENGTH...



"stalumin"

ALUMINIUM PATENT ROOF GLAZING

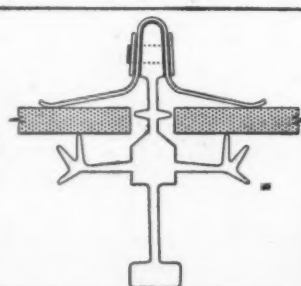
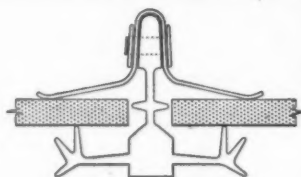
Designed with a background of 45 years' experience of roof glazing, 'stalumin' glazing bars have proved a reliable addition to the range of 'Standard' products. They offer the advantage of light weight with strength and are highly resistant to corrosion. Features include integral glass stops, large water channels, balanced cruciform section and secure capping. We shall be pleased to supply further details on request or give technical advice. Write to—

THE STANDARD PATENT GLAZING CO LTD

Telephone DEWSBURY 1213-4

DEWSBURY

& PROVINCIAL BRANCHES





SAFE

— for years
to come

ON STAIRS FOR PUBLIC USE, safety is essential: a surface that can't wear slippery, and a good clear edge to the steps.

Ferodo Stairtreads meet both requirements—handsomely. The gleaming aluminium nosing outlines each tread, and the inlaid strips of Ferodo fabric are non-slip through and through. They give a safe, comfortable grip to hurrying feet, even where shoes may be wet. They seem to absorb endless wear without themselves wearing appreciably, and last for many years under heavy traffic.

There are both single and double channel types, in various widths and profiles. As an alternative to Ferodo fabric, the strips may be of Ferodo composition, giving a non-slip surface in red, white, or grey.

Ferodo Stairtreads are being increasingly installed

in hotels, stores, offices, and other buildings. They are easily fitted to existing stairs of any type, are easily cleaned, and need no other maintenance. The various models, including a plain steel-backed industrial type, are described and illustrated in our catalogue No. 732KK, gladly sent on request.

FERODO STAIRTREADS

FERODO LIMITED
CHAPEL-EN-LE-FRITH

A Member of the Turner & Newall Organization

XXV

REGD TRADE MARK
FERODO

These girls shivered in their shoes, but ...



the gardener's crops grew hot and strong!

The frost never caught old Giles' superb runner beans outside the main workshop windows, but the feet and fingers of the girls working *inside* got well and truly nipped. So the welfare-minded management sent for the Ministry's Regional Fuel Engineer.

When he arrived, he found that the main supplying steam to heat the building was lagged on all *exposed* surfaces, but ran quite bare for 200 yards beneath old Giles' vegetable plot. No wonder the crops flourished and the girls shivered!

To-day the pipe is lagged for its whole length, the girls are warm and happy, output is soaring and

gardener Giles is wondering how he can get soil-heating for his precious crops!

This case was perhaps typical of many wasteful practices that are still costing the nation thousands of tons of coal a year. All too often 'out of sight' means 'out of mind', and the leak of hard-won fuel continues year after year, unchallenged and unchecked.

You are a go-ahead type, of course, so your Fuel Efficiency is naturally of a high standard—but could there be *anything* you've overlooked? There's one way of making sure—ask the Ministry's Regional Fuel Engineer to visit you. His advice *may* be worth its weight in gold and his services are FREE.

YOUR REGIONAL FUEL OFFICE

REGION

Northern
North-Eastern
North-Eastern
North-Midland
Eastern
London
South-Eastern
Southern
Wales
South-Western
Midland
North-Western
Scotland
Scotland
Scotland

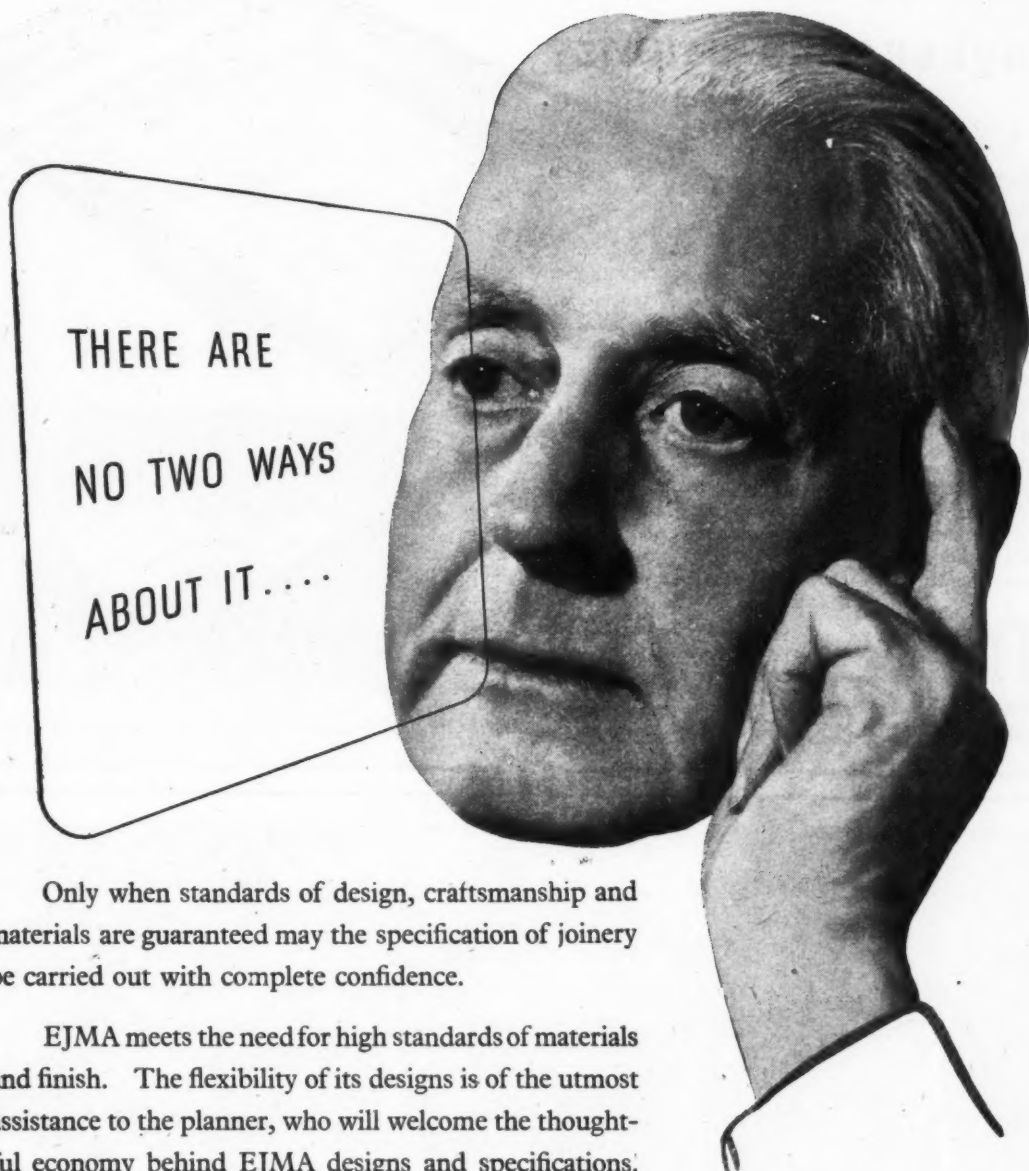
ADDRESS

Government Buildings, Ponteland Road, Newcastle-on-Tyne, 5
Century House, South Parade, Leeds, 1
Mount Pleasant School, Sharrow Lane, Sheffield
Castle Gate House, Castle Gate, Nottingham
Shaftesbury Road, Brooklands Avenue, Cambridge
Mill House, 87/89, Shaftesbury Avenue, W.1
Forest Road, Hawkenbury, Tunbridge Wells, Kent
Whiteknights, Earley, Reading
27, Newport Road, Cardiff
12/14, Apsley Road, Clifton, Bristol, 8
Temporary Office Buildings, Hagley Road West, Birmingham, 17
Burton Road, West Didsbury, Manchester, 20
145, St. Vincent Street, Glasgow, C.2
51, Cockburn Street, Edinburgh, 1
1, Overgate, Dundee

TELEPHONE

Newcastle 28131
Leeds 30611
Sheffield 52461
Nottingham 46216
Cambridge 56268
Gerrard 9700
Tun. Wells 2780
Reading 61491
Cardiff 9234
Bristol 38223
Bristol 3071
Didsbury 5180-4
Glasgow City 7636
Edinburgh 34881
Dundee 2179

ISSUED BY THE MINISTRY OF FUEL AND POWER



THERE ARE
NO TWO WAYS
ABOUT IT....

Only when standards of design, craftsmanship and materials are guaranteed may the specification of joinery be carried out with complete confidence.

EJMA meets the need for high standards of materials and finish. The flexibility of its designs is of the utmost assistance to the planner, who will welcome the thoughtful economy behind EJMA designs and specifications.

SPECIFY

The Trade Mark is a guarantee of quality since it may only be used by licensed producers who undertake to conform to the designs and specifications of the Association, a list of whom may be obtained from the Secretary of the Association.

EJMA THE GUARANTEE
OF JOINERY
EXCELLENCE
CERTIFICATION TRADE MARK

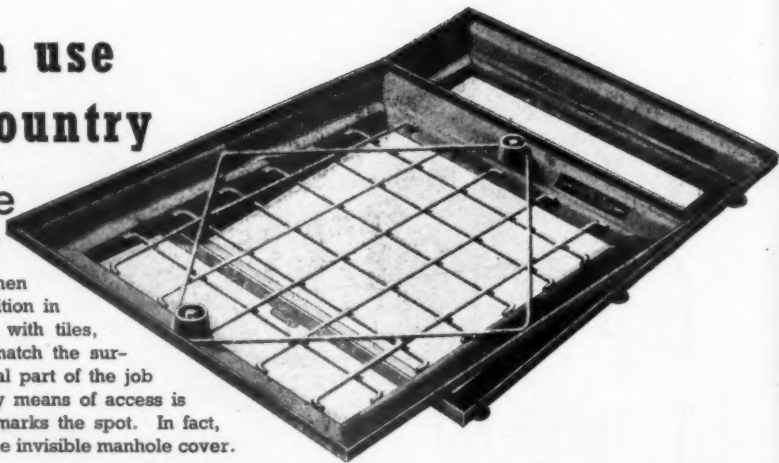


THE
ENGLISH JOINERY MANUFACTURERS ASSOCIATION
(INCORPORATED)
SACKVILLE HOUSE • 40 PICCADILLY W.I. Reg. 4448

Thousands are in use throughout the country

yet you never see
them . . .

that is, you never see them unless you look very closely. For when a "Broadstel" Cover is placed in position in floor or paving and filled in to surface with tiles, wood-blocks, terazzo, asphalt, etc., to match the surroundings, the cover becomes an integral part of the job and is scarcely discernible. The ready means of access is there, but only the thinnest line of metal marks the spot. In fact, the "Broadstel" has become known as the invisible manhole cover.

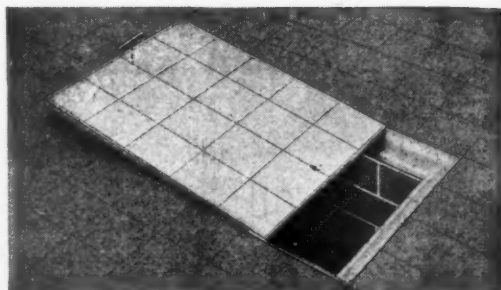


The 'BROADSTEL' Cover

Designed for filling on site to match the surrounding floor or paving. Stronger than cast iron and highly resistant to impact. Wide range of sizes in locking, non-locking, and rubber-sealed patterns, all reinforced to stand specific loading. Officially approved by Ministry of Works and Ministry of Health. Thousands in use throughout the country.

BROADS
MANUFACTURING CO. LTD.

*Write for illustrated folder
giving full particulars.*



4 SOUTH WHARF, PADDINGTON, LONDON, W.2. Tel.: PAD. 9091 (15 Lines)

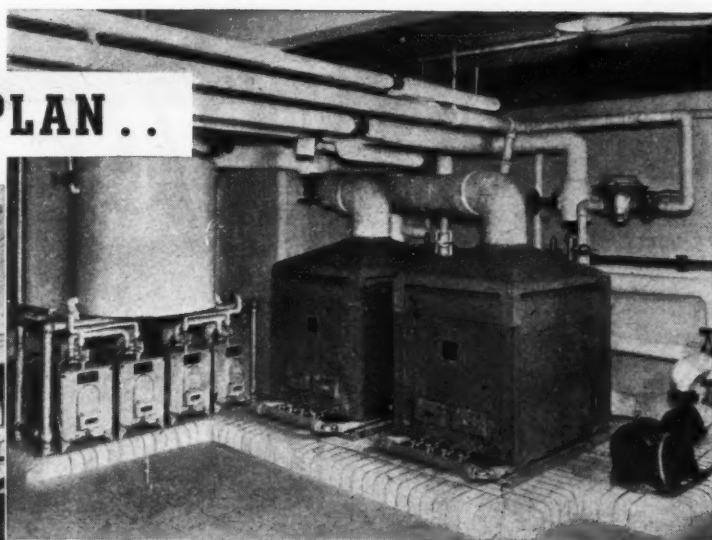


VOLEX AIR HEATERS ENSURE FRESH WARM AIR INDOORS

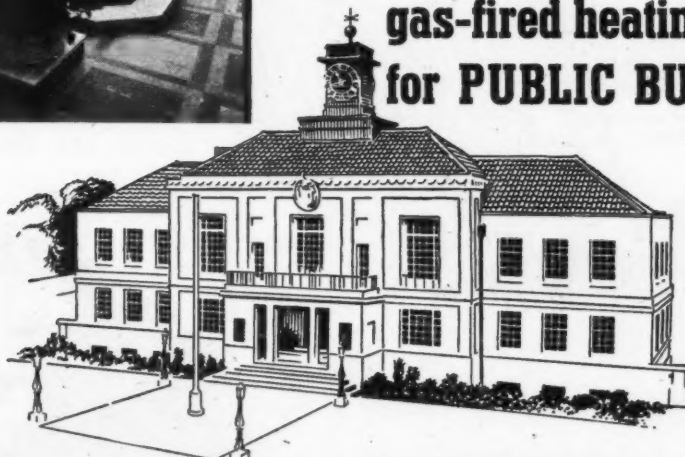
Sole Makers: T. E. SALTER LIMITED TIPTON STAFFS.

Telephone: TIPTON 1657/1658

IT'S A GOOD PLAN..



**if it's a POTTERTON
gas-fired heating system
for PUBLIC BUILDINGS**



Architects may be interested to know that although the standard Potterton gas-fired boilers include a most comprehensive range of different types, the greatest demand is still for individually designed plant. Each new building has its own heating problem—have you one? POTTERTON boilers which can be incorporated into any individual scheme, are rated from 20,000 to 125,000 B.Th.U. per hour output. They are fully automatic with the utmost precision of control—labour saving, needing no stoking—create no smoke and require no fuel storage space.



A De La Rue Company
Thomas POTTERTON (Heating Engineers) Ltd
CAVENDISH WORKS, BUCKHOLD ROAD, WANDSWORTH, S.W.18.
Tel: PUTNEY 2263.

Northern Area: 4 ALBERT SQUARE, MANCHESTER, 2.

Blackfriars 3258

Tygan

FOR INDOOR COMFORT OUTDOORS!



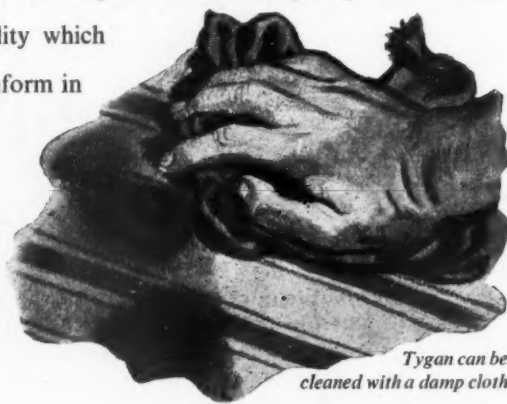
Tygan, the new woven synthetic fabric, has such remarkable weathering properties that it can be safely used outdoors. Rain or moisture will not rot or weaken it. And because its water absorption is negligible it is never damp. Sunshine also has no harmful effect on Tygan which is fast to light.

Where wear is exceptionally heavy Tygan is the ideal upholstery material. Its resilience, toughness and abrasion resistance are outstanding.

Tygan is available in a wide range of attractive colours and designs. It upholsters well, and because

it can easily be cleaned by sponging, it keeps its smart appearance.

Tygan is produced by Fothergill & Harvey, Ltd. This is an assurance of the highest attainable quality and service-ability which conform in



Tygan can be cleaned with a damp cloth

every respect to the best standards of Lancashire woven productions.

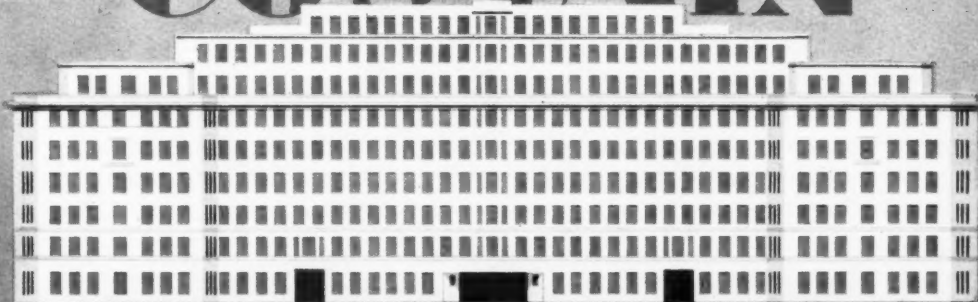
Tygan is woven exclusively by Fothergill & Harvey Ltd. from BEXAN, a new synthetic yarn developed by B.X. Plastics Ltd.



Write for illustrated folder with patterns, quoting reference BA10
to FOTHERGILL & HARVEY LTD., Harvester House, Peter Street, Manchester 2

the name behind the job

COSTAIN



LAMBETH BRIDGE HOUSE

RICHARD

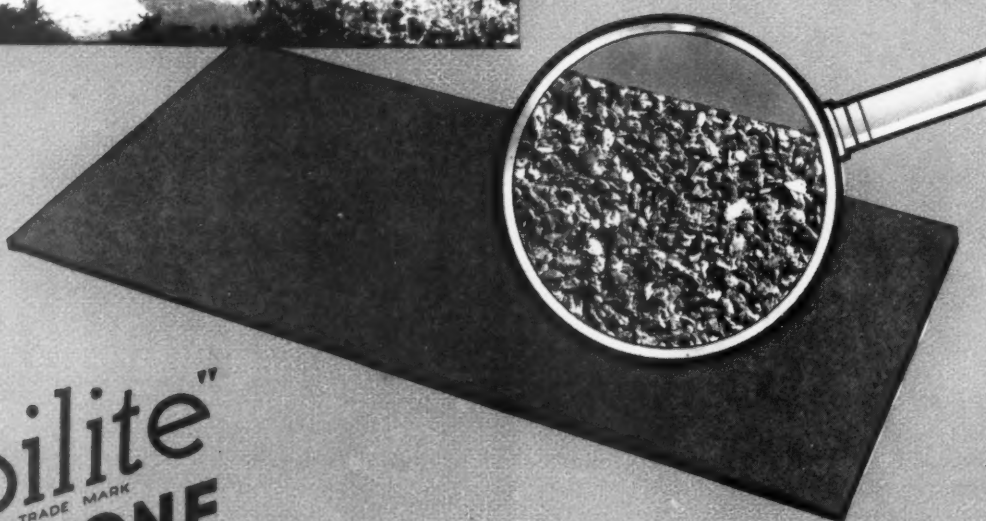
COSTAIN

LIMITED

BUILDING & CIVIL ENGINEERING CONTRACTORS
DOLPHIN SQUARE, LONDON S.W.1 VICTORIA 6624



Durability



"Poilite"
REGD TRADE MARK
NEWTONE
ASBESTOS-CEMENT
SLATES

DURABILITY IS EQUALLY OF IMPORTANCE IN ROOFING, WHICH MUST BE EQUIPPED TO WITHSTAND THE FULL EFFECTS OF THE ELEMENTS.

"POILITE" NEWTONE ASBESTOS-CEMENT SLATES ARE NOW MANUFACTURED WITH A MINERAL GRIT FINISH INTIMATELY BONDED TO THE SURFACE IN NATURE'S OWN COLOURS, COMBINING TONE, TEXTURE AND DURABILITY.

SIZE 24" x 12"

COLOURS BLUE, BRINDLED, RUSSET, GREEN

TURNERS ASBESTOS CEMENT CO LTD

A MEMBER OF THE TURNER & NEWELL ORGANISATION
TRAFFORD PARK

MANCHESTER 17



Raath Power Station
Civil Engineers: L. G. MOUCHEL & PARTNERS LTD.
Builders: JOHN MORGAN (BUILDERS) LTD.

JONWINDOWS

*More than 50 years
of window making.*



JOHN WILLIAMS & SONS

(CARDIFF) LTD.

EAST MOORS ROAD • CARDIFF

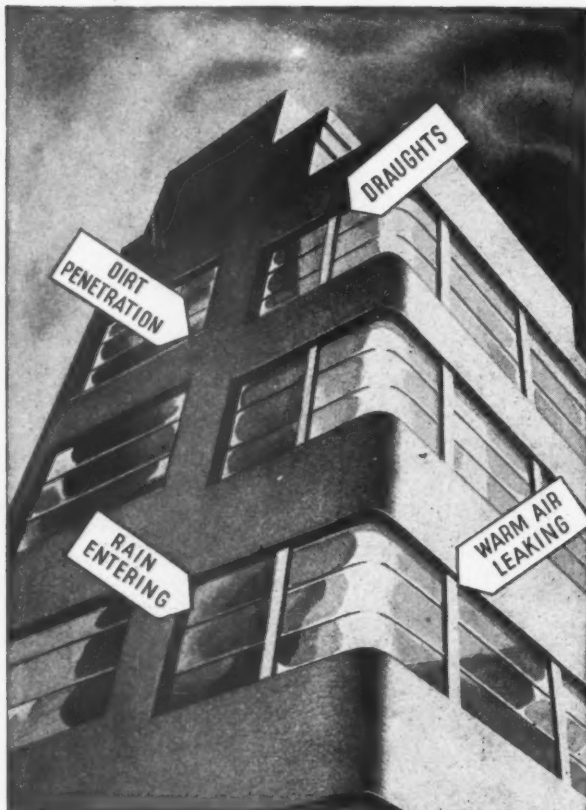
TELEPHONE: CARDIFF 2501

TELEGRAMS: "METAL" CARDIFF

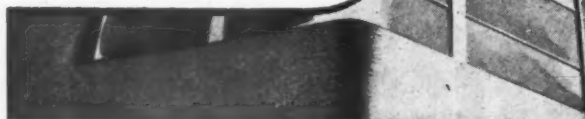
LONDON: BANK CHAMBERS, FINSBURY PARK, N.4

Telephone: ARCHWAY 2294

Telegrams: DISSOLVING, LONDON



'... and you took
such pains'



To prevent failure in joints between dissimilar building materials—e.g., between wood and brickwork or between metal and concrete—a sealing compound should be used that remains flexible. This is because different materials have different rates of expansion and contraction in changing conditions of temperature and humidity. Such a sealing compound is also called for when structural movement or vibration may be encountered in a joint. The jointing around windows is a typical example of a joint that calls for SECOMASTIC. SECOMASTIC is the ideal material for bedding and sealing wood and metal windows and external door frames, sealing overlap joints and gutters and a hundred and one other joints in building construction and maintenance where a lasting flexible seal is required that will take up movement.

Rapidly and neatly applied by SECO hand or patent air gun, SECOMASTIC saves money, both during and after erection.

SECOMASTIC
for Jointing & Sealing

Regd. Trade Mark

A SPECIFIED MATERIAL



Write for further
particulars to:
Secomastic Ltd.,
Sales Dept.,
25, Upper Brook St.,
Park Lane,
London, W.1.

Phone:
MAYFAIR 9080

SECOMASTIC LTD., 25, UPPER BROOK STREET, LONDON, W.1.



**VULCANITE
ROOFING**

for
EVERY TYPE
of ROOF....

Original patentees of Bituminous built up roofs

VULCANITE

TRIDENT WORKS · WIGAN Ltd

GLASGOW · LONDON · BELFAST

"and I want  flush doors throughout . . .



...we can rely on them!"

in
**PLYWOOD or
HARDBOARD**

The F.D.M.A. Standard Flush Door is proving invaluable to Architects, Merchants and Builders. Its great advantages are that it is built to a standard specification, guaranteeing the construction and material of the internal core. It shows a 2 to 1 saving in timber over that of a panel door and in the case of hardboard faced flush doors it also involves a saving of plywood, and in addition permits the keenest prices by reason of standardised production by all F.D.M.A. manufacturing members.

 **FLUSH DOOR MANUFACTURERS' ASSOCIATION LTD.**

Full details of the Association's Flush Doors are available on application to any of the following members or from the Secretary, at Trowell, Nottingham:

Austin Veneer & Panel Co. Ltd., Edmonton, N.18
British Door Marketing Co., Burton-on-Trent
Crosby & Co. Ltd., Farnham, Surrey
Durham Timber Co. Ltd., Hampton, Middlesex
William Evans & Co. (Distributors) Ltd., Liverpool, 3

Exeau Products Ltd., Enfield, Middlesex
Farquharson (Timber) Ltd., London, E.C.2
S. & F. Fryer Ltd., Hazel Grove, Cheshire
Hitchins Flush Woodwork Ltd., East Ham, E.6
Leaderflush Ltd., Nottingham

MacAndrews & Forbes Ltd., London, S.W.1
Manor Joinery Works Ltd., Barking, Essex
Merchant Trading Co. Ltd., London, W.C.2
William Royle & Co. (Manchester) Ltd., Manchester, 2
Stavers & Anderson Ltd., London, E.C.3

Cogen

BUILDING MUST GO ON...

SEVERE WINTER PREDICTED
By Our Own Correspondent
WHEN the meteorologists predict conditions will be so severe as to prevent the building of snow for the lowest temperature and the lowest temperature will be at the very end of the road.

FROST HOLDS UP BUILDING PROGRAMME
The severe frost has held up the building programme at the moment.

HOUSING FIGURES AFFECTED BY COLD WEATHER
The cold weather has affected the housing figures.

BRICKLAYERS IDLE 15° FROST STOPS HOUSE BUILDING
The 15° frost has stopped house building.

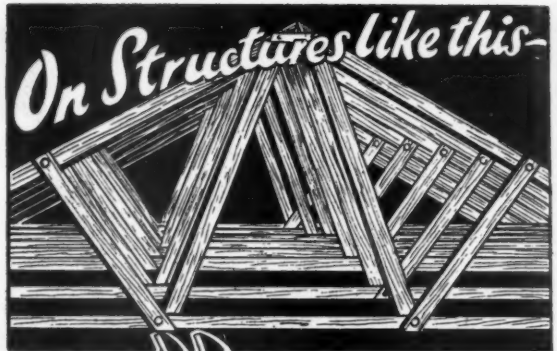
This is the Answer

TRETOL

ANTI-FREEZER

By preventing concrete and mortar from freezing, Tretol Anti-Freezer enables building to continue during severe frost. It is a liquid which is easily mixed with the gauging water—no other deviation from the normal method of work is necessary.

TRETOL LTD., 12-14 North End Rd, London, N.W.11
Tel: SPeedwell 4621 (5 lines) Works: Slough, Bucks.



BULLDOG

TIMBER CONNECTORS

'Bulldog' Connectors have solved the basic problem of Timber Construction. They enable simple joints to be made, in which the load is spread over almost the entire cross section of the wood.

In the past much larger sections of timber were needed in order to make the joints strong enough to carry the load.

Now, Timber Construction can be placed on a sound engineering basis, the consequent increase in efficiency bringing outstanding advantages.

and Save

**TIMBER
TIME
and
MONEY**

1 While the members are held temporarily in place by nails, a bolt hole is bored through the assembly.

2 The members are lifted apart and the toothed connectors are placed between the adjacent faces of the members to be connected.

3 The members are then drawn together by means of the bolt until the projecting teeth of the metal plates are completely embedded in each contacting timber surface.

The 'Bulldog' Timber Connector consists of a steel plate with the edges turned off at right angles to form sharp triangular teeth projecting evenly from both sides of the plate.

'Bulldog' Timber Connectors are also made with teeth on one side only for timber to steel joints, or for portable and demountable timber buildings.

TECHNICAL ADVICE AND FULL DETAILS AVAILABLE ON REQUEST

"BULLDOG"

Timber Connectors

W. F. HOLLWAY & BROTHER, LIMITED,
42, GRAFTON STREET, LIVERPOOL 8.



Decoration and furnishing on a large scale call for large-scale organization and resources. Waring & Gillow's Lancaster factory is equipped with the most up-to-date plant and machinery, manned by highly trained technicians and skilled craftsmen to carry out competitively and expeditiously all classes of decorative woodwork and furniture. They invite enquiries for tenders for Ships, Hotels, Clubs and Public Buildings at home and abroad.

Telephone: MUSEUM 5000

WARING & GILLOW LTD

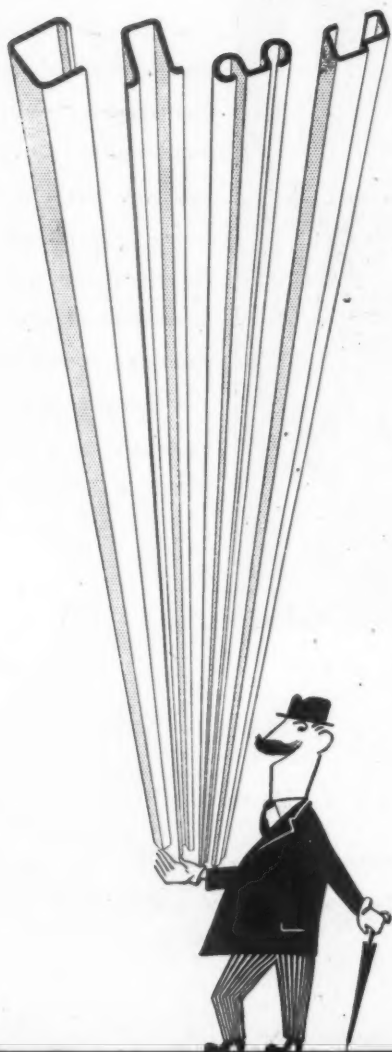
Oxford Street, London, W.1.

Lancaster, Liverpool, Manchester & Brussels



These photographs of the 1st Class Lounge (above) and 1st Class Music Room (below) of the P. & O. liner *Strathmore*, provide an example of the work we did prior to 1939. (Architects: Messrs. McInnes, Gardner and Partners, Builders: Vickers Armstrong Ltd.).

IT'S SO EASY



METAL SECTIONS
LTD

It's so easy to solve constructional problems if you make use of cold formed metal sections. Hundreds of shapes to choose from in steels and aluminium alloys, and in any length you like. Let us know your requirements.

*London Stockists:—Edward H. Stenning & Co. Ltd., 47 Victoria Street
London, S.W.1.*

METAL SECTIONS LTD·OLDBURY·BIRMINGHAM

TEL: Broadwell 1461



TSW

Emblem of Quality



ARMOUR BRAND

for
Protection
Durability
and Finish

Griffiths Bros. & Co

London Limited

PAINT, ENAMEL & VARNISH SPECIALISTS

MACKS ROAD, BERMONDSEY, SE16

TEL BERMONDSEY 1161



NEW
Forrest
FITTING

*I*llustrated is a new addition to the famous
Forrest range of Fluorescent fittings.

SEND FOR
ILLUSTRATED
LEAFLET

**BUILT-IN CONTROL GEAR • LUMINOUS
END PANELS • ONE-MAN MAINTENANCE
NO SCREWS • COVER IN PLAIN OPAL OR
CLEAR REEDED PERSPEX • CEILING OR
PENDANT MOUNTING.**

Manufacturers of all types of lighting equipment

GEORGE

FORREST & SON LTD

OSBORNE ROAD • ACTON • LONDON W.3

Telephone : ACORN 5081

Telegrams : GEFSOL EALUX LONDON

ESTABLISHED
1780
Members of
Electric Light
Fittings
Association



CARDEN SCHOOL, HOLLINGBURY, BRIGHTON
D. J. Howe, M.Inst.C.E., M.I.Mun.E., *Borough Engineer and Surveyor*
P. Billington, A.R.I.B.A., A.M.T.P.I., *Architect. Kirk & Kirk Ltd., Contractors*

HOPE'S

METAL WINDOWS DOORS & DOOR FRAMES LAVATORY CUBICLES

HENRY HOPE & SONS LTD., *Smethwick, Birmingham*
and 17 Berners St., London, W.1

In common with every other periodical, this JOURNAL is rationed to a small part of its pre-war consumption of paper. Circulation is therefore temporarily restricted but would-be subscribers are advised to have their names put on the waiting-list. Their names will then be added to the subscription list as soon as possible. Subscription rates: by post in the U.K. or abroad, £1 15s. od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra.



DIARY FOR DECEMBER JANUARY AND FEBRUARY

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

GLASGOW. H. Ferrington. *Wind Pressures on Buildings in Practice and Design.* At the Ca'doro Restaurant, Glasgow. (Sponsor, ISE.) 6 p.m. DEC. 13

LONDON. Danish Art Exhibition. At the Victoria and Albert Museum, S.W.7. (Sponsor, Victoria and Albert Museum.) UNTIL JAN. 2

National Federation of Housing Societies: Arts and Crafts Exhibition. At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) UNTIL DEC. 18

Poplar Builds Exhibition. At the Central Public Library, 126, Poplar High Street, E.14. (Sponsor, Poplar Borough Council.) UNTIL DEC. 18

150 Years of Lithography Exhibition. At the Victoria and Albert Museum, South Kensington. UNTIL DEC. 31

Building Good Houses Exhibition. At the Science Museum, South Kensington. (Sponsor, BRS.) UNTIL DEC. 31

A Series of Papers on Industrial Design. M. Hartland Thomas. *Industrial Design and the Engineering Industries.* Dec. 15. Milner Gray. *The Industrial Designer and Consumer Goods.* Jan. 19. Gordon Russell. *The Industrial Designer's Responsibility.* Feb. 2. Robin Darwin. *The Training of the Industrial Designer.* Feb. 16. John Gloag. *British Industrial Design and World Markets.* March 2. At the RSA, John Adam Street, W.C.2. (Sponsor, RSA.) All meetings begin at 2.30 p.m.

R. Nicholas. *The Validity of Building Density and other Theoretical Standards.* At Caxton Hall, Westminster, S.W.1. (Sponsor, TPI.) 5.30 p.m. DEC. 9

S. Kennedy. *Premises for the Operation and Maintenance of Public Service Vehicles.* Henry Spurrier Memorial Lecture. At the Jarvis Hall, RIBA, 66, Portland Place, W.1. (Sponsor, Institute of Transport.) 5.30 p.m. DEC. 9

P. W. Macfarlane. *Regional Planning Problems of the North East Coast.* At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) Lunch, 12.45-1.15 p.m., 2s. 6d. Lecture, 1.15-2.15 p.m., 6d. DEC. 14

Dr. Oscar Faber. *The Code of Practice for the Structural Use of Normal Reinforced Concrete in Buildings.* At 11, Upper Belgrave St., S.W.1. (Sponsor, ISE and Reinforced Concrete Association.) 6 p.m. DEC. 14

Sir Malcolm Trustram Eve. *The Town and Country Planning Act, and the Work of the Central Land Board.* At the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. DEC. 14

Exhibition: 40,000 Years of Modern Art. At the Academy Hall, Oxford Street, W.1. (Sponsor, Institute of Contemporary Art.) FROM DEC. 21

International Architectural Student Congress. Dec. 30. 11 a.m. Opening by President, RIBA, at the RIBA; 3 p.m. Opening of International Exhibition of Students' Work by the President of the AA, at County Hall, Westminster; 5.30 p.m. British Council Reception for Delegates. Dec. 31. 10 a.m. John Summerson. *Historic London*; 11.30 a.m. Leo de Syllas. *Modern London*; Afternoon: First Plenary Session. Jan. 1. 11 a.m. Talk by the Minister of Works; 12.00, Richard Sheppard. *Prefabrication*; 2 p.m. Open Debate on *Architectural Theory*. Jan. 2. Visits to Bath, Cambridge, Canterbury and Oxford. Jan. 3. *Town Planning Day*. 10 a.m. Talk by Dame Evelyn Sharp. 11.30 a.m. Max Lock. Talk on his Planning and Survey Group. 2 p.m. B. Lubetkin. *Peterlee New Town*. 4 p.m. *Summing Up* by Arthur Ling. Both these talks will be in the Holborn Town Hall. 5.30 p.m. Tea Party at the Building Centre. Jan. 4. 10 a.m. Professor J. D. Bernal. *Technical Progress*. Afternoon: Visits to BRS, the Herts Schools and British Railways Prefabricated Stations. Jan. 5-7. Sessions at the RIBA. Jan. 6. *British Council Film Show*. Jan. 8. Final Session at the RIBA. Except where otherwise stated, the Congress will meet at the RIBA, 66, Portland Place, W.1. DEC. 30-JAN. 8

MANCHESTER. *Timber as an Engineering Material.* Post Advanced lectures in Building and Civil Engineering. F. D. Silvester. *Selection and Grading of Timber.* Dec. 15. P. O. Reece. *Loads, Designs and Stresses.* Jan. 6: R. T. Walters. *Structural Design.* Jan. 26: F. D. Silvester. *Connections.* Feb. 9: P. O. Reece. *Plywood.* Feb. 23: B. Alwyn Jay. *Posts and Preservation.* March 9: P. O. Reece. *Comparative Efficiency of Timber in Relation to Other Materials.* March 23. At the College of Technology, Manchester. (Sponsors, TDA in collaboration with the Regional Advisory Council for Technical Education.) UNTIL MAR., 1949

SIA Exhibition of Designs and Textiles. At the Cotton Board, York Street, Manchester. (Sponsor, The Cotton Board.) UNTIL DEC. 11

NEWS

THURSDAY, December 9, 1948
No. 2809 Vol. 108

News	523
"A Nice Embroidered Work" ..	524
This Week's Leading Article ..	525
Astragal's Notes and Topics ..	526
Letters	527
Some New London Tube Stations ..	528
In Parliament	528
Offices at Brentford. Designed by Walter H. Williams ..	529
School at Brighton. D. J. Howe Borough Engineer and Surveyor, P. Billington, Borough School Architect ..	531
Factory at Dagenham. Designed by F. R. S. Yorke, E. Rosenberg, C. S. Mardall ..	535
Information Sheets :	
10.J3 Italianized Zinc Roofing	
32.D10 'Sadia' Automatic Electric Water Heaters : U.D.B.—Ball Tank and C.E.L.—Ball Tank Types	To face page 536
Societies and Institutions ..	537
Technical Section :	
Information Centre	538
The Industry	541

Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis.

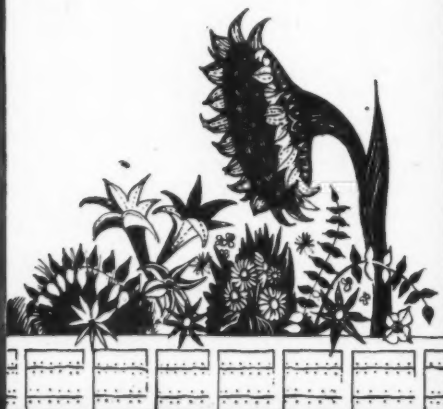
★ means spare a second for this, it will probably be worth it.

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

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

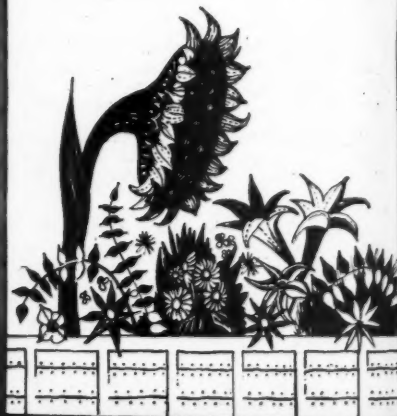
RELICS FROM THE HOUSE OF COMMONS have been presented to the US Congress and each of the 48 states.

They are intended as souvenirs of the common traditions of this country and the United States, and of comradeship in two wars. The relics consist of pieces of stone and lead from the fabric of the House mounted in American mahogany cases. They will hang in the Capitols in Washington, and each of the States. It is also planned to present stones from St. Paul's Cathedral to American episcopal cathedrals, from Eton to American colleges, and from the Temple to the American Bar Associations.



DESIGN
FABRICATION
ERECTION

257 FAMILIES will live in the block of flats now being built at Cromer Street for the Borough of St. Pancras, London, using 1350 tons of steel. Architects: Robert Hening, M.B.E., Anthony M. Chitty, M.A., F.R.I.B.A., A.M.P.T.I., Town Planning Consultants. General Contractors: Stewart & Partners Ltd., London.



**BOULTON
AND
PAUL LTD**

STEEL CONSTRUCTION

RIVETED OR WELDED

LONDON • NORWICH • BIRMINGHAM

F r
TH
Dere
and
part
with
arou
with
app
Wil
Geo
Ric
Geo
men
ing
can
rail

★★
The
Pla
quic
TH
Mr.
Guil
Link
Tow
tion
City
Briti
finan
buil
whic
The
the
three
plet
alth
whic
Cou
plan
be p
The
plet
road
tion
road
right
go
in t

TH
Co
the
at
illu
Jou
spe
alth
a l
had
cha
ing
fea
to
diff
tion
had
Pla
son
con
the
E
To
Bo
of
pos
of

From AN ARCHITECT'S Commonplace Book

THE BIRTH OF A MATERIAL. [From A History of Cast Iron in Architecture, by John Gloag and Derek Bridgwater (Allen & Unwin).] Prior to 1750 cast iron had been used very little in engineering and building, and was employed chiefly for tools, utensils, fire-backs and andirons, grave slabs, and, particularly, cannon and implements of war. For other uses it was a new material and was regarded with the same cautious expectation that until recently was aroused by reinforced concrete, and is now aroused by such substances as plastics. But the seventy-year period from 1750 to 1820 is crowded with the names of adventurous, innovating, mechanical engineers, civil engineers and architects who appreciated the possibilities of the new material. Men like the Darbys, John Wilkinson and his brother William Wilkinson, John Smeaton, John Roebuck, Matthew Boulton, James Watt, Brindley, Cranage, George Stephenson, John Rennie, Tom Paine, Andrew Meikle, Ransom, Thomas Telford, Murdoch, Richard Trevithick, John Rastrick, David Mushet, William Wilkins, John Nash, Sir Robert Taylor, George Dance, Sir John Soane, James Gibbs, the brothers Adam and Sir Robert Smirke. These men used cast iron for engineering, for building and for decoration. Apart from the purely engineering uses in machine and engine construction, the material was employed for the first time for bridges, canal banks, locks and lock gates, aqueducts, stanchions, beams, lintels, sills, windows, tram and railway lines, columns, and often took beautiful and highly decorative forms as railings.

★★

The Minister of Town and Country Planning has expressed hope for quicker progress in REBUILDING THE CITY OF LONDON.

Mr. Silkin was speaking at a luncheon at Guildhall House given by Mr. C. Ernest Link, chairman of the Improvements and Town Planning Committee of the Corporation; he said that all concerned wanted the City of London, which was the jewel of the British Commonwealth of Nations and its financial and commercial centre, to be rebuilt as quickly as possible in a way of which future generations might feel proud.

There was no reason why submission of the City Plan to the LCC should wait for three years, the date laid down for the completion of the County of London plan, although there were some features about it which had to be examined in relation to the County of London plan as a whole. But plans for separate parts of the City might be presented as they were ready.

The Ministry could not commit itself completely on the City plan because there were road plans in it which required consideration, but subject to the possible effect of the road proposals, the plan was broadly all right, and they were now in a position to go ahead with certain compulsory purchases in the bombed areas.

The Chairman of the LCC Housing Committee has spoken further about the LCC HOUSING PROJECT at Wimbledon and Putney Heath

illustrated and described in last week's JOURNAL. Mr. C. W. Gibson, who was speaking at a Council meeting, said that although the scheme had been criticized in a leader in *The Times*, the technical press had approved the scheme. He denied the charge of too much uniformity in the buildings, and emphasized that the natural features of the landscape would be utilized to the best possible advantage. The task was difficult, he said, only because of the limitations imposed by economy. The scheme had already been approved by the Town Planning Committee of the LCC. Mr. Gibson stated his belief that the scheme, when completed, would be the finest of its kind in the country.

Earlier at the meeting, the Chairman of the Town Planning Committee, Mrs. I. M. Bolton, replying to a question on the future of Holland House, said that no definite proposal for development by the Government of part of the grounds had been submitted

to the Council, and it was not known, therefore, whether it would conflict with the proposals already approved by the Town Planning Committee.

The draft development plan, now under consideration by the Town Planning Committee, suggested some development on the Kensington High Street frontage. It would not be in the public interest for the Council to make any statement of its intentions at the present time.

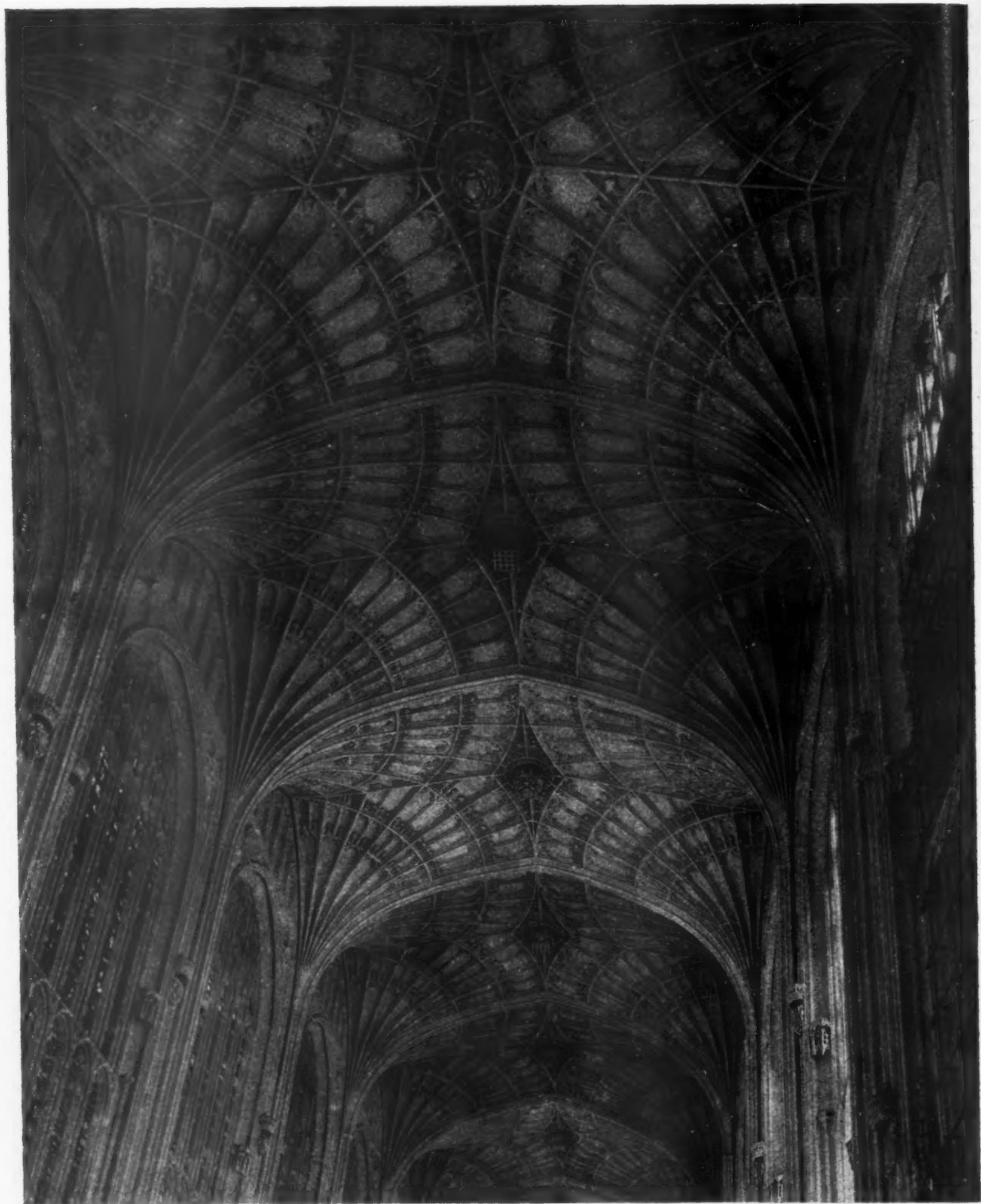
The Journal has received a report on architectural conditions in PORT ELIZABETH, South Africa.

The value of the buildings awaiting erection in this fast-growing industrial city is estimated at £20 million. Most of the plans are still on their drawing boards. The work is being delayed by shortage of architectural staff, dearth of building materials,

lack of skilled labour, and Government building control. Among the projects in hand are four banks, two schools, thirteen blocks of flats, five shops, a couple of big department stores, four garages, seven hotels, a pair of cinemas, four churches, three clubs, thirteen factories, a £400,000 hospital, four wool stores and warehouses, a large number of dwellings and numerous extensions and alterations to buildings in the central business quarter of the city. Several of the architects have declared that they are almost two years behindhand with their work. Arrears of building have been mounting up since the beginning of the war. The £20 million estimate is exclusive of the big national housing schemes for the city, projected or under way. Among the factories is one to cost £140,000 and two which will cost £50,000. More than £3 million worth of buildings are awaiting permits, and a new £3 million railway station may have to be built. More than half the central part of the city badly needs reconstruction.



The International Architectural Student Congress is to be held in London between December 30 and January 8, and its programme is printed in this week's diary. The Congress is sponsored by the International Union of Students and the Architectural Students Association. The Congress will meet at the RIBA, where the plenary sessions will be held and most of the papers read. An international exhibition of students' work will be on view concurrently at the County Hall, Westminster, and visits to Bath, Cambridge, Canterbury and Oxford, and to places of interest in London, have been organized for the visiting delegates. The photographs above are of two of the delegates: left, Raymond Reverdin, from the School of Architecture, Geneva University; and right, Iris Nyström, from Helsinki.



“A Nice Embroidered Work”

The interior of King's College Chapel at Cambridge has recently been cleaned for the first time in its history. The chapel is one of the finest examples of late perpendicular gothic in the country, and the complexity and detail of its vaulting and window tracery is equalled only by that of Henry VII's Chapel at Westminster Abbey, which Wren

referred to aptly, but disparagingly, as “a nice embroidered work.” The photograph above of the vaulting of King's Chapel, taken since the cleaning was completed, shows how well the description applies to perpendicular architecture at its best. The cleaning was done by Mr. W. F. Haslop, of Rattee & Kett, the Cambridge contractors.

★
The
up a
the
PRI
TU

The ten
the pres
in priv
mendat
appoint
Sir Pe
ects: M
Mr. L
Four
L. Gra
son; M
With
mittee
tions, t
nature
a direc
directiv
without
as a t
mittee'
ings o
tioner
1943

Journal
The c
normal
archite
can be
ing
Specia
ship b
archite
with a
a gen
archite
for y
practic
comm
from
local
nation

NE

The
Mane
for
cathed
to C
dama

The
anno
an in
town
porat
facili

The
is to
part
Nott
beha

The
for
are
cour
rece
man
Com
Edu
Indu

T
Lab
held
May
indu
194
Gov

★ *The RIBA Council have set up a committee to consider the present and future of PRIVATE ARCHITECTURAL PRACTICE.*

The terms of reference are: "To consider the present and future position of architects in private practice and to make recommendations." The following members were appointed to the Committee:—*Chairman:* Sir Percy Thomas. *Four Official Architects:* Mr. C. H. Aslin; Mr. J. H. Forshaw; Mr. Leonard Howitt; Mr. R. H. Matthew. *Four Architects in Private Practice:* Mr. L. Grahame-Thomson; Mr. Howard Robertson; Mr. Ralph Tubbs; Mr. R. H. Uren.

With the intention of affording the committee wide discretion as to their investigations, the terms of reference are general in nature and the committee have been given a directive for the purpose of guidance. The directive requires a thorough investigation without undue delay, and six months is given as a time limit for the work. The committee's attention is also drawn to the findings of the Committee of Private Practitioners and Official Architects set up in 1943 which were published in the *RIBA Journal* of September, 1945.

The committee's attention is drawn to the normal means through which a private architect obtains work and any steps that can be taken to increase the work becoming available through such channels. Special attention is drawn to the relationship between private practising and official architects and the need for co-operation with a view to securing full employment and a general improvement in the standard of architecture. Opportunities and facilities for young architects to set up in private practice are also to be considered. The committee are empowered to take evidence from a wide field, including national and local government officers and officials of nationalized industries.

NEWS IN BRIEF

The Dean and Chapter of Manchester Cathedral have issued an appeal for £100,000 towards the repair of the cathedral which, they say, is second only to Coventry in the extent of its war damage.

The Ministry of Works has announced that it has agreed to carry out an immediate inspection of the castle and town walls of Conway, and that the Corporation has agreed to grant the necessary facilities.

The RIBA Conference for 1949, is to be held at Nottingham in the early part of the year. The Lord Mayor of Nottingham has offered full facilities on behalf of the city.

The National Advisory Council for Technical and Commercial Education are considering the provision of a degree course for builders. This was announced recently by Councillor A. Ballard, chairman of Sheffield Technical Education Committee at a meeting of the Yorkshire Educational Association for the Building Industry.

The National Physical Laboratory's "Open Days" in 1949 will be held on the following dates:—Thursday, May 26, 1949, for representatives of industrial organizations; Friday, May 27, 1949, for members of university staffs and Government departments.

MULTIPLE USE ON THE SOUTH BANK

SOCIOLOGISTS and planners are looking more and more towards the principle of multiple use as the answer to the problem: how to achieve what only planning can achieve without having to put up with the inhibiting effects of over-planning. Whether the question is one of preserving the character and beauty of areas scheduled as National Parks without finding that the very act of preservation has destroyed the area's vitality, or whether the question is an urban one such as that of bringing order and efficiency into an obsolescent city centre without losing the liveliness of character on which the best English townscape depends, the same principle of multiple use applies. In the one case the planner's task becomes one of reconciling public access and development programmes with the continued agricultural productivity of the land; in the other case it becomes one of preventing such necessary measures as use-zoning, traffic-planning and density control from destroying that distinctiveness of character in different urban areas on which a satisfactory environment depends from the psychological, social and æsthetic points of view.

A recent article in *The Times* points out that a good illustration of the need for applying this principle is afforded by the South Bank of the Thames, where the LCC are now launching their long-promised attempt to reanimate this semi-derelict area. Their plans include laying out the land between Westminster and Waterloo bridges as a cultural and administrative centre, and these plans will succeed or fail according to whether the London public's traditional unwillingness to cross the river in search of pleasure and refreshment can be overcome. Southwark was once an active recreation centre, but for several centuries, though the South Bank is as near to the Strand as Piccadilly, the river has been an impassable psychological barrier. The holding of the 1951 Exhibition on the South Bank should, however, do much to break this barrier down.

When the exhibition is over, the LCC's new concert hall will remain as the nucleus of the intended cultural centre, and alongside it is to be built the national theatre. But a concert hall and a theatre do not make a new West End. They need life and lights in the surrounding streets and cafes and restaurants to serve them. The rest of the waterfront has been leased to the Ministry of Works for building Government offices, and the danger is that the concert hall and the theatre will find themselves struggling against the gloom of the empty pavements, unlighted windows and closed front-doors of office buildings after hours. Applying the principle of multiple use, the Ministry of Works might well consider using the ground floors of the new Government offices for shops and cafes, and perhaps the first floors—with the magnificent views across the river—for restaurants. They would serve the needs of the thousands of civil servants working in these buildings and

of the residents in the new housing estates nearby ; they would bring the public across the river and on to a reanimated waterfront, and keep the South Bank alive after the civil servants have gone home.

The LCC's plans also include a great hotel close to Waterloo Station. This, too, will fail if visitors to London find themselves emerging from it into streets deserted after office hours. Imagination on the part of the Ministry of Works can prove that a new Whitehall is not incompatible with a new West End and ensure that London's biggest opportunity in the way of central redevelopment is not thrown away.



The Architects' Journal
9, 11 and 13, Queen Anne's Gate, Westminster S.W.1
Phone: Whitehall 0611

N O T E S & T O P I C S

A QUESTION TO MR. GIBSON

I am puzzled by the remarks made by Mr. Gibson, Chairman of the LCC's Housing Committee, at last week's Council meeting, when the Putney-Wimbledon housing project was discussed. He referred to a critical leading article that had appeared in *The Times* (which, incidentally, did not condemn the project, as Mr. Gibson suggested, but only expressed misgivings as to the architectural standard likely to be reached), and then he went on, according to the press report, to say that the technical press had given approval.

Now in this context the technical press can only mean the architectural papers, but the architectural papers dealing with the project had not yet been published when Mr. Gibson spoke. I would like to ask him just what he had in mind. If he was making an optimistic forecast he was sadly wrong. My own comments pub-

lished last week, which were then in the press, expressed the same misgivings as *The Times*, and those of my colleagues were outspokenly critical.

Mr. Gibson also made the old plea that it is all a question of money. But he must surely know that good design is not the same thing as expensive design. And how does he account for the far higher standard set by several of the London Boroughs, who, presumably, have no more money to spend?

FURTHER SKIRMISHING

A further addition has now been made to the cases in which the LCC seems to be using odd methods to fulfil its housing responsibilities. About 40 acres of the Eyre Estate, between Finchley Road and Avenue Road, is to be taken for high density flats; and that is about all the information so far available.

I do not think any responsible person fails to recognize the difficulty which faces the LCC in finding housing sites within the County, or the need for speed, or the fact that some of the present residents in any chosen area are likely to object to any proposal and their objections must not be overvalued. But the urgency of the job must not and need not prevent the new estates being very well laid out and designed, and the LCC should try to enlist the help of, and work with, all other willing local agencies, including landowners, in making the new residential neighbourhoods successful as a whole.

The LCC Housing Committee may say they are doing or will do these two things—particularly at public enquiries

and in broad and vague terms. As regards the first; architects and town planners cannot be blamed if they tend to judge the LCC by the flats already completed, and these seem to call for very special assurances about future intention. As regards the second, the Eyre Estate proposal will provide a good test case. The Eyre Estate has a long and creditable record in estate management and has prepared a redevelopment scheme of its own. It should therefore be possible for the old and the new type of residential estate developers to produce in co-operation a scheme for redevelopment in stages which would in time place on this excellent site a mixed income neighbourhood which would be a model of its kind.

TELEVISIONS ARCHITECTURE

At the re-opening, recently, of the Royal Institute Galleries in Piccadilly the BBC television news-reel cameramen filmed the event for a future programme. The galleries, damaged by the bomb which gutted St. James's Church next door, have had their roof lights restored and have been redecorated throughout. Although on this occasion the cameramen concentrated mainly on the exhibits of the Royal Society of Portrait Painters, who were holding their first exhibition since the war in these galleries, nevertheless a fairly clear view of the exterior and interior was shown.

The BBC are to be congratulated on this start they have made in showing buildings on the screen, but should surely go further and describe buildings in their entirety. The possibilities of exploring the architectural qualities of a building and of design criticism via a television screen are waiting to be developed. A view of the object under discussion might go far to spread the appreciation of good design by those who can afford television sets, who might also, presumably, be able to afford a little patronage of the arts themselves.

PLAN 3

The latest number of *Plan*, the magazine of the Architectural Students' Association, contains a nice balance of information, theory, comment and humour. The analysis of the character of possible employers for the benefit of



Victoria Square, showing part of the car park which at present occupies the entire square. See Astragal's comment below.

students looking for jobs is excellently done. There are also a number of illustrations of schools in various parts of the world. It is difficult to identify a national style except in the case of Denmark and France, though not all countries follow the same model. The Austrian example is by Brazil out of Corb, while the Chicago Institute of Design owes much to Mies van der Rohe and Breuer. The illustrations form a background to the International Architectural Students' Congress to be held next month in London. There is, I gather, also to be an exhibition of students' work from many foreign architectural schools.

AN ENLIGHTENED SQUAREARCHY

So many of the London squares have suffered in the past from the apathy (or worse) of those who live in them that it is reassuring to hear of a case of another kind. The heroes of the tale are the residents of Victoria Square, that pleasant stuccobackwater off Buckingham Palace Road. Architecturally, Victoria Square is perhaps not *quite* first class. But its total effect is altogether admirable—or rather it could be. All it wants is some central feature in the form of a tiny garden or cobbled layout, in place of the existing waste of tarmac. And it is some such feature that the residents want to give it.

At present Victoria Square is used as a car park. It would be more than a

pity if such use should be allowed to continue for the sake of what can only be an infinitesimal contribution to the solution of Westminster's parking problems. All men of good will must hope that the residents will get their way.

"ALICE THROUGH THE FIBRE GLASS"

"I have heard of fibre and I have heard of glass," said Alice, "but I have never heard of fibre glass; what does it mean?" "It means," said Humpty Dumpty, "whatever I choose it to mean." "That must be very confusing."

"Not at all," replied Humpty Dumpty, "it means anything but he and she."

Alice considered for a while and then said: "But what has he and she to do with fibre glass?"

"Nothing at all," said Humpty Dumpty, "at least not much and not often, but you know how old-fashioned even peach-looking glass is nowadays."

In pursuit of her education as an architect, having once penetrated the fibre glass, Alice enjoyed (perhaps that is not the happiest word) many experiences. Those who can get tickets for this year's AA Pantomime to be held at the Mary Ward Settlement Hall, Tavistock Place, will see what they were. They will be initiated into the mysteries of architectural education as practised under the sign of the Cherry Beret.

ASTRAGAL

LETTERS

W. W. Scott-Moncrieff, F.R.I.B.A.

One Hundred Years Ahead

SIR.—Talking of perspective, allow me to quote from the leading article of the *Architects' Journal* for December, 2048:

Quote begins:

"Looking back over the architectural history of the past hundred years, we must begin by recording that extraordinary mania which seized our country immediately after what they used to call World War II and which took legislative form in the so-called 'Town and Country Planning Act.'"

"Hordes of officials and an immense bureaucratic organization were established at public expense whose principal function was to direct where and how people should live and what they should live in. At that time it must be remembered the Atom Bomb had just been brought to perfection. In those days they used to laugh at Victoria and Albert. In fact they were so impressed with their own importance and so intrigued by laughing at previous generations—'old fashioned' was the cry—that they completely failed to realize how foolish they were themselves."

"It is difficult now, in these enlightened times to imagine their supine belief in Science as god and benefactor and that all their hideous inventions would bring to them a millenium of no labour—it was all to be 'saved'!—and all men were to re-enter Paradise by a road prepared for them by standardization, not only of robot products, but of human beings themselves. 'Scientific approach' was the cliché. This was the password and open sesame to the New Era."

"It is, of course, easy to be wise after the event, but the main object of the Act was, by crushing taxation, to build new cities and to herd people together in what they called 'communities,' and this, if you please, when every nation was rising against nation and the Atom Bomb was about to burst."

"No sooner did the 3rd bomb burst (the first two had previously been dropped on the Japanese with a success that flattered the professors), than they saw—in a flash—their mistake. There was panic and the cry went up: 'Disperse—disperse!'"

"At this distance of time we can appreciate fully the irony of that period, for it was immediately obvious that the only way to reduce the slaughter was to string out the population along both the main and subsidiary roads. These thin threads of habitations proved difficult of devastation by the Atom and enabled food and necessities to be distributed quickly both by air and road."

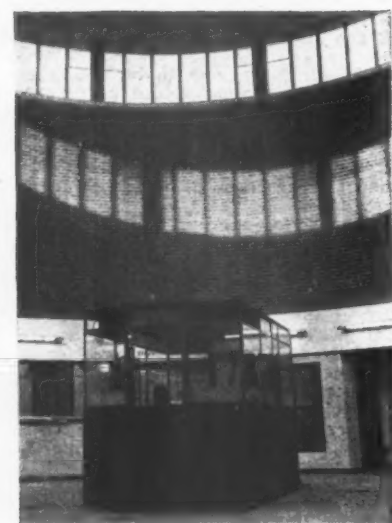
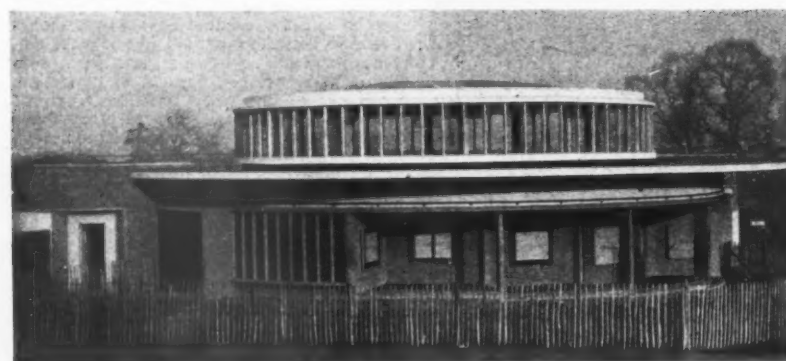
"Alas! Had what they called 'ribbon development,' been allowed to develop naturally there would have been an immense saving of life, limb and suffering. As it so turned out, the people had been taxed to penury in order to bring them to a mass slaughter too terrible to recall."

"We have learnt in our generation, after bitter experience indeed, that every legislator is a potential spanner in the works of Destiny; that, if we will not lay the axe to the root, it is simplest and wisest to leave people alone and, above all, that legislation can never be a cure for the evils of mankind, and as for 'Science'—well, well!"

Quote ends.

W. W. SCOTT-MONCRIEFF

Horham, Diss, Norfolk.



Work on the extensions to the London Central Line Tube is proceeding steadily and the new section to West Ruislip was recently opened by the Minister of Transport. In addition to the building of new stations, thirteen former steam-line stations are being modernised. The photographs on this page show examples of both types. Top: the new façade to Perivale Station, designed by Brian Lewis, late architect to the GWR. Centre: the new station at Hanger Lane, with, left: a view of the interior showing the booking office originally planned by Mr. Lewis, and redesigned to suit post war conditions by Dr. F. F. Curtis, Chief Architect for Western Region. Above: one of the new platforms at Ruislip Gardens, designed by A. S. Quartermaine, Chief Engineer of Western Region, Assistant Engineer: H. Savage. Bottom, left: a platform at Loughton Station, by J. Murray Easton, of Stanley Hall, Easton and Robertson, which was rebuilt just before the war and is now being redecorated. The British Railways Western Region have been responsible for all design, construction, and civil engineering work at the west end of the line; at the east end it has been shared between the British Railways Eastern Region, London Transport, and the Essex County Council.

SOME NEW LONDON TUBE STATIONS

IN PARLIAMENT

Mr. John Platt-Mills (Ind.—Finsbury) asked the Minister of Town and Country Planning, during question time in the Commons, what progress had been made in carrying out the recommendations of the Abercrombie Plan for the decentralization of population and industry in the Greater London Area, and, in particular, in which areas there had been a reduction in the density of the population to the recommended figure of 136 persons per acre.

Mr. Lewis Silkin replied that work on site preparation was in progress at four new towns around London. Corporations had been set up for two other such new towns and two more proposals were under consideration.

In general, schemes for the expansion of selected towns were being worked out by the local authorities concerned, and a phased building programme for all developments proposed for the accommodation of population and industry from London was also in preparation. No permanent reduction of the density of population in inner areas was possible until the economic situation permitted the large-scale building of houses in the new towns and other reception centres.

The Minister was also asked by the same Member when it was proposed to announce the constitution and personnel of the planning board, recommended in the Abercrombie Report, to be set up to carry out the proposals contained in the Greater London Plan.

Mr. Silkin recalled that a committee, under the chairmanship of Mr. Clement Davies (Leader of the Liberals in the House), was set up in 1946 to consider the appropriate machinery for securing concerted action in the implementation of a regional plan for London as a whole. Their deliberations had been delayed by the changes made in planning administration by the Act of 1947, and he had not yet received their report.

"Until I have their report, which I hope to receive shortly, I cannot come to any conclusion in this matter," the Minister added.

Mr. Silkin told another Member that he was considering the report of his inspector on the public inquiry into the proposal for a new town at Basildon, Essex, and he hoped to give a decision in two to three weeks' time.

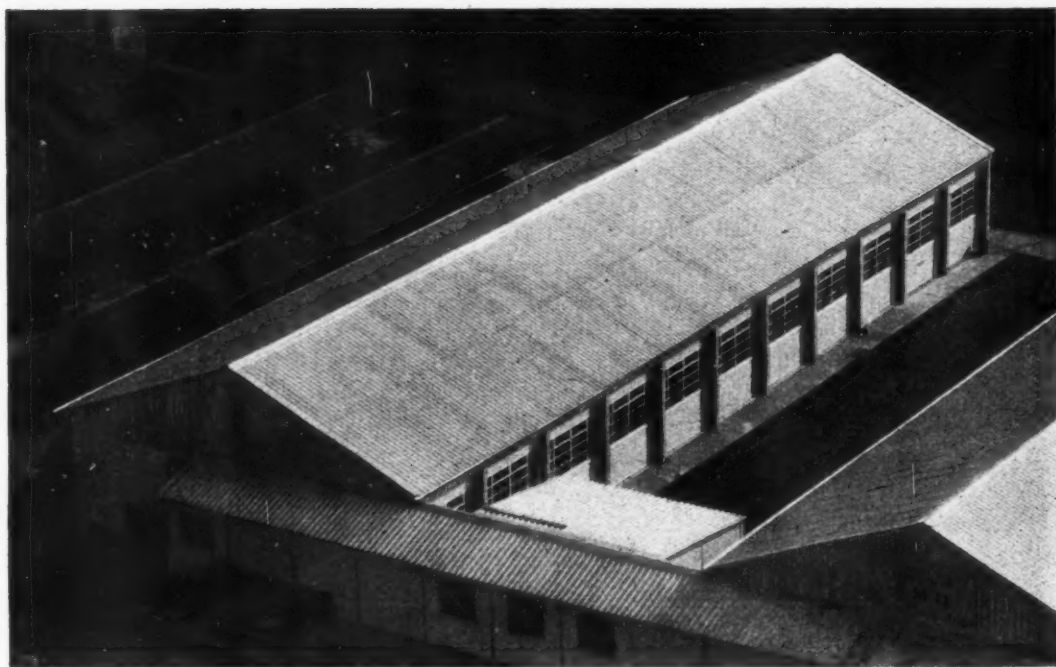
The Minister of Works, Mr. C. W. Key, informed Mr. F. J. Erroll (Con.—Altrincham and Sale) that eleven steel framed buildings were at present under construction in London for use as Government offices. The total area of office space which would be provided by these buildings was about 1,340,000 square feet.

Sir Waldron Smithers (Con.—Orpington) demanded: "How many tons of steel are being wasted on homes for bureaucrats?"

Mr. Key: "No steel is being wasted because it is absolutely essential to provide these buildings in order that we may de-requisition the great amount of office space which we have under requisition at the present time."

When Mr. William Ross (Lab.—Kilmarnock) asked why 1,000 workers employed in the manufacture of aluminium houses had been discharged at Blackburn (Dumbarton) Ltd.'s factory, the Secretary of State for Scotland, Mr. Arthur Woodburn, said it had been decided that the resources available for building houses should henceforward be concentrated on the building of permanent houses. As a result, the building of temporary and permanent sub-standard size houses was coming to an end.

A proportion of this firm's workers was being discharged as its orders for the aluminium houses reached completion. The firm were, however, developing a new type of house which, if successful, might enable them to re-employ a number of their discharged workers.



Typical office block.

OFFICES AT BRENTFORD

DESIGNED BY WALTER H. WILLIAMS

GENERAL.—The BOAC buildings now in course of construction on the Great West Road, Brentford, comprise the following: (a) eight office buildings, each approx. 99 ft. by 33 ft. overall; (b) a connecting main corridor linking the eight buildings, the total length of this corridor being approx. 430 ft. (width 4 ft. 9 in. overall); (c) seven cloakroom buildings, each 12 ft. by 16 ft. 6 in., situated between office buildings.

CONSTRUCTION.—The foundation is of the orthodox type. Isolated column footings are of reinforced concrete, cast *in situ*,

the mix being 1:2:4. Tapered pockets are left in these footings for the reception of the precast columns supporting the superstructure with subsequent concreting to form a monolithic joint between the precast column and the concrete footing. The ground floor slab is 4 in. thick plain concrete laid on an 8-in. layer of hard core. This slab, concreted in 9 ft. by 12 ft. bays, has a $\frac{1}{2}$ in. sand cement screed with a frothed resin board floor finish.

The superstructure (which uses only 12 cwt. of steel per building) comprises the following: precast pre-stressed concrete columns;

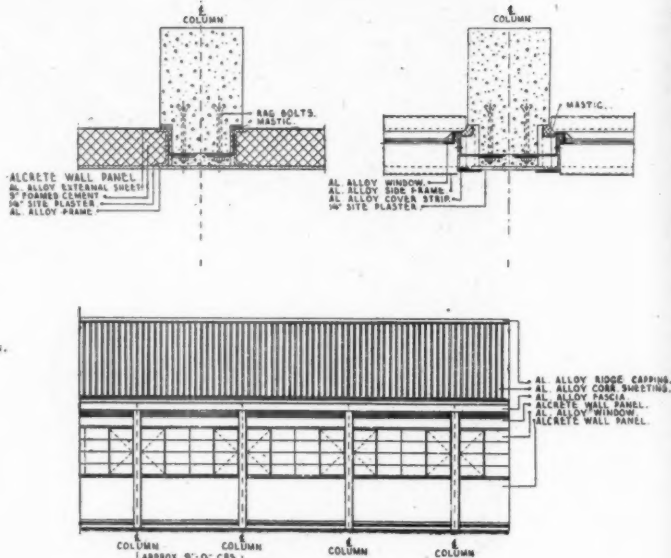
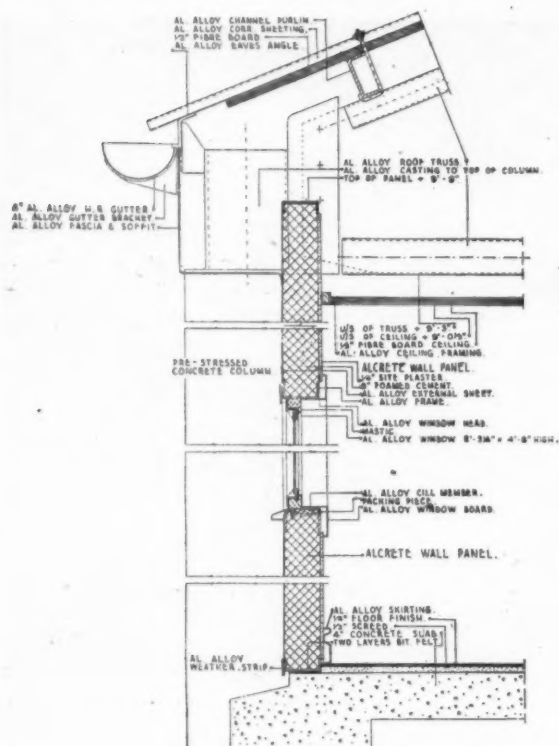
foamed cement wall panels; double sheeted aluminium partitions with glass wool fillings; insulated false ceiling; aluminium windows; aluminium roof trusses and corrugated aluminium roof sheets (chosen for durability of insulating properties) and fibre board on aluminium purlins, with aluminium gable sheeting to eaves level.

Precast pre-stressed concrete columns. These are 7 in. by 12 in., with rebates provided in the internal face to receive the wall panels. The main reinforcement consists of a cable of $12\frac{1}{2}$ in. diameter high tensile steel wires (ultimate stress 100 tons per sq. in.). A precast concrete anchorage cone is embedded in the base of each column, and the cable wires run through this anchorage cone and project approx. 2 ft. beyond for ease of fixing to the stressing jacks. To the top of each column is fixed a light alloy casting, filled with concrete and having a precast concrete anchorage cone embedded at the top. The cable is threaded through this casting and through the end anchorage cone, and by a process of pre-stressing, the column and the top aluminium casting are forced into a complete unit.

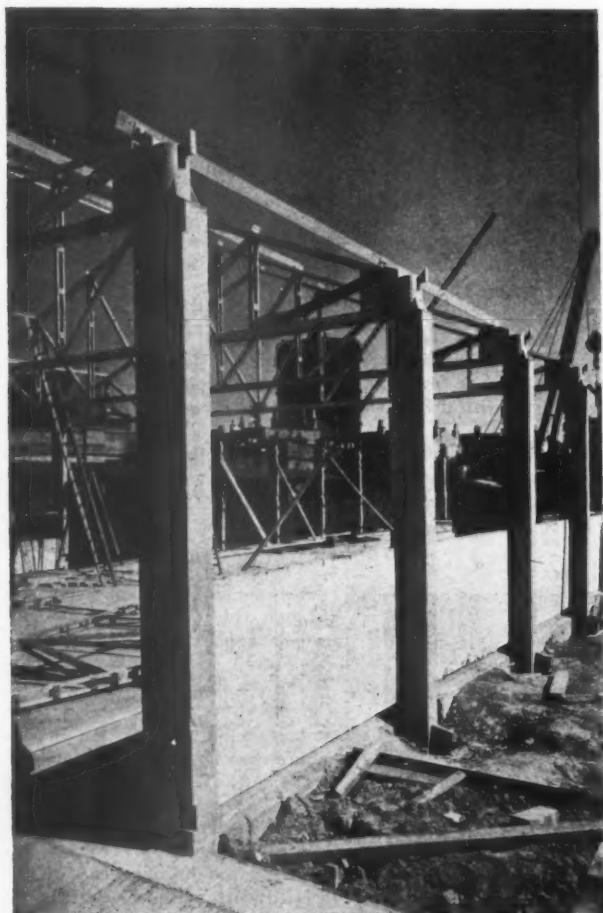
The internal partitions consist of three types, plain panels, window

Below, general view of office blocks.





CONSTRUCTION DETAILS



Left, detail of prestressed concrete columns and foamed concrete wall panels. Below, interior before the erection of partitions.

panels and door panels, made up as follows: A framework consisting of extruded channel sections riveted together, with a skin of light alloy on each side of the channel section, the space between being filled with a blanket of glass silk. The window panels have three channel sections for the fixing of the glazing, and rubber glazing strips are used for the fixing of the glass. Door panels have aluminium door frames, brake-pressed to the requisite profile; timber doors are fixed in the normal manner on site.

The general contractors are Messrs. Structural and Mechanical Development Engineers, Ltd. For sub-contractors see page 544.

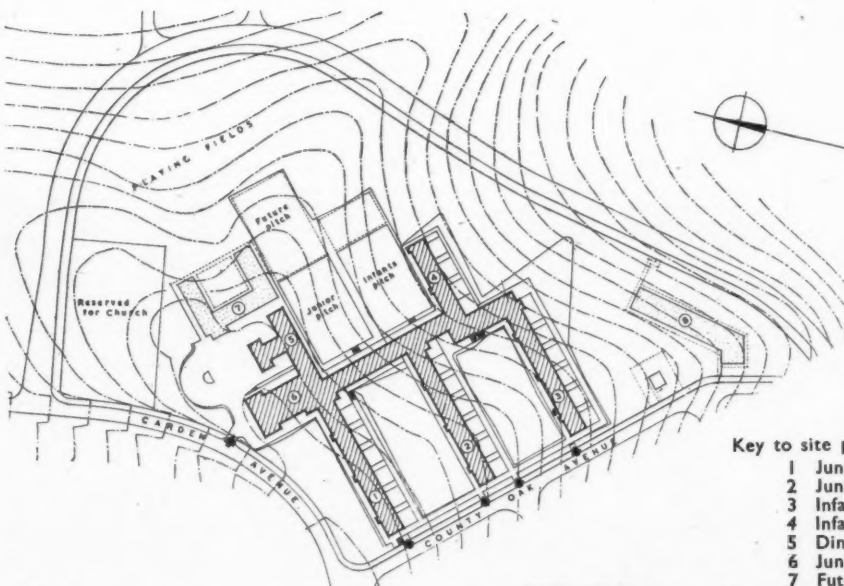




From the south.

SCHOOL AT BRIGHTON

*D. J. HOWE, BOROUGH ENGINEER & SURVEYOR
P. BILLINGTON, BOROUGH SCHOOL ARCHITECT*



SITE PLAN

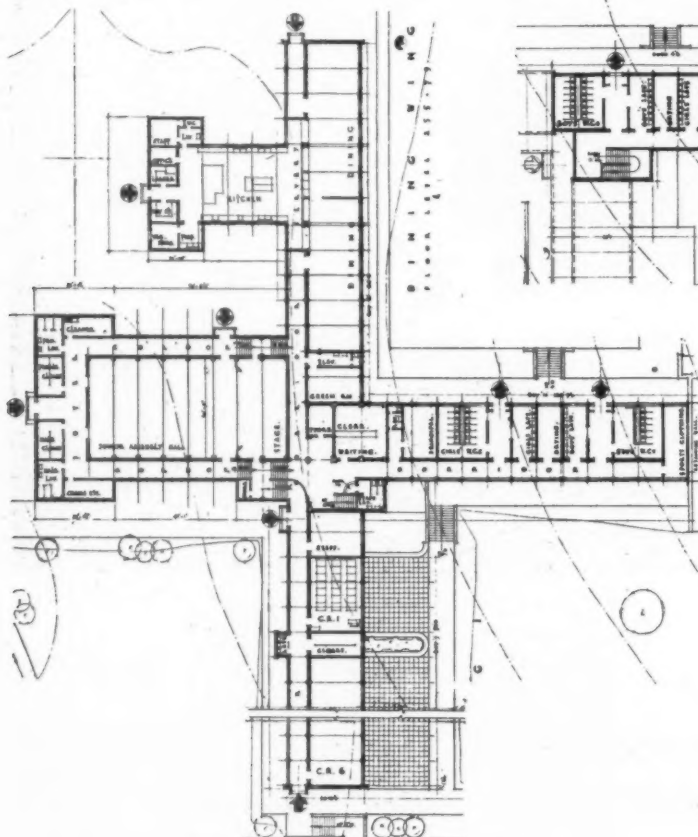
GENERAL.—This is a three-stream Primary School for infants and juniors with places for 840 children. Preparation of the plans was started in the last quarter of 1945 and work on the site began on August 1, 1947. The first classes were held in the new building on September 6, 1948. The complete scheme for the site also includes a Youth and Community Centre and Nursery School.

SITE.—A little over 13 acres in extent, the site is the first of Brighton's post-war housing schemes. The school site rises

Key to site plan :

- 1 Junior Classroom Wing.
- 2 Junior Classroom Wing.
- 3 Infants' Classroom Wing.
- 4 Infants' Classroom Wing.
- 5 Dining Rooms.
- 6 Junior Assembly Hall.
- 7 Future Community Centre.
- 8 Future Nursery School.

steeply from the north-west to the south-east. Over the area occupied by the present buildings, the rise is in the region of 60 ft. This difficulty has been overcome by terracing the buildings and planning the accommodation on three levels. At the changes in level the main buildings, of single storey construction, are connected by the introduction of double storey links.



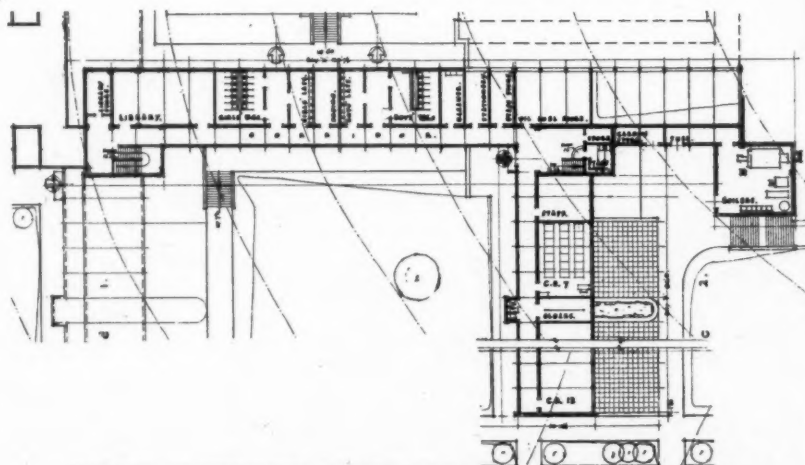
JUNIOR CLASSROOM WING:
Nos. 1, 5 AND 6 ON SITE PLAN

INFANT CLASSROOM WING:
Nos. 3 AND 4 ON SITE PLAN



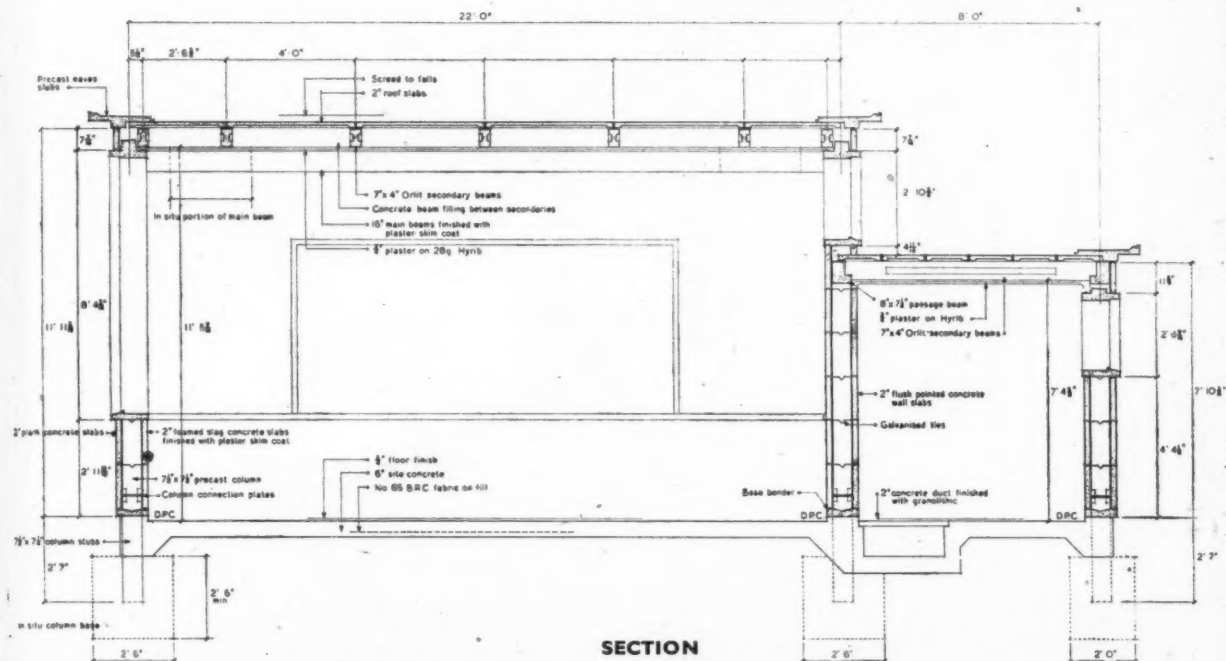
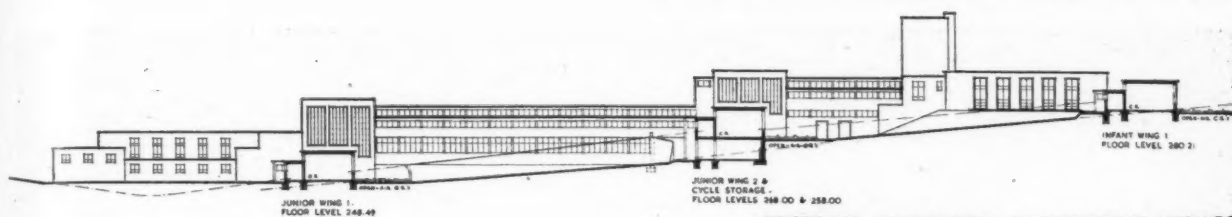
PLAN.—The Infants and Junior Schools are both designed as self-contained departments. The first is planned entirely on one floor level and occupies the highest position, the other is on two levels and occupies the lower part of the site.

Classrooms have an area of 600 sq. ft. and are separated by a small cloakroom or a store-room. Classrooms have 2 per cent. daylight factor. Each has three large windows on the south-east side and clerestory windowing above the corridor flat roof on the other.

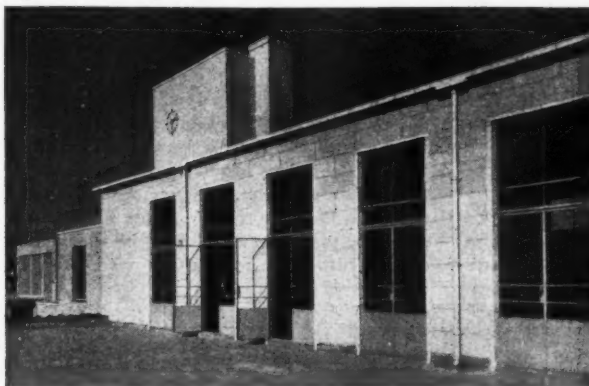
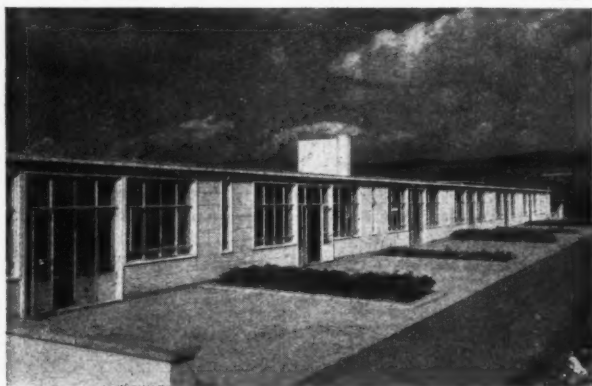


JUNIOR CLASSROOM WING; CLOAKS AND ADMIN. BLOCK:
No. 2 ON SITE PLAN

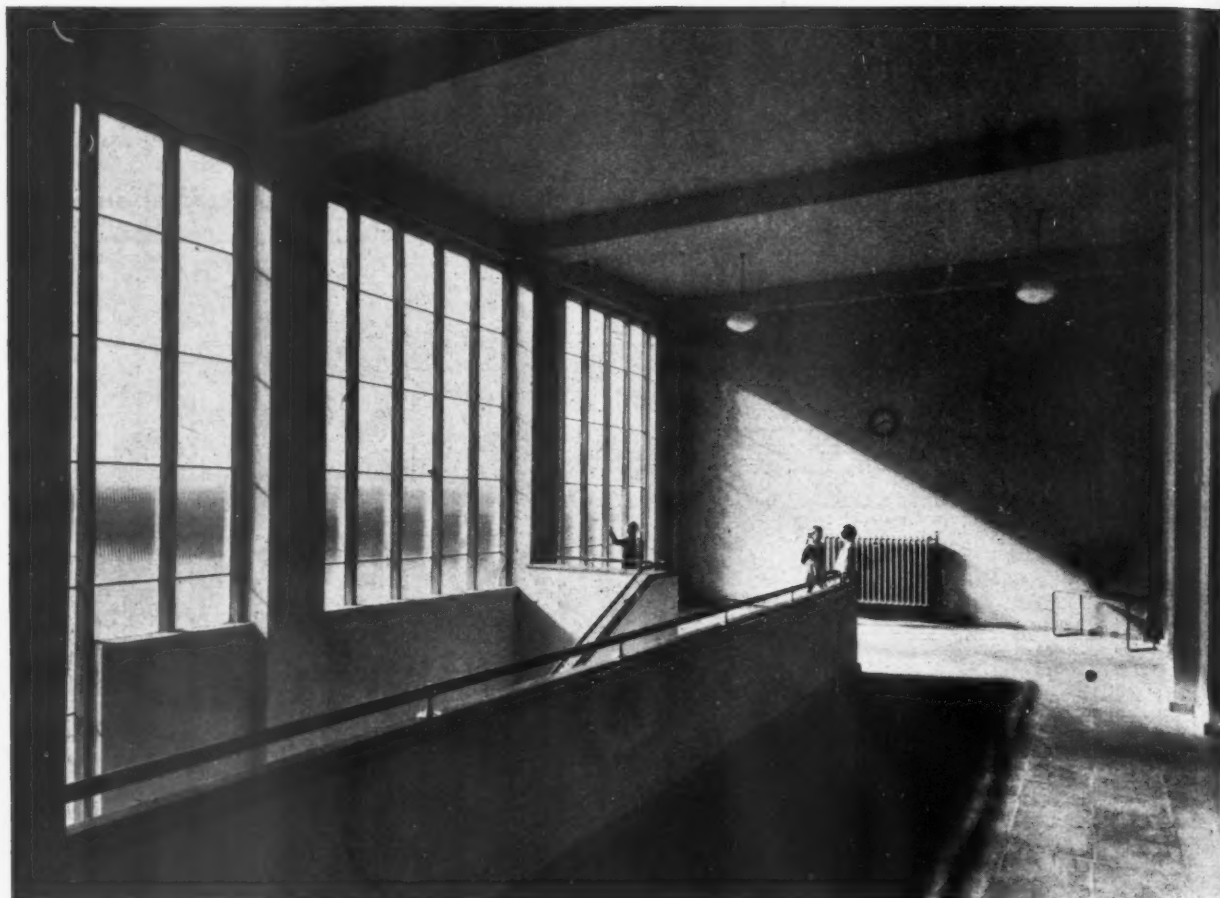
SCHOOL AT BRIGHTON: D. J. HOWE, BOROUGH ENGINEER;



Below, left, typical classroom wing and interior. Below, right, the infants' assembly hall.



P. BILLINGTON, BOROUGH SCHOOL ARCHITECT



Staircase hall, between the infant and junior wings.

CONSTRUCTION.—This school is the first to be built on a system of construction which uses a framing of precast concrete columns, main beams, and secondary beams and precast concrete roof slabbing. Stub columns with steel connecting plates welded to the top ends of the reinforcement are first concreted into the foundation and

floor slabs. The precast columns, $7\frac{1}{2}$ in. square, have steel connecting plates at the foot corresponding to those on the column stub and similarly welded to the reinforcement. The joint is formed by bolting. Connections between columns and the 16 in. deep main beams are formed *in situ*. Secondary beams 7 in. \times 4 in. supported

by the main beam carry the 2 in. thick precast roof slabbing. The cladding to the frame consists of a 2 in. outer concrete slabbing with finish of Hopton Wood stone and an inner slabbing either of dense or foamed slag concrete.

The general contractors were Kirk & Kirk, Ltd. For sub-contractors see page 544.

Below, the school from the south.



S C H O O L A T B R I G H T O N



The office block from the north-west.

FACTORY AT DAGENHAM

DESIGNED BY:

F. R. S. YORKE

E. ROSENBERG

C. S. MARDALL

GENERAL.—The labour employed on this estate is predominantly male. To achieve a balance of labour new light industry for the employment of women is being planned.

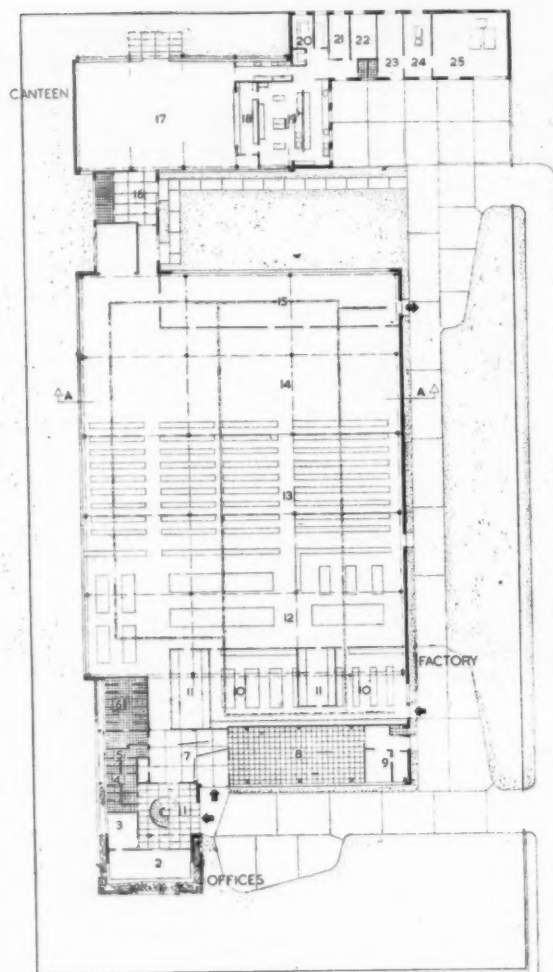
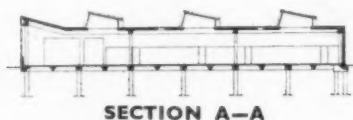
PLAN.—The clothing factory is a single storey structure with a two storey office building. There is accommodation for approximately 275 women and 20 men. The factory will expand on the south and ultimately employ 450 workers. The raw material comes in by lorry and enters the factory at the south-west corner. From the store (10) it goes in a straight line production through the designing rooms (11), cutting (12), machining (13), finishing and pressing (14) to the despatch (15). The office staff and workers enter at the north-west corner; after changing in the locker room the

Below, the canteen from the north-east.



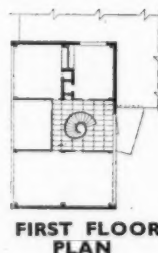
G. DENNE-MILLER

F A C T O R Y A T D A G E N H A M



workers clock-in in the crush hall (7). The entrances and the time recorders are supervised by one time-keeper. On the ground floor of the office block there is a show-room (2), with a waiting and fitting room (3). The canteen is designed to serve lunches for 200 workers in one sitting. The factory is lit by a large window in the north wall, and by three asymmetrical south-north monitors. To prevent the sun from entering the factory the monitors have 1 ft. 6 in. deep vertical steel sheet baffles spaced every 3 ft. 0 in. There are no windows in the south wall.

CONSTRUCTION. — Foundations—pre-cast concrete piles. Superstructure—reinforced concrete frame; column spacing; factory 30 ft. by 40 ft., lockers 20 ft. by 20 ft., office block 18 ft. by 20 ft., canteen barrel vaults 20 ft. by 42 ft. Floor *in situ* R.C., roof hollow tiles. Circular stairs R.C. All exterior walls are 11 in. cavity. Internal partitions in lightweight foamed slag and steel. Monitors are in aluminium.



INTERNAL FINISHES.—The floors of the offices are of composition block and that of the entrance is stone. Those of the lockers and lavatories are cement tiles and the factory and canteen floors are of bitumen tiles. All walls and ceilings are plastered. Floor panel heating is used throughout.

GROUND FLOOR PLAN (Scale: $\frac{1}{32}'' = 1'0''$)

Key :

- | | | | | |
|-------------------------|------------------------|----------------------------|-----------------|----------------|
| 1. Entrance Hall. | 6. Women's Lavatories. | 11. Designing. | 16. Crush Hall. | 21. Office. |
| 2. Show Room. | 7. Crush Hall. | 12. Cutting and sorting. | 17. Canteen. | 22. Staff. |
| 3. Waiting and Fitting. | 8. Lockers. | 13. Machining. | 18. Servery. | 23. Mechanic. |
| 4. Staff Lavatories. | 9. First aid. | 14. Finishing and pressing | 19. Kitchen. | 24. Generator. |
| 5. Men's Lavatories. | 10. Stores. | 15. Dispatch. | 20. Stores. | 25. Boilers. |

BY F. R. S. YORKE, E. ROSENBERG & C. S. MARDALL

M

hall
time
one
floor
now-
and
n is
200
tory
orth
rical
vent
tory
deep
aced
e no

nda-
siles
con-
ing;
kers
8 ft
ults
situ
cular
are
tions
and
ium.

-The
posi-
rance
and
and
s are
and
panel

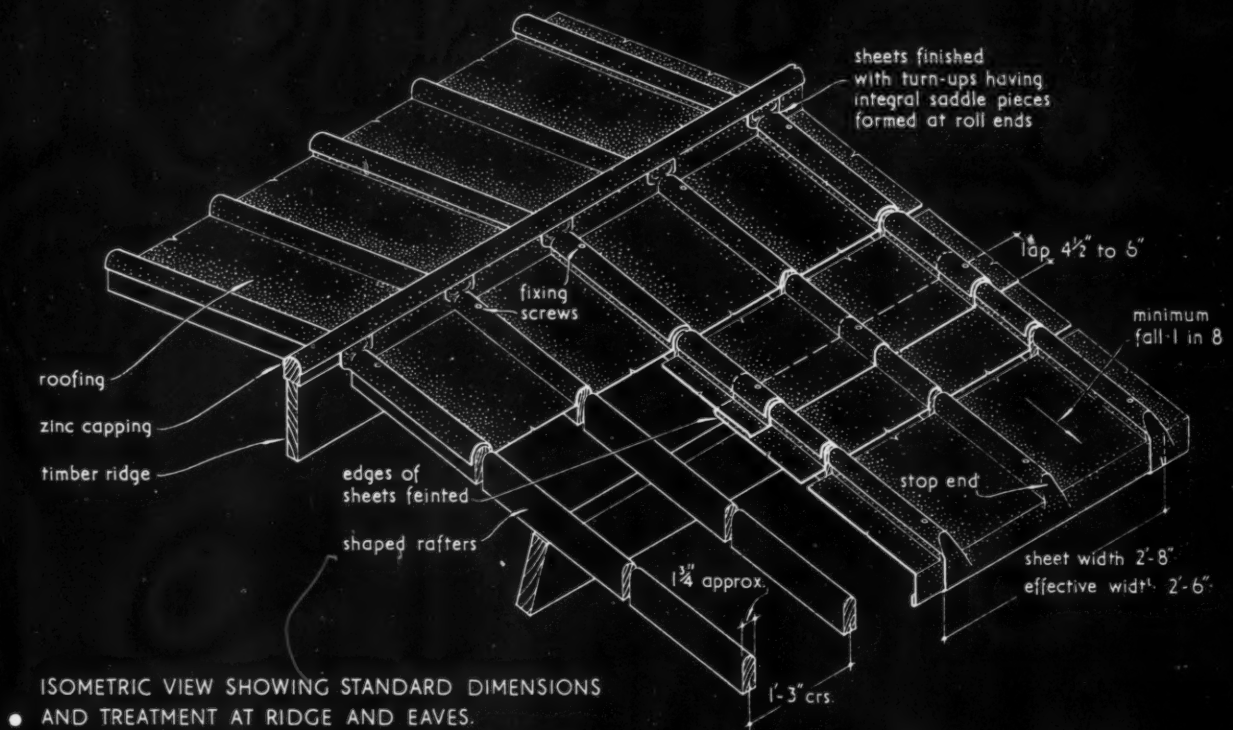
ALL

ZINC APPLICATIONS

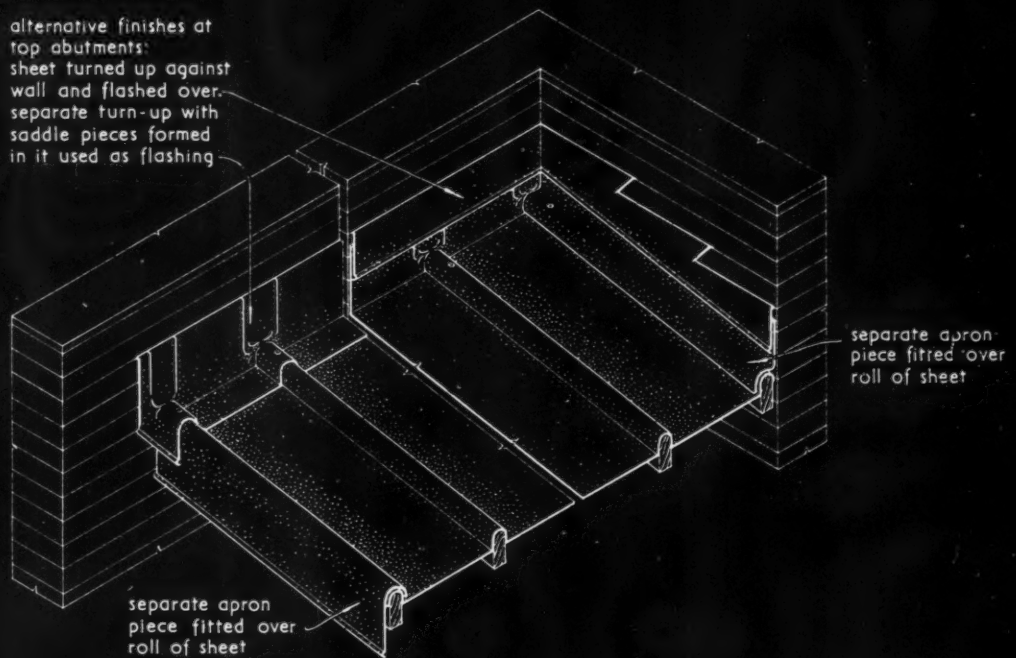
10.13

The Architects' Journal Library of Information Sheets 125. Editor: Cotterell Butler, A.R.I.B.A.

10.13



alternative finishes at top abutments:
sheet turned up against wall and flashed over.
separate turn-up with saddle pieces formed in it used as flashing



ISOMETRIC VIEW SHOWING FINISHES AT TOP OR SIDE ABUTMENTS AND AT VERGE.

10.J3 ITALIANIZED ZINC ROOFING

This Sheet describes the system known as Italianized zinc roofing. It enables the zinc sheets to be laid direct on to rafters without the use of boarding. These roofs last as long as those laid by other systems and, although insulation against sound and heat are less good, they have the advantage of economy since boarding is not required for supporting the zinc sheets. Additionally, the sheets, formed away from the site, can be laid quickly and easily. These advantages obtain even if, as is sometimes the case, boarding or other decking material is added to improve insulation. Alternatively, the sheets may be used in the same way as corrugated galvanised steel sheets and laid direct on to purlins, which would have to be suitably spaced to support them. For information on zinc roofing generally, including finishes, see Sheets 10.J1 and 10.J2.

Construction

Structural support: The supporting roof structure consists of rafters with half-round tops spaced at 1 ft. 3 in. centres and normally 1½ in. wide and of depth to suit the purlin spacing. The minimum fall should be 7° (1 in 8). Steeper pitches are permissible as zinc does not creep. Laps should be 4½ in. to 6 in. in the direction of the fall. The larger lap is essential with falls below 20° (1 in 3).

Sheets: No. 16 zinc gauge sheet (No. 19 I.S.W.G.), weight approximately 1½ lb. per square foot, is recommended to ensure adequate rigidity where no decking is used. No. 14 zinc gauge (21 I.S.W.G.) is suitable for covering boarded roofs. Standard Italianized sheets are made from the usual standard sheets 8 ft. long by 3 ft. wide, and their finished size is 8 ft. long by 2 ft. 8 in. wide. The effective width covered by each sheet is 2 ft. 6 in.

Fixing

The standard 2 ft. 8 in. wide sheet has three ½-round rolls formed longitudinally, one on each edge and the other in the centre, spaced at 1 ft. 3 in. centres. The rolls are nominally 1½ in. wide and 1½ in. high.

The sheets are fixed to the rafters through the top of each roll by galvanised screws (2 in. x No. 14) fitted with specially shaped dished zinc washers and spaced at 2 ft. 6 in. centres maximum. The holes are punched from the under-side of the sheet through the tops of the rolls, and are slotted to allow for expansion. By punching from the under-side the holes are given a slight turn-up which acts as a water check. A widely specified method of fixing is to use 9 screws per sheet; i.e. 3 across each lap joint and 3 across the middle of the sheet. The top sheets are either fitted with a turn-up to finish against a timber ridge, which is then covered with a zinc capping, or they may fit against a parapet wall, when the turn-up is flashed in the usual way. The rolls are finished by a saddle piece formed partly by machine and then completed by hand; alternatively, a separate turn-up with saddle pieces formed in it can be used

in much the same way as a flashing. The bottom sheet can be finished with turn-downs suitable for a fascia finish or for carrying into a gutter. The ends of the rolls can be closed with stop-ends usually formed by hand, although some manufacturers have special tools for closing the ends of the rolls by machine. At verges and against parapets separate apron pieces are fitted to the side edges of the sheets. In both cases the apron piece is shaped to fit over the top of the roll on the sheet.

Laying

When laying the roof, work is preferably commenced on the side of the roof furthest from the prevailing wind. The bottom sheet is laid and screwed down on one side only. The next sheet is laid over the free corrugation and so on until all the lower sheets are in position. The sheet above is then fixed allowing for a lap of 4½ in. to 6 in. according to the fall of the roof, the ends of the sheets at the lap being slightly feinted. The laying of the second row of sheets is then completed and subsequent rows until the roof is covered.

In the case of boarded roofs, wood rolls may be used in short lengths at the lap between sheets, or alternatively omitted altogether, provided care is taken during screwing down. On such roofs the ends of sheets between the rolls are sometimes joined by a simple welt.

Sound Transmission

In recent years it has been found that the sound transmission through metal roofs can be lessened by the use of sound proofing (anti-drumming) mastics such as those used on motor car bodies. They are applied by brush or by spraying, either before or after erection, and are comparatively cheap.

Applications

Italianized zinc roofing is suitable for covering large buildings such as warehouses, garages and railway stations. It has been widely used in the United Kingdom by the Port of London Authority and the railway companies. Several such roofs at the London docks are still in sound condition after 50 years' exposure.

Further Information

The Zinc Development Association is available to answer questions and to advise on technical problems dealing with this subject generally. Publications are available on request.

Compiled from information supplied by:

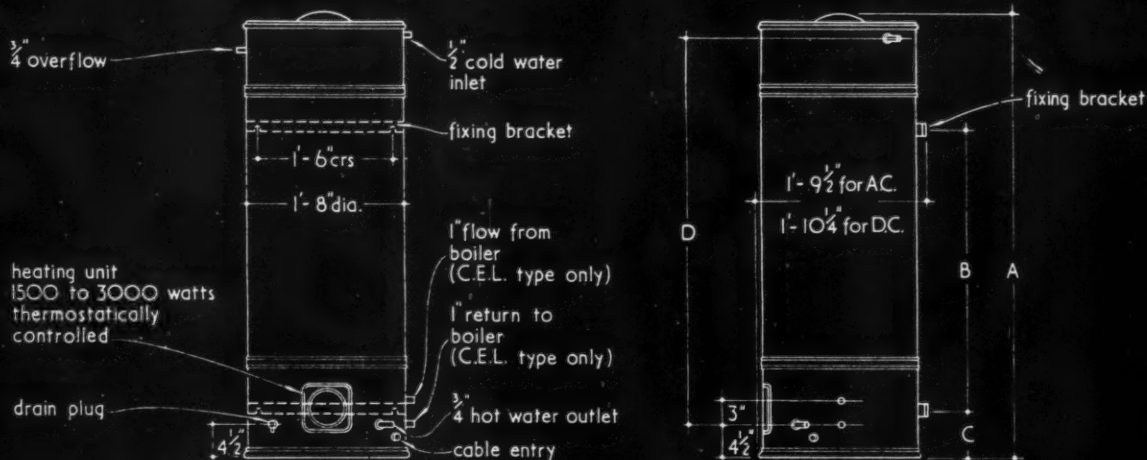
Zinc Development Association.

Address: Lincoln House, Turl Street, Oxford.
Telephone: Oxford 47988.

WATER HEATING UNITS | ELECTRIC

32.D10

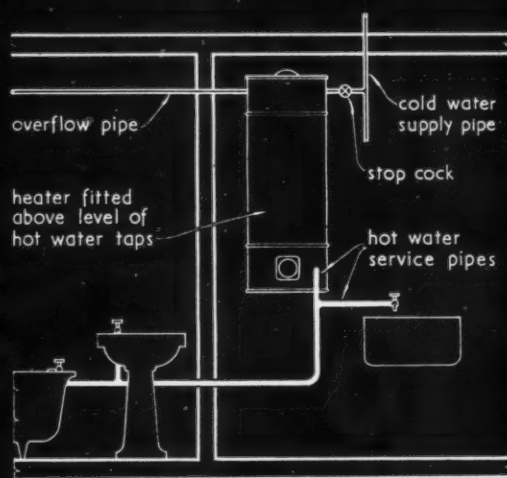
The Architects' Journal Library of Information Sheets 126. Editor: Cotterell Butler, A.R.I.B.A.



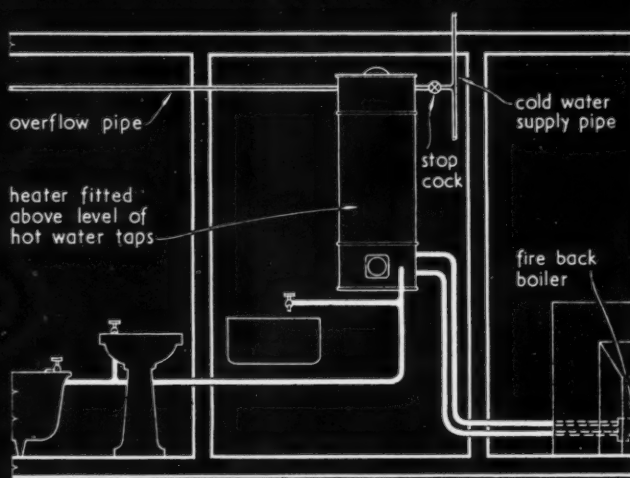
FRONT AND SIDE ELEVATION OF U.D.B.-B.T. AND C.E.L.-B.T. WATER HEATERS WITH BALL TANKS.

type	capacity	A	B	C	D
U.D.B.-B.T.	20 gallons	3'-6 1/2"	2'-0"	4 1/2"	2'-11 1/2"
U.D.B.-B.T. and C.E.L.-B.T.	30 gallons	4'-8 1/2"	3'-0"	6"	4'-1 1/2"
U.D.B.-B.T. and C.E.L.-B.T.	35 gallons	5'-3 1/2"	3'-0"	1'-0 1/4"	4'-8 1/2"

CAPACITIES AND DIMENSIONS OF U.D.B.-B.T. AND C.E.L.-B.T. WATER HEATERS WITH BALL TANKS.



TYPICAL INSTALLATION OF U.D.B.-B.T. HEATER (ALL ELECTRIC).



TYPICAL INSTALLATION OF C.E.L.-B.T. HEATER (COAL AND ELECTRIC).

32.D10 ·SADIA· AUTOMATIC ELECTRIC WATER HEATERS: U.D.B.-BALL TANK AND C.E.L.-BALL TANK TYPES

This Sheet, one of a series on automatic electric water heaters, describes a range of types fitted with built-in cold water tanks suitable for operation direct from the main or from the storage tank in the roof. Two models are available with the ball tank, the U.D.B.-B.T., manufactured in 20, 30 and 35 gallon capacities, and the C.E.L.-B.T. (coal-electric), specially designed for use in conjunction with a saddle or back-boiler and available in 30 and 35 gallon capacities.

Design

Both models consist of a tinned copper container for hot water and a tinned copper ball tank for cold water insulated from each other and connected by a cold water feed pipe. There is an internal vent or expansion pipe from the hot water container to the ball tank. This vent is air lagged to prevent loss of heat. Both the container and the ball tank are fitted inside a steel outer case with access, in front of the cylinder, to the heating unit.

In the C.E.L. type a patent drum calorifier is mounted inside the hot water container. This calorifier is self-filling and self-venting, and does not require a separate cold water feed and vent pipe for the primary circulation. It is fitted with flow and return connections for the pipes from the solid fuel boiler.

Both models are suitable for wall fitting or for standing on the floor.

Construction

The hot water container is of 18 gauge copper sheet with copper-welded seams, tinned inside and out by immersion in pure molten tin, and twice tested at 100 lb. per sq. in. pressure. The cold water storage tank of tinned copper is automatically controlled by a $\frac{1}{2}$ in. J.C.S.W.R. ball valve fitted on the right side with plumber's union for $\frac{1}{2}$ in. lead pipe. The overflow, fitted with $\frac{3}{4}$ in. plumber's union for lead, is on the left side 1 in. lower.

The space of 2 in. between the hot water container and the outer case, and of 3 in. between the top of the container and the bottom of the ball tank is packed with re-granulated cork as heat insulator.

The outer steel case is rust-proofed both inside and out and finished in white enamel, relieved by two blue bands. A moulded rubber ring is fitted to the base of the apparatus in order to ensure a close, dirt-free contact with the floor. The heaters are also fitted with brackets for wall mounting.

The hot water outlet is brought out through the outer casing near the bottom ($\frac{3}{4}$ in. male B.S.P.). Coupling unions screwed $\frac{1}{2}$ in. female B.S.P. thread for iron pipe, or compression unions for $\frac{3}{4}$ in. copper tube can be supplied as an extra.

C.E.L. model only: The hot water outlet and the flow and return are always on the same side, usually on the right, but if required heaters with all three connections on the left side can be supplied without extra cost.

The connections for the flow and return pipes are both screwed 1 in. male B.S.P. thread. Coupling unions, screwed 1 in. female B.S.P. thread for iron pipe or compression unions for 1 in. copper tube can be supplied as an extra.

Wiring and Loading

The heaters are completely wired internally in closed conduits, the electrician having only to connect a pair of leads to the terminals together with an earth wire. Screwed conduit can be used right up to the heater. The heating unit near the bottom is thermostatically controlled and has a standard loading of 2,000 watts, which, if specified when ordering, can be increased to 2,500 or 3,000 watts without extra cost. All elements are units of 500 watts each and interchangeable and withdrawable even when the heater is full. The standard heaters are suitable for A.C. supply only. For D.C. supply, heaters can be supplied with a mercury switch type thermostat and a projecting cover plate as an extra.

Operation

Both the U.D.B. and the C.E.L. types operate on the displacement principle, the cold water entering at the bottom of the inner cylinder displacing the hot water which is drawn off from the top through the hot water draw-off pipe.

Application and Installation

Typical installation arrangements are shown in the illustrations.

These models do not require an external vent or expansion pipe and may be supplied with cold water from the water mains or from another storage tank at a higher level. Either model should be fitted above the level of all the hot water taps which it has to serve. Overflow pipes are required.

The heaters are particularly adapted to installation in blocks of flats, as a saving in plumbing costs results from the elimination of the expansion pipes and the use of a common down service pipe to supply cold water from a storage tank in the roof to all the cold water taps as well as the ball valves on the heaters.

C.E.L. Model: This model is specially designed for use as an alternative to the traditional hot water cylinder in a solid fuel fired water heating system.

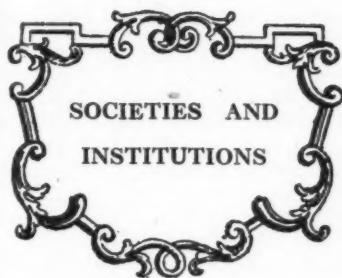
Compiled from information supplied by:

Aidas Electric Ltd.

Address: Sadia Works, Rowdell Road, Northolt, Middlesex.

Telephone: Waxlow 1607

Telegrams: Aidaselect, Greenford, London.



Speeches and lectures delivered before societies as well as reports of their activities, are dealt with under this title, which includes professional societies, trade associations and government departments. To save space they are represented by their initials—see front cover. Lectures cannot usually be reported in full, but the extracts given are in the speaker's own words.

TPI

James W. R. Adams

November 11. PRESIDENTIAL ADDRESS to the Town Planning Institute, delivered by James W. R. Adams in the Assembly Room at Central Hall, Westminster.

James W. R. Adams: My father described town planning as "the Art of shaping and guiding the physical growth of towns and rural communities in harmony with social and economic needs." He added that in its narrowest geographical scope it took the form of site planning and, in its widest scope, of regional planning. "Regional" in this context, of course, is used in the widest geographical sense of the word, and such planning can include therefore "national planning." I am one of those who agree with Bernard Shaw's view that failure to define the meanings of words, the wide divergencies in the meanings conveyed to different people by any given term, are responsible for much of the trouble in the world today. The word Art is so much misused, apart from the fact that it has long ceased to represent its original meaning, that it is well-nigh impossible for a group of persons to discuss the question of whether town and country planning is an Art in its own right without getting hopelessly confused. To those who are sufficiently interested in this matter of what constitutes "Art," I commend a work by T. M. Greene, published in 1947 by the Princeton University Press, entitled *The Arts and Art of Criticism*. Mr. Greene defines "major" and "minor" arts and "pure" and "mixed" arts. To the commonly accepted five "major pure arts" (generally known as the fine arts), music, painting, sculpture, literature and architecture, Greene adds the dance as a sixth pure art.

THE ART OF TOWN PLANNING

The American landscape architects and our own Past-President, Thomas Mawson, whose pupil I am proud to have been, have claimed that landscape architecture is also a fine art in its own right. This is not the time and place to speak of these claims, but it is interesting to observe that Greene describes landscape architecture as "a highly developed minor art which has, on notable occasions, achieved relative self-sufficiency." No one would claim that town and country planning is a "pure major" art, that is that it should, like the dance, be added to the generally accepted five fine arts; but the fact that it is a "mixed" art does not affect its claim to be regarded as an art in its own right.

An interesting point which becomes apparent when one examines this question, is that pure art as well as mixed art may involve knowledge and practice of one or more of the pure and applied sciences; mathematics in the case of music for example. This is particularly true of architecture among the pure arts, and of town and country planning among the mixed arts. Hence the important relationship to town and country planning of engineering and land surveying, of geography and economics, of political economy and sociology, of history and anthropology, and of law and administration, as sciences, in addition to its intimate relationship with architecture and landscape architecture as arts.

You may have observed incidentally that I have refrained from describing the practices I have just mentioned as "exact" sciences. It was apparent to me when examining the list that some were quite obviously exact sciences and some were equally obviously not; I found a special difficulty, however, when I came to the law. I wonder whether my legal friends would agree with me in describing the law as a "precise" rather than an "exact" science? Let me make it clear at this point that I do not disagree with one of the younger contemporary writers, Alex Comfort, when he says that thought is a cultural unity, and when he deplores the mistaken idea that there is a fundamental hostility between science and art. I agree with him that we miss nowadays the cultural unity in men of education who tried to embrace the theory of nature and the theory of aesthetics and called the combination "philosophy." I don't think, however, that those who wish to recapture this unity realize that the development of the "theories of nature," which we can describe as modern scientific thought and achievement, is such that it is no longer possible for mortal minds adequately to comprehend the whole field of science and art.

THE NEED FOR DESIGN

The practitioner of town and country planning, of course, may be especially gifted or trained or experienced in one or more of the arts and sciences with which he is concerned, but I suggest that in any event he must be above all things a *designer*; if you don't dislike the somewhat ambiguous term, an *artist*. If he is only an artist without a really sound knowledge of most of the relevant sciences, then (as a town and country planner) he will be a bad designer. If, on the other hand, he is a good scientist but is not an artist, then he will not be a bad designer; he will be quite incapable of designing anything at all. I leave you to judge which of the two would cause the greatest injury if let loose as a master-planner. This matter of design is basic. There is nothing to be gained by failing to look unpleasant facts in the face; many town planners, including some especially gifted as designers of communities, have been frustrated by the lack of opportunities to practice their art. This has been particularly true of those employed in the central government department concerned with town planning, and sometimes, only to a

slightly lesser extent, in the case of those advising local authorities, whether as consultants or officers.

We must also recognize that in the last resort it is the individual that matters. There may well be members of the legal profession who are such gifted and imaginative artists that for that reason they are bad lawyers. There are certainly members of the town planning profession who are such good "sea lawyers" that they are bad designers of communities. The aim of our Institute has been, and is, to produce the all-round planner, skilled in design and with a general knowledge of the many arts, sciences and crafts that are involved. Emphasis has been placed on design because that must be the focus of knowledge; but the Institute also recognizes the necessity of the designer understanding that which is to be focused, even if only to enable him to appreciate the free scope that must be provided for the specialists in those other arts, sciences and crafts.

Mr. Leon Zach, an American landscape architect, has said that the teaching of basic ideals and the development of "design sense" is common to all the design professions. In my opinion this is the fundamental issue, and that is why, in the Institute's view, shared, I am happy to say, by the representatives of the Legal Members on the Council, no administrator or organizer who is not a designer in the technical sense, and indeed no one else, however competent an engineer, surveyor, geographer, economist or sociologist, unless he is also a trained designer of towns and rural communities, should be entrusted with the task of formulating the plan. In the Institute's view, the town planning profession is a design profession in its own right.

We must, of course, recognize the important new relationship to town and country planning of certain professions additional to those which have been in the past specially allied to the Institute. I think that the economists and the sociologists have, either directly or through their supporters, made their claims known to the members of the planning profession.

THE PLANNER'S TASK

As I have already said, the analysis of the problems that confront us must be made by specialists of many kinds; the acquisition of the land, the building and embellishment of each community, the services they require and the communications which connect them must be carried out by lawyers, valuers, surveyors, architects, landscape architects and engineers. It is, however, the town planner who designs each community and group of communities. As Sir Raymond Unwin said, a plan, if successful, must reveal a definite design and can only be made (in the case of towns) by a town planner who is a trained designer—"one whose imagination has been cultivated in the art of creating out of a mass of details a unified design, bringing them all into proper proportion and relation."

Do not let us delude ourselves into thinking that a town planner is or should be a "superman" who alone can resolve the conflicts to which I have referred and prepare a blue-print to solve the problems involved; or, indeed, that men can solve these problems unaided. When the Minister of Town and Country Planning urged upon us a "humane" administration of the new powers placed at our disposal, many of us, I hope, interpreted that word "humane" in a very wide sense, as indicating the need of recognizing that man is a spiritual as well as a human being. I do not think I am wrong in thinking that Mr. Silkin wished us so to interpret his wise advice. But for this very reason, man has a high destiny even on this earthly plane, and however humble may be the part to be played by town planners in the slow progress to this destiny, it cannot be gainsaid that they can by their failures do much to hinder that progress.

INFORMATION CENTRE • INFORMATION SHEETS
QUESTIONS AND ANSWERS • CURRENT TECHNIQUE
THE INDUSTRY • PRICES • TECHNICAL ARTICLES

TECHNICAL SECTION

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

INFORMATION CENTRE

1 SOCIOLOGY. 2 PLANNING: General. 3 PLANNING: Regional and National. 4 PLANNING: Urban and Rural. 5 PLANNING: Public Utilities. 6 PLANNING: Social and Recreational. 7 PRACTICE. 8 SURVEYING, SPECIFICATION. 9 DESIGN: General. 10 DESIGN: Building Types. 11 MATERIALS: General. 12 MATERIALS: Metal. 13 MATERIALS: Timber. 14 MATERIALS: Concrete. 15 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Miscellaneous. 17 CONSTRUCTION: General. 18 CONSTRUCTION: Theory. 19 CONSTRUCTION: Details. 20 CONSTRUCTION: Complete Structures. 21 CONSTRUCTION: Miscellaneous. 22 SOUND INSULATION, ACOUSTICS. 23 HEATING, VENTILATION. 24 LIGHTING. 25 WATER SUPPLY, SANITATION. 26 SERVICES, EQUIPMENT: Miscellaneous. 27 FURNITURE, FITTINGS. 28 MISCELLANEOUS.

14.22 materials: concrete CONCRETING: COLD WEATHER

Concreting and Bricklaying in Cold Weather. A. J. Newman, National Building Studies Bulletin No. 3. (HMSO, 1948, 6d.).

Effect of frost and cold weather. Simple and special precautions described in some detail. A very useful short description of theory and practice.

Though there is nothing very new in this bulletin, it goes into rather more detail than some recent papers on the subject, giving in particular enough information about practical points to be of direct use on a job.

Under concreting it deals first with the effect of both cold weather and frost, noting especially the great reduction in rate of strength gain at low temperatures. Practical measures to be taken as a precaution include simple covering and protection, the use of calcium chloride and the use of pre-heated water and/or aggregates. It is also pointed out that it is an advantage to use rapid hardening cements.

The precise effect of using calcium chloride is discussed and the limitations of this method are noted. Methods of using it both as "flake" and in solution are described. A useful table summarizes the methods which can be used for pre-heating. This gives maximum temperatures for heating, recommendations for methods of applying the heat and remarks on practical points. Another table gives a useful indication of the safe time for stripping formwork under various conditions, and there are some notes on methods of keeping the concrete warm after it is in position.

The section dealing with brickwork is much shorter as the problems are less difficult. Calcium chloride is not recommended. The chief points, apart from

careful protection of completed work, are, the use of a rather stronger mortar—e.g., 1:1:6 instead of 1:2:9, covering of bricks in the stack and avoidance of wetting the bricks before laying. For very severe conditions some pre-heating of sand and/or bricks may be used.

15.42 materials: applied finishes and treatments FLOOR FINISHES

Flooring Materials. F. R. S. Yorke and C. R. Fowkes. (Faber & Faber, 1948, £2 2s. 0d.)

Description of almost all floor finishes as types but without trade names. Some general discussion of such problems as factory floors. Lists of BS and Codes of Practice and long tabulated list of finishes recommended for various conditions of use. Photographs and diagrams. 234 pp.

By present day standards this is a lavish production. The main part consists of a short section on each type of floor finish. Each of these sections contains very brief notes under standard headings as follows: Composition, Thickness, Sub-Floor, Laying, Noise, Warmth, Resistance to Chipping and Cracking, Resistance to Abrasion, Resistance to Oils, Water and Chemicals, Non-slip, Appearance, Cleaning and Maintenance, Uses, BS Code of Practice. Inevitably a good deal of this information will be fairly familiar to many readers but there is some dealing with the newer forms of flooring which is not yet well known, and the information about polishes and other finishes and on cleaning methods is valuable as it is difficult to find elsewhere.

Following this survey of individual materials there is a list of relevant British Standards and British Standard Codes of Practice and then some rather brief notes about flooring in certain types of buildings such as schools and hospitals and various types of industrial buildings and finally a long tabulated list of rooms of almost all types with recommended floors listed under four headings of: Jointless, sheet, tiles and slabs, wood.

The whole book undoubtedly forms a very useful quick reference and is the most comprehensive collection of information there is on the subject. It loses a certain amount of value by omitting all reference to proprietary names, which makes it difficult to relate some parts to actual materials and it might also have been improved if it had included a preliminary section dealing with fundamental problems such as bonding, wear and tear, cleaning, slipperiness, etc., in a general way. It also seems an omission that the very tricky problem of finishes suitable for use on panel heated floors is hardly mentioned. Any discussion of the respective merits of various finishes clearly would have led the authors into difficult and delicate situations but it is a pity that they could not have given some opinions even if in rather general terms. Illustrations are mainly in the form of photographs which are almost all of interest for their architecture but very seldom add anything useful to an understanding of the text. If the inclusion of these photographs is partly responsible for the high price it is unfortunate for though a conscientious architect

in practice may well find this book a good investment, few students are likely to be able to afford it.

16.40 materials: miscellaneous SAND-LIME AND CONCRETE BRICKS

Sand-lime and Concrete Bricks. G. E. Bessey, National Building Studies No. 4. (HMSO, 1948, 6d.)

Manufacture, properties and use briefly described. 11 pp.

This is a brief and simple explanation of the manufacture, properties and use of sand-lime and concrete bricks which forms a useful summary of the more essential information about two materials which have been gaining in popularity. As there are some essential differences from the properties of clay bricks this bulletin should be of interest to those who are not already familiar with the subject. (There is a longer and more technical description of sand-lime bricks in National Building Studies Special Report No. 3.) [See 16.35.]

17.43 construction: general SCHOOL CONSTRUCTION

Report of the Technical Working Party on School Construction. (Ministry of Education, HMSO, 1948. 1s. net.)

Suggestions for standardisation and prefabrication in school building.

The Working Party was appointed by the Minister of Education in November, 1946, with the following terms of reference:

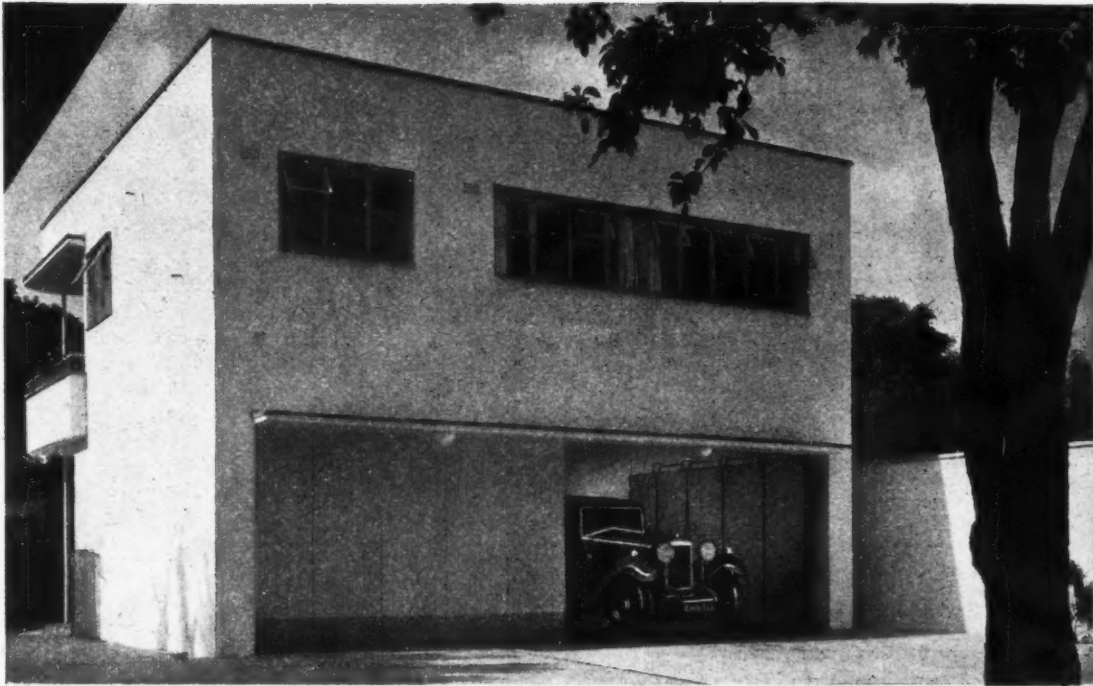
"To consider and make recommendations on the technical details of the principles of school construction suggested in the 1943 Report on Standard Construction for Schools in the light of the present materials position and of the long term building programmes required by the Education Act, 1944."

The report deals first with developments since the publication of the Wood Report. MOW Post-War Building Studies No. 2, HMSO, 1944 (see 1505), known as the Wood Report. As a consequence of the Education Act 1944, a programme of capital expenditure on school buildings of the order of £1,000,000,000, spread over 15 years, is anticipated. This is equivalent to an average expenditure of £70,000,000 a year, which, however, is not likely to be reached for some years to come. In view of the large amounts involved and the present shortage both of building materials and labour, considerable use of prefabrication may be inevitable. This may well apply even when normal conditions return.

Costs have risen steeply since the end of the war, and the working party has been conscious of the importance of financial economy. It sees the main scope for economy in (a) a review of the building regulations so as to reduce the number of sizes of room prescribed and avoid small differences in area such as those between 520 and 540 sq. ft. and 700 and 720 sq. ft. (b) standardisation to enable bulk ordering and prefabrication, and (c) economical planning by the designer.

Regarding standardisation and prefabrication, the report does not suggest the mass production of something like a "national school" or one set of controlling dimensions. Prefabrication for educational buildings should be conceived as the mass production in factories of ranges of components which can be assembled to form either part or the whole of the required structure. The basic requirement of prefabrication on a large scale is "either a national standard or a standard which is used by a sufficient number of consumers to result in substantial orders or a really large order from one or two local educational authorities."

The Wood Report has selected two approaches to standardisation. "The first



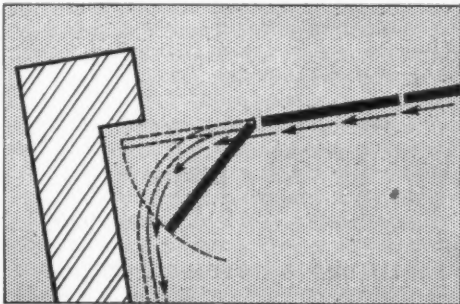
"Miramont," Kingston, Surrey.

Architect: E. Maxwell Fry, F.R.I.B.A.

Two of over 100,000 "TANGENT" Sliding Doors

There are six sizes of "Tangent" Gear suitable for doors, up to 18 feet high, which fold or slide round the corner. Our Drawing Office service and trained technical representatives—who confer with the architect and visit the site—ensure that correct gear is accurately prepared for each job. Delivery is from stock

Catalogue No. 48 contains diagrams, photographs and complete specification data.



Henderson

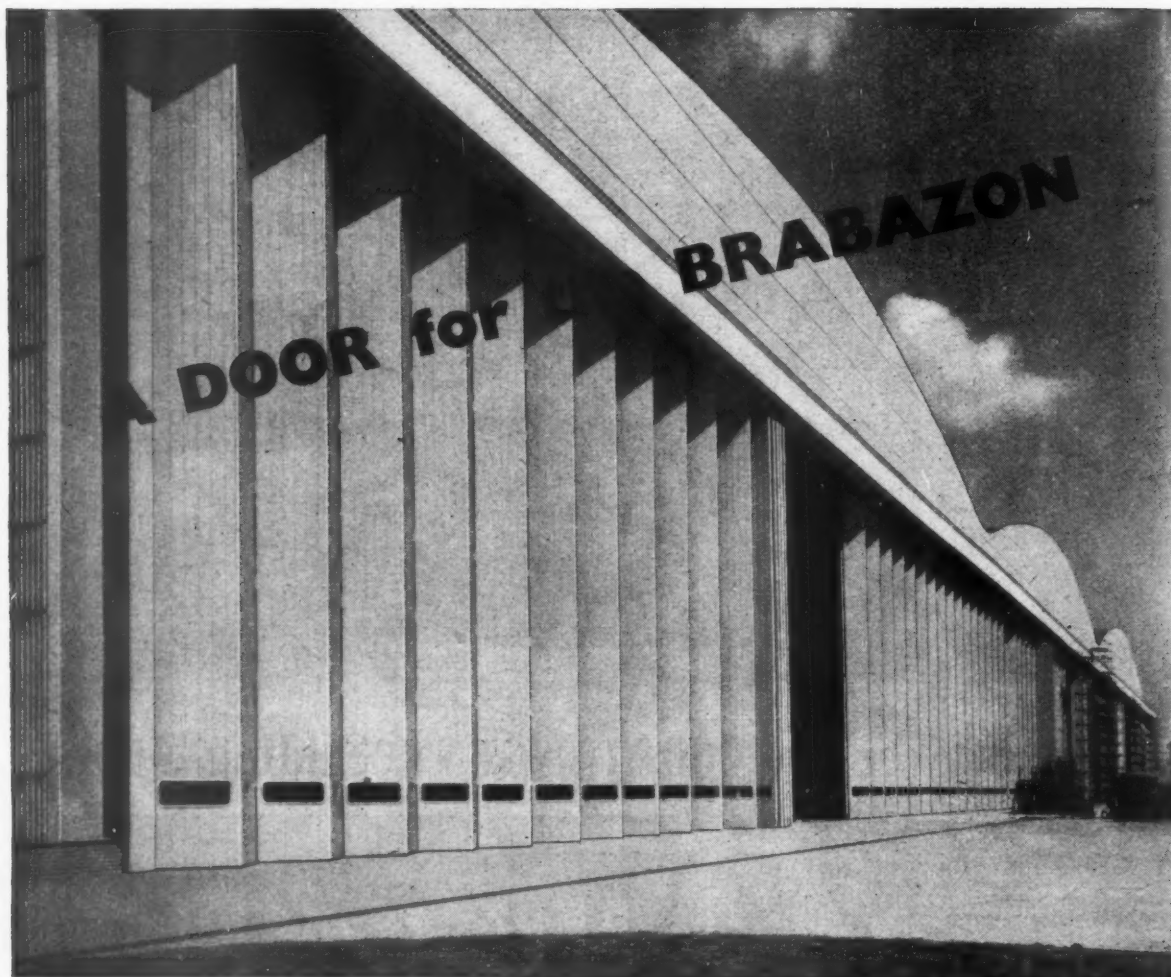
SLIDING DOOR GEAR



for any Door, Partition or Window that slides or folds

P. C. HENDERSON LIMITED · TANGENT WORKS · BARKING · ESSEX

H21



Architect :—
Eric Ross, A.R.I.B.A.

Consulting Engineers :—
Brian Colquhoun & Partners

*Aluminium alloy Extrusions,
castings and sheet by*
Northern Aluminium Co., Ltd.

THE largest door Man has yet built . . . 200 tons of it, 25 feet longer than "The Queen Mary", 65 feet 9 inches high, with each of its three sections opening centrally or from either end at 80 feet a minute. It is the door of the vast new hangar for the Bristol 'Brabazon'. Such a supreme feat of design typifies the adaptability of Esavian engineers and the Esavian principle of slide and fold . . . a principle that has proved its complete success for a hundred uses, from schoolroom partitions to 'bus garage doors. Your own 'closure' problem may not call for a door larger than an Atlantic liner but it does call for a talk with Esavian.

ESAVIAN
LIMITED

181 High Holborn, London, W.C.1
Tel.: Holborn 9116.
101 Wellington Street, Glasgow, C.2
Tel.: Central 2369.

THE



PRINCIPLE

FOR DOORS, WINDOWS, PARTITIONS & FOLDING SCREENS

WPD/A43

conceiv
structu
factor
The s
as a g
may b
in situ
is base
tions
gested
If this
out the
excessi
amount
The pr
dimens
which
in deta
The s
and m
This l
plan a
Bay r
vary b
depend
of spa
if the
are lin
cal to
nal sp
For a
dation
would
30 ft.
small
sugges
For a
that t
and st
They
system
The
shift

The
read
mati
servi
The
Que
adve
supp

EN

I am
appea
Journ

Plea
parti

NAL

ADI

BLO

conceives of the school as a connected structural whole, to which any dimensional factor adopted can be applied throughout." "The second conceives of the school rather as a group of separate plan units which may be left unconnected or connected by *in situ* work as desired." The first approach is based on a fixed dimension in two directions forming a grid. The dimension suggested in the Wood Report was 8 ft. 3 in. If this dimension is applied rigidly throughout the structure, there is a danger that an excessive and therefore uneconomical amount of accommodation will be provided. The present report is in favour of a smaller dimension, i.e. 3 ft. 4 in. The calculations which justify this suggestion are explained in detail in Appendix I.

The second approach seems to be simpler and more economical for school building. This leads to dimensions controlling the plan and the outline of the various parts. Bay measurements used or contemplated vary between 8 ft. and 12 ft., the choice depending to some extent on the number of spans used. Calculations suggest that, if the spans for teaching accommodation are limited to two, it would be economical to use a 10 ft. structural bay with internal spans of 24 ft. 9 in. and 22 ft. 9 in. For a complete range of school accommodation, including hall and gymnasium, it would be necessary to add spans of 40 ft., 30 ft. and 17 ft. 6 in., probably with a small span for corridors. Details of this suggestion are also included in Appendix I. For assembly halls the suggestion is made that they should be treated as separate plan and structural units complete in themselves. They need not bear any relation to the system used for the rest of the school.

The report deprecates the use of makeshift buildings and stresses the importance

of architectural amenity. Monotony must be avoided. Much can be done by paying more attention to the surface textures and colours of factory produced units.

In a foreword by the Ministry of Education, the Minister accepts, in general, the working party's main recommendation and welcomes particularly the emphasis on flexible planning and references to research.

This report is certainly a very important and useful contribution to the design of school buildings and will be of considerable assistance to all architects and local authorities concerned with such work.

One word of warning is, however, necessary with regard to Appendix II, which covers types of simple framed structures, walls, floors and roofs. In Tables VI, VII and VIII, various comparative weights and sizes are given for steel and reinforced concrete frames respectively. It is a striking feature of Table VI that the difference in the weights of steel between steel and precast concrete frames is very small, and quite contrary to common experience. The explanation may be found in Table VII, where further details are given for typical frames for single and double storey constructions for 26 ft. 8 in. span and 10 ft. bays. According to this table, the horizontal member of a single storey riveted ordinary frame is an R.S.J. 10 in. by 4½ in. by 25 lb., and in a welded portal frame an R.S.J. 9 in. by 4 in. by 21 lb. The total load for which these frames have been designed is 65 lb./sq. ft., i.e. 650 lb./ft. and it would be interesting to find out by what method the dimensions mentioned have been arrived at. In fact, they are quite inadequate, both from the point of view of working stresses and rigidity. The deflection of such members would be prohibitive.

The size of the corresponding horizontal member of a reinforced concrete frame is given as 14 in. by 7 in. With such dimensions, equal reinforcement top and bottom is necessary, which is not an economical use of reinforced concrete. Thus, on the one hand, the weights for structural steel frames given in Table VI are too low, those for reinforced concrete too high. This is very important since, apart from the consequences of adopting the dimensions suggested in Table VII, the data in Table VI would be completely misleading when used as a basis for application for a licence. Perhaps this serious error is due to the fact that no member of the committee appears to have been a structural engineer?

The weights of steel in Table VIII are quite different from those in Table VI, but no explanation of the discrepancy is given.

Another unsatisfactory feature of Table VIII is the classification of various types of structure with regard to fire resistance.

The following selection of examples from this table is of interest:—

	Fire resistance
Fabricated trusses with fabricated columns	fair
Fabricated trusses with rolled stanchions	good
Riveted ordinary RSJ frames	very good
Reinforced concrete (4 types)	very good

Admittedly, there is a slight difference between the three types of steel structure considered, but they all fall into the category of "Unprotected Incombustible Construction, representing the lowest standard of incombustible construction from the fire resistance point of view," to quote from Post-War Building Studies No. 20, clause 63 (see 17.10). Such structures are classified as Type 6, whereas reinforced concrete structures of the types described belong in the worst case to Type 3, "to be considered fully protected in relation to low fire loads." To put unprotected steel frames on equal footing with reinforced concrete frames is, to say the least, misleading.

This feature answers any question connected with building confidentially and free of charge. Questions to the Technical Editor, The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1.

QUESTIONS AND ANSWERS

2968 OWNERSHIP OF FENCE

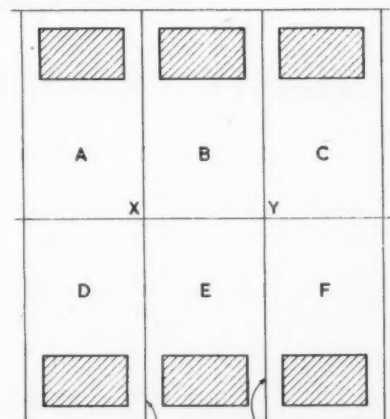
Q The tenant of the house on plot "B" has made a small gate in fence X-Y to gain access to plot "E", which he owns. The landlord of plot "B" demands that the gate should be removed (although the fence was lying flat and has been repaired by the tenant).

The deeds of plot "E" state that between "D" and "E" there is a party fence and that the owner must maintain the fence between "E" and "F".

- (1) Who owns the fence between "B" and "E"—not mentioned on the deeds—i.e., fence X-Y?
- (2) If it is a party fence has the owner of "E" the right to make a temporary gate in the fence?
- (3) Who is responsible for the maintenance of the party fence between "D" and "E"?

The deeds do not refer to the hedge "Z".

A In the absence of anything to the contrary it is presumptive evidence that in the case of a wooden fence the posts stand on the land of one owner. The nails are therefore "driven home," i.e., towards the property to which the fence belongs. It would therefore be presumed that the fence between "B" and "E" belongs to the owner of the property towards which the nails are driven. In our opinion there would be no right to make a gate in the fence whether or not it is a party fence. If the deeds describe the fence between "D" and "E" as a "party fence," then presumably the maintenance is a joint matter between the owners of "D" and "E".



PARTY FENCE
Z HEDGE TO LANE
FENCE
MAINTAINED
BY OWNER OF
PLOT E

AS SHOWN ON DEEDS OF PLOT E

Site plan referred to in Questions and Answers 2968

The form printed below is to assist readers requiring up-to-date information on building products and services. Complete and post it to *The Architects' Journal*, 9, 11 and 13, Queen Anne's Gate, S.W.1, and the advertisers listed will be asked to supply information direct.

ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of *The Architects' Journal*.

.....

.....

.....

.....

.....

.....

Please ask manufacturers to send further particulars to:—

NAME.....

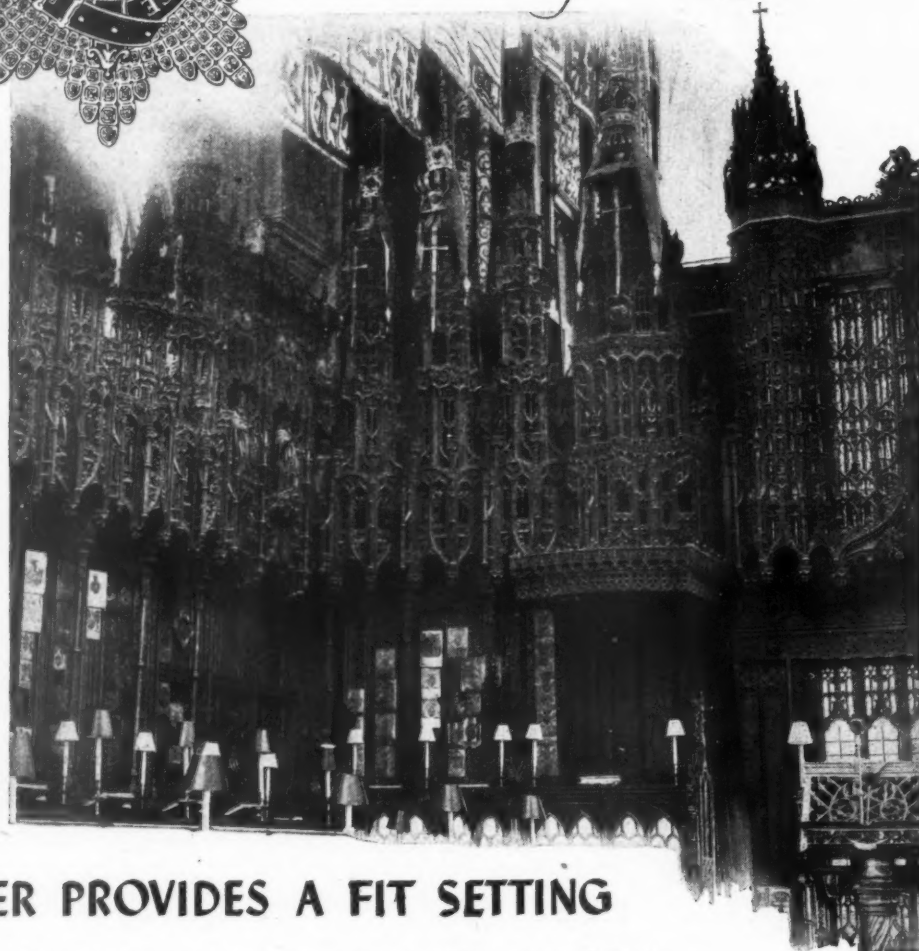
ADDRESS.....

A.J. 9.12.48

BLOCK LETTERS, Please



1348-1948 For the Most Noble Order of the Garter—



TIMBER PROVIDES A FIT SETTING

Six hundred years of the most ancient of existing orders of chivalry are enshrined in the beauty and structure of St. George's Chapel, Windsor. The enduring strength of this historic edifice is as symbolic of the nation's fortitude as is the English Oak extensively used in its construction.

Today, architects and designers rely on Timber to create permanent beauty in modern building with the added advantage of a far wider selection of hardwoods and veneers including water-resistant plywoods, (flat, shaped or metal-faced) incorporating all the qualities inherent in modern scientific development.

WILLIAM MALLINSON & SONS LTD

TIMBER AND VENEER MERCHANTS AND PANEL MANUFACTURERS

130-150 HACKNEY ROAD • LONDON • E 2

TELEPHONES (Private Exchange)
SHOREDITCH 8888 (3 lines)
SHOREDITCH 8811 (5 lines)

TELEGRAMS & CABLES
'ALMONER'
LONDON

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

THE INDUSTRY

THE PUBLIC WORKS EXHIBITION

From the architect's point of view the Public Health and Municipal Engineering exhibition is not as essential as the Building exhibition. Street cleaning vehicles, signposts and rubbish carts are presumably a matter for the surveyors and engineers, but this exhibition also always has a large display of contractors' plant and equipment varying from shovels (hand) to the large-scale earth moving equipment and asphalt mixing plants, and it is interesting to see the full range of weapons now at the contractor's disposal.

During the last year or so a good deal of attention has been paid to the possibilities of mechanizing the smaller building jobs, and there is now available a large range of power hoists and conveyors, small bulldozers for backfilling trenches, power-driven wheelbarrows and concrete skips all specifically designed to help the housebuilder who has seldom, in the past, made very much use of mechanical devices. MOW, too, have been carrying out a whole lot of experimental work at their field research station at the Thatched Barn and have evolved, among other things, a multi-purpose machine, based on the old 6 h.p. Ransome tractor, which has various attachments to convert it into a small bulldozer, a hoist, or a concrete dump wagon. Their display at the exhibition also showed the prestressed concrete joists for housing work which are still under development and which should do a great deal to help the timber shortage.

The general impression conveyed by the show was that plant is better designed, not only in appearance but from the engineering point of view. American equipment makes greater use of welding than the typical British design, but it is noticeable that far more attention is being paid to detail work and the boxing in of moving parts which were all too often lubricated only by sand and water. The correct proportioning of concrete mixes is also made simpler by accurate weigh-batching plants, though these are generally suitable only for fairly large-scale jobs.

Petrol engines, as in other industries, are being displaced by diesels, even in the smaller sizes, while for heavy work they may almost be taken for granted. One was glad, incidentally, to see that as well as diesels, Aveling Barford are still producing the good old-fashioned steam roller with the prancing silver horse on the front, even though the sample shown had been bought by a Dutch firm.

COMMUNAL LAUNDRIES

In the years between the wars it was frequently said that it was of no use to provide communal laundry facilities on housing estates because the tenants hardly ever used them.

Nowadays in housing schemes it is almost standard practice to provide some sort of communal laundry, and they seem in practice to be freely used, perhaps because of the clothes shortage or maybe as a result of high commercial laundry prices. The equipment may consist of no more than a range of coppers and drying cabinets, but

several London borough councils have installed Bendix washing machines. This firm is now trying to develop this side of the market, and has issued a useful leaflet showing a typical layout for 20 machines in a Hammersmith scheme, and containing data on the water and electricity supplies required. Apart from coining the rather regrettable name of "launderette," the scheme seems excellent, as the machines, which are almost completely automatic, can be placed close together and take less space than the average copper.

Water consumption is not heavy, the washing and rinsing of the 9 lb. load taking 11 gallons of hot and 12 gallons of cold water, while current consumption is 300 watts. (Bendix-Home Appliances, Commercial Installations Dept., 90a, Park Lane, London, W.1.)

CONSTRUCTIONAL STEEL AND METALWORK

After the rather mean little leaflets of the war years it is something of a relief to be sent a good solid volume which is capable of standing in a shelf on its own. Issued by Farmers of Lewisham it deals with constructional iron and steelwork of all kinds, as well as architectural metal work. Divided into sections, it covers iron staircases, steel doors, constructional steelwork of all kinds from pipe hangers to roof trusses, balustrading and grilles, railways and fencing, special gates, and a miscellaneous section devoted to canopies, ornamental lamps and mesh surrounds for tennis courts. (S. W. Farmer & Son Ltd., Stairway House, Courthill Road, Lewisham, London, S.E.13.)

ALUMINIUM CASTING

High Duty Alloys have recently re-equipped their gravity die casting shop at Slough and are turning out castings in large quantities. Perhaps not all designers realise how accurate die castings can be from a dimensional point of view, and the chair frame illustrated on this page may provide some idea of what can now be done. The back, seat and legs are cast separately and the total weight is less than 8 lb. It is made for Goodearl Brothers. (High Duty Alloys Ltd., Slough, Bucks.)

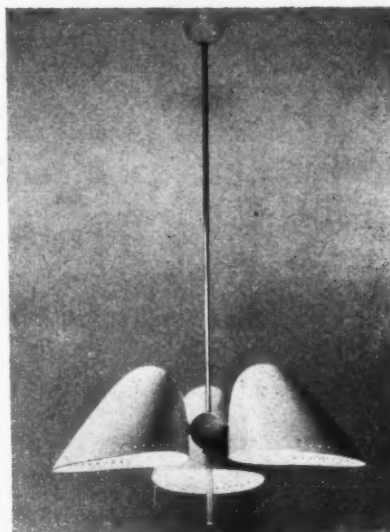
LIGHT FITTINGS

Visitors to the RDI show at Burlington House will have noticed one or two of the new range of Versalite fittings designed by Mr. A. B. Read for Troughton and Young. The two basic shade shapes, one of which is illustrated on this page, have been arranged in a number of different ways as wall and ceiling fittings and also as floor and desk lamps. Comment on the designs is needless, for Mr. Read can always be relied upon to produce the sort of thing architects would like to have for themselves, fairer than that one cannot say. Incidentally, it is something of a relief to find new designs for use with filament lamps now that scarcely a week goes by without some new fluorescent horror twice as vulgar as the one the week before. (Troughton & Young Ltd., 143, Knightsbridge, London S.W.1.)

TESTING BUILDING MATERIALS

Now that it has become fairly standard practice to specify materials and fittings to BSS, it is perhaps important to have some form of routine testing carried out on the job. Reputable manufacturers may be trusted not to let themselves down, but there are a number of materials, particularly sands and aggregates, where size variations may occur from time to time, and it may be advisable to arrange for occasional independent checks.

There are, of course, several fairly well known independent testing houses, but newcomers in this field are the Ellis Research and Testing Laboratories who specialize in



One of a new range of Versalite fittings designed by A. B. Read for Troughton and Young.

the testing of building and road materials and are equipped for tests of all kinds according to BSS and to other requirements. (Ellis Research and Testing Laboratories, Dacre House, Victoria Street, London, S.W.1.)

ALUMINIUM PASTE

A recent booklet issued by British Aluminium deals with the properties of aluminium paste and the paint produced from it. Before the war, aluminium paint was becoming fairly well known as an excellent primer for nearly all purposes, and it is a little surprising to find that the booklet does not lay any great stress on this aspect of its use. As a weatherproof, however, and as a good light reflector it has many uses, particularly for factory interiors, and for external work it is of particular value for preventing heat absorption by tanks containing petrol or other volatile substances. Brief notes are also given on the actual painting technique. (The British Aluminium Co. Ltd., Salisbury House, London Wall, London, E.C.2.)



A chair gravity die cast in Hiduminium by High Duty Alloys. The weight, back, seat and legs, is 7lb. 10 ozs.

PRICES

This regular feature, prepared by Davis, Belfield and Everest, Chartered Quantity Surveyors, summarises basic prices for materials and gives labour rates for the London District and Grade Classifications outside London. Detail prices of materials are given quarterly.

BASIC MATERIALS	BASIC PRICES AND RATES OF WAGES, 1948										
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.
Portland cement (6 tons and over) per ton	60/6	60/6	60/6	60/6	60/6	60/6	60/6	60/6	60/6	60/6	60/6
Paper bags	11/-	11/-	11/-	11/-	11/-	11/-	11/-	11/-	11/-	11/-	11/-
2-in. unscreened ballast per yard cube	14/5	14/5	14/5	14/5	14/5	14/5	14/5	14/5	14/5	14/5	14/5
Fletton bricks (at station) .. per 1,000	73/-	73/-	73/-	73/-	73/-	73/-	73/-	73/-	73/-	73/-	73/-
Stoneware drain pipes (British Standard, 2 tons and over) .. Standard list ..	42½%	42½%	42½%	42½%	42½%	42½%	42½%	42½%	42½%	42½%	42½%
Roofing tiles per 1,000	90/-+	90/-+	90/-+	90/-+	90/-+	90/-+	90/-+	90/-+	90/-+	90/-+	90/-+
Steel joists (basic sections ex mills) per ton	£17 8s.	£17 13s.	£17 13s.	£17 13s.	£17 13s.	£17 13s.	£17 13s.	£17 16s. 6d.	£17 16s. 6d.	£17 16s. 6d.	£17 16s. 6d.
Lime greystone	84/9	84/9	84/9	84/9	84/9	84/9	84/9	84/9	84/9	84/9	84/9
Sheet lead (5 cwt.-1 ton lots) ..	£107 10s.	£107 10s.	£107 10s.	£107 10s.	£107 10s.	£107 10s.	£107 10s.	£107 10s.	£107 10s.	£130 15s.	£130 15s.
Iron rainwater goods and soil pipes											
White lead paint List 3100 AB+ .. per gallon	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
	43/3	43/3	42/9	42/9	42/9	42/9	42/9	42/3	42/3	42/3	42/3*
RATES OF WAGES (LONDON)—											
Within 12 miles radius per hour	2/10½	2/10½	2/10½	2/10½	2/10½	2/10½	2/11*	2/11	2/11	2/11	2/11
Craftsmen	2/3½	2/3½	2/3½	2/3½	2/3½	2/3½	2/4*	2/4	2/4	2/4	2/4
Labourers											
From 12 to 15 miles radius	2/10	2/10	2/10	2/10	2/10	2/10	2/10½*	2/10½	2/10½	2/10½	2/10½
Craftsmen	2/3½	2/3½	2/3½	2/3½	2/3½	2/3½	2/3½*	2/3½	2/3½	2/3½	2/3½
Labourers											

Prices of materials above include for delivery to site in the Central London Area, and the rate of wages are for London only.

Current rates of wages outside London are as follows : Liverpool and District, Craftsmen, 2/11 ; Labourers 2/4.

GRADE CLASSIFICATIONS

	A	A ¹	A ²	A ³
Craftsmen	2/9½	2/9	2/8½	2/8
Labourers	2/3	2/2½	2/2	2/1½

* This increase took effect from beginning of pay week next following July 11, 1948.

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

More than just a



RIPOLIN

IT IS A SAFEGUARD AGAINST DEPRECIATION
Ripolin surfaces are renowned for their durability and enhance the value of any building. Ripolin provide a complete range of paints for interior and exterior use. Our advisory staff is available to architects for the preparation of specifications.

RIPOLIN LIMITED
9 DRURY LANE, LONDON W.C.2

LONDON • PARIS • AMSTERDAM • CLEVELAND • TORONTO • ZURICH • BILBAO

NO PURCHASE TAX
CHARGEABLE ON SEMASTIC
DECORATIVE TILES ON AND
FROM NOVEMBER 15th, 1948

THERMO- PLASTICITY AS AN AID TO TILE LAYING



THE capacity of certain of the synthetic resins to soften under the influence of heat is turned to good account in the laying of SEMASTIC DECORATIVE TILES. Nothing in this world is completely square or perfectly straight apart from theoretical conceptions, and whilst the "tolerances" of engineers are measured in thousandths of an inch, much larger fractions must in practice be tolerated by the architect.

Here it is that SEMASTIC DECORATIVE TILES prove so adaptable in laying. When the craftsman brushes them with the flame of a blow-lamp, they become just sufficiently pliable to bend easily around any irregularity in the floor or wall surface; heated, they can be cut with

shears to fit every contour or quirk in the skirting, or around column and pilaster base. They will rapidly cool to the same tough resiliency for which they have developed a world-wide reputation.

It will thus be readily appreciated how expense can be minimised when fitting rooms with awkward floor plans.

And this is only one of the many advantages of these colourful, warm textured, hard-wearing SEMASTIC DECORATIVE TILES.

Semtex Limited invites you to send for further information on this new advance in tiling technique, and offers the services of craftsmen to co-operate in your future flooring projects.

SEMTEX LIMITED (A DUNLOP COMPANY)

Branches at: ABERDEEN · BELFAST · BIRMINGHAM
BRISTOL · CARDIFF · EDINBURGH · GLASGOW
HULL · LEEDS · LIVERPOOL · LONDON
MANCHESTER · NEWCASTLE · SOUTHAMPTON
READING, BERKS.

Semtex Departments of Dunlop Overseas Companies operate in Sweden, Denmark, Holland, Belgium, France, South Africa, India and Australia; Shipping Services A/S Oslo, represent Semtex Limited in Norway.

These tiles are available for installation now by craftsmen of Semtex Limited and by those of their Approved Contractors.

J. A. Hewetson & Co., Ltd., HULL.

Hollis Bros. & Co., Ltd., LONDON, HULL and LEICESTER.

Horsley Smith & Co. (Hayes), Ltd., HAYES, Middx.

The Limmer & Trinidad Lake Asphalt Co., Ltd., LONDON and branches throughout the U.K.

The Penmaenmawr & Trinidad Lake Asphalt Co., Ltd LIVERPOOL.

The Western Trinidad Lake Asphalt Co., Ltd., CARDIFF.

SEMTEX LIMITED, 185-187-189 FINCHLEY ROAD, LONDON, N.W.3
Telephone: Maida Vale 6070. Telegrams: Semtex, Haver, London.

48SE/D9

Announcements

The first of a series of exhibitions of modern fluorescent lighting methods and equipment has been held in Manchester. Every aspect of design and equipment was included and a new no-glare fitting was shown for use as an adjustable lamp on the drawing board. Future exhibitions are to be held in Newcastle, Birmingham and Glasgow. The sponsors are Messrs. Miller Hepworth, Ltd., of Oldham, Lancs., and Hi-craft of London.

The directors of Messrs. Eastwoods Limited announce that Mr. George William Adson Miller, F.C.I.S. (managing director), has been appointed to the chairmanship of the group in succession to the late Mr. Sidney Garcke, C.B.E. Mr. Miller joined the parent company as secretary in 1923, became a director of Messrs. Eastwoods Cement Limited in 1933, General manager in 1940, and has been managing director since 1943.

Among the exhibits on the stand of Holoplast at the shipbuilding exhibition at the Salon Nautique, Paris, was a shell cabin in cream sprayed Holoplast panels with hammered finish. In the cabin were two cupboards of striped sapeli veneered panels, one enclosing a wash basin, etc. Lining the sides of the stand were photomontage panels mounted on cream sprayed Holoplast showing the applications of Holoplast in the *Mauretania*, the *Queen Mary* and other vessels.

The G.E.C. has issued a booklet showing in pictorial form some of its recent achievements in electrical equipment for power generation, control, distribution and application. It is, of course, impossible to illustrate all of the firm's extensive and important achievements. Nevertheless, those chosen fully justify the claim of the

G.E.C. to supply "Everything Electrical." The firm employs 50,000 people, has main works in London and nine other towns in this country, and overseas manufacturing facilities in Australia, India, South Africa, China, France and Eire.

Wentworth Castle, Stainborough, Yorks—dating in part back to the 17th century and at one time the seat of the Earl of Strafford—has been acquired by the Barnsley Education Committee for use as a training college for women teachers. This mansion is believed to have been the site of the first electric lighting system in Yorkshire. The original installation, carried out between the years 1882-1886, was executed by Mr. Wilson Hartnell, M.I.M.E., of Leeds, Yorkshire, and the fittings used bore the hallmark "Faraday & Sons," who, some electrical authorities believe, was related to Michael Faraday. The present lighting scheme has been carried out by the Barnsley District of the Yorkshire Electricity Board, and planned by the British Thomson-Houston Co. Ltd., who also supplied the necessary equipment.

Mr. J. M. Osborne, A.M.I.C.E., Managing Director of Dorman Long (Africa), Ltd., and a director of the parent company, Dorman Long & Co. Ltd., Middlesbrough, has been appointed Chairman of Dorman Long (Africa), Ltd., in succession to the late Viscount Greenwood.

The following changes have been made in the directors and staff of Copperad, Limited. Additional directors, Mr. G. A. Mansfield (London director), with headquarters at 87, High Holborn, W.C.1; Mr. William White (Edinburgh director), with headquarters at 30, Rutland Square, Edinburgh, 1. Mr. John Barnes, who was previously at the London office, now takes up duties at the head office and works at Colnbrook as sales manager.

Buildings Illustrated

Offices at Brentford (pages 529-530). Architect: Walter H. Williams, L.R.I.B.A. The general contractors are Messrs. Structural and Mechanical Development Engineers, Ltd. Sub-contractors: Site work and erection, Frank Bilton (London), Ltd.; site clearing and demolition, Wimpey and Co., Ltd.; electrical installation, Holliday, Hall and Stinson, Ltd.; heating, H. W. Dutton and Co., Ltd.; floor finish, Semtex, Ltd.; aluminium windows, Williams and Williams, Ltd.; false ceiling, Anderson Construction Co., Ltd.; aluminium alloy extensions for roof trusses, Southern Forge, Ltd.

Carden School, Brighton (pages 531-534). Designed by D. J. Howe, M.I.C.E., M.I.M.U.E., Borough Engineer and Surveyor, and P. Billington, A.R.I.B.A., A.M.T.P.I., School Architect. General Contractors, Kirk & Kirk Ltd. Main sub-contractors: Precast concrete units, Tiling and skirtings, Orlit Ltd.; Electrical installation, Hall & Stinson Ltd.; Heating and hot water, G. N. Haden & Sons Ltd.; Flooring, Semtex Ltd.; Acoustical treatment, May Acoustics Ltd.; Floor Tile Fixing, Zanelli (London) Ltd.; Glasscrete, J. A. King & Co. Ltd.; Structural steelwork, Banister Walton & Co. Ltd.; Steel doors, windows, wc, partitions, etc., Henry Hope & Sons Ltd.; Interior and exterior decorations, E. B. Blackwell Ltd.; Plasterers, W. A. Telling Ltd.; Roofing, Everseal Products Ltd.; Plumbing, Servants (Brighton) Ltd.; Paving, paths and playground, William F. Rees Ltd.; Glazing, Franklins; Sanitary fittings, Shanks & Co. Ltd.; Handrailing, cloakroom fittings, etc., S. Grahame Ross Ltd.; Reinforcement and false ceilings, Hy-Rib Sales; Special Paint, Clark-Gay & Co.; Paint suppliers, Arthur Sanderson & Sons, Ltd.

You are always **RIGHT**
when you specify—

RAWLPLUG FIXING DEVICES

The vague instruction "Provide and fix" can lead to unsatisfactory work. By specifying the use of Rawlplug fixing devices you ensure strong permanent fixings, carried out with the minimum of time, labour and tools. There is a Rawlplug fixing device for every fixing job. Here are a few from the complete range.

RAWLPLUGS. The universally accepted fixing for use with all sizes of screws. Invaluable for fixing electric, gas or sanitary fittings, cables, fuse boxes, machinery, piping, wiring etc. The No. 28 size will withstand a direct pull of 4 tons.

RAWLBOLTS. For all bolt fixings. It is a dry fixing which requires no grouting. Heavy machinery can be fixed in a few minutes and put into use immediately after fixing.

Available in 2 types—Loose Bolt and Bolt projecting in a wide range of sizes from $\frac{1}{4}$ " to 1" dia. Whitworth thread.

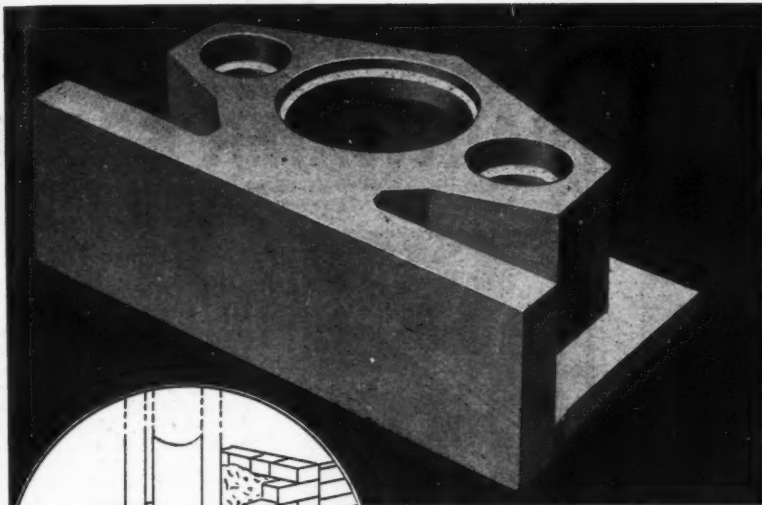
For THIN MATERIALS

For fixings to all kinds of hollow partitions, wall-boards, laminated and insulated boards, hollow bricks and tiles. Rawlplug Gravity Toggles for walls, Spring Toggles for ceilings, Rawlanchors for permanent tapped fittings. Sizes for $\frac{1}{8}$ ", $\frac{1}{4}$ " and $\frac{1}{2}$ " Whitworth Screws.

Free testing samples sent on receipt of a request on your business letter heading.



THE RAWLPLUG COMPANY LIMITED, CROMWELL ROAD, LONDON, S.W.7

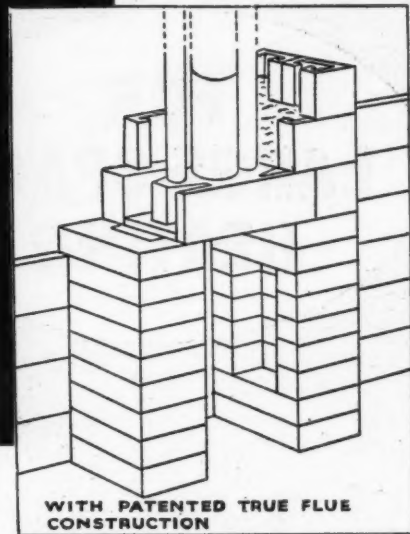


TYPE "S" LINTOL BLOCK

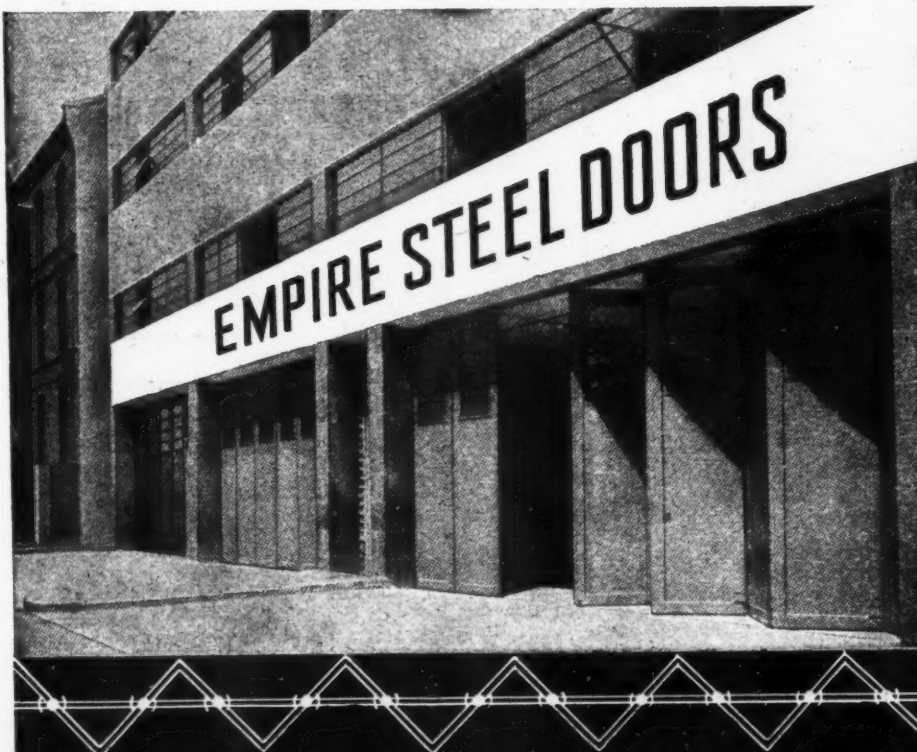
PATENT No. 600,518

This lintol, now available for immediate delivery, has been designed for use with the majority of modern Convector stoves. It has been proved the ideal unit for connecting these stoves to the flue and warm air ducts, and is being used extensively by the L.C.C. and many other local authorities.

For further details of this unit or of the complete "True Flue" patented system of flue construction apply to The Domestic Flue and Convector Heating Specialists:—



TRUE FLUE LTD. CONVECTOR HOUSE, ACACIA ROAD, ST. JOHN'S WOOD, N.W.8.
TELEPHONE PRIMROSE 7161/2



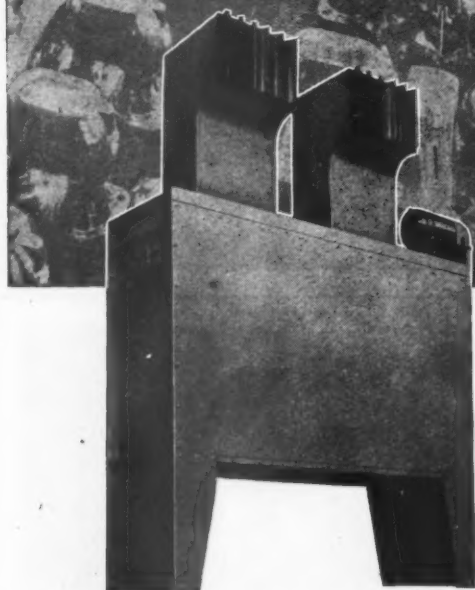
ACCORDION
FOLDED ON
TUBULAR
TRACK.

LIGHT
RIGID
ECONOMICAL

EMPIRE DOORS
CAN ALSO BE
SUPPLIED
HINGED,
SLIDING OR
FITTED WITH
ROUND THE
CORNER GEAR.

DREADNOUGHT FIREPROOF DOORS (1930) LTD. 26, VICTORIA STREET,
WESTMINSTER, S.W.1.

FOR LARGE SPACE HEATING



"IT'S TORRIDAIRE"

This is a high velocity heater for large space heating, and is made in three types—floor model, wall model and ceiling model. For use on high or low pressure hot water and steam systems. Duties from 116,000 to 942,000 BTU per hour, 1575 to 16,500 C.F.M. with steam at 5 lbs. per sq. inch pressure and entering air at 70° F.

For further details please apply for Catalogue 137



BRITISH TRANE CO. LTD

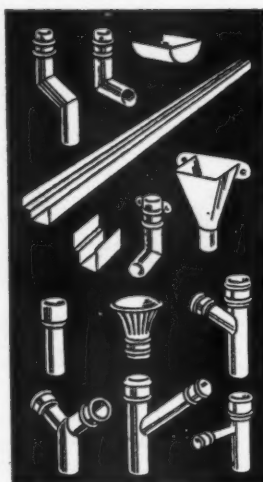
VECTAIR HOUSE, CLERKENWELL CLOSE, LONDON, E.C.1

'Phone: Clerkenwell 6864 & 3826. 'Grams: Enartrane, Smith, London



Aluminium Alloy RAINWATER GOODS & SOIL PIPES

The best and most durable on the market.....



Made from selected and tested non-corrosive aluminium alloy, twice the strength of ordinary commercial aluminium—NERKORODE offers greater DURABILITY, STRENGTH and RESISTANCE to corrosion by sea air and acid-laden atmospheres. They will outlast cast iron, asbestos or galvanised iron. A blow which will fracture cast iron will only dent our high tensile aluminium alloy. Tremendous economy is effected in transport, handling and erection.

NERKORODE Rainwater Goods and Soil Pipes are free from permit and delivery is prompt.

Full particulars from

THOS. SADLER SONS & CO.
220 Balham High Road, London, S.W.12

SB127

LIGHTWEIGHT GROUND MANHOLE COVERS IN unbreakable STEEL



Always specify
Jenkins

Export Enquiries Invited.



Light in weight and unbreakable;
hinged or plain; standard or
special sizes.

Robert Jenkins & Co. Ltd.

ESTABLISHED 1856
ROTHERHAM

Telephone: 4201-6 (6 lines).

DUNBRIK

THE PRECISION FACING BRICK

Introduced in 1934 and since specified by Government Departments, Local Authorities, Leading Architects, Builders, etc.

Buildings faced with Dunbriks include Houses, Schools, Factories, Hospitals, Drillhalls, Cinemas, Flats, Office Blocks, etc.

Dunbriks are Manufactured by:—

London and Home Counties

DUNBRIK LIMITED 35, Gloucester Square, London, W.2. 'Phone: Paddington 2471/2

Suffolk, East and Central Essex

ALPHAMSTONE BRICK & TILE CO. LTD.
Alphamstone, near Bures, Suffolk. 'Phone: Twinstead 229

Dorset, S.W. Hants and S. Wilts.

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

Oxon, Berks, N. Wilts and N. Glos.

THE COTSWOLD BRICK AND TILE CO. LTD.,
47, Market Square, Witney, Oxon. 'Phone: Witney 390

East and West Ridings, Yorkshire

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

Northumberland and Durham

SAMUEL TYZACK & CO. LTD., Monkwearmouth, Sunderland. 'Phone: Sunderland 4854/5

Scotland

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

Beauty • Economy • Permanence • Uniformity

Get in touch with us for

FORMACON

PRE-CAST CONCRETE

FLOORING

WALLING

SILLS, LINTELS

CLOTHES LINE POSTS

HOLLOW & SOLID

CONCRETE BLOCKS

and FENCING etc.

We are able to supply all kinds of pre-cast concrete products. As specialists in this field, our services are available for every type of work which calls for pre-cast concrete.

Your requirements can be met by writing to:—

FORMACON LIMITED

Specialists in pre-cast Concrete Products

The Trading Estate, Cowley Mill Road, Uxbridge, Middlesex
Tel.: UXBRIDGE 2390

ON EXPOSED SITES

INSTALL



The broad Rolador Slat, with its thickness and unique construction, forms a curtain unequalled in strength and durability and one most suitable for use in exposed positions.

ROLADOR

PAT. Nos. 257850 & 200187

Haskins

STEEL ROLLING SHUTTERS

31 HOME HOUSE, WALTHAMSTOW, LONDON, E.17.

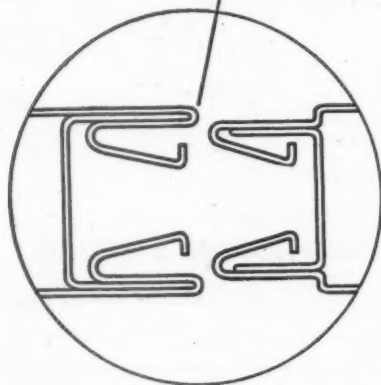
Telephone: LARKSWOOD 2622.

AGENTS IN ALL PRINCIPAL COUNTRIES OF THE WORLD.

Erected in 10 minutes . . .



Two girls who had never before seen SADCOLOK partitioning erected it themselves in under ten minutes



The new patent lock joint that revolutionises partitioning . . .

Sadcolok partitioning is assembled on the Cookson Lock joint principle which joins sheets of metal without bolts, nuts or welding, and there is no dirt or noise. The units are merely pushed together and require no skilled labour.

Note these other advantages:-

- 1 Suitable for interior or exterior use; for offices, works, complete structures, hotel conversions, etc.
- 2 Assembled without nuts, bolts, welding and can be built to any length, or height with a minimum of labour.
- 3 Can be erected and dismantled repeatedly without damage.
- 4 As the weight of the partitioning is only 14lbs. per foot run, loading on foundations, floors and walls, is kept to the absolute minimum.
- 5 Various forms of cladding can be used to suit requirements.
- 6 In durability, speed of erection and costs, there is no other form of partitioning to challenge it.
- 7 No permits are required and delivery is prompt.



PARTITIONING

Also for
Roofing,
Walling
etc.

SADCOLOK LTD., 220-222, Balham High Rd., London, S.W.12.
Sole Scottish Distributors: T. B. CAMPBELL & Sons Ltd., 29, Wellington St., Glasgow, G.2.

S.B. 170

THERMOVENT

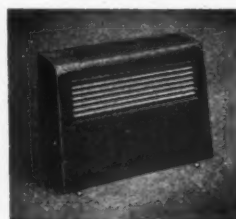
Electric

SPACE HEATING

The Thermovent system of convection heating was originally designed for the staterooms of the RMS QUEEN MARY. Its outstanding efficiency and safety features quickly established it also as the supreme domestic and industrial heating system. The patented multiple duct assembly (indicated by the diagram) offers advantages of efficiency, current economy and compactness unequalled by any other electric space heating system. The models illustrated below are available for immediate delivery.



DOMESTIC



TYPE "F" portable floor standing Heater in 1000 and 2000 watt loadings with built-in Thermostatic and/or 2 heat hand switch control as required. Black or Walnut Plastics Cabinets with luminous effect on anodised old-gold colour grilles.



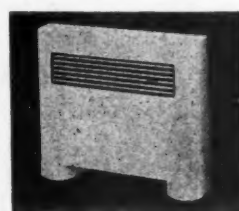
Type "B" Inset Heater in 1000 and 2000 watt loadings with built-in Thermostatic Control if required. Black or Walnut Plastics Panels with anodised old-gold colour grilles. Recess depth 5½ in.

THERMOTUBES



Type "T" 2 in. diameter Tubular Heaters in seamless steel tubing with self-contained element (no liquids) rated at 60 watts per foot. Available in lengths 2' to 12' in 1' steps. Finish is Brown Oak cellulose.

INDUSTRIAL



Type "S" in 1000 and 2000 watt loadings with Thermostatic or hand switch control. In heavy welded metal casing finished Cream. Wall or floor mounting.

All Thermovent Heaters are available in the following Voltage Ranges—100/120, 200/220 and 230/250 volts and all elements operate at low temperature "Black Heat" ensuring long life.

THERMOVENT HEATING,
5, VIGO STREET
Telephone: Regent 2601



E. K. COLE LIMITED
LONDON, W.1
Grams: Ekcorad Piccy London

CLASSIFIED ADVERTISEMENTS

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

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

Available only to applicants excepted from the Control of Engagement Order, 1947.

Public and Official Announcements

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

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: EMPLOYMENT REGISTER, WARREN PARK, WHITELEAF, Tel.: Uplands 9335, 991

LONDON COUNTY COUNCIL.
HOUSING AND VALUATION DEPARTMENT.
ARCHITECTURAL ASSISTANTS. Applications are invited for positions of Architectural Assistant, at salaries of up to £580 a year. Commencing salaries will be determined according to qualifications and experience, and qualified candidates will be eligible for appointment to the permanent staff of the Department on the occurrence of vacancies. Engagement will involve Superannuation contributions at the rate of 5 per cent. of salary.

Successful candidates will be required to undertake the design, layout, and preparation of working drawings for housing schemes (cottages and multi-storey flats), and will be employed in the Housing Architect's division.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed foolscap envelope required). Canvassing 1032 qualifies. (870).

FLINTSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments in the County Architect's Department:—

(a) QUANTITY SURVEYORS (two vacancies). Salary A.P.T., VI, £595, rising to £660 p.a., consolidated.

(b) ASSISTANT ARCHITECT. Salary A.P.T., V, £520, rising to £570 p.a., consolidated.

(c) ASSISTANT ARCHITECTS (two vacancies). Salary A.P.T., IV, £480, rising to £525 p.a., consolidated.

Applicants for (a) must be Members of the Royal Institute of Chartered Surveyors (Quantities), and must be capable of preparing bills of quantities, estimates, measuring up and dealing with contractors' accounts for large contracts.

Applicants for (c) should be Registered Architects and Associate Members of the Royal Institute of British Architects, or possess similar qualifications, and should have had adequate professional experience in the preparation of Surveys, Designs, Specifications and construction of modern buildings, particularly school buildings.

Applicants for (b) should be Registered Architects, preferably Members of the Royal Institute of British Architects, or possess similar qualifications, and should have had adequate professional experience of the preparation of Surveys, Plans and details for schools or other buildings dealt with by Local Authorities, and have a sound knowledge of design, construction and specifications.

The appointments will be subject to (a) the National Scheme of Conditions of Service, as modified by the County Council; (b) the provisions of the Local Government Superannuation Act, 1937, and (c) a satisfactory medical examination.

Applications will be considered from registered disabled persons.

Applications on forms to be obtained from the undersigned, accompanied by copy of one recent testimonial and the names and addresses of two other persons willing to supply further testimonials, are to be returned so as to be received not later than the 20th December, 1948.

W. HUGH JONES,

Clerk of the County Council.

County Buildings, Mold. 946
22nd November, 1948.

LANCASHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

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

(a) SENIOR ASSISTANT ARCHITECTS. Grade VI. Salary £595-£660 per annum. Preference will be given to Members of the R.I.B.A.

(b) ASSISTANT QUANTITY SURVEYORS. Grade VI. Salary £595-£660 per annum. Preference will be given to Associates of the Royal Institution of Chartered Surveyors (Quantity Surveyors' Division).

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937: to a satisfactory medical examination, and to the termination of each appointment by one month's notice in writing on either side.

Applications should be forwarded on the forms to be obtained from the County Architect, G. Noel Hill, F.R.I.B.A., M.T.P.I., County Offices, Preston, to whom they should be returned, accompanied by copies of three recent testimonials, to arrive not later than Saturday, 13th December.

R. H. ADCOCK,

Clerk of the County Council.

County Offices, Preston. 960
24th November, 1948.

COUNTY OF LEICESTER.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following established posts in the County Architect's Department:—

(a) SENIOR ASSISTANT ARCHITECTS. A.P.T. Grade VI/VII. Salary £595-£660/£635-£710.

(b) ASSISTANT ARCHITECTS. A.P.T. Grade V. Salary £520-£570.

(c) ASSISTANT ARCHITECTS. A.P.T. Grade IV. Salary £480-£525.

(d) ARCHITECTURAL ASSISTANTS. A.P.T. Grade III. Salary £450-£495.

(e) ENGINEERING ASSISTANT (ELECTRICAL). Grade VI. Salary £595-£660.

(f) ENGINEERING ASSISTANT (HEATING). Grade VI. Salary £595-£660.

(g) QUANTITY SURVEYOR AND ESTIMATING CLERK. Grade VI. Salary £595-£660. Candidates for appointments (g) and (h) must be registered architects, and preference will be given to Associate Members of the R.I.B.A. who have had good experience in the design and construction of modern buildings.

Candidates for appointments (c) and (d) should be experienced in the preparation of surveys and working drawings, and preference will be given to Students of the R.I.B.A.

Candidates for appointment (e) must be Corporate Members of the Institution of Electrical Engineers, and should be experienced in the preparation of schemes and specifications for electrical installations for all types of County buildings, and the testing of existing installations.

Candidates for appointment (f) must be Corporate Members of the Institution of Heating and Ventilating Engineers, and should be experienced in the design and specification of modern heating hot water and ventilating systems, and the testing of existing installations.

Candidates for appointments (g) should be experienced in the preparation of complete bills of quantities, specifications, preliminary estimates, and statements of interim and final accounts, including valuations for certificates.

The appointments will be subject to the National Scheme of Conditions of Service and to the provisions of the Local Government Superannuation Act, 1937, and to a satisfactory medical examination.

Applications must be made on the forms to be obtained from the County Architect, T. A. Collins, A.R.I.B.A., County Offices, Grey Friars, Leicester, to whom they should be returned, accompanied by copies of three recent testimonials, not later than 31st December, 1948.

JOHN CHATTERTON,

Clerk of the County Council.

Grey Friars, Leicester. 983

TARVIN RURAL DISTRICT COUNCIL.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant in the Office of the Engineer and Surveyor.

Applicants must have had sound training by pupilage and had previous experience in design and construction of building works, particularly in relation to housing. Preference will be given to persons qualified by the examination of the R.I.B.A.

The salary will be in accordance with Grade II (Technical Division) of the National Joint Council Scheme, viz., £420×£15-£465.

The appointment will be subject to one month's notice in writing on either side, to the provisions of the Local Government Superannuation Act, 1937, and to the selected candidate passing satisfactorily a medical examination.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, should be addressed to Mr. Thomas Pritchard, M.I.Mun.E., and enclosed in an envelope endorsed "Architectural Assistant," and should reach this office not later than Saturday, the 18th December, 1948.

(Sgd.) J. H. MOORE DUTTON,

Clerk to the Council.

Westminster Buildings, Newgate Street, Chester. 994

24th November, 1948.

COUNTY BOROUGH OF DERBY.

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent staff in accordance with the National Scale of Salaries:—

(1) ONE ASSISTANT ARCHITECT. Grade VI, A.P. and T. Division. Salary £595-£660.

Applicants should be Associate R.I.B.A., with a good knowledge of work undertaken by a Local Authority.

(2) ONE ASSISTANT ARCHITECT. Grade IV, A.P. and T. Division. Salary £480-£525.

Applicants should have passed the Intermediate examination of the R.I.B.A., and have had good architectural experience.

The appointments will be subject to one month's notice in writing on either side, and to the terms of the National Joint Council Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass a medical examination.

Form of application may be obtained from Thos. W. East, F.R.I.B.A., Borough Architect, The Council House, Corporation Street, Derby, and should be returned when completed, together with copies of two testimonials, to arrive not later than Tuesday, 21st December, 1948.

Canvassing, directly or indirectly, will be a disqualification.

C. ASHTON,

Town Clerk.

The Council House, Derby. 982

liii

COUNTY BOROUGH OF SWANSEA.
BOROUGH ARCHITECT'S DEPARTMENT.
ARCHITECTURAL AND MAINTENANCE STAFF.

Applications are invited for the following appointments on the Established Staff in the Borough Architect's Department:—

(1) TWO SENIOR ASSISTANT ARCHITECTS (Grade A.P.T., VI). Salary £595 to £660 per annum.

(2) A MAINTENANCE SURVEYOR (Grade A.P.T., V). Salary £520 to £570 per annum.

(3) TWO MAINTENANCE INSPECTORS (Grade A.P.T., II). Salary £420 to £465 per annum.

The salary scale is that of the National Scheme of Conditions of Service.

Applicants for appointment as Senior Assistant Architect must be Associates of the Royal Institute of British Architects, with sound experience either in Municipal or Private Offices. For one appointment, Housing experience is desirable, and for the other appointment experience in the design of School Buildings.

Applicants for appointment as Maintenance Surveyor must be Associates of the Royal Institution of Chartered Surveyors, or hold other equivalent qualifications, and must have experience in the maintenance, adaptation or alteration of all types of buildings.

For appointment as Maintenance Inspectors, candidates must have passed the Intermediate examination of the Royal Institution of Chartered Surveyors or hold equivalent qualifications, and must have experience in the preparation of Schedules of Dilapidation, War Damage Claims, and the maintenance of buildings.

Candidates must be under 45 years of age, unless in Local Government Service.

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

The appointments may be terminated by one month's notice on either side.

Forms of application may be obtained from the Borough Architect, Mr. H. T. Wykes, F.R.I.B.A., Guildhall, Swansea.

Applications, accompanied by copies of three recent testimonials and enclosed in an envelope endorsed with the title of the appropriate post, must be delivered to the undersigned not later than Tuesday, 21st December, 1948.

Canvassing, directly or indirectly, will disqualify.

T. B. BOWEN,

Town Clerk.

Guildhall, Swansea.

24th November, 1948.

953

BOROUGH OF BRENTFORD AND CHISWICK.

BOROUGH SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of one ARCHITECTURAL ASSISTANT, on the permanent staff and two on the temporary staff, at a consolidated salary according to the A.P.T. Division, Grade V, of the National Scheme, commencing 1st year, plus revised London weighting according to age.

Preference will be given to applicants who are Associate Members of the Royal Institute of British Architects (or who hold a similar qualification), but consideration will also be given to applications from persons intending shortly to take the Associate examination.

Applicants should have had experience in general architectural work, school and house planning and design, including the preparation of working drawings, specifications and setting out.

Applications for each of the above-mentioned appointments must be made on the prescribed form (which contains particulars and conditions of appointment), obtainable from the undersigned, by whom applications must be received not later than the 23rd December, 1948.

W. F. J. CHURCH,

Town Clerk.

Town Hall, Chiswick, W.4.

1022

CITY OF GLOUCESTER.

CITY ENGINEER AND SURVEYOR'S

DEPARTMENT.

CHIEF PLANNING ASSISTANT.

Applications are invited for the appointment of CHIEF PLANNING ASSISTANT (Grade VII, A.P. and T. Division, £635 to £710 p.a.).

Applicants should be Corporate Members of the Town Planning Institute with, preferably, recognized qualifications in Civil Engineering, Surveying or Architecture, have had considerable experience in Planning procedure and be competent to take charge of the Planning side of a City Engineer and Surveyor's office.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Terms and conditions of service will be generally in accordance with the Scheme of Conditions of Service for Local Authorities' Administrative, Professional, Technical and Clerical Services. Canvassing, directly or indirectly, will disqualify.

Applications, stating fully, age, qualifications and experience, accompanied by copies of three recent testimonials, and endorsed "Chief Planning Assistant," must be delivered to the undersigned not later than Wednesday, 22nd December, 1948.

L. O. NEED,

Town Clerk.

Guildhall, Gloucester.

1043

BOROUGH OF CHELTENHAM. BOROUGH ENGINEER'S DEPARTMENT. APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of Architectural Assistants, at salaries in accordance with the following grades, and subject also to the Scheme and Conditions of Service of the National Joint Council for Local Authorities:—

(a) Permanent, Grade III, A.P. and T. Division (£450 p.a., rising to £495 p.a.).

(b) Temporary, Grade A Class I (£316 5s. p.a., rising to £345, plus £59 15s. bonus).

Candidates must have been regularly trained.

Applicants for appointment (a) should be Registered Architects, preferably students of the R.I.B.A., and able to deal with the work normally carried out by a Local Authority. They should, further, be accurate draughtsmen and able to carry through works involving design and the writing of specifications, and should have a knowledge of Municipal housing.

Applicants for appointment (b) should have completed Articles, be competent draughtsmen, and able to assist generally with the work of the Department.

The successful candidates will be subject to one month's notice in writing on either side, and to the provisions of the Local Government Superannuation Acts. They will also be required to pass a medical examination.

Applications, stating age qualifications and details of previous experience, accompanied by copies of two recent testimonials, should be sent to G. Gould Marsland, B.Sc., M.Inst.C.E., Borough Engineer, Municipal Offices, Cheltenham, not later Monday, 13th December, 1948.

F. D. LITTLEWOOD

Town Clerk.

Municipal Offices, Cheltenham.

WR/ADM/R.

19th November, 1948.

967

COUNTY OF ESSEX.

ILFORD COMMITTEE FOR EDUCATION.

The Essex County Council invite applications for TWO ARCHITECTURAL ASSISTANTS, as set out below, to work in the office of the Borough Engineer of Ilford, to deal with work for the Committee for Education.

ONE ARCHITECTURAL ASSISTANT. A.P.T. Division, Grade V. (Applicants should be Members of the Royal Institute of British Architects.)

ONE ARCHITECTURAL ASSISTANT. A.P.T. Division, Grade III. (Applicants should have had good general training and experience.)

Application must be made on a form to be obtained from the Borough Engineer's Office and returned to him at the Town Hall, Ilford, together with copies of not more than three recent testimonials, within 14 days of the appearance of this advertisement.

964

HERTFORDSHIRE COUNTY COUNCIL. APPOINTMENT OF DEPUTY DIVISIONAL PLANNING OFFICER (TWO VACANCIES).

Applications are invited for the appointment of Deputy Divisional Planning Officer (two vacancies), at a salary of £685 per annum, rising by annual increments of £26 to £760 (Grade VIII, A.P.T.), together with travelling and subsistence allowances in accordance with the Council's scale.

Applicants should have had considerable experience in controlling development, and preference will be given to candidates with experience in controlling elevations by planning. Applicants must be Corporate Members of the Town Planning Institute and hold other professional qualifications.

Forms of application may be obtained from the County Planning Officer, County Hall, Hertford, and should be returned not later than the 20th December, 1948.

940

BOROUGH OF BEXLEY.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, on the permanent staff in the Architectural Section of the Borough Engineer's Department. The salary will be in accordance with Grade A.P.T., III, of the National Scale of Salaries (£450 × £15 = £495), plus London weighting.

Form of application, with Conditions of Appointment, may be obtained from the Borough Engineer and Surveyor, Council Offices, Bexleyheath, to whom completed applications must be returned by 20th December, 1948. Canvassing, directly or indirectly, will disqualify.

W. WOODWARD.

Town Clerk.

Council Offices, Bexleyheath, Kent.

1007

CITY OF CANTERBURY.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant, in the City Architect's Department, at a salary in accordance with Grade A.P.T., II, £420 × £15 = £465.

Applicants must have passed the Intermediate examination of the Royal Institute of British Architects.

The successful candidate will be required to pass a medical examination.

Applications, endorsed "Architectural Assistant," giving age, full particulars of experience and qualifications, and the names of three persons to whom reference can be made, should be received by Mr. L. Hugh Wilson, A.R.I.B.A., A.M.T.P.I., City Architect, not later than Friday, 17th December, 1948.

J. BOYLE.

Town Clerk.

Municipal Buildings, Canterbury.

24th November, 1948.

976

BOROUGH OF HESTON AND ISLEWORTH.

APPOINTMENT OF DRAUGHTSMAN.

Applications are invited for the appointment of Draughtsman, in the Town Planning Section of the Borough Engineer and Surveyor's Department, at a salary in accordance with Miscellaneous Division, Grade I, of the National Scale of Salaries (£315 × £15 = £360 per annum), plus appropriate London weighting.

Applicants, male or female, must be capable and expeditious draughtsmen, and preference will be given to those with Town Planning experience. The appointment is a permanent one, and will be terminable by one month's notice on either side. The conditions of service will be those of the National Joint Council for Local Authorities' Administrative, Professional and Clerical Services.

Forms of application may be obtained from the Borough Surveyor, 88, Lampton Road, Hounslow, by sending a foolscap stamped addressed envelope. Applications on the forms provided, together with particulars of training and experience and the names and addresses of three references, must reach the undersigned in an envelope endorsed "Draughtsman," not later than noon on the 20th December, 1948.

Canvassing will disqualify.

HAROLD SWANN.

Town Clerk.

Council House, Hounslow, Middlesex.

1006

CITY OF SALFORD.

Applications are invited for the following appointments in the City Engineer's Department.

(1) ARCHITECTURAL ASSISTANT. Salary Grade VI, £595 to £660.

(2) ARCHITECTURAL ASSISTANT. Salary Grade V, £520 to £570.

Candidates must be Associates of the Royal Institute of British Architects or hold an equivalent qualification, and should possess a sound experience in design and construction, and also be experienced in the management of building contracts.

The appointments will be subject to:—
(a) The Conditions of Service of the National Joint Council as adopted by the City Council.
(b) The Provisions of the Local Government Superannuation Act, 1937.

(c) The passing successfully of a medical examination.

Applications, stating age, qualifications and experience, together with particulars of past and present employment, accompanied by copies of two recent testimonials, should be forwarded in envelopes endorsed "Architectural Assistant," addressed to the City Engineer, Town Hall, Salford, 3, and be delivered not later than Monday, 20th December, 1948.

Applicants must disclose in writing whether or not they are related to any member of the Council or an Officer of the Authority.

H. H. TOMSON, Town Clerk.

1003

BOROUGH OF DEAL.

JUNIOR ARCHITECTURAL ASSISTANT.

Applications are invited from suitably qualified persons for the permanent appointment of Junior Architectural Assistant, in the Borough Engineer and Surveyor's Department.

Salary on Grade I of the National Consolidated Scale of £390 per annum, rising, subject to satisfactory service, to £435 per annum.

Candidates must have had proper training in the profession, and should have had experience in general Municipal architecture.

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

Applications, stating age, qualifications and experience, with the names and addresses of two persons to whom the Council may refer, must reach the undersigned not later than first post on Monday, the 20th December, 1948.

D. A. DANIELS.

Town Clerk.

Municipal Offices, Queen Street,

Deal, Kent.

24th November, 1948.

1001

BOROUGH OF HESTON AND ISLEWORTH.

ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF TWO GENERAL ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of two Architectural Assistants, in the Borough Engineer and Surveyor's Department, at a salary in accordance with Grade III of the A.P.T. Division of the National Scale, viz., £450-£495 per annum, plus London weighting.

Candidates should have good architectural experience and should have passed the Intermediate examination qualifying for Associate Membership of the Royal Institute of British Architects. Preference will be given to candidates who have had experience in the preparation of working and detailed drawings in connection with housing and other Local Government work.

The appointments are permanent ones, subject to the National Scheme of Conditions of Service, and forms of application may be obtained from the Borough Engineer and Surveyor, 88, Lampton Road, Hounslow, Middlesex, by sending a stamped, addressed envelope. Applications on the forms provided, endorsed "General Architectural Assistant," should be delivered to the Borough Engineer and Surveyor not later than noon on 20th December, 1948.

HAROLD SWANN.

Town Clerk.

949

CITY OF COVENTRY.

Applications are invited for the following whole-time appointments on the permanent staff of the City Architectural Department:—

(a) ONE ASSISTANT ARCHITECT, acting as Section Deputy. Salary on Grade A.P.T., Va, commencing at £550 per annum and rising to £610 per annum.

(b) ONE ASSISTANT ARCHITECT. Salary Grade A.P.T., V, commencing at £520 per annum and rising to £570 per annum.

Candidates for the above appointments should be Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications.

(c) ONE ASSISTANT ARCHITECT. Salary Grade A.P.T., III, commencing at £450 per annum and rising to £495 per annum.

(d) ONE ASSISTANT ARCHITECT. Salary Grade A.P.T., I, commencing at £390 per annum and rising to £435 per annum.

(e) ONE QUANTITY SURVEYOR, acting as Section Deputy. Salary Grade A.P.T., VII, commencing at £635 per annum and rising to £710 per annum.

Candidates should be Professional Associates of the Royal Institute of Chartered Surveyors (Quantities Division).

Salary increments are subject to satisfactory service.

The posts are subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Act, as amended in regard to annuities to widows by the Coventry Corporation Act, 1936, and a satisfactory certificate will be requisite from the Council's medical referee. The successful male applicants will be required to contribute to the Coventry Municipal Officers' Widows' and Orphans' Pension Fund.

Applications for all the above appointments must be made on the forms obtainable from the undersigned, and should be returned completed, together with copies of not more than two recent testimonials, or names of two persons to whom reference may be made, not later than Tuesday, 21st December, 1948.

Canvassing, directly or indirectly, will be a disqualification.

D. E. E. GIBSON.

City Architect.

1A, Warwick Row, Coventry.

2nd December, 1948.

962

SOUTH-WESTERN REGIONAL HOSPITAL BOARD.

SANDHILL PARK GROUP HOSPITAL MANAGEMENT COMMITTEE.

Applications are invited for the post of ENGINEER AND CLERK OF WORKS for the Group's Hospitals.

Salary £560, rising by annual increments of £20 to £660 per annum.

The person appointed will be responsible for the satisfactory operation and maintenance of all engineering services in the Committee's hospitals and the maintenance of the fabric of the buildings. He should have a sound knowledge of the efficient operation of Institutional boiler plants, engineering and electrical services, and be competent to advise on and supervise building maintenance and painting work, including the application of the local Bye-laws and Town Planning Acts.

The appointment will be subject to the provisions of the National Health Service (Superannuation) Regulations, 1947, and the successful applicant will be required to pass a medical examination.

Applications, stating age, qualifications and experience (including present position and past appointments), and giving the names of three referees, should reach the undersigned on or before the 6th January, 1949, under cover endorsed "Engineer and Clerk of Works."

E. V. ROSE.

Secretary.

1st December, 1948.

Sandhill Park, Bishops Lydeard,

Taunton, Somerset.

1029

ROYAL BURGH OF ARBROATH.

HOUSING ARCHITECTS' AND TOWN PLANNING DEPARTMENT.

Applications are invited for the following appointments in the above department:—

(a) TOWN PLANNING ASSISTANT. Salary Grade A.P.T., V (£520-£570 per annum, consolidated).

Applicants should have had previous experience in the preparation of Planning Schemes for Urban Areas. Preference will be given to those who have passed the Final examination of the Town Planning Institute.

Should the successful applicant be married, housing accommodation will be made available by the Council.

(b) JUNIOR ARCHITECTURAL ASSISTANT. Salary Grade A.P.T., I (£390-£435 per annum, consolidated).

Applicants should have had experience in general architectural work. Preference will be given to those who have passed the Intermediate examination of the R.I.B.A.

The successful applicants will be required to pass a medical examination, and will be subject to the provisions of the Local Government Superannuation (Scotland) Acts.

Applications (autobically endorsed), stating age, whether married or single, qualifications, present post and salary, previous posts and details of experience, together with copies of two recent testimonials, should be lodged with the undersigned not later than Friday, 24th December, 1948.

WM. D. SMITH.

Town Clerk.

Town House, Arbroath.

1038

CITY OF MANCHESTER.
HOUSING COMMITTEE.

Applications are invited from persons having suitable experience for the appointment of ASSISTANT ARCHITECTS. Salary Grade A.P.T., IV, of the N.J.C. Scales (£480 to £525 per annum). The successful candidates will be required to contribute to the Corporation's Superannuation Fund, and if under the age of 30 years, to the Manchester Municipal Officers' Widows' and Orphans' Pension Fund.

Applications, stating age, qualifications and experience, together with copies of two testimonials, must be submitted to Mr. A. Mackenzie, L.R.I.B.A., Director of Housing, Town Hall, Manchester, 2, endorsed "Assistant Architect," not later than 13th December, 1948.

Canvassing in any form, oral or written, direct or indirect, is prohibited.

PHILIP B. DINGLE, Town Clerk.

December, 1948. 1031

COUNTY BOROUGH OF EAST HAM.
BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the under-mentioned appointments:—

SENIOR ARCHITECTURAL ASSISTANT. Grade A.P.T., VI. Salary £595-£660.

ARCHITECTURAL ASSISTANT. Grade A.P.T., IV. Salary £480-£525.

CHIEF QUANTITY SURVEYOR. Grade A.P.T., VII. Salary £655-£710.

London allowance is payable in addition to the above salaries as follows:—

Age 15-20, £10 per annum.

Age 21-25, £20 per annum.

Age 26 and over, £30 per annum.

Salaries in excess of the minima of the grades may be paid according to the qualifications and experience of successful candidates.

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

Housing accommodation is not provided, but the Council will be prepared to consider applications for subsistence allowances in appropriate cases from persons appointed who may be unable to obtain suitable accommodation.

Full particulars of the duties, terms and conditions of appointment and form of application (which must be returned by Monday, the 20th December, 1948) may be obtained from the undersigned.

Canvassing in any form will disqualify.

H. A. EDWARDS, Town Clerk.

Town Hall, East Ham, E.6. 1025

COUNTY BOROUGH OF WEST HAM.
BOROUGH ARCHITECT AND PLANNING OFFICER'S DEPARTMENT.

Applications are invited for the following establishments:—

(a) CHIEF ASSISTANT-TOWN PLANNING (£850-£950-£1,000 p.a.).

Applicants must have had considerable experience in redevelopment of war damaged and obsolescent areas; examination of Development Applications; preparation of evidence for Public Inquiries; and Committee work. Preference given to those who are A.R.I.B.A., A.M.T.P.I.

Successful applicant to take charge of Town Planning Section.

(b) ASSISTANT ARCHITECT. A.P.T., VI (£595-£620-£660).

Applicants should be A.R.I.B.A., and experienced in Housing or Education works.

(c) ARCHITECTURAL ASSISTANTS. A.P.T., II (£420-£455).

Applicants should be Students of R.I.B.A. and have had two years' office experience.

(d) CLERK/SHORTHAND TYPIST. General Division (male, £150 at 18 yrs.-£385 at age 32; female, £128 at 18 yrs.-£308 at 32, with additional payment up to age 29 if suitably qualified).

Applicants must be competent shorthand typists and experience in Architect's or Builder's office an advantage.

Plus London allowance in respect of (b) to (d).

Details, together with application form (returnable by 1st January, 1949), may be obtained from Borough Architect and Planning Officer, 70, West Ham Lane, E.15. 1027

LONDON COUNTY COUNCIL.
QUANTITY SURVEYORS.

Vacancies exist for Quantity Surveyors in the Housing and Valuation Department, for work in connection with the development of cottage estates and the construction of multi-storey dwellings, at salaries of up to £700 a year, the commencing salary in each case being determined according to qualifications and experience. Successful candidates will be required to contribute to the Council's Superannuation and Provident Fund, and will be eligible for appointment to the Council's permanent staff and for advancement on the occurrence of vacancies.

Duties will include:

(a) Measurement of work in construction of houses, roads and sewers, preparation of interim and final bills; measurement and adjustment of sub-contracts; preparation of cost statistics, estimates, etc.

(b) Management of housing contracts of considerable value; interim valuations for payments; measurement of variations and settlement of final accounts.

Forms of application may be obtained from the Director of Housing and Valuer, The County Hall, Westminster Bridge, S.E.1 (a stamped addressed foolscap envelope required), quoting Q.S.1.

Canvassing disqualifies. (2140) 752

CITY OF BIRMINGHAM EDUCATION COMMITTEE.

APPOINTMENT OF ASSISTANT ARCHITECTS. Applications are invited for the appointment of FOUR ASSISTANT ARCHITECTS, on the staff of the Chief Education Officer, to work under the direction of the Architect to the Education Committee.

The salaries payable are as follows:—

(a) A.P.T., VI, £595-£660 (two posts).

(b) A.P.T., IV, £480-£525 (two posts).

Applicants must be Architects, preferably qualified by examination, with good experience in the preparation of working drawings for major schemes.

The appointments, which are for full-time service on the permanent staff, are subject to the provisions of the Local Government Superannuation Act, and to the passing of a medical examination.

Forms of application, which are obtainable from the undersigned on receipt of a stamped addressed envelope, must be returned not later than two weeks after the appearance of this advertisement.

E. L. RUSSELL, Chief Education Officer.

Education Office, Margaret Street, Birmingham, 3. 1021

LONDON COUNTY COUNCIL.
VACANCIES FOR QUANTITY SURVEYORS AND ASSISTANTS IN ARCHITECT'S DEPARTMENT.

SURVEYOR. Grade III, £550-£725-£700 a year.

TEMPORARY TECHNICAL ASSISTANT: (a) £440-£520-£580 a year.

(b) £40 to 167s. 6d. a week.

Commencing rates according to qualifications and experience.

Candidates for Grade III positions should be Associates of the Royal Institution of Chartered Surveyors, and be experienced in abstracting and billing, estimating, interim valuations for payments on account, measuring, adjusting and agreeing final accounts, "taking off," and the preparation of Bills of Quantities. Other candidates should also have a working knowledge of these matters.

Successful candidates will be superannuable, and will be considered for permanent appointment as vacancies arise.

Application forms from Architect (Q), County Hall, Westminster Bridge, S.E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualifies. (2091) 639

ISLE OF WIGHT COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

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

(a) THREE SENIOR ASSISTANT ARCHITECTS.—Salary A.P.T., Grade VI, i.e., £595-£660 per annum.

Candidates should be Associates of the Royal Institution of British Architects or hold a similar qualification, and preferably have had experience of the planning, design and construction of educational buildings and other architectural work undertaken by a Local Authority.

(b) THREE ARCHITECTURAL ASSISTANTS. Salary A.P.T., Grade III, i.e., £450-£495 per annum.

Candidates should be good draughtsmen, capable of carrying out plans and details for general architectural work. Preference will be given to candidates having an appropriate architectural qualification.

Applications, to be made on a form to be obtained from the County Architect, Mr. Frederick H. Booth, A.R.I.B.A., A.M.T.P.I., should be returned completed to the undersigned at the address stated below, together with a copy of one recent testimonial and the names of two persons to whom reference can be made, not later than Monday, 20th December, 1948.

L. H. BAINES, Clerk of the County Council.

County Hall, Newport, I.W. 1024

COUNTY BOROUGH OF EASTBOURNE.
BOROUGH ENGINEER'S DEPARTMENT.

APPOINTMENT OF ASSISTANT ARCHITECTS.

Applications are invited for the under-mentioned posts on the Staff of the Borough Engineer:—

(a) ONE ASSISTANT ARCHITECT. Grade A.P.T., VIII, £685-£760 p.a.

(b) ONE ASSISTANT ARCHITECT. Grade A.P.T., VI, £595-£660 p.a.

The successful applicants will be engaged in the design and construction of a large mixed Modern Secondary School, and experience of this or other type of new School will be an asset.

Applicants should be Associate Members of the Royal Institution of British Architects, and should have had good experience in the design, supervision and construction of new buildings.

The appointments are subject to the National Joint Council's Conditions of Service, and the Local Government Superannuation Act, 1937.

Applications, giving full details of qualifications and experience, together with the names and addresses of two persons from whom references can be obtained, should be forwarded in an envelope endorsed with the title of the appointment applied for, to this Office, as so to reach the same not later than Thursday, the 30th December, 1948.

RAYMOND WILLIAMS, B.Sc., A.M.I.C.E., Borough Engineer.

2/4, Saffrons Road, Eastbourne. 1023

LONDON COUNTY COUNCIL.
QUANTITY SURVEYORS.

Vacancies exist for Quantity Surveyors in the Housing and Valuation Department, for work in connection with the development of cottage estates and the construction of multi-storey dwellings, at salaries of up to £700 a year, the commencing salary in each case being determined according to qualifications and experience. Successful candidates will be required to contribute to the Council's Superannuation and Provident Fund, and will be eligible for appointment to the Council's permanent staff and for advancement on the occurrence of vacancies.

Duties will include:

(a) Measurement of work in construction of houses, roads and sewers, preparation of interim and final bills; measurement and adjustment of sub-contracts; preparation of cost statistics, estimates, etc.

(b) Management of housing contracts of considerable value; interim valuations for payments; measurement of variations and settlement of final accounts.

Forms of application may be obtained from the Director of Housing and Valuer, The County Hall, Westminster Bridge, S.E.1 (a stamped addressed foolscap envelope required), quoting Q.S.1.

Canvassing disqualifies. (2140) 752

LONDON COUNTY COUNCIL.

Applications are invited for unestablished positions of (i) ARCHITECT, Grade III (salaries up to £700 a year) and (ii) ARCHITECTURAL ASSISTANTS (salaries up to £580 a year), in the Housing and Valuation Department. Commencing salaries in either grade will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Acts, and successful candidates will be eligible for consideration for appointment to the permanent staff on the occurrence of vacancies.

Successful candidates will be required to undertake the design, layout and preparation of working drawings for housing schemes (cottages and multi-storey flats), and will be employed in the Housing Architect's Division. Preference will be given to candidates holding a recognized professional qualification.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed envelope required, and quote Ref. G.R.3). Canvassing disqualifies. (2269) 1046

The Ministry of Supply invites applications for an appointment as ENGINEER at a Research and Development Establishment. Candidates, who must be of British nationality, born of British parents (see detailed regulations, a copy of which can be obtained on application of Ministry of Supply, Room 432, Adelphi, John Adam Street, Strand, W.C.2), must be experienced Mechanical Engineers, and have Corporate Membership of the Institution of Civil or Mechanical Engineers, or have passed examinations recognized by these Institutions as granting exemption from Sections A and B of the Associate Membership examination. (Preference will be given to candidates having an Honours Degree.) They should have served an apprenticeship and have had considerable experience in the operation, maintenance and testing of mechanical earth-moving machinery, excavators, tractors and graders. A knowledge of road-making machinery, stone-crushing and bitumen handling plant would be an advantage. The duties of the post include supervision of the development of British plant of the above types. The appointment will be in the grade of Engineer II or Engineer III, according to age, qualifications and experience.

Salary scales are:—Engineer II, £720-£960; Engineer III, £530-£470-£720 (commencing salary will be determined in relation to age and experience).

Write, quoting C.792/48A, to the Ministry of Labour and National Service, Technical and Scientific Register (K), York House, Kingsway, London, W.C.2, for application forms, which must be completed within 10 days of the date of this advertisement. 15.11.A.16(50) 1039

BURGH OF KILMARNOCK.
BURGH ARCHITECT AND TOWN PLANNING OFFICER'S DEPARTMENT.

Applications are invited for the following appointments in:—

(1) BURGH ARCHITECT'S DEPARTMENT. ASSISTANT ARCHITECT. Salary Grade A.P.T., V (£520-£515 to £570, including war bonus).

(2) TOWN PLANNING DEPARTMENT. PLANNING ASSISTANT. Salary Grade A.P.T., III (£450-£415 to £495, including war bonus).

Applicants for appointment as Assistant Architect should have a professional qualification and previous Municipal and housing experience.

Applicants for appointment as Planning Assistant should have previous experience in a Planning Department and additional architectural or surveying experience.

Applicants must not exceed 45 years of age unless already contributory employees under the Local Government and Other Officers' Superannuation (Scotland) Act, 1937. War service may be deducted from present age to satisfy this condition.

The persons selected for appointment will require to pass a medical examination, and on satisfying this condition will become contributory employees under the above-mentioned Act.

Applications, accompanied by one copy of each of three recent testimonials, stating age, qualifications and experience, and for which post application is made, should be lodged with the Burgh Architect and Town Planning Officer, 11, London Road, Kilmarnock, not later than 10 a.m. on Monday, 13th December, 1948.

W. L. WALKER, Town Clerk.

Council Chambers, Kilmarnock. 959

METROPOLITAN BOROUGH OF WANDSWORTH.
ARCHITECTURAL ASSISTANTS.

Applications are invited for two established appointments as Architectural Assistants, in the Borough Architect's Department, at a salary in accordance with Grade A.P.T., VII (£665-£740 per annum inclusive).

Candidates should be fully experienced in the design and planning of housing estates, particularly multi-storey blocks of flats and/or other framed buildings and in supervising their erection. Preference will be given to Associates of the R.I.B.A.

Forms of application may be obtained from the Borough Architect, and must be returned to the undersigned not later than 18th December, 1948.

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

Municipal Buildings, Wandsworth, S.W.18. 981

EAST SUFFOLK COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following posts, in the County Architect's Department:—
(a) Grade A ASSISTANT ARCHITECTS.
A.P.T. Grades V and VI. Consolidated salary £520-£660.
(b) Grade B ASSISTANT ARCHITECTS.
A.P.T. Grades III and IV. Consolidated salary £450-£525.

The commencing salary in the grades will be fixed according to the qualifications and experience of the candidate.

Applicants for appointment (a) must be Registered Architects, and preferably Associates of the R.I.B.A. The work to be dealt with is that normally carried out by a Local Authority. Candidates must be quick and accurate draughtsmen, capable of carrying a job through in all its stages, and with a sound knowledge of design, building construction and specifications, and must have had at least 5 years' office experience, excluding articles, etc.

Applicants for appointments (b) must be Registered Architects, and preferably members of the R.I.B.A. They must be quick and accurate draughtsmen, fully conversant with a 1 in. scale, half inch and full size details for all types of buildings normally dealt with by a Local Authority, and have a good knowledge of design, construction and specifications.

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

Applications, stating age, qualifications, and full details of previous experience, accompanied by copies of three recent testimonials, should be sent to E. J. Symcox, F.R.I.B.A., County Architect, County Hall, Ipswich, not later than 30th December, 1948.

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

G. C. LIGHTFOOT, Clerk of the Council.

County Hall, Ipswich. 1028

BOROUGH OF WIDNES.
APPOINTMENT OF BOROUGH ARCHITECT.
Applications are invited for the appointment of Borough Architect, at a salary of £900 per annum, rising by annual increment of £50 to £1,000 per annum.

The person appointed will be required to take charge of the Architect's Department set up by the Council, which carries out all architectural work, including housing, schools and public buildings.

Applicants must have had considerable experience in Municipal Architectural work, they should be Associates of the Royal Institute of British Architects, and preference will be given to candidates possessing a University Degree in Architecture.

Applications, stating age, present and previous positions, technical training and qualifications (with dates), and concise particulars of experience, together with the names and addresses of three persons to whom reference may be made, must be delivered, endorsed "Borough Architect," to the undersigned on or before Friday, 31st December, 1948.

The appointment, which will be terminable by three months' notice on either side, is subject to the provisions of the Local Government Officers' Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The Conditions of Service will be those of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services. Canvassing will be a disqualification, and applicants must disclose any relationship to members of the Council.

The Corporation will provide a house for the successful candidate if required.

JAMES WALLACE, Town Clerk.

Town Hall, Widnes.
1st December, 1948. 1051

B.B.C. invites applications from Registered Architects for an appointment as ARCHITECTURAL ASSISTANT, based in London. They should have a sound knowledge of building construction and at least three years' practical experience in an office. Preference will be given to applicants between the ages of 25-35 and trained in an Architectural School. The salary is in a grade rising by annual increments of £25 to a maximum of £580 per annum. Applications, stating age, qualifications, experience and past and present appointments, should reach the Engineering Establishment Officer, Broadcasting House, London, W.1, within 7 days of the appearance of this advertisement. 1030

COUNTY BOROUGH OF NEWPORT.
APPOINTMENT OF CHIEF PLANNING OFFICER.

Applications are invited for the post of Chief Planning Officer, to the above Authority, at a salary of £1,100-£250 to £1,300. Candidates must be Corporate Members of the Town Planning Institute, with suitable administrative experience, and it will be an advantage to possess additional technical or professional qualifications.

The successful candidate must pass a medical examination, and the appointment, which is superannuable, will be determinable by three months' notice on either side. Application forms may be obtained from the undersigned, and should be returned not later than the 1st January, 1949.

T. MERVYN JONES, Town Clerk.

Town Hall, Newport, Mon.
December, 1948. 1017

CITY OF CHICHESTER.
APPOINTMENT OF BUILDING SURVEYOR AND DEVELOPMENT CONTROL ASSISTANT.

Applications are invited for the above appointment in the City Engineer and Surveyor's Department. The salary will be in accordance with Grade III of the A.P.T. Division of the National Joint Council Salary Scales (£450-£515-£495 per annum).

Applicants should have had previous service in a Local Government office, together with experience of Development Control, and must possess the Building Inspector's Certificate of the Institution of Municipal Engineers, and should have passed at least the Intermediate examination of one of the following:—

Institution of Municipal Engineers,
Royal Institute of Chartered Surveyors,
Royal Institute of British Architects,
Town Planning Institute.

The person appointed will deal with the following matters:—

Building Bye-laws,
Public Health Acts,
Factories Act, 1937, Section 34,
Petroleum Regulations,
Development Control, including the Control of Advertisement Regulations,
Building Licensing under Defence Regulations 56A.

If the successful candidate possesses a car, he will be classified as an Essential User, in accordance with the scale recommended by the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, the passing of a medical examination, and will be terminable by one month's notice on either side.

Application forms may be obtained from the City Engineer, Mr. R. A. J. Cork, A.M.I.C.E., and must be returned to him accompanied by copies of three recent testimonials, in order to arrive not later than Tuesday, 28th December, 1948. Canvassing, either directly or indirectly, will be a disqualification.

ERIC BANKS, Town Clerk.

Council Offices, North Street, Chichester. 1067

BOROUGH OF LEYTON.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of a TOWN PLANNING ASSISTANT in the Department of the Borough Engineer and Surveyor.

The salary will be £595 per annum, rising by two annual increments of £20 and one of £25 to a maximum of £660 per annum (Grade VI of the National Joint Council's Scheme of Conditions of Service for Local Authorities' Administrative, Professional, Technical and Clerical Services), plus £30 per annum weighting.

Candidates must have had good experience in the preparation and administration of Town Planning Schemes and should possess a recognized qualification in Town Planning.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, to the successful candidate satisfying the Medical Officer as to his fitness, to the Scheme of Conditions of Service for the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, and to the general conditions laid down from time to time by the Council, including membership of a trade union.

Canvassing, directly or indirectly, will be a disqualification, and candidates must disclose in their application whether they are related to any member or senior officer of the Council.

Applications, stating age, details of qualifications and experience, together with copies of three recent testimonials, are to be delivered to the Borough Engineer and Surveyor not later than 31st December, 1948, in a sealed envelope endorsed "Town Planning Assistant."

D. J. OSBORNE, Town Clerk.

Town Hall, Leyton, E.10, Essex. 1055

BANBURY AND DISTRICT HOSPITALS MANAGEMENT COMMITTEE (NO. 3 OXFORD REGION).

Appointment of ARCHITECT. Applications are invited from Fellows or Associates of the Royal Institute of British Architects for the above appointment. The gentleman appointed will advise on architectural matters relating to the hospitals and other premises under the administration of the Management Committee and carry out such relative professional, administrative, and executive duties as may be required. Applicants should be experienced in architectural practice, especially in relation to hospital work. Remuneration will be according to the R.I.B.A. scale.

Applications, giving particulars of qualifications and experience, together with the names of two persons to whom reference may be made, should be sent not later than 29th December, 1948, to the Secretary, Banbury and District Hospitals Management Committee, 51, Oxford Road, Banbury, Oxon. 1056

B.B.C. invites applications for the post of JUNIOR ARCHITECTURAL ASSISTANT, in the Building Department, based in the London Area. Candidates must be of R.I.B.A. Intermediate standard, and are required for work in connection with studio and office premises. The salary is in a grade rising by annual increments of £20 to a maximum of £475 per annum. Applications, stating age, qualifications and experience, should reach the Engineering Establishment Officer, Broadcasting House, London, W.1, within 7 days of the appearance of this advertisement. 1058

COUNTY BOROUGH OF BURNLEY.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT, at a salary in accordance with Grade II of the National Scales (£420, rising to £455 per annum).

Preference will be given to candidates who have passed the Intermediate examination of the Royal Institute of British Architects, and some experience of educational buildings and/or housing would be an advantage.

Conditions of service are those formulated by the National Joint Council, and the appointment is on the established staff and subject to the provisions of the Local Government Superannuation Act, 1937. The successful applicant will be required to pass a medical examination.

Forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall, Burnley, to whom applications should be returned in the envelope provided not later than noon on Friday, the 7th January, 1949.

C. V. THORNLEY, Town Clerk.

Town Hall, Burnley.
December, 1948. 1053

CROWN AGENTS FOR THE COLONIES.
Applications from qualified candidates are invited for the following post:—

BUILDING SURVEYOR required by the Hong Kong Government Public Works Department for three years, with prospect of permanency. Commencing salary, including expatriation pay according to qualifications and experience in the scale, \$1,048 a month, rising to \$1,820 a month. In addition a cost-of-living allowance of up to \$425 a month is payable. (The Government rate of exchange is at present 15 dollars to the £, but is liable to alteration). Free passages. Candidates, not over 40 years of age, must be Chartered Surveyors, preferably in both the Building and Quantities Divisions, and have had at least 5 years' experience in a City Engineer's or similar office dealing with the approval of plans for the construction of building, including reinforced concrete framed structures. Apply at once, by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/23704/3D on both letter and envelope. 1059

NEWCASTLE-UPON-TYNE REGIONAL HOSPITAL BOARD.
DIVISIONAL ASSISTANT ARCHITECT.

TYNESIDE AREA.
Applications are invited for the appointment of Divisional Assistant Architect, on the permanent staff of the Architect to the Board. Salary will be in accordance with Grade VIII of the A.P.T. Division of the National Scales, i.e., £385 per annum, rising by annual increments of £25 per annum to £460 per annum.

Candidates must be Members of the Royal Institute of British Architects, should be well versed in the design and construction of major buildings, and should possess a thorough knowledge of modern building practice and procedure. Previous hospital experience is desirable but not essential.

The person appointed will be the representative of the Board's Architect in the Tyneside area, and will be expected to reside in the district. The work will be principally administrative and will involve close liaison with the Hospital Management Committees in the Area and with "panel" architects carrying out works on behalf of the Board.

Application, stating (1) name and full address, (2) age and whether married, (3) degrees and professional qualifications, (4) experience, (5) present appointment and salary, (6) war service, (7) date available if appointed, (8) names and addresses of three referees, should be forwarded to the Secretary to the Board, "Dunra," Osborne Road, Newcastle-upon-Tyne, 2, not later than Wednesday, 29th December, 1948. 1065

CORPORATION OF LONDON.
CITY SURVEYOR'S OFFICE.
Applications are invited for the following appointments in the City Surveyor's Office:—

ASSISTANT ARCHITECTS AND SURVEYORS. Salary £400 to £600 per annum (inclusive of consolidated bonus), according to age, qualification and experience.

Applicants, aged 25 to 35 years, should either have qualified or be about to qualify for Associate Membership of the Royal Institute of British Architects or Associate Membership of the Royal Institution of Chartered Surveyors (Building Sub-division).

The appointments are for the present on a temporary basis, and will be concerned principally with the reinstatement of war damage to a variety of types of properties. In the event of establishment to the permanent staff temporary service will count for the purposes of superannuation. Such appointments will be subject to the provisions of Local Government Superannuation, and applicants will be required to pass a medical examination.

Previous experience with a Municipal body is not essential.

Applications, endorsed "Technical Staff," to be made to George Holliday, F.R.I.C.S., City Surveyor, 55-61, Moorgate, E.C.2, giving the following particulars:—Service with Armed Forces, age, qualification and intentions in connection therewith, previous training, positions and experience, salary required, date when available to commence duties if selected, together with copies of two testimonials. 1066

Amended Advertisement.**CARDIGANSHIRE COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.**

Applications are invited for the appointment of **PLANNING ASSISTANT, A.P.T., Grade III** (£450-£495), in the Development Surveys Section of the above Department. The commencing salary within the grade will be determined according to the qualifications and experience of the successful applicant.

Applicants must have had previous planning experience, and preference will be given to those who have passed the Intermediate examination of the Town Planning or other Technical Institution.

The successful candidate will be engaged on the preparation of the County Development Plan, and experience in the preparation of estate layouts for Municipal and other housing development, including ancillary social services connected therewith, is essential.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, the National Joint Council's Scheme of Conditions of Service, the passing of a satisfactory medical examination, and to one month's notice on either side.

Applications should give details of age, whether married or single, education, technical training, qualifications, present and previous appointments and experience. Copy of one recent testimonial and name and address of two persons to whom reference may be made, should be submitted. Applications should reach the undersigned not later than 29th December, 1948.

NORMAN GREENWOOD.

Acting Clerk to the Committee.

Cambrian Chambers, Aberystwyth.

2nd December, 1948.

1072

**COUNTY BOROUGH OF ROTHERHAM.
ASSISTANT ARCHITECT.**

Applications are invited for the appointment of an Architectural Assistant, in the office of the Borough Engineer, at a commencing salary of £635, rising by annual increments to a maximum of £710 per annum.

Applicants must be Associate Members of the Royal Institute of British Architects, and preferably with experience in the service of a Local Authority.

The post is superannuable, and the candidate selected for appointment will be required to pass a medical examination.

The appointment will be subject to the conditions of service adopted by the Council and based on the National Scheme of Conditions of Service. It will be determinable by one month's notice on either side.

The Council will endeavour to provide the successful candidate with housing accommodation if deemed necessary.

Applicants must state whether they are related to any member or officer of the Rotherham County Borough Council. Deliberate omission to disclose any such relationship will disqualify any candidate.

Canvassing of members of the Council, whether direct or indirect, will disqualify.

Applications, endorsed "Architectural Assistant," stating age, qualifications and experience, accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than the 23rd December, 1948.

JOHN S. WALL.

Town Clerk.

Municipal Offices, Rotherham, Yorks.

1074

**WEST SUSSEX COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments:—

(a) **ASSISTANT ARCHITECT, A.P.T., V** (£520-£570).

(b) **JUNIOR ASSISTANT ARCHITECT, A.P.T., I** (£390-£435).

(c) **TEMPORARY CLERK OF WORKS.** Consolidated salary at the rate of £12 per week, payable monthly. Candidates must have had considerable experience in supervision of very large building works.

(d) **TEMPORARY CLERK OF WORKS.** Consolidated salary at the rate of £10 per week, payable monthly. Candidates must have had experience in supervision of large buildings works.

Further particulars in respect of each of these appointments should be obtained from F. R. Steele, F.R.I.B.A., F.R.I.C.S., M.T.P.I., County Architect, County Hall, Chichester, to whom detailed applications must be submitted not later than the 22nd December, 1948.

T. C. HAYWARD.

Clerk of the County Council.

County Hall, Chichester.

3rd December, 1948.

1069

BOROUGH OF SALE.**APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

Applications are invited for the post of additional Architectural Assistant, in the Borough Surveyor's Department. Salary Grade A.P.T. III, of the National Scale (£450, rising to £495 per annum). Superannuation scheme. National Scheme of Conditions of Service. One month's notice on either side.

Applications, stating qualifications, experience, etc., together with the names of three responsible persons to whom reference may be made as to ability and character, should reach me not later than 17th December, 1948. Canvassing will disqualify.

BERTRAM FINCH.

Town Clerk.

Town Hall, Sale.

30th November, 1948.

1070

**COUNTY BOROUGH OF WALSHALL.
EDUCATION ARCHITECT.**

Applications are invited for an Education Architect on the staff of the Borough Engineer and Surveyor. Salary will be in accordance with Grade VIII of the Administrative, Professional and Technical Division of the National Joint Council's Scales of Salaries (£655-£760). The commencing point in the grade will be determined according to the qualifications and experience of the applicant.

Applicants must have had extensive experience in the design and maintenance of schools and of the administrative work in connection therewith. Preference will be given to applicants who are Associates of the Royal Institute of British Architects.

The Education Architect will be responsible for carrying out such school work as may be decided upon by the Education Committee acting through its officers.

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

The Corporation are prepared to arrange for housing accommodation should the successful applicant desire it.

Applications, accompanied by copies of three recent testimonials, must be received by the Borough Engineer and Surveyor, Council House, Walsall, not later than Wednesday, December 29, 1948.

M. E. HABERSON.

Borough Engineer and Surveyor.

Council House, Walsall.

3rd December, 1948.

1078

BOROUGH OF MANSFIELD.

Applications are invited from suitably qualified persons for the under-mentioned appointments in the Borough Engineer and Surveyor's Department:—

Housing Accommodation: The Council will consider granting service tenancies if required.

(a) **SENIOR ARCHITECTURAL ASSISTANT, A.P.T., Grade IV/V** (£480-£515 to £570). Commencing salary to be fixed in accordance with qualifications and experience; preference will be given to persons who have passed the Final examination R.I.B.A.

(b) **GENERAL ARCHITECTURAL ASSISTANT, A.P.T., Grade I** (£390-£435 to £435). Preference will be given to persons who have passed the Intermediate R.I.B.A.

(c) **QUANTITY SURVEYING ASSISTANT, A.P.T., Grade III** (£450-£515 to £495). Commencing salary to be fixed in accordance with qualifications and experience; preference will be given to persons who have passed the Final examination of the R.I.C.S.

These appointments are subject to the following conditions:—

(1) National Joint Council's Scheme of Salaries and Conditions of Service.

(2) Superannuation Act, 1937, for which the successful candidate will be required to pass a medical examination.

(3) Residence within the Borough.

(4) Termination by either party at any time on giving one month's notice.

Applications, stating age, training, qualifications, experience, together with copies of not more than three recent testimonials, should be sent to the undersigned endorsed with the name of the appointment to be received, not later than Monday, 3rd January, 1949.

Canvassing, directly or indirectly, will disqualify.

A. C. SHEPHERD.

Town Clerk.

Carr Bank, Mansfield.

4th December, 1948.

1071

**BOROUGH OF LEYTON.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.**

Applications are invited for the appointment of **TWO GENERAL ARCHITECTURAL ASSISTANTS**, in the Department of the Borough Engineer and Surveyor.

The salary will be £595 per annum, rising by two annual increments of £20 and one of £25, to a maximum of £660 per annum (Grade VI of the National Joint Council's Scheme of Conditions of Service for Local Authorities' Administrative, Professional, Technical and Clerical Services), plus £30 per annum weighting.

Candidates should possess the recognized architectural qualifications (preferably A.R.I.B.A.) and have had good Municipal experience.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, to the successful candidates satisfying the Medical Officer as to their fitness, to the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, and to the general conditions laid down from time to time by the Council, including membership of a trade union.

Canvassing, directly or indirectly, will be a disqualification, and candidates must disclose in their application whether they are related to any member or senior officer of the Council.

Applications, stating age, details of qualifications and experience, together with copies of three recent testimonials are to be delivered to the Borough Engineer and Surveyor not later than the 31st December, 1948, in a sealed envelope endorsed "General Architectural Assistants."

D. J. OSBORNE.

Town Clerk.

Town Hall, Leyton, E.10. Essex.

1054

**HIS MAJESTY'S COLONIAL SERVICE.
THE COLONIAL ENGINEERING SERVICE.**

Vacancies exist in the Public Works Department, Cyprus, for a temporary **TOWN PLANNING OFFICER** (Reference 27281/21).

Candidates should be Associates of the Royal Institute of British Architects and possess town planning qualifications. They should have had practical experience in the field of town planning. Candidates must be British subjects, physically fit and between the ages of 30 to 45.

The appointment is temporary in the first instance and on agreement for three years. Before the expiration of the period of engagement consideration will be given to the possibility of conversion to the permanent and pensionable establishment. Salary will be in the scale £800-£1,320 per annum; point of entry depending on age, experience, and approved war service.

An expatriation allowance of 15 per cent. of salary is payable, a temporary cost-of-living allowance which is liable to variations at any time is also payable. This amounts to £35 for a single man or £66 14s. 6d. for a married man, with additions for the first three children. Government quarters may be available at a low rent. Free passages to Cyprus for the officer, his wife and family, are provided on appointment and on satisfactory completion of the agreement. The duties of the post will be to establish a Government Town Planning Office; to advise in the preparation of town planning legislation, and to prepare and carry out any town planning schemes that may be approved.

Intending candidates should write before 30th January, 1949, to the Director of Recruitment (Colonial Service), 2, Sanctuary Buildings, Great Smith Street, S.W.1, stating age, professional qualifications, brief details of experience and reference number of the appointment. 1076

WELSH REGIONAL HOSPITAL BOARD.

Applications are invited for the post of **PRINCIPAL ASSISTANT ARCHITECT** on the Board's Headquarters Staff.

Salary £800 x £25-£950 per annum. Applicants, who should be Fellows or Associates of the Royal Institute of British Architects, should have had experience in the design and construction of hospitals. Administrative ability is essential.

The appointment is subject to the provisions of the National Health Service (Superannuation) Regulations, 1947 and 1949, and will be terminable by one month's notice on either side.

The successful applicant, if not a transferred officer, will be required to pass a medical examination.

Applications, stating age, experience and qualifications, together with the names of two referees, should be addressed to the undersigned so as to reach him not later than December 21.

R. E. REESE.

Secretary.

The Temple of Peace and Health,

Cathays Park, Cardiff.

1075

**THE URBAN DISTRICT COUNCIL OF
KEYNSHAM.****APPOINTMENT OF ARCHITECTURAL
ASSISTANT.**

Applications are invited for the appointment of Architectural Assistant in the Engineer and Surveyor's Department at a salary in accordance with A.P.T. Grade (a) of the National Scales of Salaries (£550 x £20-£610).

Applicants must have had wide experience in the design and preparation of housing schemes and other architectural work and possess a suitable technical qualification.

The appointment will be subject to one month's notice on either side, to the Local Government Superannuation Act, 1937, and to the submission of a satisfactory medical report.

Applications, stating age, qualifications and particulars of experience, accompanied by two recent testimonials, should reach the undersigned not later than first post on Monday, December 20th, 1948.

GEO. R. ASHTON.

Clerk of the Council.

Council Offices, Keynsham, Bristol.

4th December, 1948.

1079

**CITY OF NOTTINGHAM EDUCATION
COMMITTEE.****COLLEGE OF ARTS AND CRAFTS.**

Principal: **ALFRED H. RODWAY, A.R.C.A.**

Applications are invited from Men and Women for appointments as **STUDIO INSTRUCTORS** in the School of Architecture of the College, which is recognized for exemption from the R.I.B.A. Inter and Final examinations, and in the Department of Town and Country Planning from the Final examination of the Town Planning Institute.

Duties to commence on 1st January, 1949, or earliest date possible thereafter. Candidates should hold recognized qualifications in Architecture, preferably the degree or diploma of a recognized School. The Nottingham College of Art and Crafts is recognized by the Ministry of Education as a Central College. Salary: Burnham Scales, 1948, with additional allowances, where appropriate, for (i) training; (ii) graduation; (iii) full-time professional experience after age 21; (iv) previous recognized teaching service; and (v) service in H.M. Forces or the recognized equivalent. Application forms can be obtained from the Principal, College of Art and Crafts, Waverley Street, Nottingham, to whom they should be returned, with copies of two testimonials, within fourteen days of the publication of this advertisement.

F. STEPHENSON.

Director of Education.

Education Office, South Parade, Nottingham.

1073

**CITY OF BRADFORD.
CITY ENGINEER AND SURVEYOR'S
DEPARTMENT.
APPOINTMENT OF TWO SENIOR TOWN
PLANNING ASSISTANTS, ONE GRADE A.P.T.,
VI—ONE GRADE A.P.T., V.**

Applications are invited for the positions of Senior Town Planning Assistants in the City Engineer and Surveyor's Department; one appointment in accordance with Grade A.P.T. V, of the National Scales of Salaries (£523-£750 per annum), and one appointment in accordance with Grade A.P.T. VI (£595-£660 per annum). Candidates should be Associates of the R.I.B.A., and hold a University Degree or Diploma in Architecture, or the final examination of a recognised School of Architecture with experience in Town Planning. The final examination of one of the following bodies would be an advantage. Inst.C.E., Inst.Man.E., Surveyors' Institution. This appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Canvassing will disqualify, and any applicant who is related to a member of, or a Senior Officer of, the Council, must disclose the fact in his application.

Applications, stating age, present and previous appointments, qualifications and experience, accompanied by copies of three recent testimonials, should reach the undersigned not later than December 31, 1948.

W. H. LEATHER,
Town Clerk.

Town Hall, Bradford.

1077

**WEDNESFIELD URBAN DISTRICT COUNCIL.
APPOINTMENT OF QUANTITY SURVEYOR.**

Applications are invited for the appointment of a Quantity Surveyor at a salary of £500 per annum. Candidates should be Associates of the Royal Institute of Chartered Surveyors (Quantities Section) and be experienced in the preparation of Bills of Quantities, Estimates, Specifications, Measuring for Interim and Final Certificates and settling of Final Accounts.

Applications, stating age, training, experience and qualifications, together with copies of three recent testimonials, should be addressed to the undersigned and should be received within fourteen days of the publication of this advertisement.

Housing accommodation will be considered if necessary, and accommodation may be available at an early date.

S. R. WRIGHT,
Clerk of the Council.

Council Offices,
High Street,
Wednesfield, Staffs.

1080

**PETERLEE DEVELOPMENT CORPORATION.
ARCHITECT PLANNER'S DEPARTMENT.
APPOINTMENT OF JUNIOR ADMINISTRATIVE OFFICER.**

Applications are invited for the above post, at a starting salary of between £400 and £550 per annum, according to ability.

Duties will include acting as personal assistant to the Architect Planner, general assistance in the administration of the department, minutes of conferences, correspondence and returns, office equipment and supervision of files, maps, library, etc.

Some architectural experience, and ability to take shorthand and drive a car will be an advantage.

The appointment is subject to one month's notice either way.

Superannuation is optional. Lodging allowance is payable in certain circumstances.

Applications, stating age, qualifications and experience, should be addressed to the Architect Planner, Peterlee Development Corporation, Shotton Hall, Old Shotton, County Durham, so as to arrive not later than 1st January, 1949. 1082

**COUNTY BOROUGH OF WEST HAM.
BOROUGH ARCHITECT AND PLANNING
OFFICER'S DEPARTMENT.**

Applications are invited for the following established posts:—

(a) SENIOR ASSISTANT, PLANNING (A.P.T., Grade VII, £635-£710).

Should have had considerable experience in redevelopment of war-damaged and obsolescent areas; examination of Development applications; preparation of evidence for Public Inquiries, and preferably be A.R.I.B.A., A.M.T.P.I.

(b) ARCHITECTURAL ASSISTANT (A.P.T., Grade I, £390-£435).

Must be good draughtsman, with sound knowledge of construction and at least two years' office experience.

(c) ADMINISTRATIVE ASSISTANT (Male) (A.P.T., Grade I, £390-£435).

Should have had considerable experience in Architect's office or Local Government Department, and be competent shorthand/typist.

Plus London allowance.

Details, together with application forms, which must be returned not later than 1st January, 1949, may be obtained from Borough Architect and Planning Officer, 70, West Ham Lane, E.15. 1081

**COUNTY BOROUGH OF DARTINGTON.
BOROUGH ARCHITECT'S DEPARTMENT.**

Applications are invited for the permanent appointment of TWO ASSISTANT ARCHITECTS. Salary, Grade V (£520-£570).

The Corporation hope to be able to make available self-contained flats for successful married candidates in need of housing.

These appointments offer scope for good experience on all types of Municipal work, including Housing and Education, and preference will be given to candidates with such experience and with recognized qualifications.

Applications, stating age, qualifications, present appointment and salary, and previous experience, accompanied by copies of recent testimonials and names and addresses of two referees, should be delivered to E. A. Tornaboni, A.R.I.B.A., A.M.T.P.I., Borough Architect, Central Buildings, Dartington, not later than Monday, 20th December, 1948. 1068

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

AN expanding Middle East Oil Company urgently requires a SENIOR ARCHITECTURAL ASSISTANT, for the London office, to be engaged in the preparation of sketch plans, working drawings and details for domestic, commercial, industrial, social and civic buildings usual to the development of Municipal Estate; at least 5 years' practical experience, if school trained A.R.I.B.A., or 15 years' experience design and working drawings with architects of standing; quick accurate draughtsmanship, with sound knowledge of construction, essential; age 30-45; salary at least £600 per annum, but according to age and experience. Write giving brief details for application form, and quoting L.O. 118, to Box "R.P." c/o J. W. Vickers & Co., Ltd., 7/8, Great Winchester Street, London, E.C.2. 740

PROGRESSIVE appointment, with prospect of early Partnership, offered to capable and energetic qualified ARCHITECTURAL ASSISTANT (30/40) in private general practice near London (E.), with country connections; design, surveying and levelling, and some knowledge of quantities; minimum salary £500. Box 846.

ACHITECTURAL ASSISTANT required; preferably experienced in the design, alteration and maintenance of industrial buildings, and capable of preparing surveys, working drawings, details and specifications; knowledge of quantities an advantage; the appointment would be permanent and pensionable. Applications, stating age, experience, qualifications, and salary required, should be sent to the Staff Controller, The Gas Light & Coke Company, 30, Kensington Church Street, W.8. 865

COMPETENT ASSISTANT required in the Architect's Department of a Midland Multiple Company. Applicants are requested to give particulars of training, qualifications, age, and salary required, to Box 948.

ACHITECTS' ASSISTANTS required for Construction Department; large multiple firm, Birmingham office; good progressive position, with superannuation; 5-day week; offered to keen, energetic and capable man; state age, experience, and salary required. Box 955.

ACHITECTURAL ASSISTANT required by East Midlands Brewery Co., with large and interesting reconstruction schemes in hand for Brewery premises and Licensed properties; applicants should be Associates of the R.I.B.A., with not less than 7 years' office experience, and preference will be given to applicants having experience in the designing and maintenance of Licensed premises. State age and salary required and when available to Box 956.

SENIOR ASSISTANT required; capable of handling contracts from sketch plan stage to completion; knowledge of industrial work an advantage; salary in accordance with present day standards. Apply in writing to J. Stanley Beard, Bennett & Partners, 101-103, Baker Street, W.1, giving particulars of experience, etc. 987

EXPERIENCED ASSISTANT required (convenient self-contained flat provided in central position). Write with full particulars to S. G. Scales, A.R.I.B.A., Eastbourne. 989

QUANTITY SURVEYOR—Taker-off required; age 27 to 35; A.R.I.C.S. preferred. Write, stating age, experience, etc., to Martin Sheffield, F.R.I.C.S., 29, Sackville Street, W.1. 974

E. MAY, Architect and Townplanner, formerly Frankfurt-on-Main, requires TWO ARCHITECTURAL ASSISTANTS, one of them with some training in townplanning; several years of practical work in Architects' offices conditional; applicants must be healthy, talented young men, hard workers, and preferably unattached; applications to include samples of work, references, photograph, and handwritten summary of age, training and previous experience; starting salary £50 per month, increasing according to ability; share in profits from second year onwards; passage out will be paid. Applications by Airmail to E. May, P.O. Box 1910, Nairobi. 992

SENIOR and Intermediate Architectural Assistants required immediately. Salary according to experience and qualifications. Farmer & Dark, Chartered Architects, Terminal House, Grosvenor Gardens, London, S.W.1. 1012

SENIOR ASSISTANT required for Architectural Department; should be around R.I.B.A. Intermediate standard. Apply, stating age, experience and salary required, to Employment Manager, Rolls-Royce Ltd., Derby. 1010

JUNIOR ARCHITECTURAL ASSISTANT required in busy West End office; good prospects. Apply, stating age, experience, and salary required, to J. Stanley Beard, Bennett & Partners, 101-3, Baker Street, W.1. 1036

PRACTICAL SURVEYOR, aged about 30, required for property management and building repairs with large London company; knowledge of dilapidations and quantities essential. State age, experience, and salary to Box 1035.

JUNIOR ARCHITECTURAL ASSISTANTS required; should be interested in contemporary design; ability to prepare constructional working drawings from sketch designs is essential; salary £6 to £8 per week, according to experience. Apply in writing, Misha Black, Design Research Unit, 37, Park Street, W.1. 1034

QUALIFIED ASSISTANT ARCHITECT, aged 30-45, with experience in Factory work, required for London; applicants with sound knowledge modern construction and 5 years' office experience handling jobs throughout; salary £600-£800, according to qualifications. Apply in writing, giving full details of qualifications, experience and age, to Body, Son & Fleury, 36, Victoria Street, London, S.W.1. 1084

All Kinds of Veneer

Oak Veneer Co Ltd.
10-14 Kingsland Rd. London E.2.

SHoreditch 8544

TWO ARCHITECTS' ASSISTANTS required immediately for City office, to work on subsidised flat schemes in London; 5-day week, and profit sharing bonus in addition to salary. Apply by letter for interview, giving brief particulars of qualifications and experience: (a) To be A.R.I.B.A., with good pre-war office experience, preferably in London; salary up to £780 per annum, according to qualifications and experience. (b) To be Intermediate R.I.B.A., with some pre-war office experience; salary up to £468 per annum, according to qualifications and experience. Stewart & Hendry, F./A.A.R.I.B.A., A.M.T.P.I., 90, Fenchurch Street, E.C.3. 1057

ARCHITECTS, practising in the City of Liverpool, require **ASSISTANT (A.R.I.B.A.)**, age early thirties, for housing and hospital development work; commencing salary £750 p.a.; should be available in the New Year. Apply Box 1083.

TWO SENIOR ASSISTANT ARCHITECTS required in Staff Architect's Department of large Multiple concern in Leeds; salary up to £500 p.a., according to qualifications and experience. Apply Box 1016.

ARCHITECTS' ASSISTANT, aged 30-45, preferably member R.I.B.A., with general experience, required for West of England office; applicants should have sound knowledge modern construction, quick and neat draughtsmen, and 5 years' office experience; salary £400-£600, according to qualifications. Write, with full details of qualifications, experience, and age, to Box 1085.

ARCHITECTURAL ASSISTANT—Large Birmingham Brewery requires **JUNIOR ASSISTANT**, with experience of surveying and drawing office work; excellent future for keen, energetic young man. Reply, stating age, experience, and salary required, to Box 1086.

SENIOR qualified ARCHITECTURAL ASSISTANT required early date in Mid-Herts; experience in varied domestic work essential, and must be able to undertake all work from sketch designs to completion; opportunity of partnership if suitable. Write, stating age, full experience and salary required, Box 1087.

CIVIL Engineering Contractors require four Junior and two Senior qualified **ARCHITECTURAL ASSISTANTS** for two years' service Nyasaland; preference to unmarried men or those without family ties. Apply in writing, giving full particulars of qualifications and experience. Trevor Construction Co., 75, Victoria Street, S.W.1. 1045

ARCHITECTURAL ASSISTANT required for Architect's office near Regent Street, London, W.1; good draughtsmanship essential; state salary required and experience. Box 1060.

WANTED—Qualified **ARCHITECTS' ASSISTANT** required in a West Riding town; capable of carrying works through; bills of quantities; speedy draughtsman; good prospects for suitable man and a possible partnership. Also a **JUNIOR ASSISTANT** required, at or approaching Intermediate standard. Apply, giving experience, age, salary, when could commence at earliest, Box 1089.

ARCHITECTURAL ASSISTANT required in West Country office; Intermediate standard; general practice, including farms, factories, domestic work, etc.; ability to drive car an advantage; interesting work and progressive appointment. Full particulars of experience, training, salary, etc., to Box 1019.

ARCHITECTURAL ASSISTANT required. Apply by writing, stating qualifications. A. F. Scott & Sons, F.F.R.I.B.A., 23, Tombland, Norwich. 1040

VACANCY for qualified **ARCHITECTURAL ASSISTANT**, at least Intermediate R.I.B.A. standard, to work under the sole principal with the minimum of supervision in expanding practice in the South Midlands; salary according to qualifications and experience. Apply to Orrell H. Nuttall, Esq., F.R.I.B.A., 45A, High Street, Banbury, Oxon. 1041

ARCHITECTURAL ASSISTANT required for an interesting general practice in Mid-Wales; applicants must be up to R.I.B.A. Intermediate standard at least; salary according to experience, £300-£500 per annum. Apply R. E. Bonsall, A.R.I.B.A., 15, North Parade, Aberystwyth. 1064

ARCHITECTURAL ASSISTANT required in Manchester area; must be experienced in design, alteration and maintenance of industrial buildings, and also surveying same. Please reply, stating age, experience and salary required, to Tom Hayes, L.R.I.B.A., 12, Tandle Hill Road, Royton, near Oldham, Lancs. Box 1063.

ARCHITECT requires **TWO ASSISTANTS** for Hydro-Electric work, beginning 5th January, 1949; must have completed either apprenticeship or school training. Please reply by letter only, with references, stating age, particulars of experience, and salary required, to James Shearer, R.S.A., F.R.I.B.A., F.R.I.A.S., 11, Maygate, Dunfermline. 1061

CAPABLE ARCHITECTURAL ASSISTANT required immediately; experience of good quality building desirable; good salary and interesting work. Apply Lavender, Twentyman & Percy, 2, Waterloo Road, Wolverhampton. 1044

TWO ARCHITECTURAL ASSISTANTS of Intermediate standard required for busy West End architects' office; salary by arrangement. Box 1042.

ARCHITECTURAL ASSISTANT required (West Riding); excellent scope for progressive Modern designer in interior, exteriors and shop fitting; interesting variety of work; good salary and conditions to right man. Box 56, Smith's Library, 16, Market Hill, Barnsley. 1048

SENIOR and JUNIOR ARCHITECTURAL ASSISTANT required. Apply in writing to S. N. Cooke & Partners, Sun Building, Bennetts Hill, Birmingham. Superannuation scheme in operation. 1047

COSTAIN (WEST AFRICA), LTD., urgently require **ARCHITECTURAL ASSISTANT** in West Africa; age preferably 35 or under, preferably qualified; should have had good general experience in an architect's office; sound knowledge of construction—must be a neat draughtsman and capable of using both level and theodolite; Assistant to Chief Architect; working up sketch plans and working drawings from designs, also field works and surveys; salary around £900 per annum; free furnished accommodation and medical attention. Apply in writing, giving full details of experience, etc., to Personnel Director, Richard Costain, Limited, Dolphin Square, London, S.W.1. 1050

SENIOR ASSISTANT required in a Bank's Architect's office; good previous experience in the design and maintenance of office buildings essential; age about 40; preferably an Associate of R.I.B.A.; permanent post for suitable applicant. Box 1059.

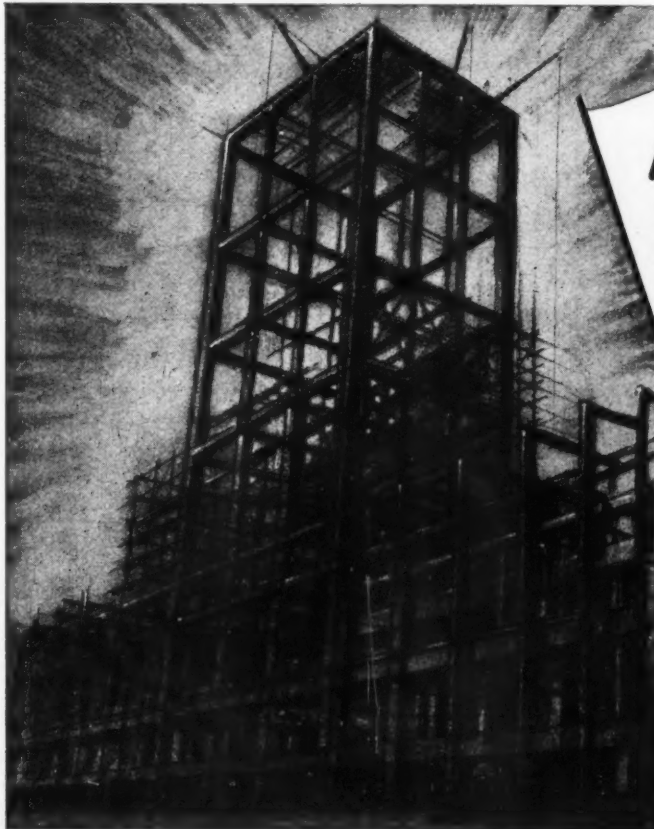
Architectural Appointments Wanted

APPLICANT, with good experience and references, seeks employment as **CLERK OF WORKS** or supervising officer, with a progressive firm of Building Contractors or Interior Decorators. Box 201.

EXPERIENCED ASSISTANT desires responsible permanent position; experience includes housing, layouts, survey work and conversions, etc; details and salary offered. Box 211.

ARCHITECT'S ASSISTANT (24), 4 years' office experience, seeks post on South Coast. Box 213.

CHARTERED ARCHITECT, A.R.I.B.A. 35 years' experience general practice, offers services; would welcome whole time appointment Senior Assistant; London or South Coast counties. Box 212.



No
SKELETON
in our cupboard!

STRUCTURAL STEELWORK

No skeleton in our cupboard and no doubt about the framework of your building when the steel is erected by Thomas Blackburn's. Our long experience in all branches of structural steelwork is your safeguard—and is at your service always.

RAILINGS • GATES • METAL WINDOWS
WELDED VESSELS • RAINWATER GOODS

THOMAS BLACKBURN & SONS
LIMITED
INCORPORATING RUSSELL EDWARDS & CO & STEVENSON
PRESTON-LANCS

Other Appointments Vacant

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

SHOPFITTING DRAUGHTSMAN (SENIOR) required; must be fully experienced in this class of work; sound knowledge of building construction an advantage; West London area. Reply to Box 965.

VISITING DECORATIVE ADVISER.—Well-known Paint Manufacturer invites applications for the above post from men of good appearance and pleasing personality, educated to matriculation standard. Applicants should possess outstandingly good colour sense and ability to convey ideas clearly to others. Architectural training an asset, but not essential. Apply, giving full details of training and experience, to Box 1009.

DESIGNERS and DETAILERS required for R.C. framed structures and hollow tile floors. Write, stating experience, etc., to Diespeker & Co., Ltd., Clifton House, Euston Road, N.W.1. 1033

Services Offered

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

QUANTITIES. Specifications, Estimates for building or sewerage work; part-time services offered. Box 921.

ARCHITECTURAL MODEL MAKING.—I am now in a position to undertake the Construction of Models of Bridges, Buildings, Town Planning Schemes; excellent craftsmanship and service offered. Write Stuart, Tiled Lodge, Iver Heath, Bucks. 958

PART-TIME Assistance offered to Architects for building and land surveys, levelling, contouring, etc., for housing schemes, school sites, factory sites, etc.; own car and equipment. Box 973.

WORKING OR DISTRICT.—Chartered Architect offers services on part-time or temporary basis; general assistance, supervision, etc.; not purely draughtsman. Full particulars from Box 1026.

DISTINCTIVE DUPLICATING.—Specifications, Bills of Quantity, etc., duplicated by experts; contractors to Local Government Authorities; detailed price list available. M.P.J. (Facilities), 268, Ripponden Road, Oldham. 1037

ASSISTANT offers occasional spare-time services at home; London area; tracings, details, working drawings, surveys, etc. Box 1018.

R.I.B.A. offers part-time assistance on surveys, preparation of specifications, working drawings, etc.; London area. Box 1062.

PART-TIME office or work at home wanted in January by qualified **WOMAN ARCHITECT**; Lake District or Carlisle neighbourhood preferred. Box 1090.

For Sale

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

SET of 12 Ranging Rods, extendable to 7 ft. 6 in.; can be carried in car, normal size 4 ft.; complete in canvas and leather bag; £5 10s. Box 990.

TWO new Portable Photo Copying Machines. 42 in. wide, complete with Hand Operated 32 in. Developing Machines. Fred Watkins, Colford, Glos. Phone 2271. 1014

Miscellaneous

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

A. J. BINNS, LTD. Specialists in the supply and fixing of all types of fencing, guard rail, factory partitions and gates. Harvest Works, 99, 107, St. Pauls Road, N.1. Canonbury 2061.

GEORGE HIGGINSON, LTD. Bickenhill, near Birmingham. Tel. Hampton-in-Arden 131. Specialist Contractors, Land Clearing, Earth Moving and Levelling. Scrapers and bulldozers with skilled men available for large or small contracts in any districts. 1480

PLANT FOR HIRE.—We can supply Petrol and Electric Paint Spraying Compressors at £5 10s. per week, single gun machines, and £7 per week, double gun machine. Aerocem, Ltd., 71, Lots Road, Chelsea, S.W.10. Flaxman 1423/4. 768

FLOORS OF DISTINCTION Laid: in wood, rubber, composition, cork, mosaic; existing floors repaired, resurfaced and polished; also panelling restored. Davis Floorings, Grove Hall Court, Hall Road, N.W.8. CUN. 3205/6 and 5616. 600

OFFICE ACCOMMODATION.—Two very large light Rooms, 3rd floor; telephones; 800 sq. ft. available in Mayfair Maisonette; some furnishings if required; £450 p.a. Write Box 1048.

CENTRAL HEATING OIL BURNERS.—Insist on the British-made Parwinc—no stoking, clean, trouble free; no waiting for coal or coke deliveries; no embargo now. Write at once to Parker, Winder & Achurch, Ltd., Makers, 30, Broad Street, Birmingham, 1.

ARCHITECTS' OFFICES (two rooms) to Let, City; area approx. 350 sq. ft.; very light and quiet; rent £140 p.a., inclusive rates; lease about 3 years; £300 to include full equipment and furniture, etc. Box 1049.

Educational Announcements

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

R. I.B.A. AND T.P.I. EXAMINATIONS.—Mr. L. Stuart Stanley, M.A., F.R.I.B.A., Dist.T.P., M.T.P.I. Tutor in the Bartlett School of Architecture, London University, prepares candidates by correspondence tuition. 15, North Road, N.6 Tel.: MOUNTVIEW 8104.

QUALIFYING EXAMINATIONS

R.I.B.A. AND T.P.I.
INTER & FINAL FINAL

Courses of Instruction by Correspondence and Personal in Studio

C. W. BOX

F.R.I.B.A., A.I.STRUCT.E., M.R.SAN.I.

115 GOWER STREET, W.C. Euston 3906

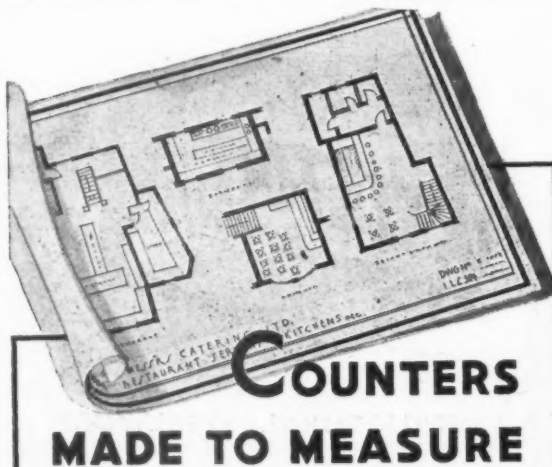
R I B A INTER, FINAL & SPECIAL FINAL.

Postal Courses in all subjects of the examination syllabus (including Professional Practice) are conducted by THE ELLIS SCHOOL OF ARCHITECTURE

Principal; A. B. Waters, M.B.E., G.M., F.R.I.B.A.

18, ALBANY HOUSE, WORCESTER.

London Office: 103, Old Brompton Road, S.W.1.



COUNTERS MADE TO MEASURE

Counters made by Henderson are adaptable to any layout and are suitable for construction to any plan, whatever the size or shape. Whole-hearted co-operation will be freely given in all matters regarding design and delivery. Stove enamel finish with stainless steel capping and a non-staining and heat-proof counter top. No permits are required.

Henderson
THE HENDERSON SAFETY BANK CO. LTD.

ELSTREE WAY ELSTREE HERTS. Phone: ELSTREE 1758/3 lines

Heating and Air Conditioning Equipment for Buildings

By E. Burlace Turpin, M.I.H.V.E., M.Inst.F.
An up-to-date guide to this subject for architects and building contractors. The author is a well-known expert. 30/- net.

PITMAN,

Parker Street, Kingsway, London, W.C.2.

**STEEL FRAMED
BUILDINGS
AND ALL TYPES OF
RIVETED & WELDED
STRUCTURAL WORK**



BONE, CONNELL & BAXTERS LTD.

NETHERTON WORKS, WISHAW, LANARKSHIRE.

PHONE WISHAW 831-2-3-4 • GRAMS' STRUCTURAL WISHAW

Glasgow Office: 219 St. Vincent St. Glasgow, C.2.

* Phone: Central 8111.

London Office: 529, Grand Buildings, Trafalgar Square, London.

* Phone: Whitehall 4272.



There are vacancies in the Chief Architect's Division for

ARCHITECTURAL ASSISTANTS

with recognised training and fair experience. Successful Candidates will be employed in London and elsewhere on a wide variety of Public Buildings, including Atomic Energy and other Research Establishments, Telephone Exchanges, and Housing.

Salary: Architectural Assistants, £300-£525 per annum; Leading Architectural Assistants, £500-£625, plus overtime. Starting pay will be assessed according to age, qualifications and experience. These rates are for London; a deduction is made in the provinces. Although these are not established posts some of them have long-term possibilities and competitions are held periodically to fill established vacancies.

APPLY in writing, stating age, nationality, full details of experience, and locality preferred, to Chief Architect, W.G.10/T, Ministry of Works, Abell House, London, S.W.1.

NEW FLOORS for OLD

Wood Floors Planed, Sanded, repaired and Treated.

FLOOR RENOVATIONS LTD.

36, LAURISTON ROAD E.C. Phone AMH 1080
Sandpapering machines for hire.

For ELECTRIC MOTOR STARTERS of proved reliability... Specify



LIFTS

by **MORRIS**

Herbert Morris Ltd

Loughborough

Engineering branches in London, Glasgow, Manchester, Birmingham, Leeds, Sheffield, Newcastle, Cardiff, Bristol, Dundee, Liverpool, Nottingham, Bury St. Edmunds, Belfast

NAILABILITY—

There is no such word

We had to invent it to express one of **DURAC's** outstanding qualities—the ease with which it can be nailed without previous drilling.

DURAC asbestos board is easy to saw, a good insulator, takes paint and distemper well.

Standard Sizes: 8' x 2' 6"
6' x 2' 6"

Thickness: 3/16"
Weight: 1.9 lbs. per sq. ft.

LICENCE FREE

From timber and builders' merchants everywhere.

Sole distributors: Denny Mott & Dickson Ltd.

Adelphi House, London, E.C.4.

DURAC — the
workable building board



INFORMATION SHEET

MAXHEAT
TUBULAR
HEATERS

Wardle
29.G1

CATALOGUES ALSO AVAILABLE.

Obtainable from
The Wardle Engineering Co., Ltd., Old Trafford, Manchester 11
dm. WA.

STEELWORK BY
R.W. SHARMAN LTD.
SWAN WORKS, HANWORTH, MIDDX.

Phones: Feltham 3007. Sunbury 3210. Grams: "Sharmans, Sunbury"

Phone: **PERIVALE 7251**

for reliable and prompt
Electrical Installations

Specifications and complete
schemes gladly submitted

SERVICE ELECTRIC CO. LTD
WATER ROAD, ALPERTON, MIDDLESEX



MODELS

ESTAB.
1888.
BY

John B. THORP

FOR 98 GRAY'S INN ROAD, W.C.1
TOWN PLANNING
PUBLIC BUILDINGS
ESTATES and
INTERIORS
TELEPHONE:
HOLBORN 1011

Pressed Steel Tanks by

BRAITHWAITE
& CO ENGINEERS LTD

KINGS HOUSE, HAYMARKET, S.W.1

Telephone: WH 1164/5 Telegrams: Braithwaite-Phone

MUMFORD BAILEY
& **PRESTON LTD**

AIR CONDITIONING & HEATING
HOT & COLD WATER SERVICES
SANITARY ENGINEERING ETC.



NEWCASTLE HOUSE - CLERKENWELL CLOSE - LONDON - E.C.1

Phone: Clerkenwell 4344

Branches at Bournemouth & Dublin

The BUILDING CENTRE

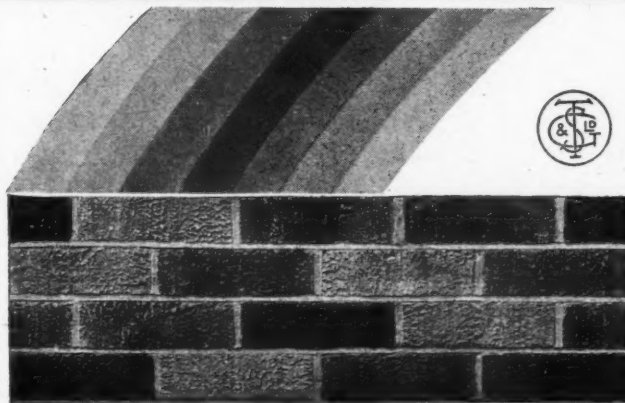
9 CONDUIT STREET, LONDON, W.1

TELEPHONE MAYFAIR 8641

EXHIBITION

... a permanent and constantly changing Exhibition
and free information service for all interested in building and its equipment

Daily 10-5 **ADMISSION FREE** Saturday 10-1



"MULTIRUF" REGD
FACING BRICKS

RAINBOW COLOURINGS

Tucker's "MULTIRUF" Facing Bricks are a machine-made, hand-finished brick with a rustic face. Handsome in appearance yet inexpensive. Made in a range of artistic colourings.

ENQUIRIES INVITED.

G. TUCKER & SON LTD

LOUGHBOROUGH, LEICESTERSHIRE.

Phone 2246-7

Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Adams, Robt. (Victor), Ltd.	—	Ferodo, Ltd.	xxv	Prodorite, Ltd.	—
Aidas Electric, Ltd.	vi	Floor Renovations, Ltd.	lxi	Pynford, Ltd.	v
Allied Ironfounders, Ltd.	—	Flush Doors Manufacturers Association,	—	Pynrotenax, Ltd.	—
Allied Paints & Chemicals, Ltd.	—	Ltd., The	xxxv	Rawplug Co., Ltd., The	xviii
Anderson Construction Co., Ltd.	—	Fordham Pressings, Ltd.	ii	Ripolin, Ltd.	li
Anderson, D., & Son, Ltd.	—	Forrest, George, & Son, Ltd.	xxxi	Sadcolock, Ltd.	—
Ascot Gas Water Heaters, Ltd.	—	Formacon, Ltd.	ii	Sadd, John, & Sons, Ltd.	xiii
Austin Hall Group of Companies, The	—	Fothergill & Harvey, Ltd.	xxx	Sadler, Thos. Sons & Co.	i
Baldwin, Son, & Co., Ltd.	ii	Gillett & Johnston, Ltd.	ii	Salter, T. E., Ltd.	xxvii
Banister, Walton & Co., Ltd.	xi	Greenwood's & Airvac Ventilating Co.,	—	Sankey, J. H., & Son, Ltd.	xii
Bath Cabinet Makers & Artcrafts, Ltd.	—	Ltd.	ii	Santon, Ltd.	xxiv
Bigwood, Joshua, & Sons, Ltd.	—	Griffiths Bros. & Co., Ltd.	xxxviii	Scaffolding (Great Britain), Ltd.	—
Birmid Rain-Water Goods	—	Gypco Products, Ltd.	—	Sealcrete Products, Ltd.	—
Birmingham & Blackburn Construction	—	Harvey, G. A., & Co. (London), Ltd.	—	Secomastic, Ltd.	xxix
Co., Ltd.	—	Haskins Steel Rolling Shutters	ii	Semtex, Ltd.	xli
Blackburn, Thos., & Sons, Ltd.	lix	Henderson, P. C., Ltd.	xliii	Service Electric Co., Ltd.	lxi
Bone, Connell & Co., Ltd.	ix	Henderson Safety Tank Co., Ltd.	ix	Sharman, R. W., Ltd.	lxi
Booth, James, & Co., Ltd.	xix	Hills, F.	—	Smith & Pearson, Ltd.	—
Booth, John, & Sons (Bolton), Ltd.	—	Hollway, W. F., & Brother, Ltd.	xxxvi	Smith's Fireproof Floors, Ltd.	—
Boulton & Paul, Ltd.	xlii	Hope, Henry, & Sons, Ltd.	xi	Southern Lime Association, The	—
Bowaters Building Boards, Ltd.	ix	Imperial Chemical Industries, Ltd.	xxi	Standard Patent Glazing Co., Ltd.	xxiv
Box, C. W., F.R.I.B.A.	lxi	Insulite Products Corporation, Ltd.	—	Stelcon (Industrial Floors), Ltd.	—
Braby, Fredk., & Co., Ltd.	—	International Correspondence Schools,	—	Sundeals Board Co., Ltd.	xiv
Braithwaite & Co., Engineers, Ltd.	lxi	Ltd.	—	Sutcliffe, Speakman & Co., Ltd.	—
Bratt, Colbran, Ltd.	viii	Jenkins, Robt., & Co., Ltd.	i	Thermavent	—
Briggs, Wm., & Sons, Ltd.	lxiii	King, George W., Ltd.	xviii	Thomas Richd., & Baldwins, Ltd.	—
British Aluminium Co., Ltd.	—	Lacrinoid Products, Ltd.	xxii	Thompson, Beacon Windows, Ltd., John	—
British Gas Council	—	Laing, John, & Son, Ltd.	—	Thorn Electrical Industries, Ltd.	—
British Insulated Callender's Cables, Ltd.	xxi	Leaderflush, Ltd.	—	Thorp, John B.	lxi
British National Electric, Ltd.	—	Lead Industries Development Council	—	Thornton, A. G., Ltd.	ii
British Trane Co., Ltd.	i	Loft Ladders, Ltd.	lxiii	Tretol, Ltd.	xxvi
Britmac Electrical Co., Ltd.	—	London Brick Co., Ltd.	—	True-Flue, Ltd.	xlii
Broad & Co., Ltd.	xxviii	Lysaght, John, Co., Ltd.	—	Trussed Concrete Steel Co., Ltd., The	—
Building Centre, The	lxi	Mallinson, Wm., & Sons, Ltd.	xlv	Tucker, G., & Son, Ltd.	lxi
Cargo Fleet Iron Co., Ltd.	iv	Marley Floor Tile Co., Ltd., The	xxiii	Tungum Sales Co., Ltd.	—
Cellon, Ltd.	—	McCarthy, M., & Son, Ltd.	—	Turners Asbestos Cement Co., Ltd.	xxxii
Cement Marketing Co., Ltd.	xvii	McKechnie Bros., Ltd.	—	United Paint Co., Ltd., The	—
Central Office of Information	xxvi	Merchant Trading Co., Ltd., The	—	Universal Asbestos Manufacturing Co.,	—
Chubb & Sons, Lock & Safe Co., Ltd.	lxiii	Metal Sections, Ltd.	xxxviii	Ltd., The	—
Colt, W. H. (London), Ltd.	iii	Midland Electric Manufacturing Co., Ltd.	—	United Steel Companies, Ltd.	—
Copper Development Association	—	Midland Joinery Works, Ltd.	—	Val De Travers Asphalt Paving Co.,	—
Coatman, Richard, Ltd.	xxxii	Midland Woodworking Co., Ltd.	—	Ltd.	—
Crittall Manufacturing Co., Ltd.	—	Mills Scaffolding Co., Ltd.	lxiv	Venesta, Ltd.	—
C.S.A. Industries, Ltd.	xv	Ministry of Works	lxi	Vulcanite, Ltd.	xxxiv
De La Rue Insulation, Ltd.	—	M.K. Electric, Ltd.	—	Walpamur Co., Ltd., The	—
Denny, Mott & Dickson, Ltd.	lxi	Morris, Herbert, Ltd.	lxi	Wardle Engineering Co., Ltd., The	lxi
Dreadnought Fireproof Doors, Ltd.	xlix	Mumford, Bailey & Preston, Ltd.	lxi	Waring & Gillow, Ltd.	xxxvii
Dunbrik, Ltd.	ii	National Federation of Clay Industries,	—	Watco (Sales), Ltd.	lxii
Dunlop Rubber Co., Ltd.	—	The	—	Weathershield, Ltd.	—
Eagle Pencil Co.	—	Oak Veneer Co., Ltd.	lviii	Wellington Tube Works, Ltd.	—
Educational Supply Association, Ltd.	xliv	Patchett & Co., Ltd.	—	Wheatly & Co., Ltd.	—
Electrolux, Ltd.	—	Pilkington Bros., Ltd.	—	Williams, John, & Sons (Cardiff), Ltd.	xxxiii
Ellis School of Building	ix	Pitman, Sir Isaac	ix	Wimpey, George, & Co., Ltd.	vii
Ellison, George, Ltd.	lxi	Potterton, Thos. (Heating Engineers),	—	Woods of Colchester, Ltd.	—
English Joinery Manufacturers Association	xxvii	Ltd.	xxix	Wright Anderson & Co., Ltd.	—
		Pritchett & Gold & E.P.S. Co., Ltd.	x	Zinc Alloy Rustproofing Co., Ltd.	—

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Traicings, etc., Educational, Legal Notices, Miscellaneous Property Land and Sales, see pages liii, liv, lv, lvi, lvii, lviii, lix and lx.

WATCO

Wood Floor Preserver

makes Wood Floors last longer

Watco Wood Floor Preserver is a new non-slip, heavy duty plastic floor finish, which seals the pores, strengthens the fibres, and acts as a binding medium that solidifies and increases the resistance of the wood to heat, dampness, traffic, acids, and all surface influences.

strengthens the Floor
checks Expansion and Contraction

Watco Wood Floor Preserver keys well with the wood and becomes part of the floor itself, while its high resistance to dampness and temperature variations checks expansion and contraction of wood blocks and parquet, and the consequent opening of joints. One treatment only is required and will last as long as the floor. The floor is ready for use in a few hours.

saves Expense and Labour

Softwoods treated with Watco Wood Floor Preserver will last as long as the more expensive hardwoods. Regular sweeping will produce a good appearance without polishing, although Watco-treated floors may be washed or polished in the usual way if desired.

Explanatory Price List post free on request

WATCO (SALES) LTD 56 BUCKINGHAM GATE SW1

Telephone: VIctoria 0623



OTHER WATCO PRODUCTS

WATCO CONCRETE HARDENER

Renders concrete floors permanently 100% non-dusting.

WATCO TIMBER GUARD

For protection of building timbers against Wood Borers.

"GRANALA"

Cement waterproof and hardener for mass concrete and cement rendering.

WATCO CONCRETE FLOOR PAINT

An economical and effective floor finish in a variety of colours.

WATCO TERRAZZO DRESSING

An effective stain preventive medium.

PAGE

v

xlviii
xlv
lii
xlii

xxvii
xli
xxiv

xxxiv
xlvii
lxi
lxi

xxiv

xiv
xx
lii

lxi
li
xxxvi
xlix

lxi

xxxii

xxxiv

lxi
xxxvii
lxii

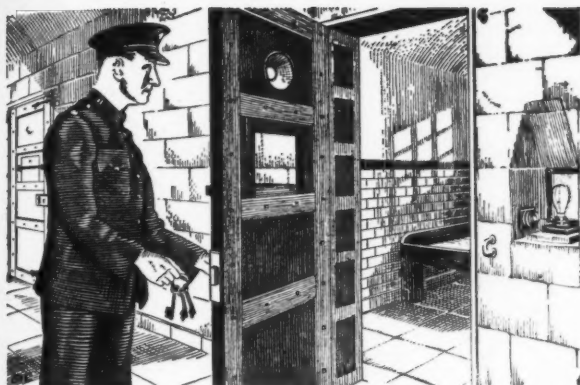
xxxiii
vii



To
the
H.M.
doc
T
hot
Arc
que
Co

C



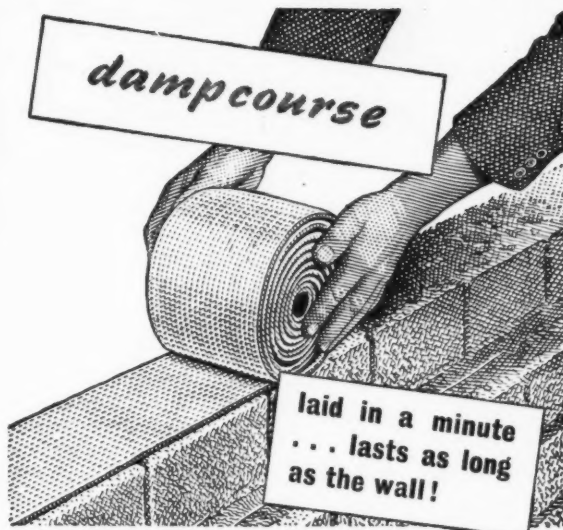


A lock on escapist moods

To ensure privacy for their guests — and also to dissuade them from making a premature departure — most of H.M. Prisons are equipped with Chubb locks on the cell doors.

The same reliability is shown in Chubb locks for homes, hotels, shops, warehouses — wherever security is vital. Architects are cordially invited to consult Chubbs on any question that concerns locks. Chubb & Son's Lock and Safe Co. Ltd., 40 Oxford Street, London, W.1.

CHUBB makes the world's best **LOCKS**



It's what you can't see that's important!

BRIGGS

AQUALITE

BITUMEN DAMPCOURSE

WILLIAM BRIGGS & SONS LIMITED

East Camperdown St., Dundee. Vauxhall Grove, London, S.W.8
Branches:—Aberdeen, Edinburgh, Glasgow, Leicester, Liverpool, Norwich



20%

increase in house space by installing a LOFT LADDER

Every new building, every repaired or converted building should be utilised to its fullest extent and all space made available for use. Don't let the loft space be wasted.

Our information sheets show in detail how this space may be made available, both in new work and conversions.

Write for full particulars of construction, balancing units, finish, erection and prices of the various types.

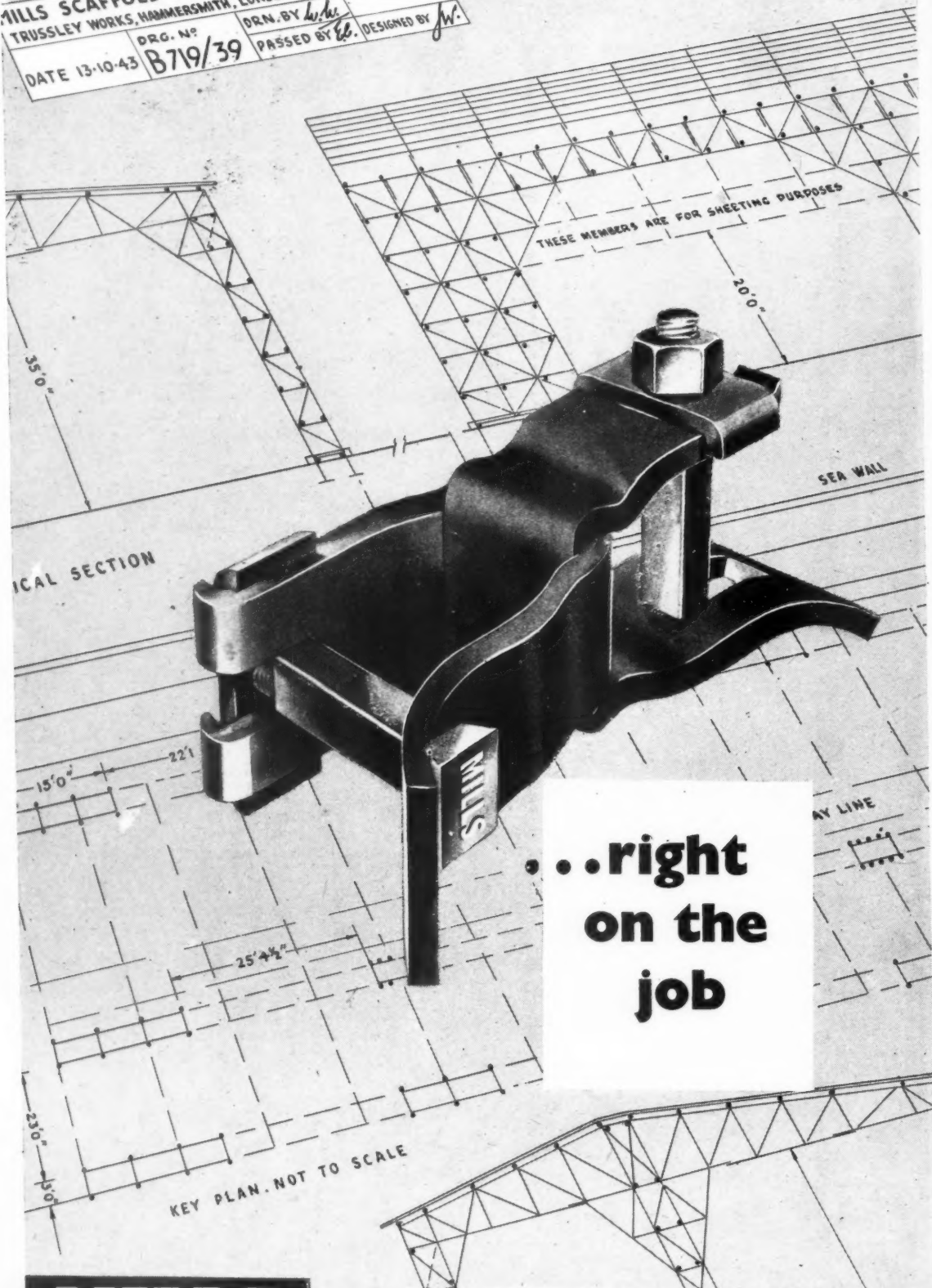


LOFT LADDERS LTD

BROADWAY WORKS · BROMLEY · KENT
RAVENSBORNE 2624



MILLS SCAFFOLD COMPANY LTD.
TRUSSLEY WORKS, HAMMERSMITH, LONDON, W.6.
PRG. No. B719/39
DATE 13-10-43
DRN. BY *h/h*
PASSED BY *h/h* DESIGNED BY *h/h*



...right
on the
job

MILLS
SCAFFOLD CO., LTD.

Branches and Depots: BELFAST • BIRMINGHAM • BOURNEMOUTH • BRIGHTON
• BRISTOL • CARDIFF • COVENTRY • DUBLIN • GLASGOW • HULL • ILFORD
• LIVERPOOL • LOWESTOFT • MANCHESTER • NEWCASTLE • NORWICH
• PORTSMOUTH • PLYMOUTH • RAMSGATE • SOUTHAMPTON • SWANSEA • YARMOUTH

Head Office: TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON, W.6. Tel.: RIVerside 5026/9

