

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

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 Ie one week, Ig to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1.	Sloane 3158/1601
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
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197/5176
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
IWA	Inland Waterways Association. 11, Gower Street, W.C.1.	Museum 9200
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MARS	MARS Group (English Branch of CIAM). Secretary: Gontran Goulden, Building Centre, 9, Conduit Street, W.1.	Mayfair 8641
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOTCP	Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1.	Whitehall 8411
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94-98, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 4813
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 8161
NCBMP	National Council of Building Material Producers. 10, Princes Street, S.W.1.	Abbey 5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4451
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4341
NPL	National Physical Laboratory. Head Office, Teddington.	Molesley 1380
NSA	National Sawmilling Association. 14, New Bridge Street, E.C.4.	City 1476
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Whitehall 9936
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Edinburgh 20396
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1.	Whitehall 5322/9242
RFAC	Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSJ	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SCR	Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8.	Western 1571
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3.	Mansion House 3921
SIA	Structural Insulation Association. 14, Moorgate, London, E.C.2.	Central 4444
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	Langham 1984
SNHTPC	Scottish National Housing Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Ruthlergen.	Holborn 2646
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Temple Bar 5006
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	City 4771
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	Sloane 4554
TGC	The Gas Council. 1, Grosvenor Place, S.W.1.	Victoria 8815
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	City 4444
TTF	Timber Trades Federation. 69, Cannon Street, E.C.4.	Mayfair 8866
WDC	War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1.	Victoria 5783
WEDA	Welfare Equipment Development Association. 74, Victoria Street, S.W.1.	Oxford 47988
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	

No. 2910] [Vol. 112
THE ARCHITECTURAL PRESS
9, 11 and 13, Queen Anne's Gate, Westminster,
S.W.1. 'Phone: Whitehall 0611

Price 9d.

Registered as a Newspaper.



A LOFT LADDER

increases house space
by 20%.

PRICES FROM £12-10-0

Government restrictions on the building of new houses, emphasises the need for using all available space in every home. The loft for instance can increase the living space of the average house by at least 20%. With a Loft Ladder access is as safe and easy as walking up the stairs. Information sheets issued on request, show in detail how this space may be made available both in new work and conversion.

Write for full particulars and prices of the various types.

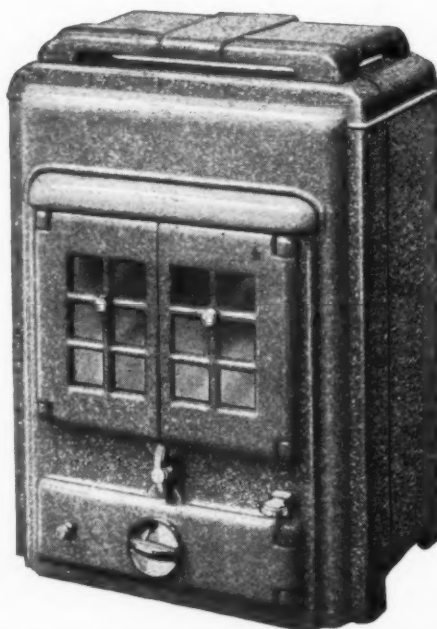
LOFT LADDERS LTD

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

BROADWAY WORKS, BROMLEY, KENT
Tel: RAvenbourne 2624

CARRON VESPER II STOVE

Burns coal, coke, anthracite, etc. • Continuous burning with little attention • Gives radiant & convected heat, and can be used as open fire • Attractive, cheerful, simple to operate, easy to keep clean. Write for full details and prices.



This is a Carron product made by modern Carron processes embodying the Carron tradition for fine workmanship begun in 1759



By Appointment
Ironfounders
to His Majesty

CARRON COMPANY • CARRON • STIRLINGSHIRE

SHOWROOMS AND OFFICES: 15 UPPER THAMES ST, LONDON EC4 • 22-26 REDCROSS ST, LIVERPOOL 1
125 BUCHANAN ST, GLASGOW C1 • OFFICE: 14 RIDGEFIELD, MANCHESTER 2



Esto Perpetua

-0

on the
hasises
space
instance
of the
. With
afe and
rmation
n detail
available

of the

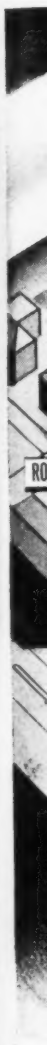
LTD

lders and

, KENT

made
on
ying
tion for
p

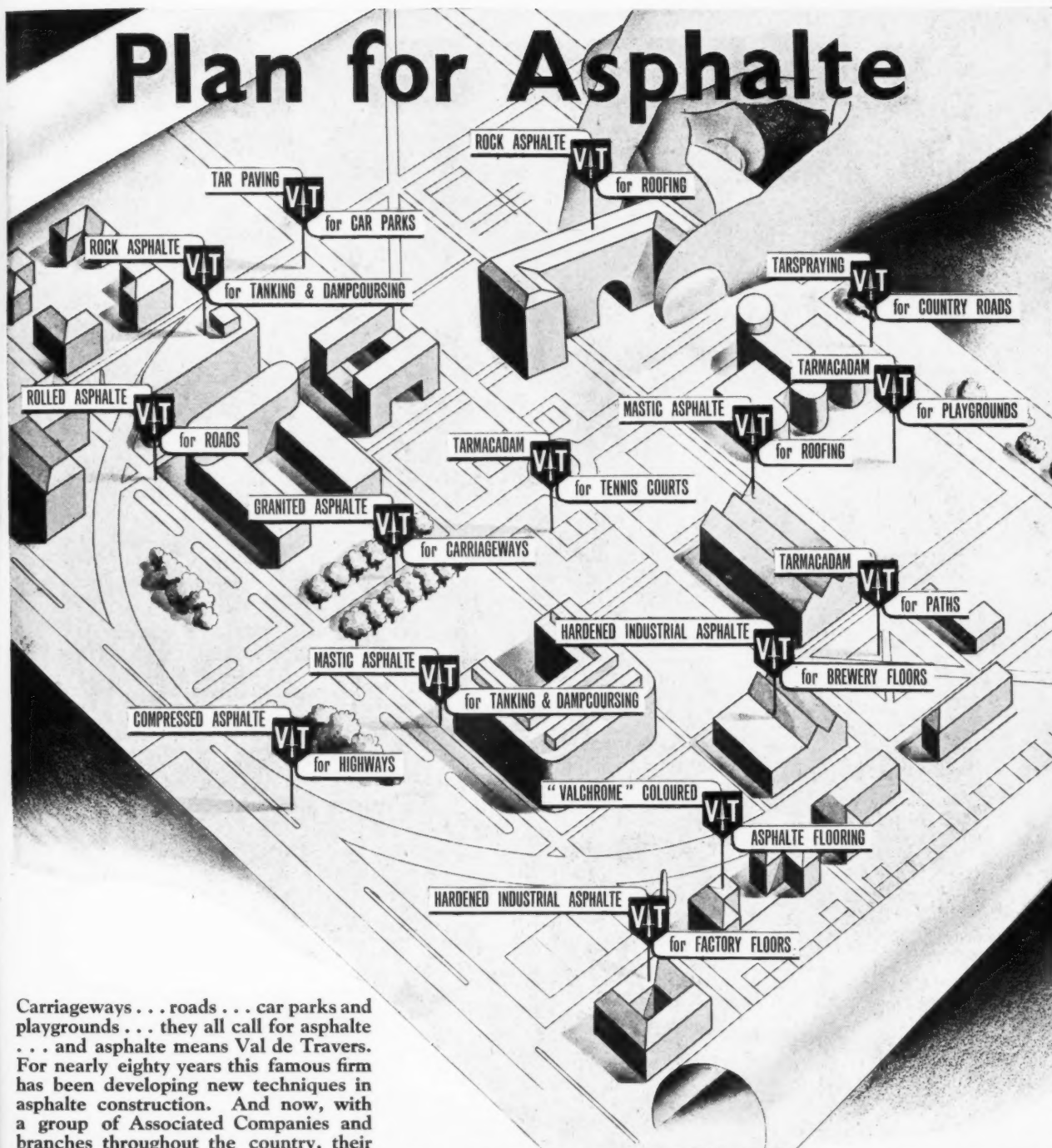




Ca
pla
.
Fo
ha
asp
a
bra
kn
res
thi

•
Sic
CC
AD
MA
PA
and
TH

Plan for Asphalte



Carriageways . . . roads . . . car parks and playgrounds . . . they all call for asphalte . . . and asphalte means Val de Travers. For nearly eighty years this famous firm has been developing new techniques in asphalte construction. And now, with a group of Associated Companies and branches throughout the country, their knowledge, experience, and general resources make them pre-eminent in this field.

ACTIVITIES

of the Company and its Associates

• ASPHALTE MINE OWNERS in Germany and Sicily • QUARRY OWNERS • ASPHALTE CONTRACTORS • TAR PAVIORS • TARMACADAM MANUFACTURERS • ASPHALTE GROUT MAKERS • TAR SPRAYERS • ROAD LINE PAINT SPECIALISTS • HARD TENNIS COURT and PLAYGROUND CONSTRUCTORS • VALCOTHERM TILE MANUFACTURERS.



VAL DE TRAVERS

The name that stands supreme for product and service

THE VAL DE TRAVERS ASPHALTE PAVING COMPANY LIMITED
VAL DE TRAVERS HOUSE, 21 - 22 OLD BAILEY, LONDON, E.C.4

Telephone: City 7001 (10 lines) • Telegrams: Traversable, Telex, London

ASSOCIATED COMPANIES

A. C. W. HOBMAN & CO. LTD. TARROADS LTD. THE DIAMOND TREAD (1938) LTD.
THE LONDON ASPHALTE CO. LTD. SICILIAN ROCK ASPHALTE CO. LTD. UNITED
LIMMER & VORWOLLE ROCK ASPHALTE CO. LTD. W. G. WALKER (GLASGOW) LTD.

BRANCHES

BIRMINGHAM • CANTERBURY • EXETER • GLASGOW • LINCOLN
LIVERPOOL • MANCHESTER • NEWCASTLE-ON-TYNE



You may
SPECIFY
this grate
with
confidence

- 3 ESSENTIAL SERVICES FROM ONE SOURCE
- CONTINUOUS BURNING DAY & NIGHT.
- HOT WATER IN CONSTANT SUPPLY.
- SPACIOUS EVENLY HEATED OVENS.
- APPROVED BY THE MINISTRY OF HEALTH.

Burning night and day continuously if required the Triplex 38 C.F. grate will give reliable service and is strongly recommended for Housing Schemes. All front castings are finished in best quality Black, Shaded Green or Biscuit mottle Porcelain Enamel for ease of cleaning.

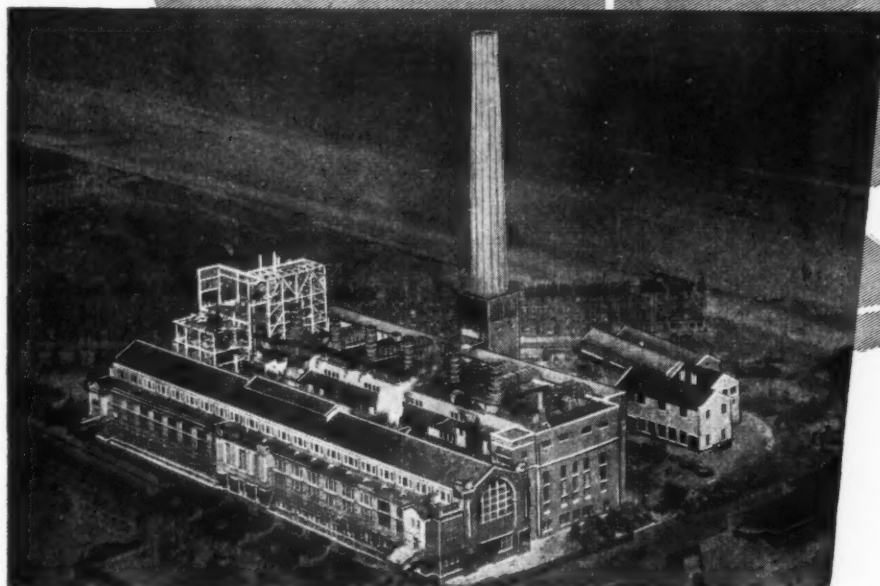
The
TRIPLEX
38 C.F. GRATE

Write for full details.

TRIPLEX FOUNDRY LTD
GREAT BRIDGE • STAFFS

P & G BATTERIES

in the public service



Behind a number of Britain's large scale enterprises lies the quiet efficiency of P & G Batteries. The generation of electricity is a case in point. The Portobello Power Station at Edinburgh (shown here) employs P & G Stationary Batteries for Switchgear Operation, Emergency Lighting and other duties. Portobello is one of many. P & G service extends into many fields and covers complete specifications for any battery installations you care to name, a second and impartial opinion on an existing scheme, the provision of equipment and its installation, regular inspection and report. We welcome discussion on any project on the sound principle that two heads are invariably better than one.

PRITCHETT & GOLD and EPS Co. Ltd

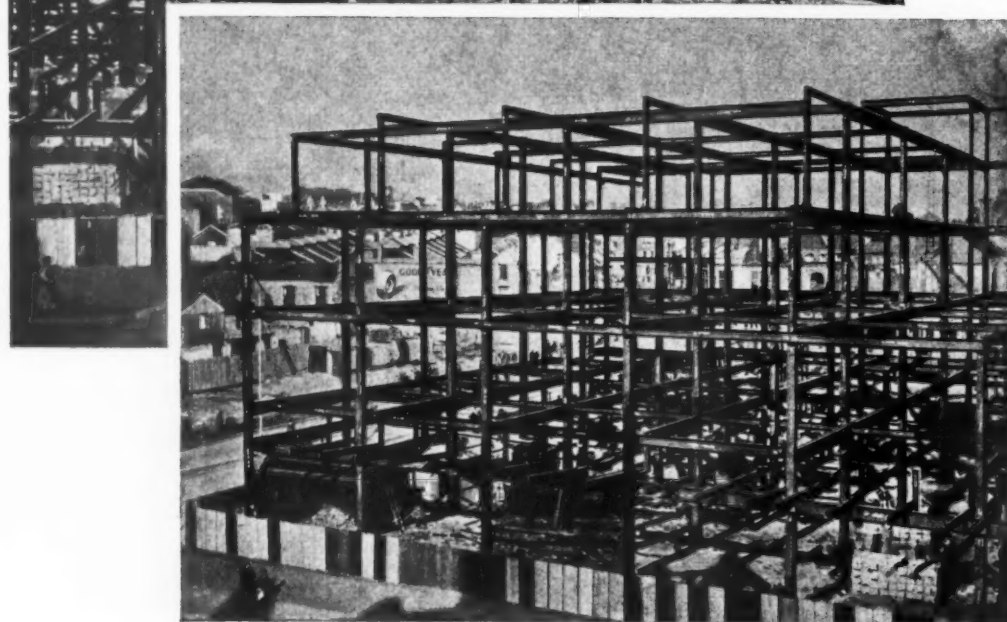
50 GROSVENOR GARDENS • LONDON • SW1

Batteries and Control Panels for Emergency Lighting



PCMA

PLYMOUTH RE-BUILDS



Steelwork of the large new department store
for Messrs. E. Dingle & Co. Ltd.

Architects: Sir J. Burnet, Tait & Partners : : Consulting Engineers: John F. Farquharson & Partners

DAWNAYS LIMITED BRIDGE AND STRUCTURAL ENGINEERS

HEAD OFFICE: Steelworks Rd., London, S.W.11: Telephone BATTERSEA 2525.

King's Dock Works SWANSEA 3185	East Moors Works CARDIFF 2557	54 Victoria St., London, S.W.1 VICTORIA 1541	Bridge Rd. Works WELWYN GDN. 242	Thorpe Works NORWICH
2 Rockstone Place SOUTHAMPTON 2474	40 Park Road PETERBOROUGH 4547	155 Princes Avenue, HULL HULL, CENTRAL 8161	Western Chmrs., South St. ROMFORD 2166	7 The Close NORWICH 23141

Cables and Telegrams "DAWNAYS, LONDON"—Code Bentley's 2nd.

Fleetwood big 5

The finest oil-bound, ready-mixed plastic paint in the world, washable, simple to texture and hard wearing.



Something more than a good hard gloss paint! A superb hard gloss enamel paint, for inside and outside work.



Amazing new flat wall paint which may be applied direct to new Plaster, Concrete, Cement, Asbestos, etc.



The lovely new Satin Wall finish which may also be used on interior woodwork.



A superfine synthetic enamel giving a lasting finish of extreme brilliance. All shades style-toned to harmonize with Durasheen and Duramatt.

..... Plastex, Chinagloss, Duramatt, Durasheen and Duramel are but five of the wide range of Fleetwood Paints—a range decorators can rely on for quality, durability, easy working and economy in use.

Write for trade prices and shade cards to:—

Telephone: Tideway

3801/2 & 2141

Fleetwood

PAINTS LIMITED 7-13 PRINCE ST., DEPTFORD, LONDON, S.E.8

IT'S A GOOD JOB IT'S BRYANTS



A GOOD NAME
FOR BUILDING &
CIVIL
ENGINEERING

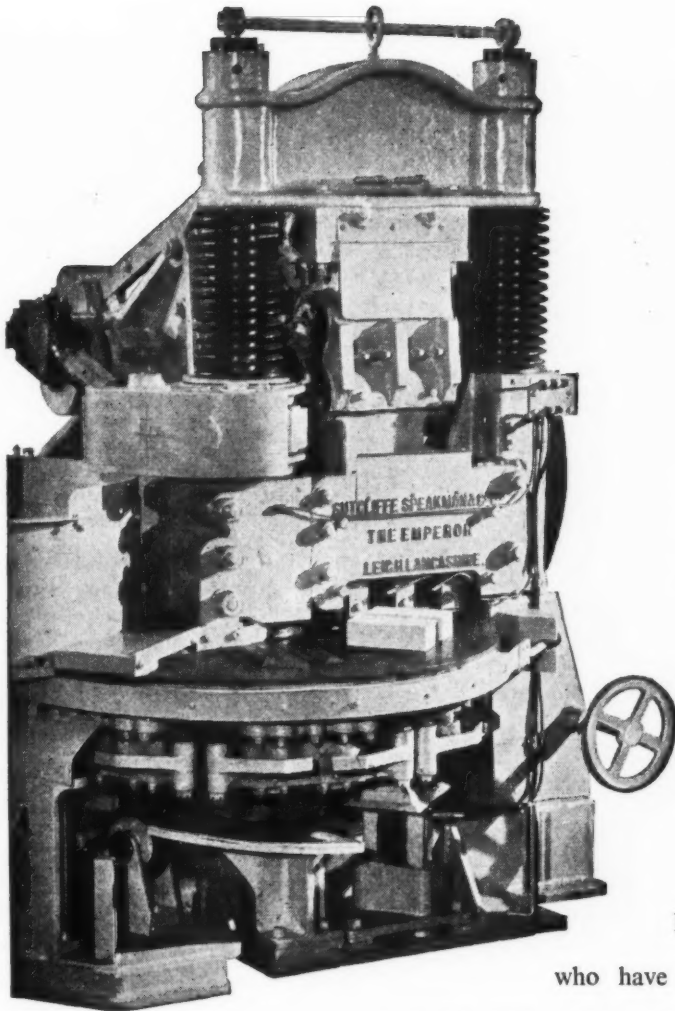
The above photograph of the Prudential Building, Birmingham, is reproduced with the kind permission of The Estate Department, Prudential Assurance Company Limited.

Bryants
Birmingham

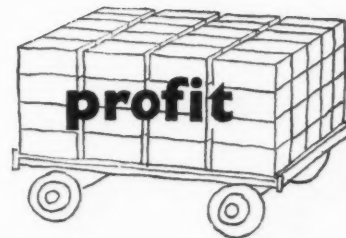
C. BRYANT & SON LTD. WHITMORE RD., BIRMINGHAM 10, Telephone VICTORIA 2333-8. London Office: 66, VICTORIA ST., S.W.1

L.G.B.

how to turn



into



Local authorities and manufacturers who have to cope with the disposal of waste materials such as slag and clinker can turn them into a regular supply of profitable bricks. These materials make first-class bricks which find a ready market at very good prices. We are always ready to supply full details and undertake the construction of all necessary equipment including the erection of complete brickworks.

The "Emperor" Press (illustrated above) exerts a total working pressure of 200 tons and has a maximum output of from 2,500-3,000 bricks per hour.

Sutcliffe Speakman

*Sutcliffe Speakman & Company Limited, Leigh, Lancashire.
London Office: Godliman House, Godliman Street, London, E.C.4. 'Phone: City 2810*

TEMCO Switches



TEMCO Switches comply with B.S.S. 816 and are made to the same high standard of quality as all TEMCO Accessories. The quick-make-and-break underslung action is semi-positive and the spring contacts are self-adjusting. The base is of best quality porcelain, while the dolly and cover are moulded. The dolly has no metal insert. Supplied in surface, semi-recessed and flush patterns in brown on white, all brown, or all white finishes. Switch plates up to 4 gang in brown or white available for use with flush Switches. Complete Accessory Catalogue Series 2 available on request.

Manufactured by: **TELEPHONE MANUFACTURING COMPANY LTD.**
 and Marketed by their Sales Organisation: **T.M.C.-HARWELL (SALES) LTD.**
 37 UPPER BERKELEY STREET, LONDON, W.1. Tel: Paddington 1867-8-9



**He
can't
afford
to buy
'cheap'**

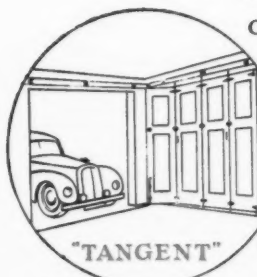
Henderson's team of sliding-door gear experts takes its thinking-cap off to Buyer Harry Holmes. It does not envy him his tough job of buying raw materials for the manufacture of the finest Sliding Door Gear in the World. For one thing, Harry has to buy only the best quality, and that is not necessarily a matter of paying the most. It requires study of constantly changing material markets. It means keeping hawk-eyes open to spot instantly deterioration in quality or the marketing of new kinds of materials.

On these materials Harry maintains a perpetual research. For he has a philosophy that what was good enough for our fathers is often not good enough for Henderson's clients. And he knows that Henderson equipment can only retain its acknowledged leadership by his keen determination to get the best out of the best available.

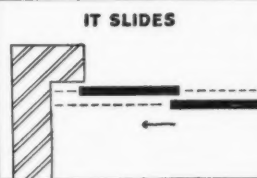
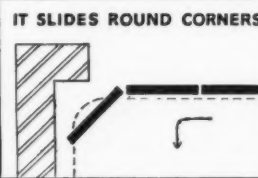
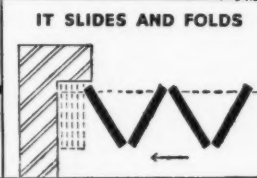
Harry does his work well. Complaints about our gear are rare. You obtain the highest possible quality in material and workmanship when you specify Henderson Sliding Door Gear.


Technical representatives in principal cities in Great Britain and in most countries overseas.

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



"TANGENT"

IT SLIDES	IT SLIDES ROUND CORNERS	IT SLIDES AND FOLDS
		

Henderson  **SLIDING DOOR GEAR**

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

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



Temple of Ta Phrom
of Angkor Thom, Cambodia

WE BUILD IN STEEL

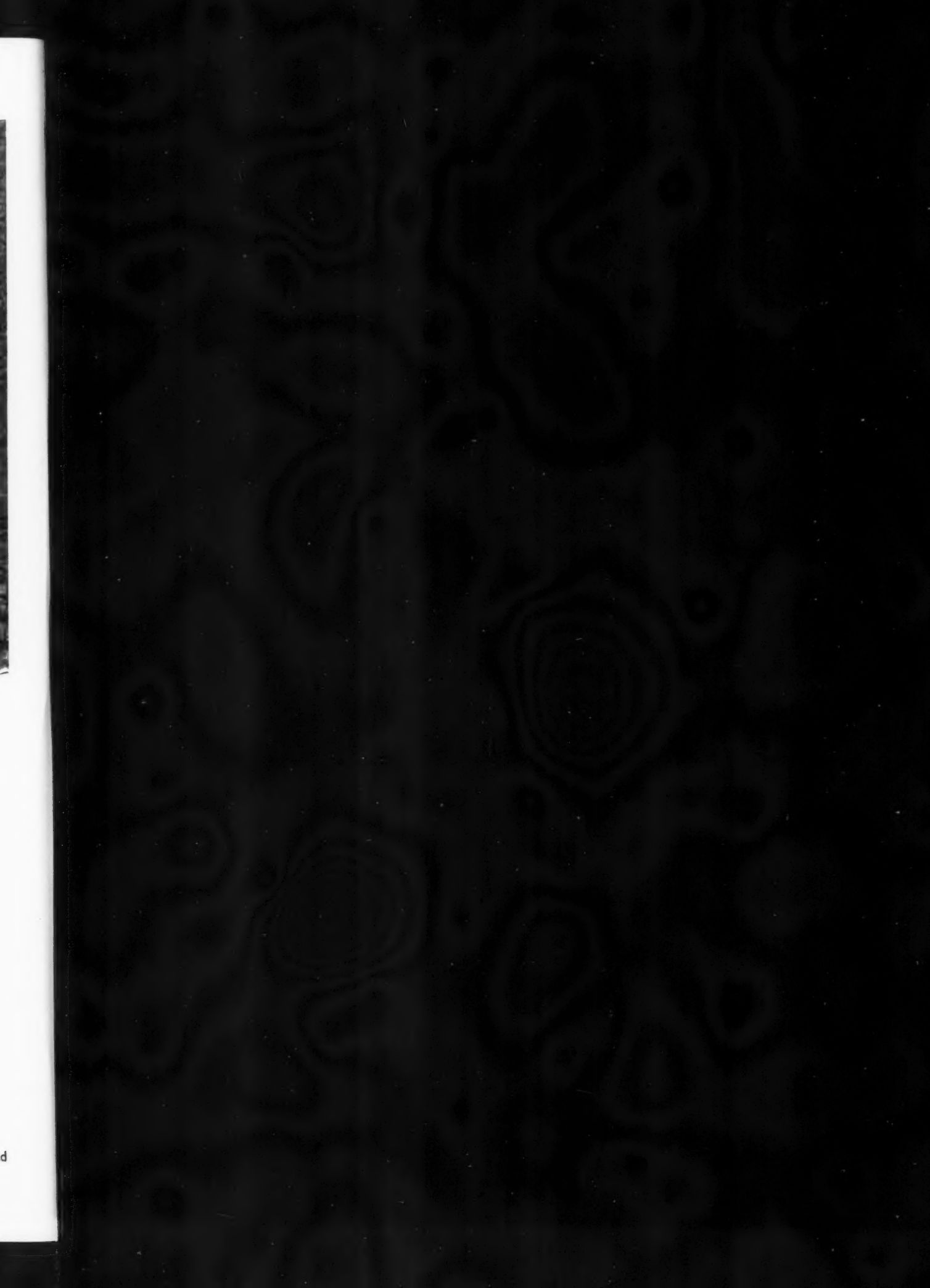


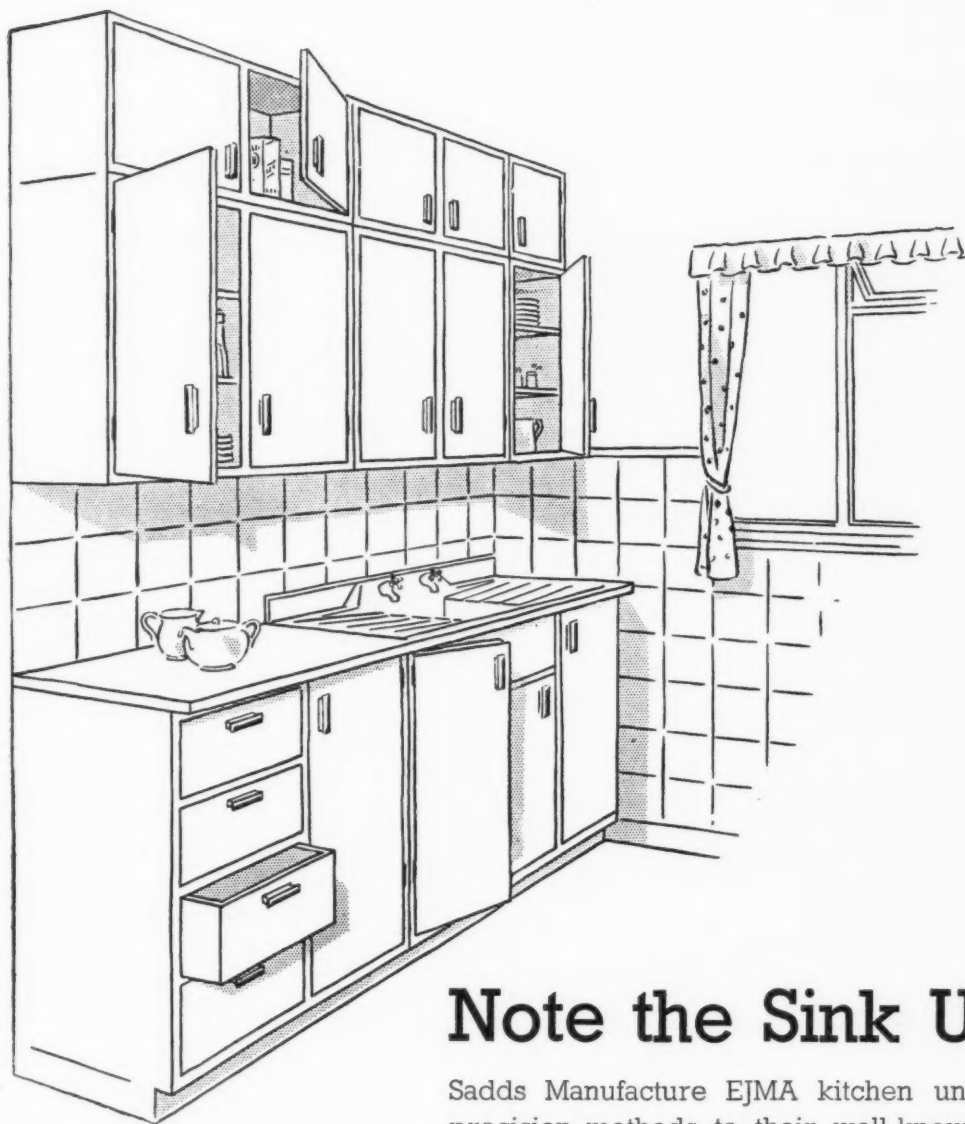
Cities are the expression of civilisation;
When civilisation dies, the city perishes.
Angkor, which sheltered a million people,
has long ago succumbed to the jungle.
As long as our own civilisation lasts, our
cities must grow. Steel will be the food
of their growth, for steel best suits
our building needs.

**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





Note the Sink Unit

Sadds Manufacture EJMA kitchen units, by precision methods to their well-known high standard of quality.

The practical sink unit illustrated above is a supplement to the standard range of twenty different Kitchen Units.

Sink Units

- A. For stainless steel sink with two draining boards: Height 3 ft. 0 ins. Width 5 ft. 3 ins. Depth 1 ft. 7 ins.
- B. For stainless steel sink with single draining board (right or left hand). Height 3 ft. 0 ins. Width 3 ft. 6 ins. Depth 1 ft. 7 ins.

EJMA is the certification trade mark of the English Joinery Manufacturers' Association

JOHN SADD & SONS LTD.

DOORS, WINDOWS, STAIRCASES, JOINERY
FOR AIREY AND OTHER STANDARD HOUSES

MALDON

MALDON 131 (6 lines)

ESSEX

London Office: ALDWYCH HOUSE, W.C.2. Chancery 7214

WELDED TUBULAR CONSTRUCTION

-by the originators of tubular scaffolding!



MESSRS. TRUVOX ENGINEERING CO., LTD., FACTORY, WEMBLEY.

Architect : H. S. Jaretzki. L.R.I.B.A., M. Inst.R.A.

Consultant Engineer : F. J. Samuely, B.Sc., (Eng.) Lond. A.M.I.C.E., M.I. Struct. E., F.I.A.S., M.I.W.

Welded tubular construction does the job with less steel, skilful design saving up to 60%. Its clean modern appearance pleases the eye of the architect. The simple shapes which arise from the method of construction are easy to protect against corrosion.

SCAFFOLDING (GREAT BRITAIN) LTD.

WELDED STRUCTURES DIVISION

MITCHAM

SURREY

Telephone : MITCHAM 3400 (18 lines)

Telegrams : SCAFCO, MITCHAM

Branches at: ABERDEEN • BIRMINGHAM • BOURNEMOUTH • BRIGHTON • BRISTOL
CAMBRIDGE • CARDIFF • DOVER • DUBLIN • DUNDEE • EDINBURGH • EXETER
GLASGOW • HULL • LEEDS • LIVERPOOL • MANCHESTER • NEWCASTLE • NOTTINGHAM
OXFORD • PLYMOUTH • PORTSMOUTH • SOUTHAMPTON • STOKE-ON-TRENT • SWANSEA



Constructed by S.G.B.

Send for this new EDA publication



THIS NEW EDA PUBLICATION is devoted to the special problems that arise in the conversion of old houses into new flats, and the advantages that electricity has to offer in this work. Costs must be kept within strictly defined limits, yet the flats must be labour-saving to meet the needs of future tenants, and so electricity is the best method of providing *all* the services required.

With electricity, *one* installation will provide all the services for a modern home — lighting, heating, cooking, refrigeration, hot water, cleaning, clothes washing, drying and ironing, and radio and television.

"ELECTRICITY TURNS OLD HOUSES INTO NEW FLATS" is divided into eight sections, which deal with water heating, kitchen planning, cooking, refrigeration, heating, laundry, wiring, and lighting ; it is illustrated by photographs and diagrams which show how installations can be made with the greatest economy in cost and efficiency in performance.

Architects and builders are invited to write for copies

THE BRITISH ELECTRICAL DEVELOPMENT ASSOCIATION, 2 SAVOY HILL, LONDON, W.C.2

INDUSTRIAL FLOORING PROBLEMS



MARTYN BITUMINOUS FLOORS

offer many advantages . . .

One of the main features of Martyn Bituminous flooring is its resiliency, a quality which enables it to stand up to the heaviest traffic conditions and to any amount of vibration. In fact, the flooring actually improves with wear, becoming more compact; marks and indentations which may appear when the floor is first laid, soon work out with use. Martyn Bituminous is damp-proof, dust-proof, ductile, warm and noiseless to the feet. It is laid cold; is completely odourless at all stages; is resistant to fire and unaffected by changes in temperature. The floor can be laid direct on to a clean concrete base without screeding. The colours available are black, dark red, middle red and dark brown.

INDUSTRIAL FLOORING LAID FOR

Messrs. J. Miller Ltd.
Chiswick Mall, London, W.4
Consulting Engineers:
Sir Alexander Gibb & Partners

OTHER CONTRACTS INCLUDE :—

JOINERY WORKS,
ENGINEERING WORKS,
PRINTING WORKS,
BAKERIES,
SHOP FITTING WORKS.
CANTEENS,
OFFICES, ETC.

Our Technical Staff are always ready to advise on your problems

BRUCE MARTYN LIMITED



SPECIALISTS IN INDUSTRIAL FLOORING

PICCADILLY HOUSE, REGENT STREET, S.W.1. • PHONE REGENT 6296-7

MARLEY tiles

are guaranteed against lamination and decay for 50 YEARS

MARLEY tiling

is maintained free in good condition for 10 YEARS

Whatever tiles you specify insist on these guarantees backed by a Company of standing



PERMANENT COLOUR

All Marley roofing tiles are now surfaced with permanently coloured granules which cannot fade, but give a distinctive texture to the tiles and assist the weathering process.

The use of these granules, which are manufactured by Marley, makes it possible to supply a range of blended coloured tiles in addition to the standard range of colours.

THE MARLEY TILE CO. LTD., RIVERHEAD, SEVENOAKS, KENT. — Sevenoaks 2251



"Not for an age—but for all time"



Reproduced from: *THE BOOK OF ENGLISH TRADES & Library of the Useful Arts*, 1821

THE CARPENTER

As the carpenter works, the sweet smell of wood shavings fills the air. Smoothing the rippled grain of fresh - planed wood, he caresses Beauty herself. The burring saw, the hissing plane, the tapping hammer are music to his ears . . .

AND CRAFTSMANSHIP LIVES ON *With the coming of the Industrial Revolution and the development of machinery, the era of the lone craftsman passed into history. No longer was one man single master of his trade. Instead, the work was divided among specialists, each one a craftsman in his own particular line. To-day, the individual is an expert, whose specialised skill is an essential part of the whole.*

★
AT CELLON we believe in the essence of craftsmanship. For example, after a new decorative finish has been produced by our laboratory specialists, it is tested by experts who examine every Cellon product under the conditions of use for which it is intended. Like the carpenter of old, who by the skill of his craft released the pent-up genius of wood, we always strive for perfection in our finished work.

The existing range of Cerrux Decorative Paints includes Gloss, Satin and Matt Finishes, Flat under-

coatings, Primers for all types of surface and, also, Cerrusco Texture and Water Paints. The skill and forethought embraced in our work together with constant research have established perfect uniformity among our standard finishes. The result is that you can always be sure of consistency of quality when re-ordering a particular finish.

On the development side, we maintain a continuous service for the production of special finishes for special needs outside the standard range. It is, in fact, a service by craftsmen for craftsmen.

CERRUX

DECORATIVE PAINTS

Created
by Craftsmanship



CELLON
Aircraft
Finishes



CERRIC
Wood
Finishes



CERRUX
Marine
Paints



CERRUX
Coach
Paints



CERRIC
Industrial
Finishes

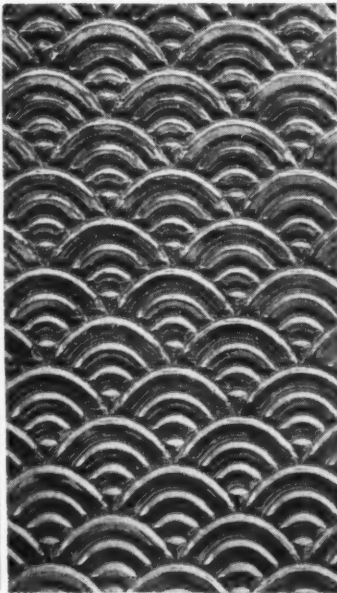
CELLON LIMITED • KINGSTON-ON-THAMES • PHONE KINGSTON

1234
CVS-679

3

FURTHER PATTERNS

OF FIGURED ROLLED GLASS



RADIANT Of the formal group. Average diffuse light transmission 75%, giving a high degree of diffusion and almost complete obscuration.



MERSEY Of the non-formal group. Average diffuse light transmission 80%. Diffusion and obscuration values approximate to $\frac{1}{8}$ " Rolled Glass. Degree of obscuration is greatly influenced by the direction of glazing.



"HARLEQUIN" Of the formal group. Average diffuse light transmission 85%. Diffusion and obscuration values closely correspond to that of Majestic.



SUPPLIES OF ALL THREE OF THESE NEW GLASSES ARE AVAILABLE THROUGH THE USUAL TRADE CHANNELS.

Consult the Technical Sales and Service Department at St. Helens, Lancs, or Selwyn House, Cleveland Row, St. James's, London, S.W.1. Telephones: St. Helens 4001; Whitehall 5672-6.

PILKINGTON BROTHERS LIMITED

"HARLEQUIN" is the registered trade mark of Pilkington Brothers Limited.

DOW-MAC

FOR

PRESTRESSED CONCRETE



→ MODERN MATERIAL

Prestressed concrete is a modern material for the architect, builder and engineer and has a wide and growing application in building, structural and civil engineering.

→ SAVING MATERIAL

Prestressed concrete replaces constructional steel and in so doing can save up to ninety per cent of the weight of steel and eliminates maintenance costs. It replaces

timber and unlike timber is not subject to deterioration. It also replaces conventional reinforced concrete because no shrinkage cracks occur, nor do stress cracks occur below a certain predetermined loading. Also the steel requirement for a given purpose may be only twenty per cent of the weight of ordinary reinforcing steel.

→ REDUCTION IN WEIGHT AND DEPTH

Compared with conventional reinforced concrete, prestressing permits reduced sections with shallower overall constructional depth.

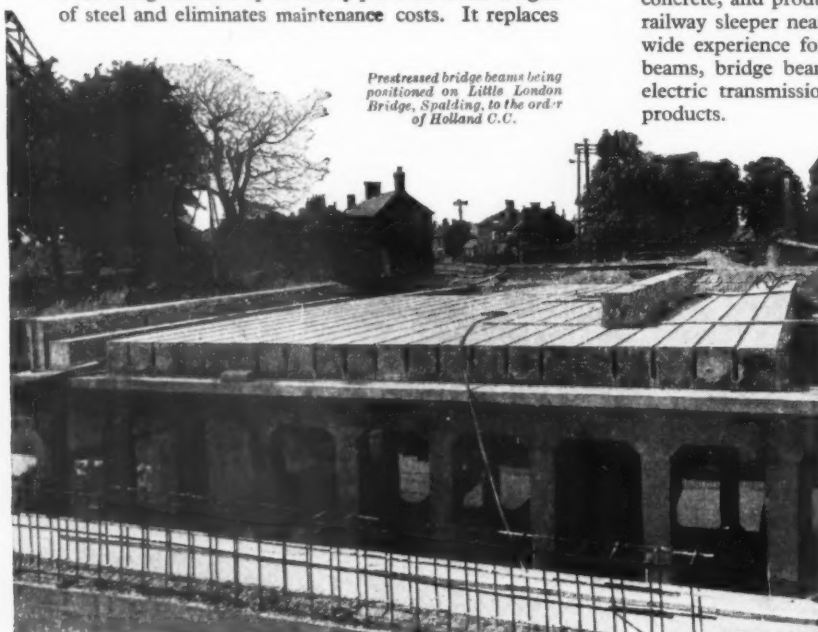
→ FLEXIBILITY

Under designed conditions, prestressed concrete acts as a homogeneous material and therefore shows a high degree of flexibility and resilience.

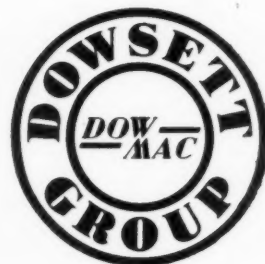
→ APPLICATION

Pre-cast units are ideal for the application of prestressing and offer unlimited scope. They are convenient to handle, and frequently eliminate shuttering with resultant further reduction in overall costs. Factory production allows the closest control of materials and manufacture.

Dow-Mac, who are pioneers in Britain of prestressed concrete, and produced their first prestressed concrete railway sleeper nearly 10 years ago, are utilising their wide experience for the production of roof and floor beams, bridge beams and girders, piles and walings, electric transmission poles and many other concrete products.

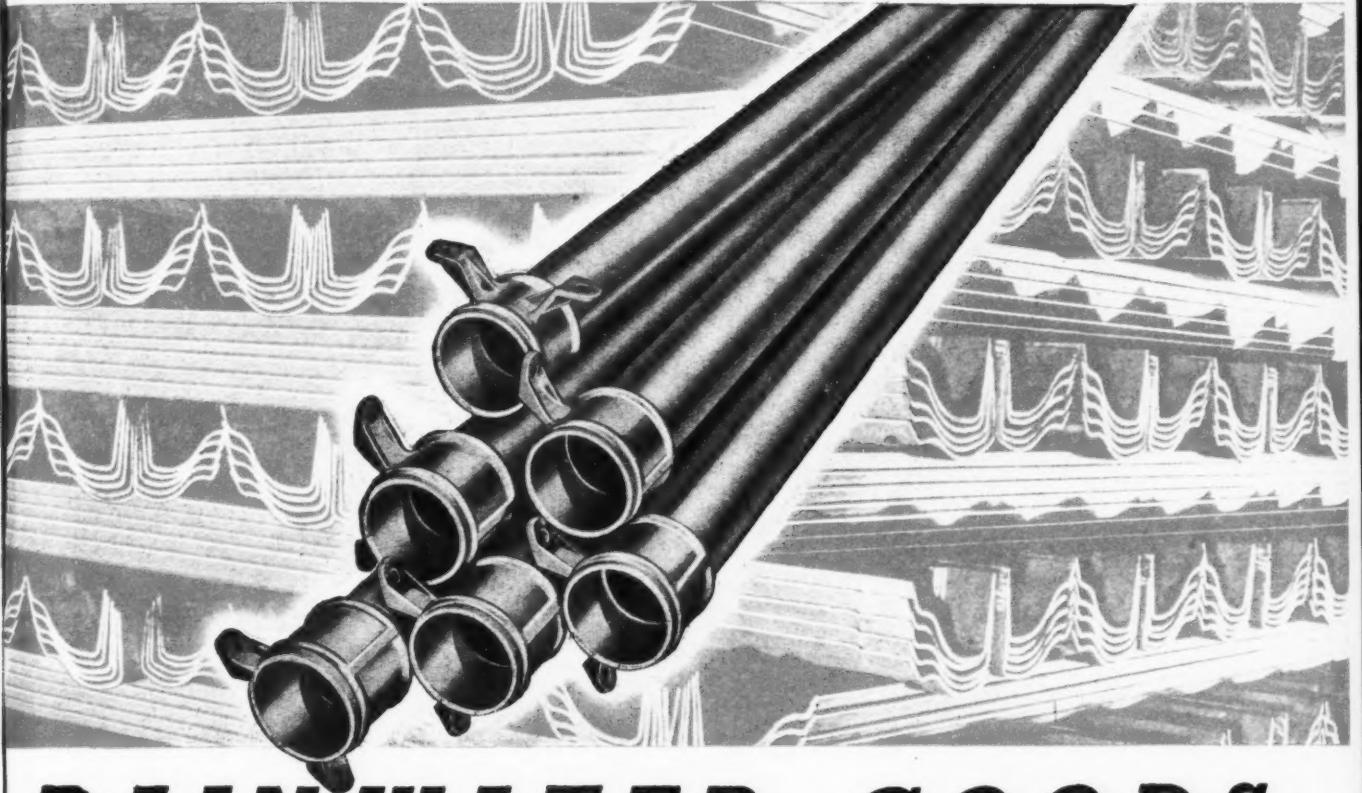


Prestressed bridge beams being positioned on Little London Bridge, Spalding, to the order of Holland C.C.



DOW-MAC (PRODUCTS) LTD.,
TALLINGTON, STAMFORD
LINCOLNSHIRE. TELEPHONE:
PETERBOROUGH 4501 (8 lines)

Cast ALUMINIUM



RAIN-WATER GOODS



"Birmid", the originators of aluminium alloy rain-water goods, have added 5" half-round and 4" O.G. gutters to their range of fittings. These, like all "Birmid" R.W.G. conform to B.S. 1430 in design, dimensions and materials. Fall pipes are also available up to 18' long so that a modern two-storey dwelling can be covered by a single pipe with only two fixings. Cast-on sockets have the ears offset to avoid use of bobbins. Aluminium alloy is durable, neat in appearance and free from the stains that so often mar stone, brickwork and paint. Light yet strong, easy to handle and readily cut to length without fear of fracture, "Birmid" R.W.G. offer a worthwhile saving in erection costs. Orders through our appointed distributors can be promptly executed.

BIRMID RAIN-WATER GOODS

BIRMID WORKS, SMETHWICK 40, STAFFS

*For
lining*

**ROOFS
CEILINGS
PARTITIONS**

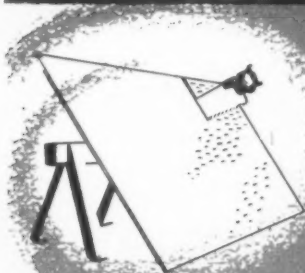


The Building Sheet that will not burn

The photograph shows the employment of "TURNALL" Asbestos Wood for the ceiling of The Ensor Mill, Rochdale. It provides very essential fire protection and at the same time is ideally suitable for the high humidity inseparable from conditions in Textile Factories.

Architects :
Arthur Turner & Sons, Oldham

"TURNALL"
REGD TRADE MARK
ASBESTOS WOOD



TURNERS ASBESTOS CEMENT CO LTD

A MEMBER OF THE TURNER & NEWALL ORGANISATION

TRAFFORD PARK

MANCHESTER 17

A.W. 2

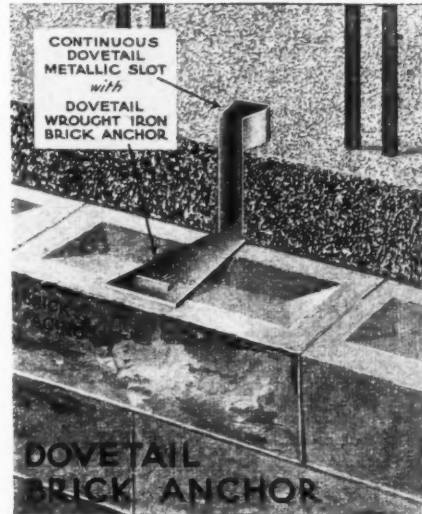
Anchorage to Concrete

at PIMLICO HOUSING SCHEME. *Architects : POWELL AND MOYA, A.A.R.I.B.A.*

General Contractors : HOLLOWAY BROS. (London) LTD.

DOVETAIL MASONRY SLOT AND ANCHORS

Dovetail Masonry Slot and Standard Brick Anchors are used throughout the Pimlico Housing Scheme to anchor the brick facings to the concrete structures



ANKORTITE BOX FITTINGS

Embedded in the concrete walls during the pouring of the concrete, Heavy Type Ankortite Box Fittings were used to fix the radiators in position. They can also be used to carry suspended ceilings, pipes, heating panels and machinery

ABBEY BUILDING SUPPLIES COMPANY

(E. A. ROE, Proprietor)

Specialists in Anchorages to Concrete

6 WALDEMAR ROAD - WIMBLEDON - LONDON - S.W.19

Telegrams : Absobilda, Wimble-London

Telephone : WIMbledon 4178

Cables : Absobilda, London

There goes a **CRAFTSMAN**

**GUARDIAN HARD ENAMEL
GLOSS PAINT**

MAYFAIR FLAT WALL ENAMEL

SUPPORTED BY A FULL AND COMPREHEN-
SIVE RANGE OF DECORATIVE FINISHES

APPLICATION BY BRUSH OR SPRAY



TEMPLE

PRODUCTS

DECORATIVE FINISHES

THE TEMPLE VARNISH CO. LTD., 43 ALDWYCH, LONDON, W.C.2

Works at STROOD, KENT.

Phones : TEMPLE BAR 9935 or 0339

These three together **mean better workability**

The gauging with **LIME** effects economy in the use of cement and also produces the ideal mortar which will . . .

Spread more easily. Cling tightly to the bricks. Bond well by filling all joints. Give adequate strength and durability. Improve weather resistance.

AT LOWER COST.



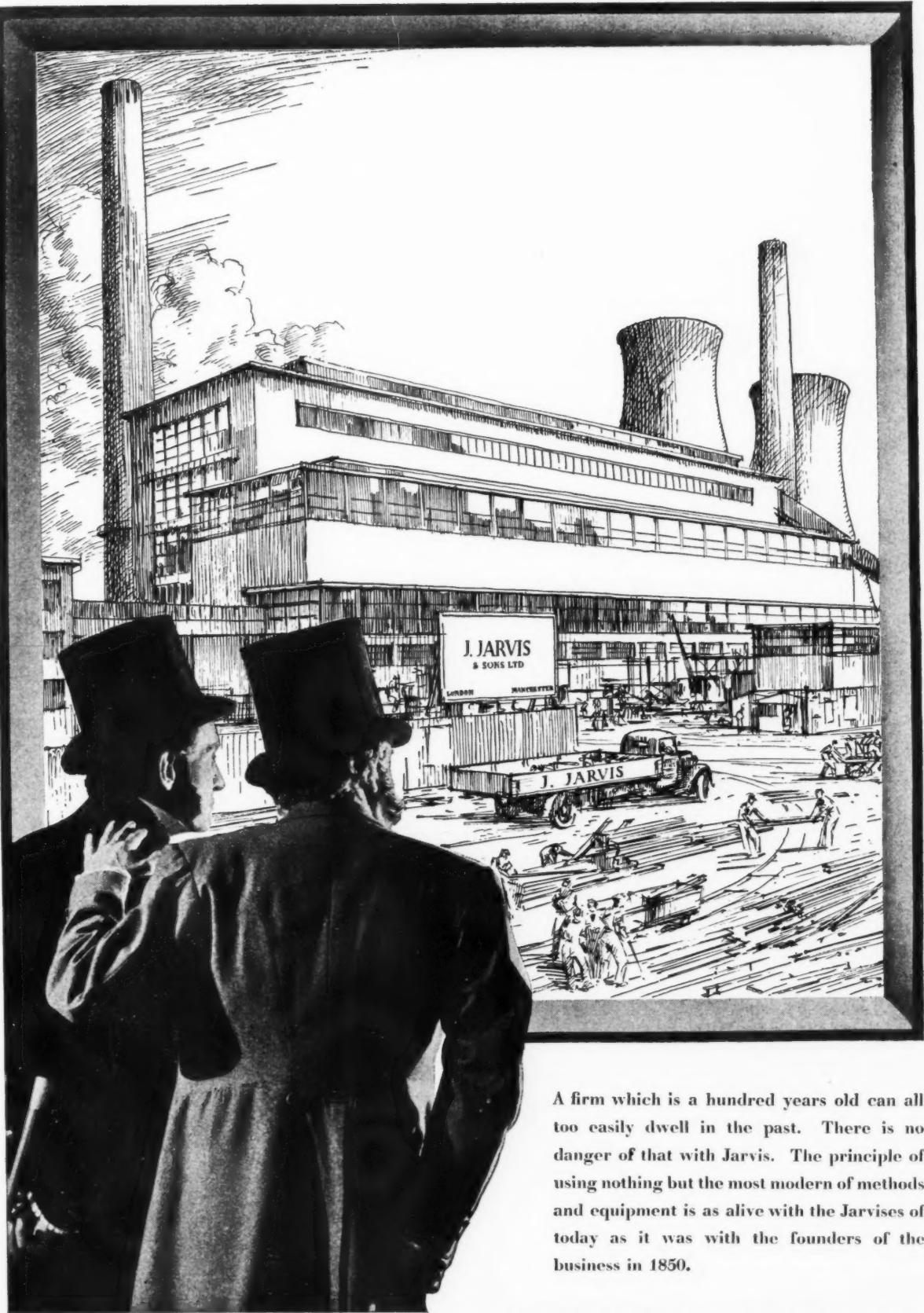
For a better job in less time use —

LIME

- Full details of Cement/Lime/Sand mixes will be sent on application to :—

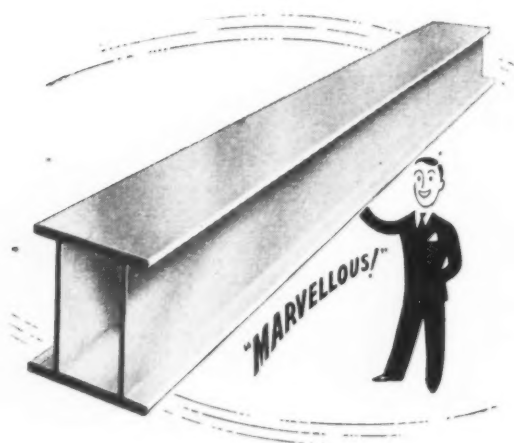


THE SOUTHERN LIME ASSOCIATION, HANOVER HOUSE, 73-78 HIGH HOLBORN, LONDON, W.C.1. Tel: Holborn 5434



A firm which is a hundred years old can all too easily dwell in the past. There is no danger of that with Jarvis. The principle of using nothing but the most modern of methods and equipment is as alive with the Jarvises of today as it was with the founders of the business in 1850.

J. JARVIS & SONS LTD • 12 BUCKINGHAM PALACE GARDENS • LONDON • S.W.1



No!...

— WHAT'S MARVELLOUS IS THE STRENGTH OF
**ALUMINIUM EXTRUDED
HOLLOW BEAM SECTIONS**

This particular extruded section in aluminium alloy illustrates admirably the unique lightness and strength of extrusions and their ideal combination of functional purpose and decorative possibilities.

Other features which appeal to designers include *corrosion resistance*—they do not rust or warp; *negligible maintenance*—they do not require protective paintwork; *saving of fabricating time*—extrusions are produced to close tolerances and have a smooth, clean-cut, bright, attractive appearance. The specialist experience of the Southern Forge organisation is available, to advise on the most economical and efficient procedure to follow on any one of a host of profitable applications.



There's an 'S.F. EXTRUSION'

for every need

Write today to our

EXTRUSION DESIGN DEPARTMENT

Southern Forge LTD

IN ASSOCIATION WITH **ALMIN LIMITED** FARNHAM ROYAL BUCKS

MEADFIELD ROAD • LANGLEY • BUCKS
Tel: LANGLEY 301



"Of course, we've always been insured against loss of office equipment and damage to property, but it wasn't until we met the 'Loss of Profits' expert from the Norwich Union that we realised we could—and should—cover ourselves not merely against the cessation of income (in our case our gross fees) which a fire would inevitably involve, but the heavy additional expenditure which would be entailed.

In a professional business like ours, a fire could be disastrous. Besides the lost fees we should have to try to find alternative accommodation (and you know what that means with rents at the present level) and, worse still, it would cost no end to reinstate our essential business documents and records.

The expert told us that before the war an 'indemnity period' of a few months was usually adequate but that under present-day conditions it might easily take 2 years to get re-established. It made us think—and act!"

Don't you think **you** should have this important protection too? The Norwich Union have a leaflet which explains all about "Loss of Profits" insurance. Send for a copy NOW.

**NORWICH
UNION**



INSURANCE SOCIETIES

8-16 Surrey Street, NORWICH, Norfolk

A "Sound" SOLUTION OF SOUND PROBLEMS

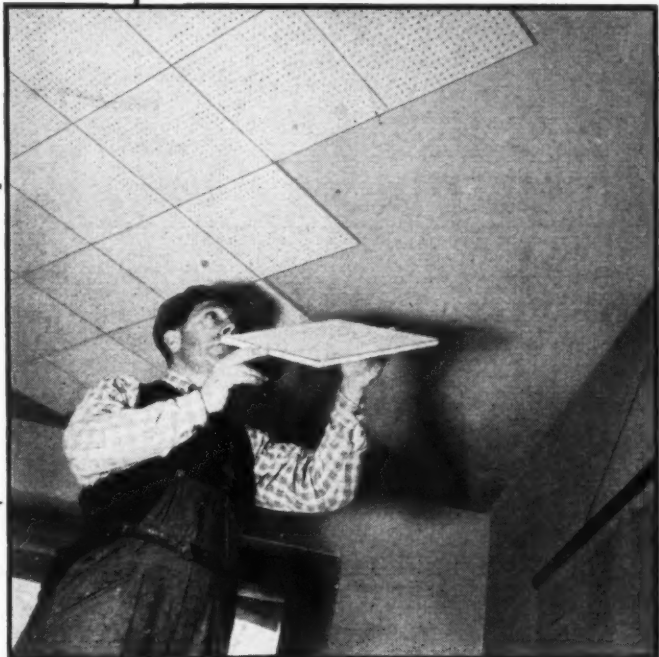
UNITEX

ACOUSTILE

A perforated acoustical
tile with clean cut
holes & UNITEX
self-decorative
ivory surface

High efficiency at
all frequencies at
low cost per unit

For noise
abatement and
acoustical correction



*Our Technical Department
is at your service*

The **MERCHANT TRADING COMPANY** *Limited.*

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

Telegrams: "Themetraco, Estrand, London."

Telephone: TEMple Bar 5303 (8 lines)

The BUILDING TECHNICIANS' POCKET DIARY 1951



The Building Technicians' Diary is the most practical diary for the architect, engineer and surveyor, builder, clerk of works, etc. Contains 112 pages of valuable information, diagrams and tables dealing with Measuring, Planning, Specification (all trades), Legislation, Directory of Professional and Trade Organisations, Journals, Coloured maps, memo pages, graph paper, pocket, etc.

5/- EACH

INCLUDING P/TAX
AND POSTAGE

Cash orders to:—

Association of BUILDING TECHNICIANS
(Ref.: FKV)

5 ASHLEY PLACE • LONDON • S.W.1

(Please quote reference and give name and address in block letters)



BITUMINOUS ROOFINGS

DURABLE INSULATED BUILT-UP ROOFING SPECIALITIES

- Laid by our own experienced roofers only
- Ideal for all roofs irrespective of type of construction
- We guarantee their waterproof qualities

"PERMANITE"	Two or three layers Permanite Sheet Asphalt Roofing with Coloured Grit (Brown, Red, Green, Grey) or White Spar Finish (or self finish Bitumen Roofing)
"PERMAC"	Ditto, but with $\frac{3}{4}$ in. fine Bituminous Macadam
"PERMASUL"	Ditto, but with 1 in. Sand and Cement screed, grooved in 2ft. squares with "V" shaped joints
"PERMATILE"	Ditto but with 1 $\frac{1}{2}$ in. thick by 9 in. square insulated tiles set in Bitumen
"PERMAPHALT" ASPHALT	Two layers Permanite Sheet Asphalt Roofing finished on top with $\frac{1}{4}$ in. coat Mastic Asphalt on an underlay of Asphalter's best Black Sheathing Felt

★ EXPERT ADVICE AVAILABLE TO ALL, IF REQUIRED

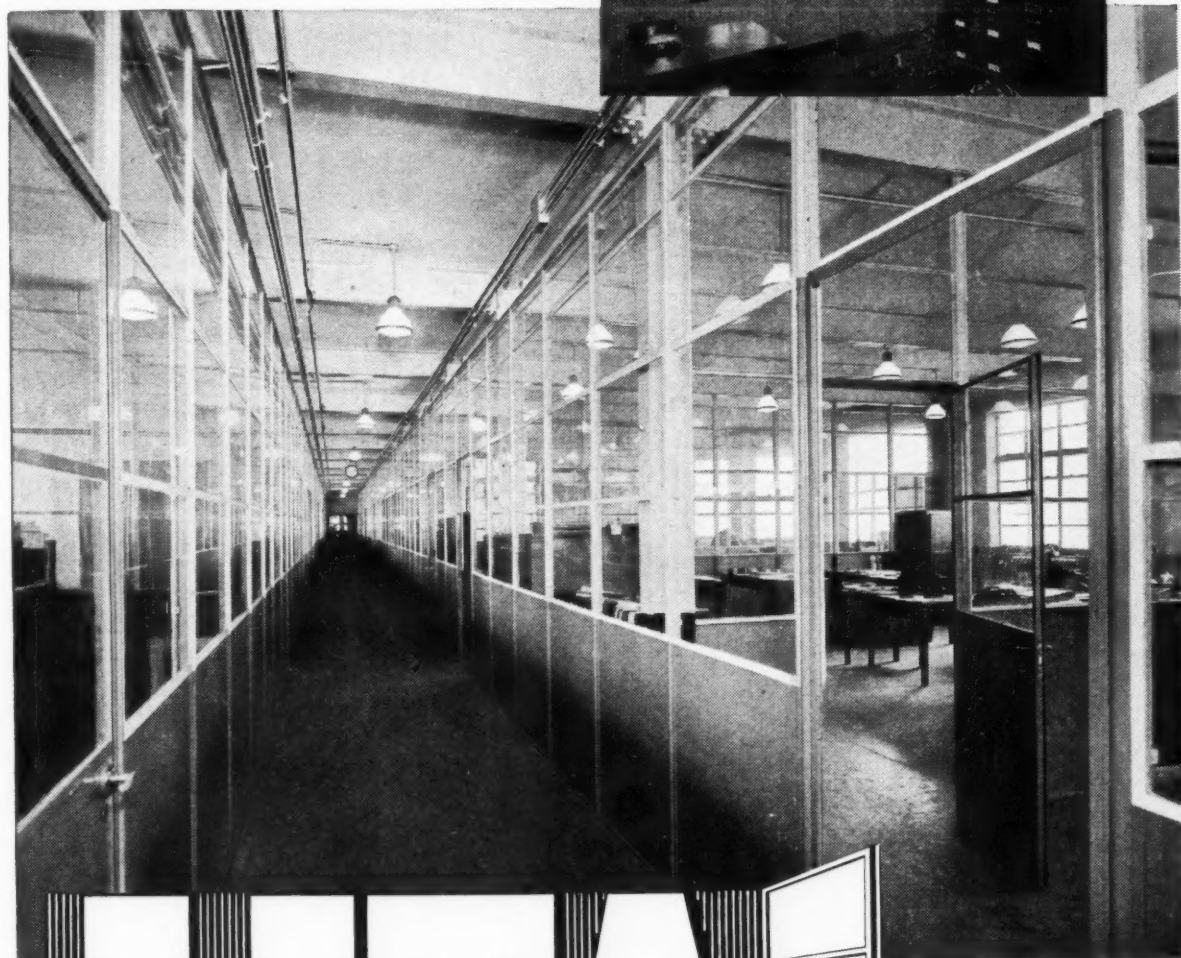
PERMANITE LTD

LONDON
455, OLD FORD ROAD, E.3.
'Phone: ADVance 4477 (8 lines).

BIRMINGHAM
220-222, KINGSTANDING ROAD, 22C.
'Phone: BIRchfields 5041-2

MANCHESTER
PICCADILLY HOUSE, 11 PICCADILLY.
'Phone: BLAckfriars 9469

Walls of DAYLIGHT



Steel and Aluminium Partitions for all purposes

JOHN WILLIAMS & SONS (CARDIFF) LTD · EAST MOORS ROAD · CARDIFF

Telephone Cardiff 2 501

Telegrams "Metal" Cardiff

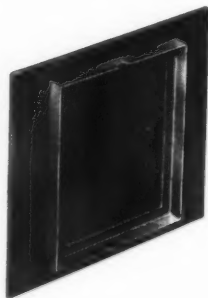
LONDON: BANK CHAMBERS, FINSBURY PARK, N.4 · TELEPHONE: ARCHWAY 2294 · TELEGRAMS: DISSOLVING LONDON

17805

KWIKFORM



*... the two-component
Suspended Formwork system.*



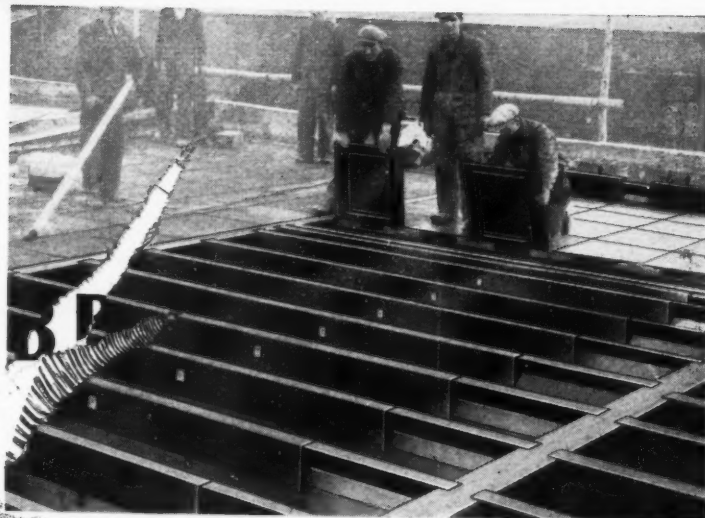
The Spanform is a sturdily constructed telescopic unit designed to obtain the utmost economy in usage and maintenance. All 'Kwikform' Formwork is available for hire or outright purchase.

Fully descriptive literature is available on application

KWIKFORM LTD., WATERLOO ROAD

M

Illustrating the simplicity of laying the Platforms which by their design are held rigidly in position. Striking is equally simple.



A feature of the Kwikform system is that within the ranges of the standard size Spanforms no props are needed for normal requirements.

D AIRMINGHAM 25 London Office: 66 Victoria Street, S.W.1.

LIFTS and ESCALATORS



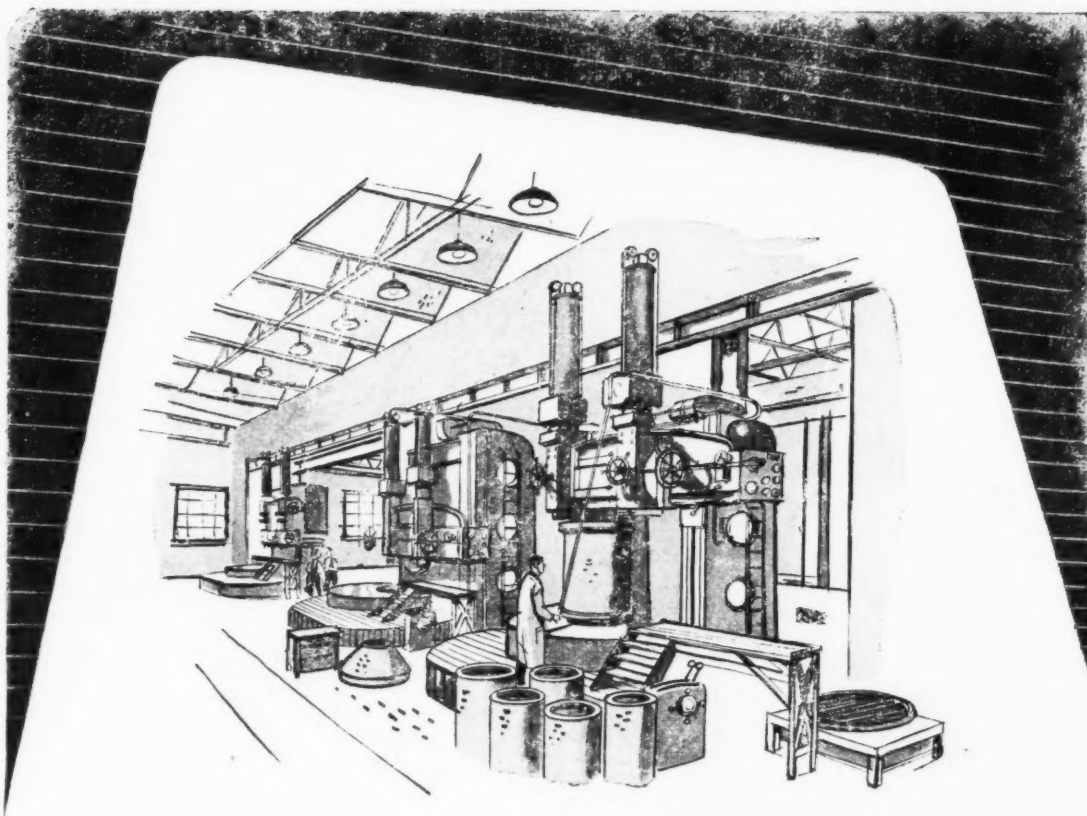
J. & E. HALL
LIMITED

DARTFORD :: KENT

Telephone : Dartford 3456

LONDON OFFICE : 10 St. Swithin's Lane, E.C.4

Telephone : Mansion House 9811



ROBBIALAC PAINTS

Combine colour with protection.

Providing adequate protection for factory interiors need not be an excuse for dull and dingy decorations. For Robbialac Paints combine maximum protection with colours that are practical yet delightful to look at, prevent eye-strain and fatigue and generally promote the comfort and well-being of the workers. Advice on finishes for all decorative and protective purposes, inside and outside, will gladly be given by the makers of Robbialac Paints.

JENSON & NICHOLSON LTD

Jenson House, Stratford, London, E.15

NEW
INTERIOR WALL TREATMENT

ROBBIALAC SUEDE FINISH
WALL PAINT is the perfect, new finish for walls and ceilings . . . velvety in appearance and to the touch. Hygienic, dirt-resisting, washable. Suede Finish is ideal for canteens, restaurants, bars, offices, shops, etc. Many beautiful pastel tints, all intermixable. Please write for details.

for colour

quality & lasting beauty



BOOTH

ROLLING SHUTTERS

At British Railways
New Ocean Terminal,
Southampton.



Part of £10,000 contract. The Shutter Curtains are operated by Mobile Electric Units by means of flexible shaft and gear unit, driven by electrical power points by means of a 6 pin detachable plug member, 4 cored flexible electrical cable housed on a steel winding cable drum.

JOHN BOOTH & SONS (BOLTON) LTD.
FIREPROOF DOOR AND SHUTTER DEPARTMENT
BOLTON... Phone 1195

The most **VERSATILE** *flooring*



For further information, please write to The Secretary, Floor
Quarry Association, Federation House, Stoke-on-Trent.

Bank or cowhouse, dairy or show-
rooms—can a flooring material be
equally suitable for such diverse
purposes ?

Consider the properties of Clay
Floor Quarries. They are extremely
dense, tough and durable, and offer
exceptional resistance to abrasion
and impact. They can be polished to
enhance their rich, warm colour or,
being almost impervious to moisture,
may be sluiced or mopped with
water. Skirtings of the same material
save timber, render a floor vermin-
proof, and greatly facilitate cleaning.

Clay Floor Quarries are available
in a wide range of sizes, thicknesses,
and shapes, and in uniform shades
of red, blue, brown and buff, or in
multi-colours. Attractive effects are
obtainable by using contrasting
shades or a combination of different
sizes.

With all their advantages, Clay
Floor Quarries **COST LESS**
THAN ANY OTHER FLOOR-
ING MATERIAL

Correctly laid, a Quarry floor will
last as long as the building.

Clay Floor Quarries

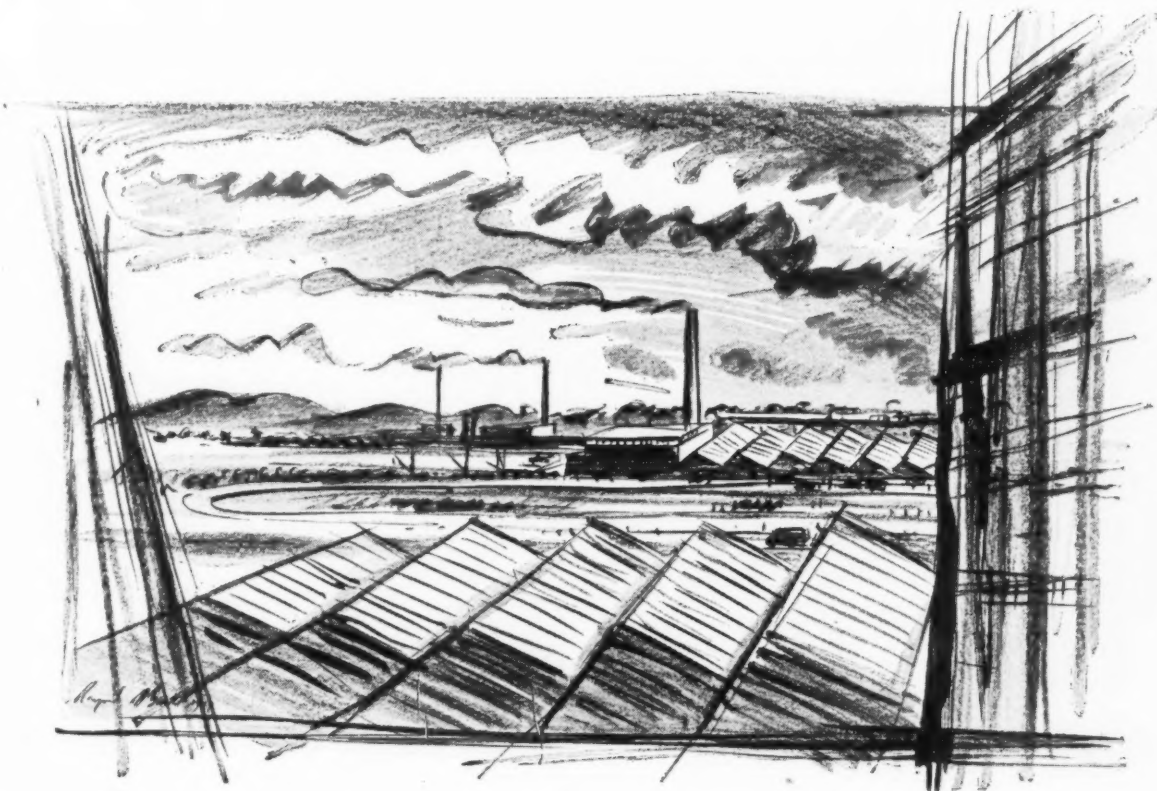
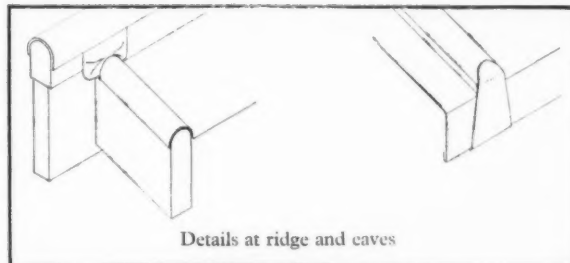
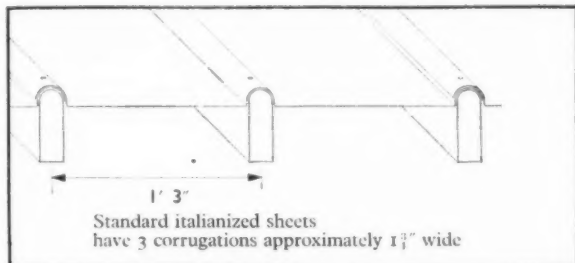


BUSH HOUSE, ALDWYCH, LONDON
—the new sales home of
ACCOTILE

ARMSTRONG CORK COMPANY LIMITED

DATA SHEET FOR ARCHITECTS No. 8

ITALIANIZED ZINC ROOFING



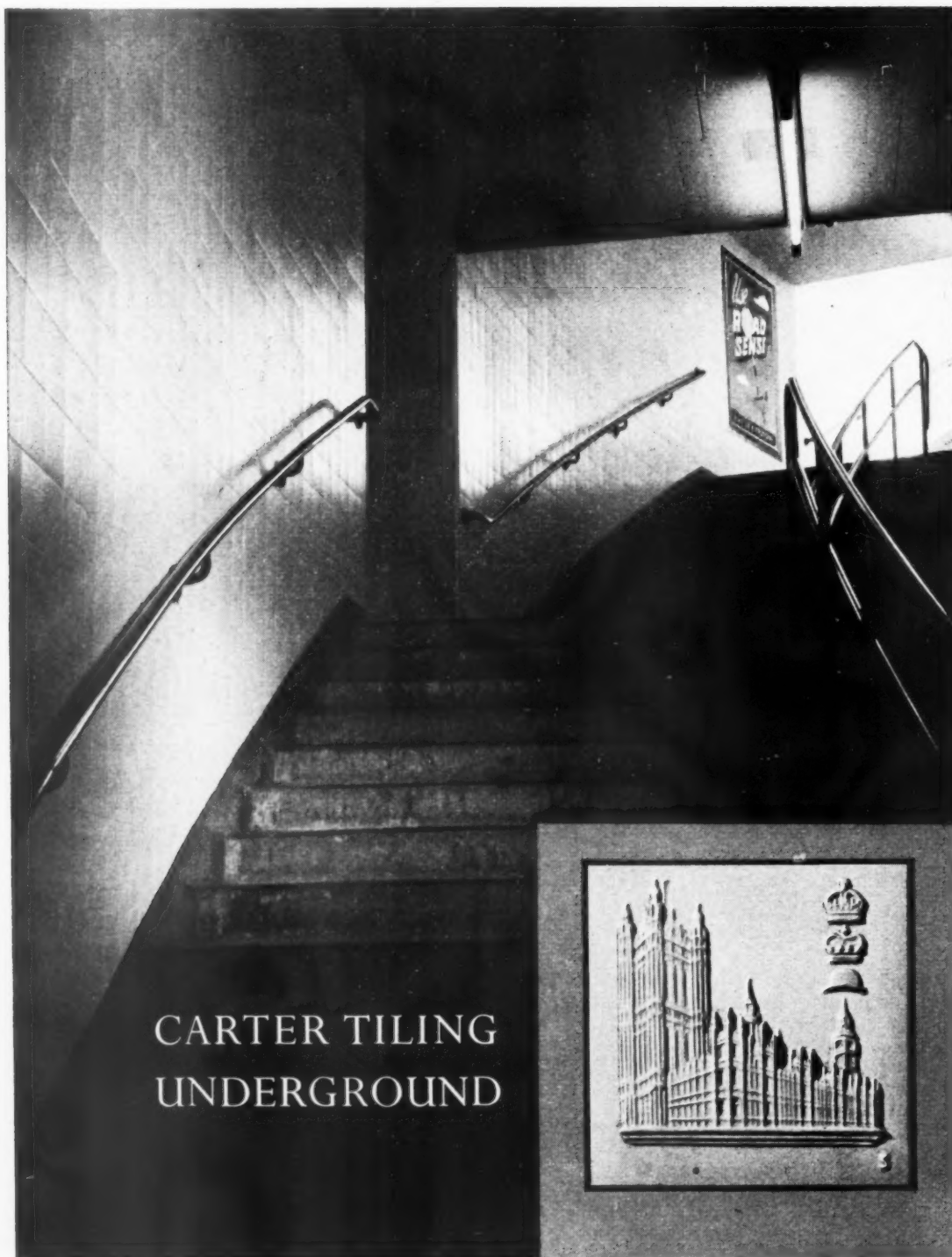
Italianized zinc roofing enables zinc roofs to be laid directly on to rafters or purlins without the use of boarding. It is thus both cheaper and easier to lay than other systems, since the sheets are factory-formed; and it is especially suitable for large buildings, such as warehouses, railway stations, etc. It can be adapted to housing, if used with a decking material to provide sound proofing and thermal

insulation. The standard italianized sheet of Z.G.16 (19 I.S.W.G.) measures 8' long by 2' 8" wide, the rolls being spaced at 1' 3" centres. The sheets are fixed by galvanized screws directly to the rafters or purlins. Further information on roofing systems and other uses of zinc in building can be had from the Association, together with a list of publications.

ZINC DEVELOPMENT ASSOCIATION

LINCOLN HOUSE TURL STREET OXFORD TELEPHONE OXFORD 47988





CARTER TILING UNDERGROUND

Stairway—Perivale Station

Architects: F. F. Curtis, D. Ing., A.R.I.B.A. B. B. Lewis, M.A., B. Arch., F.R.I.B.A. Howard Cavanagh A.R.I.B.A. Contractors: Holliday & Greenwood Ltd.

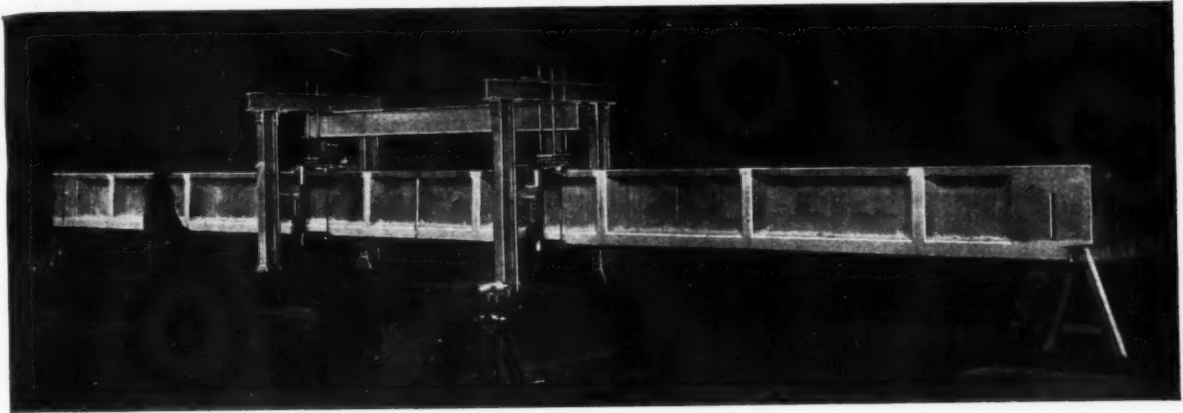
There is no need to tell a Londoner how widely, or how successfully, glazed tiles have been used throughout his Underground system. The large photograph indicates the extent to which an otherwise depressing stairway can be made more cheerful and attractive by the characteristic texture of glazed tiles. The small inset shows an embossed tile, designed by Harold Stabler, used at St. John's Wood Underground Station. A very high percentage of the tiles used in the London Underground are made and fixed by Carter.

CARTER

CARTER & CO. LTD., POOLE, DORSET

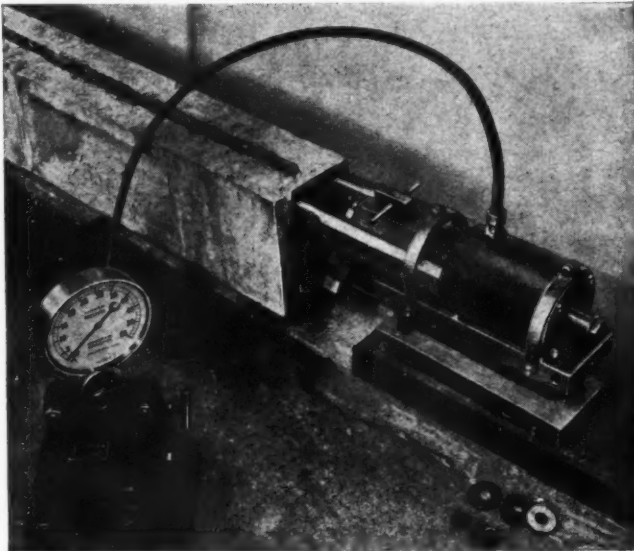
For all contracting work: CARTER & CO., LONDON, LTD., 29 ALBERT EMBANKMENT, LONDON S.E.11

PRESTRESSED CONCRETE



The LEE-McCALL system has all these advantages...

- Is a simple method of prestressing concrete.
- Uses Phoenix "MACALLOY" steel bars in diameters up to 1 in. with a guaranteed minimum 0.1 per cent. Proof Stress of 54 tons per sq. inch, threaded and secured with special high efficiency nuts.
- Provides easy attachment of the new patented hydraulic pulling jacks and rapid stressing of the bars.
- Does not rely upon bond to transmit the steel stress to the concrete.
- Shows no loss of prestress from creep of the steel or slip in the end anchorages.
- Offers exceptional durability with the high resistance of the "MACALLOY" steel bars to corrosion and the robust end fittings.
- Is most suitable for post-tensioned long-span beams, railway and highway bridges, foundations, harbour works, retaining walls, etc., and for factory-produced hollow units.



Write for the LEE-McCALL brochure

McCALL & CO. (SHEFFIELD) LTD.
TEMPLEBOROUGH · SHEFFIELD · AND AT LONDON

SISALKRAFT *for SARKING*



ROOFING COSTS can be reduced by several pounds when the sarking used is **SISALKRAFT**—the supreme building paper—reinforced, waterproof, pliable, clean and in-odorous. Technical information and samples on request.

See Folder No. 116 Architects "Classifile"

SISALKRAFT
TRADE MARK

Sole Distributors
for British Sisalkraft Ltd.

J.H. SANKEY & SON, LTD.

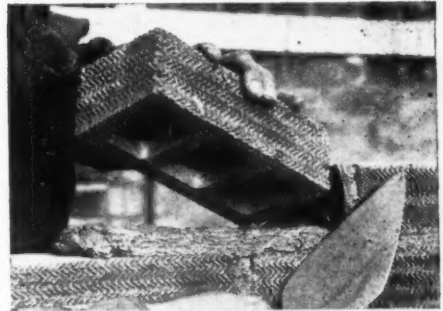
ALDWYCH HOUSE, ALDWYCH, LONDON, W.C.2

TELEPHONE: HOLBORN 6949

TELEGRAMS: BRICKWORK, ESTRAND, LONDON

STANDARD PRACTICE

The introduction of Phorpres Rustic facing bricks dates from about 1922 since when over 2,000,000,000 have been used and was a very important step forward from the design point of view. At one time it would have been little less than sacrilege to suggest anything other than a hand-made facing brick for an important facade. Today, the great number of buildings in which their characteristic exture, pleasant colour and excellent weathering properties are used as an integral part of the architect's design testifies to the fact that where it is desired to combine brick construction with bold texture it is standard practice to specify



Phorpres bricks are available in a very wide range of standard specials. Particulars of these may be obtained from the Technical and Research Department, who are at your service for information or advice on brickwork problems.

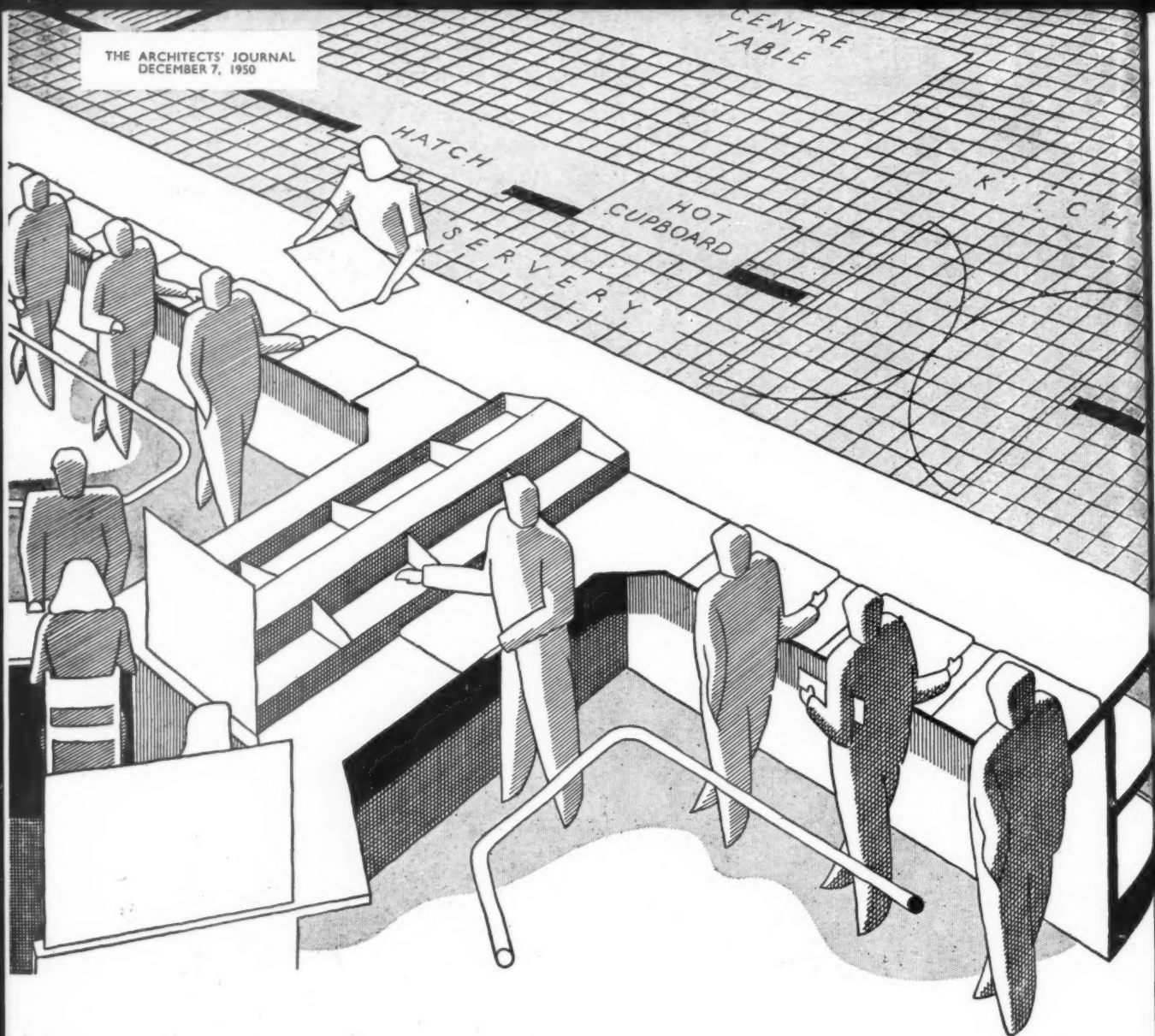
the PHORPRES rustic facing brick



LONDON BRICK COMPANY LTD

Head Office: AFRICA HOUSE, KINGSWAY, LONDON, W.C.2 Telephone: Holborn 8282. Midland District Office: Prudential Buildings, St. Philip's Place, Birmingham, 3 Telephone: Colmore 4141. South Western District Office: 11 Orchard Street, Bristol, 1 Telephone: Bristol 23004/5. Northern District Office: Gascoigne Street, Boar Lane, Leeds, 1 Telephone: Leeds 20771





Planning for Industrial Catering

WHILST THE PLANNING of every kitchen or canteen will vary according to individual circumstances, there are many essential data, including dimensions, which are common to any such scheme. It is of great value, too, if the planner can have access to the knowledge which has been accumulated from past experience of similar problems.

The Gas Industry has collated a great deal of information on the subject of industrial catering. For instance, planning requirements to which consideration must be given; schedules of equipment required to produce a given number of meals in a given time; typical plans illustrating the possibilities of combining various types of equipment; and examples of kitchens which have been designed and installed to suit individual sites and conditions. This information is freely available to architects, and others in responsible positions, who are concerned with the planning and equipment of industrial kitchens and canteens.

The collation of this kind of information is one of many activities by which The Gas Council seeks to promote the development of gas services for cooking, hot water, space heating and refrigeration. In all cases where the use of gas is envisaged, early consultation with the Gas Undertaking is advisable.

GAS

BATH CABINET MAKERS & ARTCRAFT LTD

Creative craftsmanship in Modern
and Period Architectural Joinery,
Panelling, Wood Carving, Plaster
Work, Interior Decoration,
and Fine Quality Furniture
and Furnishings for Public and
Commercial Buildings, Hotels,
Restaurants, Steamships, Clubs,
Shops, Offices.

Enquiries are invited

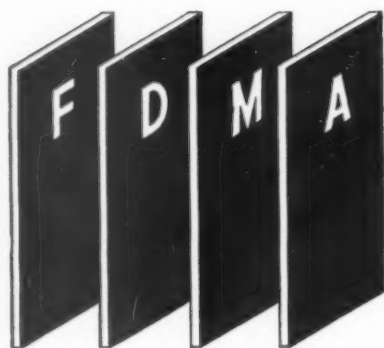
WORKS AND OFFICES LOWER BRISTOL ROAD BATH

Telephone: Bath 7214/7215 Telegrams: Art Bath

LONDON SHOWROOMS 1 GRAFTON STREET MAYFAIR W.1

Telephone Regent 4671

THIS
Registered
TRADE MARK



is your
GUARANTEE

It is the Trade Mark of the
Flush Door Manufacturers Association
Ltd., it may only be used by members who
are registered users of the Trade Mark, and it
is stamped on all doors made to the Association's
Standard Specification. It is your guarantee that
the materials and construction of the core
of the door are up to a minimum standard
as set out in the official F.D.M.A.
Standard Flush Door
Specification.

The
FLUSH DOOR
MANUFACTURERS'
ASSOCIATION LTD.

Full details of the Association's Doors are obtainable
from any of the following Members, or the Secretary
at Trowell.

Durham Timber Co. Ltd., Middx.
Edmonton Panel Co. Ltd.,
Edmonton, N.18
Wm. Evans & Co. (Distributors)
Ltd., Liverpool 3
Exau Products Ltd., Enfield,
Middx.
Farquharson (Timber) Ltd.,
London, E.C.2.

Flush Woodwork Ltd., East Ham,
E.6.
Leaderflush Ltd., Nottingham
Manor Joinery Works Ltd.,
Barking, Essex
Merchant Trading Co. Ltd.,
London, W.C.2.



solve
the
problem
with
tiles

For simple and straightforward treatment,
or attractive decorative effect, tiles by
Pilkington's are most suitable for interior
or exterior walls and floors. An interesting
example of unusual treatment is shown above.

We also specialize in faience for fireplaces
and certain other purposes, and mosaic for
floors.

Pilkington's
TILES
LIMITED

CLIFTON JUNCTION, Nr. MANCHESTER
London Office: 27b, Old Gloucester Street,
Holborn, W.C.2



- Bears the mark of the B.S.I.
- Choice of 11 permanent colours
- Rustproof, straight or cranked hinges

- Cannot harbour dirt or germs
- Cannot stain, fade or chip
- Cover completely encloses seat

The Belvedere toilet seat — perfectly hygienic, modern in design, with wide colour range and permanently good appearance — can confidently be specified. Any scheme of decoration can be matched, spotless cleanliness is easily maintained without effort and neither seat nor lid can stain or fade. There are no cracks or joins to harbour dirt or germs and the material itself is impervious to moisture and unaffected by chemical influences. Full illustrated details of the range available may be obtained from any of the addresses below.

Colour

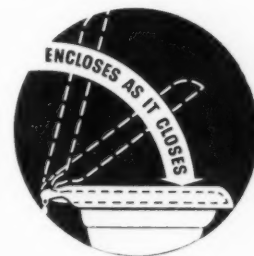
Black, Mottled Red, Mottled Green, Walnut	£2 . 9 . 6
Light Green, Ivory, Jade, Primrose, Flesh Pink,	
Lavender-Blue - - - - -	£2 . 15 . 0
White - - - - -	£3 . 3 . 0

Seat & Cover

Ask your local wholesale builders merchant for trade discounts and further details

E K C O Belvedere

PLASTIC TOILET SEATS



Manufacturers: E. K. COLE LTD., SOUTHEND-ON-SEA, ESSEX. 'PHONE: SOUTHEND 49491
 Export Enquiries: E. K. COLE LTD., 5 VIGO STREET, LONDON, W.I. 'PHONE: REGENT 7030
 Distributors: UNITED MERCHANTS LTD., 73 HIGH HOLBORN, W.C.I. 'PHONE: CHANCERY 7535





Pimlico polygon...

**a hot water accumulator that delights the eye!
A 16-sided tower glazed by Aluminex Patent Glazing houses the hot water accumulator of the Pimlico District Heating Scheme of the Westminster City Council.**

When a hot water accumulator tank 29 ft. in diameter and 126 ft. high is set cheek by jowl with blocks of new flats, something special, obviously has to be done about its appearance. Something, indeed, has been done, and to some purpose, to the hot water accumulator of the Pimlico District heating scheme. The remarkable photographs in these pages show how Aluminex Patent Glazing was used in accomplishing these three prime requirements of:

- 1 — providing an aesthetic finish;
- 2 — protecting the accumulator and its lagging;
- 3 — providing a measure of additional heat insulation.

In particular the architects desired that the accumulator enclosure should have a light and airy appearance and harmonise with the design of the flats in the surrounding estate.

It was with these considerations in mind that they chose Aluminex Patent Glazing—the modern, all-aluminium system—for the tower cladding. The Architects built round the accumulator a 16-sided steel tower glazed with rough cast glass panes, 6 ft. \times 1 ft 9 ins., set in Aluminex patent glazing bars.

These are the normal Aluminex glazing bars as used in the Brabazon Assembly Hall, motor factories, steel works and other industrial structures large and small.

In this application of versatile Aluminex however, the tee-shaped glazing bars have been set to face inwards. This permitted the glazing to be placed from the inside, doing away with the need for scaffolding. Moreover this arrangement suited the wind conditions for the wind suction is much greater than pressure.

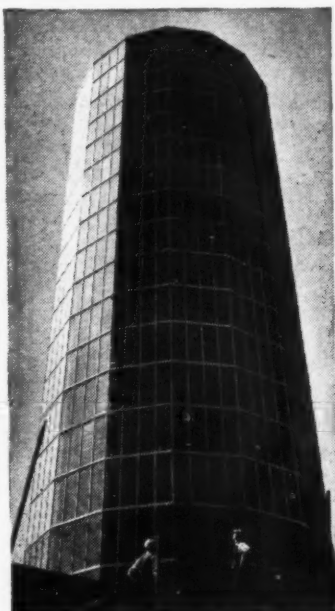
The manufacturers of Aluminex, Williams & Williams Ltd., carried out tests showing that the glass would not break until a suction of 65 lbs. per square foot was reached and that the Aluminex continuous spring glazing strip inside would not give way under a pulsating outside pressure varying up to a maximum of 45 lbs. per square foot. It was therefore clear that there was an ample margin of safety, since the maximum design suction is 50 lbs. per square foot and the maximum design pressure is 30 lbs. per square foot.

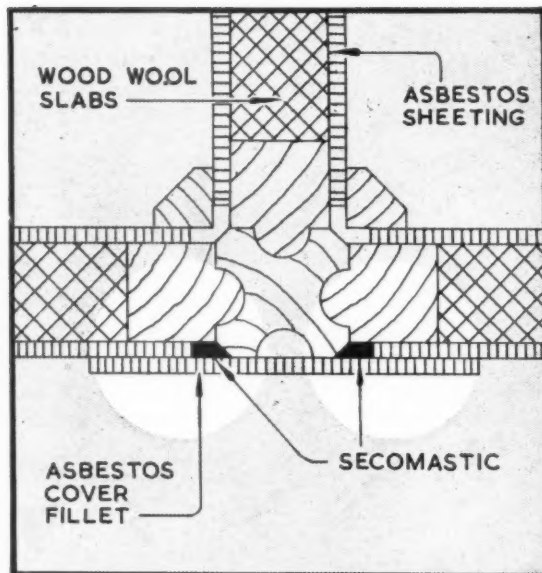
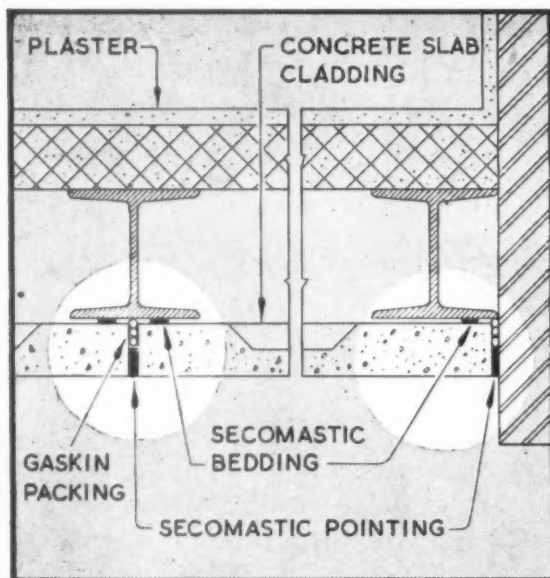
It is, however, from the point of view of appearance that the choice of Aluminex has been so notably justified. Aluminex is essentially a neat and precise glazing system. The bars are extruded to a design which represents the strictest adaptation of shape to function. The Aluminex engineers who designed it re-thought "dry glazing" from basic principles. The components and fixings are equally simple, efficient and functional. The result is that, in such structures as the

Pimlico tower, when clean, precise lines play an important part in the aesthetic effect of the finished building, Aluminex presents invaluable advantages.

Aluminex Division of Williams & Williams Ltd., Reliance Works, Chester

Architects: Messrs. Powell and Moya, A.A.R.I.B.A. Chartered Civil Engineers: Messrs. Scott & Wilson. Consulting Engineers: Messrs. Kenneuv & Donkin





EXPANSION JOINT PROBLEMS

SOLVED BY

SECOMASTIC

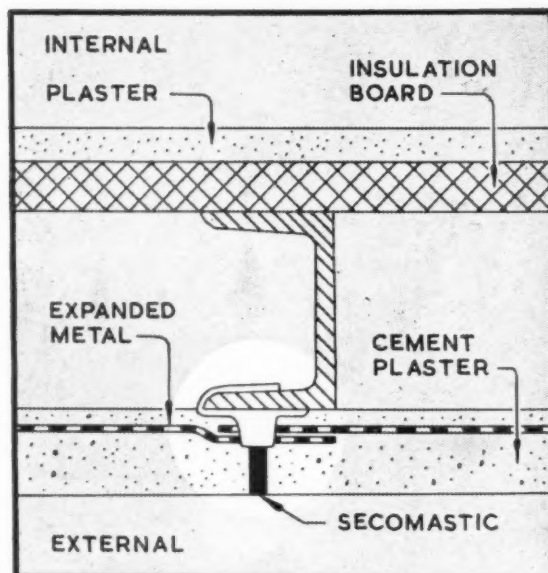
The illustrations show typical examples of the use of SECOMASTIC for expansion joints. In each case the problem was to provide a weatherproof seal whilst at the same time allowing for the normal contraction and expansion of the joint.

SECOMASTIC fulfils this requirement admirably since the movement of the joint is taken up within the body of the mastic which remains in a plastic state, though protected by an outer skin.

There are a great many uses, both in new construction and maintenance work, for which Secomastic has outstanding advantages and a "code of good practice" is gradually being built up whereby the best results can be obtained where joints occur which require sealing.

The problem of efficient and economical application of the mastic is solved by the SECO caulking gun, particularly when used with the SECOMASTIC patented extra-capacity cartridges.

Informative literature will be supplied on request and the SECOMASTIC Technical Staff, who know a great



deal about jointing and sealing problems, will be pleased to advise on specific applications. Please address your enquiries to Architectural Department.

SECOMASTIC JOINT SEALING COMPOUND
REGD.

SECOMASTIC LTD., 11 UPPER BROOK ST., PARK LANE, LONDON, W.1. TELEPHONE: MAYFAIR 9080



"PLIMBERITE" FOR SUSPENDED FLOORS

**Building Research Station Tests Prove
Strength of "Plimberite" as Flooring.**

The summary quoted below heads the report of a special investigation on the behaviour of $\frac{3}{4}$ " "Plimberite" (standard grade) under static and impact loading.

$\frac{3}{4}$ in. "Plimberite" board, made from wood chips and synthetic resin, has been tested under vertical static and impact loads when nailed over timber joists at 16 in. centres.

In the tests the board sustained no damage when

subjected to an applied load up to 100 lb./square foot and at this load the deflection of the board relative to the joists was slightly less than 1/20. in.

Damage under standard impacts used for checking house floors was slight and, provided that the board is supported and nailed at all edges, it can be regarded as satisfactory for houses and probably also for offices."



Fig. 1. - Rig and Gear for applying impact tests.

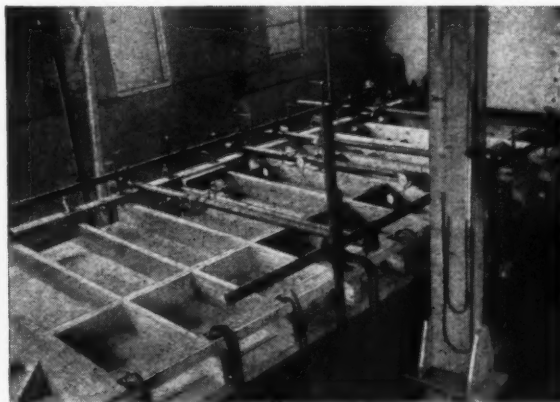


Fig. 2. - Rig for static loading tests. (Floor section is inverted, with captive airbag beneath for loading.)

Use "PLIMBERITE" also for :

Partitions
Wall cladding
Roof Lining
Notice boards
Shelves

Door panels
Skirting boards
Built-in furniture
units, etc.

"PLIMBERITE" can be worked using normal woodworking tools and techniques and is available in sizes 8 ft. by 4 ft.

A copy of the full report on the special investigation by the Building Research Station may be obtained by Qualified Architects, Builders, etc., on request to



BRITISH PLIMBER LIMITED

20 ALBERT EMBANKMENT, LONDON, S.E. 11.

Tel. RELiance 4242



The Speaker's Chair

The opening of the reconstructed House of Commons on October 26 was a landmark in the long and distinguished history of the Mother of Parliaments. But it can fairly be said that it was also a great occasion in the splendid history of Dunlopillo, the original Latex Foam cushioning. For every foot of seating through the length and breadth of the historic building was upholstered with this superb material.

The Speaker's Chair and all the seating, not only in the Chamber but throughout the galleries and lobbies, 1622 feet of it, is cushioned with Dunlopillo. In the precincts the story is the same. Every article of upholstered furniture in the conference rooms, writing rooms and offices, in the Prime Minister's own room, in the dining rooms—even the stools in the phone boxes—all are upholstered in Dunlopillo.



The Conference Room



One of the Ministers' Rooms

DUNLOPILLO



makes upholstery history in the new
HOUSE OF COMMONS

This installation in a building of the greatest national and international importance is, obviously, a supreme tribute to the material. It is the most powerful recommendation for the choice of Dunlopillo for seating anywhere.

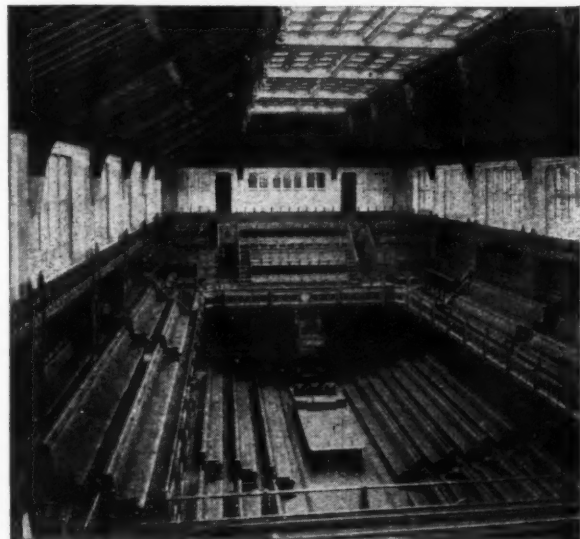
*Architect for the Ministry of Works,
 SIR GILES GILBERT SCOTT, O.M., R.A.*

ACKNOWLEDGEMENTS

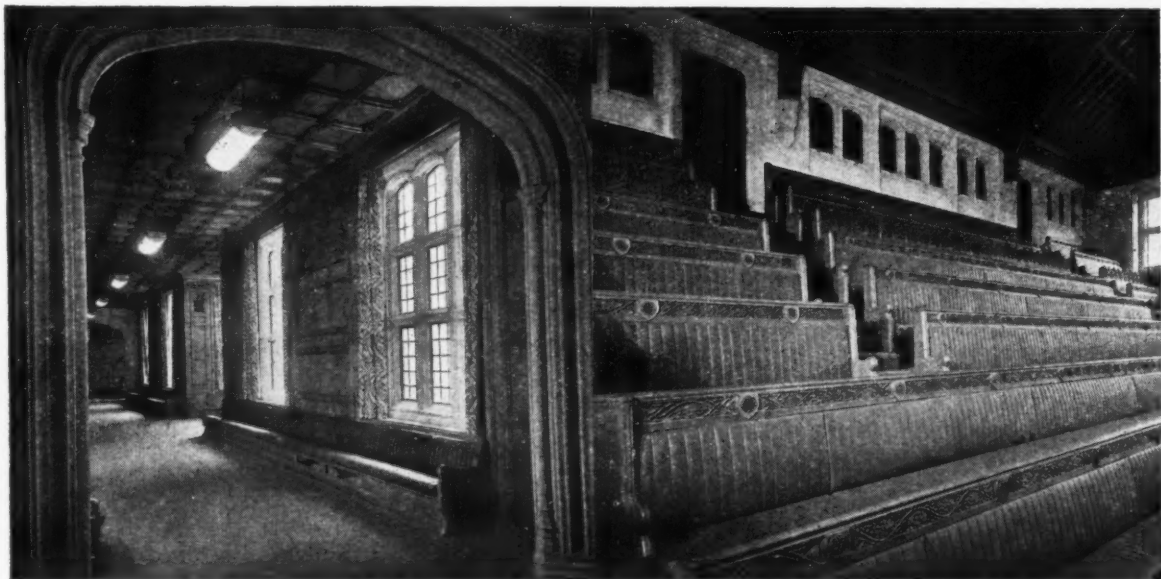
The co-operation of the contractors responsible for the seating is gratefully acknowledged by Dunlop Rubber Co. Ltd.

J. L. GREEN & VARDY LTD. LONDON MAPLE & CO. LTD. LONDON
 H. H. MARTYN & CO. LTD. CHELTENHAM
 F. SAGE & CO. LTD. LONDON WARING & GILLOW LTD. LONDON

DUNLOP RUBBER CO. LTD. (DUNLOPILLO DIVISION), RICE LANE,
 WALTON, LIVERPOOL, 9 LONDON: 19/20 NEW BOND STREET, W.1
FOUNDERS OF THE LATEX FOAM INDUSTRY



A general view of the Chamber from the Distinguished Strangers Gallery



One of the Division Lobbies

Part of the Distinguished Strangers Gallery and Public Seats.

50D 63B

For the Safety of the Public



This photograph of the King's Theatre, Hammersmith, shows (top left hand corner) **Edgar B.W.39 Wall Fittings**, which meet all present regulations for Secondary Lighting, which is considered essential in Public Buildings, such as Cinemas, Theatres and Restaurants, for the safety of the public in case of emergency.

Also are shown **Exit** and **Way Out** signs, which fulfil a similar purpose.

Exit Sign, standard size 17½" long x 9½" wide x 11½" high. Glazed colour as required, painted black.



Way Out Sign, standard size 26½" long x 6½" wide x 10½" high. Glazed colour as required, painted black.



B.W.39 Wall Fitting, 8½" high x 4½" wide x 4½" deep. Finished coinage bronze as standard.

All are fitted with nursery cock, single inverted Bijou burners with permanent by-pass, gas and air regulators. All easily accessible.



WILLIAM EDGAR & SON LIMITED

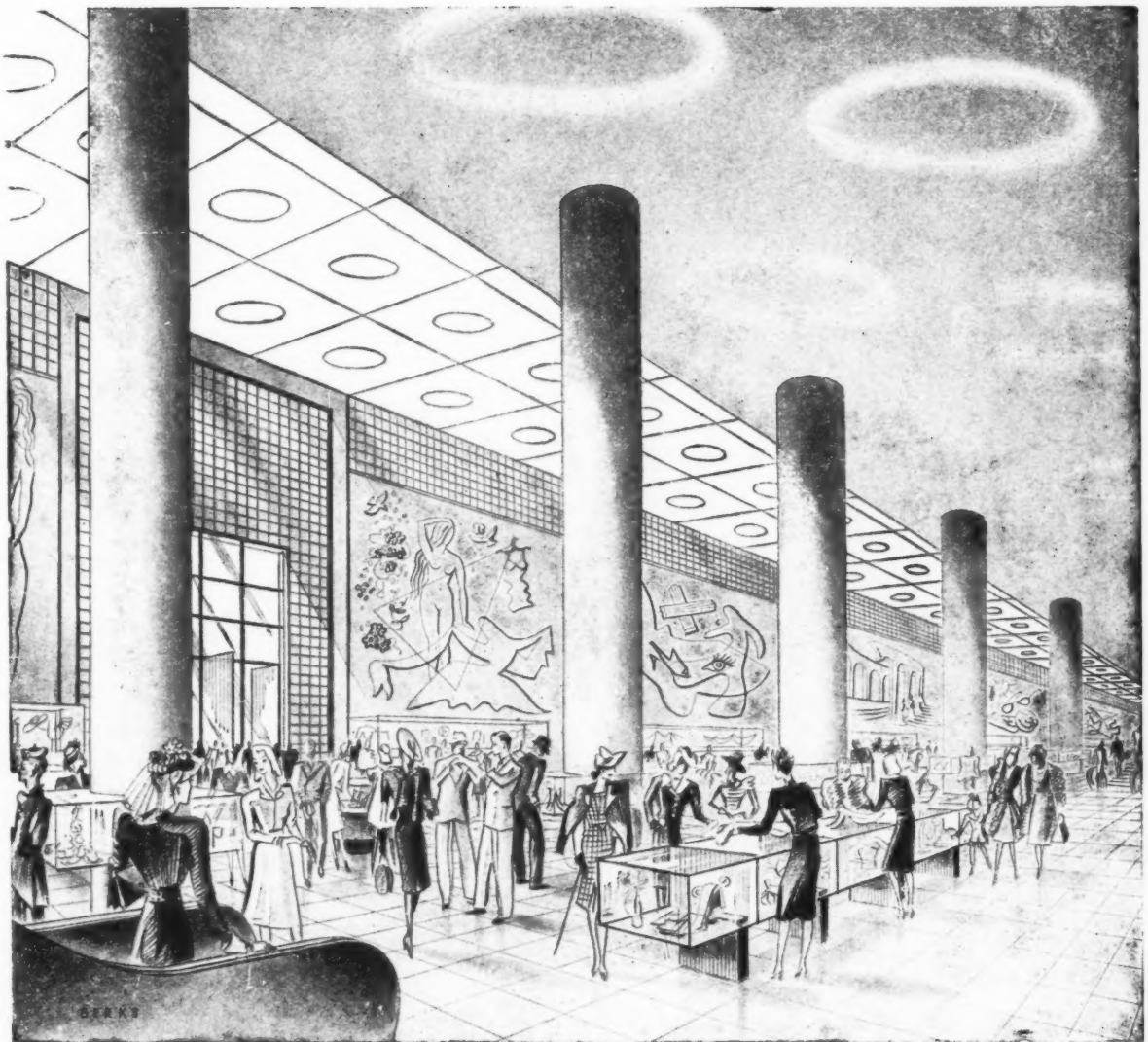
BLENNHEIM WORKS · HAMMERSMITH
LONDON · W.6

Telephone: RIVerside 3486

EDGAR

Gas Fittings and Apparatus

See our exhibit at the BUILDING CENTRE, 9 Conduit Street, W.1.



Fine weather in store . . or in any building for that matter!

Brightside technique in air conditioning enables surroundings of optimum comfort to be maintained in spite of climatic conditions outside, in any kind of public, private or industrial building.

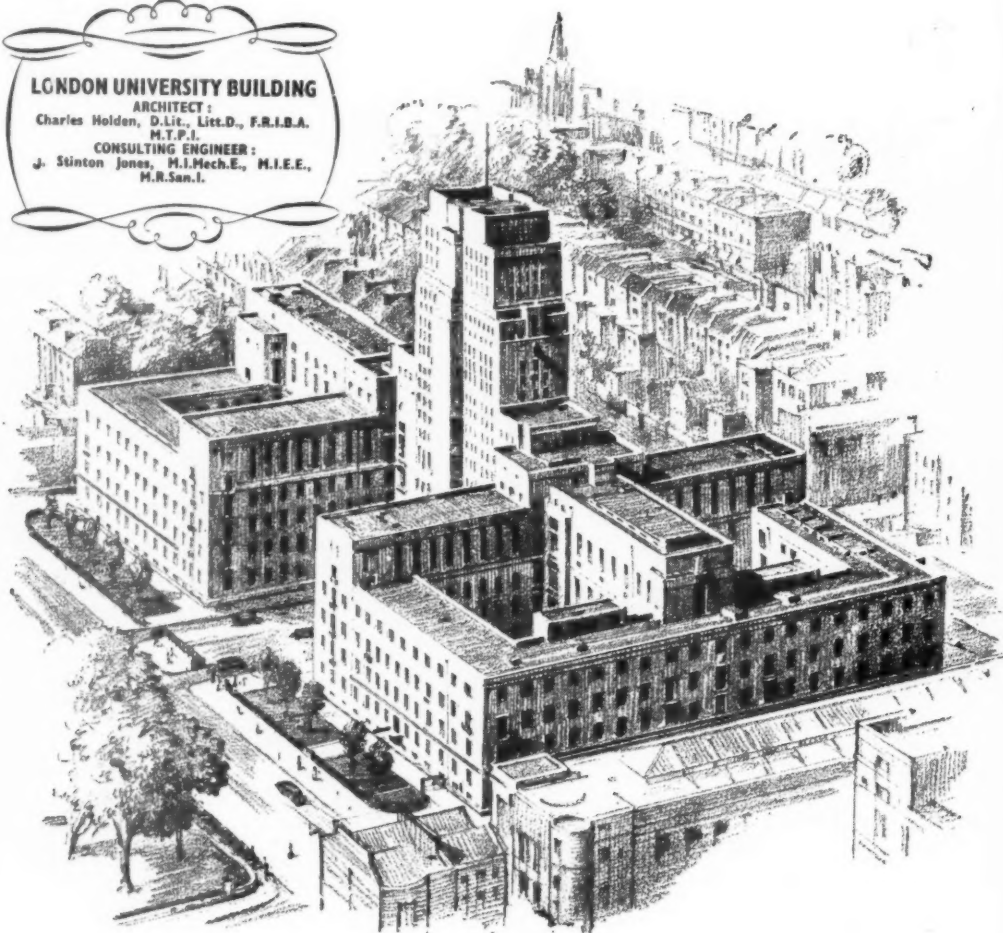
BRIGHTSIDE *Conditioned* COMFORT

HEATING • PIPING • AIR CONDITIONING

THE BRIGHTSIDE FOUNDRY & ENGINEERING COMPANY LTD

Head Office : **SHEFFIELD** ; and BIRMINGHAM, BRISTOL, LIVERPOOL, LONDON, MANCHESTER, NEWCASTLE, PORTSMOUTH,
EDINBURGH, GLASGOW, BELFAST

® CC30



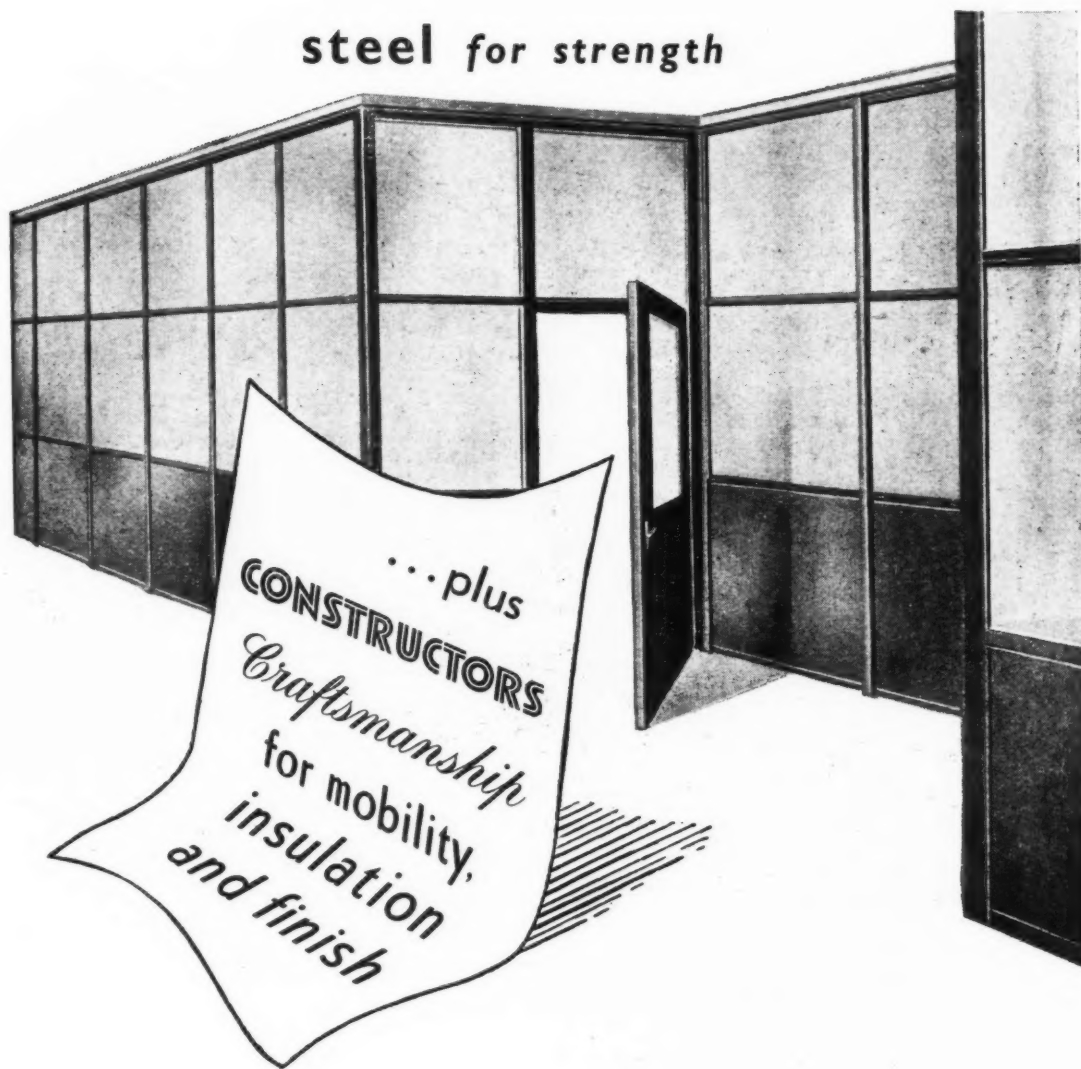
THE launching of a project on the scale of the London University Building is today more than difficult . . . but at least it is not difficult to obtain the same



J. & P. ARE FOUNDATION MEMBERS OF THE C.M.A.

JOHNSON & PHILLIPS LTD., LONDON, S.E.7
ELECTRICAL ENGINEERS AND CABLE MAKERS SINCE 1875

steel for strength



Revision of floor space to multiply rooms is easy and speedy with Constructors partitions. The sections (of varying sizes) are fixed in a matter of minutes and stay put with rock-like stability.

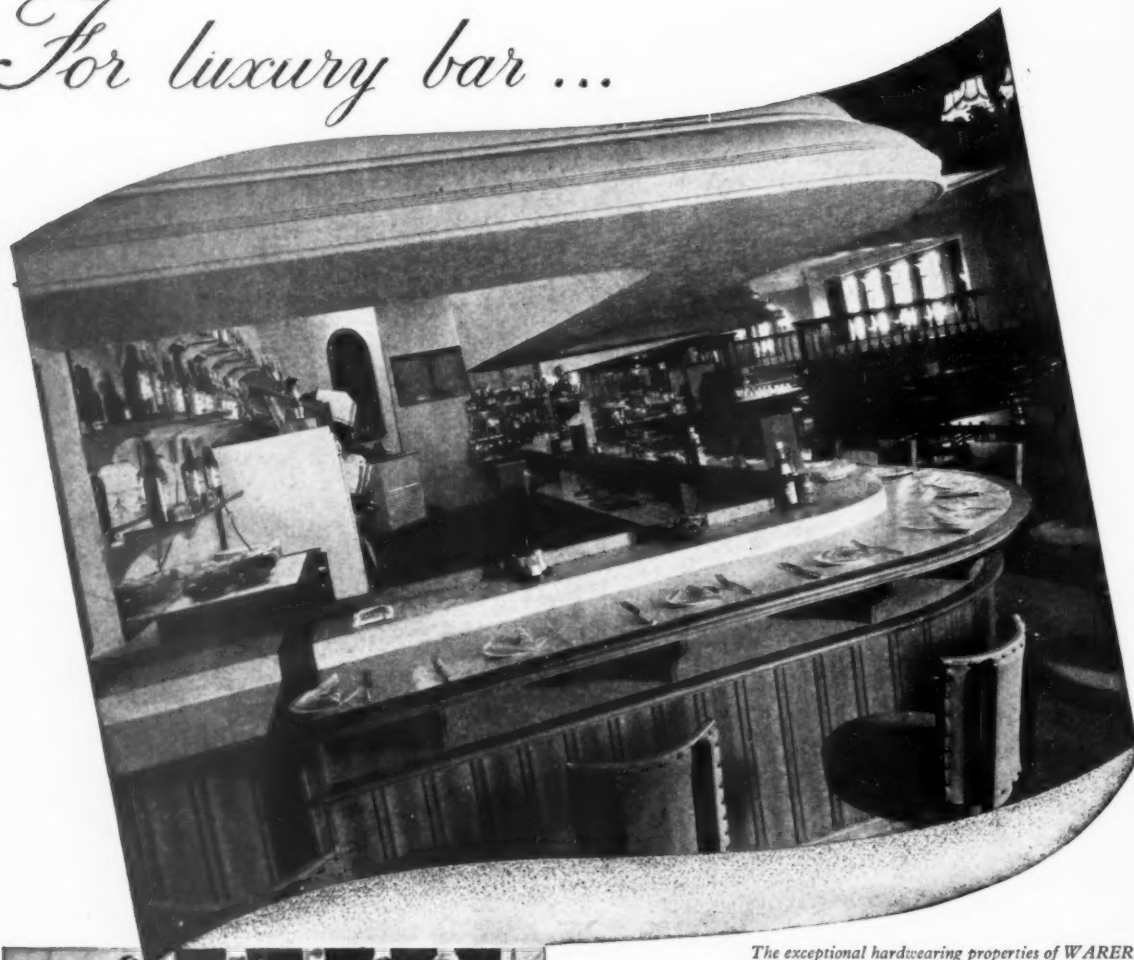
Please write for catalogue No.A.J./NP.

CONSTRUCTORS

STEEL EQUIPMENT FOR OFFICE AND FACTORY

Issued by Constructors Group, Tyburn Road, Birmingham, 24. Tel : ERDington 1616
London Office : 98 Park Lane, W.1. Tel : GROsvenor 5656, MAYfair 3074. Manchester Office : 289 Bury New Road. Tel : Broughton 1730

For luxury bar ...



The exceptional hardwearing properties of WARERITE plastics led to their adoption in the Parade Wine Lodge, Worthing, where the 92 ft. bar counter as well as tables are surfaced in a cigarette-proof grade. WARERITE materials were also used on service counters and flush doors. Architects :—Lawrence A. Cooper and P. Winton-Lewis. Contractors :—Trollope and Colls Ltd.

or humble pub

WARERITE materials make all the difference in the hotel which is setting out to attract good custom. They are available in a fine range of colours and patterns. Their long-wearing and labour-saving surfaces are so easily kept clean. They are not only admirable in use but adaptable in application —which extends to constructional panelling as well as surfacing counters. etc.



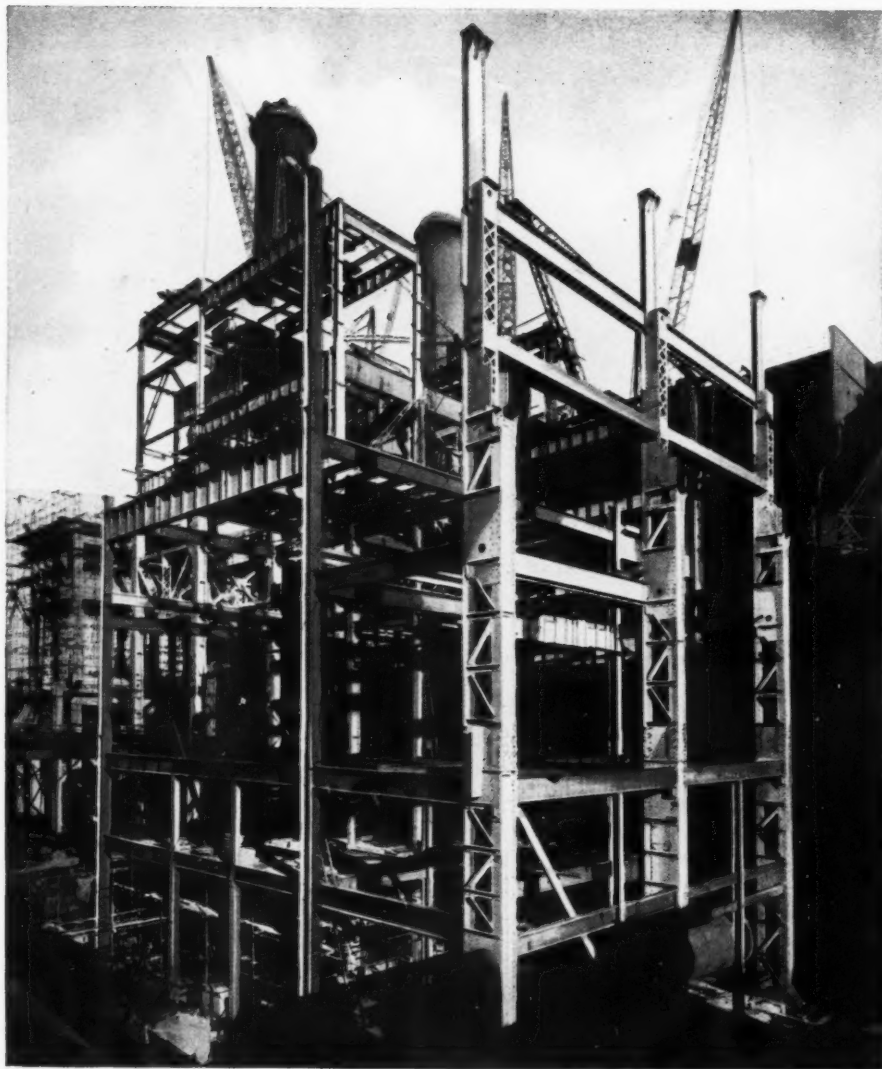
WARERITE
TRADE MARK
LAMINATED PLASTICS

Made by WARERITE LIMITED · WARE · HERTS

Manufacturers of Decorative Laminates for 20 years.
UNIT OF BAKELITE LIMITED · Phone : Ware 502 · Grams : Waverite, Ware

WB.8

TE
ere
oof
ush
vis.
td.



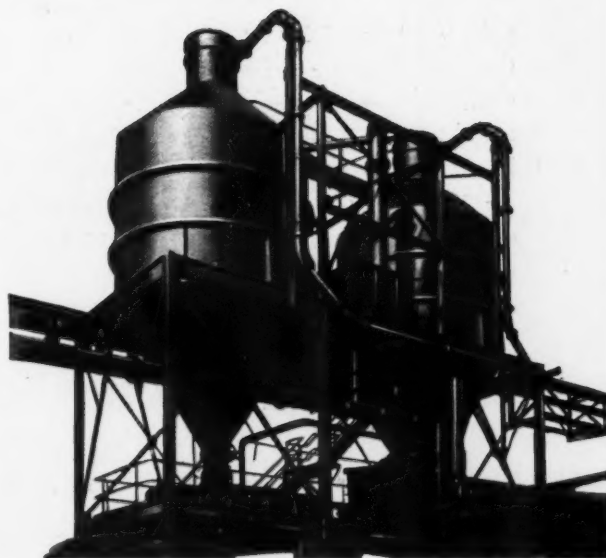
BCSA

Steel...and power

Whenever heavy loads have to be carried by compact structural elements of unquestioned security, steelwork is practically universal. The illustration shows part of an extension to a power station, the three large stanchions are for the turbine house, with annexe, workshop and boiler house behind.

Right, the cyclones for the power station completed by welding on site, — another example of the versatility of steelwork economy in reducing transport and other costs.

BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION
ARTILLERY HOUSE, WESTMINSTER, S.W.1



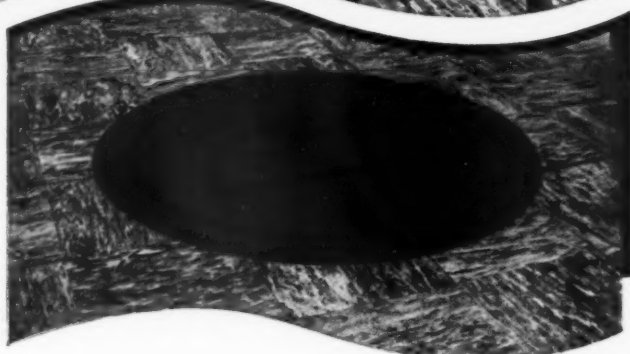


FUNCTIONAL *Beauty*

This office at the Doncaster Co-operative Society is a picture of functional beauty. In no small measure this is due to the attractive colour and subtle design of its Dunlop Rubber Flooring.

But the picture cannot show the quiet, the resilience and the long-lasting wear that Dunlop Rubber Flooring provides. Today more and more Dunlop Rubber Flooring is being installed.

In the hands of the craftsmen of the Dunlop Rubber Installation Service, the 46 plain and marbled shades can lend beauty as unique as it is durable. Monograms and special patterns (see inset) can be made to any design: Dunlop designers will be pleased to assist. Full details of the product and service may be obtained at any of the addresses below.



DUNLOP RUBBER FLOORING

DUNLOP RUBBER COMPANY LTD., CAMBRIDGE STREET, MANCHESTER

LONDON: Clerkenwell House,
Clerkenwell Green, E.C.1.

GLASGOW: Dunlop Rubber Co. (Scotland) Ltd.,
46/78, North Wallace Street, C.4.

LIVERPOOL: 24, Cornhill,
Park Lane, Liverpool 1.

BIRMINGHAM: Dunlop House,
Livery Street, Birmingham.

ER

use,
ham.

REF.3

T

No

"T

P

with

fas

An

rea

per

art

the

int

edu

a

ten

on

wo

win

bu

as

T

win

or

A J

THE ARCHITECTS' JOURNAL

No 2910 7 DECEMBER 1950 VOL 112

EDITORIAL BOARD: (1) *Consulting Editor*, F. R. Yerbury Hon. A.R.I.B.A. (2) *Guest Editor*, Raglan Squire F.R.I.B.A. in association with Arcon (3) *House Editor*, J. M. Richards A.R.I.B.A. (4) *Technical Editor*, R. Fitzmaurice, B.Sc., M.I.C.E., Hon. A.R.I.B.A. (5) *Editor Information Sheets*, Cotterell Butler A.R.I.B.A. (6) *Editorial Director*, H. de C. Hastings

SPECIALIST EDITORS*: (7) Planning (8) Practice (9) Surveying and Specification (10) Materials (11) General Construction (12) Structural Engineering (13) Sound Insulation and Acoustics (14) Heating and Ventilation (15) Lighting (16) Sanitation (17) Legal.

ASSISTANT EDITORS: *Chief Assistant Editor*, D. A. C. A. Boyne *Assistant Editor (News)*, K. J. Robinson *Assistant Editors (Buildings)*, L. F. R. Jones, A. P. Lambert, *Assistant Editor (Information Sheets)*, E. G. Johnson *Assistant Technical Editor*, M. Jay *Photographic Department*, E. R. H. Read, H. de Burgh Galwey *Editorial Secretary*, Betty E. Harris

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

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

Subscription rates: by post in the U.K. or abroad, £1 15s. 0d. 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. Half-yearly volumes can be bound complete with index in cloth cases for £1; carriage 1s. extra.



"THE BUILDER" AND THE AA

People who imagine that the political witch-hunting that has become so fashionable nowadays is confined to America must have been astonished to read recently, in that usually very sane periodical *The Builder*, a leading article which seemed bent on carrying the American inquisitorial technique into the heart of English architectural education. It was written in support of a rather silly letter about communist tendencies in the AA school, and not only enlarged on the dangers the AA would be running if people with left wing ideas were allowed to teach there, but went further to include foreigners as an undesirable influence as well.

*

There may or may not be individuals with communist beliefs among the staff or the students of the AA; I don't know.

I do know that there are a number of foreigners whose presence I welcome. I also know that a backward step would have been taken if the AA began to inquire into the political opinions of its staff and students, as suggested by *The Builder*; opinions which should only become the AA's concern if political activities were such as to impair their efficiency as teachers or their aptitude as students. I am particularly glad to see *The Builder* has received letters putting this point of view forcibly, because one danger of the American type of political inquisition is that people are made afraid to protest against the principle of inquisition, lest they be accused of being communist, too. At least we haven't reached that stage here.

*

The AA president answered *The Builder* in exactly the right way: by a brief, dignified, factual statement of AA policy, the concluding part of which I cannot resist quoting because it puts the civilized point of view so well. "It will be a sad day," he said, "for what you

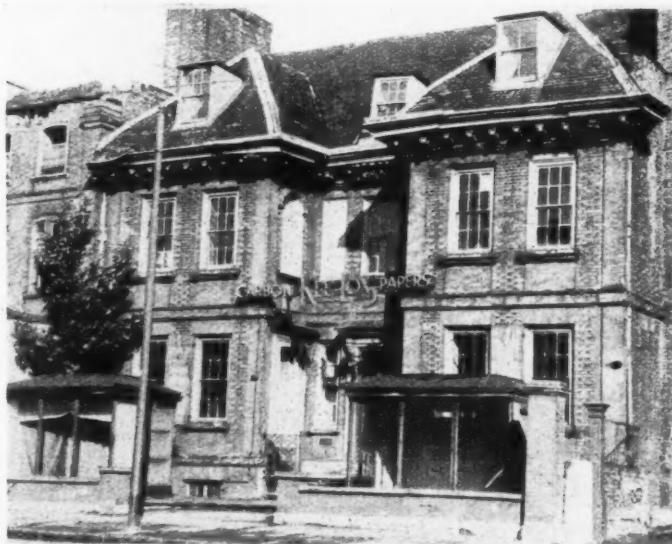
call (quoting from *The Builder*) 'the British way of life at its richest and best' when membership of professional bodies or school staffs is made subject to political tests. It is, and will continue to be, the practice of the AA to admit members, appoint staff and enrol students irrespective of their religious or political beliefs or of their nationality."

*

The president's letter reaffirmed the AA Council's "complete confidence in the efficiency and integrity of the teaching staff" and was supported by a spirited letter from the AA Principal which should set at rest any misgivings that may have been aroused by *The Builder's* publication. It will also, I hope, effectively put an end to a controversy that should never have been begun.

CROYDON ON TRIAL

"Wrencote," South Croydon, is one of the finest specimens of an early eighteenth-century town house, although it is not, as its name might sug-



"Wrencote," South Croydon. (See note: "Croydon on Trial.")

D



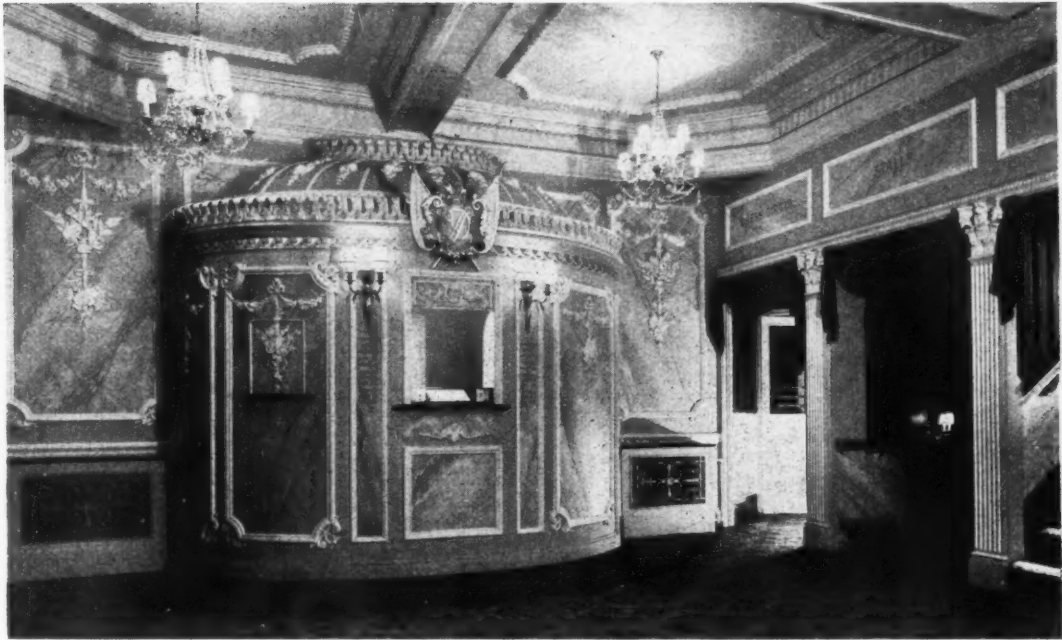
Flats, Countess Road, Walthamstow

F. G. Southgate, A.R.I.B.A. *Borough Architect*

HOPE'S

STEEL DOOR FRAMES

HENRY HOPE & SONS LTD., SMETHWICK, BIRMINGHAM & 17 BERNERS ST., LONDON, W.1



gest, by Wren. Nathaniel Lloyd illustrates it in his *History of the English House*, and praises it highly. He describes its cornice, for example, as "one of the richest remaining examples of a period when handsome cornices were prevalent." Yet anyone who goes to look at it now will find it in a sorry state, as the photograph on page 469, taken a short while ago, shows.

The wrought-iron railings and gateway, which are shown in Nathaniel Lloyd's picture, were removed—presumably for salvage—during the war, and since the war it has belonged to a property investment company who have allowed the building to deteriorate appallingly. The front has been obstructed with show windows and

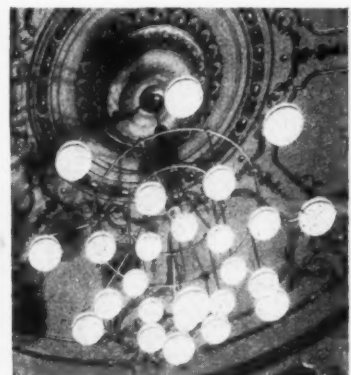
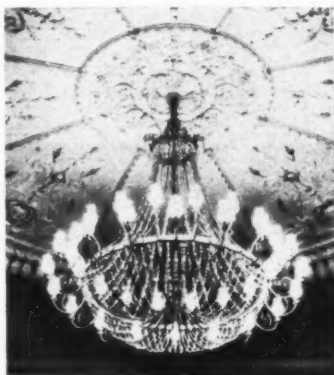
The Duke of York's Theatre has been redecorated in the Edwardian style by Cecil Beaton and W. Wylton Todd. Above is the foyer, showing the "antique" light fittings, the new Corinthian capitals, and the effectiveness of the not lost craft of "marbleising".

about a year ago the centre of the façade was defaced by a neon advertisement. At this time a local newspaper drew attention to its condition and the Croydon Borough Council was approached in the hope that they would save it. But they did not show themselves, I am told, very enthusiastic.

Since then worse things have threatened: a proposal by its owners to pull it down for redevelopment. A committee has now been formed, led by some local architects and calling itself The Friends of Wrencote, in order to try and save it. The Committee has at least succeeded in enlisting the support of the SPAB in order to get the house

listed as worthy of preservation. The next move is with the Borough Council, who are being pressed by the Committee to acquire the house as a Croydon Museum or for some similar purpose. It is still in good condition structurally.

Far too often, in cases like this, a Council waits till there is irresistible public demand before taking any action, but a Council surely should set a lead in seeing that the treasures of the locality are properly looked after, not wait till they are pushed. And this case is of interest far beyond the locality. The house is a national possession and the Borough Council will cause Croy-



Which is the most effective in an old theatre; fake Georgian, fake Victorian or contemporary? Left, a copy of an oil lamp chandelier, wired for electricity, which was designed by James Brown for the Old Vic. Centre, a chandelier, in the Duke of York's Theatre, London. This was copied from an Adam chandelier. Right, an attempt to create a chandelier effect with modern lamps at the Palace Theatre, Blackpool, which has been redecorated by Frank Mortimer.



A Circular Feature

There are many brighter ways for towns to celebrate the Festival of Britain than by building a crematorium, as is being done at Blyth. But so far no imaginative ideas have been published. Perhaps someone might find inspiration in this charming form of street decoration. This variation

on the familiar vertical feature revolved slowly outside the main railway station at Oslo as part of the celebrations that took place during the summer months in honour of the town's nine hundredth anniversary. The swinging baskets on the wheel contained geraniums and foliage.

don to be labelled a city of philistines sible to give this story a happy ending. if they do not now do every thing possible. A point of more general interest arises out of this case: in spite of the legislation that now exists whereby MOTCP lists buildings that are thereafter to a certain extent safeguarded, if the local authority does not choose to take action to see that a building is properly looked after, there is nothing the Ministry can do to stop it falling to pieces. It is, therefore, specially important that local authorities should fully value the architectural treasures they have within their boundaries.

CAN WE BUILD 300,000 HOUSES?

300,000 houses a year have now become a daily Press topic; experts and amateurs are all airing their opinions. In *Picture Post*, Ian Mikardo has followed Alfred Bosson with a few hearty slaps at the Building Industry, concluding that we can have the 300,000 if we can make up our minds what we would most like to do without. This seems to me more or less what I suggested last week. But I would still like to know if the builders say they can or cannot build the 300,000.

CITY ARCHITECT-ENGINEER

For the first time ever Glasgow is advertising for a City Architect. "A belated piece of foresight," as an Irish Glaswegian might say, for which I offer my congratulations. There is one snag, however. The appointed architect must also act as planning officer. Glasgow has already tried doubling a Borough Engineer in this task, with far from successful results. It is high time City Councils realized that health is not just a matter of drains and refuse collection, but also hospitals and health centres; that housing is not just a matter of habitable units, but houses, schools and open space; and that roads are not just wide or narrow traffic arteries but also an integral part of a city's pattern. In all these things the engineer, architect and planner are equally concerned.

*

All cities need a capable person in each of these posts; a fact which the economic difficulties of administering London made the LCC realize all too late, but which now stands as an object lesson to other cities.

ASTRAGAL

The Editors

HOUSING STANDARDS

WHILE the proportion of the National Budget available for housing is determined on the political plane, the manner in which it is used, and therefore the number of houses it represents, is largely the architect's responsibility. A complete revaluation of the requirements of the home, and a determination of the best way in which these requirements can be satisfied, is long overdue. New solutions might well prove to be more economical than accepted practice. Of course, there can be no universal solution, but one would be the small, but highly efficient, type of house described on pages 493-497 by Grenfell Baines. This should appeal particularly to young married people, and to others living under overcrowded conditions, who have not invested in a great deal of furniture.

We are most anxious that Grenfell Baines' suggestions should not be misinterpreted as a plea for lowering housing standards. The working class regard as sacrosanct standards which have taken so long to reach. Moreover, reduction of standards would be an admission of defeat and it might kill any incentive among architects, contractors, operatives and research workers to increase efficiency and productivity. As we see it, the theory behind Grenfell Baines' *Reflections on Housing* is that a house warmed throughout provides increased comfort, even if the floor area is far less than that of the typical local authority house or the speculative builders' "semi-detached." Although the heating and other equipment (particularly cupboards) of such a house would need to be more, not less, generous than usual, the cost might still be less than that of the traditional house. If this were so, it would be an additional advantage, but not the main argument in favour of such a policy. In any case there must be a considerable saving in building materials and labour, so that any local authority which built a certain proportion of houses of this type could increase its housing programme by an equivalent amount.

Technical Editor

CAN WE AFFORD DISTRICT HEATING?

The district heating scheme at Pimlico (described on pages 491 and 492) and the recent decision of the Paddington Borough Council to use district heating for its Bishops Bridge Road housing scheme focuses attention once again on this controversial subject. In the case of the Pimlico flats the high rents make the cost of "whole house warming" an undue burden on the tenants, but as mentioned above, on page 493 there is a well-reasoned plea for a reduction in the floor area of houses, based on the provision of warmth throughout and there seems to be little doubt that district heating is the most economical method of providing this.

The MOTCP decision that "district heating schemes shall

not be proceeded with in the new towns" is, therefore, rather disappointing. It is true that the economics of district heating depends largely on the density of building and Mr. Dalton stated in the House that in the new town where district heating had been considered "the density of building was not such as to give any probability of the scheme covering its cost". However, against the disadvantage of low density must be balanced the fact that the power stations in new towns could be designed to cater for district heating, whereas at Battersea expensive modifications had to be carried out. In any case, this is taking a very narrow view of costs. While the cost to the consumer may be fairly high, although even this should be counteracted by reduced rents, there are many savings and advantages for the nation as a whole: coal deliveries are eliminated and refuse collection reduced; fuel is saved—it is estimated that the Pimlico scheme, including Dolphin Square, will save 10,000 tons per annum—and that urban scourge, atmospheric pollution, can be largely abated. It is difficult to evaluate all the advantages solely in terms of hard cash, but one might well ask "can we afford *not* to have district heating?"

With the high cost of living generally and high rents in particular, many families cannot afford central heating, even if it is provided relatively economically by district heating. But if there are so many advantages for the nation as a whole, surely the nation as a whole should foot the bill? The British Electricity Authority does not expect electricity supply schemes in certain rural areas to cover their costs and the losses made in these areas are shared throughout the country. It may well be worth considering whether towns in which district heating cannot cover its costs, without charges becoming excessive, should be subsidized by the rest of the country in a similar way.

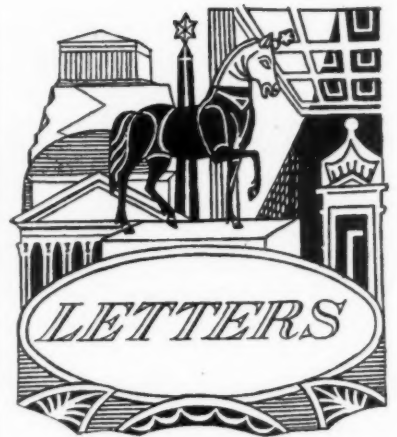
RETURN OF INFORMATION SHEETS

This week sees the return of Information Sheets to the JOURNAL. Judging by the telephone calls and letters received, this feature, suspended because of the printing dispute, has been greatly missed. For new readers may we point out that the Library is a collection of reference sheets, standard in size and format and covering a wide range of subjects connected with architecture and the building industry.

The organization of the Library involves the selection, preparation, revision and distribution of technical material of all kinds, the criterion being that all material selected for publication shall be, first and foremost, of value to the practising architect.

All Sheets published are kept constantly under review and when revisions are necessary these are noted in the Technical Section of the JOURNAL.

May we also remind readers that, as announced in our leading article on November 9, we are resuming Working Detail sheets. The first of these will appear on January 4, 1951.



T. H. M. Nesbitt, A.R.I.B.A.

The New Old Vic

SIR,—I was interested to read ASTRAGAL'S comment on the alterations to the Old Vic theatre, but think it is a pity that your frontispiece photograph of the new forestage, did not show its relationship with the rest of the auditorium.

It seems to me that since, as ASTRAGAL mentions, the "idea" of a forestage is not new, the precise architectural handling of it in relation to the auditorium was the essential problem with which the architect of the Old Vic was faced. The provision of a forestage is one method of linking more closely the actor and his audience, but does not necessarily succeed in linking architecturally the auditorium and the stage.

In attempting to do this the architect of the Old Vic has provided a third and quite distinct architectural element, neither auditorium, nor stage, but serving both, and this method is by no means without historical precedent.

ASTRAGAL says, however, that this stage is "the most significant innovation in the history of the British theatre for the past fifty years". Apart from the eighteenth century use of such methods, I would like to draw his attention to the number of the *Architectural Review* devoted to the Shakespeare Memorial Theatre at Stratford-on-Avon (June, 1932).

Mr. Jellicoe's description of the theatre leaves no doubt that its intention "plastically" and dramatically was precisely the same as that of the Old Vic. "On the forestage, the actor becomes player, part of the audience" while behind him, within the picture frame, the stage is fully equipped, as in the Old Vic, with all the "paraphernalia of illusion".

In both these cases, however, the method, although very different in decorative treatment, is architecturally the same—the provision of a third element which, while it links the actor and the audience, may by its different architectural character only serve to divorce the auditorium from the stage.

The effect of this is, of course, to deprive the producer of any real freedom, since if he decides not to use the forestage, the inner stage is so effectively separated from the audience that to "act over" it becomes extremely difficult.

Dramatically then, intimacy is possible for the imaginative producer and actor. Architecturally there remains a very close equivalent to the "mystical abyss" of the Wagnerian theatre.

London.

T. H. M. NESBITT.



RIBA

Recent News

The following appointments have been made:—**RIBA Architecture Bronze Medal:** *The Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects;* **RIBA representative on Jury to consider the award:** T. W. Haird, President of the Leicestershire and Rutland Society of Architects, *International Association of Bridge and Structural Engineers; Congress 1952;* **RIBA representation:** Arthur Bailey, in place of Graham R. Dawbarn.

Architects' Benevolent Society Centenary Appeal: The Council approved a donation of £250 to the Architects' Benevolent Society Centenary Appeal. This is additional to the Institute's annual grant.

The RIBA Council recently considered a report concerning the transfer of responsibility for housing at Southampton from the borough architect to the borough engineer and it was agreed to protest to the borough council at what was considered a retrograde step, detrimental to the best interests of architecture in the borough.

The Council has approved a memorandum of evidence prepared by a sub-committee of the Salaried and Official Architects' Committee for submission to the Treasury Committee which is sitting under the chairmanship of Sir Thomas Gardiner, to consider and advise on the future organization, structure and remuneration of the professional classes of the civil service.

The Council has approved a joint recommendation of the Executive Committee and the Practice Committee that negotiations should be opened with the MOH with a view to withdrawing the present scale of fees for State-aided housing schemes and substituting a new scale calculated on a percentage basis applicable to all forms of housing financed by public monies.

MOTCP

Buildings in Ely Listed

The Cathedral of the Holy Trinity, Ely, and three other churches in the city have been listed by the MOTCP as buildings of special architectural and historic interest. The churches are the Parish Church of St. Mary, the Church of St. Michael, Chettisham, and the Church of St. Mary, Stuntney.

College buildings listed include Ely Porta, the Barn and Stables to the South, and Guest Quarters of the Monastery and subsidiary buildings, the Guest Hall and subsidiary buildings including the Headmaster's House, Bishop's House (Prior's House) and residences incorporating the remains of the

Infirmary and including the Chapel. The Bishop's Palace, Palace Green, is also included.

New Chairman for New Town

The Minister of Town and Country Planning has appointed H. W. Wells to be chairman of the Hemel Hempstead Development Corporation in place of Lord Reith who has resigned from the chairmanship. Mr. Wells has been a member of the Hemel Hempstead Development Corporation since its inception in 1947. From 1943 to 1946 he was with the Ministry of Town and Country Planning where he held the post of Chief Estates Officer. In October, 1949 he was appointed vice-chairman of the Bracknell Development Corporation.

Kent Woodland Areas Preserved

The Minister of Town and Country Planning, Hugh Dalton, has confirmed a Tree Preservation Order for trees and groups of trees, and seven woodland areas in the Wilderness Estate, Seal, Sevenoaks. Chance Wood, the largest woodland area on the estate, is considered to be one of the finest beech woods in Kent.

DIARY

Modern Building Exhibition. At Ham-smith School of Building, Lime Grove, Shepherds Bush, London. 10.30 a.m. to 8.30 p.m., including Saturday, December 9. UNTIL DEC. 13

Good Practice in Domestic Drainage. F. J. Crabb. At the Physics Lecture Theatre, Royal Fort, Bristol, 8. (Sponsor, MOW.) 7.30 p.m. DEC. 7

Demonstrations of Stud Welding for Building Construction. At the Engineering Centre, 351, Sauchiehall Street, Glasgow. 10 a.m. to 4.30 p.m. UNTIL DEC. 7

Architectural Control and Criticism. J. M. Richards. At 21, King Street, W.C.2. (Sponsor, Students' Planning Group.) 6.15 p.m. DEC. 7

The Behaviour of Clay in Foundations. Professor W. Fisher Cassie. At Creighton School, Strand Road, Carlisle. (Sponsor, MOW.) 7 p.m. DEC. 7

Composition and Applications of Paint. L. A. Walker. At Walker Hall Technical College, Abbey Foregate, Shrewsbury. (Sponsor, MOW.) 7 p.m. DEC. 7

London Housing. Peter Shephard talks about the Westminster City Council's housing scheme at Pimlico in relation to other large housing projects in London. BBC Third Programme. 8.40 p.m. to 9 p.m. DEC. 8

Economy in Traditional House Building. N. S. Pippard. At Hammersmith School of Building and Arts and Crafts, Lime Grove, Shepherds Bush, W.12. (Sponsor, MOW.) 7 p.m. DEC. 12

Soane: The Case-History of a Personal Style. John Summerson. At 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. DEC. 12

The Development of the Tungsten Lamp. B. P. Dudding. At the Lighting Service Bureau, 2, Savoy Hill, W.C.2. (Sponsor, IES.) 6 p.m. DEC. 12

The Economics of Housing. Mrs. Layton (of "The Economist"). At 13, Suffolk Street, S.W.1. (Sponsor, HC.) 1.15 p.m. DEC. 12

Some Noise Problems and Their Solution. W. Allen. At City Museum, Park Row, Leeds. (Sponsor, MOW.) 7.15 p.m. DEC. 12

Plastering. H. Andrews. At Building Department, Technical College, Cauldon Place, Stoke. (Sponsor, MOW.) 7.15 p.m. DEC. 12

Essentials of Good Concreting. S. White. At YMCA, Little Theatre, Fawcett Street, Sunderland. (Sponsor, MOW.) 7 p.m. DEC. 12

The Non-Destructive Testing of Concrete. R. Jones. At 11, Upper Belgrave Street, S.W.1. (Sponsor, RCA.) 6 p.m. DEC. 13

Planning Slough's Future. Fenner Brockway. At 21, King Street, W.C.2. (Sponsor, TCPA.) 6.15 p.m. DEC. 13

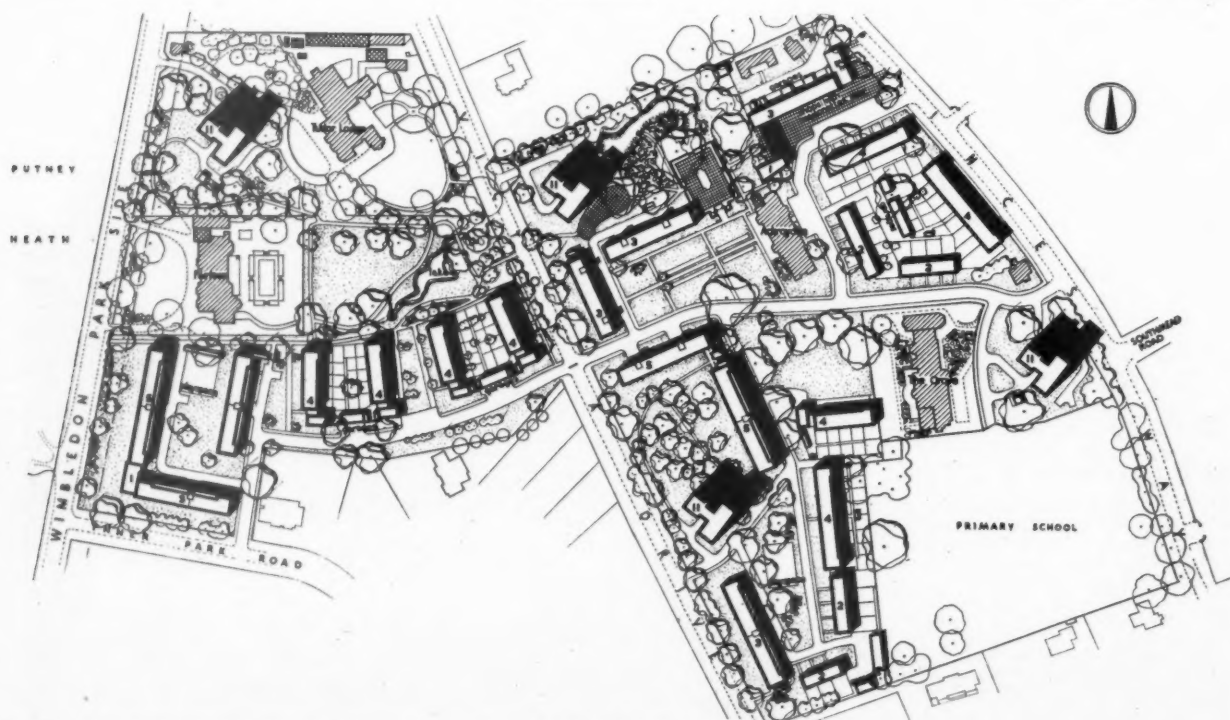
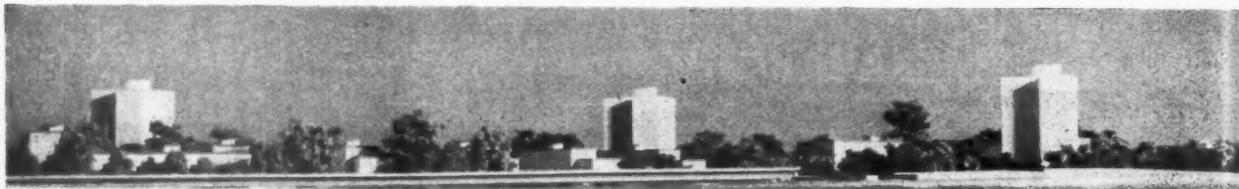
Essentials of Good Concreting. S. White. At Lecture Hall, Literary and Philosophical Society, Westgate Road, Newcastle-on-Tyne. (Sponsor, MOW.) 7 p.m. DEC. 13

Good Practice in Domestic Drainage. F. J. Crabb. At the Town Hall, Devizes. (Sponsor, MOW.) 7.30 p.m. DEC. 14



The interior of the Dome of Discovery on the Festival of Britain site: a recent photo.

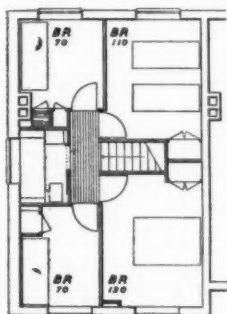
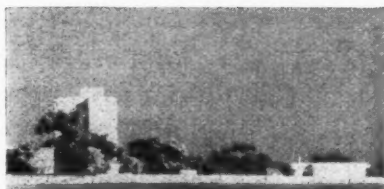
FIRST PROJECT, FOR SOUTH LONDON SITE, BY LCC



The site, The London County Council Estate at Princes Way and Wimbledon Park Side, Wandsworth

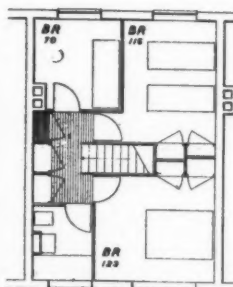
HOUSING DIVISION

LCC



Lower and upper floor plans.

5 room maisonette

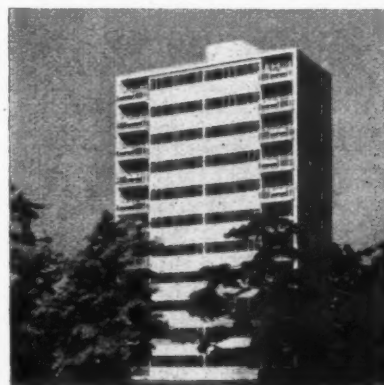


Lower and upper floor plans.

4 room maisonette

(Scale: 1/8"=1'0")

In these four columns we illustrate the first plans to be produced by the newly created Housing Division of the London County Council's Architects' Department. A full description of the scheme is given in the adjoining columns. Top, the site from the south. Below, a "point" block from the east. (For further illustrations see page 415 in our issue of November 23.)



Proposed Housing Scheme

A scheme for the development of three housing sites at Princes Way and Wimbledon Park Side, which was approved by the LCC last week, is illustrated on this and the opposite page, Robert H. Matthew, Architect to the Council, is responsible for this scheme, together with Dr. J. L. Martin, Deputy Architect, the details of which have been developed in the Housing Division under Whitfield Lewis, the Principal Housing Architect, and Michael Powell, Assistant Housing Architect, in close collaboration with the Town Planning Division, under the Senior Planning Officer, A. J. Ling. Housing Division officers who worked on this scheme were: C. A. Lucas, H. G. Gillett, A. W. Barr, E. Moholi, A. P. Roach, J. Partridge. Planning Division officers were J. M. Hirsch and Miss J. L. Gardner.

These sites have called for special architectural and planning consideration. They comprise the grounds and, in some cases, the properties of large Victorian and Edwardian houses, all surrounded by fine trees, appropriate landscaping, and special garden features. Ackroyden in Princes Way, for instance, has over an acre of grounds including a large lawn with a sunk garden.

A scheme of mixed development has been planned and designed which, as far as practicable, will preserve the mansions and the open character of the sites with their trees and landscape and garden features, so that they may be enjoyed by the new inhabitants (1,500 to 1,600 people).

With these considerations in mind and in order to achieve the desired density two types of building have been specially designed—"point" blocks and superimposed maisonettes. *Point blocks.* These are eleven-storey T-shaped blocks of flats nearly 100 feet high, with small site coverage. Each block contains thirty-two flats, three on each floor except the ground floor which contains two flats and a laundry. The chief advantages of the "point" blocks are:—

(i) The comparatively small ground coverage gives a greater flexibility in siting the blocks, enables existing trees to be preserved and effects a saving in access roads with a correspondingly better relationship between the natural and paved areas. The extra space around the blocks is available for the recreational use of tenants.

(ii) Most of the occupants of the flats will get full benefit from the fine views over the open country, particularly as each flat has windows on three sides.

(iii) Careful siting in clearings surrounded by fine trees will give contrast and variety to the layout as a whole which includes lower blocks of flats, maisonettes and houses. The uninteresting effect of rows of five-storey blocks which would otherwise be necessary to achieve the same density is avoided.

(iv) The complete vertical standardization of the "point" block enables full advantage to be taken of modern reinforced concrete technique.

The T-shaped design places each flat in a separate wing and windows on three sides, give a wide range of aspect and maximum sunlight. In the central "core" there will be two lifts, the main staircase and an enclosed staircase as alternative means of escape. To economize in capital and maintenance costs the lifts will stop on alternate floors and this arrangement will ensure that if one lift fails tenants will not have to walk more than one floor up or down. A large balcony (42 square feet) forms a valuable addition to the living room and could be used as a play space for small children. There is space for a perambulator in the hall. The floors will be insulated against impact noise.

An all-electric installation will be provided for space heating, hot water supply and cooker but the blocks will be carcassed for gas services to enable tenants to have the

alternative of a gas-fire and gas-cooker. The estimated average cost per room including gas and electrical installations and incidental expenses is £699. This somewhat high cost can be offset, however, by savings in the cost of the lower blocks, and in the scheme for the combined sites economies have been achieved by a balanced distribution of three- and five-storey blocks (of both staircases and balcony access) and dwellings in a new type of superimposed maisonette which although providing a higher standard of accommodation and amenity than flats, are cheaper to build than the existing type and attract the full rate of subsidy for flats.

Superimposed Maisonettes. The new type of superimposed maisonettes is designed as an alternative to flats for use in schemes of mixed development where density considerations enable them to be used. The chief advantages of the new types are:—

(i) Slightly larger rooms.

(ii) Better lighting in habitable rooms, as the access balcony passes only in front of the kitchen and hall, and greater privacy by having the bedrooms above the living rooms, etc., as in a two-storey house.

(iii) The provision of separate gardens for the tenants of each maisonette.

The plan is basically a three-bedroom maisonette with a four-bedroom variation at the ends of the block. The accommodation provided in each maisonette comprises, on the lower floor, an entrance hall with fuel store and separate wc, a living room and a kitchen which is large enough for occasional dining; on the upper floor three bedrooms, a linen cupboard with hot water cylinder, storage cupboards and a bathroom with a second wc. All living rooms have French windows opening on to a semi-recessed private balcony.

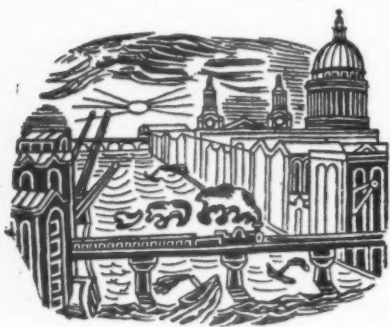
Economies have been effected in planning and structural costs and the estimated cost a room, including gas and electrical installations and incidental expenses is £425.

The scheme as a whole. The combined sites have an area of about 23 acres and the development scheme envisages four of the new eleven-storey "point" blocks, one five-storey and two three-storey blocks, each with staircase access, two three-storey, one four-storey and two five-storey blocks, each with balcony access, eight of the new type of superimposed maisonette blocks, eight shops with maisonettes above and sixteen four-roomed terraced houses. The total housing accommodation will be 314 flats, 106 maisonettes and 16 houses at a density of development of 26.8 dwellings to the acre. There will be six fitted laundries, two fitted playgrounds, 32 garages, 178 perambulator sheds and stores, and an estate workshop and yard.

The "point" blocks will be situated on three sites with landscape and other features which are said to make them particularly suitable for this form of development and on a fourth site chosen so as to complete an even distribution over the whole area. The lower blocks will be grouped around a series of related "greens" linked by roads and paths. Contrast will be provided by the occasional glimpse of a "point" block rising amongst the trees.

The scheme provides for the reservation of 8.08 acres for a primary school, 0.5 acre for the widening of Wimbledon Park Side to 70 feet, and a site for a public house. Existing buildings, namely Tudor Lodge, Fairlawn, The Grove, Ackroyden and six smaller dwellings occupy nearly four acres of the area. A nursery school will be accommodated in either The Grove or a new building on the same site. Tudor Lodge is to be used for a children's home. The future use of the other properties is still under consideration.

The estimated total cost of the development, including electrical and gas installations and planting and incidental expenses, is £855,950, and the gross average cost a room of the housing accommodation is £585. The comparable cost of the Putney Park Lane scheme, adjusted to present-day prices, is £615 a room.



After some weeks of absence from our pages Ernest Watkins resumes this feature covering aspects of legislation, parliamentary news or statutory rules and regulations which are of special significance to the architectural profession.

ERNEST WATKINS

The Architect and Current Affairs

Any column, after an interruption, is bound to look something like a scrapbook; an uneasy combination of an attempt to cover a lot of ground and yet preserve some sense of arrangement and continuity. With that apology, I plunge into the thick of it.

The item with the widest implications came from the Central Land Board. The second phase of the valuation of claims on the Compensation Fund for loss of development rights is starting. The first phase was the rejection outright of those claims which disclosed no valid basis under the 1947 Act. The second is the assessment, by district valuers, of the amounts of those claims that are accepted as having a valid basis. There, the district valuer will issue, on behalf of the Board, a "notice of statement of proposed development value". If the claimant accepts the figure—that is, if he does not put in an objection to the figure within 60 days—the Board will make their determination based on that figure. If the claimant does object, he must lodge his objection, and a statement of the reasons on which it is based, within the 60 days. The Board then makes its determination in the light of the information before it. If the claimant again disputes the Board's determination, he has a right of appeal (to the Lands Tribunal) within 30 days thereafter. The times of the objection and the appeal are different, and important. Clearly, in all cases where there is any doubt in the mind of a claimant over the amount offered on behalf of the Board, he should keep his rights alive by objection and appeal. It is likely that a number of appeals will raise the same point of principle and the decisions of the Lands Tribunals will be of very great interest.

I felt considerable interest, too, in the news of a meeting at the beginning of October between MOTCP and the County

Councils of the area likely to be included in the Peak National Park. The issue raised there was really a continuation of the arguments that went on while the National Parks Bill was being debated as a Bill. It was this: Should the authority made responsible for a national park be a separate Joint Board or should the existing and separate planning authorities in the area remain separately responsible but linked for common action by means of a Joint Advisory Committee? The County Councils were all in favour of retaining their separate authority, all against surrender to a Joint Board. The Minister was adamant the other way.

There is this much to be said for the County Councils' arguments. To surrender planning authority over the areas included in a national park to a Joint Board will inevitably mean that the planning of the area surrendered will be dominated by the idea that it is part of a national park, part of a place of beauty set aside for recreation. All development inconsistent with that will be discouraged. The emphasis will be on the needs of those who use the area as a park, most of whom will be casual visitors to the area with no permanent interests there. The cement works in the valley will be no more than an eyesore; it will be no concern of theirs that it is a source of local employment. It may be that some such price as this must be paid for each national park, but it is as well to realise that there is a price to be paid, and paid, most likely, by some of the local inhabitants.

On the other hand, it is inevitable, and desirable, that at some stage in the development of local government some solid attempt should be made to break down the intense conservatism of the existing authorities, that the existing county and county borough councils should be made (and it has come to that) to accept that their areas are not sacrosanct. Too many responsibilities have been taken away from local authorities because their areas did not permit them to discharge those responsibilities well. Area is a very real barrier which every attempt to reform local government has encountered and from which, so far, it has recoiled. Counties and county boroughs seem incapable of agreeing to any change, which means that change can only be imposed on them from above. I believe that the development areas and the new towns would have been better organised by Joint Boards, not by the present overlap of existing and new bodies. Hence the importance of the stand over Joint Boards for national parks. If the wedge isn't inserted somewhere . . .

Other items on my list are now in danger of being telescoped. The High Court has ruled that the Crystal Palace Trustees hold the Crystal Palace land for charitable purposes and are therefore exempt from liability to pay development charge. This, at least, means one obstacle the less in the way of the rebuilding of the Palace area, and perhaps a general freeing of MOTCP's attitude to similar activities. Now that the last building on the Palace site has been burnt down, will something be done there soon—possibly financed by the profits of next year's Festival?

A departmental committee has reported on the qualifications needed by planning officers. What is required is "a creative and imaginative faculty of mind, a power of synthesis and a broad human understanding". Translated into academic terms, this means a normal degree course in an established subject, plus a specific post-graduate course in the technicalities of planning operations themselves.

May I suggest one additional need for the successful planner? It is a capacity for sustained perseverance in the face of both active and passive opposition.

Raglan Squire, the JOURNAL's guest editor, in consultation with the firm of Arcon, has invited architects working in two "group practice" offices to describe their experiences of this system. Below is the first article, by the Architects' Co-operative.

ARCON

Group Practice

The editors of this JOURNAL have suggested to us that young architects today have a choice between public offices and private practice, and that to those who favour private practice some form of group practice often seems more desirable than a one man band.

We would not wish what follows to be interpreted as an argument for private practice, for our minds are open to arguments both for and against, and we are all too aware of the limitations of the small private organization in face of the real and urgent problems of building today. If it is an argument for anything, it is for the harmonious working group as distinct from the soloist.

Group practice may mean almost anything. The form it takes in Architects' Co-operative is in a sense arbitrary, a product of its time and the circumstances of its growth. By starting afresh today, instead of in 1939, the form might well be different. But we have been asked to explain ourselves, not to speculate.

The Architects' Co-operative Partnership was formed in the spring of 1939 by a group of eleven, all contemporaries at the AA. We had been together at the AA during the exciting period of the latter 'thirties, and behind the barricades, as it were, had worked together with an identity of outlook which, on leaving, we were loath to see dissipated. Had we left the AA ten years later we might have tried to join a large public department, but such was not our mood then. For better or worse we wished to work as an independent group; meanwhile we were fragmented in salaried employment of one sort or another, meeting together in the evenings to argue and to speculate.

The speculation crystallized into the partnership, with a capital of ten pounds a head and a primitive basement office. We aimed to build a full working group gradually, starting with a couple of partners working full time and the others only in the evening. The salaries earned externally were to be equalized, and a proportion set aside to help subsidize the full-time partners. We planned that as work increased more partners would be brought in to work full time; in a lean period the process could be reversed.

Owing to this method of building up the practice the question of employing assistants scarcely arose. The employment of an assistant would have delayed the full-time employment of a partner, at least until all partners were working full time in the group. And in 1939 that felt a

long way off, as indeed it was. But we were opposed to the employment of assistants for another reason, although we appreciated that there might be economic arguments in their favour. We felt that the sort of architecture we wanted to produce could not be delegated, even in detail, and that it demanded our designing and co-ordinating the smallest elements in a building and not only the larger ideas. The conception, so frequent in practice as we then saw it, of the principal with the general scheme and the assistants who had to make it work, was anathema to us. It must also be added, in honesty, that we had egalitarian ideals into whose spacious framework it was difficult to fit the employee.

ADVANTAGES OF GROUP WORKING

Apart from the fact that working in a group came naturally and congenially to us, owing to the AA background which we held in common, and apart from our conviction that we could produce better work together than in isolation, we felt that a group organization would have advantages in enabling us to work out and to support a more efficient administrative machinery, and to embrace a wider range of technical knowledge, than would otherwise have been possible.

We proposed that it should be the responsibility of each partner to become well informed on a particular branch of technical knowledge and also on a particular category of building types, so that the firm would comprise not merely a number of architects but also an equal number of minor specialist consultants. This tidy ideal has become blurred and imprecise, specialist knowledge having been acquired unevenly following the demands of particular jobs. But we mention it for what it is worth.

The outbreak of war dispersed the group; but of good fortune two partners remained, intermittently, as a nucleus, a so-called "architects' department" to an industrial concern. This provided some continuity, however tenuous, and the opportunity to establish a basis of administration and method of working which was to be invaluable later. By the end of the war this nucleus found itself, as a result of wartime work, with its first big job. Along with other and smaller commissions this was capable of absorbing the first few partners who returned to civil life. Others came in from external employment as soon as the practice could support them. Without this big job, and the patronage behind it, it would have been economically impossible for the group to re-form rapidly, and it is doubtful whether it would otherwise have re-formed at all.

During the first year or so after the war the problems of running a group partnership were simple. There were no assistants; the majority of partners were working on the same job; the office had few enough jobs to make group discussion very easy and fruitful, and everyone knew what everyone else was doing. The difficult problems were to come later, when the volume of work increased.

Except that we now employ assistants the form of organization that we evolved at this time has not materially changed. All members of the firm, except secretarial staff, were partners, and all were equal in status and salary. None, to use Orwell's phrase, was more equal than others.

Jobs were done by the firm, and not necessarily by the partner who was first approached by the client. Partners worked in pairs as far as possible, one in charge of a job and the other as deputy. Usually the deputy was himself in charge of another job. No one partner was general

manager for all jobs: each job was administered independently, but to a common pattern which was the result of much discussion and many pro-formas, most of which have now disappeared having served their purpose in standardizing procedure.

ADMINISTRATION

The responsibility for the administrative background of the office was split up functionally amongst partners, the principal divisions being premises and office equipment; finance and income tax; the organization of technical information; the periodic analysis and co-relation of time records, overheads and job costing; the standardization of certain types of correspondence; the production of check lists and routine procedures for jobs; and the overall programming of office work on all jobs.

A weekly meeting of all partners was held at which policy and general administrative matters were decided, or referred to partners for working out and recommendations, and at which progress on each job was reported by the partner in charge. Normally this formed the first half of the agenda. In the second half, design problems on a specific job were discussed. Frequently this resulted in tangible designing work being completed round the table; at other times work might be generally criticized and the lines of a different solution suggested. Design rested ultimately with the partner in charge, but his work remained a group responsibility and was generally strongly influenced and improved by group criticism and contributions.

Finally, at about half yearly intervals, week-end conferences were held at which general policy was reviewed and the lines of future development decided in principle. These were usually fairly carefully prepared, and papers for discussion were circulated in advance. Our files groan with the proceedings of these week-ends, but we suspect that without such formalities there might still be no files at all.

DIFFICULTIES OF GROUP WORKING

We have explained how our particular form of group partnership grew and something of our method of working and organization. We have mentioned that originally the problems of running such a group were simple, but that the difficulties began when the volume of work increased. It is with these difficulties that we now wish to deal. They are, presumably, not peculiar to us, but would be shared by any group.

Our original ideal was that all partners should work together as a group on a job, doing all the administration and drawing work themselves. Starting from scratch, we imagined that when the back of the first job had been broken, half the group would move on to a new job as their primary responsibility and become only secondarily concerned with the original one, and that the partners remaining responsible for the original job would be only secondarily concerned with the new one. Our first post-war job happened to be a large one and it was possible initially to work very much in this way. But the method is quite impracticable, of course, unless a regular and conveniently phased flow of jobs can be assured, and it broke down as soon as a number of small or medium-sized and entirely dissimilar jobs came into the office and had to be dealt with simultaneously. It was at this stage that each job was allotted two partners, one in charge and one as deputy, one job being handled by Messrs. A and B, another by B and C, and another by C and A, and so on.

In practice we found at first that this worked unevenly, for the job for which a partner was primarily responsible was frequently so pressing that he was physically incapable of doing more than take a background place in the job in which he was deputy. Thus there was a tendency for partners to work in isolation, not by any means from choice but entirely through pressure of work, stretch the working day though one might. Although this was mitigated by *ad hoc* consultations and by the weekly meetings at which jobs were discussed and criticized, it was clear that the method of working was getting a long way from the closely knit system of our original intentions.

We have explained why we did not originally envisage or desire the employment of assistants, but our theory proved unrealistic as soon as the volume of work in the office accelerated with any rapidity. The introduction of assistants emphasized the tendency for partners to work in isolation without our realizing it at first. It was a question, really, of how we absorbed them into the group, and of how we made use of the additional manpower. The pains of indigestion having eased, however, the difficulties of this period are disappearing, and we are beginning, tentatively, to see the next stage a little more clearly.

It seems to us that there is a limit to the number of assistants a group such as ours can employ if it is to retain its identity as a group, and if partners are to remain fully in control of all jobs. For a partner exercises a dual role: as a member of the group he takes part in group decisions on matters of major policy on all jobs, but on individual jobs he occupies, in fact, the position of chief assistant. If in this latter role he delegates too much the group as a whole loses control of design. This is not to imply that assistants need necessarily be mere drawing machines, with no further responsibility, for obviously a wide range of responsibility can be taken by assistants provided the group method of working is maintained as far as possible at all levels. It does imply, however, that the role of chief assistant as it is usually interpreted has no place in our organization as we now see it.

THE WORKING UNIT

We would say that a good working unit appears to be two partners and four assistants; that the ratio of assistants to partners should not exceed four to one; and that it is possible to earn a living, if not a highly profitable one, at this ratio. A ratio of assistants to partners in excess of this would upset the working method of the firm, and would create, in effect, a number of self-sufficient private practices merely sharing an administrative and financial background. And equally important, the relatively intimate atmosphere of the firm as a whole, and the opportunity this can give for all assistants to know about and to contribute to the work going on around them, might be lost.

If all this is rather parochial, we hope at least it may be of interest to some students and younger architects. We have stressed some of the difficulties of group working, but we hope that we have not given the impression that we regard them as insuperable, or that we have come to the conclusion that it is not really worth the candle. On the contrary, we are more than ever sure that it is worthwhile. Provided the members of the group have an outlook sufficiently homogeneous for them to be able to speak the same architectural language, and are more concerned with the building than with their own self-expression, we are convinced that the constant exercise of analysis and criticism is of immense value. The real problem, as we have implied, is to find time to exercise it constantly enough, and still to remain solvent.

NEW TOWNS: No. 10

Progress report on Hatfield by D. Rigby Childs.

Between 1934 and 1939 Hatfield, Hertfordshire, grew from a historic village into an industrial town. The town was the subject of a study in the Greater London Plan 1944, and the recommendation was made that "while no new industries are proposed in Hatfield, an increase of population up to rather over double its present size would help Hatfield to become a more self-contained social community." This proposal was adopted by the Minister of Town and Country Planning, who, however, suggested the ultimate size of population should be 25,000.

The new town designated area does not include Hatfield Park, or De Havillands aircraft works, but included is the old town of Hatfield. The site, as designated, is partly built up; the existing development is nearly all residential—mostly working-class. The present population is 8,500 persons.

The topography is undulating. The subsoil is very mixed, changing to and from sand, clay, and chalk.

DEVELOPMENT CORPORATION

The Development Corporation includes the following members and staff:—chairman, R. G. Gosling; vice-chairman, R. L. Reiss; general manager, J. E. McComb; engineer, J. Skinner; planning consultant, Hon. Lionel Brett.

The Corporation has not set up an architect's department. Outside architects are engaged as and when they are needed, and approval of layout and elevations is given by the planning consultant.

The outside architects engaged by the Development Corporation are:—Lionel Brett (houses and flats); A. Chitty (houses).

PROGRESS

1948: July.—Designation Order made for 2,340 acres.

October.—Preparation of master plan began.

1949: September.—First building construction contract let.

October.—Draft master plan published under title of "Hatfield New Town" (Copies obtainable from Development Corporation's offices. 2s. per copy).

Draft master plan submitted to the Minister of Town and Country Planning.

1950: August.—Minister gave his comments on the master plan. According to the draft plan, 1,448 acres of land will be developed or used as townlands as opposed to agriculture.

September.—Total expenditure on constructional works completed or in progress by the end of September was £5,654.

Civil engineering £3,682 (contracts let to the value of £40,479).

Building construction £1,972 (contracts let to the value of £255,719).

At the beginning of this month 447 acres of land had been acquired.

October.—The number of buildings completed included:—8 workshops (total area 1,504 square feet); 1 junior and mixed infants school.

The number of buildings under construction included:—119 houses (all types); 36 flats (all types); 1 technical college and technical school; 1 youth centre (temporary).

The total labour force at work was 41 men with 16 men on civil engineering and 25 men on building construction.

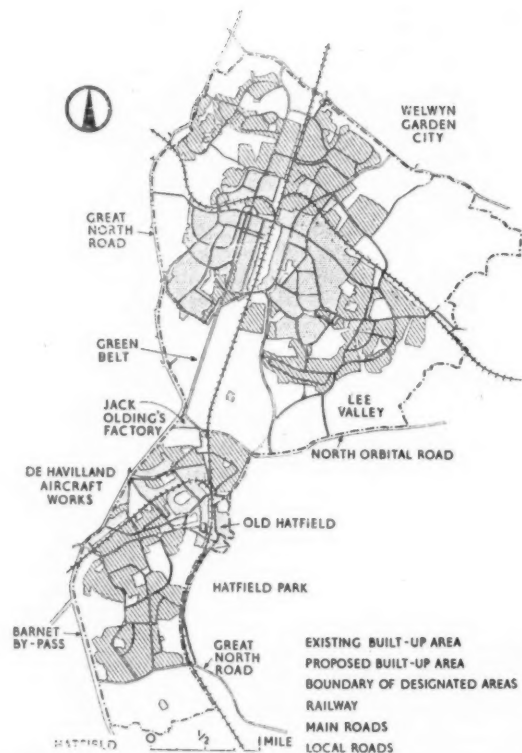
PROGRAMME

The aim for intake of new population by midsummer of the next three years is as follows:—

1951: total number, 450 persons.

1952: further 1,200 to make total number of 1,650 persons.

1953: further 1,200 to make total number of 2,850 persons.



Plan of Welwyn and Hatfield

COMMENT

There are already employed at de Havillands over 7,000 people and at Jack Olding's over 1,000. There is, therefore, more than sufficient manufacturing industry just outside the designated area than would be required for a population of 25,000; although the working population is a local one the new town will contribute to the decentralisation of London. De Havillands came from London in 1934 and many of their workers still live in London, travelling to Hatfield daily. As the Corporation's task is to house these workers wherever they come from, be it within London proper or Greater London, a contribution will be made to the ultimate lowering of London's population. The weakness at Hatfield is that practically all the townspeople will be employed in one industry. The Corporation can hardly insure against this by bringing to Hatfield alternative industries to the aircraft industry, but it has made a reservation in the Welwyn Garden City industrial area for the express purpose of hedging the liability to unemployment. The Minister has agreed, however, that "the employment pattern of Hatfield cannot be regarded in isolation but should be viewed in the regional setting."

In Hatfield, the provision and maintenance of such amenities as public gardens, open front treatment of houses, theatres, playing fields, community centres, etc., may be difficult to achieve. These amenities all cost money and economically are a bad proposition by themselves. Normally money for their provision is obtained from industry and shops in the form of high ground rents. In Hatfield an industrial source of income will not exist (the factories being outside the designated area) and a great deal will depend upon the provision of a good shopping area.

A feature of Hatfield which requires to be most carefully watched is the risk of establishing an artisan town; although the human need is not relatively of the first importance, the Corporation are going to build next year 80 monthly-rented houses and are reserving sites for 25 privately-owned type of house to avoid the stamp of the artisan town being put upon Hatfield in

its earliest days. Furthermore, in the southern part of the town the Corporation will attempt to create further better-class development; the Corporation recognise that if such development is not attracted now, it will be too late.

Building in this new town will be at a rather higher density than in other new towns. The existing net residential density is already 35 persons per acre, and with average density of 37 for the new development the average for the town as a whole should be about 36.7. This higher density will be reflected in closely-spaced terrace houses with small gardens interspersed with three- or four-storey flats. A house and garden, however, will be provided for every family over two persons.

The planning of Hatfield has been quite difficult. The designated area is an elongated shape and if development spreads too far from the centre, the town will be lacking in cohesion. The advantage of working to a high average density is that development in the extreme south of the area is rendered unnecessary, thereby agricultural land is saved, people are kept around the town centre, and a useful break is made in the development between Welwyn Green and Hatfield on the South, and Hatfield and Welwyn Garden City in the North. The town cannot expand eastwards without crossing the railway and the Great North Road into Hatfield Park, nor westwards without crossing the Barnet by-pass and getting either into the aerodrome or valuable agricultural land.

NOTES ON PROGRESS

The Corporation hope to increase the rate of building next year to 300 dwellings per annum. The southern area of Hatfield gravitates towards the Colne Valley Sewage Board's area, and the Board are nearing completion of substantial disposal works at Rickmanworth and could get a trunk sewer in to Hatfield in two years. The sewage problem at Hatfield, although not simple, is, therefore, not quite so urgent as at neighbouring Welwyn Garden City. (Welwyn New Town was described last week.)

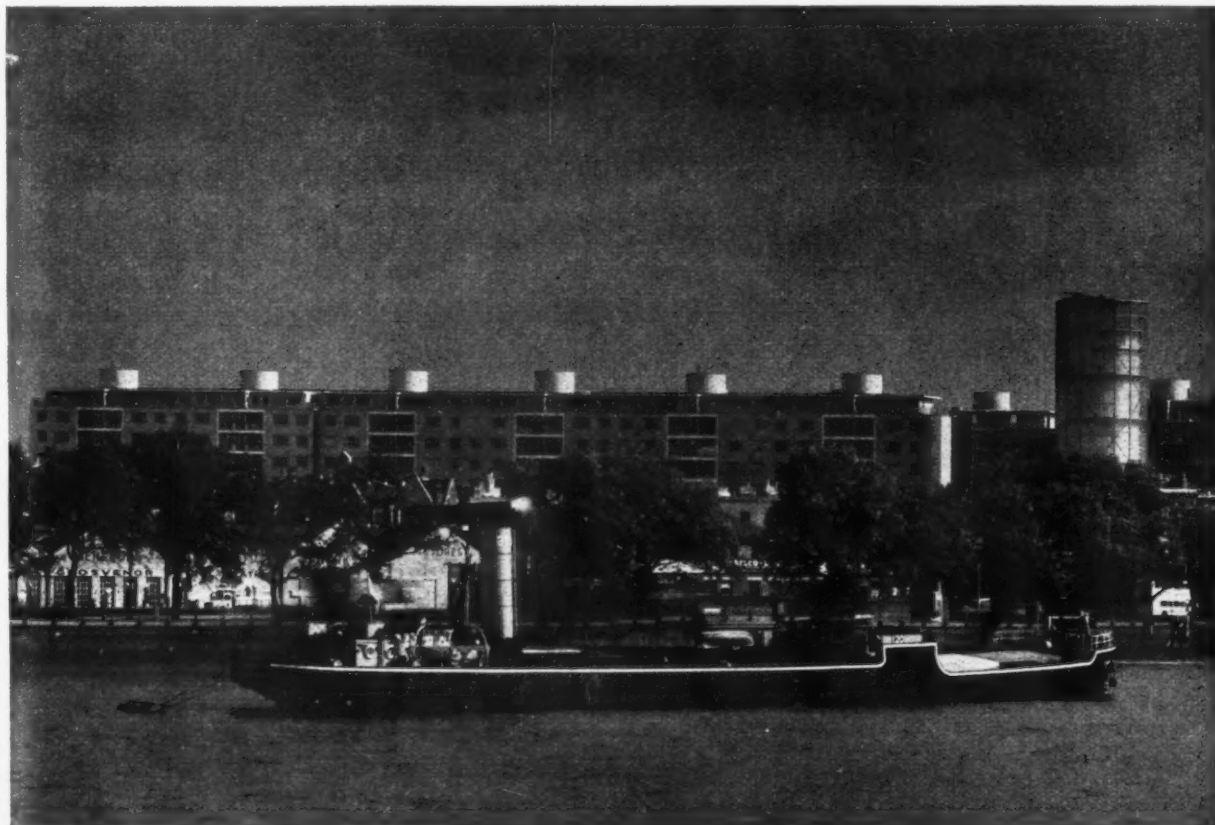
FLATS

in ANTROBUS STREET, PIMLICO, S.W.1
for the WESTMINSTER CITY COUNCIL

designed by POWELL and MOYA
Consulting Structural Engineers, SCOTT and WILSON

Chaucer House (shown solid black on site plan) is the first block of flats to be completed on the City of Westminster's Pimlico Housing Scheme (Director of Housing, John Hughes). The 30-acre site is to be developed in four sections. The whole scheme will consist of approximately 1,600 flats. The design and layout of the flats was the subject of a competition in 1945-46.

View across the river looking north-east.

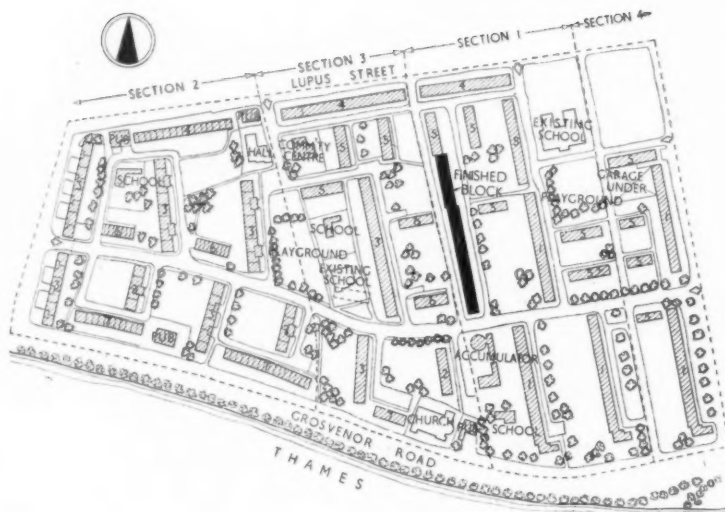


SITE.—The site, approximately 600 yds. by 300 yds., lies between Dolphin Square on the east and the Southern Region railway line on the west. The first section to be developed is between Ranelagh Road and Antrobus Street, an area previously occupied by factory and commercial buildings, most of which were derelict or damaged by enemy action.

PLAN.—In accordance with the requirements of the County of London Plan, the area is being developed to house 200 persons per acre. Apart from flats, the scheme will include a community centre, a day nursery, three nursery schools, four public houses, about 30 shops, laundries, a mortuary, restaurant, public lavatories and a service station.

FLATS

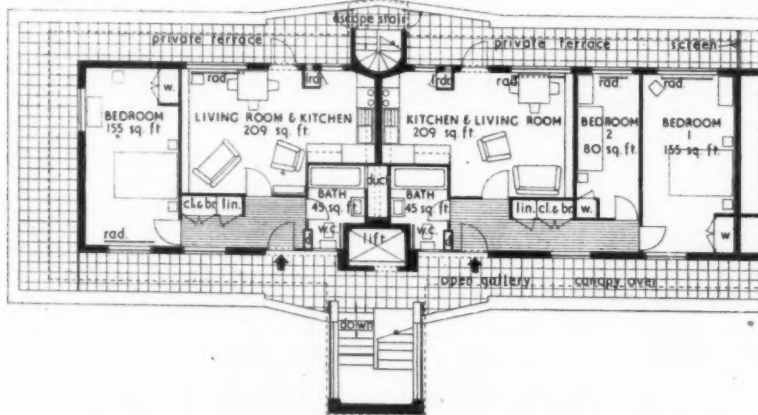
in ANTROBUS STREET, PIMLICO, S.W.1
designed by POWELL and MOYA



Site plan

KEY

1. 9-Storey flats.
2. 11-Storey flats.
3. 10-Storey flats.
4. 7-Storey flats.
6. 4-Storey flats.
7. 3-Storey houses.



Plan of 8th floor flats [Scale 1/4"=1'0"]

The east facade of block 1.

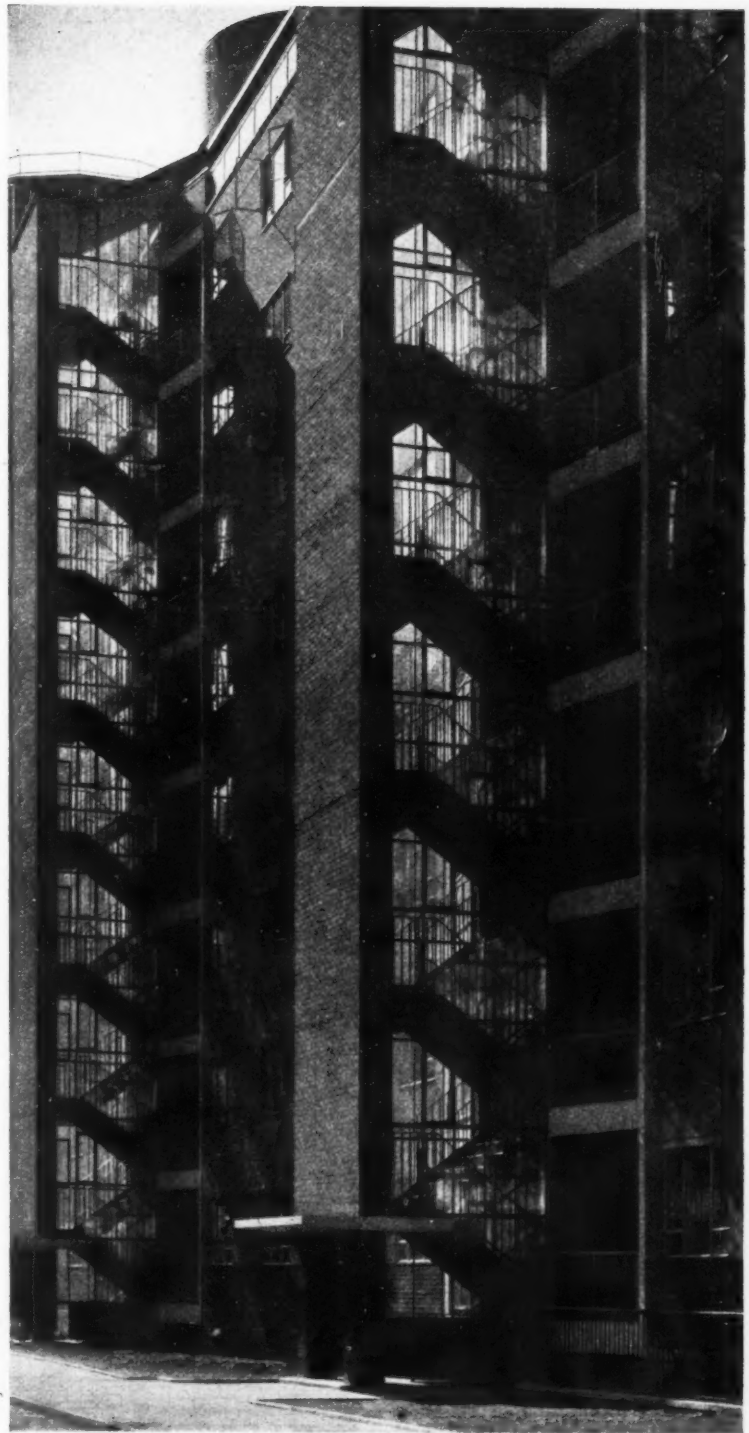


with underground garage for 200 cars. Due to the high density required, the majority of the blocks of flats are the maximum height allowable. The tall blocks are sited at right angles to the river with living rooms facing west and the majority of bedrooms facing east. The rooms have oblique views up and down the river. The only exception to this orientation for tall blocks is at the western extreme of the site, parallel to the railway line, where all habitable rooms face east, thus minimizing the disturbance caused by trains. There are also a number of maisonette dwellings (2 storey high flats) in 4-storey blocks and in 7-storey blocks (the ground floors of which contain shops or one-room flats). In the second section of the scheme it is proposed to build some terraces of 3-storey houses along the river front and there will also be two small 3-storey blocks of one-room flats. There are no direct road connections between the site and Grosvenor Road, which runs along the river on the south border of the site. The open spaces between the blocks of flats are laid out as lawns, small enclosed



Plan of typical flat, ground to 7th floor

public gardens and private gardens belonging to nursery schools, lower level maisonettes and 3-storey houses. There are also children's playgrounds. The tall blocks are staggered in layout to avoid the cutting up of these open spaces into long tunnel-like strips running from the north to the south borders of the site. The first section, consisting of 495 flats, is being developed in two contracts. The first consists of 370 flats in 9-storey blocks. The first block is now complete and the remaining three are nearing completion. A second contract for the remaining 125 flats (in 4-storey blocks and 7-storey blocks, which includes 13 shops) is under way. The open way through under the north end of the first block will form part of a pedestrian way, which will run from east to west



Two projecting staircase bays at the south end of the east facade.

across the site when all the sections have been developed. Service roads, running north and south, are 14 ft. wide. The street lighting is by means of fluorescent fittings. Lamp standards, 25 ft. high, are used for the east-west service road and 15-ft. high standards for the minor service roads.

THE BLOCK ILLUSTRATED. GENERAL.— The first completed block contains 104 flats serviced by 6 staircases and 6 lifts. There are 92 four-

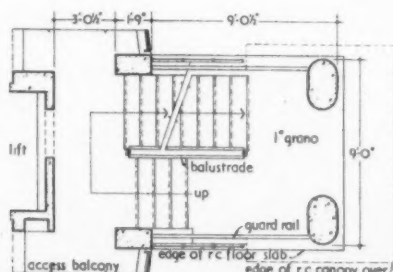


One of the entrances.

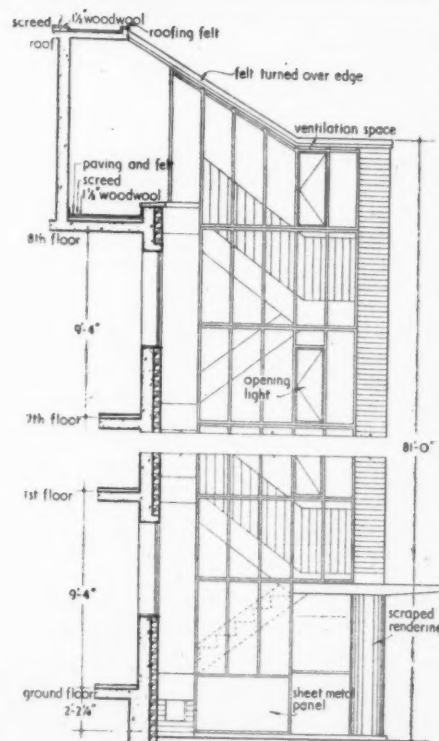
FLATS

in ANTROBUS STREET, PIMLICO, S.W.1
designed by POWELL and MOYA

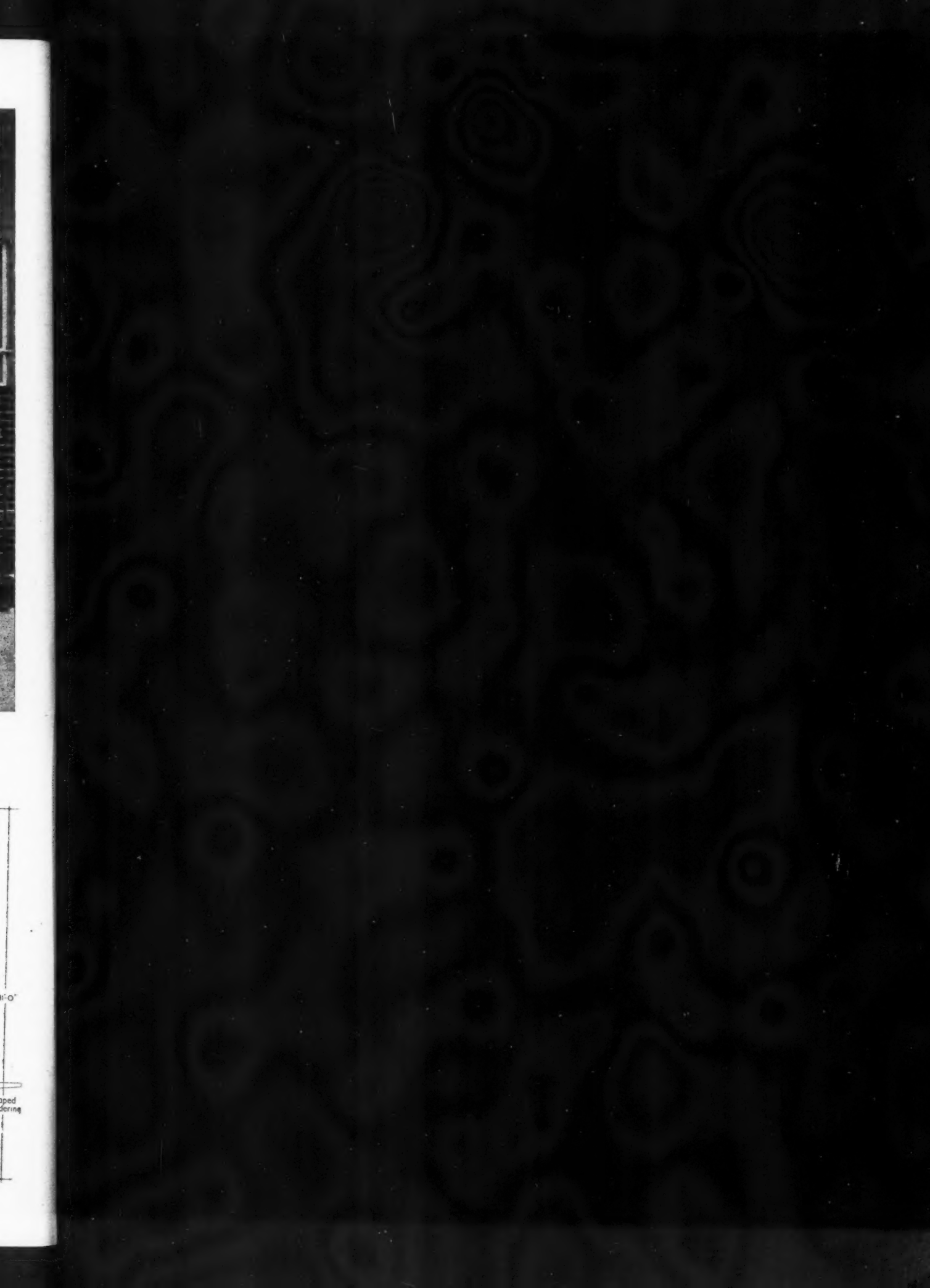
room flats and 12 smaller flats on the top floor. The basement, which is accessible by lifts, staircases and a ramp, contains pram and cycle stores for each flat and a small laundry. Household refuse is deposited at ground floor level in containers and then these are housed in two special outbuildings on the opposite side of the service road. It has been decided to incorporate shutters in all future blocks, but the decision was made too late to incorporate them in the block illustrated.



Plan of typical entrance (Scale: 1/4"=1'-0")



Side elevation of staircase



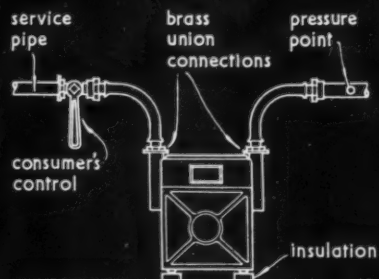
11-0"

apped
dering

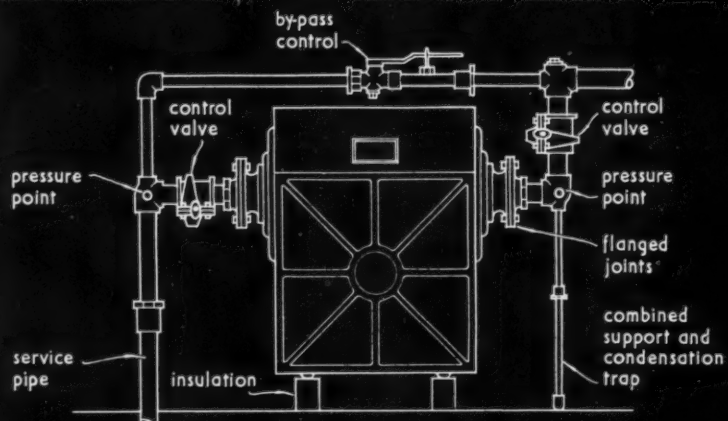
SERVICES AND EQUIPMENT | POWER SUPPLY | GAS

37.D3

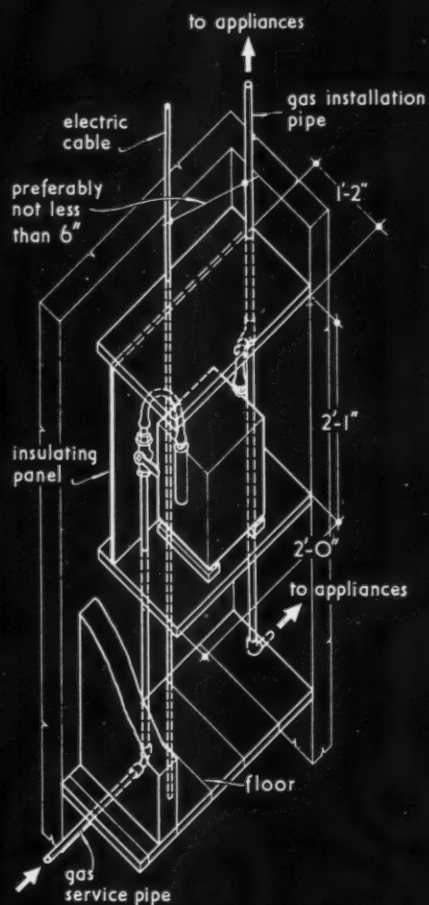
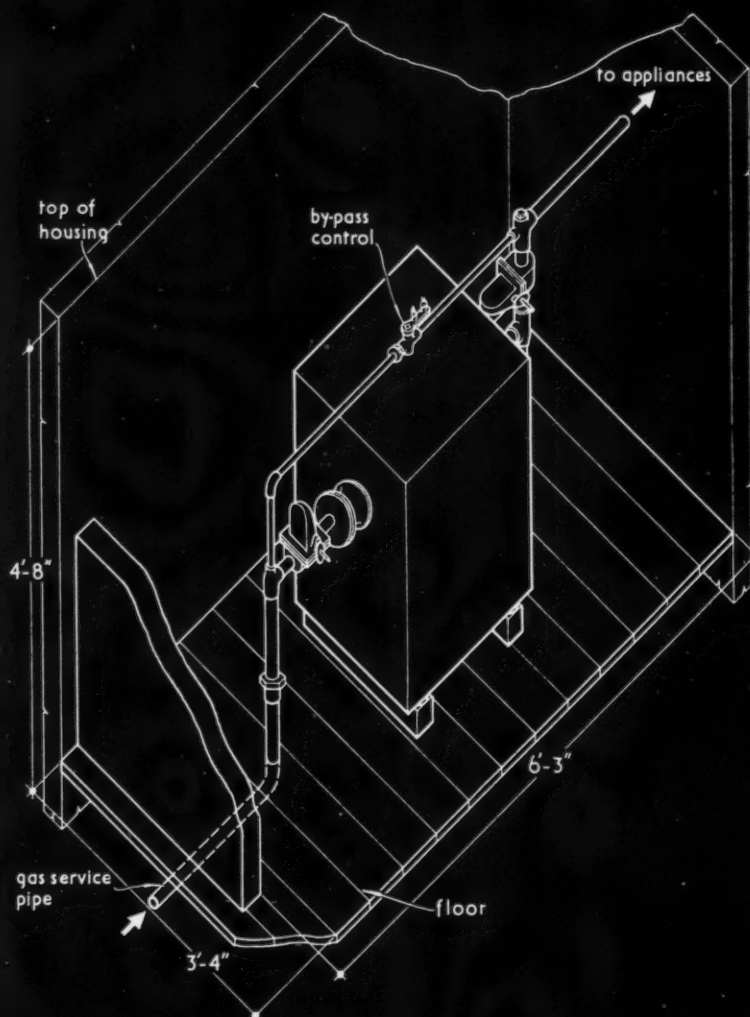
The Architects' Journal Library of Information Sheets 281. Editor: Cotterell Butler, A.R.I.B.A.



SMALL DOMESTIC PRIMARY METER.



LARGE PRIMARY METER WITH BY-PASS.

TYPICAL DOMESTIC INSTALLATION.
(200 CU. FT. CAPACITY METER)TYPICAL LARGE INSTALLATION.
(1200 CU. FT. CAPACITY METER)

GAS METERS: TYPES: TYPICAL INSTALLATIONS.
Compiled from information supplied by The Gas Council.

37.D3 GAS METERS : TYPES : METHOD OF INSTALLATION

This Sheet gives a summary of the types of meter in common use for registering the gas consumed on premises, the methods of their installation and the provisions to be made for them when a gas installation is planned.

Types of Meter

Primary meter : Connected to the service pipe. The index reading constitutes the basis of charge by the gas undertaking for gas used on the premises.

Secondary meter : Used for measuring gas which has already passed through a primary meter.

Prepayment meter : A meter fitted with a mechanism which, on the insertion of a coin, permits the passage of the prepaid quantity of gas. It may be a primary or a secondary meter.

Architects' Drawings

Drawings should show the proposed position of the meter, to scale, with a clear indication of the available surrounding free space.

The sizes of meters to be installed should be decided in consultation with the gas undertaking in the planning stage.

Meter Housing

The primary meter should be housed either in a compartment provided inside the building or in a specially constructed housing outside the premises. When inside the building the meter should be easily accessible and placed as nearly as practicable to the point where the service enters the building. The following positions should be avoided : immediately above cooking or heating appliances ; in the open ; in places used for storage of food ; under draining boards or adjoining sinks ; in contact with walls ; in any position in which the meter is likely to cause an obstruction, to be damaged or to be exposed to conditions likely to affect its accuracy or safety ; in any position subject to wide variations of temperature.

Meters fitted at floor level should be protected against damage.

Where a separate meter housing is to be built, the design should provide : protection from weather ; accessibility in case of exchange of meters ; space to incorporate a by-pass or other ancillary devices if required ; ventilation.

High pressure gas supplies : When gas is to be supplied at high pressure and a pressure governor is installed in the meter housing provision must be made for a vent pipe to pass from the governor to the outside air.

Secondary meters : Under no circumstances should a secondary meter be supplied with gas through a prepayment meter.

Dimensions of Meter Housings

Where strict economy of space is necessary the recommended dimensions shown below may be reduced. The gas undertaking should be asked to give advice on this matter. Meters of larger capacity may be obtained.

Meter capacity (cu. ft./hr.)	Recommended dimensions of housings (in.)					
	Without by-pass			With by-pass		
	high	wide	deep	high	wide	deep
100	24	24	13	—	—	—
200	25	24	14	—	—	—
400	27	26	18	40	26	18
700	36	32	27	46	32	27
1200	—	—	—	56	75	40
1800	—	—	—	65	87	44
3000	—	—	—	78	104	49
4500	—	—	—	89	108	56
6000	—	—	—	93	126	62
9000	—	—	—	103	145	64
12000	—	—	—	105	147	70
15000	—	—	—	107	149	70

Meter Fixing

Meters should be fitted in such a position that the index may be easily read ; the prepayment mechanism may be easily operated ; collectors can remove the cash box ; they may be exchanged when necessary with the minimum of disturbance ; there is adequate space for fitting ancillary apparatus when required. Primary meters must be fixed by the gas undertaking or its approved agent.

Meters and connections should be prevented by spacing or insulation from contact with electric conduits and other electric equipment. Meters should not be in contact with floors and walls. Meters of 1,200 cu. ft./hr. capacity and larger have flange connections ; smaller meters have brass union connections.

By-pass to meter : In buildings where a continuous supply of gas is essential a by-pass with a sealed valve may be fitted provided that the permission of the gas undertaking has been obtained.

Consumer's Control

All meters should be fitted with a cock or valve on the inlet side which must be readily accessible and easy to operate and of a type approved by the gas undertaking.

British Standards for Gas Meters and Connections

- B.S. 864: 1945 Capillary fittings and compression fittings of copper and copper alloy for use with light gauge copper tube.
 B.S. 746: 1937 Gas meter unions.
 B.S. 603: 1941 Lead pipes, B.N.F. ternary alloy (No. 2).
 B.S. 602: 1949 Lead pipes for other than chemical purposes.
 B.S. 659: 1944 Light gauge copper tubes.
 B.S. 1396: 1947 Gas meter cupboards.
 B.S. 10: Part I: 1947 Pipe flanges for land use (for pressures up to 400 lb./sq. in. head).

Further Information

More detailed information will be found in British Standard Code of Practice:

CP 331.102: 1947 Gas metering and consumer's control.

This Series of Sheets deals with the provision of service and installation pipes, meters, flues and all other considerations involving the installation of gas equipment concerning the architect.

Compiled from information supplied by :

The Gas Council

Address : Gas Industry House, 1, Grosvenor Place,
 London, S.W.1.

Telephone : Sloane 4554.

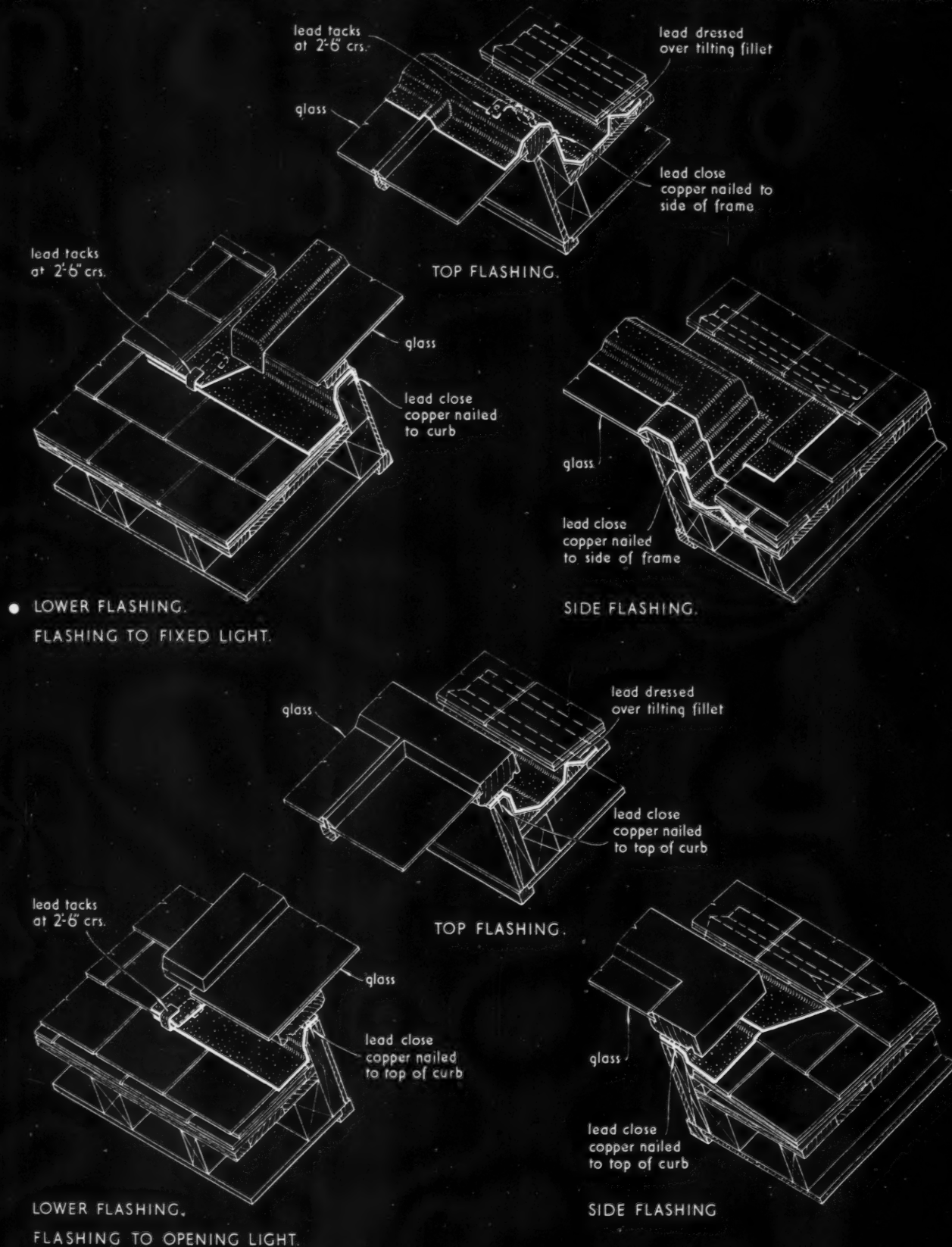
Telegrams : Gascil, Knights, London.

LEAD AND ALLOYS APPLICATIONS

10.G22

10.G22

The Architects' Journal Library of Information Sheets 282. Editor: Cotterell Butler, A.R.I.B.A.



LEAD FLASHING TO TIMBER FRAMED SKYLIGHTS.

10.G22 LEAD FLASHINGS TO TIMBER FRAMED SKYLIGHTS

This Sheet describes the fixing of sheet lead flashings to timber framed skylights in pitched roofs of traditional construction. The upper drawings deal with fixed lights and the lower drawings with opening lights.

Fixed Light

The drawings show a skylight raised above the plane of the roof surface, framed in wood and close flashed on all sides. This is a method which gives a thoroughly reliable and waterproof job, but which can only be used with fixed lights. It has the advantage that the timber, in a position where maintenance painting is difficult, is well protected. The flashing at the bottom of the skylight is formed in one piece of lead and at the sides and head in two pieces. The lead should be dressed down to a close fit over all woodwork and slates or tiles and should be secured where shown with copper nails and lead tacks.

Opening Light

The drawings show a method of flashing which permits the skylight to be hinged.

It is necessary to make the trimming timbers or curb of sufficient depth to raise the skylight well above the plane of the roof surface since the flashing on the upper side of the skylight forms a gutter.

This gutter should generally be made 5 or 6 in. wide.

Weight of Lead

The weight of lead for these flashings should be not less than 5 lb. per sq. ft.

Further Information

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

Compiled from information supplied by :

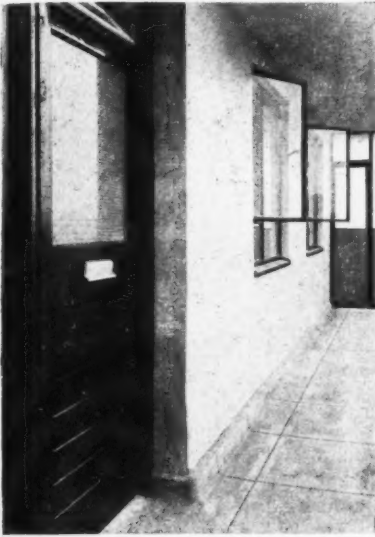
The Lead Industries Development Council.

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

Telephone : Whitehall 7264.



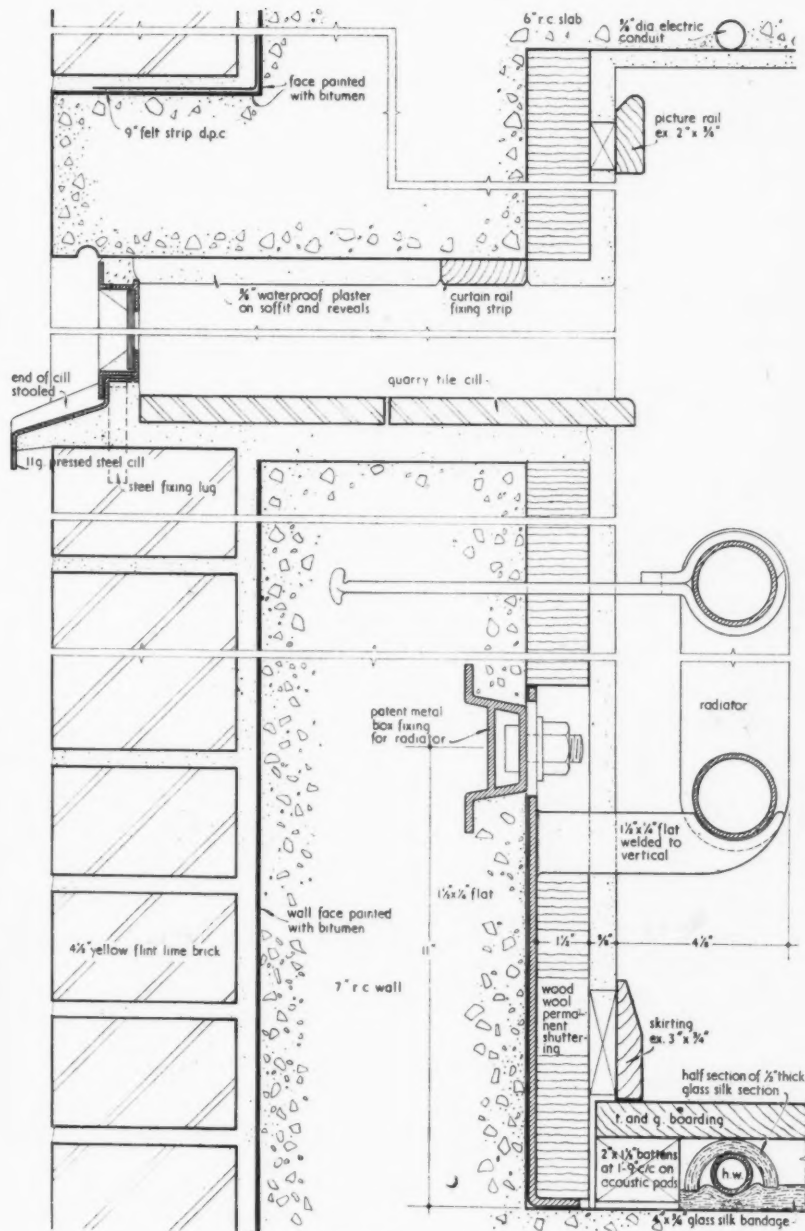
Below, flat entrance door on eighth floor.



Below, staircase side window.

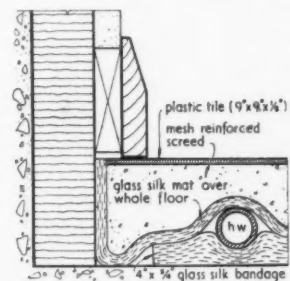


Below, staircase balustrade and landing.



Typical section through flat external wall [Scale: 3"=1'0"]

CONSTRUCTION.—External and transverse spine walls, floors and roof are of monolithic concrete. The external walls are 7 in. thick and lined internally with 1½-in. wood wool slabs, which form permanent shuttering. Party walls are 7 in. thick and breeze block partition walls 2½ in. thick built upon felt strips. External walls are faced with brick supported by horizontal reinforced concrete ribs at each window head level. The brickwork is tied to the concrete by means of galvanized iron cramps, which fix into dovetail galvanized slots cast in with the concrete walls. Windows are of metal. Front doors, casement doors and windows facing balconies are of timber. Balcony fronts consist of Georgian wired roughcast glass in aluminium frames supported on steel tubes.



Skirting detail in halls, kitchens and bathrooms



The west facade from Antrobus Street.

FLATS

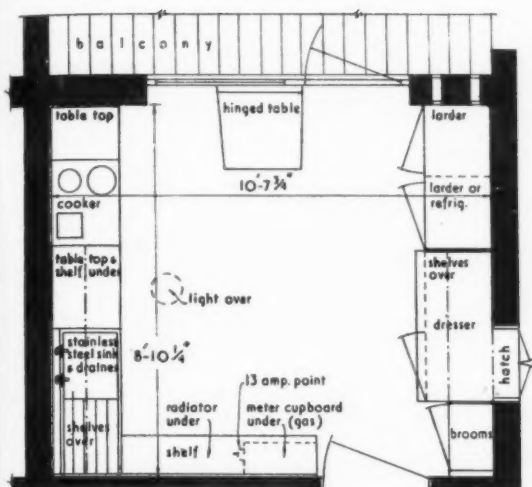
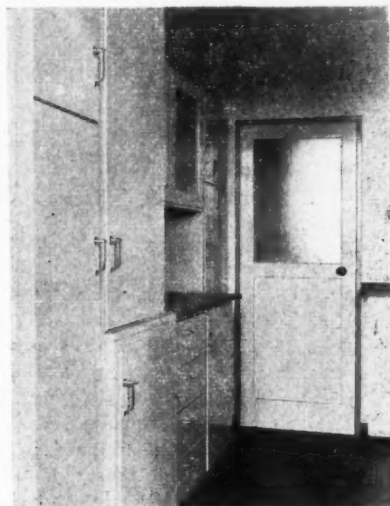
ANTROBUS STREET,

PIMLICO S.W.1

designed by POWELL and MOYA

EXTERNAL FINISHES.—Walls are faced with yellow flint lime bricks with a plinth of Staffordshire blue engineering bricks to ground floor cill level. Horizontal concrete ribs and exposed concrete to the raised portion at the north end have been left unpainted. The exposed concrete of the walls of the balconies, of the top floor gallery and tank rooms has been set in smooth shuttering and painted with a chlorinated-rubber based enamel paint. Colours

used are as follows :—Window frames, off-white. Vertical reinforced concrete ribs, balcony upstands and soffits, white. Metal cills, metal frames to staircase glazing, front doors, handrails and balusters to balconies, black. Columns flanking entrances, grey. Panels flanking entrances, violet. Back walls of balconies, lift fronts, panels below windows, internal staircase walls, sky blue, poppy red and grass green, alternately.

Plan of typical kitchen [Scale: $\frac{1}{8}'' = 1' 0''$]

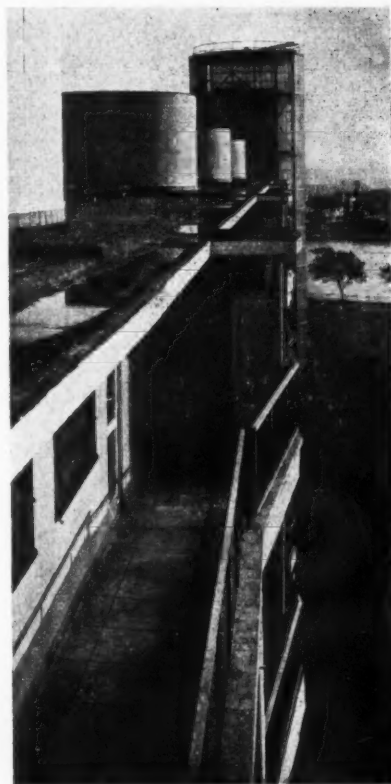
Above, typical kitc. en. Below, circular water tank holders above the eight floor pent house flats.

INTERNAL FINISHES.—Floors: living rooms and bedrooms, boarding on battens, on cork pads, which are stuck down with bitumen on to the concrete slab; kitchens, bathrooms, w.c.'s and halls, dark brown plastic tiles, on screed, on resilient glass silk quilt. Walls, plastered with $\frac{3}{8}$ -in. semi-hydrate plaster. Ceilings, special gypsum plaster, obviating mechanical key to concrete. Cills, dark brown quarry tiles. Splash backs in kitchens, white glazed tiles. All plaster work is distempered, except dados of bathrooms and one kitchen wall where gloss paint is used. Colours used are as follows:—Ceilings, white. Door trims, skirtings and radiators, dark grey. Woodwork generally, light putty. Window frames, off white. Walls: living rooms, terra cotta and light putty; bathrooms, light putty; bedrooms facing west, light yellow; bedrooms facing east, light pink; halls, light pink and dark grey; kitchens, above sinks and cookers, canary yellow; other walls, light putty; hatch doors, poppy red.

SERVICES.—All services, except rainwater pipes to private balconies, are carried in internal ducts. A main duct, between each pair of flats, carries a 4-in. soil pipe and a rainwater pipe into which drains water from the access balconies by means of flat cast iron gullies, built within the thickness of the slab. Central heating mains rise in the wardrobes between bedrooms 1 and 2, and horizontal branch pipes are carried within the thickness of the floor screed. Radiators, fitted in living rooms and bedrooms, are bracketed to the walls. Electricity is provided in three circuits: (1) a cooker circuit, (2) a 5-amp. lighting fitting circuit, (3) a 13-amp. fused plug ring main circuit for all floor points.

There are 4 plugs in each living room and 2 each in kitchens and bedrooms. Horizontal conduits are cast within the floor slabs. Tenants have the choice of gas or electricity in their kitchens. Each flat is fitted for relay wireless and television.

The district heating system, which was designed by Kennedy & Donkin, Consulting Engineers, is described on pages 491 and 492 of this issue. The general contractors are Holloway Bros. (London), Ltd. For list of sub-contractors, see page 498.



In view of the unusual technical and planning interest of the first block of this large housing scheme, the description is supplemented by the following discussion.

FLATS IN PIMLICO

Discussion between the Architects and the Editors

THE EDITORS: We see the structure of the building is monolithic reinforced concrete, with not only the cross walls of concrete, but the external walls also. Why is this?

THE ARCHITECTS: There are several reasons. An R.C. building (whether frame or monolithic) probably uses half as much steel as a steel frame building. This eased the licensing position. Under the London Building Act and with prices at their present levels an R.C. structure is considered cheaper for this type of building. We originally chose R.C. frame, with flat, wide, external columns within the thickness of the external wall. However, this meant that at the lower floors, the columns would have occupied the entire space between the windows, and the only infilling would have been in the aprons below the windows. We would, therefore, have had the difficulty of two different materials on the internal face of the walls, and the danger of cracking and pattern staining, due to the inequality of thermal insulation. Under the circumstances, and on the advice of the Consulting Structural Engineers, solid external walls appeared more logical. R.C. wall construction gives one a structure where there are no awkward projections into rooms, so often found in frame buildings, and this is particularly important in the case of flats of this type, where the rooms are of necessity small.

THE EDITORS: We think brick used as an external veneer to the concrete structure is illogical. Was there no other material suitable?

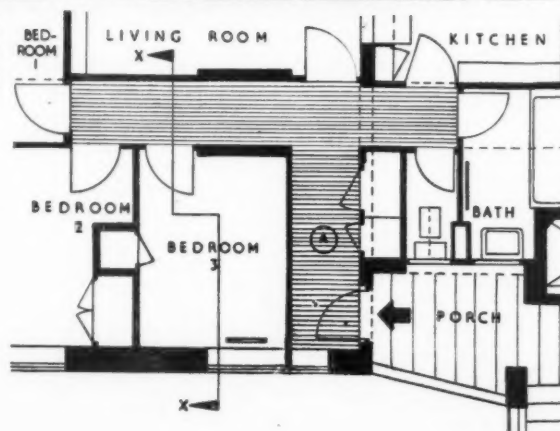
THE ARCHITECTS: We agree that it does at first sight seem illogical, and we considered many alternatives. All other finishes requiring little maintenance and yet having a good appearance were far more expensive than 4½ in. brick. Painting concrete—although cheaper at first—would be higher on maintenance costs. A rough textured rendering may require no up-keep, but this was rejected because of the dirty atmosphere. Thus, bricks were proved to be the best veneer at the present time, and their use is consequently logical. The bricks are treated deliberately as smooth panels of flat colour. The R.C. nibs supporting the panels at each floor are exposed. The smoothness of the flint/lime bricks has the advantage of picking up the minimum of dirt.

THE EDITORS: Why are the concrete walls on the balconies painted?

THE ARCHITECTS: The overall use of brick would have completely concealed the concrete structure. It would have given the appearance of a load bearing brick building. Though this isn't necessarily bad in itself, in this case it would have looked heavy and oppressive. Also, the painted walls are readily accessible for maintenance. The paint used is a chlorinated rubber based enamel paint suitable for application to concrete surfaces. It should last very well and can be cleaned down like glazed tiles.



Above, private balconies on the west facade. Right, plan showing corridors in typical ground to 7th floor flat.



[Scale: 3/8"=1'0"]

THE EDITORS : You have used $1\frac{1}{2}$ in. wood wool lining to the external walls, presumably for thermal insulation. If you had left a cavity between the brick facing and the concrete wall, could this lining not have been omitted?

THE ARCHITECTS : The cavity would not have given the equivalent insulation of the wood wool slabs. These slabs were used not only for insulation purposes, but as a permanent shuttering for the internal faces of the external walls. This permanent shuttering is, in fact, about the same price as the temporary shuttering used. It is, in our opinion, better to have the thermal insulation on the inside of the external walls rather than on the outside.

THE EDITORS : We notice that some of the floors in living-rooms and bed-rooms squeak. We know this does sometimes occur with timber floors on a concrete sub-floor. Have you any proposals for dealing with the problem for the remainder of the scheme?

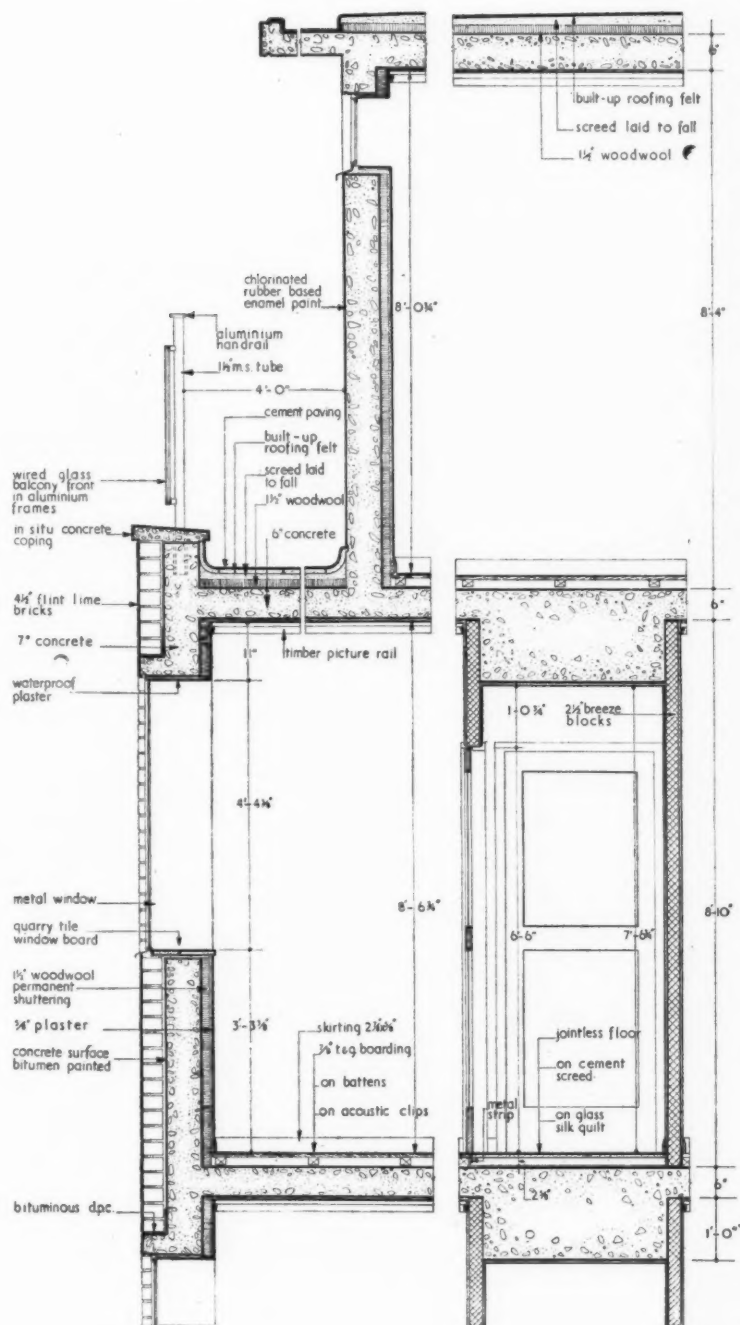
THE ARCHITECTS : The main difficulty is, in our opinion, the quality of some post-war timber, and the fact that generously thick boarding cannot be used due to the necessity for timber economy. At the time of specifying the materials for this block, it should be remembered that the materials for jointless flooring (comparable in price to the timber floors used) were not by any means ideal. Since that time, better and cheaper floor finishes suitable for application to concrete screeds have come on the market. It has been possible to use them in bathrooms, kitchens and halls of the present flats, and in future they will be used throughout. The cost of this finish (asphalte tiles) when laid on a cement screed on a glass silk quilt will be very slightly cheaper than the timber boarding on battens on insulating pads. B.R.S. tests have shown that the sound insulation results would also be slightly better. We believe that the asphalte tile flooring is proving popular.

THE EDITORS : Why did you use solid concrete floors instead of the hollow terra cotta blocks so widely used in these days?

THE ARCHITECTS : We prefer solid concrete floors, everything else being equal. In the present case advantage could be taken of spanning in two directions so that the solid floor compared favourably in price. We consider it better for construction and it avoids pattern staining on plaster ceilings.

THE EDITORS : Regarding the sound insulation, is the 7 in. of reinforced concrete adequate for the party walls between the flats?

THE ARCHITECTS : In the first block, the living rooms are not placed adjacent to each other on a party wall, neither is the living room of one flat against the bedroom of another. In the smaller flats of Block 5, where the short wall of a living-room occurs against another similar living-room, free standing leaves of breeze partition are built up on either side of the party wall. Like all the other breeze partitions, they rest on felt strips. We understand that none of the tenants have complained about noise.



Section X-X, showing the $4\frac{1}{2}$ -in. brick veneer supported on reinforced concrete nibs at each floor level.

(Scale: 1" = 1'0")

THE EDITORS : Since we are getting into the realms of planning, perhaps you can tell us why there are such a large proportion of 3-bedroom flats?

THE ARCHITECTS : There are a large proportion of 3-bedroom flats in Block 1, but other blocks, e.g. Blocks 5 and 6, are almost entirely devoted to smaller flats. It's more economical to group flats of a similar size altogether in one block, rather than mix large and small flats indiscriminately. To mix them in one block often causes an expensive structural arrangement.

THE EDITORS : We were surprised to see living-room-kitchens appearing in some of the smaller flats. Is there actually a demand for this arrangement?

THE ARCHITECTS : Yes, with some of the tenants this arrangement proves very popular.

THE EDITORS : It is difficult to avoid having a corridor in a large flat, unless part of the living-room is allowed to degenerate into "circulation space," but would it not have helped if part of the wall between the living-room and the corridor had been glazed? Was the extra length of the corridor (marked "A") essential?

THE ARCHITECTS : Part of the wall between living room and corridor is, in fact, glazed. This helps a lot—as you walk down the corridor, you can see into the living-room, and this reduced the closed-in effect. The long corridor is almost always a problem with "access in pairs" flats. One reason for choosing the open "access in pairs," i.e., access to each flat from an open air porch, rather than the more normal closed in access, is because it makes direct lighting and ventilation to the hall possible. The extra length of corridor (marked "A") is essential to this type of access.

THE EDITORS : The shape of the balconies has been described by some as a little whimsical.

THE ARCHITECTS : That certainly wasn't our intention, and we don't think they do look whimsical. We like the appearance and the shape, which exploits the material used for the balcony fronts, namely, glass. Where the two facets reflect the sun's rays from different angles, a clear and pungent effect is given. And there was a reason for it, too. An extra staircase was required from the 5th floor upwards for escape purposes. The balcony was not quite deep enough to accommodate it, but the extra depth required was so little that to project the balcony that distance from the main wall would have looked distinctly mean, and the return face of the balcony front would have looked awkward. The tapering balcony front seemed to us a more economical and natural answer.

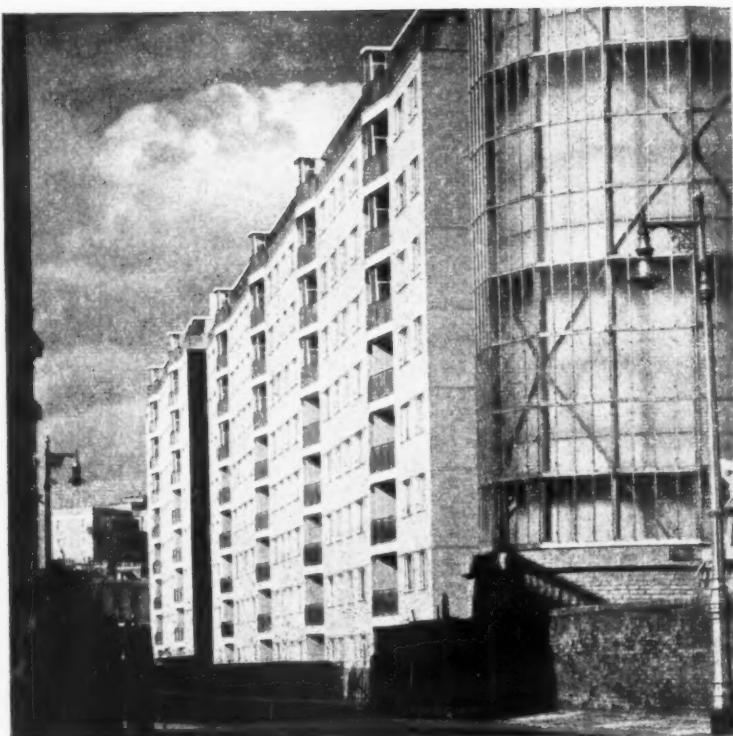
THE EDITORS : Your internal decorations are a considerable advance on the standard cream of most flats. How do the tenants take to the colours?

THE ARCHITECTS : We believe they like them.

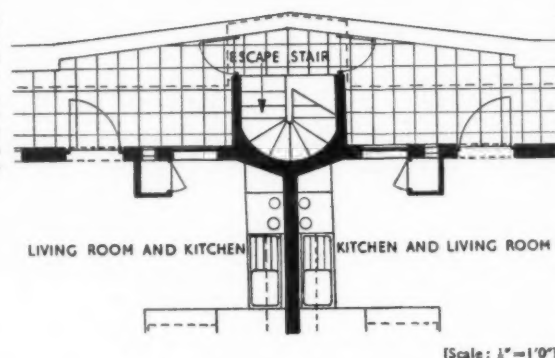
THE EDITORS : We have terrible visions of window cleaners being frustrated by the staircase. Can the staircase windows be cleaned?

THE ARCHITECTS : Yes, they have been specially designed so that all cleaning can be done from the inside of the building. Hanging cradles from the top of the staircase would have been quite impracticable. Half the window can be cleaned from the inside, as there are opening lights placed so that the face of the glass can be reached with the help of a wash leather on a short stick (which, we believe, is a standard article). The other half can be cleaned from the balcony itself.

THE EDITORS : Why is there a break in the block towards the north end?



Above, looking north up Antrobus Street, showing the break in the west facade emphasized in black. Right, 8th floor balcony detail showing 2-ft. protrusion to allow access to escape stairs.



[Scale: 1/4" = 1' 0"]

THE ARCHITECTS : The break occurs at the one expansion joint in the building. The block to the north end of this break forms itself, as it were, into a separate block. The separation is stressed by the fact that this part of the block is raised above ground level on large concrete columns. The way-through will give a vista of the entire estate, and form part of the main pedestrian way through it. When the block is visually divided into two (when one of the lower blocks on Section I is built), the break will accentuate this natural division.

THE EDITORS : We feel that although painting the break black makes it quite effective when viewed from one direction, from other viewpoints the break is imperceptible. Unless it had been made deeper, it would have been better not to have had the break at all.

THE ARCHITECTS : Why not? Any colour could have been used, and even if black may not look photogenic, we think it is the best colour to use in this case.

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

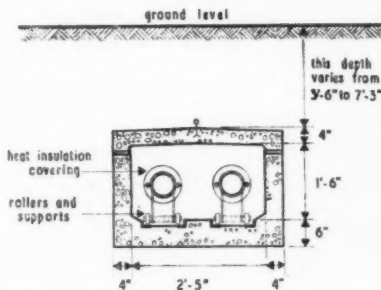
TECHNICAL SECTION

District heating is once again in the news. On the one hand it has been decided that "district heating schemes shall not be proceeded with in the new towns" but, on the other hand, we have the scheme at Pimlico, with its unique glazed hot water "accumulator," described below. The financial aspects of this scheme, details of which follow the general description, add an important chapter to the controversy on the economics of district heating.*

DISTRICT HEATING AT PIMLICO

At Pimlico, London, a large area of old property, damaged or demolished during the war, has been cleared and large blocks of flats are being erected which will eventually re-house about 5,000 people. A district heating scheme, designed by Kennedy and Donkin, Consulting Engineers, is to be employed which will utilise the heat in exhaust steam from the Battersea Power Station and transmit it, in the form of hot water, to the new housing estates, for space heating and domestic hot water supply. Later the privately owned flats, known as Do'mhin Square, will also be participating in the scheme.

* See Information Centre items, 23.122 and 23.123 (A.J. Apr. 13, 1950).



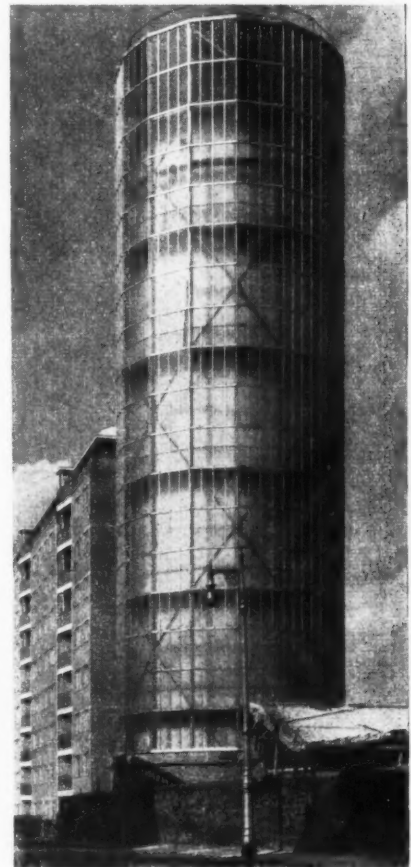
Typical conduit for 6-in. distribution main.

At Battersea there are two back-pressure turbo-alternators, designed for an output of 1,350 kW. taking steam at 600 lb. per sq. in. at 800-850°F. and these turbo-alternators are each connected to a heat exchanger arranged to heat water to 200°F. in a closed circuit circulating system. This is, essentially, a 12 in. flow and 12 in. return and a large hot water storage tank, or "heat accumulator," situated on the Pimlico housing estate, together with flow and return pipes and circulating water pumps in the power station, for delivering hot water to the top of the accumulator and returning the cooler water from the bottom for reheating. (The pipes pass through an existing tunnel under the river.) From the accumulator, the hot water is pumped as required to the space heating and hot water systems in the blocks of flats, while hot water for baths, wash basins and other equipment is provided by one or two main calorifiers in each block of flats.

THE HOT WATER ACCUMULATOR.

The hot water accumulator ensures an adequate supply at all times independent of any output fluctuations at Battersea. It is a cylindrical vessel 29 ft. in diameter and 126 ft. high, constructed of mild steel shell plates, varying in thickness from $\frac{3}{8}$ in. at the base to $\frac{1}{2}$ in. at the top, all the seams being electrically welded *in situ*.

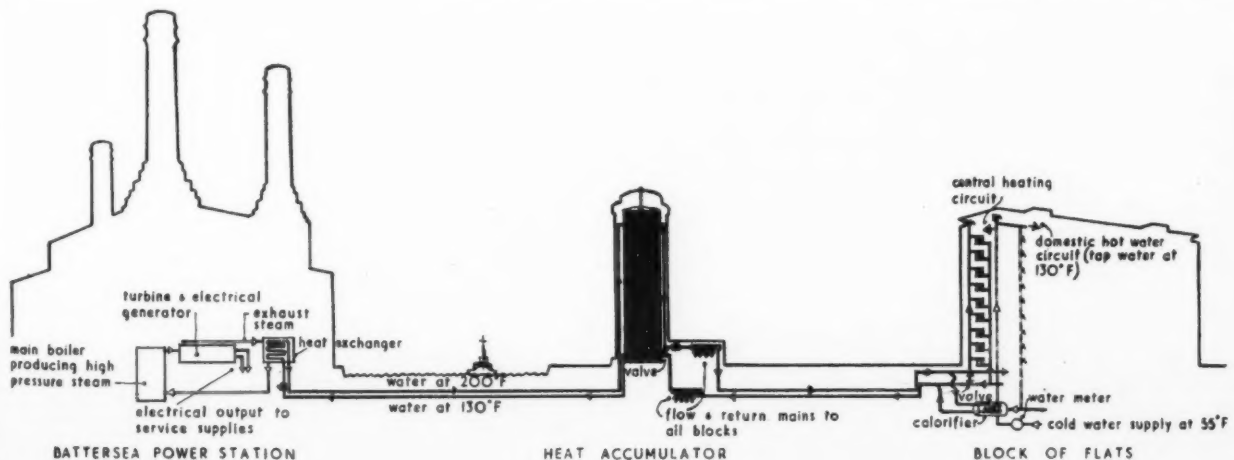
The shell is insulated with 3 in. thick cork slabs, held in place by steel studs welded to the outer surface, and the whole is enclosed in a steel framework, with $\frac{1}{2}$ in. rough cast glass panels fixed in aluminium glazing bars.



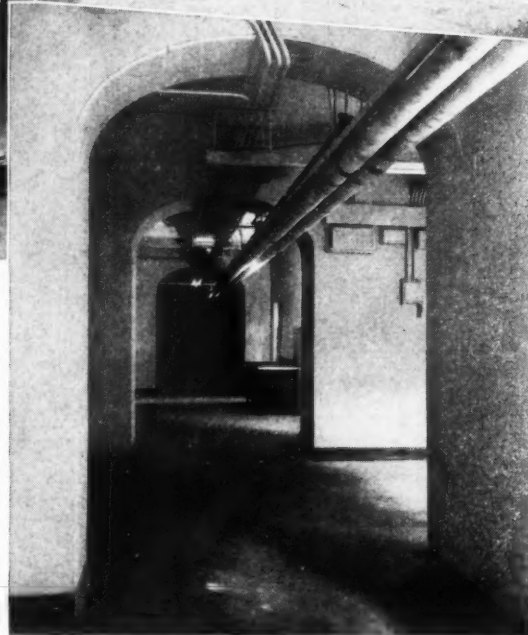
The glazed accumulator.

Provision is made between the accumulator shell and the enclosure for maintenance and access to the top. There are permanent ladders between the enclosure and the shell, with galleries every 18 ft. The outside glazing starts 30 ft. from the base of the cylinder and rises to a height of 108 ft. in 16 tiers, each of 6 ft. high. The enclosure framework is in the form of a polygon with 16 facets. The facets, at centre line of glass, are 7 ft. $3\frac{1}{2}$ in. wide, sub-divided by aluminium glazing bars into four panes of glass. Weathering at the junction of the tiers is provided by a special cleat-shaped light alloy extrusion.

The aluminium glazing bars are of normal design, reversed for internal glazing, and have been anodized. The three lower tiers are protected from malicious damage by wiremeshed panels each 5 ft. 8 in. high.



LAMBETH PALACE



Architects for the Reconstruction :
LORD MOTTISTONE & MR. PAUL PAGET.
F. & L.R.I.B.A.

ABOVE : The Crypt.

TOP : Converted Stables.

RIGHT : Ground Floor Corridor.

'PUDLO'

— BRAND —

CEMENT WATERPROOFER

LAMBETH PALACE dates, in its several parts, from the 13th to the 19th century, and even the "modern" residential quarters were built more than one hundred years ago—before the practice of providing horizontal damp-courses had been established. The repair of extensive bomb damage has provided the opportunity, amongst other things, to modernise the major part of the ground floor, and to convert a block

of stables into three cottages and two flats for the staff. In giving us permission to publish these photographs, the architects informed us that they stripped the old matchboard linings and substituted a dado of cement rendering made impervious with 'PUDLO' Brand cement waterproofer. The dado is finished with porous plaster, or glazed tiles.

Ask for Specification 4A worked to in this case

KERNER - GREENWOOD & COMPANY, LIMITED

ANN'S PLACE,

KING'S LYNN

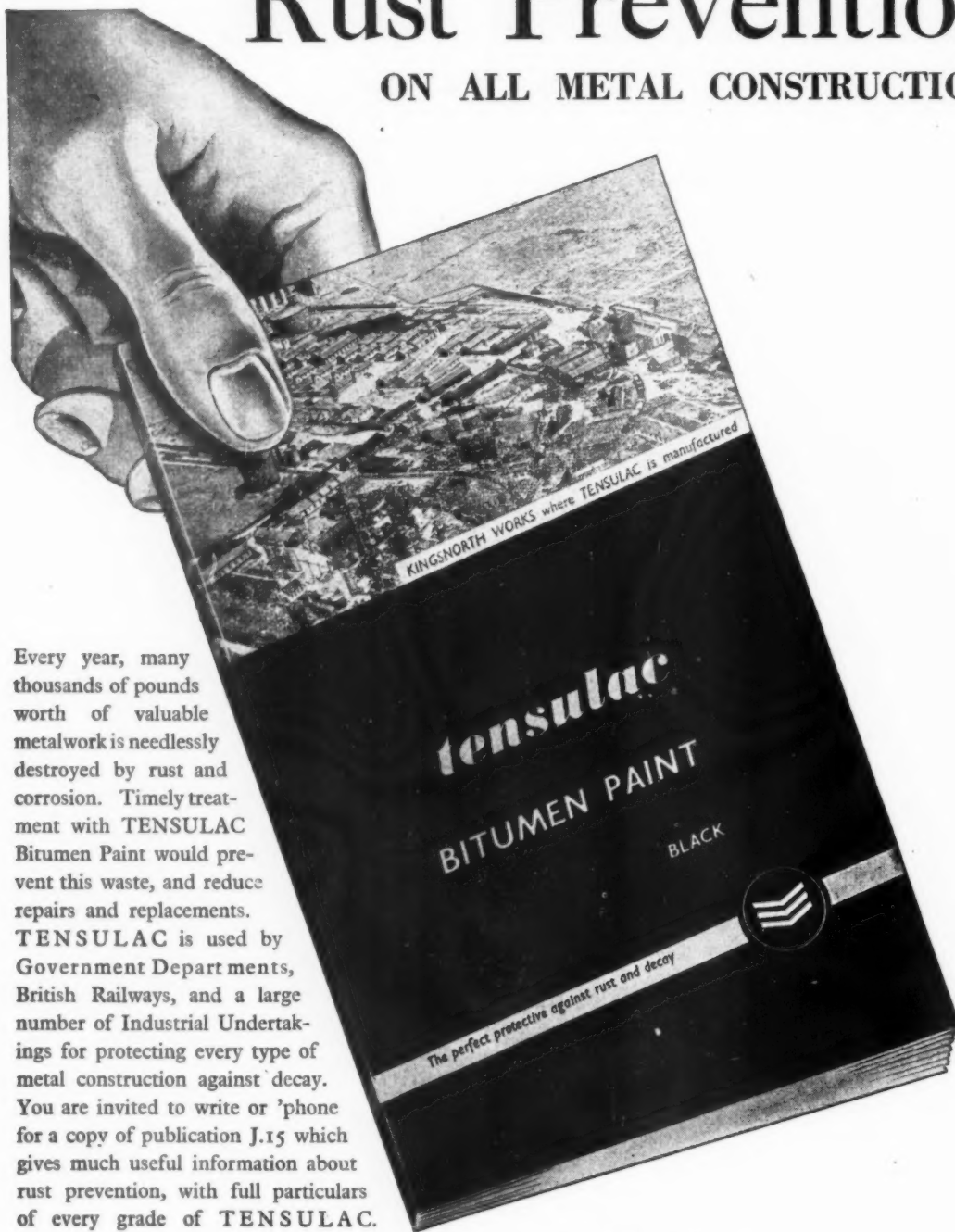
Sole Proprietors and Manufacturers

The word 'PUDLO' is the Registered Trade Brand of Kerner-Greenwood & Co., Ltd., by whom all articles bearing that Brand are manufactured or guaranteed

A PUBLICATION OF IMPORTANCE TO ALL CONCERNED WITH

Rust Prevention

ON ALL METAL CONSTRUCTIONS



Every year, many thousands of pounds worth of valuable metalwork is needlessly destroyed by rust and corrosion. Timely treatment with TENSULAC Bitumen Paint would prevent this waste, and reduce repairs and replacements. TENSULAC is used by Government Departments, British Railways, and a large number of Industrial Undertakings for protecting every type of metal construction against decay. You are invited to write or 'phone for a copy of publication J.15 which gives much useful information about rust prevention, with full particulars of every grade of TENSULAC.

tensulac

BITUMEN PAINT

for lasting protection against rust and corrosion



BERRY WIGGINS & CO. LTD., FIELD HOUSE, BREAMS BUILDINGS, FETTER LANE, LONDON, E.C.4

Telephone : Holborn 0941



It has often been suggested in these columns that with whole house warming and free planning, the floor area of houses could be reduced without any loss and possibly with an increase, of amenities. But this article by Grenfell Baines presents, for the first time, a detailed analysis of the problem with concrete suggestions for its solution.

REFLECTIONS ON HOUSING

By G. Grenfell Baines

Whenever our leading politicians are stuck for something to talk about they can always turn to Housing. Thanks (if you like) to the efforts of the RIBA and the amenability of the MOH to whom they have sold architecture very successfully, it behoves architects more than ever today to take note of what our governors have to say. Here are two remarks which have stuck with me:—

Churchill: "We make our homes, then they make us."

Bevan: "So that not only will we produce housing as a social service but as an adornment of our island."

Considering the way these two fail to agree in other matters it is pleasing for a layman to notice how the latter seems to have the right idea for making the best of what is implied by the former.

In many ways, due to the efforts of architects and others, our post-war housing is an example to the rest of the world and, although its quality is not, unfortunately, matched by bulk achievements, it is clear to all but the most prejudiced that long before the life of our new housing is over it will be judged for design qualities—not quantity or speed of erection. It is equally clear that this quality is to a very large extent due to the agency which has been mainly responsible for the production of the houses. Perhaps some local authorities have not responded to the enlightened

leadership of their ministry as they might have, but one of the features of MOH administration, at least as far as housing is concerned, has been its democratic willingness to delegate powers to local autonomy.

It would be as well, therefore, if those who (justifiably to some extent) are clamouring for more houses to be built by other agencies, notably the house builders who combine (or did combine prior to the 1947 Town and Country Planning Act) house building with speculative estate development, were to pause and ponder on the possibility of a situation arising in ten years time whereby the relative esteem enjoyed by "Council Houses" and "Show Houses," council estates and "Park Hill" and other equally salubriously entitled estates, were to be reversed. For judging by the way in which the private builder is liquidating his precious licences, there is in this trickle every promise of a pent up flood of the same old bay windowed, semi-detached, pseudo-villas, "assigned" either by precocious apprentices who have been for a few years to a building course at night school or by cynical practitioners who are prepared to do the necessary, usually to eight scale, to comply with the local formalities.

All these desirable residences waiting to be planted in each piece of land parcelled up with Solomonic discrimination by some estate agent, each house toeing the starting line which, as far as the builder "trying to make a living" is concerned, is the finishing line, set by the local byelaws. Were the present or some future government to decide to open the flood gates it would be advisable to make the condition that the new flow of production should continue to be filtered through qualified professional channels and if, contingent on our being properly paid in money and time allowed, we for our part were to organize our profession to meet the demand for good design as courageously and expeditiously as lays within our power—our own house needs sweeping.

But after the congratulations have been given we designers must realize as Tom Meior pointed out in his recent paper "The Designers Dilemma," that these great improvements in post-war housing have been achieved at a cost which places tens beyond the capacity of many of those families who are most in need of good housing. We have re-housed only a favoured fringe who can pay the new rents. This bogey of economics must, however, be kept in its proper place. Capacity to pay cannot be divorced from willingness to put a priority on a good home as against other and less worth while ways of emptying a wage packet. It must also be considered against incapacity or unwillingness to produce buildings efficiently, for, with a few notable exceptions both the men and the masters of the building industry have fallen short not only of our expectations but of their own past performances.

Apart from this, however, the designer can make further contributions to the problem of providing more separate houses, using the same amount of building effort that is now being expended on inefficient dwellings. Much smaller but more efficient houses can be designed to give greater use of space if full consideration is given both to space and time. When housing is viewed four dimensionally it is easy to see that the average post-war house, good as it is, falls far below the slum dwelling as to efficiency in use of space over a given time. Not that the slum has any standard to suggest other than the twenty-four hour a day usage.

Although it may be wrong mathematically to multiply space by time there is no harm in doing so for purposes of comparing available with habitable area.

A more attractive example of high habita-

bility efficiency than the slum dwelling is the caravan. Adding its mobility to the space time usage introduces almost a fifth dimension, but to confine ourselves to four for the time being, the caravan is seen to be an acme of habitability for three main reasons:—

1. It is generally used in summer and is therefore bearably warm in all parts (sometimes unbearably).

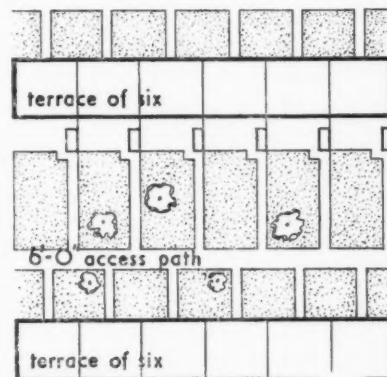
2. Its equipment is specially designed to facilitate the dual and even treble use of space.

3. The inhabitants are willing to adapt themselves to the circumstances in order to take full advantage of 1 and 2.

Now consider the typical speculative builders 950 square foot house with its method of warming, equipment and general living habits arising out of these. ("We make our houses, etc.")

Without going into great detail at the moment and being very lenient about the amount of habitable space within the small semi-circle of warmth from the average open coal fire, it may be stated conservatively that the efficiency of most British houses is less than 37½ per cent. Upstairs practically half the area of the house is usable for only a third of the time. Downstairs part of the area is available for two-thirds in summer only, less in winter; while halls, stairs and landings are used for as little time as possible.

As things are, except under extraordinary circumstances one would not dream of en-



Suggested layout for houses as described in this article.

tertaining the neighbours to a game of gin rummy in an unheated bedroom furnished with large Victorian pieces, on the other hand most of us have at some time been forcibly compelled to consider the trials of spending a night crouched on an inadequate settee or uneasily poised on a fallible combination of two easy chairs in some living room recently vacated by all but a Westminster chiming clock. Under such conditions of increased space time use the design breaks down. But with adequate warming and the right equipment it must be clear that less space used for a larger time can give as much convenience, comfort and satisfaction at less capital and consequently lower rental cost.

The two tables give space time use for the two types of house plans described:

House A has 1,050 square feet conventionally warmed and equipped.

House B has 664 square feet including out-building with heating and equipment designed to facilitate a high factor of space

DURESCO

certainly



BUT

we also make

SILCOLAC

Hard Gloss Paint

SILPACO

Flat Oil Paint

CHARLTON ENAMEL

Hygienic Porcelain Finish

ALKALI RESISTING PRIMER

For exterior application

CALDURO CEILINGWHITE

in paste form

SILKARDO

Washable Distemper

PETRIFYING LIQUID

For thinning and waterproofing

SILKAS VARNISH

CHARLTON WHITE

Flat Undercoating

DURESCO

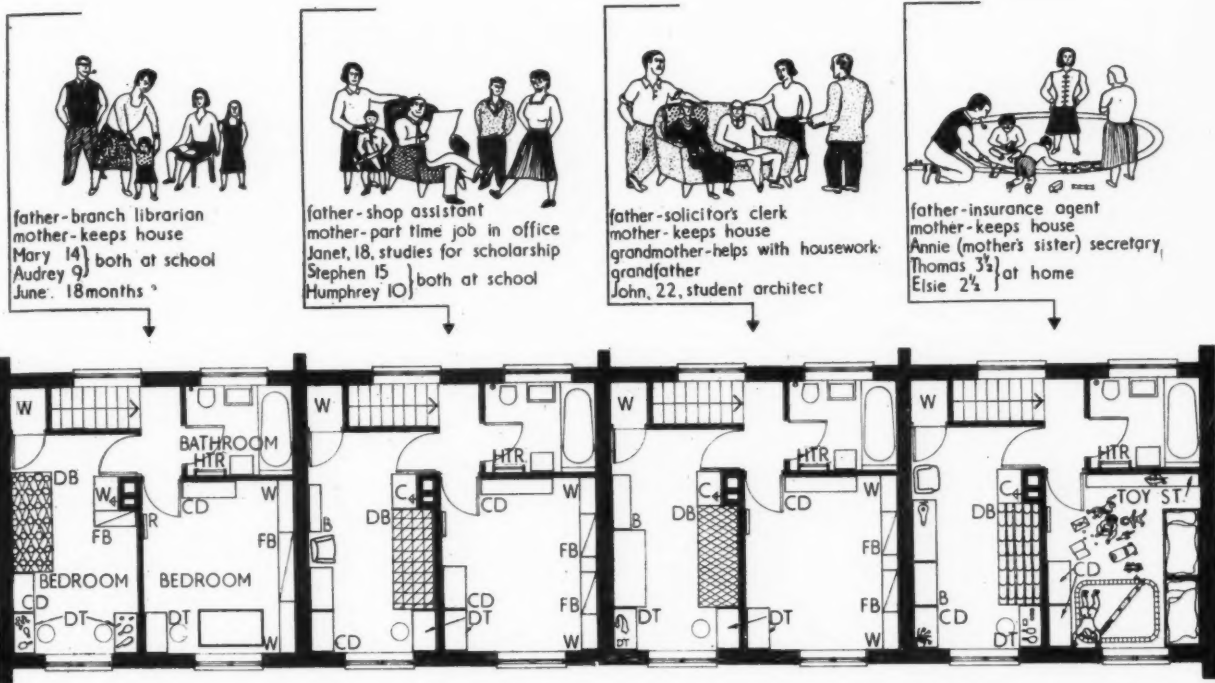
Texture Paint

AQUAMAT

The one-coat Washable Distemper

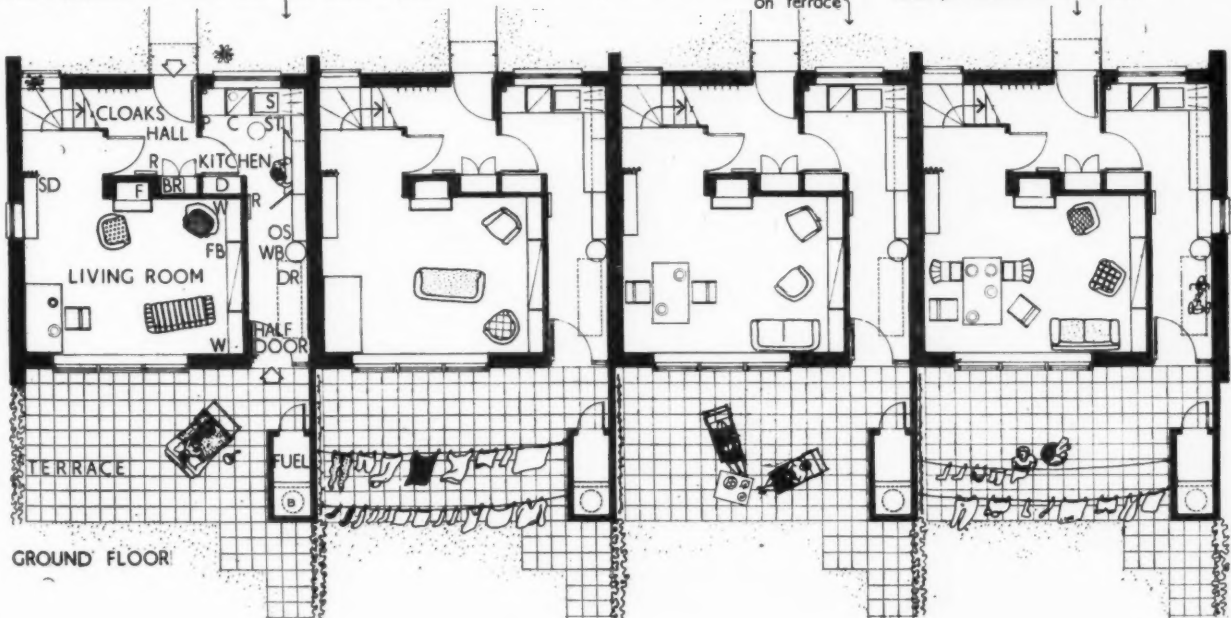
DURESCO PRODUCTS

DURESCO PRODUCTS LTD., CHARLTON, LONDON S.E.7. TEL: GREENWICH 0035 (four lines)



FIRST FLOOR

house empty all day
 mother prepares lunch while baby June sleeps in pram
 mother & grandma have morning coffee on terrace
 mother does family wash & prepares light lunch for Thomas Elsie & Annie



GROUND FLOOR

usage. The basis of comparison is the square foot hour.

For the purpose of this paper time of occupation of service space—that is kitchen, bathroom, storage of tools and cycles is assumed as being the same, though in passing it may be said that a much more critical examination of the cubic storage space required in kitchens would result in substantial savings in any type of house—far too many cupboards and shelves are designed to store more air than articles.

As in any other search for an optimum we cannot ignore that the law of diminishing returns will operate with more than

ordinary severity. The savings in building, fabric and furnishings to be purchased must not be swallowed up by cost of additional equipment; the convenience of the small house should not be vitiated by an excessive number of working gadgets; finally the reduced spaces must be arranged to present an appearance of satisfactory scale. Cost of running must also be taken into account and, of course, the social problem of adjustment to new conditions. Too much should not be made of the latter. We are inclined to forget that responsibility for housing rests to a large extent with middle class professional people and public admini-

DAY

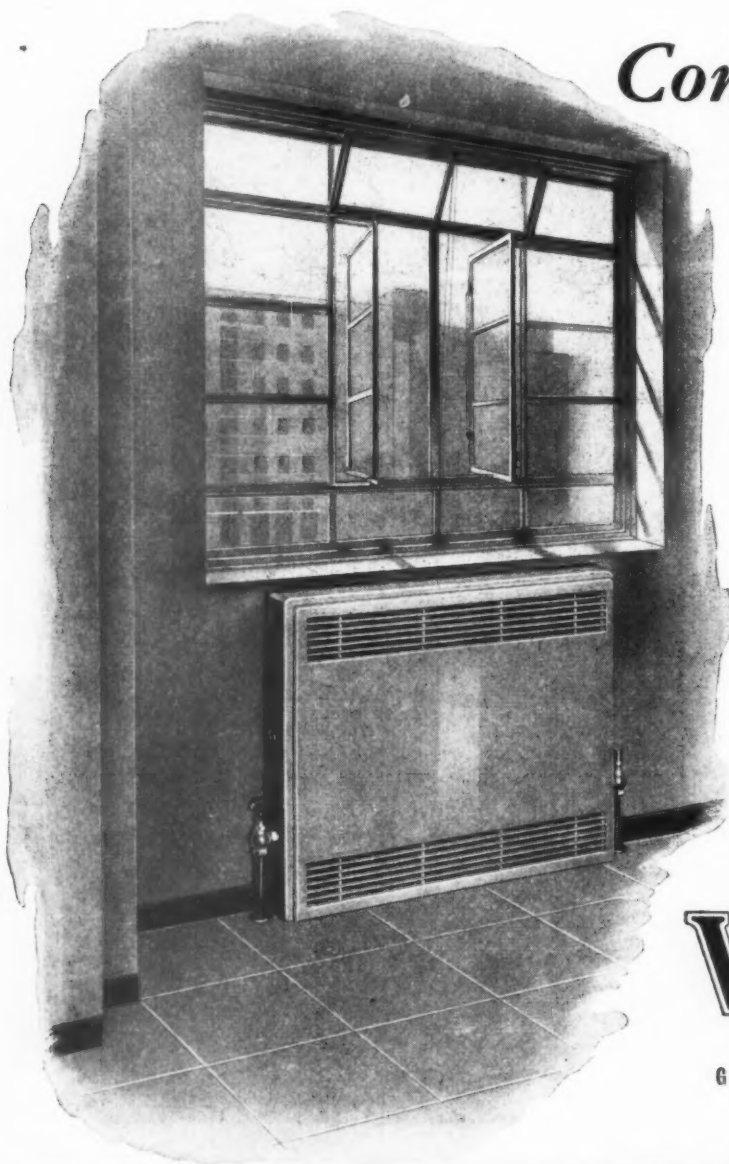
KEY

B	Bookcase	FB	Folding bed
BR	Broom cupboard	HTR	Heated towel rail
C	Cooker	OS	Open shelving
CD	Chest of drawers	P	Pan store
D	Dresser	R	Radiator
DB	Divan bed	S	Sink and drainer
DR	Drying rack	SD	Sideboard
DT	Dressing table	ST	Store cupboard
F	Open down draught fire with reflector	W	Wardrobe
		WB	Wash boiler

**WELDEX
HEATERS**

**INFORMATION ON PLANNED
HEATING AND VENTILATING**

Convector Heaters



The "WELDEX" Convector is designed to answer the demand of Architects and Heating Engineers for reliable, robust and attractive equipment for Hospitals, Schools, Offices, etc.

They are supplied in three casing styles: Wall Type, Floor Type and Floor type with Bottom Grille, the latter of which is illustrated here and in a range of lengths.

CASING fabricated from 18 gauge steel sheet and with easily removable Front Panel for inspection and cleaning.

FINISH Stoved Grey Primer is standard but special and two-colour finishes can be supplied.

ELEMENTS Universal type using "WELDEX" Steel Gilled Tubes in all-welded construction suitable for steam up to 100 p.s.i.g. and accelerated low pressure hot water.

DAMPER can be fitted if required and is adjustable.

ILLUSTRATED leaflet with table of ratings is available, and will be supplied on request.

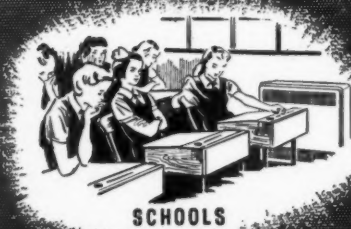
**WELLINGTON
TUBE WORKS LTD.**

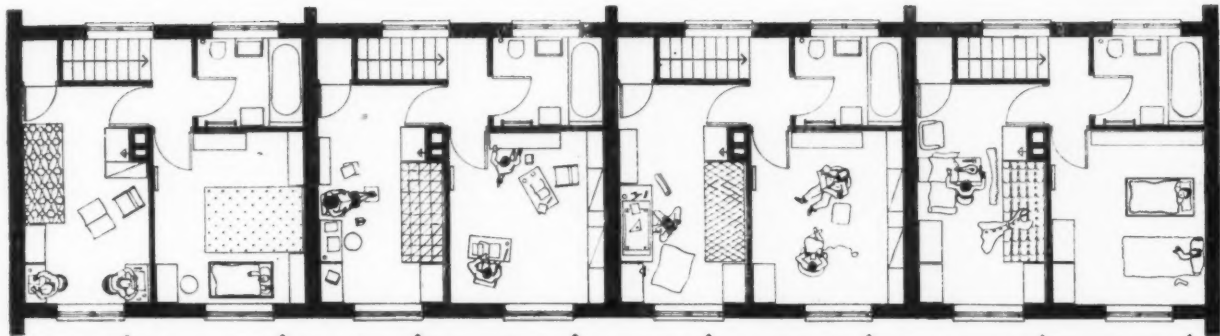
HEAD OFFICE & WORKS

GREAT BRIDGE · TIPTON · STAFFS

Telephone: Tipton 1242

Telegrams: Vigilantia, Tipton





Audrey & Mary do homework baby June in cot Janet studies for scholarship Stephen & Humphrey do homework John studies grandparents read & sew Annie dressmakes Thomas & Elsie in bed early

FIRST FLOOR



mother & father chat with visitor

mother bakes & father woodworks on folding bench

mother & father entertain friends with game of cards

father writes letters; mother knits

GROUND FLOOR



strators. What to them looks like a lowering of standards is only a lowering of their own. To the new occupants of the houses, perhaps coming from one room dwellings, where all the cooking equipment has to be stored under a bed, an ordinary 664 square foot house would be a palace, let alone one which may be used to an extent usually only found in a much larger house—possibly larger than most of the houses occupied by those who hesitate to "reduce" standards.

Hitherto the social problem of combining open fire amenities with central heating efficiency has been difficult to solve. The author's first thoughts on this subject arose from a review of all the design implications of district heating and to those who have

studied this subject the uncertainty of getting the average Britisher to accept fireless homes has been proved almost conclusively. Fortunately now a new down draught open fire is available which gives radiant heat and a high output of convected air and hot water at an efficiency as high as many domestic central heating boilers. Complete installations for the type B house would cost about £80 as against at least £60 for normal installations of open fires, chimneys, etc. Running costs are not high. Solid fuel consumption is less than 2 cwt. per week during eight months of the year and less than one for the other four. Extra capital and running costs for heating will be about 1s. per week assuming normal

EVENING

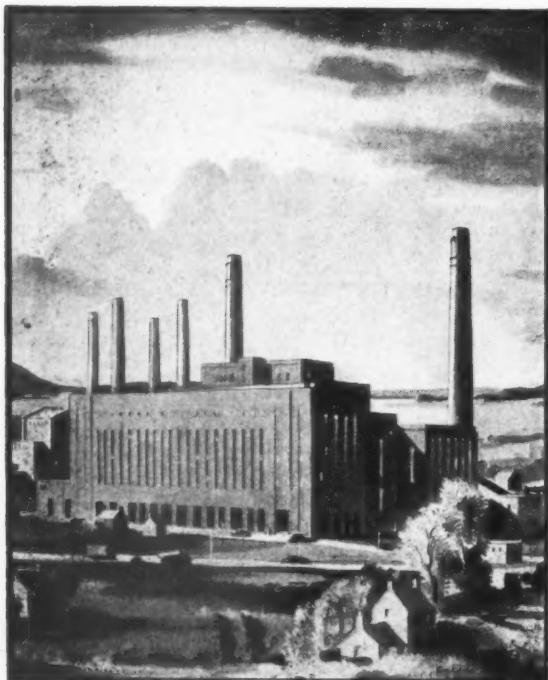
allowances for interest and loan repayments. Economically a reduction of nearly four hundred square feet in area should reduce rent by at least six shillings per week—there may also be a reduction in rates. But some of the other less easily assessed advantages claimed for district heating will be available, for example: there will be a saving in the amount of bedding required

I Location of space	II Area, sq. ft.	III Habitable area		V Time available for occupation per day		VII Super foot hours		Total super foot hours	Remarks
		Winter, 244 days	Summer, 121 days	Winter	Summer	Winter, III × V × 244 days	Summer, IV × VI × 121 days		
Living Room ..	150	75	150	16	16	292,800	290,400	583,200	Winter area based on comfort area average open fire. Assume sitting room used at week-ends in winter and half of time in summer. Intermittent occupation irrespective of warmth. Area for winter is lenient, strictly only area of bed, 30 sq. ft., is "habitable." Ditto. Ditto, but 21 sq. ft. habitable.
Sitting Room ..	128	75	128	5	8	91,500	123,904	215,404	
Kitchen ..	70	70	70	8	8	136,640	67,760	204,400	
Bedroom 1 ..	138	138	138	8	8	269,376	133,584	402,960	
Bedroom 2 ..	121	121	121	8	8	236,192	117,128	353,320	
Bedroom 3 ..	70	70	70	8	8	136,640	67,760	204,400	
Total : Super foot hour								1,963,684	

Total available area = 677 super feet
Total super foot hours = 677 × 24 × 365

Efficiency of hours A =

5,930,520 super foot hours
33.1%



Stourport—an impression of the completed station by Charles Cunliff, R.A., R.W.S.

Another New Power Station

AT STOURPORT-ON-SEVERN, Worcestershire, stands the fifth of British Electricity's great post-war power plants. Stourport, when completed, will contribute 120,000 kilowatts of much-needed electricity—equal to over 160,000 horsepower—to the national Grid.

Steam at Red Heat

Most of the turbo-alternators being installed in British Electricity's new power stations are of two standard sizes—30,000 and 60,000 kilowatts. The Stourport sets are designed for 60,000 kilowatts. Stourport is using steam at the exceptional pressure of 1,500 lb—two-thirds of a ton—per sq. in., and at a temperature of 1,050° F—a visible red heat.

Stourport is only *one* of 38 new power stations being built by British Electricity, while 43 existing stations are being extended to give increased output. This is part of British Electricity's plans to overtake the power shortage and supply abundant electricity to those who will live and work in the homes and factories now being planned and yet to be built.

more power

FROM STOURPORT

means more power to the nation

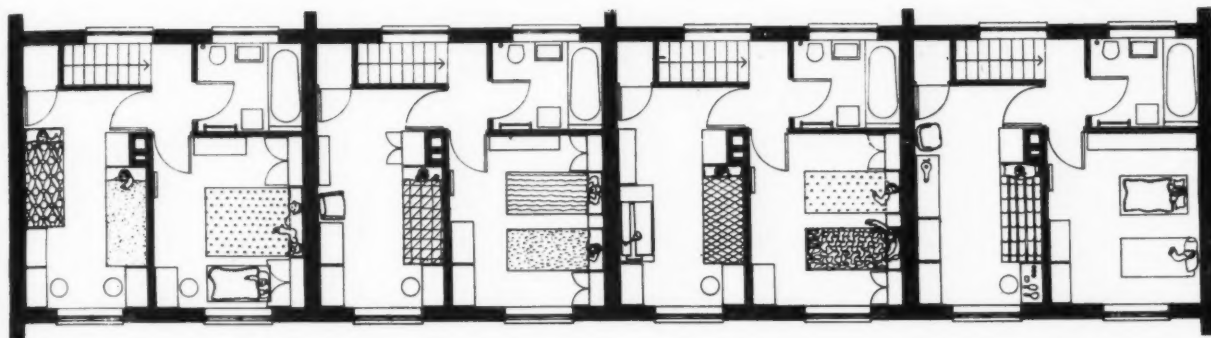
BRITISH ELECTRICITY

**WILLIAM
MALLINSON
& SONS LTD**

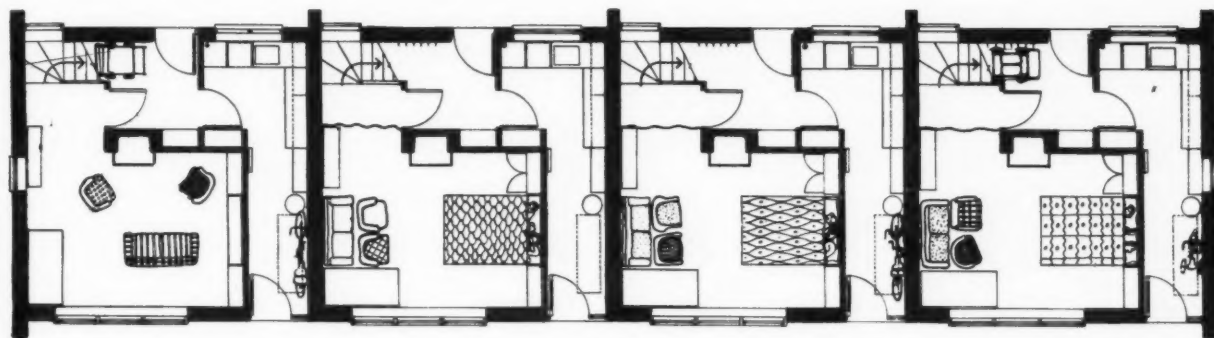
*Timber
Veneers
Plywood*

130-150 HACKNEY ROAD
· LONDON · E.2

TELEPHONES · SHOREDITCH 8888-8811



FIRST FLOOR



GROUND FLOOR



NIGHT

in warm bedrooms—this will help the laundry bill ultimately.

Suitable equipment presents economic and social problems. Obviously if space has to be reclaimed for other purposes some folding beds and other built-in furniture must be included in the design. The combined folding bed, wardrobe and dressing table fitting would be an essential item for the parents' living-bedroom; children could, however, sleep comfortably and safely on the *safari* type bed which can be erected and made or dismantled and put away in less than four minutes. Ventilated storage space for bed and bedding would be necessary but as the former folds into a 6 in. diameter roll three feet long and the latter need not be bulky in a warmed house, the resulting cupboard fitting need not be more than a 12 in. extension on a standard built-in wardrobe. There may be doubts about

using a living room for sleeping—atmosphere and so on. With natural cross ventilation the air of a 200 square foot room can be changed seven times while the supper dishes are being cleared and washed up.

Another approach to this problem, particularly for children, is suggested by the space standard of a two berth tourist class cabin, the beds being arranged in two tiers in relatively small space—the rest being available for play or study.

Obviously the design illustrated is not the only solution. For instance, as the staircase may be considered a barrier to the free use of space, there might be a case for considering two storey flats in groups of four or eight. An economy on staircases and space would be effected where one stair might serve four dwellings. Gardens on alternate sides could be planned for each flat. No doubt there are hidden snags yet to be dis-

covered but they are small compared with the fundamental snag of stepping up the production of separate homes. There will be many practical theorists who can think up all manner of emergencies under which the design may fail—there is far too much of a tendency these days to let a capacity to invent emergencies sterilize even the most moderate ideas. The problem is to utilize our present building capacity for the creation of more houses, the difficulty for those who will read this article is that they must judge these proposals not only from their own viewpoint but from that of the millions who are waiting to move in.

I Location of space	II Area, sq. ft.	III IV Habitable area		V VI Time available for occupation per day		VII VIII Super foot hours		Total super foot hours	Remarks
		Winter, 244 days	Summer, 121 days	Winter	Summer	Winter, III × V × 244 days	Summer, IV × VI × 121 days		
Living Room ..	195	195	195	24	24	1,441,920	566,280	1,708,200	Kitchen being warm may be used more than 8 hours. Vacant during school or work- ing hours.
Kitchen ..	48	48	48	8	8	93,696	46,464	140,160	
Bedroom 1 ..	135	135	135	16	16	527,040	261,360	788,400	
Bedroom 2 ..	108	108	108	16	16	421,632	209,088	630,720	
Total super foot hours								3,267,480	

Total available area = 486 super feet
Total super foot hours = 486 × 24 × 365

Efficiency of house B =

4,257,360
76.72% super foot hours

N.B.—It will be noted that the total available super foot hours for house B is almost double that for house A, yet the smaller house is less than two-thirds the size of the bigger.

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

ENQUIRY FORM

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

Please ask manufacturers to send further particulars to:—

NAME

PROFESSION or TRADE

ADDRESS

A.J. 7.12.50

Buildings Illustrated

Flats in Antrobus Street, Pimlico, S.W.1 (Pages 481-490.) Architects: Powell & Moya, A./A.R.I.B.A. Consulting Structural Engineers: Scott & Wilson. Quantity Surveyors: E. C. Harris & Partners. Consulting Engineers for District Heating: Kennedy & Donkin. Consulting Heating Engineers inside flats: R. Preston & Partners. Director of Housing, Westminster City Council: John Hughes, F.R.I.B.A., B.A.R.C.H. General Contractors: Holloway Bros. (London) Ltd. Sub-contractors: Heating and hot water, G. N. Haden & Sons Ltd.; electrical services, Troughton & Young Ltd.; wood windows and kitchen fittings, H. Newsum Sons & Co. Ltd.; metal windows, balcony fronts and metal screens, Williams & Williams Ltd.; other metalwork, T. W. Palmer (Merton Abbey) Ltd.; lifts, The Express Lift Co. Ltd.; pressed steel tanks, Braithwaite & Co. Ltd.; pumps, W. H. Willcox & Co. Ltd.; bricks (Uxbridge flint lime and Staffordshire blue engineering), Uxbridge Flint Brick Co. Ltd. and Richard Parton (Builders' Merchants) Ltd.; ventilation, Vent Axia Fans, Ltd.; sanitary fittings, J. H. Sankey & Sons Ltd.; ironmongery, Rowson, Drew & Clydesdale Ltd., Nettlefold & Sons Ltd., Yannedis & Co. Ltd.; washing machines, Bendix Home Appliances Ltd.; metal trims, John Thompson Beacon Windows Ltd.; waterproof roofing, The Neuchatel Asphalte Co. Ltd.; Everseal Products Ltd.; basement tanking, Wm. Briggs & Sons Ltd.; masonry slots and anchors, The Abbey Building Supplies Co.; insulating floor pads, Elisol Ltd.; plastic tile flooring, "Accotile" by the National Flooring Co. Ltd.; liquid asphalt paint, R.I.W. Protective Products Co. Ltd.;

rubber based enamel paint, Inertol Co. Ltd.; internal paint, Hadfields (Merton) Ltd.; distemper, The Walpamur Co. Ltd.; relay wireless and television, British Relay Wireless Ltd.; street lighting standards (columns), Poles Ltd.; (light fittings), British Thomson-Houston Ltd. District Heating Contractors: Heat accumulator vessel, Whessoe & Co. Ltd.; insulation of accumulator, William Kenyon & Sons Ltd.; district heating plant, J. Jeffreys & Co. Ltd.; civil engineering works (including pumphouse), Holloway Bros. (London) Ltd.; accumulator outer enclosure, Dawneys Ltd.; glazing, Williams & Williams Ltd.; electrical work, Troughton & Young Ltd.

Announcements

We regret to record the death of Charles Gandy, chairman of the National Smoke Abatement Society. Mr. Gandy, who was a barrister-at-law, practising in Manchester, died suddenly at his home in Bowdon, Cheshire, on November 4, 1950.

A new address was quoted in Messrs. Sealocrete Products' recent advertisement in the JOURNAL. We have been asked to point out that, for the time being, all enquiries should still be addressed to Atlantic Works, Macbeth Street, London, W.6 (tel.: Riverside 2686, 2687 and 7275). The firm's address in the New Year will be Hythe Road, London, N.W.10.

Correction

The name of Hume, Atkins & Co. Ltd. was omitted as sub-contractors for lighting fittings in the Prototype Classrooms, Oxhey, illustrated in the JOURNAL for November 23.

THE NEW CHAMBERS'S ENCYCLOPÆDIA



Completely New! The only post-war encyclopaedia of major status in the English language. A newly written work in its entirety.

"IN range, clearness of conception, weight of authority and liberality of mind this is in every way a historic achievement."

—The Master of Balliol (Sir David Keir) in *The Sunday Times*

YOU will find that the new CHAMBERS'S ENCYCLOPÆDIA is something you have always wanted. You will spend hours of delight just reading its pages wherever your mood takes you, although its greatest value to you will be found in the up-to-date information, unimpeachable in authority and scholarship, immediately available at your elbow.

SEND TODAY FOR A COMPLETE PRE-VIEW

AS a first step to discovering that this outstanding publishing achievement will cost you far less than you have hitherto paid for a major work of this scope, send this coupon for free illustrated brochure NOW.

GEORGE NEWNES LTD (A.J.1), 136-137, Long Acre, London, W.C.2.

Please send me free and without obligation your illustrated brochure containing a complete survey of contents, together with information of your publication offer for sets of the first printing.

Full Name..... (Please give exact title, rank, Mr., Mrs. or Miss)

Profession..... Householder?.....

Address

See the Chambers's brochure before you order any other encyclopaedia.

Co. Ltd.;
Ltd.; dis-
play wire-
Wireless
(columns),
Thomson-
tractors:
e & Co.
William
ing plant,
ing works
ay Bros.
enclosure,
Williams
& Young

ents

of Charles
al Smoke
who was a
Manchester,
Bowdon.

Messrs.
sement in
d to point
enquiries
tic Works,
l.: River-
the firm's
be Hythe

i o n

Co. Ltd.
or lighting
ns, Oxhey,
mber 23.

major
tirety.

-VIEW
at this
nt will
o paid
d this
NOW.

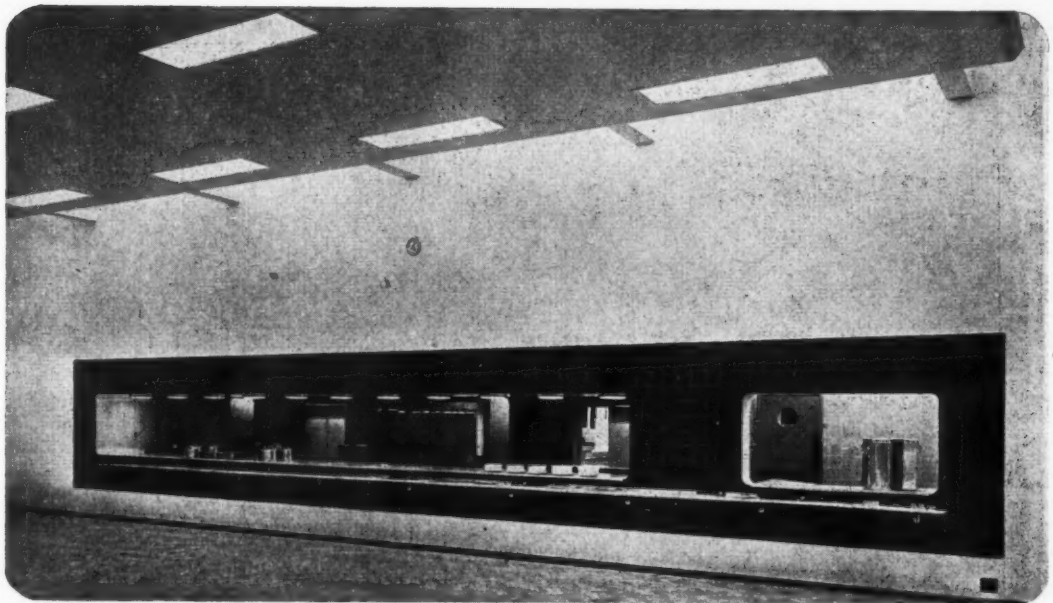
g Acre.

ustrated
together
of the

ny

Petrocarbon—
Carrington—Cheshire

Architects:
SCHERRER & HICKS,
P.F.R.I.B.A., London



Co-operation in Kitchen Design

We carry out installations to meet the designs and requirements of the architect and our technical staff are always at your service.

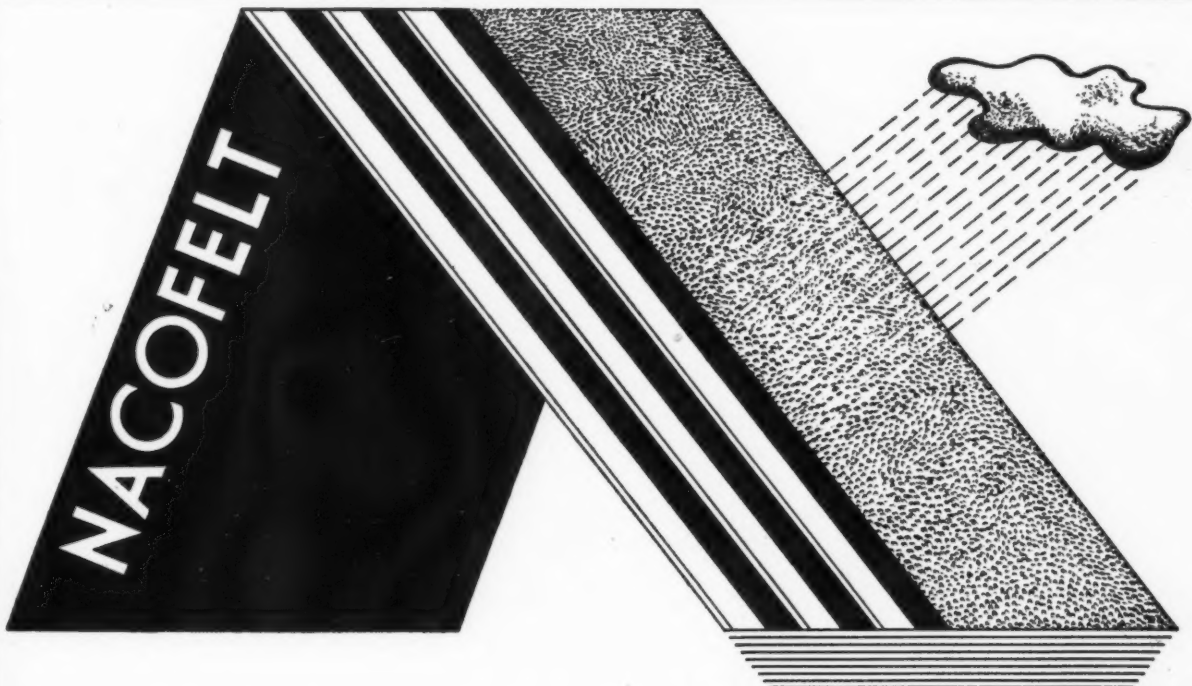


CRITTALL KITCHEN EQUIPMENT CO. (1950) LTD.

Registered Office: PREBEND GARDENS, 195, STAMFORD BROOK ARCHES, HAMMERSMITH, W.6.

Tel.: RIVerside 5081

Showrooms: 22-24, Buckingham Palace Road, London, S.W.1. Tel: VICtoria 7093



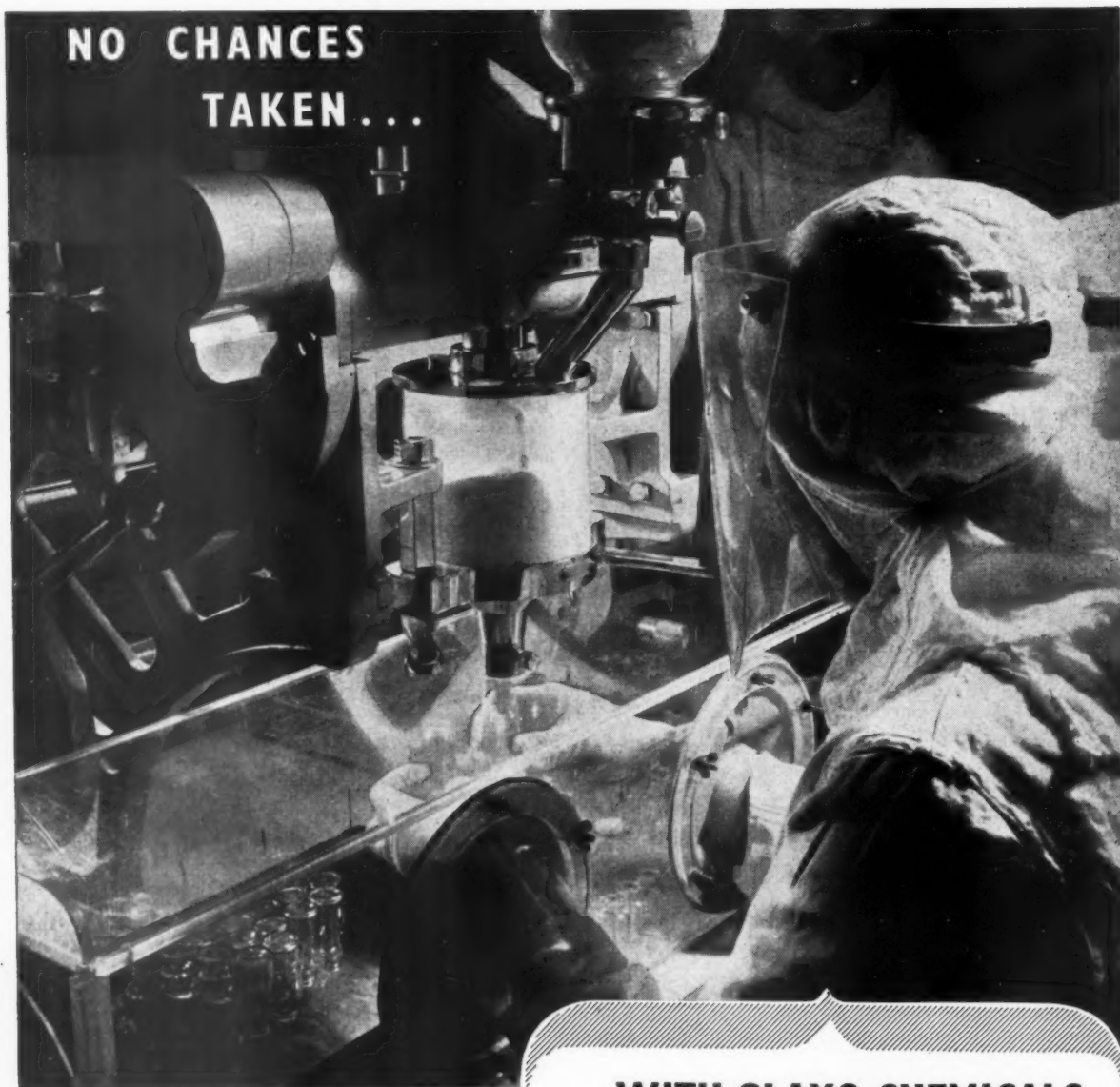
Built-up Roofings by

NEUCHATEL

As supplied to the Pimlico Housing Scheme.
Architects: Powell and Moya. A.A.R.I.B.A.

THE NEUCHATEL ASPHALTE CO. LTD., 58 VICTORIA ST., S.W.1.

Glasgow, Edinburgh, Manchester, Newcastle, Birmingham, Portsmouth, Plymouth, Frome
Ixxvii



Filling vials with Streptomycin Glaxo in the Ampoule Department of Messrs. Glaxo Ltd.'s Ulverston Factory

...WITH GLAXO CHEMICALS

In the preparation of medicinal drugs nothing can be left to chance. Note, in the illustration, the elaborate precautions taken to protect both the product and the operator. But this vigilance must be backed by the complete reliability of every piece of equipment.

Pipes play a large part in the smooth running of the Glaxo factory. Pipes for chemicals and oils; pipes for water and superheated steam and compressed air; pipes for heating and pipes for cooling—pipes to provide essential services "on tap" wherever they are needed. Here again no chances were taken. Z. D. Berry & Sons were called in to install them.



1810-1950—140 Years' Experience

HEATING, VENTILATING & PLUMBING CONTRACTORS

Z. D. BERRY & SONS LTD., 16 REGENCY ST., LONDON, S.W.1

Telephone: VICTORIA 6166

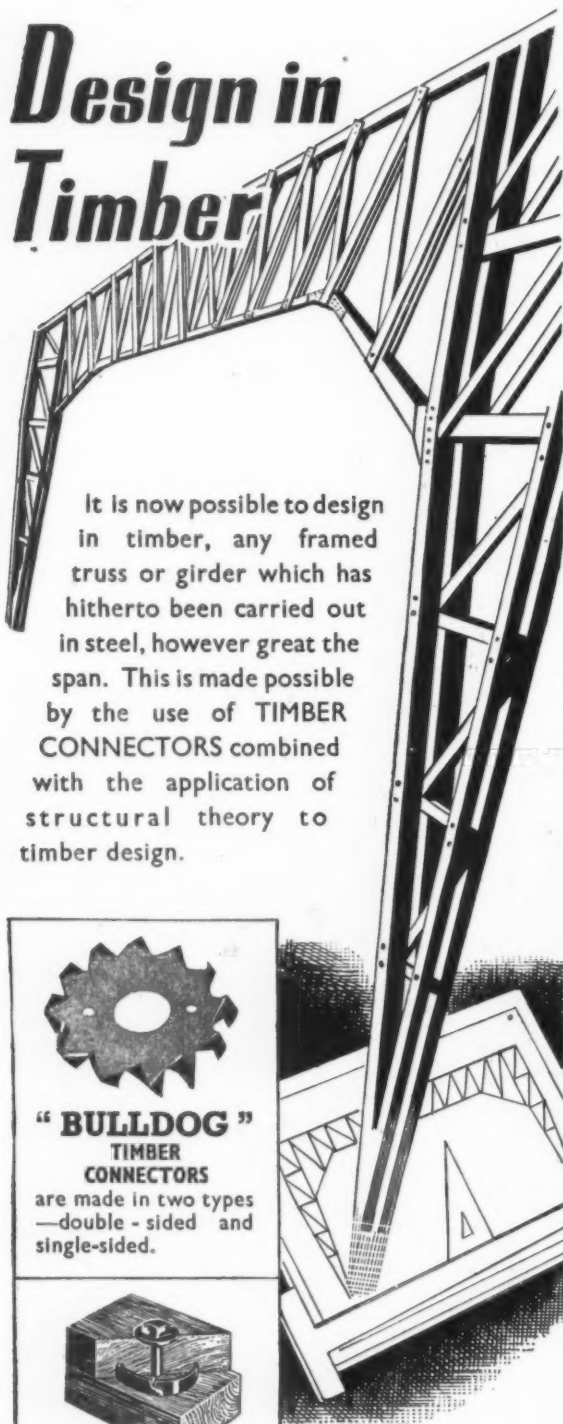
and at WARRINGTON & DONCASTER



Here's wishing our friends, old and new, a high time at Christmas
and hoping that they will all be sitting pretty in the New Year.

M I L L S S C A F F O L D C O . , L T D .

Design in Timber



It is now possible to design in timber, any framed truss or girder which has hitherto been carried out in steel, however great the span. This is made possible by the use of **TIMBER CONNECTORS** combined with the application of structural theory to timber design.



"BULLDOG"
TIMBER
CONNECTORS
are made in two types
—double-sided and
single-sided.



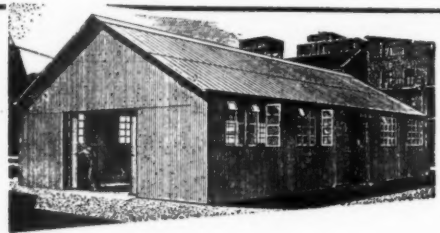
"TECO" Patent
SPLIT-RING TIMBER
CONNECTORS
are double bevelled to
ensure easy insertion,
and give greater load
capacity.

For full particulars write to:
**MACANDREWS
& FORBES LTD**

2 CAXTON STREET
LONDON, S.W.1

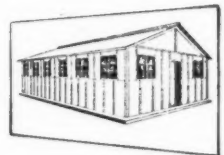
Telephone: Abbey 4451/2/3

THORNS INDUSTRIAL BUILDINGS



SAVE TIME AND MONEY

Have you considered the many ways in which Thorns Buildings can effect economies in building costs and help production to get into full swing at the earliest possible moment? If not, write for our list of buildings, suitable for Factories, Stores, Garages, Offices, Canteens, etc.

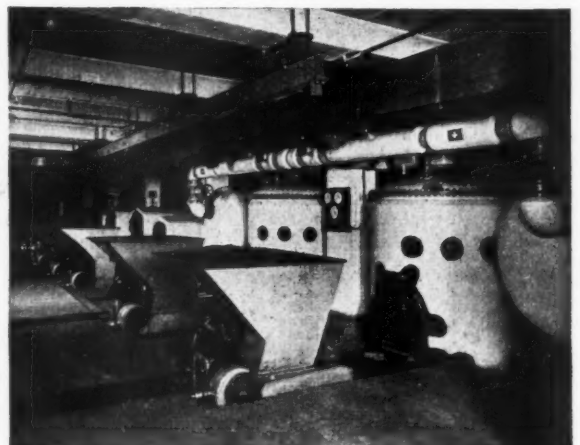


*Enquiries invited for home or export.
Please write, stating your requirements.*

J. THORN & SONS LTD

Box No. 185, BRAMPTON ROAD, BEXLEYHEATH, KENT
Telephone: BEXLEYHEATH 305

BD9800



Heating and Hot Water Supply Boiler Equipment with Automatic Stoking

The above illustration shows one of the many clean and efficient automatic boiler plants serving central heating and hot water supply installations carried out by

CANNONS

Established Contractors since 1853

Heating, Ventilating and Air Conditioning Engineers and
Specialists in Oil, Gas and Automatic Firing.

145/147, NORTH END, CROYDON, SURREY

Tel.: Croydon 4535 & 6749

SINCE 1850 THE ARCHITECTS' BENEVOLENT SOCIETY

has assisted architects and their dependants
in time of need.

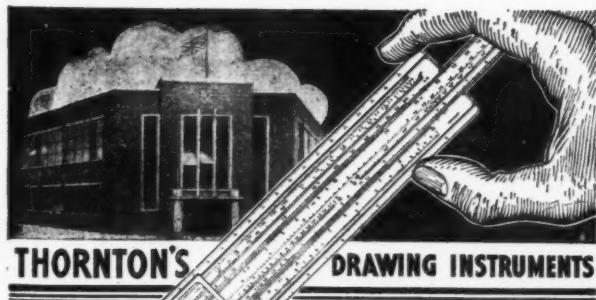
THE PENSION & FAMILY PROVISION SCHEME FOR ARCHITECTS

enables YOU to make provision now for
yourself in retirement and for dependants
in the event of your death.

Details will be sent without obligation
on request and giving your date of birth.

From :—

The Secretary, A.B.S. Insurance Dept.,
66, Portland Place, London, W.1.
(Tel. : WELbeck 5721.)



PIC SLIDE RULES

Ensure maximum efficiency with
minimum of scale length over the
most comprehensive range of calcu-
lations. No other slide rule—British
or Foreign—offers the same or equal
advantages.

Our illustrated Catalogue, which includes particulars of
Drawing Boards, Tee and Set Squares, Scales, Slide Rules,
Drawing Instruments, Curves, Protractors, Drawing
Materials, etc., is sent Post Free on request.

A. G. THORNTON LTD
Drawing Instrument Specialists
WYTHENSHAW, MANCHESTER
Tel: WYThenshawe 2277 (4 lines)

THE ARCHITECTS' JOURNAL for December 7, 1950



Two gallon Foam
non-spill extin-
guisher for petrol
and oil fires.

Two gallon capacity
Soda-Acid, conical
extinguisher for gen-
eral purpose use.

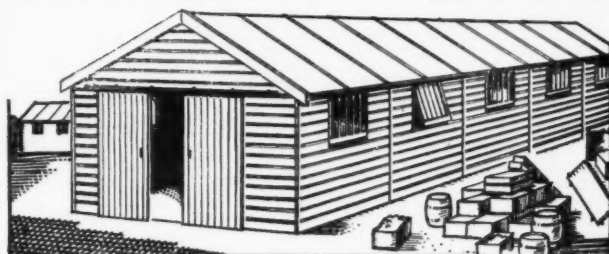
Two gallon water
(Gas expelled) ex-
tinguisher for general
use.

Fire Armour extinguishers are fully approved by the Fire Offices Committee,
and the Ministry of Transport.

Fire Armour
LIMITED

9 GEORGE STREET, BAKER STREET, LONDON W.1.
Telephone No. : WEL 3313
Sole distributors for Coventry Climax Fire Engines D.H.B.

IMPORTANT NOTICE



HALL'S

Larger Timber Buildings are now
available again for Factory extensions,
agricultural and Site Buildings.

In accordance with our usual practice we have not attempted
to re-enter any specialised market unless we could do so pro-
vided with pre-war specifications and materials. Bearing in
mind what Industry requires we have avoided offering buildings
which would mean that we used substitutes for the best
material. And what is the best and traditional material? Of
course, Timber. Timber for economy—Timber for warmth—
Timber for insulation. Timber the kinder material.

STORE SHEDS. WORKSHOP EXTENSIONS. BUILDINGS FOR
SITE CONTRACTORS, AGRICULTURAL BUILDINGS, ETC
A timber licence is not required for these buildings

Let us quote you for your requirements, write.

HALL'S Dep. A.I. **PADDOCK WOOD
TONBRIDGE KENT**

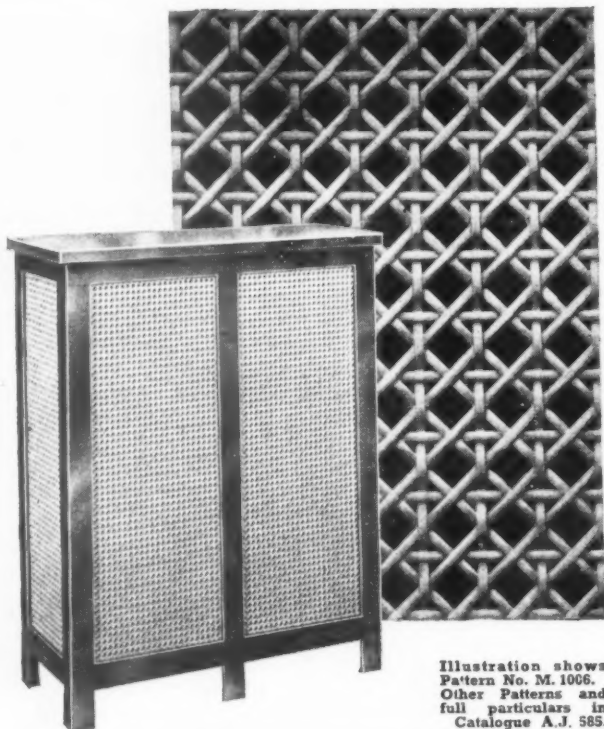


Illustration shows Pattern No. M. 1006. Other Patterns and full particulars in Catalogue A.J. 585.

HARCO PATENT METALACE

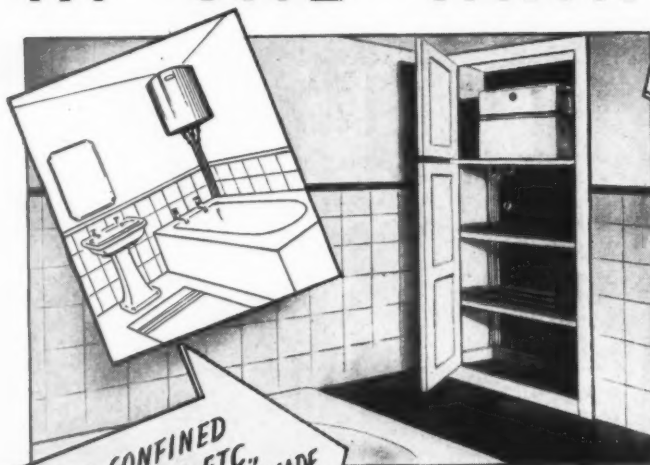
PRODUCED IN ROLLS OF 25' TO 100' LONG BY 2'11" WIDE.

The artistic effect of Harco Patent Metalace renders it particularly suitable for use where care of design and appointment are of major importance. Architects will appreciate that it not only screens the unsightly, but allows free circulation of air. The patterns in which Metalace can be woven, make it the perfect selection for Lift Shaft Enclosures, Ventilating Panels, Radiator Covers, Electric Heater Covers, etc.

Harvey

G. A. Harvey & Co. (London) Ltd. Woolwich Road, London, S.E.7

A COMPLETE HOT WATER SYSTEM IN ONE TANK



SPECIFIED BY
MORE THAN 300
LOCAL AUTHORITIES

IDEAL FOR CONFINED
SPACES CORNERS ETC.,
THE RECESSED TYPE CAN BE MADE
DOWN TO A BACK TO FRONT
MEASUREMENT OF ONLY 12 INCHES

Simplicity for Plumbing, Compactness for limited spaces, Accessibility after fixing, and far greater Heating Efficiency are the characteristics of the Rolyat system which have outmoded the tank and cylinder and convinced heating engineers and local authorities throughout the country of its superiority.

Several types and sizes are available for both Hard and Soft water areas and in various designs and capacities. The manufacturers will be pleased to send complete specifications on request.

ROLYAT PATENT HOT WATER TANKS

THE ROLYAT TANK CO. LTD. CROMWELL ROAD - YORK

Rolyat Tanks are fitted in the Agricultural Cottages, Newton Harcourt.

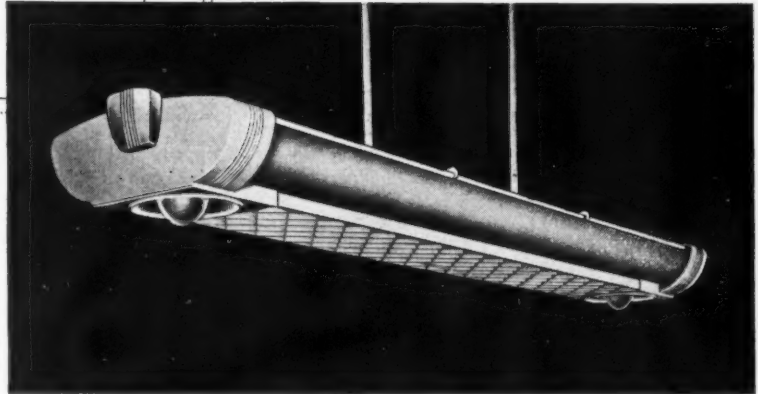
Announcing NEW PHILIPS Instant Self-Start

FLUORESCENT LAMP



WE are pleased to announce a most important new lighting development—an instant self-start fluorescent lamp operating entirely without choke, transformer, capacitor or starter. This new lamp, a Philips development, operates in series with a Philips Coiled-Coil Tungsten Ballast Lamp—itsself an efficient source of light.

- A pleasing blend of fluorescent colour, plus the "punch" of tungsten light.
- Overall luminous efficiency about double that of tungsten lamps.
- Long average life.



Philips "Alva" fitting — open type, "Crinothene" side screens, diffusing louvres. Using 2 MCFB/U. 40W. lamps. and 2 half-silvered tungsten ballast lamps.

For full particulars of the Philips "Instant-Self-Start" Fluorescent Lamp, please write to :—



PHILIPS ELECTRICAL LTD

LIGHT GROUP, CENTURY HOUSE, SHAFTESBURY AVENUE, LONDON, W.C.2

Factories in England and Holland

Makers of :—RADIO & TELEVISION RECEIVERS · LAMPS & LIGHTING EQUIPMENT · "PHILISHAVE" ELECTRIC DRY SHAVERS ETC.

ARBOLITE *advanced* "is the most" METAL CASEMENT PUTTY



Part of Staythorpe Power Station
Reproduced by courtesy of British Electricity
Authority, East Midlands Division.
Architect : T. Cecil Howitt, F.R.I.B.A.
Contractor : Balfour, Beatty & Co., Ltd.
Windows : Henry Hope & Sons, Ltd.
Glazed throughout with Arbolite Metal
Casement Putty

ARBOLITE is supplied in a "ready for use" consistency and consequently requires no pre-mixing on the site.

It works easily, points neatly and remains exactly as finished without shrinking, cracking or wrinkling.

ARBOLITE has excellent keying properties and ensures a tight, tough waterproof joint, adding considerably to the life of metal windows.

FIREPROOF FLOORS

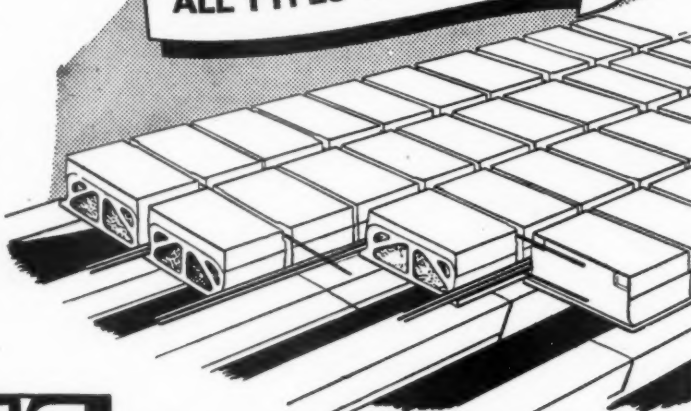
★ THE Smith Two-way reinforced fireproof floor can be employed for any flooring or roofing requirement.

WORK can commence on the site within 3/4 days of receipt of details.

THE employment of Patent telescopic centers permits the immediate use of the floor with the additional advantage of their removal in the minimum of time.

WORKING space for other trades not obstructed by props and timber shuttering.

WITH THE UNIQUE
TELESCOPIC CENTERING IN
ALL TYPES OF BUILDINGS



SMITH'S

FIREPROOF FLOORS LTD
(DEPT A) IMBER COURT, EAST MOLESEY, SURREY
Telephone: EMBERBROOK 3300

2 WAY REINFORCED FIREPROOF FLOORS

Thermal Insulation . .

A SPECIALISED SERVICE FOR THE ARCHITECT AND BUILDER

A RECENT
INSULATION
ORDER

The Hollway organisation specialises in the supply of all types of thermal insulation, and their experience in this direction can be of great value to you in undertakings of such nature.

**20,000 SQUARE YARDS
OF INSULATION . . .**

Constructed on Chisarc Shell "D" principles this large roof was treated with an Insulating layer of Loose Fill Grade VERMICULITE and cement, with a small percentage of Bitumen in the gauging water. Laid to an overall thickness of 2 inches with Roofing felt applied directly on top, it provides high degree insulation, and great fuel saving. Laying cost is economical and is as easy as using normal concrete whilst its weight is approximately half that of Foam Slag Concrete.

Consider VERMICULITE for your insulation problems—the above method of application applies equally to flat roofs. Further information on request.



HOLLWAY

W. F. HOLLWAY & BROTHER LTD.

STRUCTURAL INSULATION AND WALLBOARD SPECIALISTS

42 Grafton Street • Liverpool 8 and Widnes • Phone: ROYal 5315

HOLLWAY'S LATEST INSULATION ORDER

Provision of insulation materials
for

**BEDFORD ROAD
SCHOOL,**

BIRKENHEAD

to provide suspended ceilings
employing 1/2 in. "Celotex" Insulation Board and "Celotex" Patented Aluminium Alloy sections.

NOW AVAILABLE
**'MASONITE'
HARDBOARD**

Standard and Tempered Quality
in 1/2 in. and 3/4 in. thickness

Enquiries to:

DEPT. 'A'

W. F. HOLLWAY & BROTHER LTD
42, GRAFTON ST., LIVERPOOL, 8.

THE WELLS HOUSE

This attractive block of flats has recently been completed for the Borough of Hampstead. The design of in-situ reinforced concrete and the supply of reinforcement thereto were carried out by Twisteel.



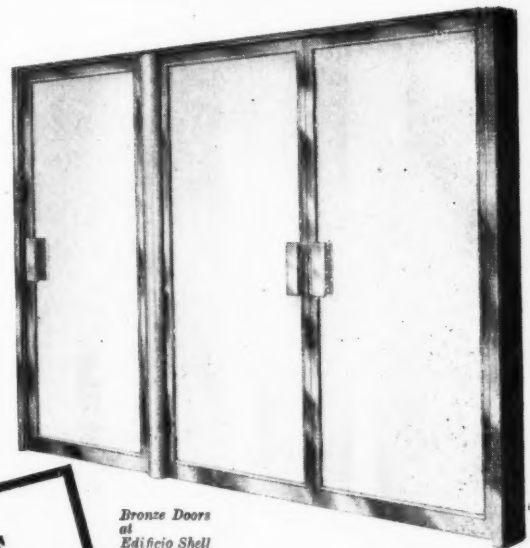
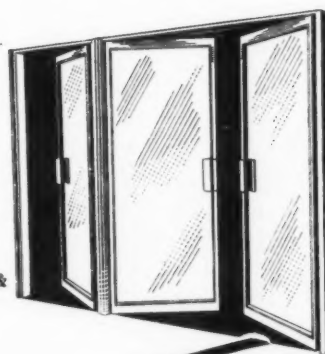
C. H. James, R.A., F.R.I.B.A. Architect

LONDON: 43 UPPER GROSVENOR STREET, W.1. Telephone: GROsvenor 1216
BIRMINGHAM: ALMA STREET, SMETHWICK, 40. Telephone: SMethwick 1991
MANCHESTER: 7 OXFORD ROAD, MANCHESTER 1. Telephone: ARdwick 1691
SCOTLAND: JOHNSTONS & PATON, LTD. 224 INGRAM STREET, GLASGOW C.1. Telephone: City 7661



This is where we came in

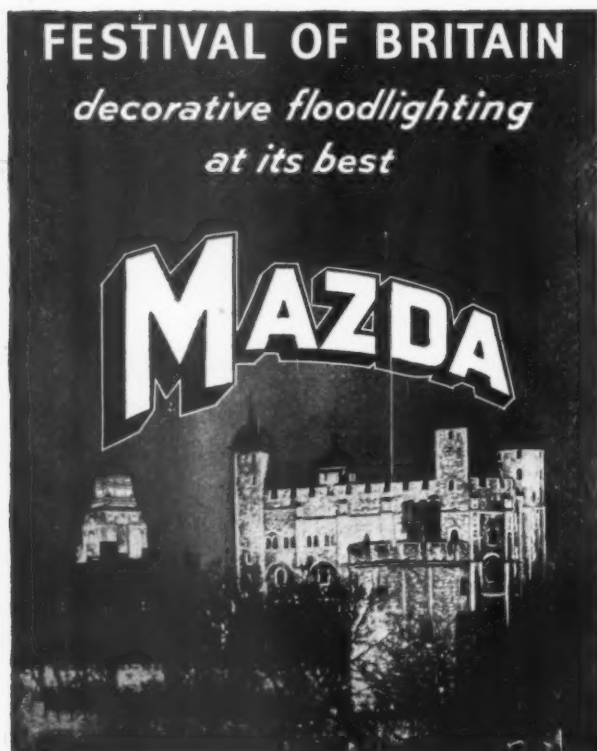
Few Venezuelans will raise their sombreros to McKechnie Metal Technique when they pass through the doors of the Edificio Shell at Caracas. (Makers: Frederick Sage & Co., London. Architect: C. Dale Badgeley, New York.) But the makers of ornamental metal work, the producers of stairtread, scientific instruments, and locomotive parts will doubtless spare a thought for the ubiquitous brass and bronze extrusion —without which so many more machine shops would be on overtime.



Bronze Doors
of
Edificio Shell
Caracas
Venezuela.



McKECHNIE BROTHERS LIMITED.
Metal Works: Rotton Park Street, Birmingham.
16. Branch Offices: London, Leeds, Manchester,
Newcastle-on-Tyne. Copper Sulphate & Litho-
pore Works: Widnes, Lancs. South African
Works: McKechnie Brothers S.A. (Pty) Ltd.
P.O. Box No. 382, Germiston, S.A.



the outshining light

This dramatic picture of the Tower of London illustrates one of many spectacular and colourful effects which have been produced by Mazda floodlighting projectors. All over the country, more and more Government departments, municipalities and other authorities are entrusting to BTH technicians the "Festival of Britain" floodlighting of historic monuments, Town Halls, Civic Centres and other buildings of national and local interest. BTH engineers will be pleased to give their advice and guidance on all forms of floodlighting and display lighting.

Illustrated is Mazda Floodlight Projector "21". Scientifically designed and sturdily constructed to give maximum service with minimum maintenance. Many other Mazda projectors are also available. Ask your local BTH Office for details.



**MAZDA LAMPS
AND LIGHTING EQUIPMENT**



The British Thomson-Houston Co. Ltd., London, W.C.2.
Member of the A.E.I. Group of Companies

M4293



The competitive prices of Prestex Joints can reduce costs wherever light gauge copper piping is used. They are the only joints which have *all* the following features :

- Absolutely reliable yet made in a few seconds.
- No special tools needed—just a spanner.
- Tube need not be cut to dead length.
- Tube is not weakened or damaged and the bore is unrestricted.
- Easily dismantled and remade, with the same parts.
- Normally of forged brass for clean surfaces and greatest strength.
- Made in Europe's largest, most modern self-contained brassfoundry.
- Approved by the Ministry of Works and leading Water Authorities.
- There is a "Prestex" fitting for all domestic uses with BS.659 copper tube. Sizes $\frac{1}{4}$ "—2".

Quick delivery

Available through the usual Merchant houses. Illustrated catalogue gladly supplied.

**Peglers
Limited**

BELMONT WORKS, DONCASTER
London Office: PRESTEX HOUSE, MARSHALSEA ROAD, S.E.1

C.1A

'BROADS TRUCAST' DUCT COVERS

*Specially designed
for use in —*

POWER STATIONS, HOSPITALS
SCHOOLS, KITCHENS
LABORATORIES, BOILER HOUSES, ETC.

'Broads Trucast' Duct Covers are available in widths from 6" to 36", with Cast Iron Sectional Frames for bolting together to form continuous runs, with necessary angles and branches of various sizes. The Cast Iron Covers and Frames have machined seatings and the covers are recessed for filling on site to match the surroundings.

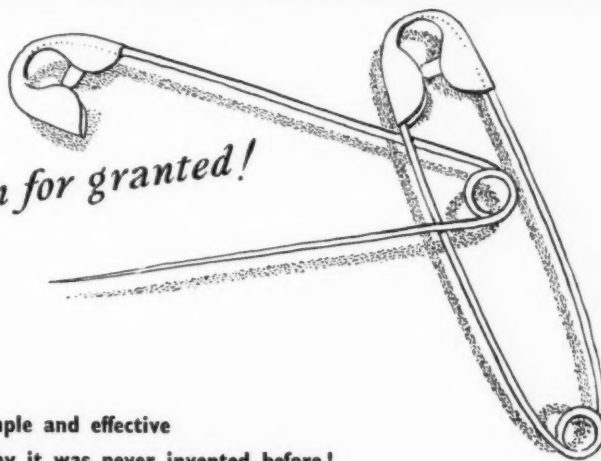


BROADS

★ Technical Staff are available to visit site to check final details and offer expert advice on layouts. Liaison is also maintained with contractors during installation. Full details submitted on application.

MANUFACTURING CO. LTD. 4 SOUTH WHARF, PADDINGTON, LONDON, W.2 Tel.: PAD. 7061 (20 Lines)

safety pins are taken for granted!



The "Hurlinge" is so simple and effective
you'll wonder why it was never invented before!
All hinges look alike — until you see "Hurlinge",
the hinge that needs no rebating and is self-aligning.
For your next contract, insist on —



HURLINGE

the quick fit hinge!

Send for Free Sample Pair

"HURLINGE," the hinge discovery of the century, will be used in the Dome of Discovery at the Festival of Britain.

Hurcal Engineering Company, Ltd., Peninsular House, Sidney Street, Birkenhead.
Tel: Birkenhead 4866-7.



GET that new plant into action quickly—speed up the fixings! Machinery and equipment? Bolt it down same day with Rawlbolts. Screw fixings—wiring, lighting, pipes, switchgear and the rest—fix them fast, firm and permanently with Rawlplugs. Rawlplugs are the world's speediest, vibration-proof fixing devices—in brick, cement, concrete and all types of masonry.

Use Rawlplug Fixing Devices where "speed is the essence of the contract"

RAWLPLUG
FIXING DEVICES

WRITE FOR TECHNICAL LITERATURE

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

B 396



RUST means REPLACEMENTS

THE photograph above shows the heavily pitted surface of a steel plate after 18 months exposure to normal industrial atmospheric conditions. Many thousands of pounds are spent yearly on replacements due to corrosion.

A timely coating of one or other of Wailes Dove's protective Solutions or Enamels is the best way to reduce maintenance costs.

"Bitumastic" No. 50, Super Service Black, "Bituros" Solution & Enamel, "Bitublack" Smoke Stack Solution, "Bituplastic" Waterproofing Compounds etc.

WAILES DOVE

"BITUMASTIC"

ANTI-CORROSIVE
SOLUTIONS & ENAMELS

Send to-day for full particulars.

WAILES DOVE BITUMASTIC LIMITED • HEBBURN • Co. DURHAM.

Branches—LONDON GLASGOW CARDIFF LIVERPOOL BIRMINGHAM LEEDS ETC. • AGENTS THROUGHOUT THE WORLD



A new & handsome

contribution

towards greater

hygiene...

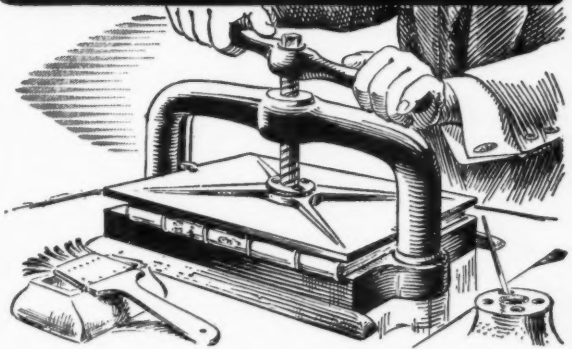
Here is the latest Gas-Fired Incinerator produced by Sugg to take care of disposal problems quickly, safely, and *hygienically*. This new design (Model No. 3706), attractively finished in white enamel, is backed by 20 years' experience in the manufacture of 'personal' incinerators. The action of opening the incinerator door lights the burner. After burning for the pre-set period—between 3 and 120 minutes—the gas is *automatically* turned off, reducing fuel consumption to the minimum. A wall model (No. 3705) of similar design is also available, for use in small or narrow rooms where extra floor space is needed. An ever-increasing number of Hospitals, Nursing Homes, Factories, Business Houses, Stores and Schools are being equipped with Sugg Gas-Fired incinerators.



GAS INCINERATORS

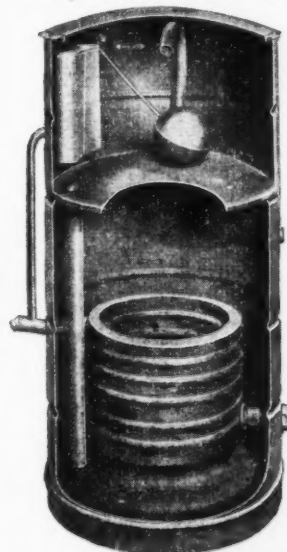
WILLIAM SUGG & COMPANY LIMITED, CHAPTER STREET, WESTMINSTER, S.W.1 • VIC 3219

WOULD YOU BE CONTENT WITH THIS?



You wouldn't tolerate the bother and inefficiency of a copying press—you'd use a typewriter! Why stick to the old-fashioned separate cold water cistern and hot water cylinder?

In the "Fortic" Patent Tank Unit they are effectively combined. Units available for both 'direct' and 'indirect' heating; that illustrated is the Indirect type, with annular heat-exchange unit. This solves all problems associated with hard waters (scale) and soft waters (discoloration) by confining the directly heated water to a primary circuit and using this to heat indirectly the consumable water which is thereby always clean and uncontaminated.



- Labour, materials, time and space needed to install separate cisterns and cylinder are saved.

- Quantity—production to precise dimensions cuts down initial cost.

- By using hard-rolled copper throughout, with all-brazed seams and pure brass bosses (no galvanising), electrolytic corrosion and rusting are abolished.

- Thermal efficiency high—Freezing risk minimised—patent insulating air division between cistern section and hot water section conserves heat.

"Fortic" (REGD)

PATENT TANK UNIT

COMBINING COLD FEED CISTERN & HOT STORAGE CYLINDER
Patent No. 457294

RANGE BOILERS LIMITED

(and subsidiary companies)
STALYBRIDGE CHESHIRE

TELEPHONE STALYBRIDGE 22312 TELEGRAMS CYLINDERS STALYBRIDGE

Glass roofing

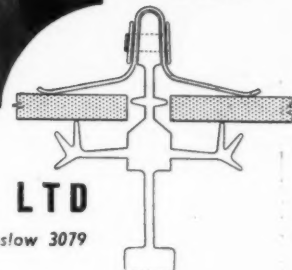
BY SPECIALISTS

For nearly half a century The Standard Patent Glazing Co. Ltd. have designed, made and fixed glass roofing renowned for its durability, strength and maximum natural light.

In your own interests consult "STANDARD" the specialists for every type of trouble-free roof glazing.



"STALUMIN" CRUCIFORM SECTION



MODERN — NEAT — EFFICIENT — DURABLE

THE STANDARD PATENT GLAZING CO. LTD

WORKS: DEWSBURY Phone: 1213-4

LONDON OFFICE Phone: HOUnslow 3079

Branches at BIRMINGHAM and BRISTOL

ESTABLISHED 1875

TRUETT & STEEL

LTD

BUILDING CONTRACTORS

WESTMINSTER

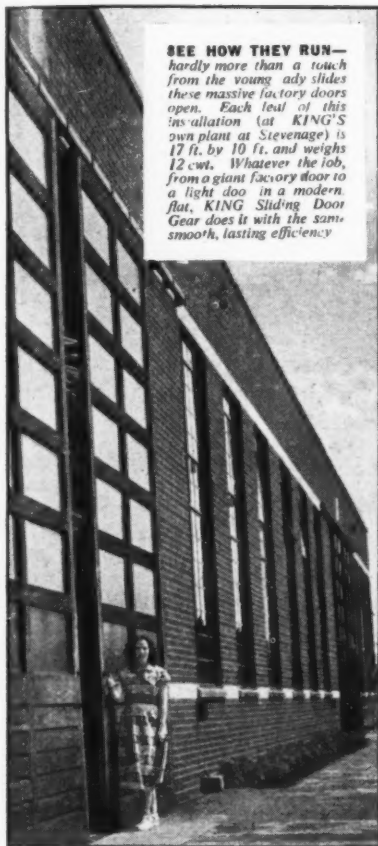
THORNTON HEATH

WHITEHALL 3342 & 4051

THORNTON HEATH 1122/4/5/6

PLAN NEW BUILDINGS FOR EFFICIENCY— Modernise old ones with KING SLIDING DOOR GEAR

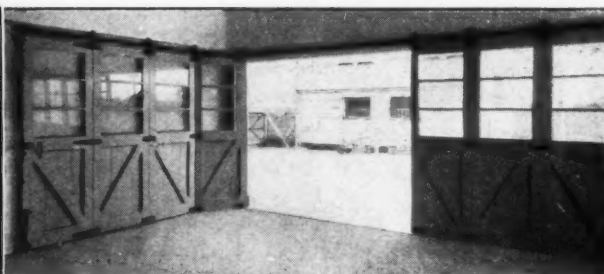
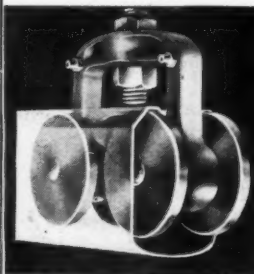
SEE HOW THEY RUN—
hardly more than a touch
from the young lady slides
these massive factory doors
open. Each leaf of this
installation (at KING'S
own plant at Stevenage) is
17 ft. by 10 ft. and weighs
12 cwt. Whatever the job,
from a giant factory door to
a light door in a modern
flat, KING Sliding Door
Gear does it with the same
smooth, lasting efficiency.



The planning of modern factories, schools, hospitals, houses, farm buildings and garages, and the modernising of old buildings increasingly recognise the advantage of well-designed sliding doors.

When you specify sliding door gear, bear in mind the precision engineering that makes KING door gear so easy to operate through

its long, trouble-free life. The "plus" features that give it its silky-smooth action are the product of long experience. They have been proved in thousands of installations large and small. Find out more about the wide range and varied applications of KING door fittings—send for illustrated booklets and the name of your nearest stockist.



THIS 'X-RAY' CLOSE-UP of a Kingway door hanger shows why KING Door Gear does its job with such lasting easy-running action. Note the flat wheel-treads, which spread the load at the wearing surface; the lubrication nipples; the ease of vertical and lateral adjustment. The domed top of KING tubular track and rustproof finish of KING fittings give exceptional life in exposed conditions.

THESE GARAGE DOORS are mounted on KING "Major" Out-of-the-way and Around-the-Corner Gear, sliding to either side of the opening. KING'S wide range covers every requirement.

KING

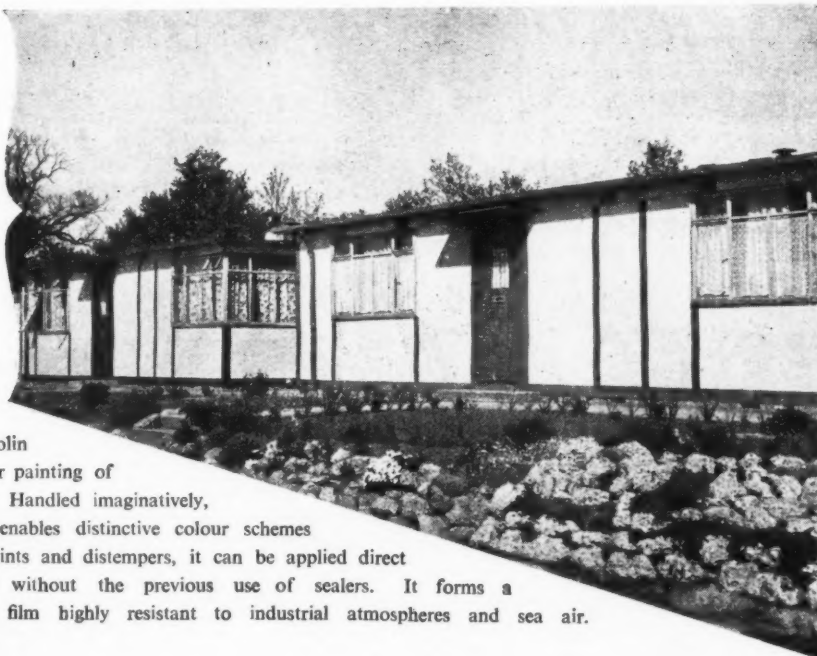
SLIDING DOOR GEAR



Write for Illustrated Booklets to GEO. W. KING LTD., D.G.B. WORKS, HITCHIN, HERTS. TEL: HITCHIN, 960

Painting of Asbestos Cement . . .

The grey monotony of unpainted prefabs has been transformed on this Chingford Council estate where Tretolin was specified for interior and exterior painting of the asbestos cement wall cladding. Handled imaginatively, the wide range of Tretolin shades enables distinctive colour schemes to be evolved. Unlike ordinary paints and distempers, it can be applied direct to new or old asbestos cement without the previous use of sealers. It forms a tough, waterproof and protective film highly resistant to industrial atmospheres and sea air.



TRETOLIN PAINT

TRETOL LTD. 12-14, NORTH END ROAD, LONDON, N.W.11.

Direct Application No Sealers necessary
Acid and Alkali resistant Apply Brush or Spray

Tel: SPEedwell 4621 (5 lines)

Works: SLOUGH, BUCKS

STEELWORK

BY
R. W.

SHARMAN

LTD.

HEAD OFFICE: The Parade,
Sunbury, Middx.

Telephone: Sunbury 3210 and 3464

Telegraphic address: Sharman, Sunbury

(all communications to be addressed to above)

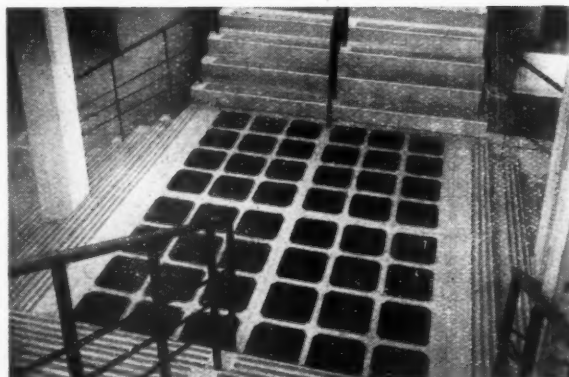
WORKS: Swan Works,
Hanworth, Middx.
(and at Hayes, Middx.)

Telephone: Feltham 3007 and 3990

LONDON OFFICES:
5 Victoria Street,
S.W.1.

Telephone: Abbey 5731-2.

Contractors to Admiralty, Air Ministry, Crown Agent for the
Colonies, L.C.C., Ministry of Supply, Ministry of Works, Ordnance
Survey, War Office, etc.



**Pre-cast
CONCRETE**
Cast Stone
Granolithic
Terrazzo
EBOR

RAPID DELIVERIES OF
FENCING
PAVING
WALLING
BLOCKS
AND PRE-FAB
STRUCTURES
IN MANY SIZES

CONCRETES LTD. URE BANK, RIPON
Telephone: Ripon 202

Specify



"DURABLE REFLECTIVE ROOFING"
is a scientific mastic roofing carrying
a twenty year guarantee and very
moderate in price. May we send you
details?

**FOR "BUILT UP" FELT ROOFING
AND ASPHALTIC**

FLOORING

To B.S.S. 1451/1948

ROOFING

To B.S.S. 1162/1944 & 988/1941

TANKING

To B.S.S. 1418/1947 & 1097/1943

DAMP COURSE WORK

To B.S.S. 1418/1947 & 1097/1943

"KIMBERLEY HOUSE"

14/17 HOLBORN VIADUCT, E.C.1

TELEPHONE CITY 1456/7, 4553, 6271

Southern Depot: Great Testwood, Totton.
Near Southampton

Northern Depot: Gladstone Street.
Huntingdon Road York



*Living space
wanted—
urgently!*

There is no alternative to
pressed steel door frames when
building on a large scale—
urgently.

The Morris Singer Company
will provide full information
and details by return of post.

Standard
PRESSED STEEL DOOR FRAMES

by

THE MORRIS SINGER COMPANY LTD

FERRY LANE WORKS, FOREST ROAD, WALTHAMSTOW, LONDON E.17.
Telephone: LARKSwood 1055

**BRITAIN'S
BEST
BRICKS!**

ACCRINGTON 'NORI' BRICKS

THE ACCRINGTON BRICK & TILE COMPANY
ACCRINGTON. (ACCRINGTON 2684)

- FACINGS
- ENGINEERING
- ACID-RESISTING



HLMPSVX ★

Have you got the fully illustrated catalogue sheets on file, showing the new Fordham range? Nine cisterns to meet every need with descriptive key-letters to make specification simple. Full details and 'Architect's Journal' Information Sheets will gladly be supplied on request.



LS



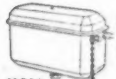
LSX



HS



HV



HSM



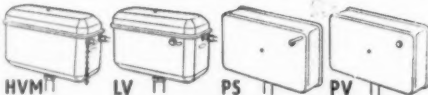
H=High-level
M=Mosquito-proof
S=Syphonic-type
X=Extra-special

L=Low-level
P=Panel-type
V=Valve-type

Fordham

FORDHAM PRESSINGS LTD.
DUDLEY ROAD, WOLVERHAMPTON

Telephone 23861



"I want a floor reasonable in cost, pleasing to the eye, soft to the tread, will wear like steel and will not damage tools which are inadvertently dropped on the floor, is fire and vermin proof."

Such are the qualities of

Liotex

JOINTLESS (MAGNESITE) FLOORING

IS GUARANTEED

**NOT TO CRACK, LIFT
DUST OR FADE**
for a period of
FIVE YEARS

**THE LIOTEX ASBESTOS
FLOORING Co., Ltd.**

**Liotex Works
JARROW ROAD, LONDON, S.E.16**

Telephone: BERmondsey 4341 (3 lines)

**Unistuc
Liquid Stone**

The modern economical treatment for the preservation and decoration of cement, stone, concrete, brick and plaster surfaces.

THE UNITED PAINT CO. LTD
15, St. Helens Place, London, E.C.3

LIVERPOOL

NEWCASTLE-ON-TYNE

CARDIFF, ETC.



DON'T RELY ON CHANCE

For constructional steelwork, heating and ventilating equipment, special machinery, etc., you can rely on the service we offer.

A copy of our booklet describing the work we do will gladly be sent to you on request.

The
BIRMINGHAM & BLACKBURN
CONSTRUCTION CO. LTD

ARMOURY CLOSE, BORDESLEY GREEN, BIRMINGHAM 9
AND AT HARLEY ST., BLACKBURN



Terrazzo

Unequalled for its hard wearing qualities, Johnston Brothers terrazzo is manufactured for internal and external work such as flooring, skirting, urinals, cloakrooms, counter tops for food kitchens and similar establishments.

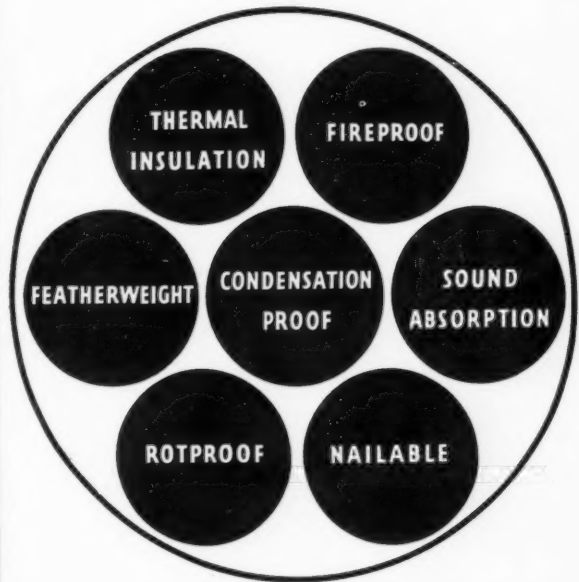
Can be supplied in a blend of marbles to tone with any colour scheme, or in plain colours. A special acid-resisting terrazzo is also available. Stocks held to meet the requirements of Breweries.

Johnston Brothers
(CONTRACTORS) LTD.

DOSELEY QUARRIES, DAWLEY, SALOP.
London Office: Ibex House, Minorities, E.C.3

META MICA
Vermiculite Scientifically Applied

*offers all these
properties
in one material*



META MICA
Vermiculite Scientifically Applied

Spray

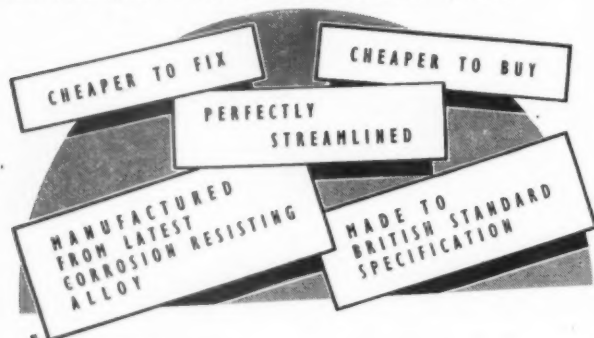
MetaMica Spray prevents condensation completely and also provides a high measure of fire-resistance and sound absorption, with thermal insulation over three times better than normal plaster. Its protection against thermal shock and corrosion is outstanding. It adheres firmly to any properly prepared surface, internal or external, and presents a most pleasant self-decorative finish in white or pastel shades.

The secret is in the mix

MetaMica is applied by our own operatives and nominated Sub-Contractors and our Technical Department is always available for consultations and advice on any particular project.

MetaMica Technical Bulletins containing results of laboratory and field tests are available on request.

MetaMica Ltd., Oxgate Lane, London, N.W.2
Tel. GLAdstone 6554



QUALITY

A much welcomed and fast becoming popular newcomer to the capillary or soldered range of joints. Fixing time has been slashed to the minimum, with the use of Tex joints and Frytex solder paste, the latest and best fixing method yet. Neat, with cunning streamlined proportions.

TEX JOINTS CAN ALSO BE WELDED.

COMPRESSION JOINTS LTD.
TYBURN ROAD, BIRMINGHAM 24



Talk about WARM!

That's our job—warming people. And we do it the best way, with 'all-round' warmth, no draughts, no hot spots and no cold spots—just 'all-round' comfort. It's an economical, safe, automatic system of electric heating adaptable to any industrial or office space heating. It is Thermovent Space Heating—the system that gives more comfort, and so more efficiency, in the factory or office.

THERMOVENT

ELECTRIC SPACE HEATING

Our Technical Advisory Service knows all the answers and is keen to help you—quite without obligation, of course. Write now for full details of Thermovent Space Heating and Technical Advisory Service to E. K. Cole Ltd., 5 Vigo Street, London, W.1, or 'phone Regent 7030

If you intend to specify Sash Windows, avoid future Cord troubles by ordering . . .

"EVERLASTO"

BRITAIN'S SUPER SASH CORD

- ★ Weatherproofed by special process AT NO EXTRA COST
- ★ Non Stretch
- ★ Rot Proof
- ★ Long Life
- ★ Durable
- ★ Low Cost



Sash Cords do not break—they rot. Stop the Rot—fit "EVERLASTO"



Registered Trade Mark No. 519412

Specified by Housing Directors, Architects, and Builders

Weatherproof and Rot Proof
SASH CORD



ENDLESS CORD
STRONG DURABLE
Ask for details and prices

Also Ideal for Colour Poles, Aerial Poles, Inside Clothes Ailer Rails, etc.

Made in all lengths
Write for details

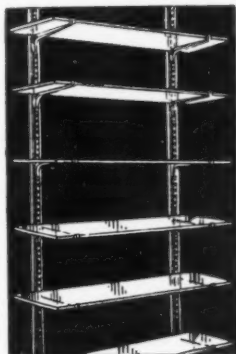
JAMES LEVER & SONS LTD
Everlasto Cordage Works · Delph St. Bolton

Important

Once again
PARQUET FLOORING
of traditional quality
and craftsmanship is
freely at your disposal


HOLLIS BROS LTD.
FLOORING CONTRACTORS
HULL — LONDON
LEICESTER — BIRMINGHAM

	<p>SPECIFY <i>EJMA</i> THE GUARANTEE OF JOINERY EXCELLENCE</p> <p><small>CERTIFICATION TRADE MARK</small></p> <p>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.</p>	
	<p>THE ENGLISH JOINERY MANUFACTURERS' ASSOCIATION (INCORPORATED)</p> <p>SACKVILLE HOUSE, 40 PICCADILLY, W.1. REG. 4448</p>	



**STORAGE SHELVES
adjusted to
requirements—
IN SECONDS !**

Hokon Cantilever Brackets are the perfect space-savers for warehouses, factories, offices, libraries and department stores. Made from light alloy, these sturdy, light-weight brackets are supplied in both commercial and high-grade finishes in sizes 6in., 9in., 12in., 15in. and 18in. The Brackets can be inserted in the supporting columns at various heights in a matter of seconds. They are perfectly safe, hard wearing and look attractive and tidy. Just insert the top anchor hook, depress the bracket and it locks itself! Brackets and support are non-corrosive and will take either wood or glass shelves.



HOKON
CANTILEVER BRACKET

We shall be pleased to discuss your particular requirements.

CHURCH & Co. (FITTINGS) Ltd.
15 The Oracle, Minster Street, Reading

FITZPATRICK'S

Specialists in the construction of

**ROADS, FOOTPATHS
DRAINAGE
FACTORY FLOORING
FOUNDATIONS, etc.**

FITZPATRICK & SON (Contractors) LTD.

455, OLD FORD ROAD, LONDON, E.3.

Contractors to the Government, County and Municipal Authorities.

WOODWORM AND DRY ROT



RENTOKIL TIMBER and DRY ROT FLUID and FLUID

Both fluids conform to the highest specifications. Colourless. Deep penetration by brush treatment. Permanent. Officially approved and recommended. Rentokil Ltd., Dept. A.J., Fetcham, Leatherhead, Surrey. Telephone: Leatherhead 4021/2.



FINEWOOD PRODUCTS Ltd.

Hotel bedroom in Mahogany and Zeburmano.

Designed and made by Fine-wood Products.

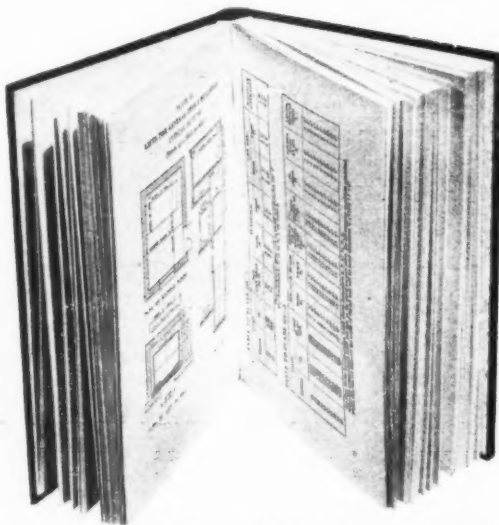
- ★ Contemporary Furniture & Interior Architecture
- ★ Ship Interiors
- ★ Municipal & School Furnishing
- ★ Flat & Hotel Schemes
- ★ Panelling & Fitting Public Houses & Offices
- ★ Government Contractors
- ★

107, BUCKINGHAM AVENUE, TRADING ESTATE, SLOUGH
BUCKS
PHONE 22925

MARRYAT-SCOTT LIFTS

"Lifts" A collation of British Legislation and official recommendations on Lift Design with notes on Lift Planning. This valuable reference is profusely illustrated with plans and photographs.

Available free on request to practising Architects from :—



MARRYAT & SCOTT LTD., The Lift Manufacturers

Wellington Works, Hounslow, Middlesex Telephone : Hounslow 6284 Telegrams : Marryat, London

or from any of the following Branch Offices:

LONDON, 40 Hatton Gdn. • BIRMINGHAM, 41 Water St. LIVERPOOL, 15 Tithebarn St. • BRIGHTON, 34 Chesham Rd.
BRISTOL, 29 Orchard St. CARDIFF, 67 Queen St. • BRADFORD, 154 Harris St. • EXETER, 22 Oakfield Rd.
GLASGOW, Moncur St. • CHELTENHAM, 107 St. Georges Rd. • BELFAST, 6/7 Queen St. • DUBLIN, 7/8 Eden Quay

Flooring . . . for the future

RITZIDE, the new leather plastic flooring, combines durability with a beautiful surface and a warm, quiet tread. It is specially suitable for schools, hotels, private houses, and wherever traffic is heavy and good appearance is important. The surface is dustless, damp-resisting and fireproof, and it will neither crack nor disintegrate.

RITZIDE is available in a number of pleasing colours and designs. Samples and prices sent gladly on request.

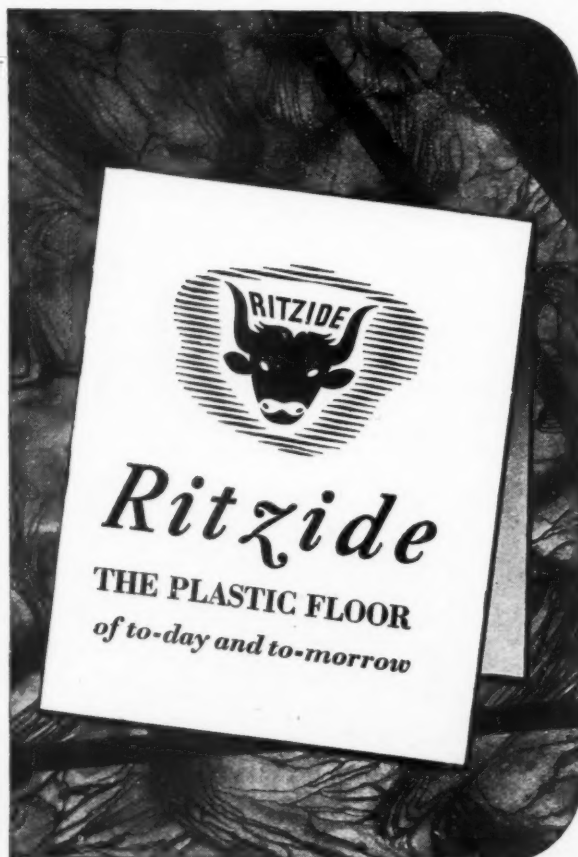
LEATHERFLOR LIMITED

London Office: Wellington Works,
Wellington Road, Forest Gate, E.7.
Maryland 3786.

Scottish Office: Inch Mill, Arbroath,
Angus, Scotland.

'Phone: Arbroath 3271.

N.E. England Depot: 3, Oldgate,
Morpeth, nr. Newcastle-upon-Tyne.



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.

Public and Official Announcements

25s. 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, WREN PARK, WHITELEAF. Tel.: Uplands 0935. 991

NORTH THAMES GAS BOARD.

Applications are invited for the following appointment in the Architects' Section of the Chief Engineer's Department of Westminster: SENIOR ARCHITECTURAL ASSISTANT, minimum starting salary £650 per annum.

Applicants, who must be Registered Architects and should be studying for or have passed the Final Examination of the R.I.B.A., should be capable of preparing working and detailed drawings and specifications, and supervising and controlling the work on contracts. Experience in design and planning of industrial buildings would be an advantage.

The appointment is of a permanent nature, and pension arrangements will be discussed with short list candidates.

Applications, stating age, qualifications, and particulars of previous appointments held, must be submitted to the Staff Controller, North Thames Gas Board, 30, Kensington Church Street, London, W.8, quoting reference 9757. 4341

LONDON COUNTY COUNCIL.

Applications are invited for positions of ARCHITECTURAL ASSISTANT (salaries up to £580 a year) in the Housing and Valuation Department. Commencing salaries 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 assist in 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 envelope required and quote reference A.A.1). Canvassing disqualifies. (816) 4558

BOROUGH OF DOUGLAS.

SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Senior Architectural Assistant, in the Borough Engineer and Surveyor's Office, at an inclusive salary of £595 per annum, rising by two yearly increments of £25 and one of £15 to a maximum of £660 per annum.

Applicants must be Associates of the R.I.B.A. and experienced in the preparation of working drawings, specifications and quantities for public buildings, housing schemes and other Municipal Buildings.

The appointment will be terminable by one month's notice on either side, and will be subject to the provisions of the Council's Superannuation Scheme. Reciprocal arrangements regarding Superannuation as between Great Britain and the Isle of Man will apply.

The successful candidate will be required to pass a medical examination, and to contribute towards the Superannuation Fund.

Applications, endorsed "Architectural Assistant," giving particulars of age, qualifications and experience, together with copies of not more than three recent testimonials, should be addressed to the undersigned not later than 9th December, 1950.

Canvassing, either directly or indirectly, will be deemed to be a disqualification.

PERCY M. SHIMMIN.

Town Clerk.

Town Hall, Douglas.

15th November, 1950.

1311

LIVERPOOL REGIONAL HOSPITAL BOARD.

Applications are invited for the permanent pensionable appointment of ASSISTANT QUANTITY SURVEYOR, in the Regional Architect's Department, on the Headquarters staff of the Board.

Applicants should be Corporate Members of the Royal Institute of Chartered Surveyors, having passed the Final Examination in the Quantities Sub-Division, and should have had considerable experience in "taking-off" and settling Contractors' Final Accounts.

Salary £635, rising by annual increments of £25 to a maximum of £710 per annum, in accordance with A.P.T., Grade VII.

Applications, stating age, education, qualifications, experience, present and previous appointments, salary, war service, together with the names and addresses of three referees, should be sent to the undersigned at No. 19, James Street, Liverpool, 2, not later than 24th December, 1950.

VINCENT COLLINGS.

Secretary to the Board.

1349

COUNTY BOROUGH OF WEST HAM.

Applications are invited for following on permanent establishment Borough Architect and Planning Officer's Department in connection with Reconstruction Programme of the Borough.

Department undergoing considerable expansion with view to early completion of Development Plan, layout of new neighbourhoods and large scale works comprising Housing, Education, and Public Buildings. Work to be done covers widest possible range in badly blitzed area and calls for imagination and enthusiasm.

ARCHITECTURE:

SENIOR ASSISTANT ARCHITECT. A.P.T., Grade VIII (£685×£25—£760).
SENIOR ASSISTANT ARCHITECT. A.P.T., Grade VII (£635×£25—£710).
THREE ASSISTANT ARCHITECTS. A.P.T., Grade VI (£595×£20×£20×£25—£660).
ASSISTANT ARCHITECT. A.P.T., Grade V/VA (£520×£15×£15×£20—£570) (£550×£20—£610).

Applicants should be A.R.I.B.A., having considerable experience in large Housing and Education works and Public Buildings, and in case of Senior Architects should be capable of taking complete charge of Contracts.

PLANNING:

SENIOR ASSISTANT—PLANNING. A.P.T., Grade VIII (£685×£25—£760).
SENIOR ASSISTANT—PLANNING. A.P.T., Grade VII (£635×£25—£710).
TWO ASSISTANTS—PLANNING. A.P.T., Grade VI (£595×£20×£20×£25—£660).

Applicants for the above posts should be A.R.I.B.A. Senior Assistants should also be A.M.T.P.I. and experienced in the planning work entailed in the reconstruction of war damaged and obsolete area; Assistants should hold planning qualification and be experienced in work on Development Plans and detailed layouts for Areas of Comprehensive Development.

GENERAL ASSISTANTS—TECHNICAL (Architecture and Planning). General Division Scale, £135 (age 16), £220 (age 21), £385 (age 32).

Applicants should be probationers of the R.I.B.A. Previous experience in architect's office desirable but not essential. Position regarding Military Service must be stated.

TWO CLERKS OF WORKS. A.P.T., Grade VA (£550×£20—£610).

Applicants should have been responsible for and have had considerable experience in large contracts, including schools and flats.

N.B.—London allowance in addition to salary scales, viz.:

16-20 years, £10 per annum.

21-25 years, £20 per annum.

26 years and over, £30 per annum.

Applications are also invited for the following

TEMPORARY APPOINTMENT—
CLERK OF WORKS. A.P.T., Grade IV/VA (£480×£15—£525), (£520×£15×£15×£20—£570), (£550×£20—£610).

Applicants should have had considerable experience in large contracts, and preferably on the erection of houses and flats. Salary in accordance with experience.

The office is situated within 20 mins. on the Tube from Central London.

Application forms (returnable by 19th December, 1950) may be obtained from the Borough Architect and Planning Officer, Thomas E. North, F.R.I.B.A., 70, West Ham Lane, Stratford, E.15.

G. E. SMITH.

Town Clerk.

West Ham Town Hall, Stratford, E.15. 1314

LONDON COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

TOWN PLANNING STAFF.

Applications are invited for positions of TECHNICAL ASSISTANT (scales: (a) £440-£580; (b) 55s.-16s. 6d.) in the Planning Division of the Architect's Department. Candidates should be trained draughtsmen experienced in lettering and in the preparation and colouring of plans. Application forms from the Architect (AR/EP). The County Hall, Westminster Bridge, S.E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualifies. (1193) 864

CITY AND ROYAL BURGH OF EDINBURGH.

TOWN PLANNING DEPARTMENT.

Applications are invited for the following appointments:—

AREA PLANNING OFFICERS. Salary £900 per annum.

Qualifications and experience of candidates should be as below:—

Appointment: Corporate Membership of the Town Planning Institute is essential, together with an additional qualification in Architecture. The successful candidate will be responsible for examining planning applications under the Act and advising the Town Planning Officer. His responsibilities will also include the preparation of detailed layout plans, street elevations, and contributing advice upon architectural developments from time to time in connection with these duties.

Two houses are available towards meeting the requirements of successful candidates. The right of allocation is reserved to the Corporation.

Applications, stating age, present and previous appointments and present salary, qualifications and experience, should be forwarded to the Town Planning Officer, City Chambers, Edinburgh, 1, within 14 days from the appearance of this advertisement.

J. STORRAR.

Town Clerk.

27th November, 1950.

1369

COUNTY COUNCIL OF ESSEX.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the Established Staff of the County Architect's Department in the School Buildings Section:—

(a) SENIOR ASSISTANT ARCHITECTS. Grade IX, A.P.T.D., to be in charge of groups of other Assistant Architects, and one post for an ARCHITECT with experience in architectural administration, reports, inspections, and to assist in technical matters. Salaries at rates of not exceeding £900 a year.

(b) SENIOR ASSISTANT ARCHITECTS. Grade VIII, A.P.T.D. Salaries at rates of not exceeding £760 a year.

Candidates for all appointments should be Members of the Royal Institute of British Architects. Work projected includes Primary and Secondary Schools, Colleges, and any other buildings required for education purposes. In fixing the commencing salary in each case regard will be had to the experience and qualifications of the successful candidate.

Applications must be made on a form obtainable from the County Architect, Mr. H. Conolly, F.R.I.B.A., at the address stated below (please state post for which form is required), and when completed the form, accompanied by copies of not more than three recent testimonials, should be returned to reach him not later than 20th December, 1950.

Canvassing, either directly or indirectly, is forbidden.

JOHN E. LIGHTBURN.

Clerk of the County Council.

County Hall, Chelmsford, Essex.

24th November, 1950.

1358

BOROUGH OF ST. MARYLEBONE.

ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointments of (a) SENIOR ARCHITECTURAL ASSISTANT, and (b) ARCHITECTURAL ASSISTANT, on the permanent staff of the Housing Department.

Applicants for appointment (a) should be Registered Architects, with good experience in Municipal housing, and for appointment (b) should have passed the R.I.B.A. Intermediate or Final Examination. Salary for appointment (a) is in accordance with Grade A.P.T., VA (£550-£610 per annum), and for appointment (b) will be between A.P.T., II (£420-£465 per annum) and A.P.T., V (£520-£570 per annum), according to the qualifications and experience of the successful candidate, as laid down in the National Scheme of Conditions of Service.

London weighting will also be paid in both cases. The appointments, terminable by one month's notice on either side, will be subject to satisfactory medical examination by the Council's Medical Officer; to proof of age by production of birth certificate; to the National Scheme of Conditions of Service as adopted by the Council; and to compliance with the provisions of the St. Marylebone Borough Council (Superannuation) Acts, 1908-1936, and any modifications thereof.

Forms of application are not issued, but candidates must write stating age, qualifications, present position and salary, particulars of past appointments and all other essential information, and giving the names of three referees. Applications must be received by the Town Clerk, Town Hall, St. Marylebone, W.1, not later than 16th December, 1950.

Canvassing will disqualify.

November, 1950. 1378

WREXHAM RURAL DISTRICT COUNCIL.

APPOINTMENT OF (a) ARCHITECTURAL ASSISTANT, (b) QUANTITY SURVEYING ASSISTANT.

Applications are invited for the following appointments in the Engineer and Surveyor's Department of the Council, namely:—

(a) Architectural Assistant, at a salary in accordance with Grade VII of the A.P.T. Division (£635×£25 to £710). Applicants must be Associates of the Royal Institute of British Architects, or Registered Architects, and must be competent to undertake housing and general architectural work.

(b) Quantity Surveying Assistant, at a salary in accordance with Grade VII of the A.P.T. Division (£635×£25 to £710). Applicants must be Associates of the Royal Institute of Chartered Surveyors (Quantities Division), and have had experience in the preparation of Bills of Quantities for housing and road works and the measuring of works in progress and on completion.

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

Applications, stating age, qualifications, experience, present appointment and salary, together with copies of two recent testimonials, must be delivered to the undersigned not later than Monday, 18th December, 1950, in envelopes suitably endorsed.

Canvassing, either directly or indirectly, will be a disqualification, and relationship to any member or senior officer of the Council must be disclosed.

TREVOR L. WILLIAMS.

Clerk and Solicitor.

Imperial Buildings, Regent Street, Wrexham.

28th November, 1950.

1377

NEW ZEALAND.
SURVEYORS AND SURVEYOR'S ASSISTANTS
FOR LANDS AND SURVEY DEPARTMENT.

(1) **SURVEYORS.**
Applications are invited from Surveyors who are Professional Associates of the R.I.C.S. (Land Survey) for appointment as Surveyors, Professional Division, Land and Survey Department, New Zealand.

Salary on appointment up to £760 (N.Z.) per annum, dependent on previous experience.

Appointees will be engaged on triangulation, precise level, topographic mapping and development surveys. Employment on Land Title Surveys in New Zealand will depend on experience in New Zealand on Land Title Surveys and registration by the New Zealand Survey Board. Appointees may be given the opportunity to complete examination for registration in New Zealand.

(2) **SURVEY ASSISTANTS.**
Applications are also invited for appointment as Survey Assistants, Lands and Survey Department, New Zealand. Salary on appointment up to £665 (N.Z.) per annum, dependent on previous experience.

Applicants must have had a reasonable training in surveying, and it would be an advantage if a pass had been obtained in the Intermediate Examination (Land Survey) of the R.I.C.S.

Appointees who are probationer members of the R.I.C.S. may be given the opportunity to complete the examination for registration in New Zealand.

All of these salaries carry an additional interim wage increase of £18 5s. (N.Z.) per annum.

Full details of conditions of contract, transportation and accommodation allowances, also application forms, are available on request from:

THE HIGH COMMISSIONER FOR NEW ZEALAND,

415, Strand, London, W.C.2,
with whom completed applications, in duplicate, should be lodged not later than 10th December, 1950. Consideration will, however, be given to late applications received before the 10th January, 1951.

CITY OF WESTMINSTER.

HOUSING DEPARTMENT.
JUNIOR ARCHITECTURAL ASSISTANT
(PERMANENT).

Applications are invited for the above appointment from candidates who intend to make architecture a career.

They should have received a good general education, to School Certificate or Matriculation standard, and have undergone or be prepared to undergo training in Architecture and Building Construction.

Salary in accordance with General Division (£145 at age 16 to £415 at age 32) if unqualified, rising to A.P.T. Grades I, II and III (maximum £525) on satisfactory service, and passing the R.I.B.A. Intermediate Examination or its equivalent at one of the recognised Schools of Architecture.

Applications, marked "Housing Department—Architectural Assistant," stating full name and age with other particulars, and whether related to any member or chief officer of the Council, with a copy of a recent testimonial, must be received by 9 a.m. on Monday, 18th December, 1950.

PARKER MORRIS,

Town Clerk.

Westminster City Hall,
Charing Cross Road, W.C.2.
25th November, 1950.

1372

NORTH-WEST METROPOLITAN REGIONAL
HOSPITAL BOARD.

Applications are invited for the following appointments in the Architect's Department. This Department is responsible for the preparation and supervision of schemes for building all types of Hospitals, including staff housing schemes, and for the extensions and adaptations to existing hospitals and other premises in the Region, which covers the whole of Bedfordshire and large areas of Hertfordshire, Middlesex, London, Berkshire and Buckinghamshire.

ASSISTANT ARCHITECTS, Grade A.P.T., VI,

£595 to £660 per annum. Three vacancies.
Applicants should be Members of the R.I.B.A. or about to take their Final Examinations. Good general experience in design and construction is essential. A knowledge of hospital work is desirable.

JUNIOR ARCHITECTURAL ASSISTANT,

Grade A.P.T., V, £520 to £570 per annum. One vacancy.

Applicants should have passed the Intermediate Examination of the R.I.B.A. Good general experience in design and construction and a knowledge of Hospital work is desirable.
London weighting, £20 at age 21 and £30 at age 26, is payable in addition to the above salaries, which will commence at the minimum of the Grades.

Appointments, which are subject to medical examination, and to the National Health Service (Superannuation) Regulations, 1950, will be terminable by one month's notice.

Applications, stating age and details of experience, together with names of two professional referees, should be addressed to the Secretary, North-West Metropolitan Regional Hospital Board, 11a, Portland Place, London, W.1, not later than 22nd December, 1950.

1382

COUNTY BOROUGH OF BIRKENHEAD.
APPOINTMENT OF ARCHITECTURAL STAFF.

Applications are invited for the positions of **ASSISTANT ARCHITECTS, Grade A.P.T., VIII,** salary £685-£760 per annum, and **Grade A.P.T., VI,** salary £595-£660 per annum; and **QUANTITY SURVEYORS, Grade A.P.T., IV,** salary £480-£525 per annum.

Applicants for the positions of Assistant Architects should be Registered Architects and/or Members of the R.I.B.A., and have a sound knowledge of architectural design and construction and be capable of preparing complete sets of drawings, details, etc.
The appointments will be terminable in each case by one month's notice on either side; are subject to the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass medical examinations. They will not be allowed to engage in private practice.

Forms of application may be obtained from the undersigned.

Applications, in envelopes endorsed "Assistant Architects" and "Quantity Surveyors" respectively, stating age, experience and qualifications, and accompanied by copies of three recent testimonials, must reach the undersigned by not later than 10 a.m. on Thursday, the 21st December, 1950.

Canvassing, directly or indirectly, will disqualify, and applicants must disclose to the undersigned in writing if they are related to any member or senior officer of the Council.

DONALD P. HEATH,

Town Clerk.

Town Hall, Birkenhead.
1st December, 1950.

1348

METROPOLITAN BOROUGH OF POPLAR.
APPOINTMENT OF CHIEF ARCHITECTURAL
ASSISTANT (GRADE A.P.T., VII).

Applications are invited from suitably qualified persons for the permanent appointment of **CHIEF ARCHITECTURAL ASSISTANT** in the Architect's Section of the Borough Engineer and Surveyor's Department. The salary payable will be in accordance with Grade A.P.T., VII, of the National Salary Scales, i.e., £635-£710 per annum, plus London weighting.

Applicants should have had experience of housing and multi-storey flats, and have a good knowledge of building construction and specification writing, and must be able to supervise a team of assistants.

Several schemes, including interesting constructional and detailing problems, are in hand or under construction, and the applicant appointed will be engaged on these projects.
Preference will be given to applicants who are Associate Members of the Royal Institute of British Architects.

Full details of the appointment and forms on which application must be made, may be obtained from the Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3, to whom completed applications must be delivered not later than first post on Monday, 1st January, 1951.

Poplar Town Hall, Bow Road, E.3.
24th November, 1950.

1346

ROAD HAULAGE EXECUTIVE.

The Road Haulage Executive invite applications for positions as **DRAUGHTSMEN** in their South-Eastern Divisional Office, with headquarters in London. Applicants must be able to carry out land and building surveys. One vacancy will be for a Draughtsman who must have reached at least the Intermediate Examination Standard of the Royal Institute of Chartered Surveyors or the Royal Institute of British Architects. Applications in duplicate should state date of birth, qualifications, previous experience, present post and salary. Candidates selected for appointment will, where eligible, be expected to join a contributory superannuation scheme, and in this respect to comply with whatever provisions are decided upon later for the staff of the Executive as a whole.

Applications should be addressed to:

THE DIVISIONAL MANAGER (S.V.),

South-Eastern Division,
Road Haulage Executive,
238, City Road, E.C.1,

and should be forwarded not later than 14 days after the appearance of this advertisement.

Salaries will depend on age, qualifications and experience, but the commencing figure will not be less than £365 p.a.

1375

SALOP COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments to Established posts in the Department:—

(1) **ASSISTANT ARCHITECT, A.P.T., Grades**

II-III (£420 to £495 per annum).

(2) **JUNIOR ASSISTANT ARCHITECT,**

A.P.T., Grades I-II (£390 to £465 per annum).

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

Application forms may be obtained from the County Architect, A. G. Chant, F.R.I.B.A., Column House, London Road, Shrewsbury, to whom they must be returned, accompanied by copies of not more than three recent testimonials, not later than Saturday, 30th December, 1950.

G. C. GODBER,

Clerk of the Council.

Shrewsbury.
November, 1950.

1373

XC

IMPERIAL WAR GRAVES COMMISSION.

Applications are invited from suitably qualified candidates for the post of **SUPERINTENDENT OF WORKS, Tunisia Area**, in the Western Mediterranean District.

All candidates should be under 50 years of age, have had experience in carrying out constructional work abroad, and have some knowledge of the country. A knowledge of French is desirable. Salary scale £500×£20—£625 per annum, plus Foreign Service Allowance, at present at the rate of about £350 per annum for a married man accompanied by his wife, £275 per annum for a married man unaccompanied by his wife, or £175 per annum for a single man.

Applications to be addressed to **Appointments Officer, Imperial War Graves Commission, Woodburn House, Woodburn Green, Bucks. 1360**

CITY AND ROYAL BURGH OF EDINBURGH.
TOWN PLANNING DEPARTMENT
ESTABLISHMENT.

Applications are invited for the following appointments:—

PLANNING OFFICERS. Salary £900 per annum.

Qualifications and experience of candidates should be as below:—

Appointment: Corporate Membership of the Town Planning Institute is essential, together with an additional qualification in Architecture. The successful candidates will be responsible for detailed work on the Development Plan, the preparation of detailed layout plans, street elevations, and contributing advice upon architectural developments from time to time in connection with these duties.

Two houses are available towards meeting the requirements of successful candidates. The right of allocation is reserved to the Corporation.

Applications, stating age, present and previous appointments and present salary, qualifications and experience, should be forwarded to the Town Planning Officer, City Chambers, Edinburgh, 1, within 14 days from the appearance of this advertisement.

J. STORRAN,

Town Clerk.

27th November, 1950.

1370

NOTTINGHAMSHIRE COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.

Applications are invited for the following appointments, namely:—

SURVEY AND RESEARCH SECTION:
SENIOR PLANNING ASSISTANT. Salary £595-£660 p.a.

Applicants should have had considerable experience in the preparation of a County Development Plan and hold the qualification of Corporate Member of the Royal Institute of British Architects. An additional qualification of Corporate Member of the Town Planning Institute will be an advantage.

DEVELOPMENT AND CONTROL SECTION:
SENIOR PLANNING ASSISTANT. Salary £590-£660 p.a.

Applicants should have had considerable experience in the control of Development and the general administrative work connected with a Planning Office; and hold the qualification of Corporate Member of the Town Planning Institute. An additional qualification in engineering, surveying or architecture would be an advantage.

PLANNING ASSISTANT. Salary £520-£570 p.a.
Applicants should preferably have had experience in Building and Land Development and the general administrative work of a Planning Office, but Local Government experience is not essential.

The qualification of Corporate Member of the Town Planning Institute will be an advantage, but applicants who possess other suitable qualifications will be considered.

Further particulars are obtainable from the County Director of Planning, Shire Hall, Nottingham, by whom completed applications must be received by Monday, 18th December, 1950. Canvassing will disqualify.

K. TWEEDALE MEABY,

Clerk of the County Council.

1385

ADMINISTRATIVE COUNTIES OF EAST AND

WEST SUFFOLK.

COUNTY PLANNING DEPARTMENT.

Applications are invited for the appointment of **CHIEF PLANNING ASSISTANT** in the County Planning Department.

The salary will be within Grade VIII (£685-£760 per annum) of the National Joint Council's Scales, with scale allowance for use of motor car, and will be determinable by one month's notice on either side.

Candidates must have passed the Associate Membership Examination of the Town Planning Institute or equivalent examination, and preference will be given to those possessing a degree or diploma in architecture.

The successful applicant will be attached to the Development Plan Section in charge of the drawing office, and considerable experience in the preparation of development plans and the detailed planning of residential and industrial areas is essential.

Applications, stating age, qualifications, experience, present and past appointments, present salary, and giving names and addresses of two referees, to be delivered to the County Planning Officer, County Hall, Ipswich, not later than Saturday morning, the 23rd December, 1950.

Canvassing, directly or indirectly, will disqualify.

G. C. LIGHTFOOT,

Clerk of the East Suffolk County Council.

County Hall, Ipswich.
29th November, 1950.

1394

**COUNTY BOROUGH OF BOURNEMOUTH.
BOROUGH ARCHITECTS' DEPARTMENT.**

Applications are invited for the following appointment:—

ASSISTANT ARCHITECT. Unestablished post. Salary Grade A.P.T. VI, £595-£660 per annum. Required for reconstruction works on beach buildings.

Applicants must be Members of the R.I.B.A. The successful candidate will be appointed at his present salary if such salary is within the incremental scale of the advertised post.

The above appointment will be terminable by one month's notice in writing on either side and subject to the provisions of the Local Government Superannuation Act, 1937, also to the conditions of service in accordance with the National Scheme.

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

No assistance can be offered regarding housing accommodation.

Applications, on forms to be obtained from the Borough Architect, Town Hall, Bournemouth, accompanied by copies of three recent testimonials to be returned to the undersigned in envelopes endorsed "Staff Architectural," not later than 9 a.m. Saturday, 16th December, 1950.

A. LINDSAY CLEGG,
Town Clerk. 1362

CITY OF PORTSMOUTH.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) **ASSISTANT ARCHITECTS.** Grade VI (£555-£660), and Grade V (£520-£570).

Applicants should be Associates R.I.B.A. (b) **ARCHITECTURAL ASSISTANT.** Grade IV (£480-£525).

Applicants should be of Intermediate R.I.B.A. standard with adequate office experience.

(c) **ASSISTANT QUANTITY SURVEYORS.** Grade VI (£595-£660).

Candidates should be Professional Associates of the Chartered Surveyors' Institution, qualified in the Quantities Sub-Division, with experience in taking-off, abstracting, billing, estimating, site measurement, preparation of interim certificates, and final accounts.

(d) **ASSISTANT QUANTITY SURVEYORS.** Grade V (£520-£570).

Candidates should be experienced in taking-off, abstracting, billing, estimating, site measurement, preparation of interim certificates, and final accounts.

A special subsistence allowance may be paid to a married applicant for a period of six months after taking up the appointment if he is unable to secure housing accommodation immediately.

Applications, setting out in tabular form, name, age, qualifications, present post and salary, previous posts with dates, details of experience, with names of three referees, must be delivered to the undersigned not later than 10 a.m. on Monday, 1st January, 1951.

Canvassing will disqualify.

V. BLANCHARD,
Town Clerk. 1386

City Council Chambers,
1, Clarence Parade, Portsmouth.
23rd November, 1950.

**ARCHITECTURAL DEPARTMENT, HASTINGS
SCHOOL OF ART.**

Wanted, as soon as possible, a qualified part-time INSTRUCTOR, to teach Construction and Structural Mechanics in the above department, which is, at present, housed in temporary premises at Memorial Chambers, 7, Cambridge Road, Hastings.

Applications by letter (no forms), including information as to age, qualifications and required payment per hour, stating the number of hours per week the applicant would be able to give to the work of the School, should reach the undersigned within 14 days of publication.

W. NORMAN KING, M.Sc.,
Chief Education Officer.

Education Office, 12, Wellington Square,
Hastings. 1345

ROYAL BOROUGH OF KINGSTON-UPON-THAMES.

**BOROUGH SURVEYOR'S DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

Applications are invited for the appointment of an Architectural Assistant, at a salary in accordance with Grade III of the A.P.T. Division of the National Scale of Salaries, £450, rising by annual increments of £15 to £495, plus London weighting. Applicants should have passed the R.I.B.A. Intermediate Examination or its equivalent at one of the recognised Schools of Architecture.

The appointment is a permanent one and 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. The appointment is subject to one month's notice on either side.

Applications, stating age, qualifications and experience, and accompanied by the names and addresses of not more than three persons to whom reference can be made, must be sent in a sealed envelope endorsed "Architectural Assistant" so as to reach the undersigned not later than noon, 18th December, 1950.

A. W. FORSDIKE,
Town Clerk.

Guildhall, Kingston-upon-Thames.
November, 1950. 1384

**BARNET URBAN DISTRICT COUNCIL.
ARCHITECTURAL ASSISTANTS.**

Applications are invited for the undermentioned posts in the Engineer and Surveyor's Department:—

(1) A SENIOR ARCHITECTURAL ASSISTANT (Housing). A.P.T., Grade VII. Candidates should have the A.R.I.B.A. or equivalent qualification.

(2) AN ARCHITECTURAL ASSISTANT (Housing). A.P.T., Grade IV.

If necessary, housing accommodation will be offered.

The appointments will be subject to: (a) the provisions of the Local Government Superannuation Act, 1937; (b) the National Scheme of Conditions of Service; (c) satisfactory passing of a medical examination.

Applications, stating age, qualifications and experience, together with the names and addresses of two referees, should be addressed to the undersigned, in envelopes endorsed "Architectural Assistant, Grade" to be received not later than Saturday, 16th December, 1950.

Candidates must, when making application, disclose in writing whether they are related to any member or senior officer of the Council, and canvassing, directly or indirectly, will disqualify.

ALFRED S. MAYS,
Clerk of the Council.

Old Court House, Wood Street, Barnet, Herts. 1336

CITY OF SALFORD.

Applications are invited for the appointment of TWO ARCHITECTURAL ASSISTANTS on the permanent staff of the City Engineer and Surveyor's Department. Salary Grades A.P.T. IV (£480-£525) and A.P.T. V (£520-£570).

Candidates for the appointment in Grade V should hold an approved Architectural qualification and for Grade IV should have passed the Intermediate Examination of the R.I.B.A. and have had at least two years' experience in an Architectural office.

The appointments will be subject to:—

(a) The provisions of the Local Government Superannuation Act, 1937;

(b) the passing of a medical examination;

(c) the Standing Orders of the Council.

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, Lancs., so as to be received not later than 15th December, 1950.

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. 1301

**NATIONAL COAL BOARD—EAST MIDLANDS
DIVISION.**

ARCHITECT'S DEPARTMENT.

Applications are invited for the following permanent and superannuated appointments:—

(a) **ARCHITECT, Grade I.** Salary £700×£25—£875 per annum.

(b) **ARCHITECTS, Grade II.** Salary £450×£25—£700 per annum.

The point of entry into the relevant salary scales will depend on the qualifications and experience of the successful applicants, and subject to satisfactory service, opportunities will be available for promotion to higher grades.

The architectural work of the Department covers all new projects in the Division, which embraces five counties. The work is of considerable variety and interest and includes the design of industrial buildings of all types concerned in the planning of collieries, such as workshops, power plants, offices, stores, pithead baths, canteens, medical centres, recreation buildings, convalescent homes, etc.

Part-time studying facilities are given to assistants in the Department to avail themselves of the advantages of the Nottingham School of Architecture.

Applications, stating age, education, qualifications, experience, present appointment and salary, should be submitted within 14 days of publication of this advertisement to:—

THE SECRETARY,

National Coal Board,
East Midlands Division, Sherwood Lodge,
Arnold, near Nottingham.

Envelopes should be marked "S.V.48," and original testimonials should not be sent. 1293

KENT COUNTY COUNCIL.

Applications are invited for the appointment in the Buildings Department of an ARCHITECTURAL ASSISTANT, at a salary within A.P.T., Grades II-III (£420-£495).

Candidates must have passed the Intermediate Examination of the Royal Institute of British Architects, and have had experience in the preparation of working drawings and development of detail drawings.

The commencing salary will be dependent upon the experience of the successful candidate.

The post is superannuable, and the successful candidate will be required to pass a medical examination.

Applications on forms obtainable from the County Architect, Springfield, Maidstone, should be delivered to him within two weeks of the appearance of this advertisement.

W. L. PLATTS,
Clerk of the County Council.

County Hall, Maidstone.
23rd November, 1950. 1350

**COUNTY BOROUGH OF CROYDON.
TEMPORARY CLERK OF WORKS.**

Applications are invited for this appointment from persons accustomed to dealing with housing contracts and building. Salary £10 10s. for 44-hour week.

Applications on forms from the Borough Engineer must be received by him within 14 days after this advertisement is published.

Canvassing will disqualify.

E. TABERNER,
Town Clerk. 1359

November, 1950.

HIS MAJESTY'S COLONIAL SERVICE.

Two vacancies exist for TOWN PLANNING OFFICERS in the Town Planning Division of the Surveys and Town Planning Department of Tanganyika. One appointment is on contract for 2-3 years on a fixed salary of £1,200, with a gratuity of £37 10s. for each 3 months' service on satisfactory completion of contract.

The other is on probation for permanent and pensionable employment on the salary scale of £555 to £1,320. A non-pensionable static allowance of £50 per annum is payable to officers in Dar-es-Salaam, Lindi, Mikindani, and Mt. Wara. An outfit allowance of £15 to £45 is also payable.

Applicants should be between 33 and 45 and must be Associate Members of the Town Planning Institute and, in addition, should be Corporate Members of either the Institution of Civil Engineers, the Institution of Municipal Engineers, the Royal Institute of British Architects, or the Chartered Surveyors' Institution. Considerable experience of the preparation of town planning schemes in all stages and the control of development are essential.

The officer appointed will be responsible to the Chief Town Planning Officer for the accumulation of basic data and the preparation of planning schemes for a number of townships in the territory. In the first instance, he will normally be stationed in Dar-es-Salaam, but will be required to undertake extensive journeys to up-country townships. The work is of unusual interest professionally, and affords good opportunities for travel by air, road and rail within the territory.

Terms of service include free first-class passages each way each tour for the officer, his wife and children (up to a maximum of three adult passages in all), and free medical attention for the officer, which is extended to his wife and family when his salary is below £1,140. Government quarters, if available, are provided, at a rent of 10 per cent. of the salary. Home leave on full pay is granted after tours of two to three years at the rate of 5 days for each month of residential service. Income tax and local taxes at local rates.

Intending candidates should write for application forms, and further particulars to the Director of Recruitment, Colonial Office, Sanctuary Buildings, Great Smith Street, London, S.W.1, giving brief details of age, qualifications and experience, and quoting reference number 27281/22A. 1366

BOROUGH OF DEVIZES.

TECHNICAL ASSISTANT.

Applications are invited for the temporary appointment of TECHNICAL ASSISTANT in the office of the Borough Surveyor and Water Engineer, to assist in the preparation of schemes for the Council's permanent housing programme, at a salary in accordance with Grade II (A.P.T.) of the National Scale of Salaries.

Applicants should have had good experience in the preparation of schemes of Municipal housing, including sewerage, highways and water supply. Preference will be given to applicants who have passed an examination of the Institution of Civil Engineers or the Institution of Municipal Engineers or the Royal Institute of British Architects.

Forms of application and any further particulars may be obtained from, and applications should be addressed to, the Borough Surveyor and Water Engineer, The Chequers, Devizes.

All applications should be received in an envelope endorsed "Technical Assistant," by not later than noon on Tuesday, 2nd January, 1951.

The appointment will be subject to one month's notice on either side.

A. HODGE,
Town Clerk.

Midland Bank Chambers, Devizes, Wilts.
22nd November, 1950. 1357

FERMANAGH COUNTY EDUCATION

COMMITTEE.

APPOINTMENT OF ASSISTANT ARCHITECT. Applications are invited from fully qualified Architects for a post on the permanent staff of the Architect's Department.

The salary scale will be £650×£25 to £750 per annum, and the point of entry to the scale will be determined according to the experience of the person appointed.

Preference will be given to suitably qualified ex-Service applicants provided the Committee is satisfied that such applicants can, or within a reasonable time will be able to, fill the post efficiently.

The successful candidate will be required to contribute in accordance with the provisions of the Local Government (Superannuation) Act (Northern Ireland), 1950.

Forms of application and conditions of appointment may be obtained from the undersigned, with whom completed applications must be lodged not later than Saturday, 13th January, 1951.

J. MAYONE,
Chief Education Officer.

Education Office, 27, High Street,
Enniskillen, Northern Ireland.
23rd November, 1950. 1351

**CUMBERLAND COUNTY COUNCIL.
PLANNING ASSISTANTS, A.P.T., GRADE VI
(£595-£660).**

Applications are invited from qualified and suitably experienced candidates for the above permanent appointments in the Department of the County Planning Officer. Further particulars as to duties, car and subsistence allowances, etc., and forms of application, may be obtained on request from the County Planning Officer, Citadel Chambers, Carlisle, to whom completed forms are required to be returned by Saturday, 23rd December, 1950.

G. N. C. SWIFT,
Clerk of the County Council.
1294

MINISTRY OF WORKS.

There are vacancies in the Chief Architect's Division for ARCHITECTURAL ASSISTANTS and LEADING 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 per annum. Starting pay will be assessed according to age, qualifications and experience. These rates are for London; a small 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/BC, Ministry of Works, Abell House, London, S.W.1, quoting reference W.G. 10/BC. 4826

**LONDON COUNTY COUNCIL.
QUALIFYING EXAMINATION FOR THE
OFFICE OF DISTRICT SURVEYOR.**

Formal notice is hereby given that the next examination of persons desirous of obtaining a certificate of proficiency to perform the duties of the office of district surveyor will be conducted in London in October, 1951, by the Board established by the London County Council, in accordance with Section 77 of the London Building Acts (Amendment) Act, 1939. The minimum age limit for candidates is 25.

Possession of this certificate carries eligibility to compete for appointment to vacant positions as District Surveyor, at maximum salaries ranging from £1,200 to £1,800 a year (inclusive), or as Assistant District Surveyor (salary scale £840 by £40 to £960 a year). It is intended to hold subsequent examinations annually.

For regulations governing candidature, the current syllabus and application forms for the examination, or for any further information, apply to the Architect to the Council, County Hall, Westminster Bridge, S.E.1. (145) 1245

HIS MAJESTY'S COLONIAL SERVICE—HONG KONG.

A vacancy exists for an ARCHITECT in the Public Works Department, Hong Kong, on a salary scale of £1,047 to £1,820 per month (equivalent to £785-£1,365 per annum). The duties will include the preparation of designs for and erection of Government buildings.

A cost-of-living allowance is payable varying from \$366 per month for a single officer to \$610 per month for a married officer with children. Appointment will be on agreement for three years, and free passages are provided for an officer, his wife, and up to three children on appointment and on satisfactory completion of his agreement. He may be required to travel by air on duty. Quarters are provided at just over one-ninth of the salary advertised. Educational facilities are available up to secondary school standard. One day's leave is granted for every 12 days' resident service.

Candidates, preferably between the ages of 29 and 35, should hold the qualification of A.R.I.B.A., and should have at least 5 years' practical experience. The agreement may be followed by an offer of permanent employment.

Candidates should write for a form of application stating age, qualifications and experience, to the Director of Recruitment (Colonial Service), Colonial Office, Sanctuary Buildings, Great Smith Street, London, S.W.1. Please mention this paper in your reply and quote No. 27301/37. 1365

**CANNOCK URBAN DISTRICT COUNCIL.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.**

Applications are invited for the above-named appointment in the Architect's Department, at a salary in accordance with Grade III of the A.P.T. Division of the National Scale (£450-£515-£495 per annum).

Applications, giving full details of age, training, qualifications, present and previous appointments, nature of experience, and the names of two persons to whom reference may be made, must be delivered to the undersigned not later than the first post on Wednesday, 20th December, 1950.

The Council are prepared to provide housing accommodation for the successful applicant, if required.

Canvassing, either directly or indirectly, will disqualify, and candidates should state whether to their knowledge they are related to any member of or the holder of any senior office under the Council.

WM. C. SPEDDY,
Clerk of the Council.
Council House, The Green, Cannock.
29th November, 1950. 1383

**EAST KILBRIDE DEVELOPMENT
CORPORATION.**

The Corporation invite applications for the following appointments:—

(1) SENIOR ARCHITECTS. Grade I. Salary scale, £15-£1,000 per annum.

Applicants should be fully qualified and experienced Architects, capable of directing and supervising a section of the housing work of the Corporation. They should have post-war experience in the design and construction of residential areas and the handling of Contracts. Associate Membership of the Town Planning Institute or completion of a degree or diploma course in Town Planning is desirable but not essential.

(2) SENIOR ARCHITECTS. Grade II. Salary scale, £760-£900 per annum.

Applicants should be fully qualified and experienced Architects, capable of carrying out substantial projects from start to completion, including the handling of Contracts. Posts are available on this grade for the following work:—

(a) Housing developments.

(b) Industrial and commercial building.

(c) Schools.

Post-war experience in at least one of these three fields is essential. Vacancies also exist on this grade for candidates who have had planning experience in these fields.

Candidates for posts under (1) or (2) should show evidence of a sensitive approach to the contemporary design, equipment and layout of buildings.

(3) ARCHITECTS. Salary scale, £550-£760 per annum.

Applicants should possess similar qualifications, etc., to (2) above, except that they will work under the direction of a Senior Architect.

(4) ASSISTANT ARCHITECTS. Salary scale, £450-£525 per annum.

(5) JUNIOR ASSISTANT ARCHITECTS. Salary scale, £390-£465 per annum.

In respect of each of the above posts a placing on the scale will be given according to qualifications and/or experience.

The appointments are subject to the Corporation's Conditions of Service and Superannuation Agreement. The selected candidates will be required to pass a medical examination. A house will be made available if required. Application forms may be obtained from the General Manager, Torrance House, East Kilbride, to whom they should be returned not later than 21st December, 1950.

Canvassing, directly or indirectly, of the members of the Corporation will constitute an absolute disqualification.

This advertisement appeared at an earlier date in newspapers, but was delayed in this journal owing to printing difficulties. 1399

**URBAN DISTRICT COUNCIL OF CORBY.
ENGINEER AND SURVEYOR'S
DEPARTMENT.**

Applications are invited for the under-mentioned appointments on the permanent staff of the Engineer and Surveyor:—

(1) ASSISTANT ARCHITECT. The salary will be in accordance with training and experience and will be as follows:—

For Registered Architects with less than six years' experience in an Architect's office or at a School of Architecture, Grade V, A.P.T. Division (£520-£570).

Registered Architects with six or more years' experience in an Architect's office or at a School of Architecture, Grade Va (£550-£610) or VI (£595-£660), according to qualifications and practical experience.

Candidates must have previous experience of the design of buildings, preparation of working drawings, building details and estimating.

(2) TRACER/DRAUGHTSMAN (Male or Female). Salary in accordance with Grade III, Miscellaneous Division of the National Scale of Salaries (£315 to £375). Applicants must be neat and expeditious draughtsmen, well experienced in the tracing of Architectural and Engineering Drawings and tracing from Ordnance maps, and must be able, also, to undertake lettering thereon of a high standard.

Housing accommodation will be made available to the selected married candidates, if required.

The provision of the Local Government Superannuation Act, 1937, will apply to both appointments.

Forms of application can be obtained from the undersigned, and requests therefore should indicate the position for which application is being made.

Completed forms must be received not later than noon on Friday, the 22nd December, 1950.

G. B. BLACKALL,
Clerk of the Council.
Council Offices, Corby, Northants. 1400

**LONDON COUNTY COUNCIL.
ARCHITECT'S DEPARTMENT.**

SCHOOLS DIVISION.

Applications are invited for positions of ARCHITECT, Grade II (£700-£840); ARCHITECT, Grade III (£550-£700), and TECHNICAL ASSISTANT (up to £580), for work on new schools and major alterations and extensions to existing schools.

The positions are superannuable. Candidates for Grades II and III should possess professional qualifications. Application forms obtainable from the Architect (AR/EK/S), The County Hall, S.E.1 (enclosing stamped addressed foolscap envelope), to be returned by 30th December, 1950. Canvassing disqualifies. (1569). 1398

xcii

**COUNTY BOROUGH OF NEWPORT, MON.
Applications are invited for the under-mentioned appointments in the Borough Architect's Department:—**

PERMANENT APPOINTMENTS:

ONE ASSISTANT ARCHITECT. Salary, Grade VI (£595-£660).

ONE ASSISTANT ARCHITECT. Salary, Grade V (£520-£570).

ONE ARCHITECTURAL ASSISTANT. Salary, Grade III (£450-£495).

ONE ASSISTANT QUANTITY SURVEYOR. Salary Grade VII (£635-£710).

TEMPORARY APPOINTMENTS:

ONE ASSISTANT ARCHITECT. Salary, Grade VI (£595-£660).

ONE ARCHITECTURAL ASSISTANT. Salary, Grade IV (£480-£525).

ONE ARCHITECT. RURAL ASSISTANT. Salary, Grade III (£450-£495).

ONE ARCHITECT. RURAL ASSISTANT. Salary, Grade II (£420-£465).

ONE ARCHITECTURAL DRAUGHTSMAN. Salary, General Division (£135 at 16 to £385 at 32 years).

ONE ASSISTANT QUANTITY SURVEYOR. Salary, Grade VI (£595-£660).

ONE CLERK OF WORKS. Salary, Grade IV (£480-£525).

A candidate who is related to a member or senior officer of the Council must disclose the fact in the application. Canvassing, directly or indirectly, will disqualify.

Applications should reach me not later than Monday, 18th December, 1950, giving full details of education and qualifications and the names of two referees.

JOHNSON BLACKETT, F.R.I.B.A.,
Borough Architect.
Civic Centre, Newport, Mon. 1393

**CITY AND ROYAL BURGH OF EDINBURGH.
TOWN PLANNING DEPARTMENT
ESTABLISHMENT.**

Applications are invited for the following appointments:—

DRAUGHTSMEN.

Qualifications and experience of candidates should be as below:—

Appointment. Training and experience in Architecture, Engineering or Surveying at least up to intermediate standard of recognised school essential. Candidates should be good draughtsmen, and will prepare fair copies of layout plans connected with statutory development, copies for public exhibition, etc. Skilled perspective drawing an added advantage.

Applications, stating age, present and previous appointments and present salary, qualifications and experience, should be forwarded to the Town Planning Officer, City Chambers, Edinburgh, 1, within 14 days from the appearance of this advertisement.

J. STORRAR,
Town Clerk.
27th November, 1950. 1368

**BOROUGH OF WIMBLEDON.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.**

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

(a) ONE CHIEF ARCHITECTURAL ASSISTANT, on Grade A.P.T., VII, at a commencing salary of £635 per annum, rising by three annual increments of £25 to a maximum of £710 per annum. Applicants must have had considerable experience in an Architect's office, and must be Associate Members of the Royal Institute of British Architects and be Registered Architects.

(b) TWO SENIOR ARCHITECTURAL ASSISTANTS, on Grade A.P.T., VI, at a commencing salary of £595 per annum, rising by two annual increments of £20 and one of £25 to a maximum of £660 per annum. Applicants must be Registered Architects. Candidates must have had considerable experience in an Architect's office and membership of the Royal Institute of British Architects would be an advantage.

(c) ONE GENERAL ARCHITECTURAL ASSISTANT, on Grade A.P.T., III, at a commencing salary of £450 per annum, rising by three annual increments of £15 to a maximum of £495 per annum. Applicants must have served their articles of pupillage or have worked in an architectural office for a minimum period of three years, and have passed the R.I.B.A. Intermediate Examination or its equivalent at one of the recognised Schools of Architecture.

London weighting is paid in addition to the above salaries, and the appointments are subject to:—

(a) The National Scheme of Conditions of Service; (b) The provisions of the Local Government Superannuation Acts, and (c) satisfactory medical examination.

Applications, endorsed "Chief Architectural Assistant," "Senior Architectural Assistant," and "General Architectural Assistant," stating age, qualification, former local government service, present and previous appointments and experience, length of notice required to terminate present appointment, and the names and addresses of three persons as referees, must be forwarded to the Borough Engineer and Surveyor by Friday, 22nd December, 1950.

Candidates must disclose in writing to the undersigned if to their knowledge they are related to any member or senior officer of the Council.

EDWIN M. NEAVE,
Town Clerk.
Town Hall, Wimbledon, S.W.19. 1392

COUNTY BOROUGH OF GREAT YARMOUTH. BOROUGH ENGINEER'S DEPARTMENT. APPOINTMENT OF SENIOR ASSISTANT ARCHITECT.

Applications are invited for the appointment of a Senior Assistant Architect in the Borough Engineer's Department. Salary A.P.T., Grade VI (£595-£660). Candidates should be Associates of the Royal Institute of British Architects, but need not have had previous Local Government experience. The appointment will be terminable by one month's notice on either side and will be subject to the provision of the Local Government Superannuation Act, 1937, and to the passing of a medical examination.

Housing accommodation will be offered to the successful applicant, if married.

Applications, stating age, qualifications and experience, together with the names of three persons to whom reference could be made, should be enclosed in an envelope endorsed "Senior Assistant Architect," and must be received by me not later than Friday, 22nd December, 1950. Canvassing will be deemed a disqualification, and candidates must disclose in writing any relationship to any member or holder of any senior office under the Council. Candidates who fail to do so will be disqualified, and, if appointed, will be liable to dismissal without notice.

FARRA CONWAY.

Town Clerk.

Town Hall, Great Yarmouth.
1st December, 1950.

1402

ESSEX EDUCATION COMMITTEE. SOUTH-WEST ESSEX TECHNICAL COLLEGE AND SCHOOL OF ART, FOREST ROAD, WALTHAMSTOW, E.17.

Full-time LECTURER AND INSTRUCTOR IN STRUCTURAL ENGINEERING AND DESIGN required for one year, primarily for full-time day and evening courses for the Graduateship and Associate-Membership Examinations of the Institution of Structural Engineers. Previous teaching experience not essential.

Salary: £300-£355 (at present), with addition of London (£35 or £48) and appropriate training (up to £45) and graduation (£30) allowances, according to Burnham Further Report. Up to twelve increments may be allowed for suitable professional and industrial experience.

Applications (no forms), giving full particulars of training, qualifications, and experience, to Clerk to Governors at the College, within two weeks.

B. E. LAWRENCE,

Chief Education Officer.

1397

MIDDLESEX COUNTY COUNCIL, ARCHITECT'S DEPARTMENT.

CLERKS OF WORKS required to supervise the erection of Educational Buildings in various parts of County. Salary £550 p.a. inclusive and prescribed conditions. Unestablished capacity, and for a period not exceeding 2 years. Written applications, giving full details of age, experience, etc., must be sent to the County Architect, 10, Gt. George Street, Westminster, S.W.1, by 16th December (quoting H.821 A.J.). Canvassing disqualifies.

C. W. RADCLIFFE,

Clerk of the County Council.

1376

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

Applications are invited for the following appointments at salaries in accordance with the National Scales as indicated:—

(a) TWO PRINCIPAL ARCHITECTURAL ASSISTANTS. A.P.T., VII-VIII (£635-£760).

(b) CHIEF TOWN PLANNING ASSISTANT. A.P.T., VII-VIII (£635-£760).

(c) SENIOR TOWN PLANNING ASSISTANT. A.P.T., VI (£595-£660).

(d) TWO TOWN PLANNING ASSISTANTS. A.P.T., V (£520-£570).

Candidates should possess, in addition to the general experience of the duties applicable to the several appointments, the particular experience and qualifications specified below:—

(a) Design of houses, flats and other Municipal buildings, preference being given to Members of the Royal Institute of British Architects.

(b) and (c) Experience of survey, design and development, and Corporate Membership, by examination, of the Town Planning Institute. In the case of appointment (c) an additional professional qualification is desirable.

(d) Preference will be given to candidates who have passed the Intermediate Examination of the Town Planning Institute.

Applications are subject to the National Scheme of Conditions of Service, the provisions of the Local Government Superannuation Act, 1937, the passing by the successful candidates of medical examinations, and to termination by one month's notice on either side.

Applications, suitably endorsed, stating age, marital condition, details of education and qualifications, present and previous appointments and particulars of experience, together with copies of two recent testimonials, should be addressed to the Borough Engineer and Surveyor, The Council House, Smethwick, 40, to reach him not later than 16th December, 1950.

E. L. TWYCCROSS,

Town Clerk.

Council House, Smethwick.
27th November, 1950.

1371

COUNTY OF LEICESTER.

Applications are invited for the post of DRAUGHTSMAN in the County Land Agent's Department. The salary will be in accordance with Grade A.P.T., I (£390-£435 per annum).

The post will be superannuable and subject to the Scheme of Conditions of Service of the National Joint Council, and the successful applicant will be required to pass a medical examination. Consideration will be given to applications from registered disabled persons.

Applicants must be capable of producing neat and accurate plans, sections and elevations, and must have a knowledge of ordnance maps. A good knowledge of building construction, surveying and levelling, and the ability to construct building plans from specifications, are also desirable. The Draughtsman will be required to draw plans from site surveys undertaken by himself, and the ownership of a car will, therefore, be an advantage.

Applications, stating qualifications, accompanied by two testimonials and the names of two referees, should be submitted to the County Land Agent, 7, Victoria Parade, Leicester, within 14 days of the appearance of this advertisement.

JOHN A. CHATTERTON,

Clerk of the Council.

County Offices, Grey Friars, Leicester. 1401

THE UNIVERSITY OF LIVERPOOL.

Applications are invited for the post of SENIOR LECTURER IN ARCHITECTURAL CONSTRUCTION, in the School of Architecture, at a salary of £1,150-£50-£1,350 per annum. Applications, accompanied if possible by drawings or photographs of work, two testimonials, and the names of two referees, should be received not later than 29th January, 1951, by the undersigned, from whom further particulars of the conditions of appointment may be obtained.

STANLEY DUMBELL,

Registrar.

1347

CITY AND ROYAL BURGH OF EDINBURGH. TOWN PLANNING DEPARTMENT ESTABLISHMENT.

Applications are invited for the undernoted post:—

MODEL CRAFTSMAN. Salary £390-£475. Applicants will be required to assist in the construction of Architectural and Town Planning Models for general and detailed development schemes. Applications to state age, present salary and previous employment.

J. STORRAR,

Town Clerk.

1367

CITY AND COUNTY OF KINGSTON-UPON-HULL.

CITY ARCHITECT'S DEPARTMENT. Applications are invited for ASSISTANT ARCHITECTS, A.P. and T., Grade V (£520-£570). The appointment will be subject to one month's notice on either side and to the National Scheme of Conditions of Service.

Application forms, obtainable from the undersigned, should be returned on or before 27th December, 1950.

ANDREW RANKINE, A.R.I.B.A.,

City Architect.

Guildhall, Kingston-upon-Hull.

20th November, 1950.

1344

Tenders for Contracts

6 lines or under, 12s. 6d.; each additional line, 2s.

COUNTY OF LINCOLN—PARTS OF LINDSEY.

POLICE BUILDINGS AND COURTS.

TOWN HALL SQUARE, SCUNTHORPE.

CONTRACT NO. 2—SUPERSTRUCTURE.

Contractors desirous of tendering for the Superstructure of these Buildings, known as Contract No. 2, should submit their names to the Architects, Messrs. C. B. Pearson & Son, F.R.I.B.A., 13, Dalton Square, Lancaster, on or before the 30th November, 1950. The Foundations up to Ground Level, Roads, Sewers and Site Works have been subject to a separate Contract and are now nearing completion.

Specifications, Bills of Quantities and Form of Tender will be sent to Contractors desirous of Tendering, and plans may be seen at the Offices of the Architects, the office of the Clerk of Works on the site, or at my office.

The acceptance of any Tender is subject to the approval of the Home Office, and the Council do not bind themselves to accept the lowest or any Tender.

Sealed Tenders, endorsed "Scunthorpe Police Buildings and Courts," must be delivered to me not later than Saturday, the 6th January, 1951.

HERBERT COPLAND,

Clerk of the County Council.

County Offices, Lincoln.

November, 1950.

1223

BOROUGH OF DAGENHAM.

Tenders are invited for the erection of 24 Three-storey Flats, in two blocks of six and one block of twelve, at Woodlands Estate, Dagenham.

Bills of Quantities and form of Tender are obtainable from the Borough Engineer on payment of deposit of two guineas which will be refunded on receipt of a bona fide Tender.

Plans and General Conditions of Contract may be inspected during normal office hours.

Sealed Tenders, in the envelope provided, which must bear no indication of the identity of the sender, to be delivered to the undersigned by noon on Thursday, 21st December, 1950.

The Council do not bind themselves to accept the lowest or any Tender.

KEITH LAUDER,

Town Clerk.

Civic Centre, Dagenham.

1374

COUNTY BOROUGH OF BURNLEY.

NEW ST. STEPHEN'S C.E. JUNIOR SCHOOL. Tenders are invited on behalf of the Managers of the St. Stephen's C.E. Junior School for the erection of a new Junior School for 280 pupils at Woodgrove Road, Burnley.

Forms of Tender, together with Bills of Quantities, may be obtained on application to the Architects, Messrs. Leach, Rhodes and Walker, 15, Manchester New Road, Middleton, Lancs., on payment of a deposit of two guineas, which will be returned on receipt of a bona fide Tender and the return of all Documents.

Tender Documents will be dispatched on or about 30th November, and should be returned to the Town Clerk, Burnley, in the envelope provided not later than noon on Monday, 18th December.

Drawings and Conditions of Contract may be inspected during normal office hours either at the Office of the Architects or at the Borough Engineer and Surveyor's Office, Burnley.

C. V. THORNLEY,

Town Clerk.

1361

Partnership

6 lines or under, 12s. 6d.; each additional line, 2s.

PRACTISING ARCHITECT, F.R.I.B.A., M.Inst.R.A., with pleasant office at excellent London, W.C., address at moderate cost, seeks colleague who has work on hand, to share the accommodation, and who would like to work in association with a view to Partnership. If accommodation not required advertiser would still be interested in partnership. Box 1270.

YOUNG progressive SURVEYOR, West End office, wishes to contact young Architect in private practice with a view to combine Partnership. Box 1409.

Architectural Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.

REQUIRED immediately ARCHITECT'S ASSISTANT, for General Private Practice. Minimum standard, Intermediate R.I.B.A. Applicants are requested to apply in writing, stating age, experience, and salary required, to Granville F. Siegerts, 1, Electric Parade, Seven Kings, Hford, Essex. 1227

TWO ARCHITECTURAL ASSISTANTS, with Industrial and Housing experience, required, of Intermediate standard, in North-West London. Salaries according to age and experience. National Scales are offered to suitable applicants. Apply Sydney Greenwood, A.R.I.B.A., 35, Burns Lane, N.W.7. 1230

SENIOR ARCHITECTURAL ASSISTANTS required. Interesting and varied work. Five-day week. Apply, stating age, experience, and salary required, to Farmer and Dark, Chartered Architects, Terminal House, Grosvenor Gardens, London, S.W.1. 1318

QUALIFIED ASSISTANTS required for London Architect's Department of Large Commercial Concern. Applicants should be about 35 years old, experienced in good class building, used to writing specifications and handling contracts for new buildings, also maintenance work. Permanency and allowance following retirement offered to suitable men, who should write stating age and full details, to Box 1319.

EXPERIENCED ARCHITECTURAL ASSISTANT required for busy Provincial and Country practice. Good all round practical knowledge essential. Salary £550 upwards, according to ability. F. J. Lenton & Partners, F.R.I.B.A., 16, Broad Street, Stamford. 1297

RONALD WARD & PARTNERS require TWO ARCHITECTURAL ASSISTANTS (Intermediate standard). Apply 17, Lowndes Street, S.W.1. Telephone: Sloane 8291. 1333

SCHERRER & HICKS, F.R.I.B.A., of 19, Caendish Square, W.1, require TWO ASSISTANTS, of Intermediate standard, in January, 1951. Salary by arrangement. Museum 1105. 1379

EXPERIENCED ASSISTANT ARCHITECT required in small London office, able to take charge of Contracts, Housing, and other work. Particulars to Box 1354.

ARCHITECTURAL DRAUGHTSMEN, up to Inter. R.I.B.A. standard, required. London area. Write, stating experience and salary, to Box 1364.

ARCHITECTURAL DRAUGHTSMAN required for detailing Masonry and Precast Concrete Units. Write, stating full particulars of experience, age, salary required, to Girdings Ferro-Concrete Co., Ltd., Rothwell, near Leeds. 1352

ARCHITECTURAL ASSISTANT for immediate engagement in London office of important industrial company. Must be neat Draughtsman, with ability in perspectives. Knowledge of building construction, specifications and surveys. Age 25-35. Pensionable appointment for successful applicant. Write, stating age, experience, salary and date when free. Box 1395.

ARCHITECTURAL ASSISTANT required. Intermediate R.I.B.A. qualification, and 3 years' minimum office experience. 5-day week. Reply, with full particulars, to P. A. W. Roffey, F.R.I.B.A., F.R.I.C.S., 1, Putney Hill, London, S.W.15. 1395

ARCHITECTURAL DRAUGHTSMAN required for Architect's Department of large Iron and Steel Works. Applicants should be aged 22-35 years, should be capable of preparing working drawings with a minimum supervision, sound knowledge of modern construction and building services essential. Some experience of Industrial work preferred. Apply the Labour Manager, Appleby-Frodingham Steel Co., Branch of The United Steel Companies, Scunthorpe, Lincs. 1391

ARCHITECTURAL ASSISTANT wanted, about Intermediate R.I.B.A. Country practice, offering varied experience and advancement. F. C. Levitt, L.R.I.B.A., Biggleswade, Beds. 1390

NAIROBI—Experienced **DRAUGHTSMAN**, initial salary £450 p.a., single man, income tax at low local rates, passage money refunded, return fare or £100 bonus after 3 years' satisfactory service. Full particulars to Overseas Architects Service, 5, Weldon Crescent, Harrow. 1389

COMPETENT SENIOR ASSISTANT required to take charge of Drawing Office in Victoria Street, Westminster. Must have experience of design from sketch plan stage to complete working drawings, and able to organise staff efficiently. Good opportunity and progressive position offered to person with suitable qualifications. Salary offered £700-£850 p.a. 5-day week. Reply Box 1388.

CAPABLE salaried **JUNIOR PARTNER** or **CHIEF ASSISTANT** required in established Architectural practice. State particulars of salary and experience to Box 1406.

ARCHITECTURAL ASSISTANT required. Intermediate R.I.B.A. standard. Industrial and general work. Write, stating age, experience, qualifications and salary required. Apply Cotton, Ballard & Blow, Architects and Surveyors, Northam Road, North Shields. 1405

REQUIRED immediately experienced **ARCHITECTURAL ASSISTANTS**. High salary, according to ability. Five-day week. Knowledge of Industrial work an advantage. Apply Ley, Colbeck & Partners, F.R.I.B.A., 51, Bishopsgate, E.C.2. Telephone: London Wall 2917. 1403

ARCHITECTURAL ASSISTANT required immediately. Varied and interesting work. Salary according to experience and qualifications. Apply by letter, with all particulars, to Robert C. Carvell, L.R.I.B.A., 3a, Charlotte Street, Perth. 1404

EXPERIENCED SENIOR ARCHITECT'S ASSISTANT required by large multiple firm. Very busy office in Birmingham. Good prospects for live and capable man. State age, experience and salary. Box 1407.

Architectural Appointments Wanted

POST with prospects sought by young **ARCHITECT** with imagination and interest in contemporary design. A.R.I.B.A., L.S.I.A. 5 years' experience housing, exhibition work, display design. Can handle complete contracts. Box 43.

A.R.I.B.A., with 12 years' extensive office experience, requires responsible and progressive position, preferably South West or West of England.—Box 44.

Other Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.

ARCHITECTURAL METALWORK DETAILING DRAUGHTSMAN wanted; good wages and ideal working conditions. Apply: The Morris Singer Co., Ltd., Ferry Lane, Forest Road, Walthamstow, E.17. 3524

ARCHITECTURAL Metalworkers require a **DESIGNER DRAUGHTSMAN** of considerable merit; top salaried position for skilled man. Apply The Morris Singer Company, Hope House, Gt. Peter Street, Westminster, S.W.1. 3564

CHIEF ARCHITECTURAL DRAUGHTSMAN required, with sound knowledge of industrial building construction. Five-day working week and pension scheme. Staff canteen. Housing accommodation available. Write, stating age, experience and salary required, to Chief Staff Architect, Ilford, Ltd., Romford, Essex. 1231

Services Offered

4 lines or under, 7s. 6d.; each additional line, 2s.

ARCHITECTURAL MODELS and Dioramas. Edward J. Ashenden, A.R.C.A., 15, Chenil Studios, 183, Kings Road, S.W.3. Tel.: Flax 6103. 2566

MANUFACTURERS of exclusive hand-made Lampshades; architects' contracts carried out. J. & M. Beagley, 51, Great Ormond Street, London, W.C.1. CHANCERY 8959. 2397

A.R.I.B.A. offers occasional services at own London office. Excellent all-round experience and exhibitions. Box 1320.

FRAMING AND MOUNTING of Drawings and Plans is a special service offered to Architects by The Rowley Gallery, Ltd., 87, Campden Street, Kensington Church Street, W.8. Park 4349. 3000

FREE-LANCE Surveyor offers Services to Architects requiring accurate surveys of land and buildings, levelling, contouring, etc.; own car and complete equipment. 2772

QUALIFIED STRUCTURAL ENGINEER requires design work in either Reinforced Concrete or Steelwork Structures.—Box 1353.

EXPERIENCED SECRETARY (25) seeks change, preferably small office; excellent reference. Box 1380.

SECRETARY - SHORTHAND / TYPIST (26), with Accounts and Income Tax experience, 4 years in Architect's office, requires similar position in London to commence early in New Year. Please write Box 1363.

WINSTON WALKER, A.A.Dipl., F.R.I.B.A., Dipl.T.P., will be pleased to execute a limited number of Perspective Drawings for submission Royal Academy, 1951. Prices from 20 gns. For a small fee advice given on size of drawings, technique, viewpoint, etc., to Architects preparing own works for submission. 107, Sloane Street, S.W.1. SLOANE 1410. 1387

QUALIFIED Lady ARCHITECT seeks any architectural work which she can do at home.—Box 1408.

Miscellaneous

4 lines or under, 7s. 6d.; each additional line, 2s.

A. J. BINNS, LTD., Specialists in the supply and fixing of all types of fencing, guard rail, factory partitions and gates. Harvest Works, 99-107, St. Pauls Road, N.1. Canonbury 2061.

The Race Upholstery Unit will be pleased to report on and tender for your specialised upholstery requirements and repairs. 22, Union Road, Clapham, S.W.4. 4048

ALL BOOKS of interest to Architects, published in this country and in America, are obtainable from Stobart & Son, Ltd., 9, Victoria Street, London, S.W.1. Ask to receive regularly our free lists giving contents-summaries of new books. 1445

NAME-PLATES—Classical Lettering engraved by Austin Luce & Co., Broadway Chambers, 336, Station Road, Harrow, Middlesex. Send for sketch and estimate. 990

A PLUG to a power station, may we quote you? Rylex Co., GRA, 2210, Electrical Contractors, Harclid Road, London, E.13. 1355

ARCHITECT'S SMOCKS—Natural colour high grade Irish linen, zip front, 37s. 6d., including P.T. State size. E. Ashcroft, 167, Oldham Road, Manchester, 4. 1381

Educational Announcements

4 lines or under, 7s. 6d.; each additional line, 2s.

R.I.B.A. EXAMS—Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I., Dist. in T.P. (Tutor in the Sch. of Arch. Lond. Univ.), prepares Students by correspondence tuition. 15, North Road, N.6. MOU. 8104.

Don't delay!

GIVE THE ANSWER

NOW

"I'll ring you back" means needless delay and expense when the data you need can be always within reach.

Flick a switch—and **RELIANCE** Loudspeaking Telephones put you into immediate contact with any member of your staff. Time and telephone charges saved . . . goodwill created . . . your P.O. switchboard and operator free for external traffic . . . this is the efficient way to run a business.

The many advantages of **RELIANCE** installations—on sale or rental—are detailed in leaflet L12. May we send you a copy?

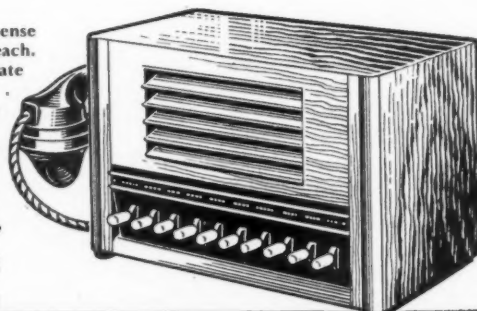
THE RELIANCE TELEPHONE COMPANY LTD.

(A subsidiary of The General Electric Co. Ltd.)

39-41, PARKER STREET, KINGSWAY, LONDON, W.C.2

Telephone: Chancery 5341 (P.B.X)

BRANCHES THROUGHOUT THE UNITED KINGDOM



L 1206 A

minimise fire risk with

DURASTEEL

STRUCTURAL FIRE PROTECTION

**HIGH FIRE RESISTANCE
LIGHTNESS AND STRENGTH
STRUCTURAL SIMPLICITY**

in Fire Resisting Doors, Panelling and Roofing. Send for data mentioning Information Sheets Nos. 36.D1 (Fire Protection—Doors) and 15.R1 (Sheet Materials—Fire Protection).

DURASTEEL LTD

OLDFIELD LANE

GREENFORD · MIDD

TEL: WAXLOW 1051 (Pre B. Ex)

GRAMS: ENQUAFIRE, WESPHONE, LONDON

R.I.B.A. R.I.C.S.
Postal Courses in all subjects for R.I.B.A.
(1951 syllabus) and R.I.C.S. examinations
conducted by
THE ELLIS SCHOOL
103B, OLD BROMPTON RD., LONDON, S.W.7
under the personal direction of the Principal
A. B. WATERS, M.B.E., G.M., F.R.I.B.A.
Phone: KEN 8641

QUALIFYING EXAMINATIONS
R.I.B.A. AND T.P.I.
INTER & FINAL FINAL

Courses of Instruction by Correspondence and
Personal in Studio, including TESTIMONIES OF
STUDY AND PROFESSIONAL PRACTICE.

C. W. BOX

F.R.I.B.A., A.J. STRUCT.E., M.R. SAN.I.
115 GOWER STREET, W.C. Euston 3906

LIFTS
by **MORRIS**
Herbert Morris Ltd
Loughborough

Engineering branches in London, Glasgow,
Manchester, Birmingham, Leeds, Sheffield,
Newcastle, Cardiff, Bristol, Dundee, Liver-
pool, Nottingham, Bury St. Edmunds, Belfast

LINOLEUM
Information Sheets
19/GI, 2, 3 & 4

Reprints available on application to:-
Linoleum Manufacturers' Association,
273/287, Regent Street, London, W.1.

"STONITE"

WALL FINISHING MATERIALS

Full particulars including Information Sheet No. 7.C2 from
CALLAW & KEPPICH LTD

C & K SHIPHAM GORGE, CHEDDAR, SOMERSET
Telephone: Cheddar 714

Technical Literature?

CONSULT



Specialists in the
production of
technical drawings
and catalogue
material for the
building and
allied industries

Building Industries Services Ltd
25 LOWER BELGRAVE ST., LONDON, SW1
Telephone: Sloane 0474

PROFESSIONAL ADVANCEMENT

through **ICS** **STUDY
COURSES**

I.C.S. Home Study Courses help the pro-
fessional man to further his career. They
include many courses for Membership Exam-
inations of the various technical bodies
Brilliant successes have been recorded in the
spheres of architecture, building, and surveying

Here are some of the subjects in which we
offer fully qualified instruction:—

Architecture
Architectural Drawing
and Designing
Building Contracting
Building Construction
and Interior Work
Building Construction
and Quantities
Building Specifications
Quantity Surveying
Civil Engineering

Surveying and Mapping
Plan and Map
Draughtsmanship
Structural Engineering
Concrete Engineering
Structural Drawing
Construction Draughts-
manship
Sanitary Engineering
Air Conditioning
Heating and Ventilation

Special Courses for the examinations of the R.I.B.A.
I.O.B., R.I.C.S., Inst. C.E., I.M.E. (Building Inspectors)
Inst. Struct.E., I.Q.S., Inst. Clerk of Works etc
Examination students are coached till successful.
Write to-day for free booklet describing our Course
in any of the subjects mentioned above.

International
CORRESPONDENCE SCHOOLS

Dept. A.J. International Buildings, Kingsway
London W.C.1

SPECIFY

ELLISON for MAIN
ELECTRIC
SWITCHGEAR

GEORGE ELLISON
Limited
Perry Barr, Birmingham B28

It's Reliable

MODELS

John B. THORP

FOR 98 GRAY'S INN ROAD,
TOWN PLANNING W.C.1
PUBLIC BUILDINGS TELEPHONE:
ESTATES and HOLBORN 1011
INTERIORS

**FIBROUS PLASTERWORK OF
EVERY DESCRIPTION**

ALLIED GUILDS

King Edward Square,
SUTTON COLDFIELD. Tel.: Sut 3809

**ANCHORAGES TO
CONCRETE**

SPEARPOINT Floor Clips to
anchor wood floors to concrete.
DOVETAIL Masonry Slot and
Anchors to anchor brick and
stone facings to concrete.
ANKORTITE Box Fittings.

ABBAY BUILDING SUPPLIES CO.

6, Waldemar Road, Wimbledon, London, S.W.19
Telephone: Wimbledon 4178



for

**PROTECTIVE
DECORATION**

internal & external



THE ADAMITE COMPANY LIMITED
MANFIELD HOUSE, STRAND, W.C.2

**ASPINALL'S
PAINTS
EXCEL**

ASPINALLS (PAINTS) LTD, CARLETON, SKIPTON, YORKS



FOR INFORMATION

on the many applications of
DOVETAILED STEEL SHEETING write
for information Sheet 20. Z12
et seq., to the manufacturers:

**DOVETAILED STEEL SHEETING
STEEL CEILINGS LIMITED**

Floor Works, Port Talbot, Glamorgan, South Wales

**MUMFORD BAILEY
& PRESTON LTD**

**AIR CONDITIONING & HEATING
HOT & COLD WATER SERVICES
SANITARY ENGINEERING ETC.**

NEWCASTLE HOUSE - CLERKENWELL CLOSE - LONDON - E.C.1

Phone: Clerkenwell 6344

Branches at Bournemouth & Dublin

**WHITE FACING
BRICKS**

(S. P. W. BRAND)

TELEPHONE & TELEGRAMS
BULWELL 78237-8

M. McCARTHY & SONS, LTD
BULWELL NOTTINGHAM

Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Abbey Building Supplies Company ...	xxiii, xcv	Ellis School of Architecture, The	xv	Newman, William, & Sons, Ltd.	[xvi]
Acerington Brick & Tile Co.	lxxxiv	Ellison, George, Ltd.	xv	Nwies, George, Ltd.	[xvi]
Adamite Co., Ltd.	xv	English Joinery Manufacturers' Assocn. (Inc.)	lxxxvii	Norwich Union Insurance Societies	[xvi]
Adshad, Ratcliffe & Co., Ltd.	lxxxiii	Finewood Products, Ltd.	lxxxvii	Peglers, Ltd.	[xvi]
Allied Guilds	xov	Fire Armour, Ltd.	lxxi	Penmaenmaur & Welsh Granite Co., Ltd.	xxviii
Anderson Construction Co., Ltd.	lxxi	Fitzpatrick & Son (Contractors), Ltd. ...	lxxxvii	Permanite, Ltd.	xxviii
Architects Benevolent Society	lxxxvi	Fleetwood Palms, Ltd.	vii	Phillips Lamps	lxxxiii
Asphalls (Paints), Ltd.	xv	Floor Quarry Association	xxxv	Pilkington Bros., Ltd.	xix
Association of Building Technicians	xxviii	Flush Door Manufacturers' Assocn., Ltd.	xliv	Pritchett & Gold & E.P.S. Co., Ltd.	xlii
Austins of East Ham	xli	Fordham Pressings, Ltd.	lxxxiv	Prodorite, Ltd.	v
Baister Walton & Co., Ltd.	xli	Gas Council, The	xlii	Range Boilers, Ltd.	lxxxix
Bath Cabinet Makers & Artcraft, Ltd.	xliii	Gyprock Products, Ltd.	xviii	Rawplug Co., Ltd., The	lxxxviii
Berry Wiggins & Co., Ltd.	lxii	Hall, J. & E. Ltd.	xxxii	R. J. J. Telephone Co., Ltd., The	xvii
Berry, Z. D., & Sons, Ltd.	lxxviii	Hall, Robt. H., & Co., Ltd.	lxxi	Rentokil, Ltd.	lxxxvii
Birmid Rain-Water Goods	xxi	Harvey, G. A., & Co. (London), Ltd.	lxxii	Rolyat Tank Co., Ltd., The	lxxxii
Birmingham & Blackburn Concret. Co., Ltd.	lxxxv	Henderson, P. C., Ltd.	xi	Sadd, John, & Sons, Ltd.	xli
Booth John, & Sons (Bolton), Ltd.	lxxxiv	Hollis Bros., Ltd.	lxxxvi	Saakey, J. H., & Son, Ltd.	xi
Box, C. W.	xv	Hollway, W. F., & Brother, Ltd.	lxxxv	Seaford (Gt. Britain), Ltd.	xiv
Brightside Foundry & Engineering Co., Ltd.	liii	Hope, Henry, & Sons, Ltd.	ix	Seomastic, Ltd.	xlviii
British Constructional Steelwork Association	lvii	Hurel Engineering Co., Ltd.	lxxxvii	Shurman, R. W., Ltd.	lxxxiii
British Electricity Authority	lxv	International Correspondence Schools	xv	Smith's Fire-proof Floors, Ltd.	lxxxix
British Electrical Development Association	xv	Jarvis, J., & Sons, Ltd.	xxxv	Smith, George H., & Partners	xvii
British Plumber, Ltd.	xix	Jenson & Nicholson, Ltd.	xxxiii, xcvii	Southern Forge, Ltd.	xxvi
British Thomson-Houston Co., Ltd., The	lxxxvi	Johnson & Phillips, Ltd.	lv	Southern Lime Association, The	xxvii
The Broad & Co., Ltd.	lxxxv	Johanson Bros., Ltd.	lxxxv	Standard Patent Glazing Co., Ltd., The	lxxx
Bryant, C. & Son, Ltd.	viii	Korner-Greenwood & Co., Ltd.	lxi	Steel Ceilings, Ltd.	xxv
Building Industries Services, Ltd.	xv	King, George W., Ltd.	lxxxii	Steele (Industrial Floors), Ltd.	lxxxix
Callow & Keppich, Ltd.	xv	Kwikform, Ltd.	xxx, xxxi	Sugg, Wm., & Co., Ltd.	lxxxix
Cannon, W. C., & Sons, Ltd.	lxx	Lead Industries Development Council	lxxxviii	Su deala Board Co., Ltd.	ix
Carron & Company	lxx	Leatherfloor, Ltd.	lxxxvii	Sutcliffe Speakman & Co., Ltd.	ix
Carter & Co., Ltd.	lxxxviii	Lever, J. M., & Sons, Ltd.	lxxxvi	Temple Varish Co., Ltd., The	xxiv
Cellon, Ltd.	xxviii	Limmer & Trinidad Lake Asphalt Co., Ltd., The	lxxxv	Thorn, J., & Sons, Ltd.	lxx
Church & Co. (Fitties), Ltd.	lxxxvii	Lotex Asbestos Flooring Co., Ltd., The	lxxxv	Thornton, A. G., Ltd.	xxv
Cole, E. K., Ltd.	xlv & lxxxvi	Luxleum Manufacturers' Association	xv	Thorp, John B.	x
Compression Joints, Ltd.	lxxxvi	Loft Ladders, Ltd.	li	T.M.C. Harwell (Sales), Ltd.	lxxxii
Concrete, Ltd.	lv	London Brick Co., Ltd., The	lxx	Triplex Foundry, Ltd.	lv
Crittall Kitchen Equipment (1950) Co., Ltd.	lxvii	M. J. J. Ltd.	lxx	Troughton & Young (Lighting), Ltd.	lxxx
Davidson, C., & Sons, Ltd.	vi	Mallison, Wm., & Sons, Ltd.	lxxv	Truett & Steel, Ltd.	lxxx
Dawsons, Ltd.	xx	Marsley Tile Co., Ltd., The	xvii	Turners Asbestos Cement Co., Ltd.	xxii
D. La Rue, Thomas, & Co., Ltd.	xx	Marryat & Scott, Ltd.	lxxxviii	Twistell Reinforcement, Ltd.	lxxxv
Dunlop Rubber Co., Ltd.	li, liii	Martyn, Bruce, Ltd.	xvi	United Paint Co., Ltd., The	lxxxv
Durable Asphalt, Ltd.	lxxxii	McCall & Co. (Shelfield), Ltd.	xxxix	Val de Travers Asphalt Paving Co., Ltd.	lii
Durasteel, Ltd.	xvii	McCarthy, M., & Sons, Ltd.	xv	Versil, Ltd.	lv
Dureco Products, Ltd.	lxiii	Merchandise Bros., Ltd.	lxxxv	Ward, Thomas W., Ltd.	lxxxviii
Ebor Concrete, Ltd.	lxxxii	Merchandise Trading Co., Ltd., The	lxxxv	Warsite, Ltd.	lxv
Edgar, Wm., & Son, Ltd.	lii	M. T. M. Ltd.	lxxxv	Wall's Dove Bitumastic, Ltd.	xxix
		Mills Seaford Co., Ltd.	lxix & xcvi	Wellington Tube Works, Ltd.	xxix
		Morris, Herbert, Ltd.	xv	Williams, John, & Sons (Cardiff), Ltd.	xxvi, xlvii
		Morris Slager Co., Ltd.	lxxxiii	Wimpey, George, & Co., Ltd.	xxvi
		Mumford, Bailey & Preston, Ltd.	xov	Zinc Alloy Rust Proofing Co., Ltd.	xxxvii
		National Asphalt Paving Co., Ltd., The	lxvii	Zinc Development Assocn.	xxxvii

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tradings, etc., Educational, Legal Notices, Miscellaneous Property, Land and Sales, see lxxxix, xc, xci, xcii, xciii, xciv, and xcv.

YOURS for the Asking

LEARN HOW TO:—

SPECIFY,

TEST,

USE,

SHERARDIZING

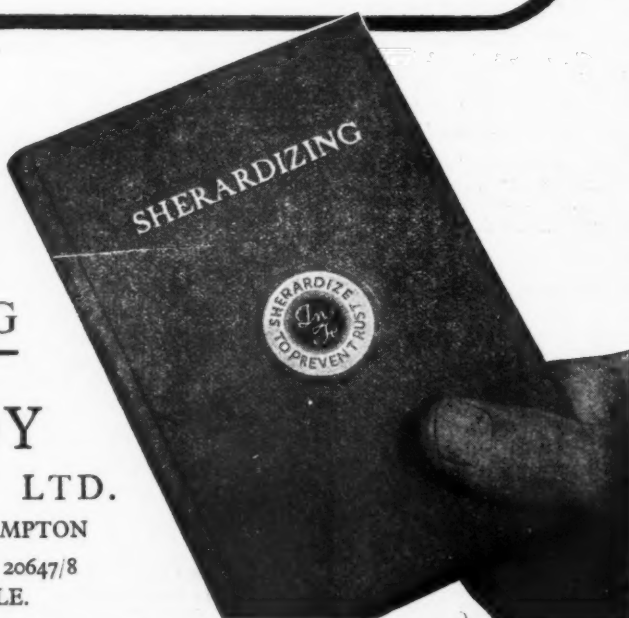
ZINC ALLOY

RUST PROOFING CO. LTD.

SHAKESPEARE STREET, WOLVERHAMPTON

TELEPHONE : WOLVERHAMPTON 20647/8

ALSO AT LONDON & ROCHDALE.



PAGE

lxxvi
xxvi
lxxvi
xxvii
xxviii
lxxviii
xix
xliv
v

lxxix
lxxviii
xci
lxxxvii
lxxii
xli
xlv
xlvi
lxxvii
lxxiv
xxvii
xxvi
xxiv
lxxx
xev

lxxxix

ix
xxiv
lxx
lxxi
xev
x
lxxxix
iv

lxxx
xxii
lxxxv
lxxxiv
iii

lvi
lxxviii
lxiv
xxix
xvi, xlvii

xvii
xxxvii



There's an unwelcome visitor in church this morning. The Ghost of Decay has settled in the beams and woodwork. Whether the decay is caused by dry rot or the dreaded death watch beetle, it's a case for Cuprinology—quickly. For timely treatment with Cuprinol can arrest the spread of the trouble and probably save the crippling cost of widespread replacement of timber. So let's hope the reverend gentleman calls in a builder who knows Cuprinology. Details from U.K. Distributors: Jenson & Nicholson Ltd., 36, St. James's St., London, S.W.1.

a case for ***Cuprinology** . . .

★ This means the technology of wood and fabric preservation with Cuprinol Fungicides and Insecticides. (Manufactured by Cuprinol Ltd., London)

By using

"Cretestone"

CONCRETE BONDING GYPSUM PLASTER

you save the cost of
hacking concrete to
provide a mechanical bond

Full information and complete specifications
available on request.

GYPROC PRODUCTS LIMITED

Head Office: Westfield, Upper Singlewell Road, Gravesend, Kent.
Telephone: Gravesend 4251-4. Telegrams: Gyproc, Gravesend.

Glasgow Office: Gyproc Wharf, Shieldhall, Glasgow, S.W.1.
Telephone: Govan 2141-3. Telegrams: Gyproc, Glasgow.

London Office: Morris House, 1-5 Jermyn Street, London, S.W.1.
Telephone: Whitehall 8073/4

Makers of
"GYPROC" "GYFELLITH" Light-weight Building Slabs,
"GYPROC" Wallboard and Lath,
"GYFELLITH" Partitions and Ceilings,
"FLAXSTELE" and "ACOUSTELE" Ceilings,
"GYPROC" 2-inch Solid Partitions.

G.C.3.

SAWN & POLISHED STONE
FOR CHURCHES
PUBLIC BUILDINGS
SHOP FRONTS, BANKS

TREVOR

GRANITE

PENMAENMAWR & WELSH GRANITE CO. LTD.
Head Office: Penmaenmawr, North Wales

CVS-23

Pelican Graphos

Drawing Ink Fountain Pen for
lettering and technical drawing

FROM YOUR USUAL DRAWING
OFFICE MATERIAL SUPPLIERS

Wholesale Distributors:

G. H. Smith & Partners,

28 Berechurch Rd.,

Colchester, Essex, Tel.: 5526

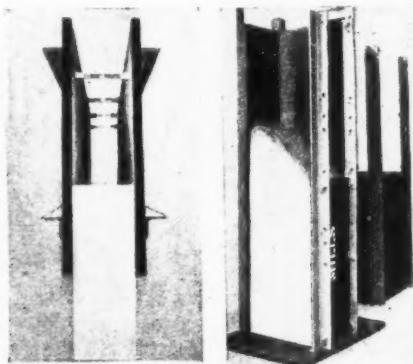
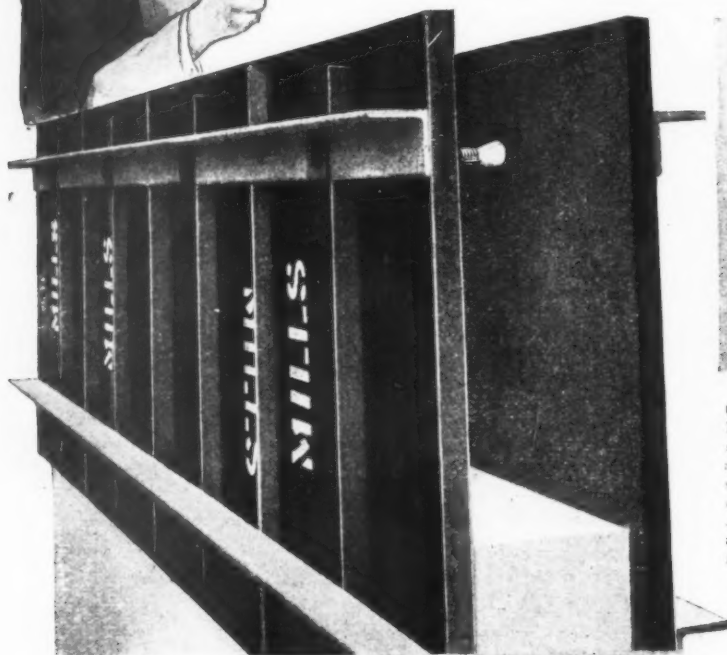
Also distributors of
Pelican world renowned Waterproof
Drawing Inks
and Drawing Ink Cartridges.





MILLS provides all the answers to your FORMWORK problems

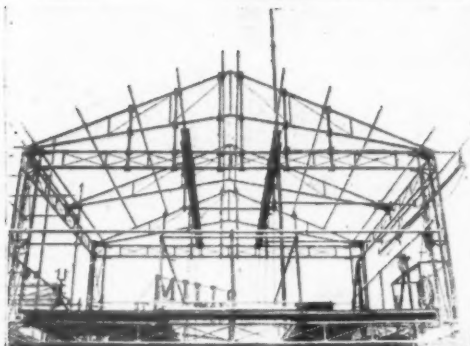
Mills Scaffold Co., Ltd. have pleasure in announcing that they have now completed their new range of Formwork, for use on all types and systems of concrete construction. You are invited to see this robust, inexpensive and easy-to-handle equipment (no special tools required) now on exhibition at Mills' Hammersmith Depot.



(Left and above left)
The use of Milforms for wall shuttering with angle-iron wallings and "Rawlties". This shuttering is self-supporting and automatically aligning. A light access-scaffold only would be required in addition to the above items.



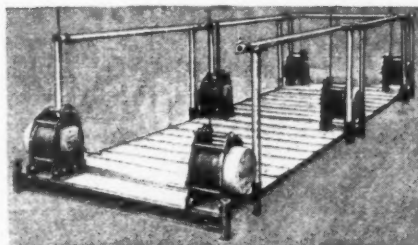
(Right and above right)
These two illustrations show the use of angle-iron studs and clamps with Milforms to shutter a 2 ft. x 2 ft. column.



An example of Mills Standard 20-ft. span welded roof truss. Standard designs have been prepared for spans from 20 ft. to 45 ft. in 5-ft. increments. Trusses to customers' specification can be fabricated.



Built at Mills' Birmingham Depot. A prefabricated staircase, light and easy to handle: a stout and rigid structure when erected.



Mills Heavy Suspended Scaffold, designed for a super-imposed load of 100-lb./ft.². The platform is pivoted at the winches, enabling two men to move a considerable length of scaffold in the shortest time with a minimum of effort.

VISIT THE MILLS EXHIBIT AT THE HAMMERSMITH DEPOT

MILLS SCAFFOLD CO., LTD., Head Office and Depot: TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON, W.6. Tel.: RIVERSIDE 5026/9
Belfast • Birmingham • Bournemouth • Brighton • Bristol • Canterbury • Cardiff • Coventry • Dublin • Exeter • Glasgow • Hull
Ilford • Liverpool • Lowestoft • Manchester • Newcastle • Norwich • Portsmouth • Plymouth • Southampton • Swansea • Yarmouth

es
ur
ns

now
tems
and
n at



super-
votled
asiler-
th a

O T
26/9
Hull
mouth