

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

Astragal's Notes and Topics

Letters

News

Diary

Criticism

TECHNICAL SECTION

Information Sheets

Information Centre

Current Technique

Working Details

Questions and Answers

Prices

The Industry

CURRENT BUILDING

Major Buildings described:

Details of Planning, Construction,

Finishes and Costs

Buildings in the News

Building Costs Analysed

Architectural Appointments

Wanted and Vacant

No. 3445]

[Vol. 133

THE ARCHITECTURAL PRESS

9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1. Telephone: Whitehall 0611

Price 1s. 0d.

Registered as a Newspaper.

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

ILA	Institute of Landscape Architects.	1, Park Crescent, W.1.	Museum 3473
I of Arb	Institute of Arbitrators.	Hastings House, 10, Norfolk Street, W.C.2.	Temple Bar 4071
IOB	Institute of Builders.	48, Bedford Square, W.C.1.	Museum 7197
IQS	Institute of Quantity Surveyors.	98, Gloucester Place, W.1.	Welbeck 1859
IR	Institute of Refrigeration.	Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects.	68, Gloucester Place, W.1.	Hunter 1945
ISE	Institution of Structural Engineers.	11, Upper Belgrave Street, S.W.1.	Sloane 7128
JFRO	Joint Fire Research Organisation (DSIR & Fire Offices' Committee).	Fire Research Station, Boreham Wood, Herts.	Elstree 1341/1797
LDA	Lead Development Association.	18, Adam Street W.C.2.	Whitehall 4175
LMBA	London Master Builders' Association.	47, Bedford Square, W.C.1.	Museum 3891
MAFF	Ministry of Agriculture, Fisheries and Food.	Whitehall Place, S.W.1.	Trafalgar 7711
MOE	Ministry of Education.	Curzon Street House, W.1.	Hyde Park 7070
MOH	Ministry of Health.	23, Savile Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government.	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, W.C.2.	Gerrard 6933
MOT	Ministry of Transport.	Berkeley Square House, W.1.	Mayfair 9494
MOW	Ministry of Works.	Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine Owners and Manufacturers Council.	14, Howick Place, Victoria Street, S.W.1.	Victoria 1600 & 6477
NAS	National Association of Shopfitters.	2, Caxton Street, S.W.1.	Abbey 4813
NBR	National Buildings Record.	Fielden House, 10, Great College Street, Westminster, S.W.1.	Whitehall 6554
NCBMP	National Council of Building Material Producers.	10, Storey's Gate, S.W.1.	Abbey 5111
NEFMAL	National Employers Federation of the Mastic Asphalt Industry.	21, John Adam Street, Adelphi, W.C.2.	Trafalgar 3927
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.	Macauley 4459
NFHS	National Federation of Housing Societies.	12, Suffolk St., S.W.1.	Whitehall 1631
NHBRC	National House Builders Registration Council.	58, Portland Place, W.1.	Langham 0064/5
NJCBI	National Joint Council for the Building Industry.	11, Weymouth Street, W.1.	Langham 2785
NPL	National Physical Laboratory.	Head Office, Teddington.	Teddington Lock 3222
NRDB	Natural Rubber Development Board.	Market Buildings, Mark Lane, E.C.3.	Mansion House 9383
NSAS	National Smoke Abatement Society.	Palace Chambers, Bridge Street, S.W.1.	Trafalgar 6838
NT	National Trust.	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.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland.	15, Rutland Square, Edinburgh.	Fountainbridge 7631
RIB	Rural Industries Bureau.	35, Camp Road, S.W.19.	Wimbledon 5101
RIBA	Royal Institute of British Architects.	66, Portland Place, W.1.	Langham 5533
RICS	Royal Institution of Chartered Surveyors.	12, Great George Street, S.W.1.	Whitehall 5322/9245
RFAC	Royal Fine Art Commission.	5, Old Palace Yard, 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
RSH	Royal Society of Health.	90, Buckingham Palace Road, S.W.1.	Sloane 5134
SBPM	Society of British Paint Manufacturers.	Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SE	Society of Engineers.	Abbey House, Victoria Street, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association.	30, Cornhill, E.C.3.	Mansion House 3921
SIA	Society of Industrial Artists.	7, Woburn Square, W.C.1.	Langham 1984/5
SIA	Structural Insulation Association.	32, Queen Anne Street, W.1.	Langham 7616
SNHTPC	Scottish National Housing.	Town Planning Council.	Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.
SPAB	Society for the Protection of Ancient Buildings.	55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association.	28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association.	21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute.	18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation.	75, Cannon Street, E.C.4.	City 5040
WDC	War Damage Commission.	6, Carlton House Terrace, S.W.1.	Whitehall 4341
ZDA	Zinc Development Association.	34, Berkeley Square, W.1.	Grosvenor 6636

ACME

—FLOORING SPECIALISTS FOR 100 YEARS

IMMOVABLE-ACME HARDWOOD FLOORS

ACMEPAVING FACTORY FLOORS

ACMETYLE SOLID P.V.C. TILES AND SHEET

ACMELYNO LINOLEUM

ACMECORK CORK TILES

ACMETRED RUBBER FLOORING

ACMEPYLE FITTED CARPETS

ACME FLOOR RENOVATION SERVICE

Technical Brochures gladly sent on request.

ACME

**FLOORING & PAVING
CO. (1904) LIMITED**

RIVER ROAD, BARKING, ESSEX. RIPpleway 2771 (P.B.X.)

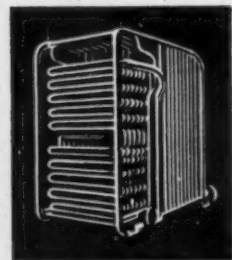
For more than 4 years
EDWIN DANKS
OF OLDBURY
(A member of the Babcock & Wilcox Organisation)
has designed fabricated
and installed...

**CORNER
TUBE
BOILERS**

FOR H.P.
HOT WATER
INSTALLATIONS,
SUCH AS...

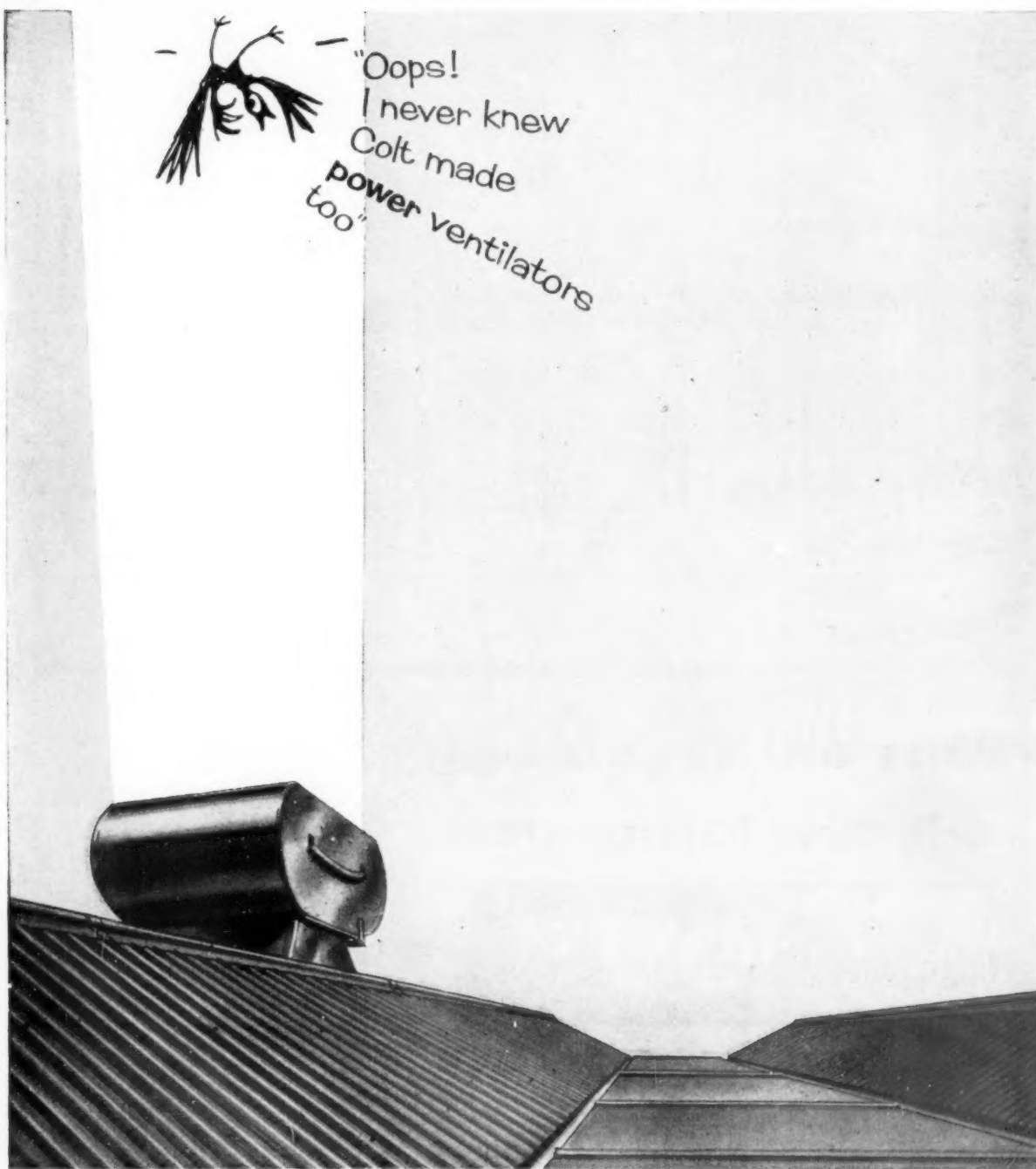
MANCHESTER
OFFICE BLOCKS IN
SHEFFIELD
WORKS IN
BIRMINGHAM
MULTIPLE STORES IN
WAREHOUSES IN LONDON

FACTORIES IN SHEFFIELD · OFFICE BLOCKS IN BIRMINGHAM



and now offers Corner
Tube design for Steam
duties. The First
Contract is 2 Steam
Boilers 15,000 lb. 350 lb.
pressure F.S.T. 570 F.
This versatile experience
in Corner Tube Boiler
design and fabrication
is at your service from

**EDWIN DANKS
& CO (OLDBURY) LTD**
OLDBURY Near BIRMINGHAM
Tel: (Main Works) Broadwell 2531



They do! For Colt have a ventilator, natural or powered, to meet every kind of problem—including a range of high powered ventilators such as the Upward Discharge unit shown here. Let the Colt Ventilation Service advise you. Powered or natural, or a combination of both—the Colt engineer will tell you which system is best and most economical for you. Send for a free manual to Dept. 37.



**The power behind
natural ventilation and naturally
behind powered ventilation too!**

COLT VENTILATION LIMITED · SURBITON · SURREY · Telephone: ELMbridge 0161



ACME

—FLOORING SPECIALISTS FOR 100 YEARS

IMMOVABLE-ACME HARDWOOD FLOORS

ACMEPAVING FACTORY FLOORS

ACMETYLE SOLID P.V.C. TILES AND SHEET

ACMELYNO LINOLEUM

ACMECORK CORK TILES

ACMETRED RUBBER FLOORING

ACMEPYLE FITTED CARPETS

ACME FLOOR RENOVATION SERVICE

Technical Brochures gladly sent on request.

ACME

**FLOORING & PAVING
CO. (1904) LIMITED**

RIVER ROAD, BARKING, ESSEX. R1Ppleway 2771 (P.B.X.)

For more than 4 years
EDWIN DANKS
OF OLDBURY
(a member of the Babcock & Wilcox Organisation)
has designed fabricated
and installed...

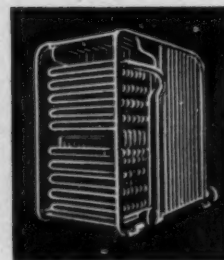
**CORNER
TUBE
BOILERS**

FOR H.P.
HOT WATER
INSTALLATIONS,
SUCH AS...

WORKS IN SHEFFIELD • OFFICE BLOCKS IN MANCHESTER

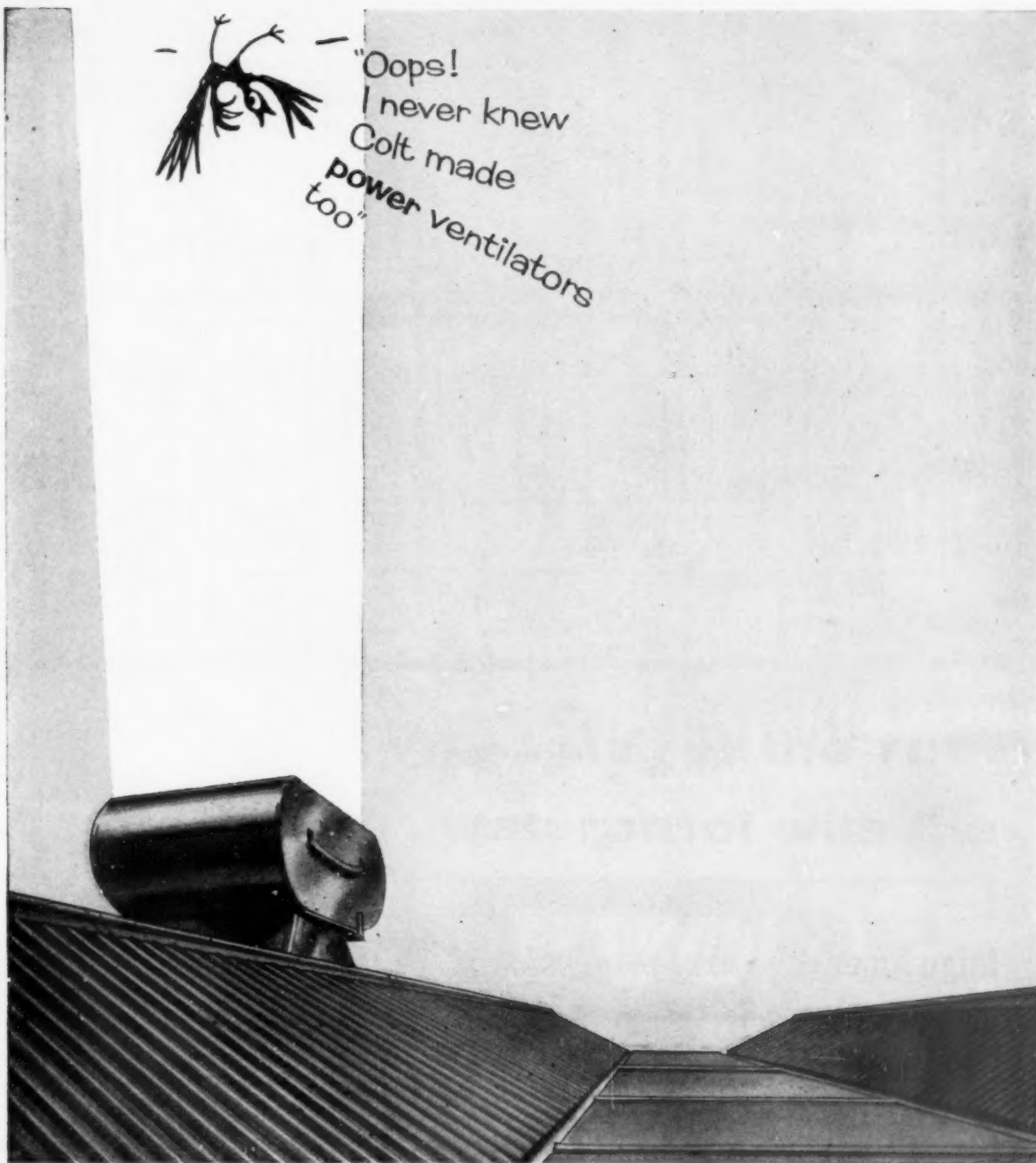
WAREHOUSES IN LONDON • MULTIPLE STORES IN BIRMINGHAM

FACTORIES IN SHEFFIELD • OFFICE BLOCKS IN BIRMINGHAM



and now offers Corner
Tube design for Steam
duties. The First
Contract is 2 Steam
Boilers 15,000 lb. 350 lb.
pressure F.S.T. 570 F.
This versatile experience
in Corner Tube Boiler
design and fabrication
is at your service from

**EDWIN DANKS
& CO (OLDBURY) LTD**
OLDBURY Near BIRMINGHAM
Tel: (Main Works) Broadwell 2531



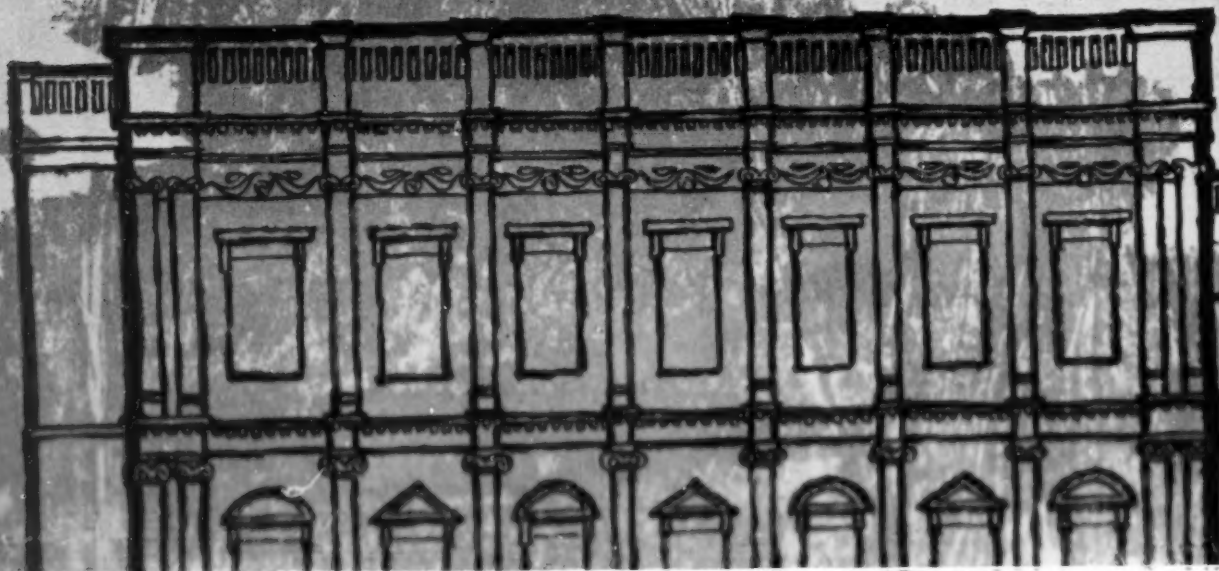
They do! For Colt have a ventilator, natural or powered, to meet every kind of problem—including a range of high powered ventilators such as the Upward Discharge unit shown here. Let the Colt Ventilation Service advise you. Powered or natural, or a combination of both—the Colt engineer will tell you which system is best and most economical for you. Send for a free manual to Dept. 37.



**The power behind
natural ventilation and naturally
behind powered ventilation too!**

COLT VENTILATION LIMITED · SURBITON · SURREY · Telephone: ELMbridge 0161





Technical drawings freely sent on request.

EDWIN DANKS & CO. (1904) LIMITED

RIVER ROAD, BARKING, ESSEX. R1Ppleway 2771 (P.B.X.)

For more than 4 years
EDWIN DANKS
OF OLDBURY
has designed fabricated
and installed...

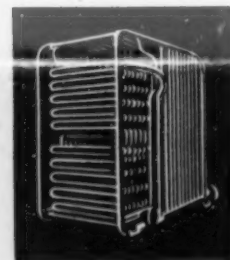
**CORNER
TUBE
BOILERS**

FOR H.P.
HOT WATER
INSTALLATIONS,
SUCH AS...

WORKS IN SHEFFIELD • OFFICE BLOCKS IN MANCHESTER

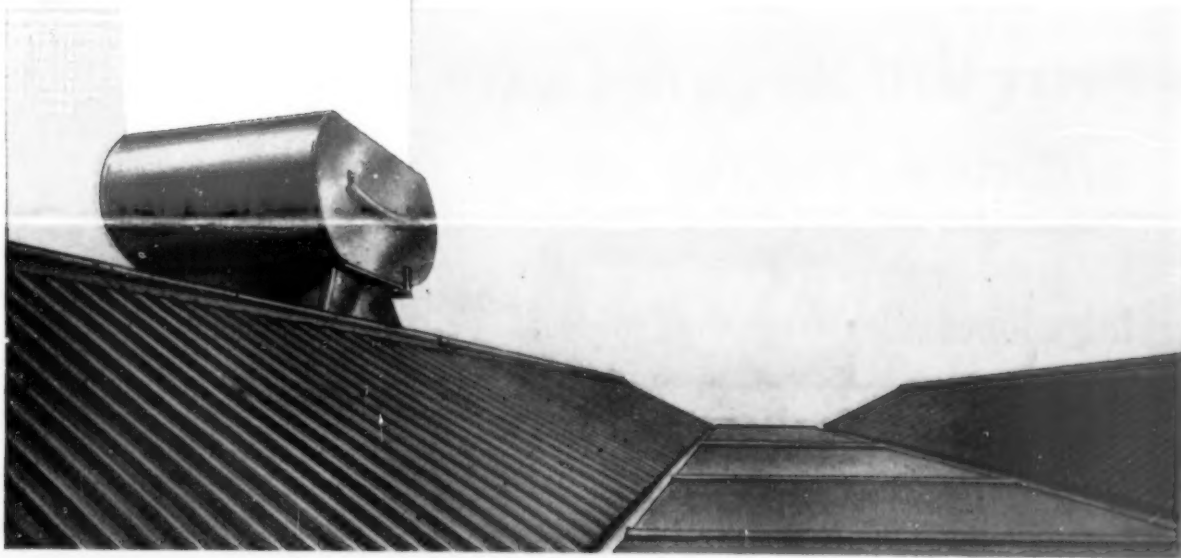
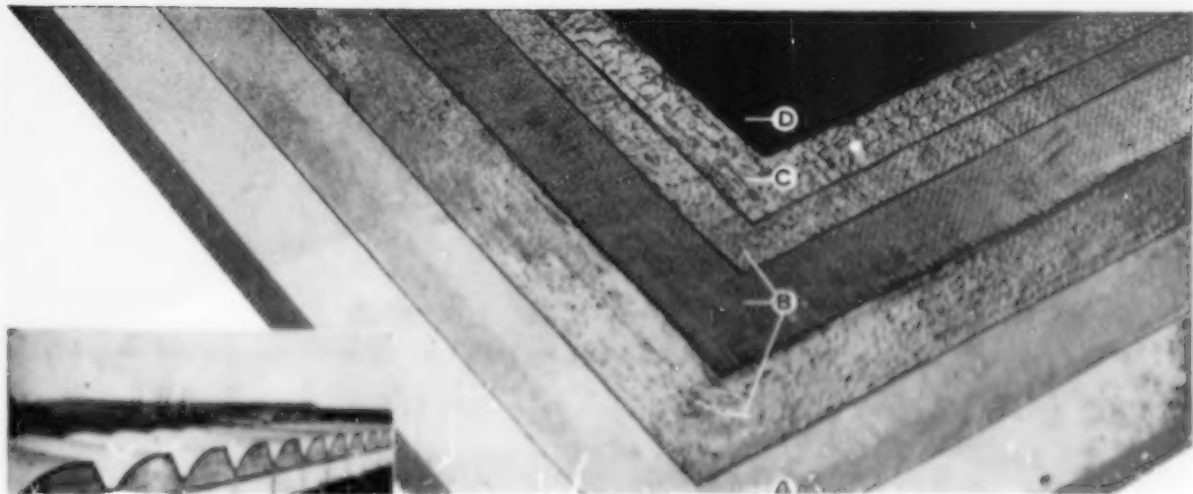
WAREHOUSES IN LONDON • MULTIPLE STORES IN BIRMINGHAM

FACTORIES IN SHEFFIELD • OFFICE BLOCKS IN BIRMINGHAM



and now offers Corner
Tube design for Steam
duties. The First
Contract is 2 Steam
Boilers 15,000 lb. 350 lb.
pressure F.S.T. 570 F.
This versatile experience
in Corner Tube Boiler
design and fabrication
is at your service from

**EDWIN DANKS
& CO (OLDBURY) LTD**
OLDBURY Near BIRMINGHAM
Tel: (Main Works) Broadwell 2531



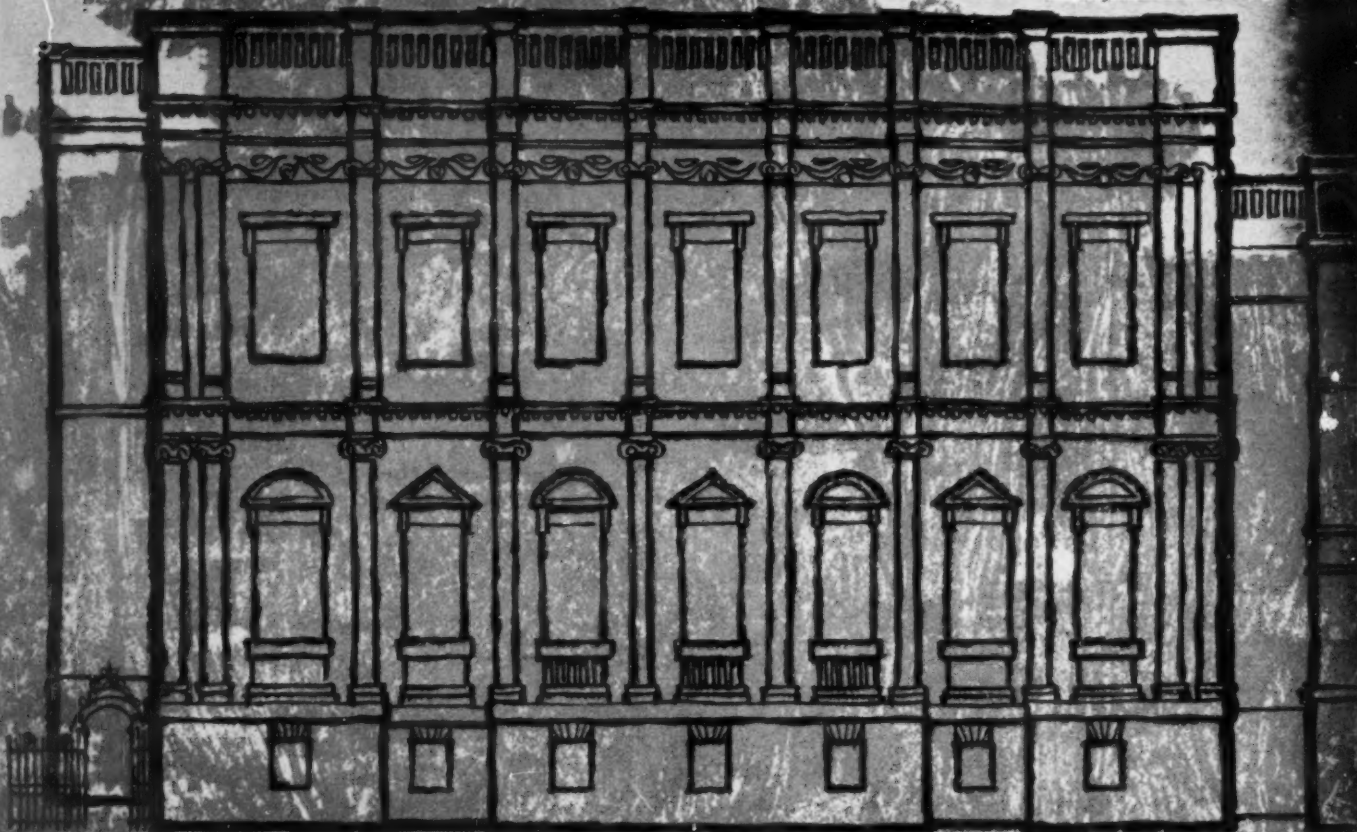
They do! For Colt have a ventilator, natural or powered, to meet every kind of problem—including a range of high powered ventilators such as the Upward Discharge unit shown here. Let the Colt Ventilation Service advise you. Powered or natural, or a combination of both—the Colt engineer will tell you which system is best and most economical for you. Send for a free manual to Dept. 37.



**The power behind
natural ventilation and naturally
behind powered ventilation too!**

COLT VENTILATION LIMITED · SURBITON · SURREY · Telephone: ELMbridge 0161





Inigo Jones—the first professional

Inigo Jones was the first English architect in the modern sense, i.e. a professional man rather than a master-mason; but it must be confessed that he was in many ways quite different from the architect of today. He was never trained as such, and he started almost from the gutter. The only record of his parentage is that his father, a Smithfield meat-porter, was fined by a jury in 1581 for using bad language to a lady—a strange ancestry for a man who was to die as a famous courtier! At an early age, Inigo showed a talent for drawing; and, somehow, managed to study in Italy between 1597 and 1603 as the protégé of the Earl of Pembroke. Later, he appears to have worked for King Christian IV of Denmark. It was at this point that he came to be employed by King James I (who had married Princess Anne of Denmark), as a designer of stage-scenery and costumes for one of those "masques" or pageants which had been made popular by Elizabeth I.

Italian art and antiquities having become fashionable, it was natural that the organisers "hired one Mr. Jones, a great traveller, who undertook to further them much, and furnish them with rare Devices, but performed very little to that which was expected". So wrote a contemporary gossip-columnist in 1605, but in fact Inigo had secured a foothold on the Court ladder. He became Surveyor to the young Prince of Wales in 1611, and "Surveyor-

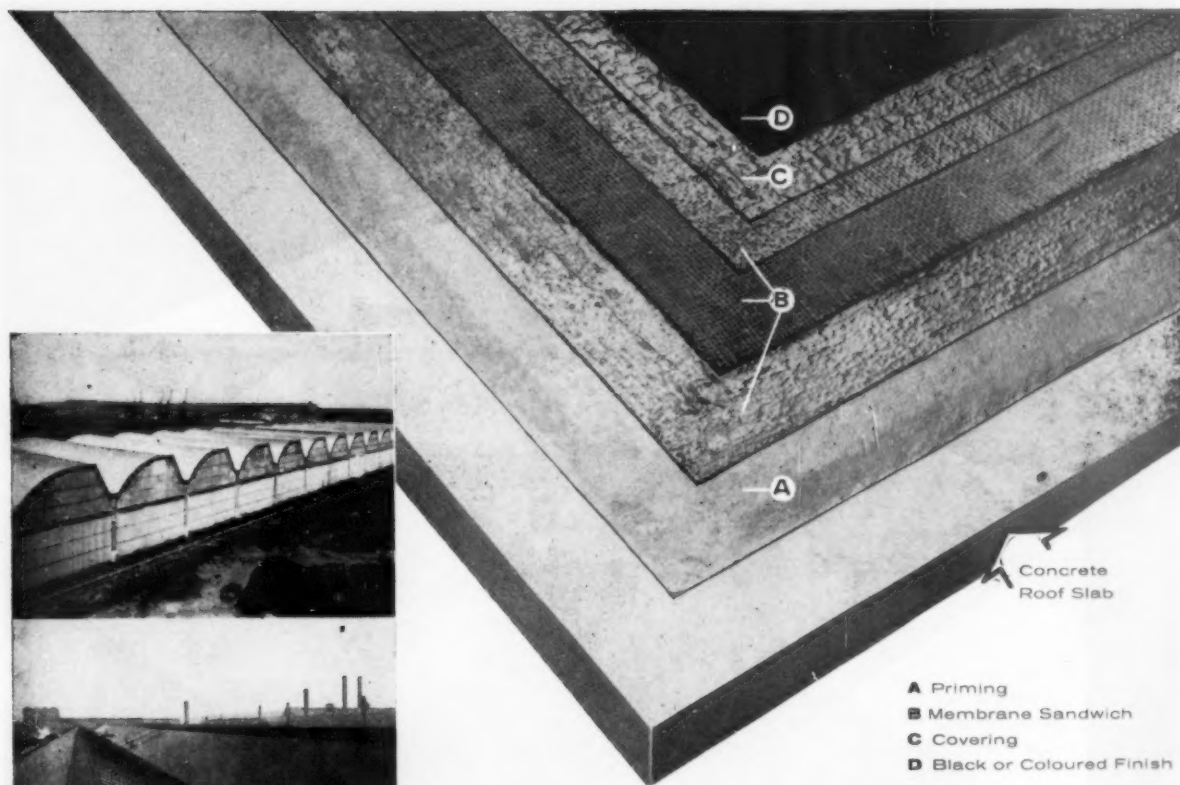
General to the King's Works and Buildings" in 1615. It was only then that he really blossomed out as an architect; and thereafter his architectural practice was only interrupted during a single year, when he was M.P. for Shoreham in Sussex.

A large number of buildings have been rashly attributed to him, but the only surviving works which are quite definitely his are the Queen's House at Greenwich (1616-35); the Banqueting Hall (now the Royal United Service Institution) in Whitehall (1619-22), intended as the first instalment of a huge new palace; the Chapel of Marlborough House, London (1623-6); and a few fragments of other buildings. Because his work was mainly for the Court, it naturally followed that it was interrupted by the Civil War in 1640. When he was 72 years of age, in 1645, he was arrested as a Royalist supporter, at Basing House, Hampshire, by Parliamentary troops, and fined. A contemporary reported that "there was the famous Surveyor, Inigo Jones who was carried away in a blanket, having lost his clothes". He had taken the precaution of burying his money in "Scotland-yard" just before this happened; and reburied it in "Lambeth-Marsh" soon after the House of Lords pardoned him in 1646. (For all we know, it may still be there). After his release, he carried on a little practice, but died in 1652. The importance of his work is that he introduced into England the mature Renaissance architecture of Palladio the Italian.

Siegwart Floors were not available to architects in Victorian times, but since 1912, we have been proud to provide structural flooring for many famous buildings. Technical information and advice is freely given.

SIEGWART PRECAST FLOORS & ROOFS

Siegwart Floor Company Ltd.,
Gable House, Rickmansworth, Herts.
Telephone Rickmansworth 2268.
Berkeley House, Hagley Road,
Birmingham 16.
Telephone Edgbaston 3960
Carlton House, Blythswood Square,
Glasgow, C.2.
Telephone City 5156



**Whatever the roof
waterproof with the**

EVO DE

BUILT UP ROOFING SYSTEM

* Any roof can be treated * Permanent waterproofing
for large or small roofs * Applied cold without pre-
liminary treatment * Used and proved for 25 years
* Foreman demonstrators are available to assist your
contractor's labour, or, if you prefer, our contracts
department can undertake
the work for you.

On the left we show 4 examples of roofs which have been waterproofed with the Evode System. These illustrate the variety of jobs which are handled successfully by our contracts department.

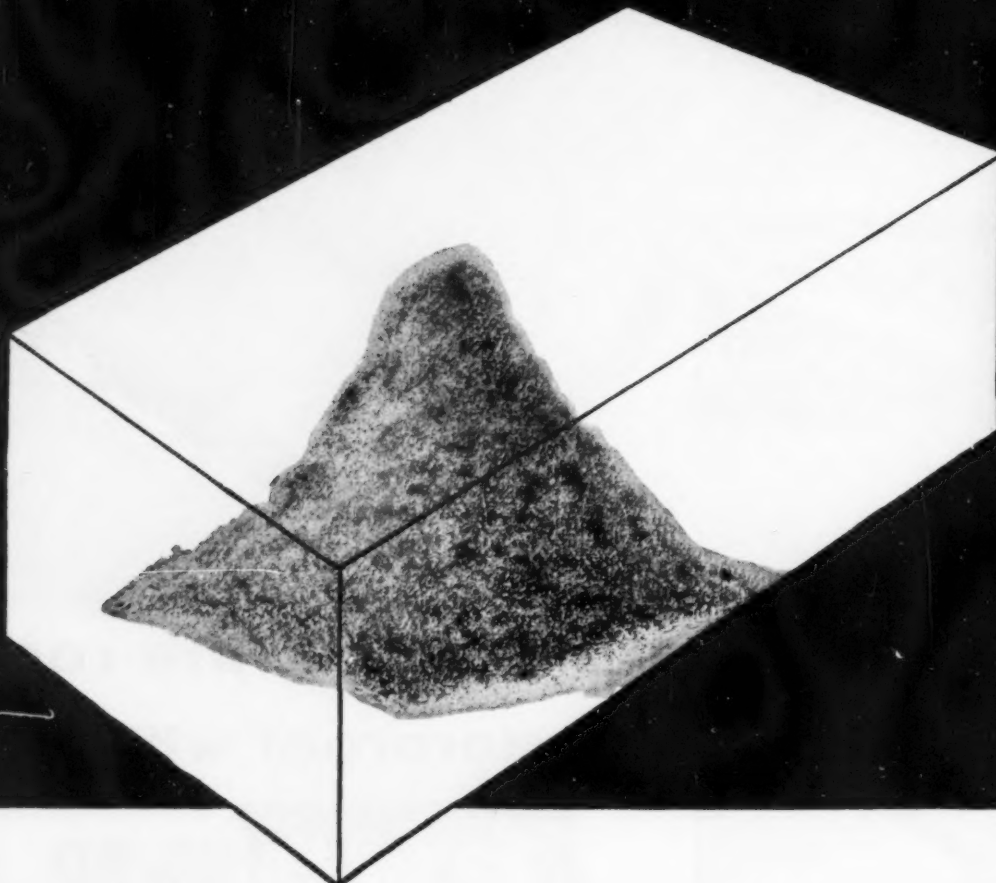
A PRODUCT OF EVODE LIMITED OF STAFFORD, THE **EVO STIK** 'IMPACT' ADHESIVE SPECIALISTS.

Are YOU using the EVODE PERSONAL SERVICE TO DESIGNERS? Write or phone for details.

* **SEND FOR LITERATURE** EVODE LTD., (BUILDING CHEMICALS DIVISION) STAFFORD. Phone: 2241 (8 lines)
London Office: 82 VICTORIA STREET, S.W.1. Telephone: ABBey 4622 (3 lines)

10-10-100

Want to make something of it?



As well as making top quality sand lime, concrete and refractory bricks, the Sutcliffe, Speakman EMPEROR Press makes bricks from clinker, burnt shale, slag, etc. - once considered useless waste. They're good quality bricks, consistent and always well formed.

The EMPEROR Press comes in various sizes - the Duplex exerts a pressure of 200 tons and can make 3,000 bricks an hour, operating round the clock. Sutcliffe, Speakman are specialists in this type of work. They supply a complete range of plant and equipment, and can undertake the erection of complete brickworks and hand them over in working order. And they are always happy to advise you.

Ask

**SUTCLIFFE
SPEAKMAN**

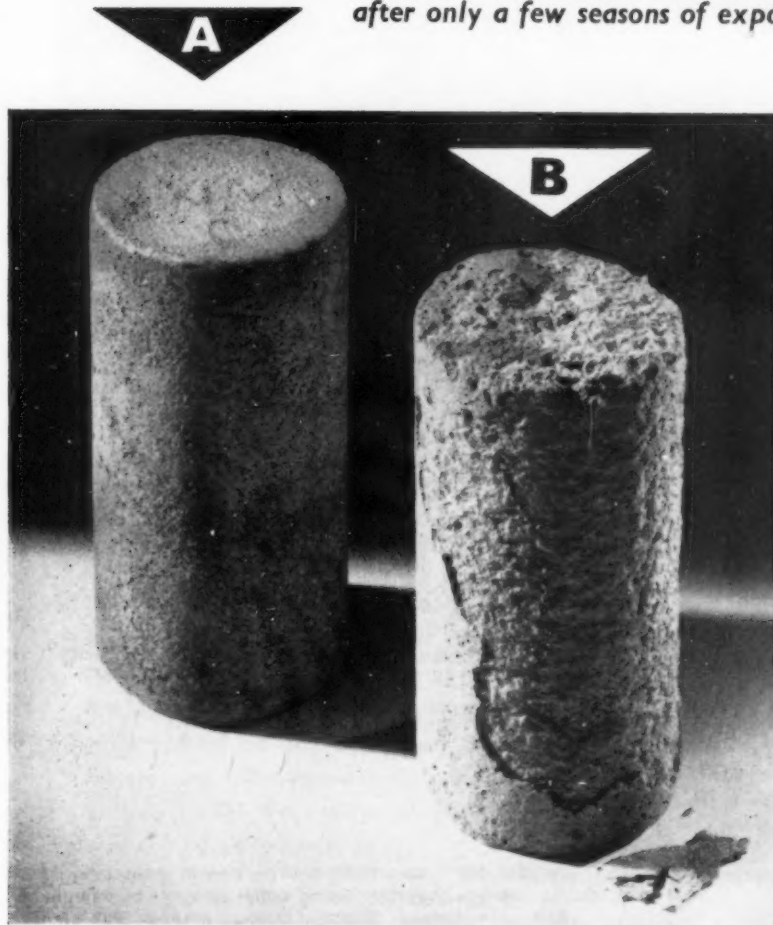
about brickmaking

SUTCLIFFE SPEAKMAN & CO LTD · LEIGH · LANCASHIRE · TELEPHONE: LEIGH 72101

London Office: 2 Caxton Street · Westminster SW1 Telephone: Abbey 3085

The Reason Why

The illustration below explains why it is often found necessary to repoint joints in brickwork after only a few seasons of exposure



The cylinder marked 'A' consisted of mortar gauged 1 part cement to 6 parts sand by volume plus **FEBMIX ADMIX** Mortar Plasticiser. The cylinder marked 'B' was composed of 1 part cement to 1 part hydrated lime to 6 parts sand by volume. Both the cylinders of mortar were allowed to cure for one month and were then subjected to 30 cycles of freezing and thawing at which point the mortar cylinder containing **FEBMIX ADMIX** was unaffected. But, as can be seen from the photograph, the cylinder of cement lime sand mortar had badly disintegrated.

For permanent strength and good appearance and lasting life, bricklaying mortar must be able to withstand alternate freezing and thawing to which it is subjected many times a year. That mortar plasticised with **FEBMIX ADMIX** has that property is proved by the condition of the mortar joints in the many thousands of buildings that have been erected in the past 8 years with **FEBMIX ADMIX** incorporated.

**For durable
brickwork**

USE FEBMIX-ADMIX

MORTAR PLASTICISER

It costs you money NOT to use it!



(GREAT BRITAIN) LTD.

102 Kensington High Street, London, W.8. WES 0444

Albany Road, Chorlton-cum-Hardy, Manchester 21.

CHO 1063

DH88497

A Easier to mix
NEW Easier to spread
RESORCINOL
WOOD Improved wetting qualities
GLUE Longer assembly time
FROM Fast, medium or slow setting
CIBA

Costs no more

Aerodux 500 is something entirely new in resorcinol glues — a two-liquid system using equal amounts by volume of resin and hardener. Supplied in three grades—500F (fast), 500M (medium) and 500S (slow)—it is mixed with Hardener 501, providing a glue which dries out slowly and cures at lower temperatures than conventional resorcinol glues. The adhesive is cold setting, gap filling and fully weatherproof so that it is eminently suitable for large scale laminating, particularly exterior work for which resorcinol glues are specified. It will bond all woods and improved or densified woods, as well as many other building materials. Aerodux 500 conforms to BS. 1204 : 1956/WPP (GF and CC) and BS 1203: 1954/WPP. May we send you further details?

AERODUX 500

Aerodux is a registered trade name

CIBA (A.R.L.) LIMITED, DUXFORD, CAMBRIDGE. TELEPHONE SAWSTON 2121

AP617

2/- A PINT



If you use a powder waterproofing compound for concrete and cement work, it probably costs from 3/- to 6/6 per cwt. of cement used. If it is a liquid type waterproofer, it can cost anything from 2/6 up to 8/- for each cwt. of cement used. This means that it costs from 11/3 up to 36/- for waterproofing a cubic yard of 1 : 2 : 4 concrete.

In contrast, with FEBPROOF it only costs 2/- for waterproofing a cwt. of cement or 9/- a cubic yard of 1 : 2 : 4 concrete. Independent Test Reports confirm that in waterproofing efficiency, FEBPROOF is superior to most and inferior to none, but that is not all—for in addition to waterproofing, FEBPROOF also improves workability and plasticity and increases compressive strengths to a marked degree.

FEBPROOF

**INTEGRAL LIQUID WATERPROOFER
for CEMENT AND CONCRETE WORK**



(GREAT BRITAIN) LTD

102 Kensington High Street, London, W.8

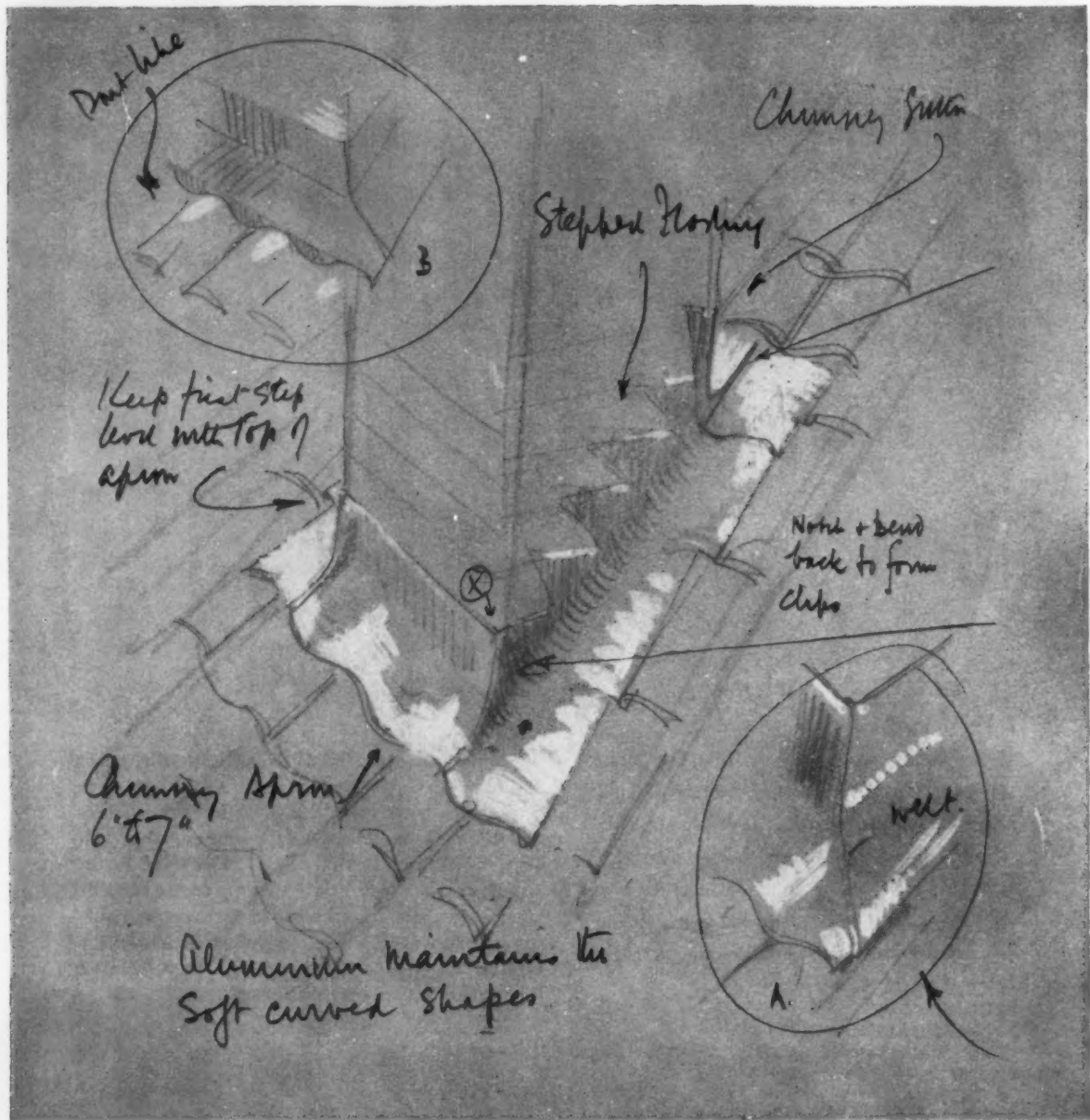
Telephone: WES 0444

Albany Road, Chorlton-cum-Hardy, Manchester 21

Telephone: CHO 1063

DHB 9195

THIS IS ALUMINIUM



Architect's drawing of flashing with notes

BRITISH ALUMINIUM

British Aluminium Super Purity (99.99%) flashing material is aluminium in its most *workable* form. And this is only one of its many pleasing attributes. It lasts a building's lifetime and is ... *good looking* ... *light in weight* ... *low in price and now less glaring*! Send for literature on Super Purity.



THE BRITISH ALUMINIUM COMPANY LTD Norfolk House, St. James's Square, London, S.W.1 | Trafalgar 8888

Powered AND Natural

VENTILATION BY GREENWOOD AIRVAC

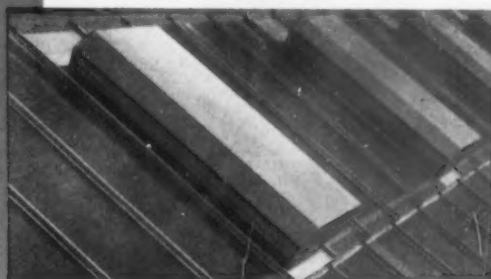
FOR INDUSTRIAL AND PUBLIC BUILDINGS

Available in a full range of sizes, all Greenwood Airvac patent Roof Extractors are suitable for flat or sloping roof mounting and are fully weathered. A special feature of all units is their neat and compact design.



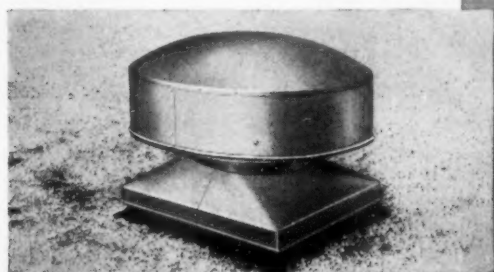
POWERED 'MECHAVENT' ROOFLINE

Roof-mounted extractor ventilator with exhaust capacities from 300 c.f.m. to 27,000 c.f.m. Available with heat conservation shutters. Heavy gauge hardened aluminium.



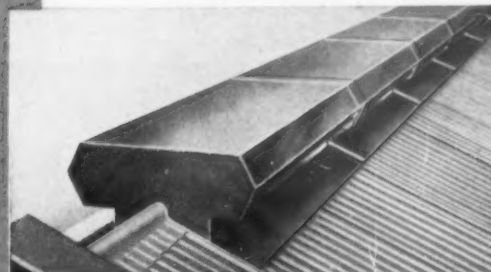
NATURAL 'ROOFLINE'

For permanent or controlled natural ventilation and effective removal of fumes and vitiated air by stack action. Low overall height and large free outlet area. Heavy gauge hardened aluminium.



POWERED 'POWER DOME'

Roof-mounted extractor with completely enclosed spun aluminium hinged dome head for access to motor. Exhaust capacities from 300 c.f.m. to 4,800 c.f.m.

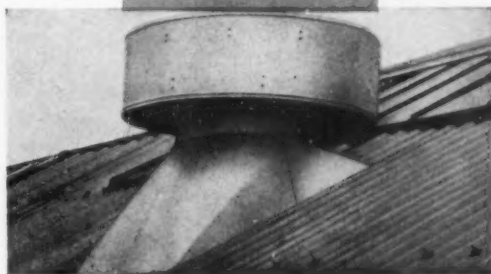


NATURAL 'RIDGELINE'

For fixing at the roof ridge, as a single unit or an extended length of units for permanent or controllable natural ventilation. Made of hardened aluminium.

POWERED 'LOWLINE'

Aerodynamically designed dual purpose extractor combining powered and natural ventilation in a single unit. Capacities from 230 c.f.m. to 6,000 c.f.m.



or NATURAL 'LOWLINE'

Roof-mounted natural extractor of low height and weight, giving maximum performance on wind and stack action. Heavy gauge steel with galvanized finish.

Write today for illustrated literature on the full range of Powered and Natural Ventilating Units

Greenwood Airvac ventilation

GREENWOOD'S AND AIRVAC VENTILATING COMPANY LTD

ESTABLISHED 1879

PATENTEES, DESIGNERS AND MANUFACTURERS OF
NATURAL AND MECHANICAL VENTILATING
EQUIPMENT



BEACON HOUSE, KINGSWAY, LONDON, W.C.2
CHANCERY 8135 (4 lines). 'Grams: AIRVAC', LONDON

E.J.M.A. PLANS TO HELP YOU

There's nothing as good as wood for windows*. And there's nothing to equal in extent and quality the range of standard and special windows supplied by members of The English Joinery Manufacturers' Association. Whether you design or build houses or hotels, schools or factories, you can get precisely the standard or special windows you want from one or another of the members of The English Joinery Manufacturers' Association. Write today for a list of members.

One of the ways the Association plans to help you, is by the development of "EJMA" windows which are of purposeful design and of economical construction. It will pay you to send for all the latest specifications and information sheets and the list of members qualified to produce "EJMA" windows.

* Remember that wood minimizes heat losses, condensation and sound transmission, offers greater flexibility in design, and properly painted, clear finished or selected for weathering, lasts longer than other materials.



The Association's membership includes firms making standard joinery and joinery to Architects' special requirements.



SPECIFY BRITISH MADE JOINERY & WOODWORK

The English Joinery Manufacturers' Association (Incorporated), Sackville House, 40 Piccadilly, London, W.1. Tel: REGent 4448/9
(with which is associated the Scottish Joinery and Door Manufacturers' Association)

New types, new designs The new extended range of "Insulight"
Hollow Glass Blocks provides all the elements for an unlimited
variety of design patterns—this "Boomerang" type is only
example—while retaining all the functional advantages.

For full details of the complete new range write to the
'Technical Sales and Service Department'

PILKINGTON BROTHERS LIMITED

St. Helens, Lancashire. London Office: Selwyn House,
Cleveland Row, St. James's, S.W.1. Supplies are
available through the usual trade channels.

Registered



LIGHT
AND
PRIVACY

with Pilkingtons' 'Insulight' hollow glass blocks



E.J.M.A. PLANS TO HELP YOU

There's nothing as good as wood for windows*. And there's nothing to equal in extent and quality the range of standard and special windows supplied by members of The English Joinery Manufacturers' Association. Whether you design or build houses or hotels, schools or factories, you can get precisely the standard or special windows you want from one or another of the members of The English Joinery Manufacturers' Association. Write today for a list of members.

One of the ways the Association plans to help you, is by the development of "EJMA" windows which are of purposeful design and of economical construction. It will pay you to send for all the latest specifications and information sheets and the list of members qualified to produce "EJMA" windows.

* Remember that wood minimizes heat losses, condensation and sound transmission, offers greater flexibility in design, and properly painted, clear finished or selected for weathering, lasts longer than other materials.



The Association's membership includes firms making standard joinery and joinery to Architects' special requirements.



SPECIFY BRITISH MADE JOINERY & WOODWORK

The English Joinery Manufacturers' Association (Incorporated), Sackville House, 40 Piccadilly, London, W.1. Tel: REGent 4448/9
(with which is associated the Scottish Joinery and Door Manufacturers' Association)

New types, new designs The new extended range of "Insulight"[®] Hollow Glass Blocks provides all the elements for an unlimited variety of design patterns—this "Boomerang" type is only one example—while retaining all the functional advantages. For full details of the complete new range write to the Technical Sales and Service Department.

PILKINGTON BROTHERS LIMITED

St. Helens, Lancashire; London Office: Selwyn House,
Cleveland Row, St. James's, S.W. 1. Supplies are
available through the usual trade channels.

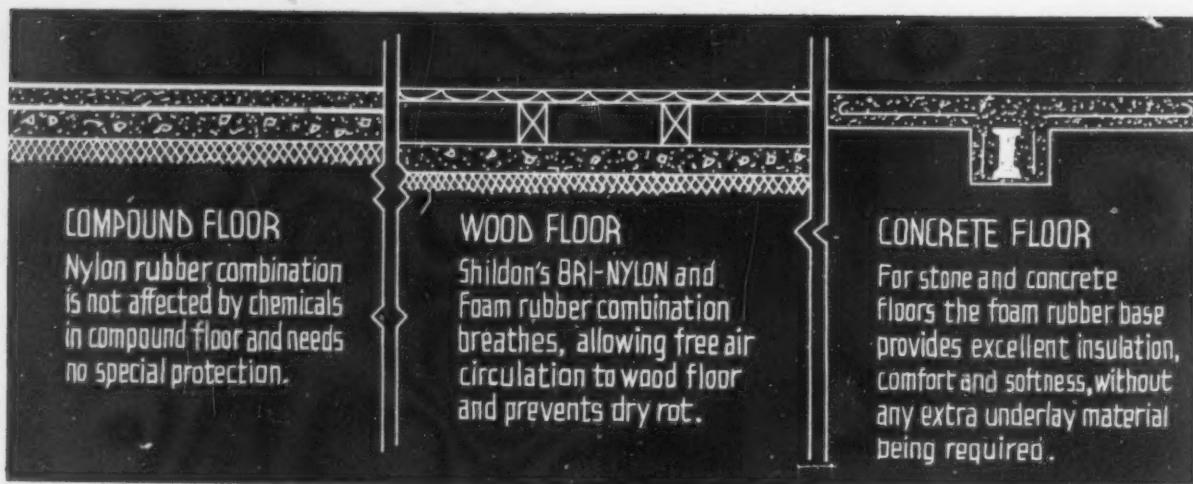
[®]Registered



LIGHT
AND
PRIVACY

with Pilkingtons' 'Insulight' hollow glass blocks

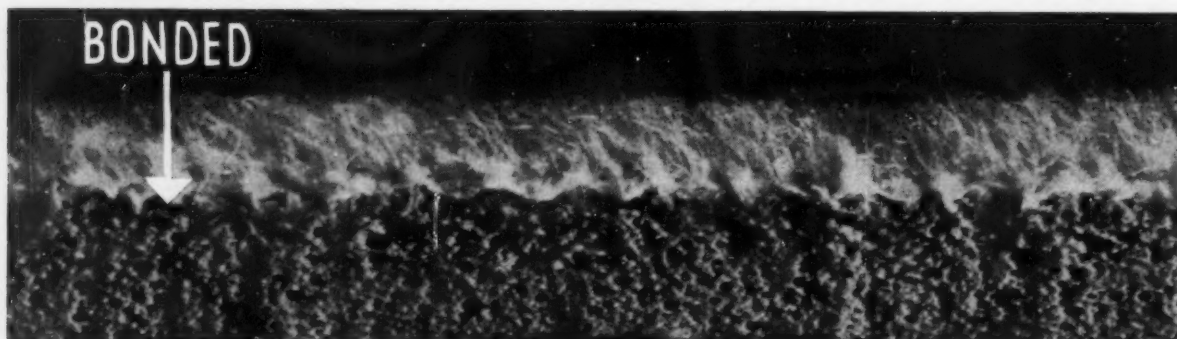




BRI-NYLON Shildon

*present
an entirely new material:*

A luxurious, soft, long lasting floor covering — now fitted in hotels, offices, public buildings and domestic living rooms. A woven BRI-NYLON fabric with a short glossy pile, bonded to a foam rubber underlay, makes it easy and economical to lay on unprepared surfaces. Compound, wood and concrete floors accept BRI-NYLON SHILDON without any special underfelt.



Shildon *present a new
complete service for architects:*

The Service from designing to fitting on any site covers:
PLANNING—Measuring, estimating, making and fitting carpets in any part of Britain.

ADVISORY SERVICE—Full information for your usual suppliers regarding all aspects of fitting Shildon.

DESIGN—Designs and colours produced to individual requirements.

LOAN OF PATTERNS—Patterns supplied in colour groups (reds, greens, blues or to your requirements).

SHOWROOM—Full showroom facilities for you and your clients.

You are invited to make full use of this unique Service as and when you need it — please telephone or write for additional information.

Shildon

*Floor covering
offers many advantages over
conventional carpets:*

- * The built-in foam rubber underlay, while giving luxuriant deep tread, also insulates sound, heat and damp.
- * The nylon fibre is stain resistant and does not fluff.
- * The colours are fast, retaining their lustre for the long life of the carpet.
- * Initial costs are low . . . replacement costs negligible.

SHILDON SHOWROOMS 60 Berners Street, London W.1.

*BRI-NYLON is the Registered Trade Mark of British Nylon Spinners Limited.

**"Ain't there
enough to
see inside
the park?"**

"Oh, yes mister. But what I'm
looking at's important!"

"Can't be any more important
than my trees."

"But it's Boots'. They're
building our new school. It's
going to be smashing —
'specially the gym! My teacher
says we're lucky to have
Boots building it because
they're so ex—expeer—because
they're so good at it.
He says Boots build all sorts
of other things too, like
roads and houses and factories."

"They can't build
trees! Come on down before
you break a branch."



HENRY BOOT



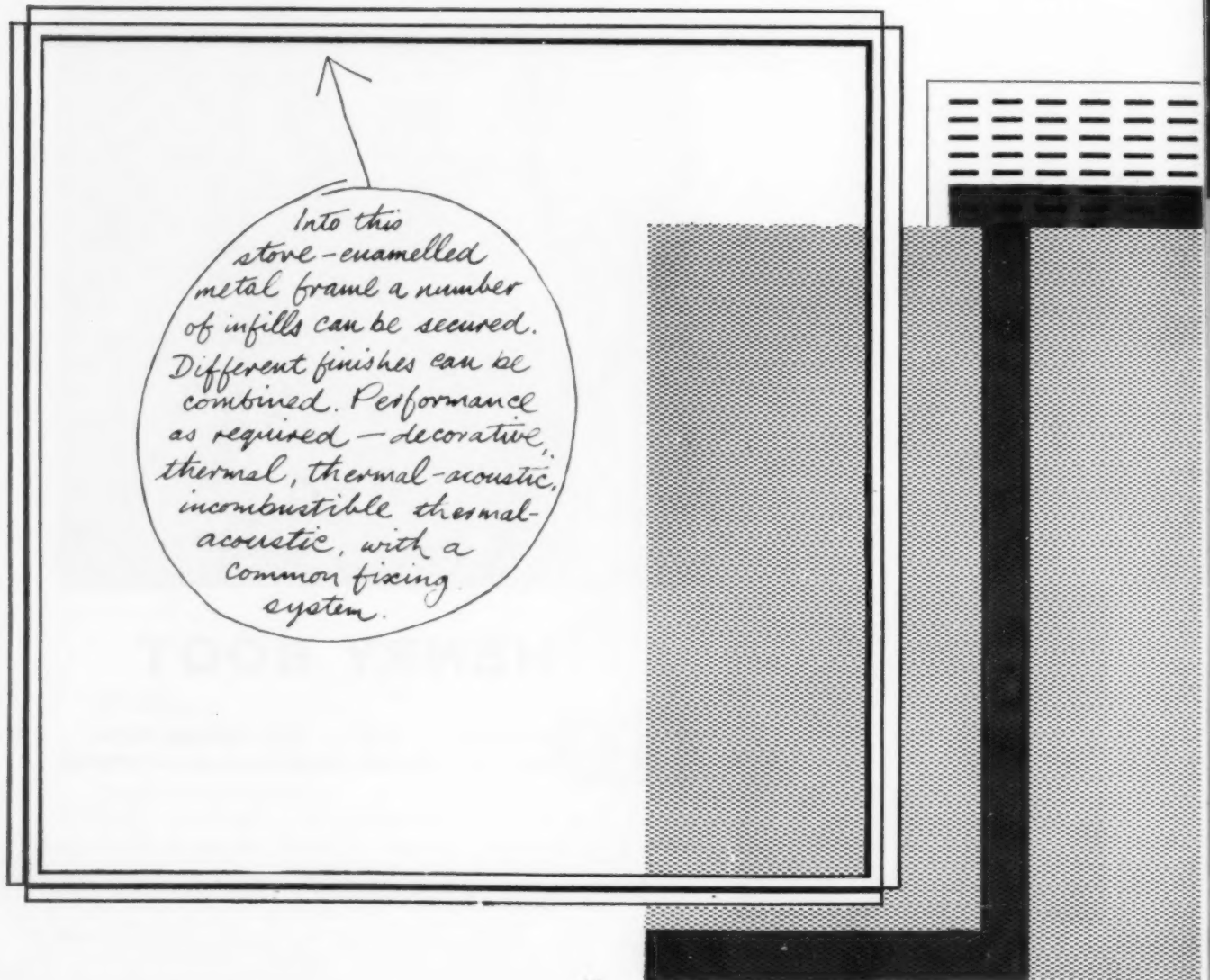
HOUSING ESTATES • RAILWAYS • WATER DISTRIBUTION SCHEMES
ROADS • SOIL STABILISATION • BUILDING PROJECTS OF EVERY DESCRIPTION

HENRY BOOT & SONS LTD., BANNER CROSS HALL, SHEFFIELD 11. Tel 54551
Offices also at: Birmingham, Glasgow, Liverpool, London and Manchester

DA/4000

NEW VERSATILE VERSA-TILE

adds to Bowater module ceiling range

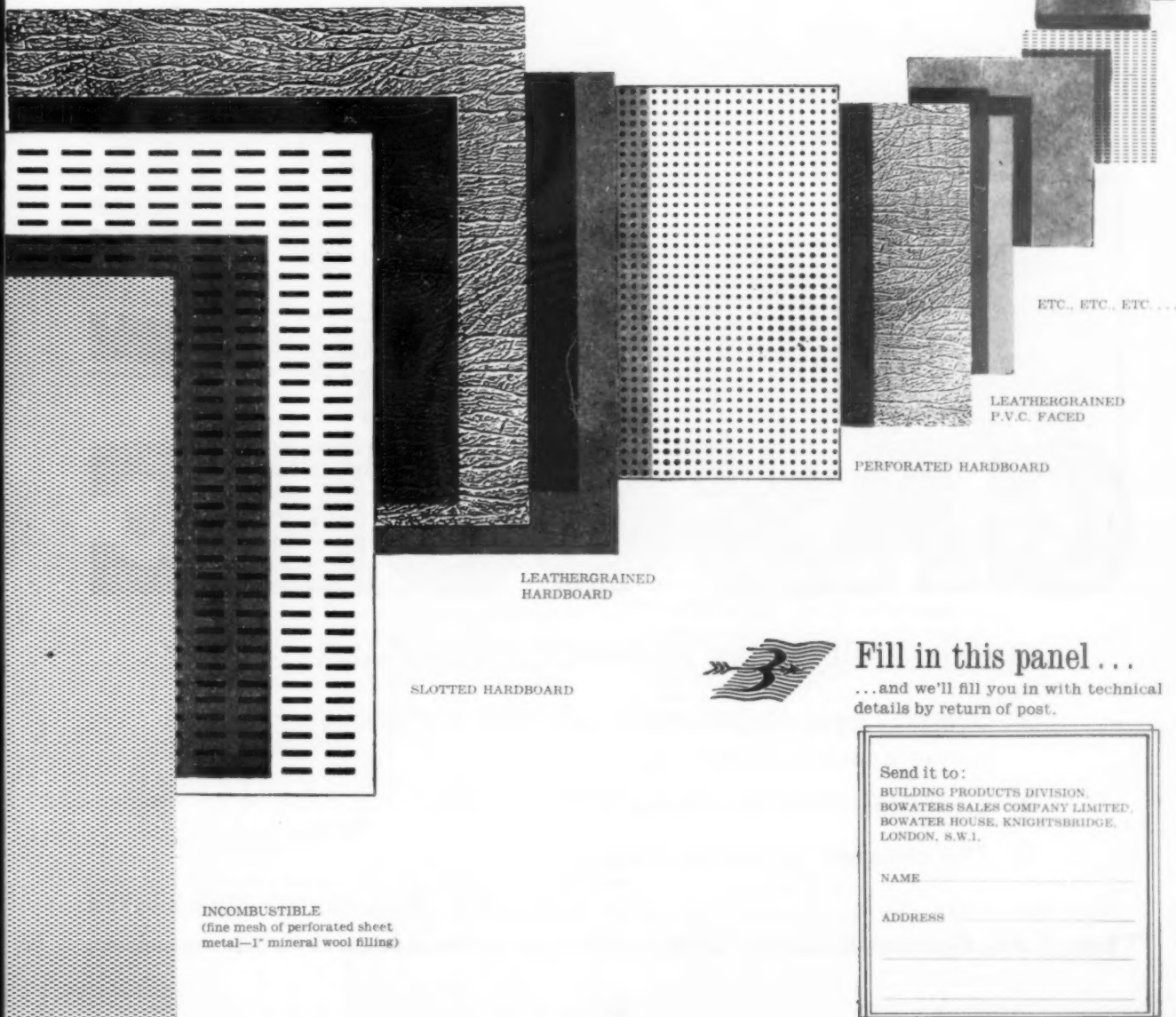


New freedom—new scope for design

The introduction of the Versa-Tile gives you the chance of broader, bolder thinking on ceiling design. Performance and finish can be combined and permuted in one ceiling or throughout a building with a common fixing system. A unique detail is the 1" x 1" recessed gap which divides the panels and gives a pleasing definition to the ceiling. Standard sizes 20" x 20"

and 24" x 24"; other sizes available on application.

The Versa-Tile is now added to the established D/C and T/A panels to complete the range of Bowater Module Ceilings. Together they offer a full selection of panels in every price bracket—each one giving high efficiency with low cost in its own class of performance. All these panels can be seen at the Building Products Division Showroom at Bowater House.



Fill in this panel . . .

...and we'll fill you in with technical details by return of post.

Send it to:

BUILDING PRODUCTS DIVISION,
BOWATERS SALES COMPANY LIMITED,
BOWATER HOUSE, KNIGHTSBRIDGE,
LONDON, S.W.1.

NAME _____

ADDRESS

**"CLEAN HEAT
CLEAN AIR"**



... with Mr. Comfort's

GAS COKE

and his other Solid Smokeless Fuels

- * Specially made for burning in open fires and openable stoves, and in domestic boilers too.
- * Light easier and burn better.
- * The cheapest smokeless fuels.

The Gas Council Coke Department, 1, Grosvenor Place, London, S.W.1.

Waterproofing in the presence of Sulphates

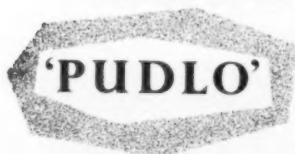
*Published by permission of
the London County Council.
Contractors:
Gee, Walker & Slater Ltd.*

When soluble salts of sufficient concentration to cause disintegration of ordinary concrete are present in a damp site, there is the dual problem of preventing sulphate attack and of protecting the concrete in contact with the ground from penetration of dampness.

These conditions have been met and overcome on numerous sites by the use of 'PUDLO' Brand Waterproofing in combination with sulphate resisting Portland cement.

A typical instance is in the construction of blocks of flats for the London County Council at Derby Hill, Sydenham, London, S.E., where the reinforced concrete forming the cellular raft foundation and basement walls is composed: 1 part sulphate resisting Portland cement, 2 parts coarse washed sand, 4 parts non-porous aggregate $\frac{3}{4}$ " down, with the inclusion of 3 lbs. 'PUDLO' Brand Waterproofing per 100 lbs. of cement.

Illustrations are of work in progress to 2 blocks.

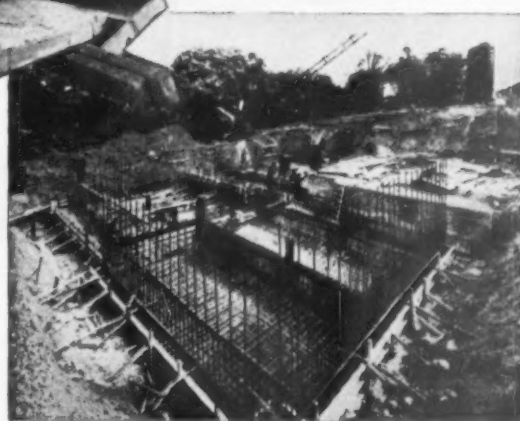


CEMENT WATERPROOFING POWDER

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

KERNER-GREENWOOD & CO. LTD., KING'S LYNN · NORFOLK · TELEPHONE: KING'S LYNN 2293

*Derby Hill Estate.
Architect to the
London County Council
Hubert Bennett, F.R.I.B.A.*



OTHER 'PUDLO' PRODUCTS INCLUDE:

WATERPROOF CEMENT PAINTS,	FROST PROTECTOR/
CEMENT PAINT PRIMER	RAPID HARDENER
EXTERNAL WATER REPELLENT,	CEMENT HARDENER/
CEMENT BONDER,	DUST PROOFER
PLASTER BONDER,	FEUSOL FIRE CEMENT
MORTAR PLASTICISER,	CONCRETE PLASTICISER
PERMANENT COLOURS FOR CEMENT	



*"What about fire alarms
on the Parker project?"*

*"I should get on to Gents first.
They're the best people
to advise us."*

GENTS
OF LEICESTER

fire alarms — don't give fire a chance!

Experience counts . . . Gents have had over sixty years in the fire alarm business and make equipment ranging from simple manually-operated systems complying with the Factory Act to comprehensive detector systems, approved by the Fire Offices' Committee, that give the alarm automatically — day or night.

GENT & COMPANY LIMITED · FARADAY WORKS · LEICESTER · London Office and Showroom: 47 Victoria Street, London S.W.1.

ALSO AT: BIRMINGHAM · BRISTOL · EDINBURGH · GLASGOW · NEWCASTLE · BELFAST

Styled for the modern home

a revolutionary

NEW

**Central Heating
Regulator
by HATTERSLEY**



Smart and stylish, as modern as the moment, this new Hattersley Regulator is the perfect choice for contemporary installations up to 200°F. and 100ft. head. The entirely new "Switch-on" fingertip adjustment automatically regulates the radiator heat output. A quarter turn of the ivory coloured heat-resisting control head permits a range of adjustment from fully open to fully closed, whilst the grey indicator plate shows the exact setting at a glance. The complementary ivory and grey of the head and indicator harmonise perfectly with any decor.

An important feature of the Regulator is its extremely low resistance to flow. It can be used on any part of a domestic heating system and no other type of control valve is necessary. The Regulator is precision engineered with a cast gun metal body. Wheel and Lockshield patterns in Standard and Chromium Plated finish are available with connections for either Iron or Copper Pipes.



**Fingertip control for
at-a-glance setting**

AN ATTRACTIVE VALVE AT AN ATTRACTIVE PRICE

Please write for details to the sole manufacturers.

HATTERSLEY

ESTABLISHED 1897



the name for good valves

**HATTERSLEY (ORMSKIRK) LIMITED · ORMSKIRK · LANCASHIRE
and at HALIFAX and LONDON**

H.10

a code for

The trend in lighting today is towards high illumination. High illumination is an excellent thing in itself, but until now it has inevitably been accompanied by excessive glare with consequent discomfort to the eyes. This discomfort glare, caused not only by the light source itself, but also by the fittings, results in the increased light becoming instead of an aid to efficiency, the very reverse, an actual distraction.

Look at the picture. The office is more than adequately lighted, yet the light fittings themselves are not emitting any appreciable glare. The light source is, in fact, unobtrusive. *You have never seen lighting like this before!*

This is G.E.C. comfort in lighting—a new technique in which the G.E.C. has gone a long way towards removing discomfort glare by using high illumination in conjunction with low brightness fittings of high luminous output, sometimes called “dark” fittings because by correct design and use of suitable materials, they actually appear to be dark.

A 40-page publication, F4695, tells you all about “Comfort in Lighting”. It is free on request.

comfort in

high level illumination without discomfort glare

comfort...

*Only the
Comfort in lighting
range meets all the
recommendations
of the new CODE
issued on April 11th
by the Illuminating
Engineering Society
in every type of
installation.*



lighting

G.E.C.

LIGHTING DIVISION

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

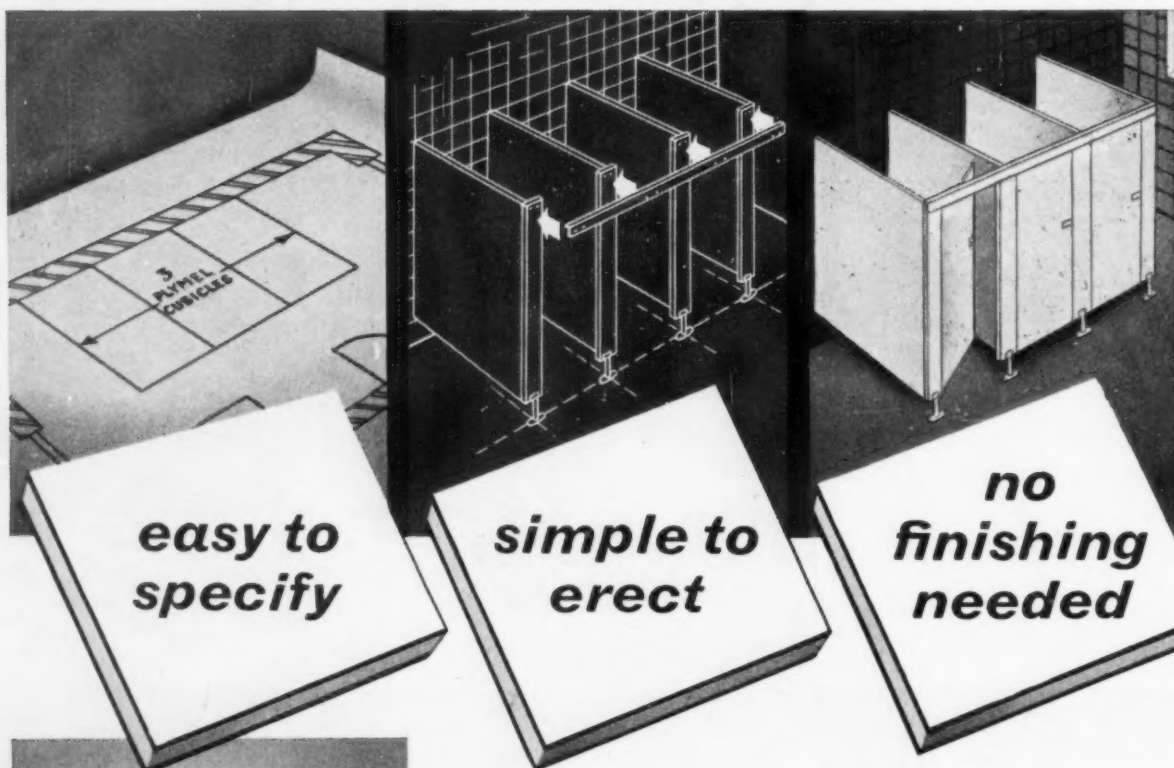
Plymel



*now in
a range of
colours*

UNIT COMPARTMENTS

save work at every stage



W.C. Compartments and shower cubicles in Plymel, the new melamine-faced material by Venesta Plywood Limited, are prefabricated in standard units to save hours of your time.

On the drawing board, you simply specify 'Plymel cubicles' and there is no need for further detail. On site, these rigid, lightweight, prefabricated units are easy to handle—they arrive dismantled ready to erect and they *need no painting*. Once erected, they are resistant to moisture and corrosion—easy to keep clean with the minimum of effort.

For samples, and full details of

Cubicles, W.C. and Shower Compartments
in PLYMEL, write for leaflet (L11)

VENESTA PLYWOOD LIMITED

Vintry House, Queen Street Place, London, E.C.4. CENTral 3040

T.A. 2402

Have they just been dipped in paint?

Yes, in a way. It's a specially formulated paint and there's a tremendous amount of it in that tank so that we can handle purlins up to 60 ft. in length. These 'Z' type purlins have already been chemically pretreated and are now ready for high temperature stoving—a protection process which guarantees that Metsec products are the finest value for money in the world.

METAL SECTIONS LTD



OLDBURY · BIRMINGHAM

Tel: BRoadwell 1541

- ☐ Please send me 'Z' Purlins catalogue
- ☐ I am also interested in your publication on DIFULITE Cellular Sub-Ceilings.

Name _____

Position _____

Company Address _____



CELSIUS

[188

celsius See THERMOMETER (person)

celt 1. *n.*, chisel-edged prehistoric tool (imaginary L.)

celt 2. *n.*, (*pl.*) peoples speaking or having spoken languages akin to that of the Gauls (Bretons, Cornish, Welsh, Irish, Manx, Gaels) (*sing.*) member of such people.

celtic (*adj.*; *-ically*) of the Cc. (Celtic fringe, the Scots, Irish, Welsh and Cornish, in relation to the U.K.) (*n.*) the Celtic language, celticism, celtomania, celtomaniac, celtophobe, celtophobia, *nn.* (L. Celta)

cement 1. *n.*, Substance made by calcining lime and clay, applied as paste and hardening into stony consistence, and used as material for floors and walls and tanks or as mortar: TUNNEL C. is particularly strong, rapid hardening, weather resistant c. Best C. *see* The Tunnel Portland Cement Company Limited, 105 Piccadilly, London W.1. GROsvenor 4100.

cement 2. *v.t.* Apply c. to, line or cover with c., unite (as) with c. To C. for best results *see* TUNNEL

cemetery *n.*, Burial ground other than churchyard (Gk. Koimao, put to sleep)

cenobite *see* COENOBITE

cenotaph (-ahf) *n.* Sepulchral monument to one whose remains are elsewhere.

censer *n.* Incense-burning vessel. Cense *v.t.* adore or perfume with incense (INCENSE 2)

censor 1. *n.* Ancient-Roman supervisor of census and public morals; modern official examining
nlave hooks news correspondence etc

SUSPENDED CEILINGS



YOU SHOULD KNOW ABOUT *Paramount* PLASTIC FACED PLASTERBOARD

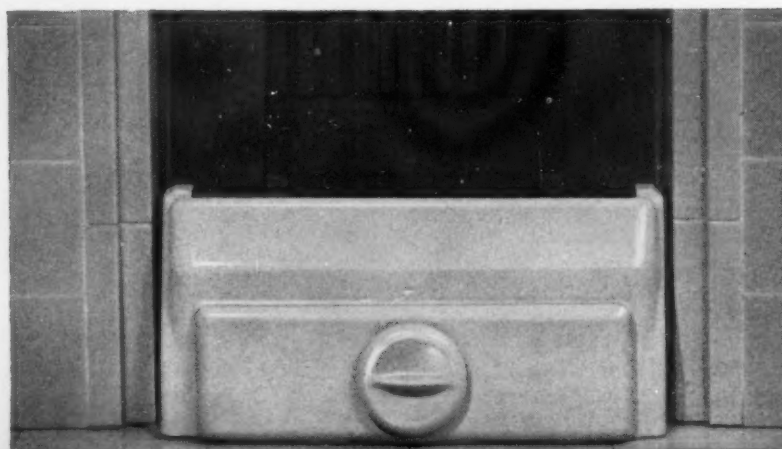
With a gleaming, coloured, wipe-clean surface
for a lighter, brighter atmosphere.
In 5 B.S.S. Pastel Shades or White.

BLUE HAWK





A Redfyre Bacboiler adds value to every house you build





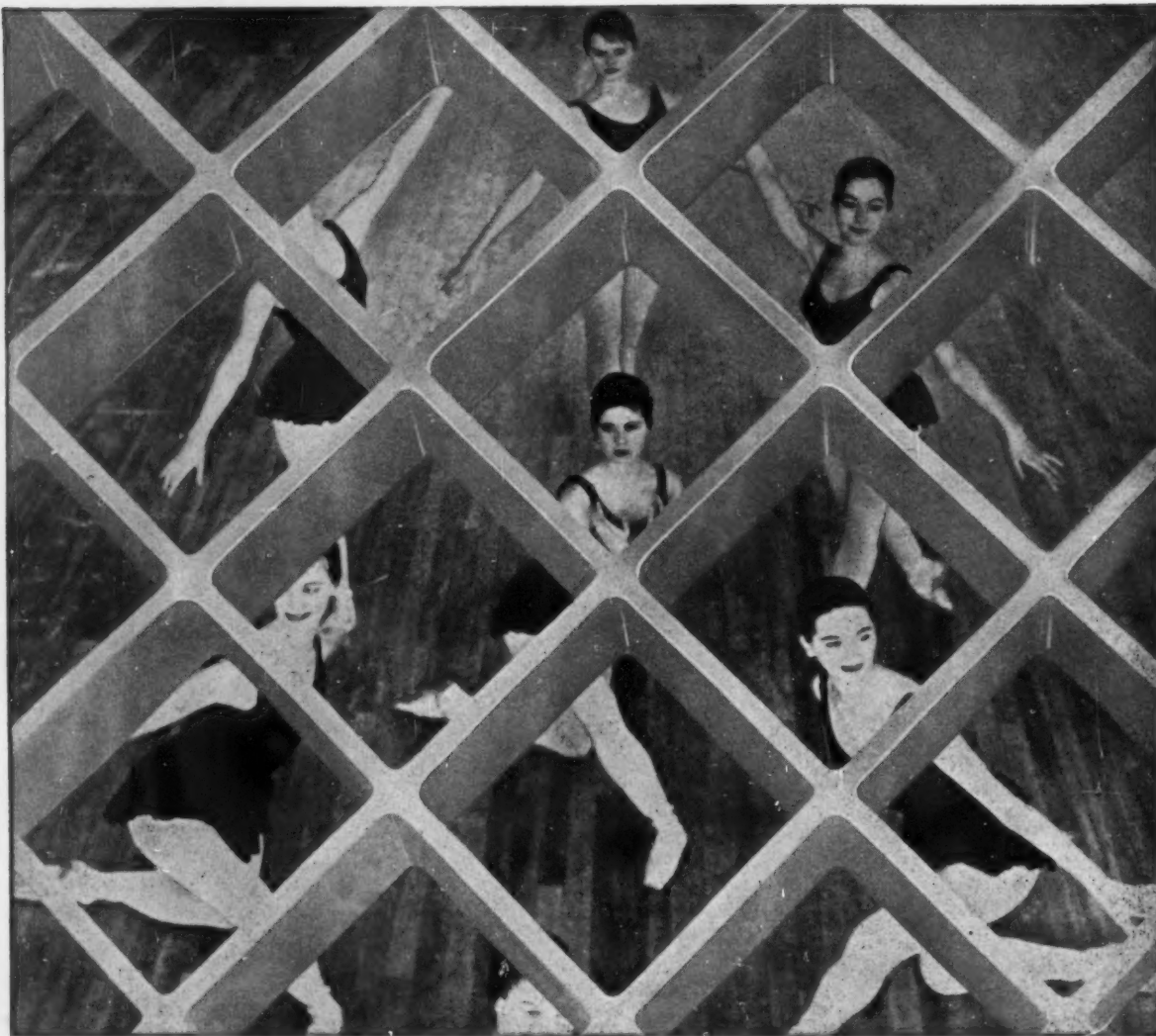
Specify Redfyre, and you specify all the charm and comfort of a beautiful open fire . . . you specify the convenience of cheap hot water for kitchen and bathroom . . . and you specify the extra bonus of partial central heating. Yet for all this, Redfyre is inexpensive and easy to install; running costs are very very reasonable; and maintenance costs virtually non-existent.

There are now three Redfyres with Bacboilers for you to choose from—all well-known to the public. The Hearth Redfyre with underfloor airfeed and the famous low-cost Redfyres, the 55 and 60. All these models are controlled burning fires, are Ministry-approved and are suitable for use in smokeless zones.

May we send you full details of these fires in our specially-bound Architect's Handbook?

NEWTON CHAMBERS & CO LTD, REDFYRE PRODUCTS, THORNCLIFFE, SHEFFIELD





Light fantastic

Light on her feet, light above her head. There was a time when ballet was danced by candlelight – but a long time ago. Long before Shell gave us 'Carinex' light-stabilised polystyrene.

The grille through which you see our ballerinas, is made from 'Carinex'.

It is durable, attractive and available in many grades and in all colours.

That's why it is so suitable for lighting fittings.



Shell Chemicals



Ask Shell Chemical Company Limited
Plastics & Rubbers Division, 170 Piccadilly, London, W.1

SHELL and CARINEX are Registered Trade Marks

PS3

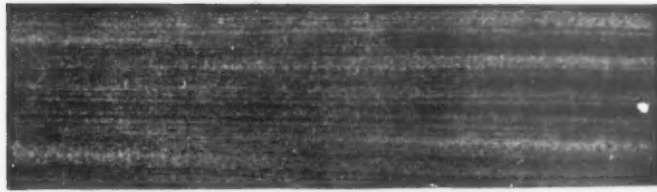
THERE'S NATURAL BEAUTY IN BEAUTY PLANK

*Rich colour —
fine grain*

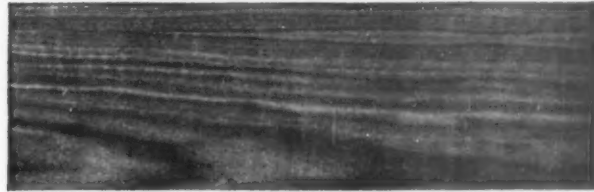
To Board Room, Showroom, or Exhibition Stand, this prefinished plywood planking adds beauty and distinction. The incorporated tongued and grooved fixing technique eliminates all face nailing and simplifies application.

The panelling, 8' long, $\frac{1}{4}$ " thick and of random widths, is available in the following eight prefinished hardwoods:-

NATURAL BIRCH • TIAMA • AMERICAN
BLACK CHERRY • ASH • AFRICAN MAHOGANY
RIFT RED OAK • AMERICAN BLACK WALNUT
ROTARY CUT RED OAK



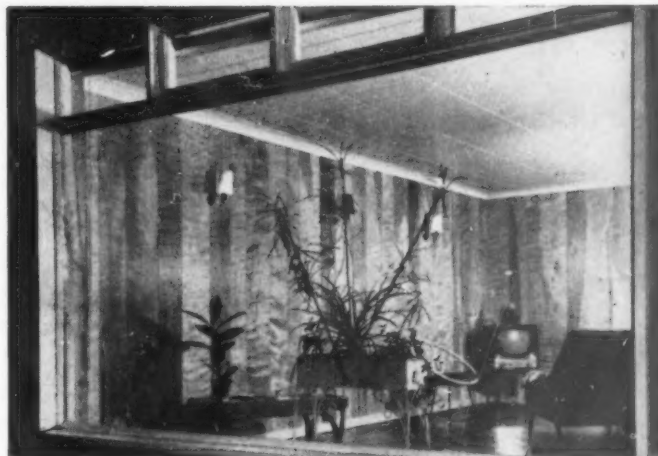
Tiama



American Black Walnut



Rotary Cut Red Oak



Canadian

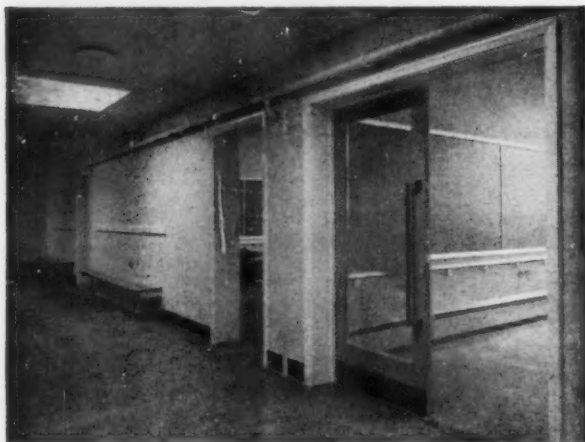


BEAUTY PLANK

THE TENTEST COMPANY LTD

DEPT. A.J. FIBOARD HOUSE, OAKLEIGH GARDENS, N.20
Hillside 8801

..... and when it comes to decorating
the best plan is to Permoglaze



SPASTIC UNIT, GREENHILL OPEN-AIR SCHOOL, RHIWBINA, CARDIFF

Interior and exterior walls, wood and metalwork finished with Permoglaze

Specified by E. C. Roberts, M.Eng., City Surveyor, Cardiff

Permoglaze

THE TILE-LIKE FINISH

Permoglaze is a liquid surface coating made by a special process which imparts exceptional hardness of surface and durability.

It is made in GLOSS, EGGSHELL and MATT finishes in grades to suit all surfaces, interior and exterior, and is of particular interest to the architect seeking a finish of outstanding quality and resistance to steam, condensation, oils, soaps, washing and hard wear.

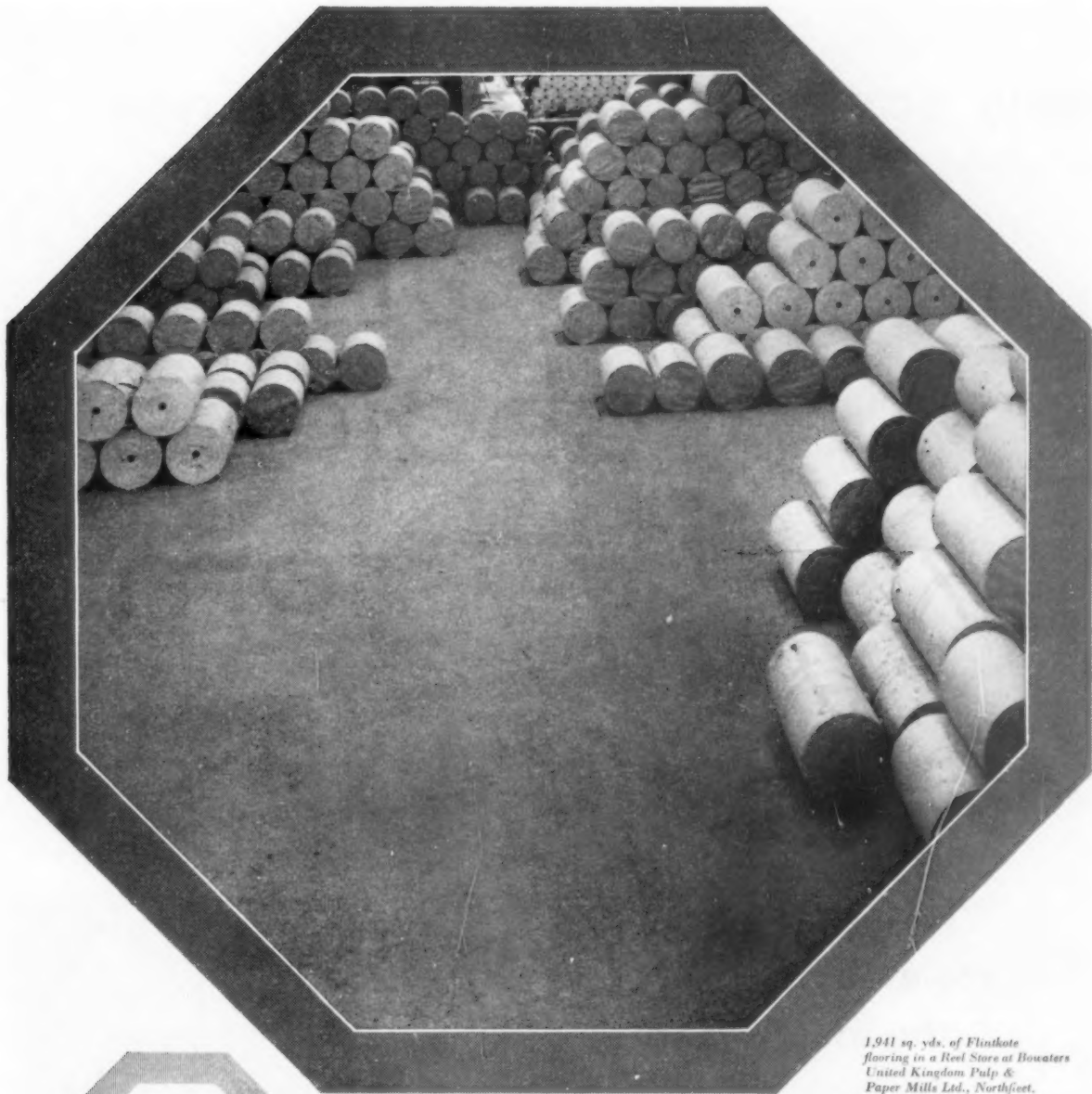
Grades are available to meet special corrosion problems, to resist chemical attack and to combat mould and other conditions which quickly affect conventional paints. Descriptive booklet, colour cards and full particulars will be sent on request.

PERMOGLAZE DECORATIVE ADVISORY SERVICE is assisting hundreds of leading architects in the preparation of colour schemes and specifications. This service is free. May we help you?



PERMOGLAZE LTD · BIRMINGHAM 11

FACTORIES at Birmingham, Tenbury Wells, Melbourne, Sydney and East London, South Africa
DEPOTS at Cardiff, Glasgow, Leeds, Manchester, Norwich and Nottingham



1,941 sq. yds. of Flintkote flooring in a Reel Store at Bowaters United Kingdom Pulp & Paper Mills Ltd., Northfleet.



Industrial flooring virtually eliminates maintenance. Simple to apply and cold laid. It is particularly suitable for heavy traffic conditions.

World-wide Availability and Technical Advisory Service

Full
information
on request

The Flintkote Company Limited
Adam House, One Fitzroy Square, London, W.1.

Telephone: Euston 7224

Telegrams: Flintkote, Wesdo, London

Cables: Flintkote, London

P.T.S.

NEW SCOPE IN LAMINATED PLASTICS

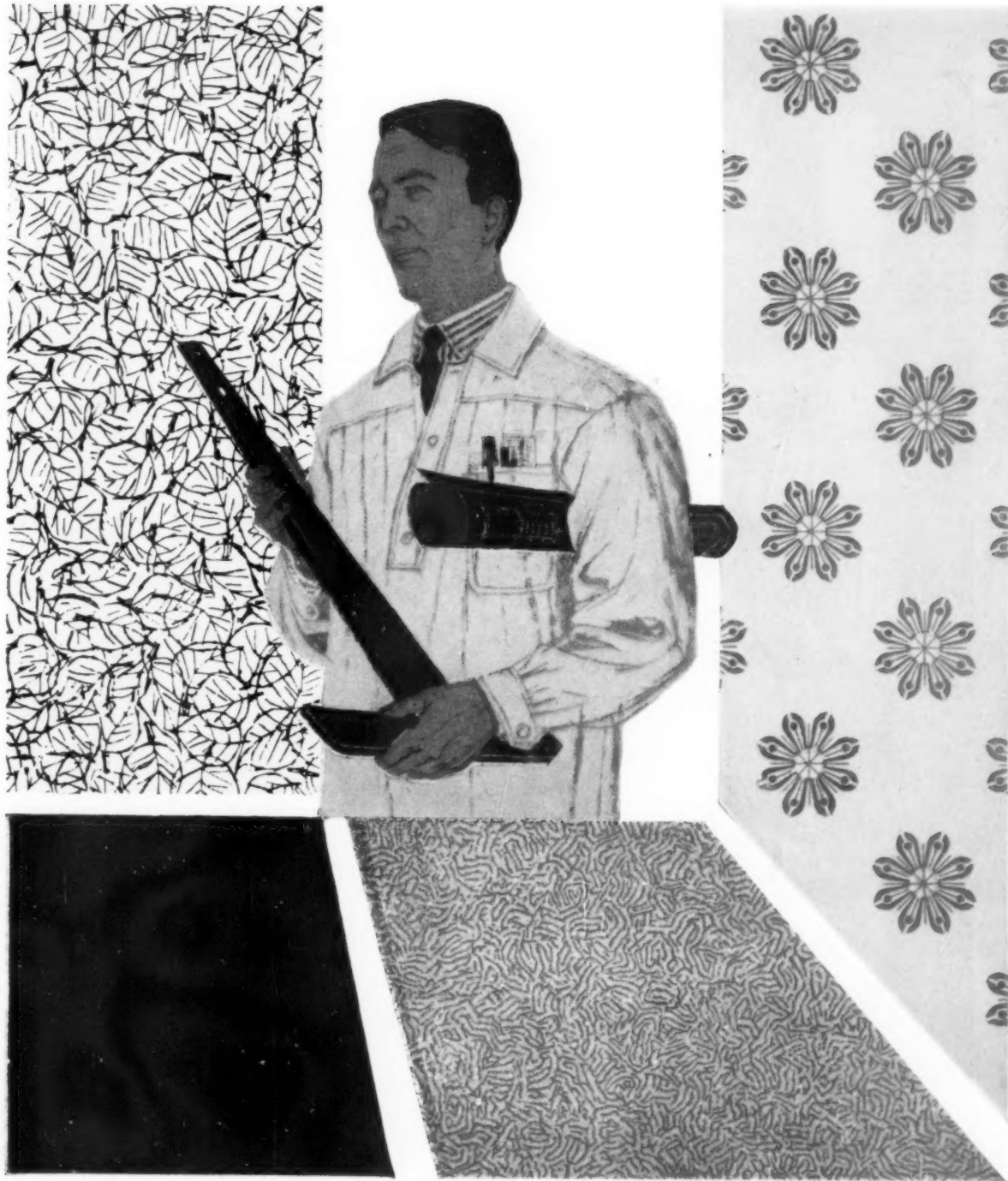
30 new^{*} choices from Decorplast

These
are a sample of
the magnificent
new range from
Decorplast...



Now Decorplast brings you brand-new designs in a wide choice of colours—plus many other existing patterns. The whole range of tough easy-to-clean Decorplast offers you new scope in colour-planning effects—Subtle, Lively or Bold. Because of these colour advantages, and because every pattern is always available from stock, Decorplast is increasingly preferred. Write to the address opposite for colour chart and list of suppliers.

** The complete Decorplast range now offers fifty-six different choices, including wood grains that really look like wood!*

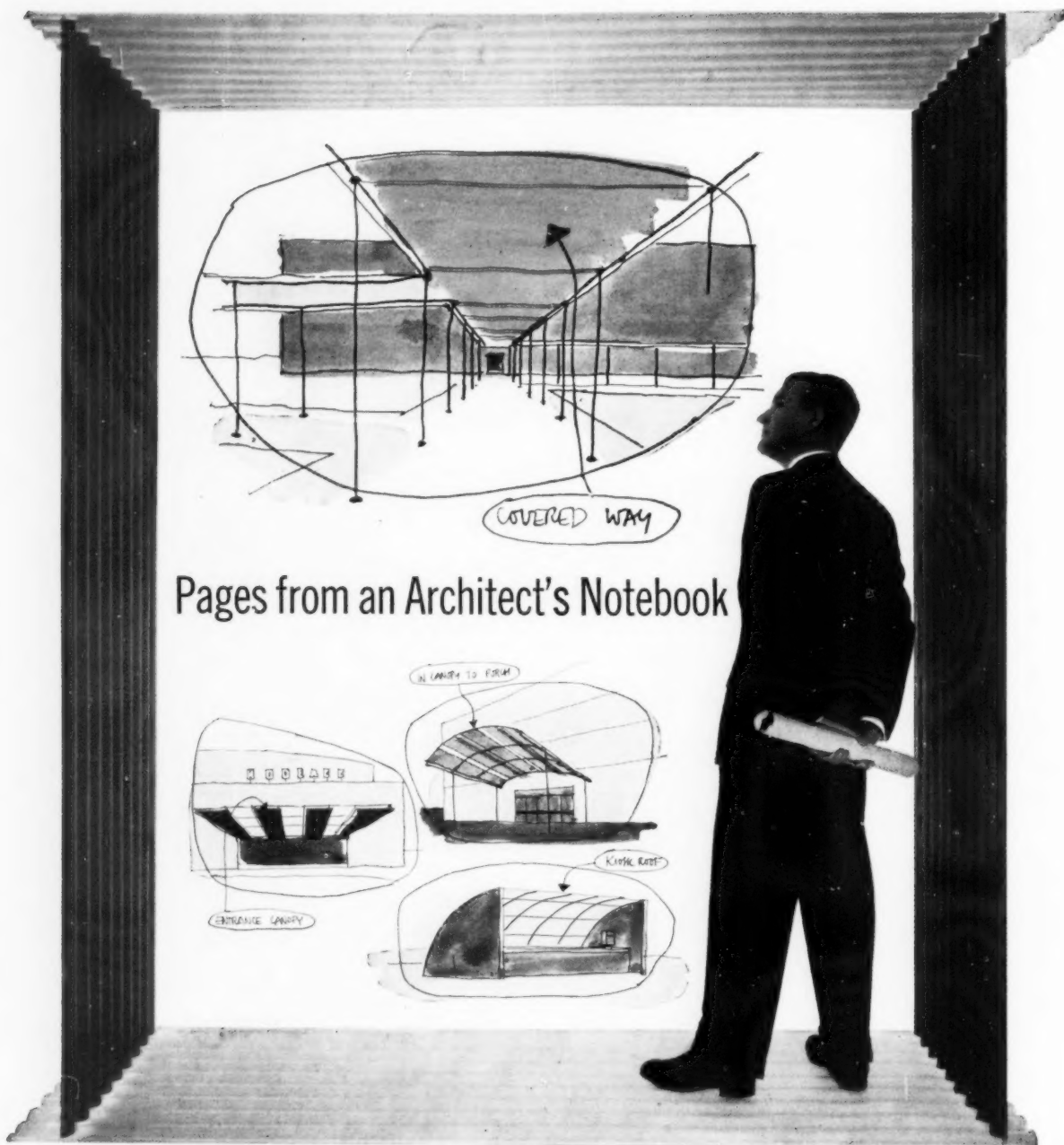


DECORPLAST

LAMINATED PLASTIC

Reed

Decorplast Sales Office, 2 Carton Street, London S.W.1. Telephone: Abbey 4866



Pages from an Architect's Notebook

1 Shelter out-of-doors

When a structure must provide light as well as shelter, FILON is today's material. Strong, lightweight, resilient, shatterproof, it transmits up to 85% of light. Available in all standard profiles to match corrugated iron, aluminium and asbestos; also special decorative profiles and flat sheeting. Good range of General Purpose

and Self Extinguishing grades and colours. Easily and cheaply erected on the lightest of supports, doesn't warp or corrode in any weather—and you can forget about maintenance.

FILON is approved by the Admiralty, Air Ministry, War Office, L.C.C., J.F.R.O.

strong

translucent

FILON

STRUCTURAL SHEETING

B.I.P. REINFORCED PRODUCTS LIMITED Streetly Works · Sutton Coldfield · Tel: Streetly 2411



SEMFLEX TILES WERE CHOSEN FOR THE STAFF RESTAURANT,
COUNTY FIRE OFFICE LTD., REGENT STREET, W.1.



This is only one of the wide range of Semtex flooring materials, giving unlimited scope for any application.

- * Excellent choice of decorative colours
- * Backed by the vast research facilities of the Semtex Organisation. Expert assistance on pre-treatment and other flooring problems
- * Skilled laying service through Semtex branches or approved contractors throughout the U.K.
- * Contracting facilities also available throughout the world
- * Design consultancy service

For further details please contact Semtex today

IMAGINATIVE MODERN FLOORING



Semtex Ltd

8 SEMTEX HOUSE 19/20 BERNERS STREET LONDON W1 • Telephone-LANgham 0401

en/41/51/51/51

3 The advantages
of 'PHORPRES'
clay products



durability

To judge the durability of building materials, let experience be your guide.

For more than fifty years, London Brick Company Limited has made and sold in all parts of this country thousands of millions of 'PHORPRES' bricks and other burnt clay products. From the past experience, we can confidently claim that 'PHORPRES' Bricks and 'PHORPRES' Hollow Clay Blocks used in the external walls of buildings, which are reasonably

protected by normal roofs, will remain in perfect condition for an indefinite period of time.

For positions of extreme exposure, where bricks are liable to be frozen for long periods when they are thoroughly soaked with water—as, for example, the copings of free-standing and parapet walls, and for such specialised duty as retaining walls and tank walls where they may be continuously in contact with flowing water and other liquids—special precautions must be taken.

Our Technical and Research Department are always at your service to advise on the use of our products.

LONDON BRICK COMPANY LIMITED in the service of the building industry

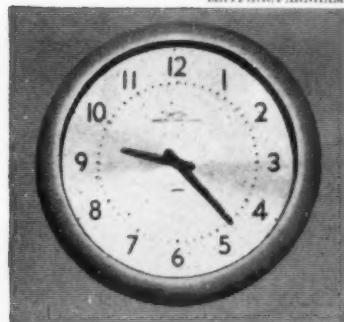


Head Office: Africa House, Kingsway, London, W.C.2. Telephone: HOLborn 8282
Midland District Office: Prudential Buildings, St. Philip's Place, Birmingham 3. Tel: Central 4141
South-Western District Office: Royal London Buildings, Baldwin Street, Bristol 1. Tel: Bristol 23004/5
Northern District Office: St. Paul's House, 20-22 St. Paul's Street, Leeds. Telephone: Leeds 20771



BY APPOINTMENT
TO HER MAJESTY QUEEN ELIZABETH II
BRICK MAKERS

MAYFAIR/FARNHAM

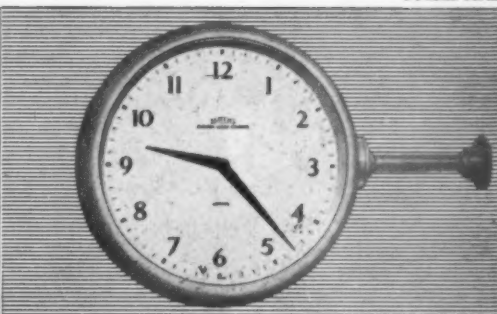


A certain style

MEDWAY/TITE



DOUBLE SIDED



FALCON



MOSTYN/FLEY



MELTON/FLEET

FULMAR



—a style for every setting in every type of building.

All the interior wall clocks in the wide E.C.S. Range (a selection of which are shown) have been accepted by The Council of Industrial Design for Design Index.

They are made in a number of sizes for operation from A.C. mains or from the E.C.S. Master Clock as part of a controlled time system.

For full details of the complete range write:

English Clock Systems

179-185 GREAT PORTLAND STREET
LONDON W1 TELEPHONE LANGHAM 7226

Branch Offices:

BIRMINGHAM MANCHESTER LEEDS GLASGOW BELFAST

A branch of the Clock
and Watch Division of

SMITHS

revolutionary new method of air conditioning



***for 1 room or every room
in the building
—at lower cost***

Stand No. 28 Second
International Refrigeration
and Air Conditioning
Exhibition, Earls Court,
April 11-14th 1961

Put one *new* TEMKON, floor-mounted, room air conditioner, in every room in the building, and the cost will still be 30% to 50% *less* than a central station plant. Running costs are lower because each conditioner is used individually as and when required, making the installation wholly flexible.

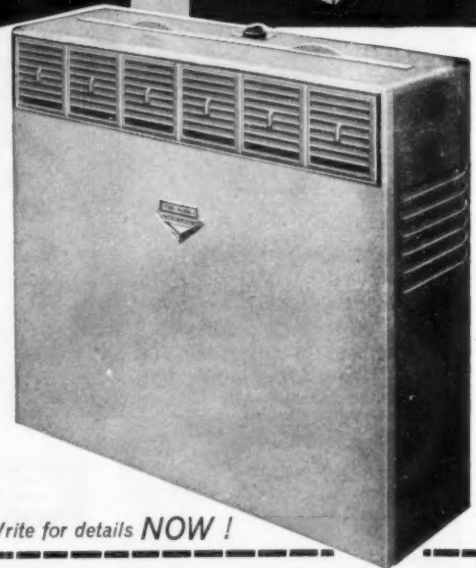
The appearance of the conditioner is attractive. Their slim-line construction and duo-tone finish ensure that they blend with any office decor — and this unit heats as well.

And it's the World's quietest air conditioner

TEMKON

**FLOOR-MOUNTED,
ROOM AIR
CONDITIONER**

TEMPERATURE LIMITED BURLINGTON ROAD, LONDON S.W.6
Phone Renown 5813. Cables: Temtur London
Makers of the World's quietest room air conditioner.



Write for details NOW !

Please send details of the new TEMKON floor-mounted room air conditioner.

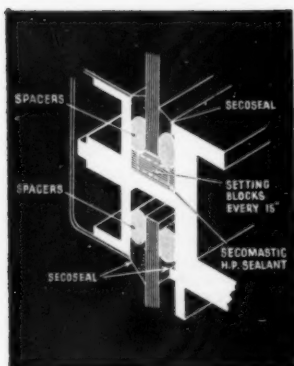
NAME _____
POSITION _____
COMPANY _____
ADDRESS _____

P5832/K

SECOMASTIC

REGD.

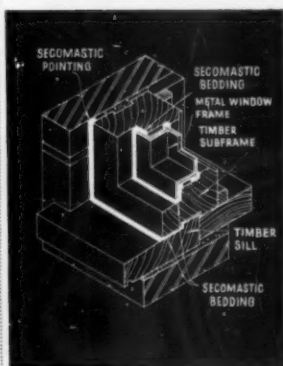
**THE FIRST NAME IN
SEALANTS FOR THE
BUILDING INDUSTRY**



SECOSEAL

ELASTOMERIC SEALANT

A polysulphide liquid polymer sealant for high duty applications. Available in patented cartridges with catalyst integrally contained. Elastic, rubber-like consistency, capable of accepting very large movements.



SECOMASTIC

JOINT SEALING COMPOUND

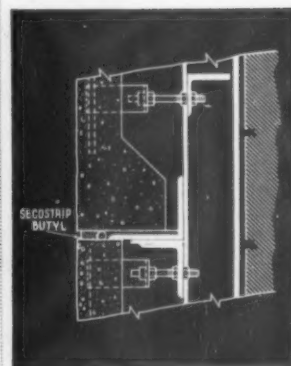
The universal mastic sealant proved throughout the world over nearly two decades for general joint-sealing in building construction. Excellent adhesion to all dry building materials, easy to apply, economic and versatile.



SECOMASTIC H-P

HIGH POLYMER

A synthetic rubber sealant based on plasticised butyl rubber of high molecular weight. Outstanding adhesion and gunnability, combined with great extensibility.



SECOSTRIP BUTYL

BEDDING AND SEALING STRIP

A pre-formed mastic strip based on an improved formulation available in a wide range of extrusions. High degree of adhesion, non-hardening, non-ageing, especially suitable for overlap joints.

JOINT-SEALING IN CONTEMPORARY BUILDING CONSTRUCTION

Our latest technical bulletins describe the most modern techniques and sealants available for ensuring that every type of joint is not only sealed in the most effective way possible—but also with the maximum economy. Write to Architectural Department

SECOMASTIC LIMITED

BRACKNELL, BERKSHIRE. TELEPHONE: BRACKNELL 910. TELEGRAMS: SECOMASTIC BRACKNELL. TELEX: 25420.

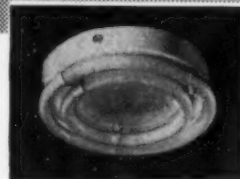


Harris & Sheldon (Electrical) Ltd., designed these special fittings for Woolworth's Head Office. Each houses the three Philips Circular Fluorescent Lamps - 94 watts of fluorescent lighting in a rectangle of small size.

Here's the new look in fluorescent lighting



Many manufacturers have selected Philips Circular Fluorescent Lamps for their fittings. Shown at left is a module by Allom Heffer & Co. Ltd., with opal perspex bowl and gill enrichments. Available in two sizes for 40w. or 32w. Circular.



This Philips A.5001 fitting combines both 40w. and 32w. Circular. A further version has one 40w. only. Both versions accept a choice of diffuser attachments.

Efficiency and long life make fluorescent lighting today's first choice. But prestige areas, such as entrances, reception halls and board rooms demand more than the technical advantages provided by conventional straight tubes. They need lighting that is also tasteful and decorative. Philips Circular Fluorescent Lamps make this possible. Circular fittings are not only attractive in themselves—they also permit a degree of layout flexibility—impossible to achieve with ordinary tubes.

Philips Circular Fluorescent Lamps are made in three sizes: 40w. 16" dia.; 32w. 12" dia.; and 22w. 8½" dia., and are available in several colours. Philips Colour 32, with its warm and luxurious colour rendering and special double coating to suppress distortion, is extremely popular. The rapid growth in popularity of circular fluorescent lamps brings you lower List Prices than ever before—27/6 for the 40w.; 25/- for the 32w. and 22w.



PHILIPS LEAD THE WORLD IN LIGHTING

For full details of Philips Circular Fluorescent Lamps and Fittings, write to:

Philips Electrical Limited · Lamp & Lighting Group · Century House · Shaftesbury Avenue · London · WC2
(1D3339)

SEABOARD FIR PLYWOOD IN ACTION!

A huge section of Canadian fir plywood shuttering being removed on a building site in South London. Below, newly-formed concrete hardens. It's smooth, even surface will require a minimum of finishing.

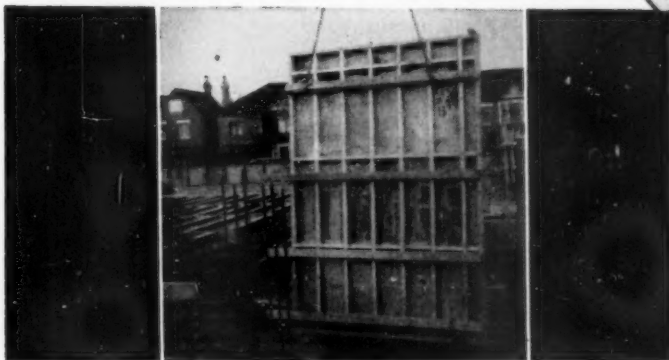
Seaboard fir plywood shuttering can be re-used many times . . . given reasonable care. It's tough, split-proof and, most important, waterproof glue-bonded.

For roof sheathing, floor underlay or shuttering, Seaboard fir plywood makes good sense. Large, but easy to handle, 32 square foot panels save cutting, avoid waste and do the work of heavier, more cumbersome materials.

Standard Panels 8' x 4' (longer and wider panels also available).

Standard Thicknesses $\frac{1}{4}$ ", 5/16", $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ " and $\frac{3}{4}$ ".

(also available $\frac{7}{8}$ ", 1", $1\frac{1}{8}$ ", $1\frac{1}{4}$ ").



N. R. M. Morison Esq.,
1-3 Regent Street, London S.W.1

Please send me a free copy of Seaboard Fir Plywood Handbook (L11) describing your full selection of Douglas Fir Plywood.

Name

Address



SEABOARD

CANADIAN DOUGLAS FIR

PLYWOOD

UK 60-39

Seaboard Lumber Sales Co. Ltd. Seaboard House, Vancouver 1, Canada.

What goes on behind the doors at **AUSTIN?**

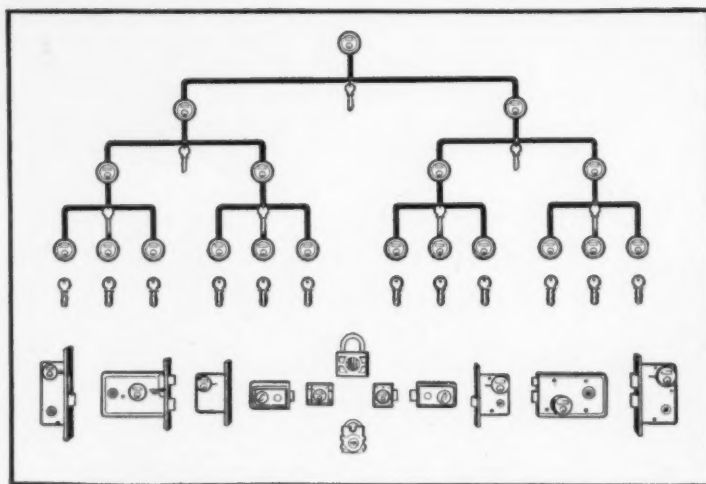


Behind every door in the famous Austin Motor Works at Longbridge, Birmingham, you'll find a safe Yale lock . . . each one part of the comprehensive Yale Master Keyed Suite installed by this organisation. The original suite now totals over 6,500 different locks, consisting of cylinder rim and mortice locks, latches and deadlocks . . . all controlled by one master key! A new suite installed in extensions being built, already numbers 700 locks to which others will be added as required.

Like so many other well-known organisations, Austin chose a Yale Master Keyed Suite for its ability to provide all-round security both internally and externally with the maximum of flexibility and control. There is practically no limit to the number of combinations obtainable, and they can be arranged to cover every need likely to be found in office blocks, factories, schools, hospitals, hotels, flats and public buildings of all types.

MASTER KEYED SUITES

Consist of any required number of different locks, each operated by its own key, but with a master to open all.



GRAND MASTER KEYED SUITES

Different locks divided into Sub-Master Suites. Each Sub-Master key operates all the locks in its suite, but not those in other suites. The Grand Master key will open all - up to 12,000 different locks! Master Keyed Suites can be arranged to include cylinder rim and mortice locks,

latches and deadlocks, padlocks and cabinet locks. All these types can be controlled by the same master key or Grand Master Key.

LITERATURE

Write to the address below for leaflets and detailed specifications.

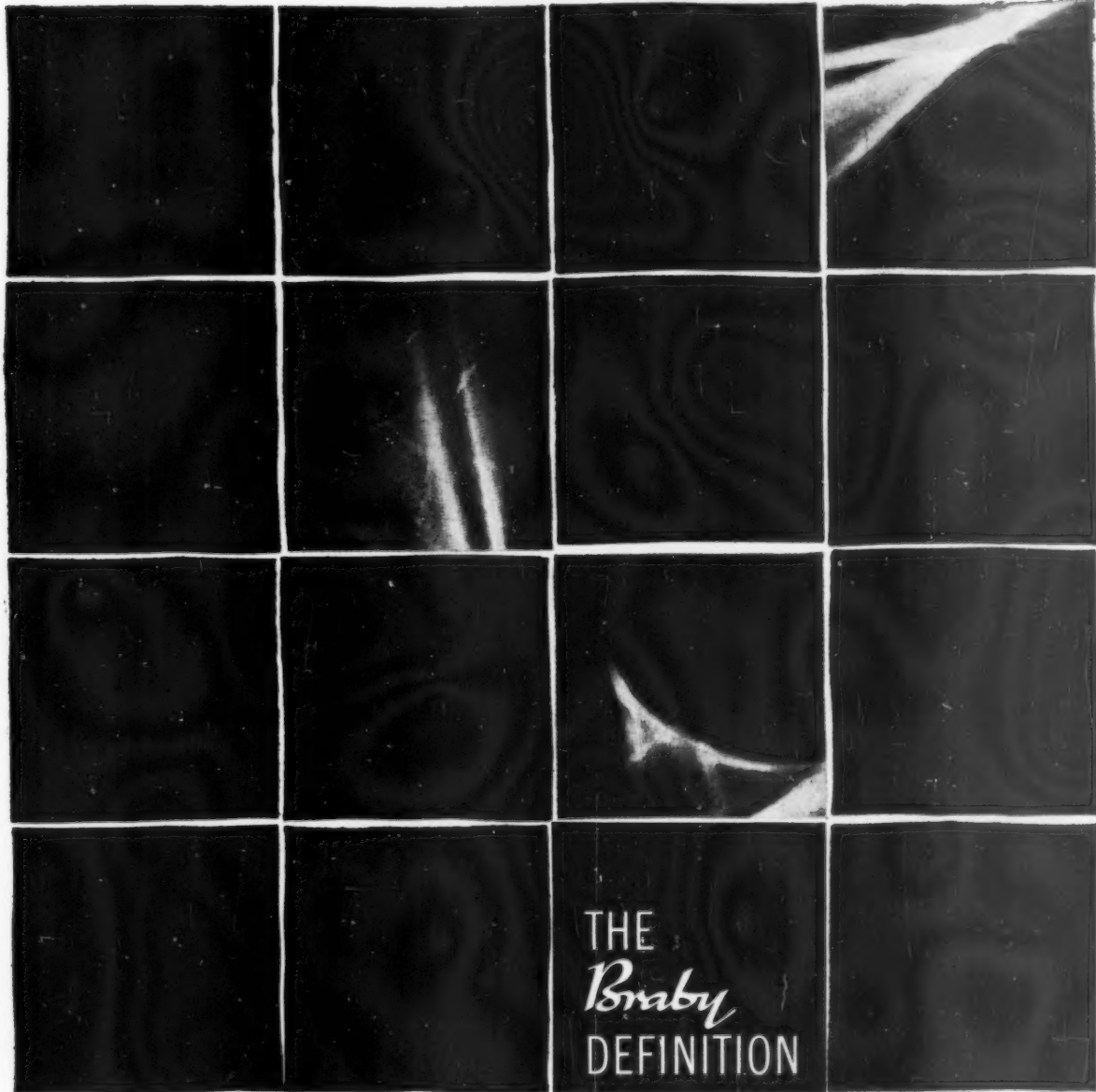
**Where there's a door
there's a need for**



THE YALE & TOWNE MANUFACTURING COMPANY, BRITISH LOCK AND HARDWARE DIVISION, DEPT. A5, WILLENHALL, STAFFS.

CURTAIN WALL

A thin wall whose weight is carried directly by the structural frame of the building
(Chambers's Technical Dictionary)



Lightweight, strong, weatherproof walling units made with precision from aluminium or steel for an infinity of imaginative applications.

Braby Curtain Walling is available to the Architect to suit his specification.

Other Braby components for the Architect include metal windows in steel and aluminium; metal partitions; copper, zinc and aluminium roofing; pressed-steel internal stairs; fire escape stairs and pressed-steel door frames.

ARCHITECTURAL DIVISION
FREDERICK *Braby* & CO LTD



MEMBER OF BRABY OF BRITAIN GROUP

HEAD OFFICE: BRABY HOUSE SMITHFIELD ST. LONDON E.C.1.
TELEPHONE: CENTRAL 2388

CRAYFORD LIVERPOOL GLASGOW BRISTOL BELFAST PLYMOUTH
AP 214

cape **PLANNED** **service**

Cape Building Products put their services at the disposal of the architect and the building industry by:

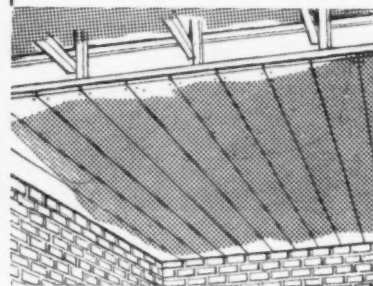
RETAINING A NUMBER OF
INDEPENDENT CONSULTANTS TO
ADVISE ON PROBLEMS COVERING
ACOUSTICS, DESIGN, INSURANCE
AND COSTS.



CO-OPERATING WITH OTHER
PRODUCERS TO SOLVE MUTUAL AND
ALLIED PROBLEMS.



STUDYING THE PROBLEMS THAT
FACE THE ARCHITECT WITH
REGARD TO NEW MATERIALS AND
TECHNIQUES.



***All these facilities are at your disposal, to enable you to make the
best use of***

CAPE ASBESTOLUX

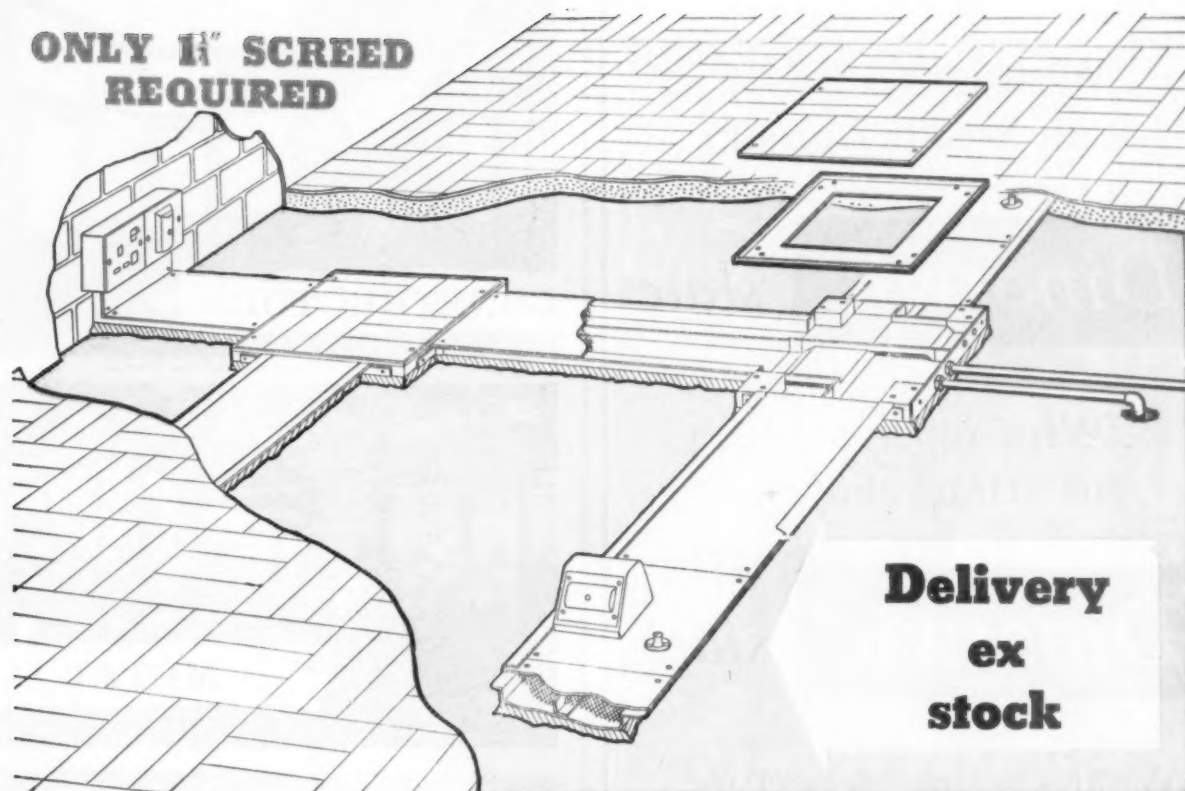
THE NON-COMBUSTIBLE ASBESTOS INSULATION BOARD



CAPE BUILDING PRODUCTS LIMITED. A Subsidiary of The Cape Asbestos Company Limited
COWLEY BRIDGE WORKS · UXBRIDGE · MIDDLESEX · TELEPHONE: UXBRIDGE 37111 · TELEGRAMS: INCORRUPT, UXBRIDGE
TELEX: 23471.

Also at Manchester, Birmingham, Glasgow, Newcastle

AX71/G



GREENWOOD AIRVAC INTRODUCE A STANDARDISED FLOOR DUCT SYSTEM **FLUSHFYT**

for telephone and all electrical services

The new Greenwood Airvac "Flushfyt" Floor Duct System provides a distribution system for all telephone and electrical services. With a small number of standardised units you can achieve the greatest possible flexibility in layout. For ease of installation the new G.A. "Flushfyt" System cannot be bettered.

★ Duct covers can be supplied fitted with $1\frac{1}{2}$ " diameter outlets or may be added at any future date.

★ Adjustable floor frame to accept final floor finish.

★ All services in one duct. Central division to segregate telephone from electrical services.

★ Skirting Terminal Boxes and Universal Pedestal Units for floor connection.

**Write for
full details
and new
"FLUSHFYT"
leaflet today!**



Greenwood Airvac Conduits Ltd

Patentees, Designers and Manufacturers of Electrical Conduit Systems

CARLISLE HOUSE, 8 SOUTHAMPTON ROW, LONDON, W.C.1. CHAncery 9377 (3 lines) 'Grams: Aircon, Westcent, London

GC 71

What makes a roof
really weather-proof?

Dinorwic slate

What repels acids,
but attracts buyers?

Dinorwic slate

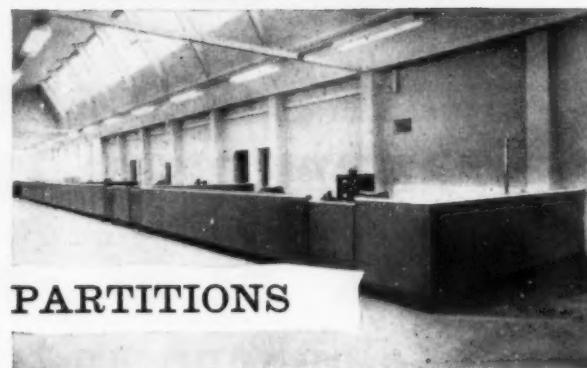
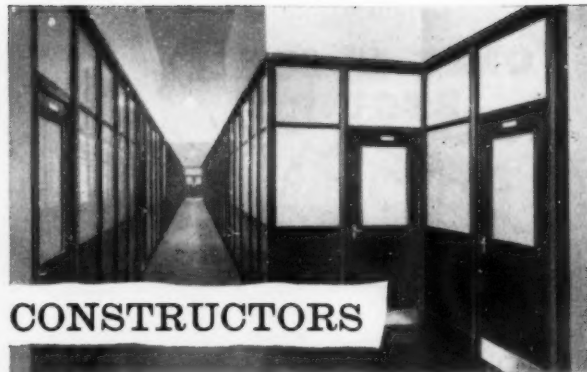
What's subtle in texture,
and rugged in strength?

Dinorwic slate

What's the finest quality
roofing slate?

Dinorwic slate

*The Dinorwic Slate
Quarries Company Limited
Port Dinorwic
Caernarvonshire*



Constructors Metal Partitions are not only extremely pleasing to the eye but of great strength, and serviceability. Their freedom from warping, cracks or decay and their resistance to fire and vermin make them the obvious choice for the sub-division of building interiors. They are very adaptable to changing requirements as they can be dismantled easily and quickly for re-siting in new positions in order to use space in the most efficient and economical manner.

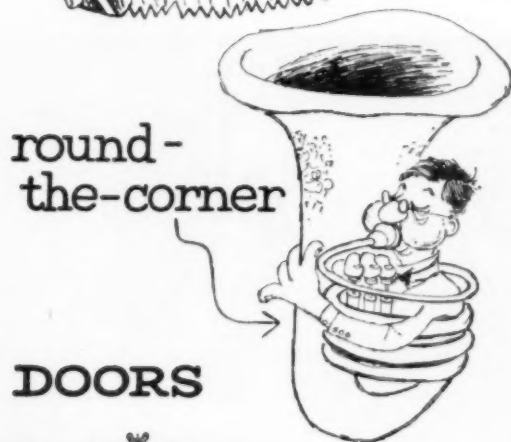
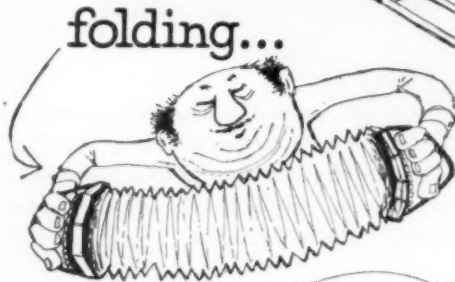
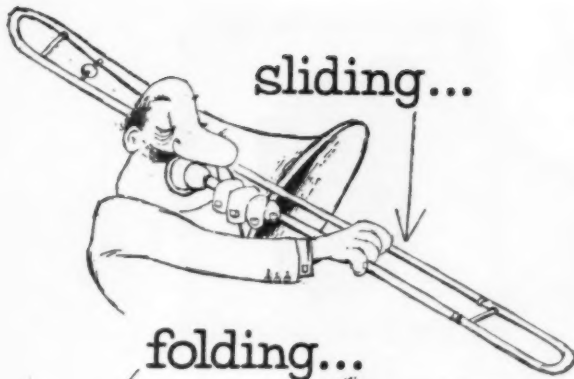
GOOD PLANNERS ALWAYS CONSULT

CONSTRUCTORS

THE MANUFACTURERS OF STEEL EQUIPMENT

CONSTRUCTORS LIMITED, Dept. A1
TYBURN ROAD, ERDINGTON, BIRMINGHAM 24
TELEPHONE: ERDington 1616

London Office: 98 Park Lane, W.1. Telephone: MAYfair 3074
Leeds Office: 25 Merriam Street. Telephone: LEEDS 28017



DOORS



gear
sets
the
pace!



For domestic, industrial and power-operated giant doors that fold, slide, or round corners, consult KING — door gear craftsmen for over 40 years! A KING representative will call on you ANYWHERE in the world! For illustrated literature, write to:

GEO. W. KING LTD

Argyle Works (11/15) Stevenage,
Herts. Telephone: Stevenage 440

PROTİM WOOD PRESERVATIVE

PROTİM

PROTECTS TIMBER

If Dry Rot or Woodworm attacks your building the **PROTİM SERVICE** will, upon request, immediately carry out an expert survey. An economical estimate of any curative treatment that may be necessary will then be submitted.

When treatment is required it will be carried out by a team of highly trained specialists using **PROTİM WOOD PRESERVATIVE** completely eradicating all fungal and insect attack. Treating with **PROTİM** ensures permanent protection against any recurrence.

THE PROTİM INSITU ERADICATION SERVICE is provided by old established highly reputable companies situated throughout the U.K. Further information is available from **PROTİM LTD.**

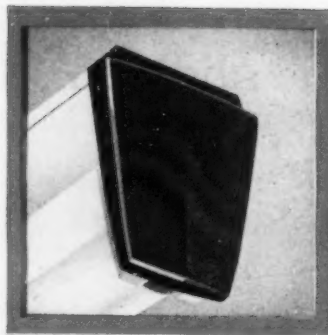
PROTİM LTD

Protim

16-17 DEVONSHIRE SQ., LONDON, E.C.2. TEL: BIS 0466/0466

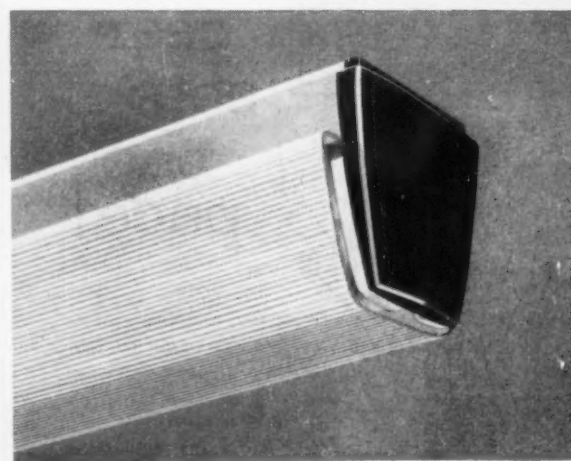
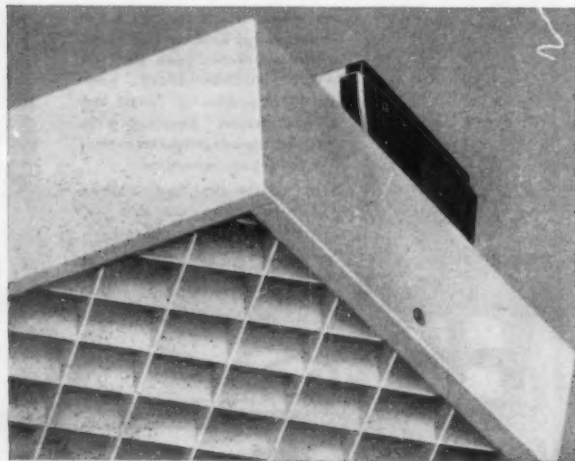
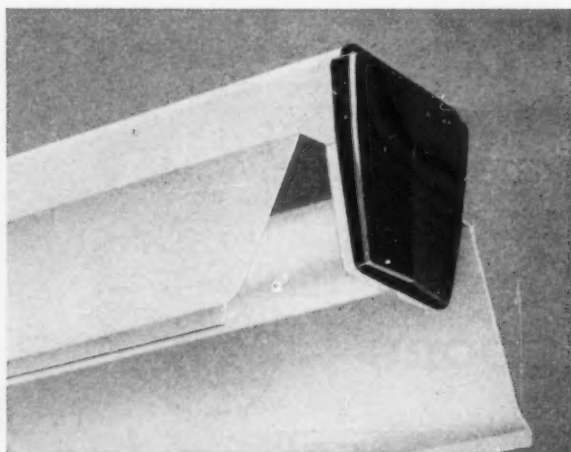
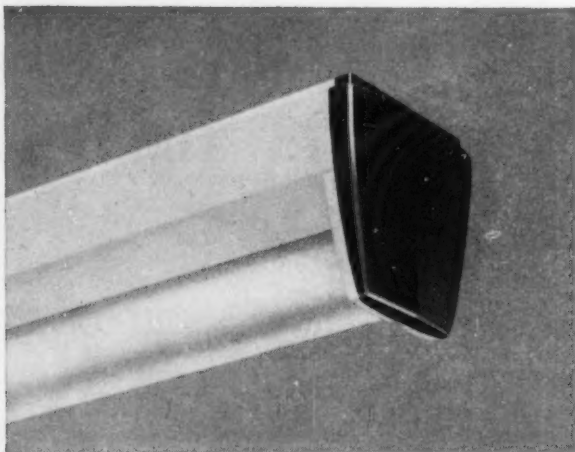
Crompton Crompack

Low-cost, high-performance fluorescent fittings in a class of their own



Good looking . . . well finished . . . easy to install.

Crompacks are made throughout to a standard of design, performance, and economy, which until now only more expensive fittings could provide. Crompacks come in 8ft, 5ft or 4ft basic units complete with tubes, and are available with a wide choice of attachments including metal or 'Diakon' reflectors, scintillating glass panels, opal plastic dishes, plastic louvres, and reeded 'Diakon' diffusers; all of which are easily fixed to a basic unit.



Write for full details
and price list to:

Crompton Parkinson
LIMITED



CROMPTON HOUSE, ALDWYCH, LONDON W.C.2. TELEPHONE: CHANCERY 3333



LONGER LIFE—IN HIDUMINIUM

Rainwater fittings in Hiduminium are self protecting. They need no painting since they are highly resistant to corrosion, and no maintenance to ensure their long life. Hiduminium rainwater fittings do not rust nor stain surrounding surfaces and will not crack even in the coldest weather; they are as strong as iron but only one third the weight and so are easy to handle and fit.

Send for our fully illustrated catalogue and price list.

Manufactured by **HIGH DUTY ALLOYS LTD.** Telephone : Slough 24431

**Specify Hiduminium
rainwater goods**

THE NEW

FLEXPIPE

DRAINAGE

SYSTEM

3"

2 FT EXTRA LENGTH PER SECTION—4 DIAMETERS

New from Bowaters comes an improved Flexpipe drainage system. To all its well-known advantages (notably its 2 ft. extra length per pipe for faster, cheaper laying) we have added 2 extra diameters and a whole new range of polypropylene fittings. And as a result of production in our new British factory, you get better quality, quicker delivery.

4"

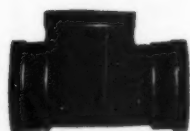
- 10 ft lengths, in diameters of 3", 4", 5" and 6"
- Faster to lay in any weather
- Can be tapered and saw-cut on site
- Unaffected by normal earth movement and resistant to root penetration
- Acid and alkali resistant
- Liquids flow faster, easier

For electrical and other conduit work

Flexpipe is available in diameters of 2", 3", 3½", 4", 5" and 6"



5"



Junction 90°



Adaptors—Flexpipe to stoneware and cast iron



Knuckle Bends—45° - 90°

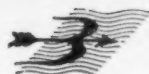


Junctions 135° - 120°
112½° - 95° - 90°



Sweep and Short Radius Bends—11½°, 22½°, 45°, 90°.

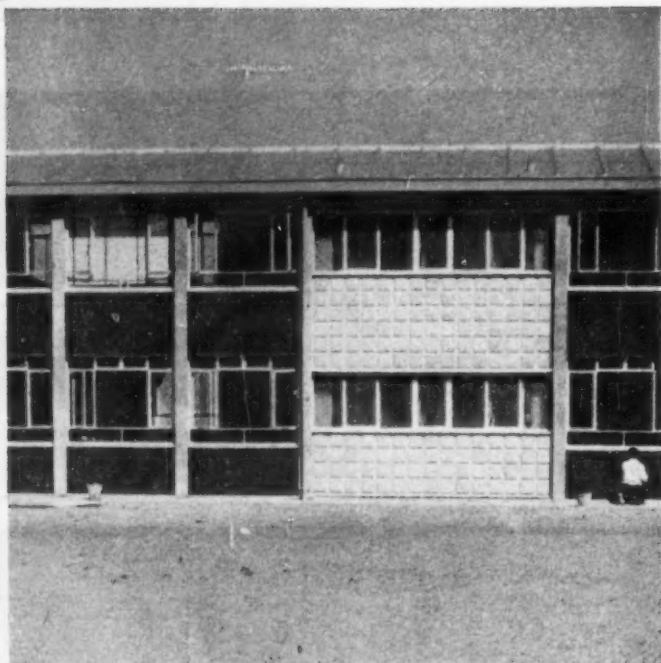
6"



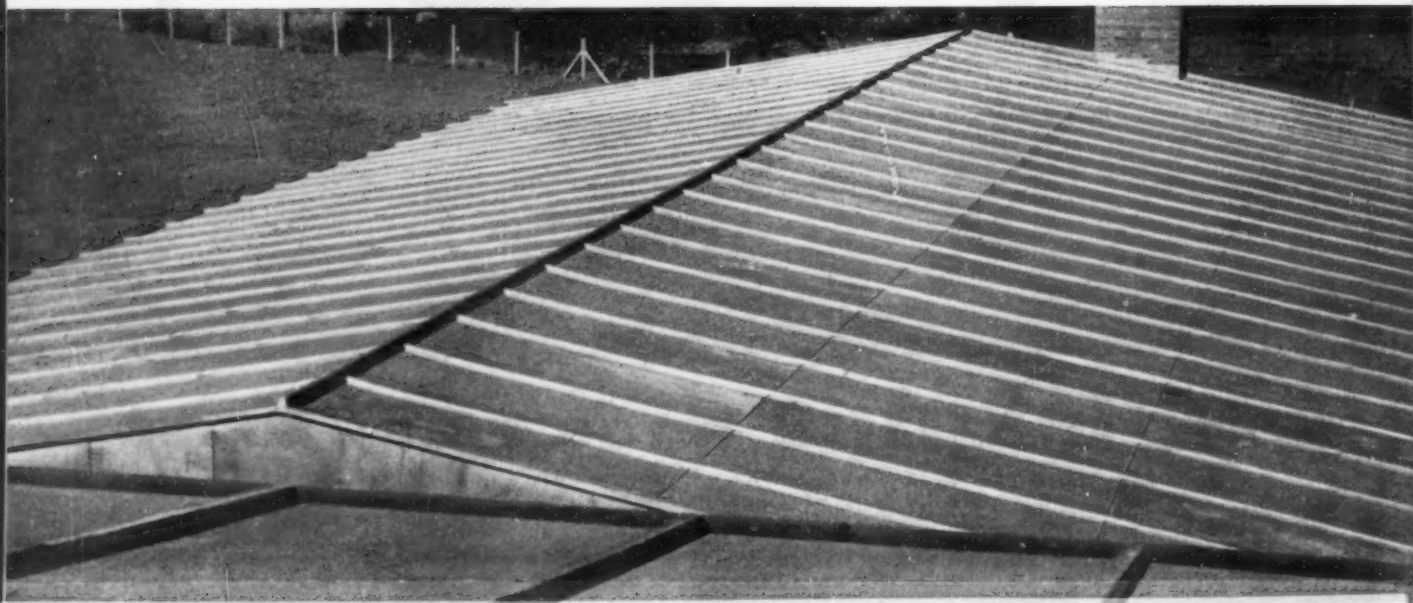
Flexpipe PITCH FIBRE PIPES

FLEXPIPE LIMITED HEAD OFFICE: BOWATER HOUSE · KNIGHTSBRIDGE · LONDON · S.W.1 · KNI 7070
SALES OFFICE: ELLESMERE PORT · WIRRAL · CHESHIRE · ELLESMERE PORT 3690

ZINC



Zinc roofing for lightness, long life and economy. Zinc's crisp and tidy appearance can give a fitting finish to modern buildings such as this new school at Willenshall, where the architects, W. H. Saunders and Sons, specified zinc. For information and publications on the many uses of zinc, telephone or write to the Zinc Development Association 34 Berkeley Square W1. GRO 6636



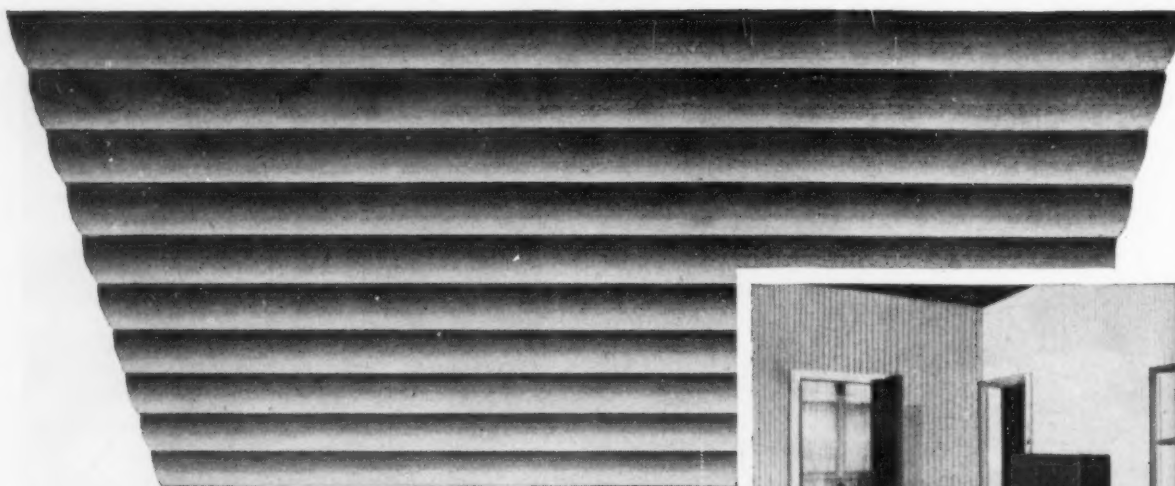


*DOUBLE BAY WAREHOUSE
Each Bay 100 ft. wide
using Portal Trusses
to give maximum headroom*

IS SPACE *Your Problem*

- Single clear spans 40ft. to 150ft.
in 5 ft. increments or multispans
- Mass produced for competitive price
- Guaranteed completion dates
- Send for brochure

WARD BROTHERS (Sherburn) LTD. Allison Works, **SHERBURN, MALTON, Yorks.**
Telephones and Telegrams Sherburn 355 and 356



FOR LASTING DECORATIVE
EFFECT WITH ECONOMY

REEDED HARDBOARD

reeds run either the length
or width of the board



Use LONG REEDS for cupboard doors, wall panelling etc.

Use CROSS REEDS for counter fronts, bars, pelmets etc.



The fact that L. W. Reeded Hardboard offers the choice of 1" reeds running either the length or width of the board gives greater versatility & economy in use. It also reduces the number of joints necessary in such applications as bar & counter facings, pelmets etc.

REEDED HARDBOARD

is available in sizes $\frac{1}{8}$ " \times 4' \times 9' and $\frac{1}{8}$ " \times 9' \times 4' through the usual distributive channels.

Manufactured by: MESSRS. LJUSNE WOXNA AB., LJUSNE, SWEDEN.

For any additional information, or in case of difficulties, apply to sole selling agents for the United Kingdom (excluding Northern Ireland):
Messrs. MARTIN OLSSON (FIBREBOARDS) LTD · MELBOURNE HOUSE · ALDWYCH · LONDON W.C.2

Bringing a building to life



A modern building is a living organism. It must breathe for its occupants, and ventilation or air conditioning systems are its lungs. How it breathes; the number of air changes, the amount of heating or cooling and humidity of the air depends on many factors; its function, number of occupants, aspect and seasonal changes. These must be calculated, and plant, fans, ducting and outlets

designed at an early stage. Then, as the building grows, the installation proceeds, at the pre-arranged pace.

It's a problem of design, teamwork and timing, needing organisation and experience. In fact, if it's a big job, it's more than likely that the whole thing was left in the hands of Haden — capable hands, thoroughly versed in the problems of bringing a building to life.

HADEN

Heating, Air Conditioning, Piping and Sanitary Engineers

G. N. HADEN & SONS LTD., 7/12 Tavistock Square, London W.C.1 and branches throughout the United Kingdom and Overseas

TAS79

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★
★
★
★
★
★
★
★
★
★
★

AT LAST !

★
★
★
★
★
★
★
★
★
★

THE EFFECTIVE ANSWER TO CONDENSATION PROBLEMS

★
★
★
★
★
★
★
★
★
★

Anticon

★
★
★
★
★
★
★
★
★
★

DECORATIVE FUNGICIDAL ANTI-CONDENSATION COATING

★
★
★
★
★
★
★
★
★
★

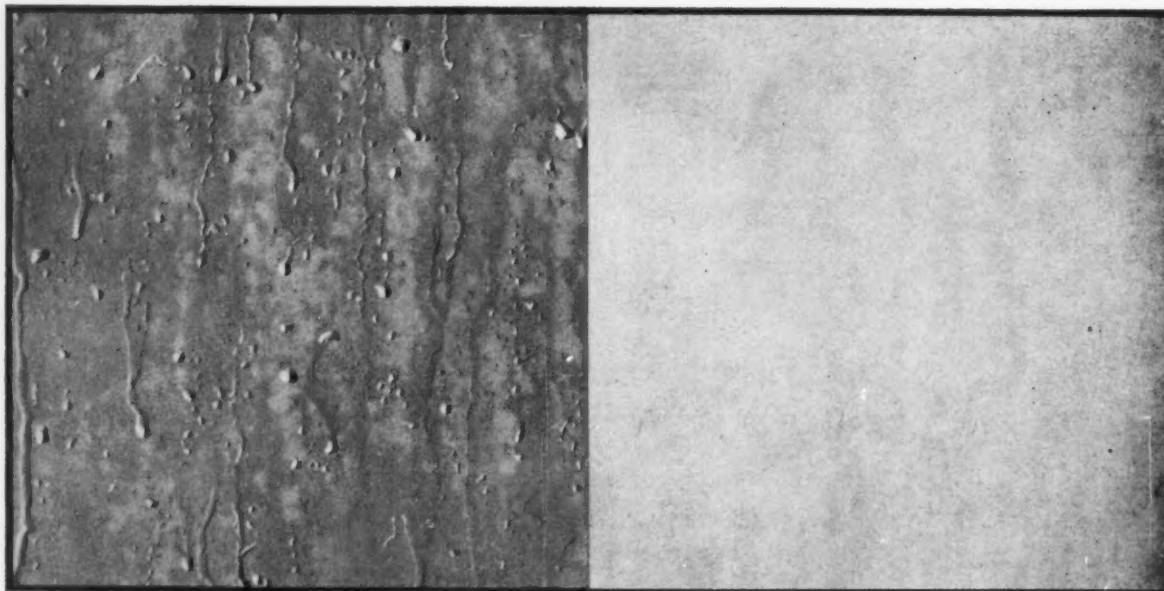
by

★
★
★
★
★
★
★
★
★
★

The Dentolite Process

★
★
★
★
★
★
★
★
★
★

(World Patents applied for)



Actual photograph showing panel with left hand side painted with first quality Emulsion Paint and right hand side with ANTICON and then subjected to severe condensation conditions.

★
★
★
★
★
★
★
★
★
★

ANTICON DEFINITELY STOPS CONDENSATION AND MOULD GROWTH EVEN UNDER SEVERE CONDITIONS

★
★
★
★
★
★
★
★
★
★

ANTICON is a remarkable new invention—a great advance on anti-condensation paints or coatings so far available. ANTICON has the following properties:

- ★ 1 Due to its possessing unique dual properties of water absorption and thermal insulation, it definitely inhibits condensation even under "severe" conditions.
- ★ 2 It prevents the growth of mould, although free from poisonous chemicals. It is absolutely harmless and its fungicidal efficiency is effective for many years.
- ★ 3 It is actively anti-bacterial. Germs, disease producing or otherwise, cannot grow on ANTICON, so eliminating the risk of cross infection from its surfaces.
- ★ 4 It is applied by brush, spray or roller and produces a smooth decorative emulsion finish.
- ★ 5 It is available in a range of colours.

★
★
★
★
★
★
★
★
★
★

DENTON EDWARDS PAINTS LIMITED, ABBEY ROAD, BARKING, ESSEX RIPpleway 3871

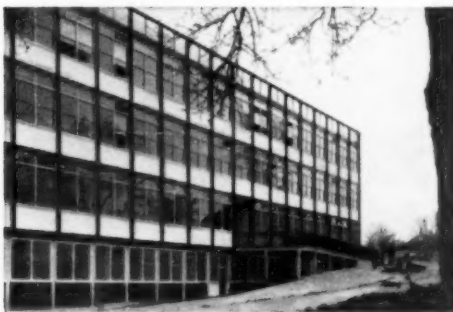
★
★
★
★
★
★
★
★
★
★

Manufacturers of fine paints for over 160 years

OS dept
DIST
ANCES
ER'S dept
TION
RAPY
CIAN &
DS
←



LINOLEUM belongs to Modern Living

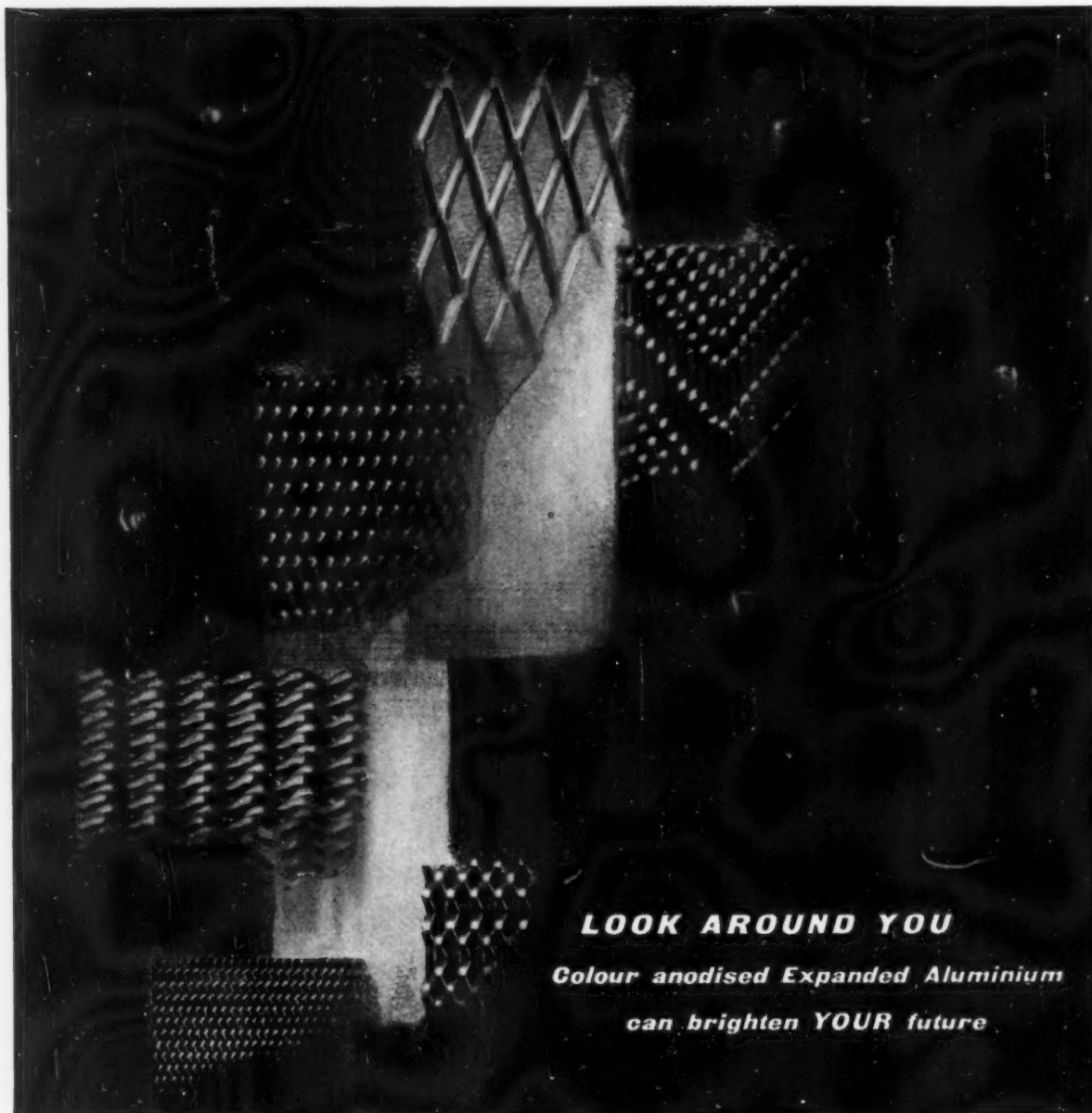


With acknowledgements to Yorke, Rosenberg & Mardall, Archts, FF FRIBA
Architects to the SW Metropolitan Regional Hospital Board

Ask any architect—he will tell you that today linoleum is one of the most versatile weapons in his creative armoury. Its applications are so wide. It expresses brilliantly the mood of any decorative theme—contemporary or period. And a constant flow of new colours and styles gives scope for endless variety of 'personalised' and novel designs. In other ways, too, linoleum belongs to modern living. It is so easy to care for—so quick to clean. It is quiet to the tread and no flooring equals linoleum for long wear . . . Always plan for linoleum. Illustrated left: the first stage of the new Crawley Hospital makes extensive use of today's finest flooring—linoleum.

"THELMA" stands for THE LINOLEUM MANUFACTURERS' ASSOCIATION, 127 VICTORIA STREET LONDON, S.W.1. For further information write to the Association or to any of the following members: BARRY OSTLER & SHEPHERD LTD., Kirkcaldy • DUNDEE LINOLEUM CO. LTD., Dundee LINOLEUM MANUFACTURING CO. LTD., 6 Old Bailey, London, E.C.4 • MICHAEL HAIN & CO. LTD., Kirkcaldy • NORTH BRITISH LINOLEUM CO. LTD., Dundee • SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LTD., Falkland, Fife • JAS. WILLIAMSON & SON LTD., Lancaster.





LOOK AROUND YOU

*Colour anodised Expanded Aluminium
can brighten YOUR future*



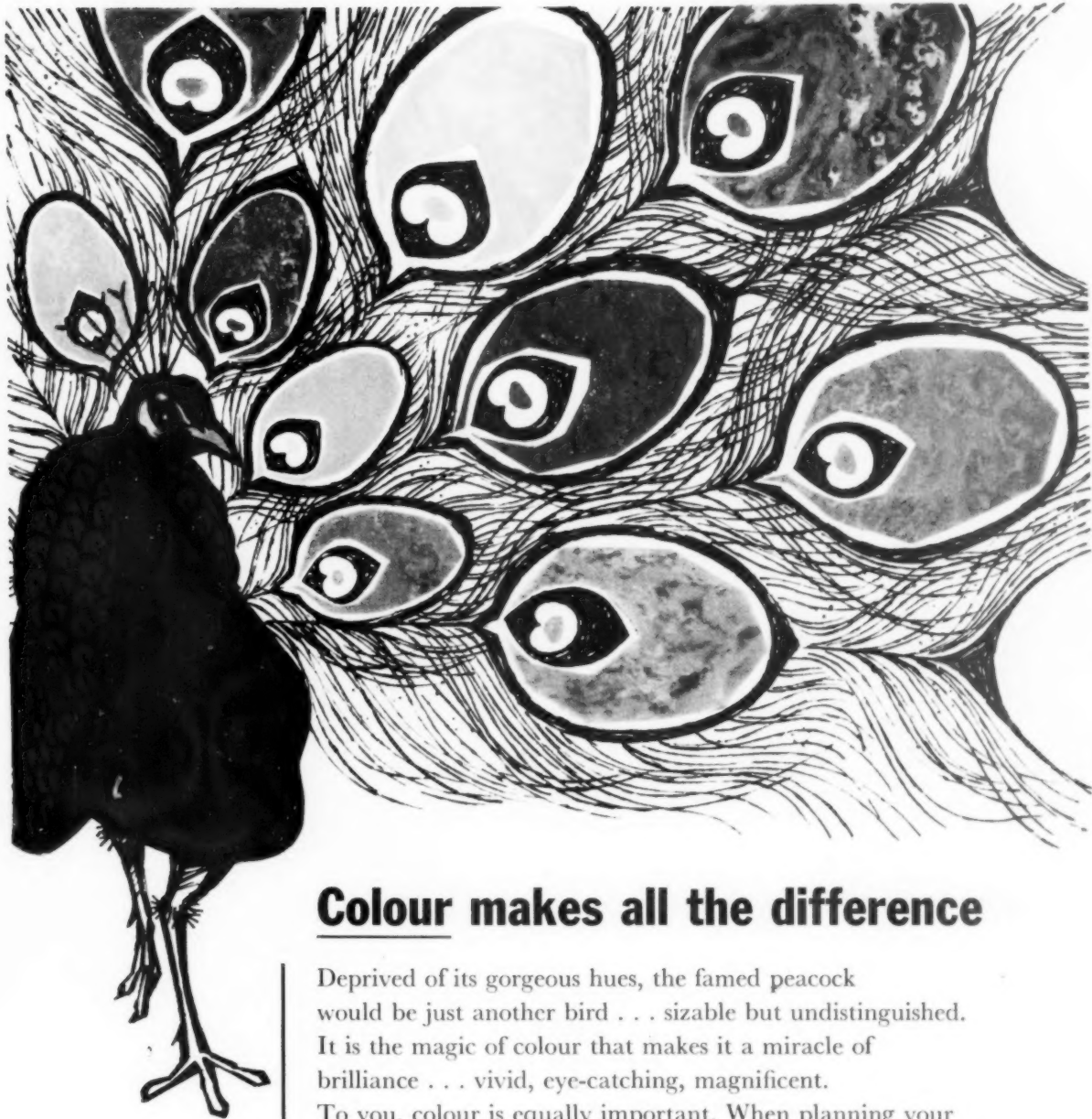
* Write for this
illustrated brochure.

Functional, decorative, resistant to corrosion, colour anodised Expanded Aluminium is helping to solve the problems of manufacturers and designers throughout the world. Light in weight, colour anodised Expanded Aluminium is patterned in imaginative designs in colours that never flake or peel. Easy to fabricate and economical to use, colour anodised Expanded Aluminium can fit brightly into your future in so many ways . . . ask the people who use it.

EXPANDED METAL — at the heart of more things than most people realise



THE EXPANDED METAL COMPANY LIMITED · 16 CAXTON STREET · LONDON · S.W.1 · TELEPHONE: ABBey 7766
Branch Offices at : Aberdeen · Belfast · Birmingham · Bristol · Cardiff · Exeter · Glasgow · Leeds · Manchester · Newcastle-on-Tyne · Nottingham



*Simplify colour selection—
send for a free copy of Barry's
latest Sample Book. Ruboleum
is obtainable in 3 gauges—
6.7 mm, 4.5 mm and 3.20 mm.*

Colour makes all the difference

Deprived of its gorgeous hues, the famed peacock would be just another bird . . . sizable but undistinguished. It is the magic of colour that makes it a miracle of brilliance . . . vivid, eye-catching, magnificent.

To you, colour is equally important. When planning your next scheme, draw freely on the extensive Ruboleum range of plain and marbled varieties. Transform your dormant ideas into subdued or dramatic reality. Choose Ruboleum — the acknowledged aristocrat of all floor coverings — and make certain of the additional advantages of economy, durability, resilience, quietness and easy cleaning.

BARRY'S

BARRY, OSTLER & SHEPHERD LTD., KIRKCALDY, SCOTLAND. *A member of the Barry and Staines Group*

AP42



authentic artistry. . .

*An inspiration to the skill of architects
designers and decorators . . .*

Hand-woven wild silk from Siam

Silk, grass and moire wallpapers from Japan

We invite you to inspect our magnificent range . . .

japanese hand-made wallpapers

EDGAR BROTHERS LTD.

12 BEAUCHAMP PLACE, LONDON, S.W.3.
KENsington 5224/5

GYPLITE ready-mixed Plasters

... light in weight, crack resisting,
fire-protective ...



... worthy of the
hands of the craftsman

GYPROC

products include:

GYPROC WALLBOARD—LATH—PLANK
GYPROC PLASTERS
GYPSTELE ROOF AND WALL LININGS—SUSPENDED CEILING
FLAXSTELE SUSPENDED CEILING
GYPUNIT PANELS
GYPTONE ACOUSTIC TILES
GYPLITE READY-MIXED LIGHTWEIGHT AGGREGATE PLASTER
GYPKLITH WOOD WOOL SLABS

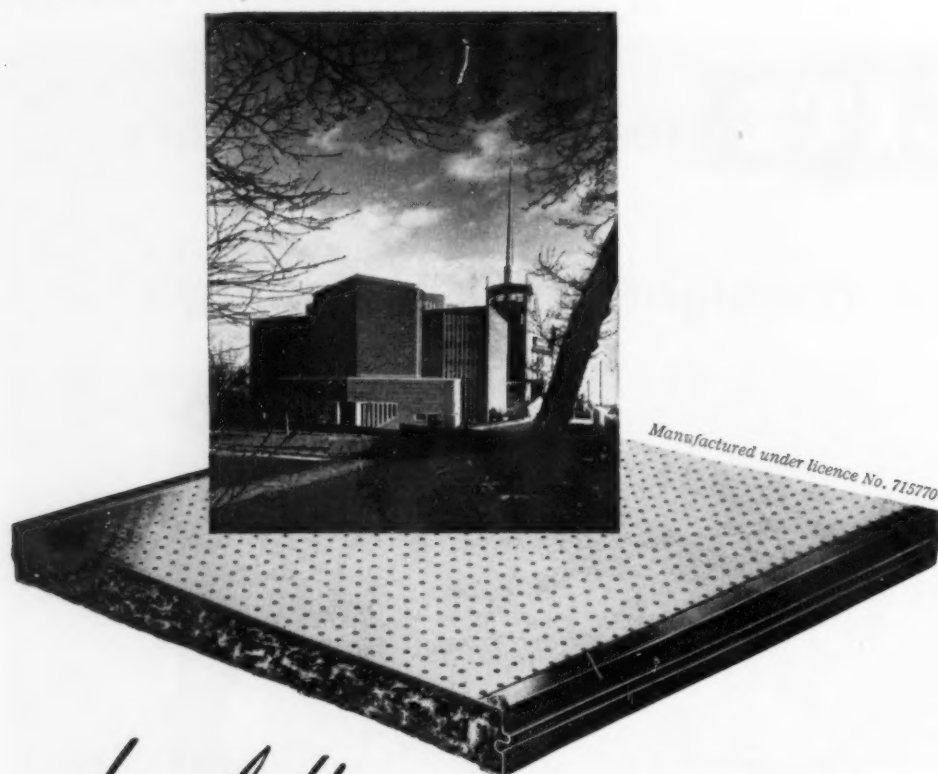
Free technical literature will be sent on request

GYPROC PRODUCTS LIMITED

Head Office: Singlewell Road, Gravesend, Kent. *Gravesend* 4251/4 · *Glasgow:* Gyproc Wharf, Shieldhall, Glasgow, S.W.1. *Govan* 2141/3

Midlands: 11 Musters Road, West Bridgford, Nottingham, Nottingham 82101 · *London:* Ferguson House, 15/17 Marylebone Road, N.W.1. *Hunter* 4031/6

GYP.1



Insulation... and **STRENGTH**



Specify Halcrete 'DICERS'

(Double Interlocking Channel Edge Roofing Slabs)
Wood wool panels 2", 3" and 4" thick and to Span
from 6' 0"—12' 6".

also Domelight units with inset Perspex or
glass roof lights, in varying sizes. Hit & Miss
Shutter Ventilation can also be incorporated.

- 1 A combined roof and ceiling panel
- 2 Fire resistant—Class 1 Penetration test Ext. F A A
- 3 High absorption co-efficient 77%
- 4 Combining structural strength with thermal insulation of 0.23 B.T.U.'s
- 5 Prefinished with Perforated or Plain asbestos facing
- 6 Economy—saves cost of suspended ceiling.
- 7 Patent concealed fixing

Halcrete are the original manufacturers of the channel interlocked reinforced wood wool slab. Layouts and quotations, without obligation, can be had on request from our specialised advisory department.

Write for fully descriptive 52 page catalogue

HALCRETE PANELS

HALCRETE PANELS LTD.

STOCKLEY · WEST DRAYTON · MIDDLESEX Telephone: West Drayton 2645-8

VISIT OUR STAND AT "THE BUILDING CENTRE" 26 STORE STREET, W.C.1



*Photo by courtesy of
Holland & Hannen and
Cubitts (G.B.) Ltd.*

TEAK

TEAK *tectona grandis*, lord of Asian forests. Difficulties involved in reaching and shipping this most beautiful hardwood are felt by Morris to be well worthwhile.

Large stocks are held, from the smallest short scantling to the 25ft. flitch. Thus selection to customers' orders is less wasteful and more economic. And bulk shipment or one piece, the service is the same. See Morris for TEAK.



IROKO, MAHOGANY AND OTHER HARDWOODS

Ravensdale Wharf, Stamford Hill, London, N.16. Tel: STAMFORD HILL 6611

NOW YOU CAN CUT HOUSE ROOFING COSTS BY UP TO 30% with the NEW TECTON UNITRUSS



1 TECTON UNITRUSS WILL DO THE WORK OF 2 ORDINARY TIMBER TRUSSES

... only one Unitruss for any house up to 36 ft. wide thanks to skilled timber engineering, weather-resisting, all-glued construction and top grade materials.

And there are 3 other good reasons for specifying and using Tecton Unitrusses

1. Site costs cut . . .

You get Tecton Unitrusses in two halves for easy handling on site. You join the halves just by nailing at the top and bolting in the bottom tie. Connectors are built in and bolts supplied.

2. Standard versatile units

Tecton Unitrusses come in standard pitches (22½°, 30°, 35°) for any type of roof finish: tiles (including Redland Stonewold at 22½°) copper, Stramit with felt, etc. And with half Tecton Unitrusses you build hipped ends.

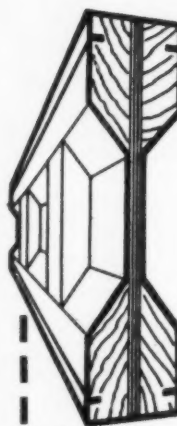
3. Freedom of design

One pier only in each of the front and back walls (up to 36 ft. long). Clear spans—also up to 36 ft.—made to suit your scheme.

AND to take all design worries off your hands you can call on the FREE Tecton Design Service.

Find out today what Tecton Unitrusses can do for you.

Just fill in the coupon for more details and post it today. Better still enclose some drawings with it for a FREE estimate.



Tick what interests you and send to

TECTON

Dexion Ltd., Maygrove Road, London, N.W.6
Telephone: MALda Vale 6031

- ☐ Please send me more information about Tecton Unitrusses.
- ☐ Please ask your technical representative to phone for an appointment.
- ☐ I enclose drawings. Please supply FREE estimate for Unitruss Construction. With no obligation of course.

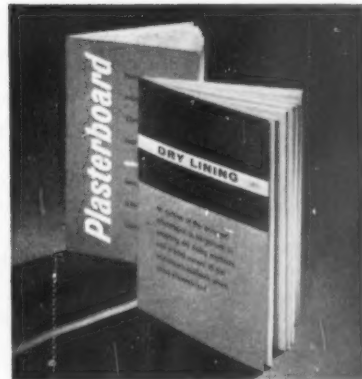
NAME
POSITION
COMPANY
ADDRESS

PHONE AJ9

There's a lot more information about other Tecton products. Just ask for details.

**The cost of fires
in 1959 was
£40,000,000
the price of
320,000,000 yards
of Fire Resistant Plasterboard**

BOOKLETS AVAILABLE FREE
Factual booklets now available
underline the advantages of using gypsum plasterboard.
Write for your copies to . . .



THE GYPSUM PLASTERBOARD DEVELOPMENT ASSOCIATION

MEMBERS: The British Plaster Board (Manufacturing) Limited · Gyproc Products Limited · Imperial Chemical Industries Limited

An Association for the promotion, encouragement and development of the proper use of gypsum plasterboard. Plasterboard made by members meets the highest standards, and their experienced technicians give real after-sales service.

G.P.O. BOX NO. 321, LONDON, N.W.1.



The Indugud Relief, outstanding among discoveries made at Al-Ubaid, of art works incorporating copper and bitumen . . . and dated c.3100 B.C. Reproduced by courtesy of the British Museum.

Copper and native bitumen are known to have been in use as long ago as 3100 B.C. because the weatherproof and corrosion-resistant properties of these materials have helped to preserve for 20th Century eyes relics of unbelievably ancient civilisations.

TODAY this same time-tested combination of Copper and native bitumen now derived from the great Trinidad Asphalt 'lake' provides modern building with COPPERTRINDA — the finest hand-made dampcourse in the world.

COPPERTRINDA

for lasting protection

A sample of COPPERTRINDA will be sent to you immediately upon request to

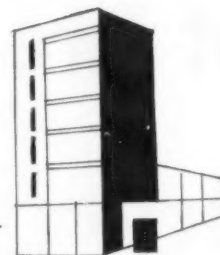
ENGERT & ROLFE LIMITED

Dept. A.J.13

Barchester Street London E14

Tel. EAST 1441

**What
will
last . . .
5,000
years?**



Will Engert & Rolfe arrange to have a sample of COPPERTRINDA sent to

M _____
(Designation) _____
of _____

A.J.2



COMPACTOM KEEP NOISE IN ITS PLACE

Compactom can offer the widest range of materials and methods for dry construction demountable partitions, acoustic ceilings and other methods of acoustical treatment. Remarkable reductions in noise are achieved *between* rooms and *within* rooms by Compactom schemes.

May we send you a copy of the Compactom Planning Guide?

It contains just the sort of information you want about

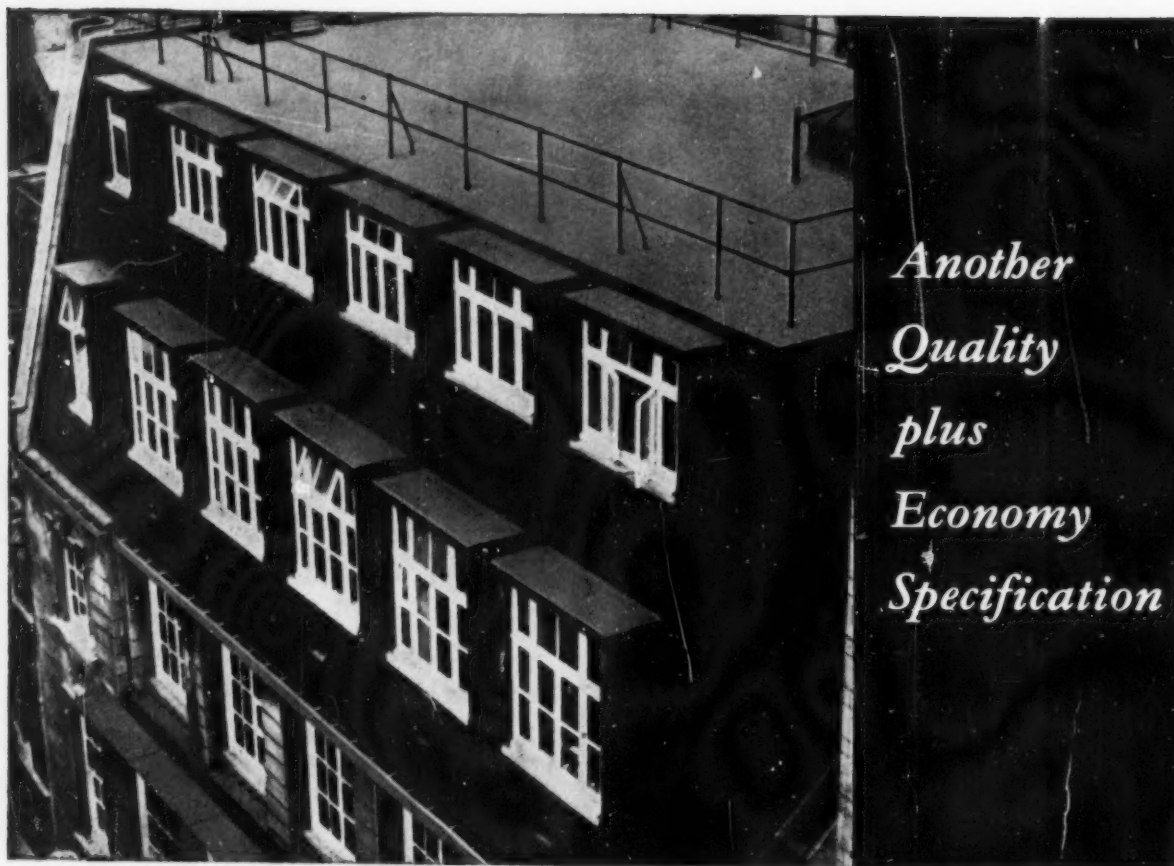
- Dry construction demountable partitions
- Patented Miniwall dwarf partitions
- Acoustic ceilings and treatment
- Fitment work
- Toilet cubicles

COMPACTOM

SPECIALISTS IN PARTITIONS AND ACOUSTIC CEILINGS

COMPACTOM LTD., Oxgate Lane • Cricklewood • London, N.W.2.

Telephone: GLAdstone 6633



*Another
Quality
plus
Economy
Specification*

'NAMASTIC'

The Association has a membership made up of the following:—

ASSOCIATED ASPHALT COMPANY LTD.
THE BIRMINGHAM ASPHALT & PAVING CO., LTD.
BOLTON & HAYES LTD.
WILLIAM BRIGGS & SONS LTD.
CAMBRIDGE ASPHALT CO. LTD.
COVERITE (ASPHALTERS) LTD.
DAVIES BROTHERS (ASPHALTERS) LTD.
DURABLE ASPHALTE CO., LTD.
DURASTIC LTD.
EXCEL ASPHALTE CO., LTD.

In the construction of this important office building, everything had to be of outstanding quality. The choice of 'NAMASTIC', which is made from British materials with manufacturing tolerances much closer than those demanded by British Standard Specifications, emphasised this need while ensuring the added advantage of lower costs.

Specify

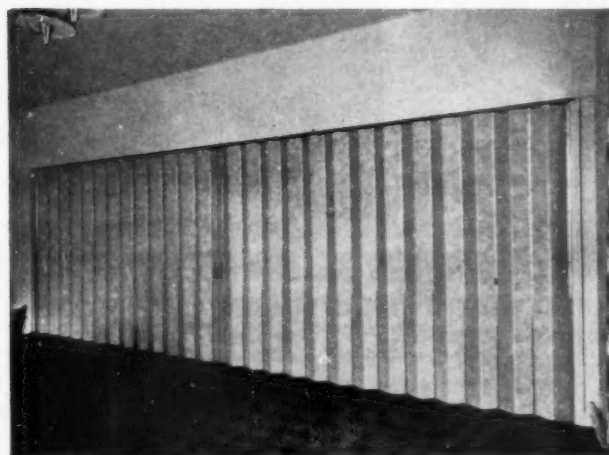
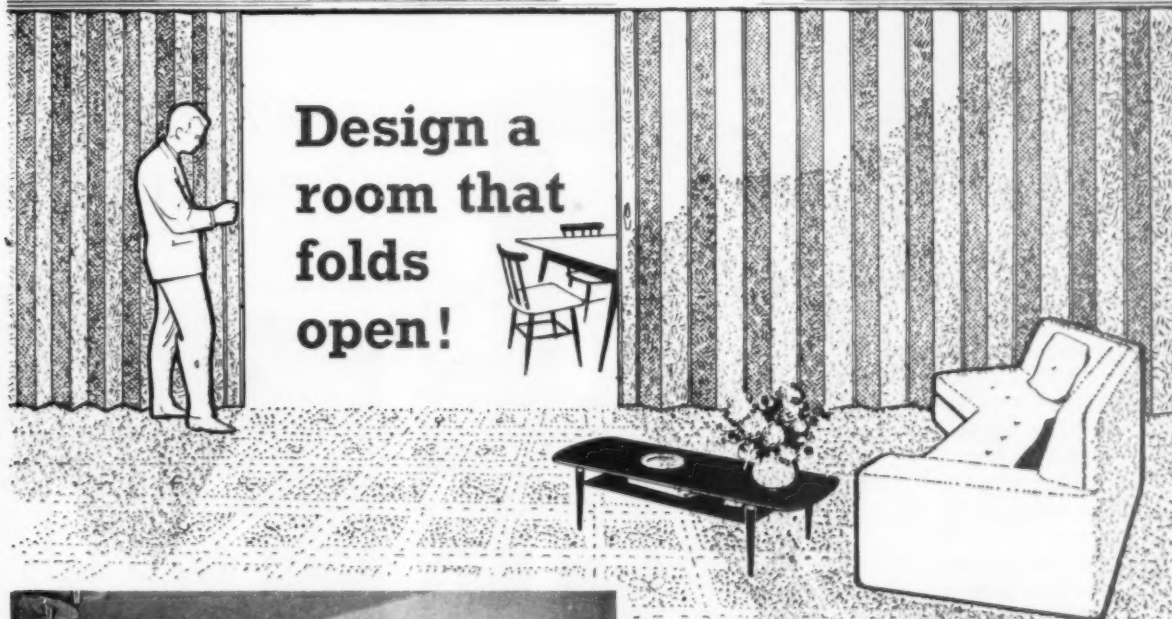
ALDO ASPHALTE CO., LTD.
FIELD & PALMER LTD.
THE IMPROVED ASPHALTE CO., LTD.
MOUNTFIELD JUNIOR
NATURAL ROCK ASPHALTE CO., LTD.
THE OXFORD ASPHALT CO.
C. PASINI (IPSWICH) LTD.
PERMANITE LTD.
THE ROCK ASPHALTE CO., LTD.
TAYLOR & SONS (ASPHALTERS) LTD.
UNITY ASPHALT (LONDON) LTD.



For full information about N.A.M.A. and free technical advice on asphalt for Building apply to the Secretary:

NATIONAL ASSOCIATION OF MASTER ASPHALTERS, 9 CLARGES STREET LONDON W1
TELEPHONE: GROSVENOR 5333 ESTABLISHED 1933

Offices, schools, assembly halls—or a serving hatch—these are just a few of the innumerable applications of SUPERFOLD collapsible partitions. The metal frames combine strength with lightness, operation is smooth and silent and, when bunched, the partitions occupy the minimum of space. The technical superiority of SUPERFOLD, complemented by a range of 120 washable leathercloth finishes, opens up new planning possibilities for architect and builder.



The photograph above shows a pair of Superfold partitions (24' 8 1/2" overall width x 8' 10" overall height), at a club. In the photograph at the top of the page the partitions are opened to show the dining room.

- * SUPERFOLD is made in sizes up to 15 ft. x 120 ft.
- * Extruded alloy hinge sections connected to frame by special hinging plates; alloy strips fix leathercloth to the frame, thus preventing sagging of the material.
- * Remote control by electrical operation where required.
- * Leathercloth samples and leaflets available on request under reference AJ 384.



LEATHERCLOTH COVERED COLLAPSIBLE PARTITIONS

BOLTON GATE COMPANY LIMITED • BOLTON • LANCASHIRE

Branches at London, Glasgow, Birmingham, and towns throughout the country.

8G384

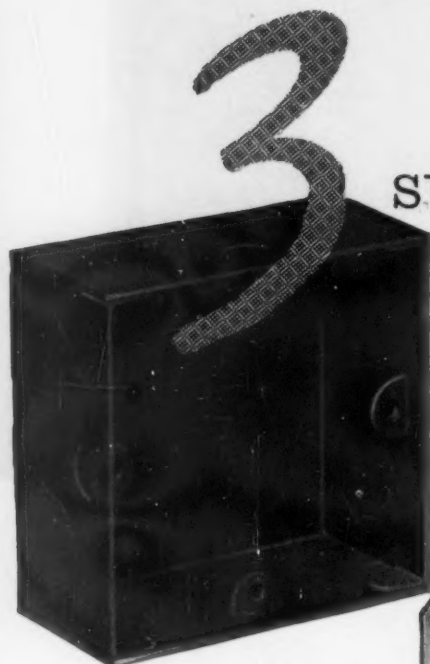
NOW

you can put up to

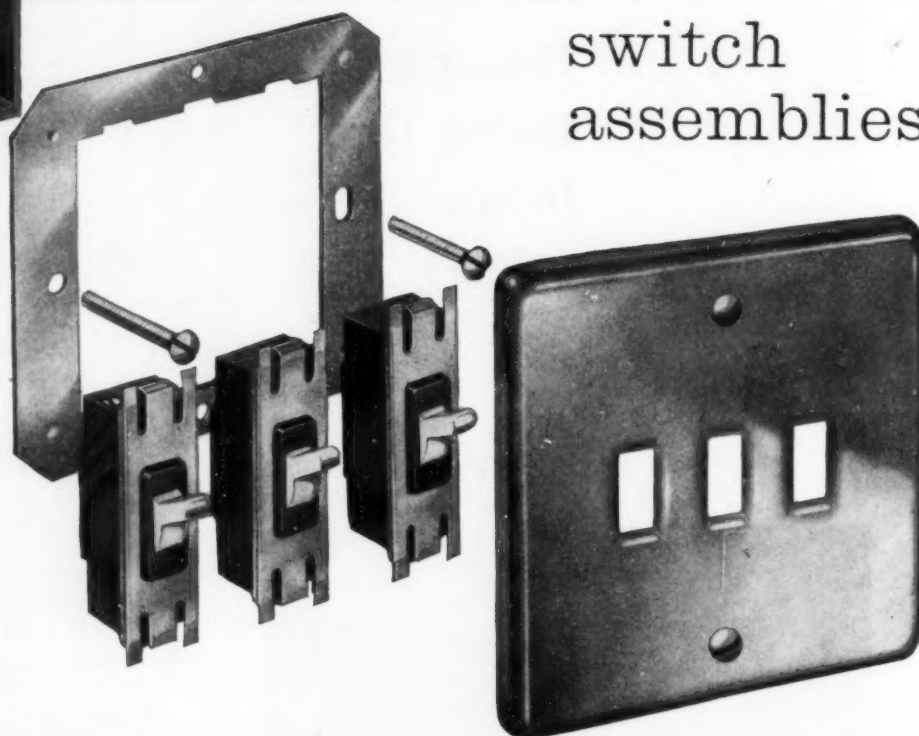
switches in a

BS 1299 1-GANG BOX

with **'MUTAC CLIPPER'** switch assemblies

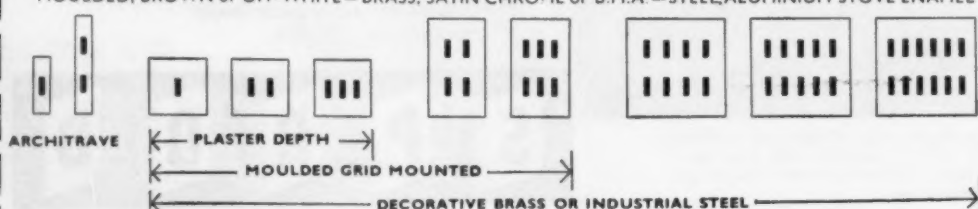


Three into one does go, safely, compactly and swiftly, when you use 'Mutac Clipper' switch assemblies and a standard B.S.1299 box. And now all the proven 'Mutac Clipper' advantages—simplified installation, time saved, reduced costs, are available in types and sizes to cover every normal switching requirement. The chart below gives full details and a useful switch selector, available freely on request, makes ordering simple too.



44 DIFFERENT SWITCH PLATES BASED ON 26 ASSEMBLIES

MOULDED, BROWN or OFF-WHITE — BRASS, SATIN CHROME or B.M.A. — STEEL, ALUMINIUM STOVE ENAMEL



INTERCHANGEABLE UNITS

SWITCHES

- 5 amp 1 way S.P.
- 15 amp 1 way S.P.
- 5 amp 1 way D.P.
- 5 amp 2 way S.P.
- 5 amp 2 way & Off
- 5 amp intermediate
- 5 amp 1 way secret
- 5 amp 2 way secret
- BELL PUSH
- NEON INDICATOR

G.E.C.

INSTALLATION

THE GENERAL ELECTRIC CO. LTD., KINGSWAY, LONDON, WC2



'HIDUTAC'

switchfuses

tested
to 110,000
operations at
1½ times full load
on tungsten
lighting load
and still
fit for duty

SINGLE POLE & NEUTRAL DOUBLE POLE TRIPLE POLE TRIPLE POLE & NEUTRAL

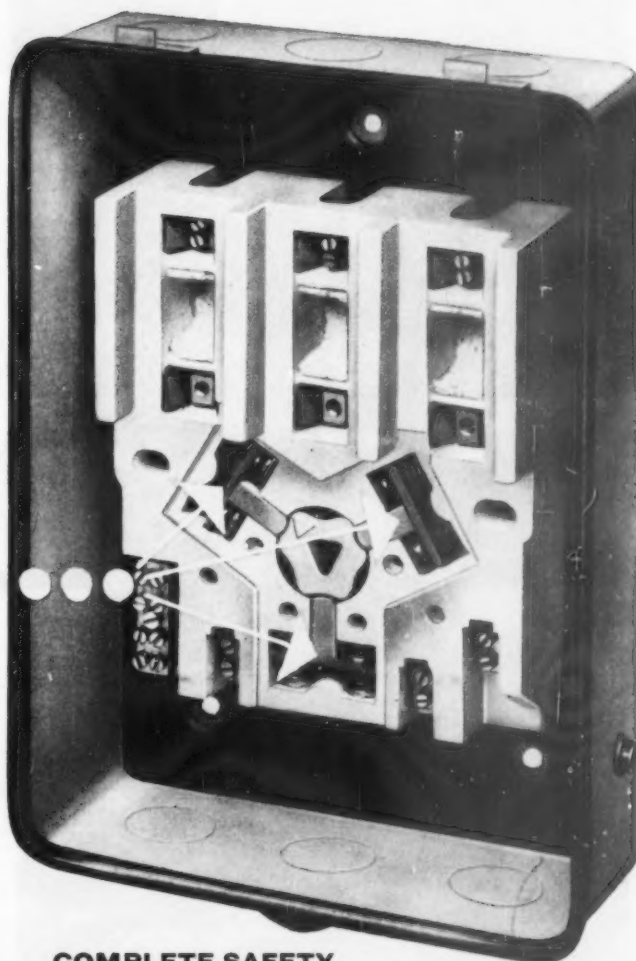
15-30 or 60 amp. 440 volts a.c. with rewirable or H.R.C. fuses.

'Hidutac' by G.E.C.—switchgear of advanced design combining high performance, complete safety and good looks. High breaking capacity makes 'Hidutac' switchgear ideally suitable for motor control, transformer and discharge lighting control.

Categories of Duty:

H.R.C. fuses (all ratings) AC 4 of BS 88 (33000 amps.)

Rewireable fuses 15 & 30 amp. ratings. S2A of BS 3036 (2000 amps.) Rewireable fuses 60 amp. rating. S4A of BS 3036 (4000 amps.)



COMPLETE SAFETY

For complete safety all INTERNAL moving parts are totally enclosed. Switch element for each phase is an individual enclosure to give maximum protection against flashover. Incoming terminals are screened by shields bearing the words "Live Terminals". Full interlock is provided between cover and switch mechanism.



EQUIPMENT GROUP

INSTALLATION EQUIPMENT GROUP HEADQUARTERS, FOUR ASHES, WOLVERHAMPTON

Permanently
Protected
by
ESCOL

Escol Panels are:

... finished with porcelain-enamelling
... permanent, ecological protection
... against corrosion and building noise
... in normal atmospheric conditions and
... in air. Escol is a wide range of
colours and a variety of textures. Pro-
vide fire and sound insulation.

PORCELAIN

ENAMELLED

PANELS

New Headquarters for
C.I.S. and C.W.S.
Manchester.
52,000 sq. ft. of
Escol Type
'B' 2 Panel.
Colour: Black

Architect:
G. S. Hay, Esq., F.R.I.B.A.,
Chief Architect,
C.W.S. Ltd., Manchester, 4,
in association with
Sir John Burnet, Tait & Partners,
London, W.C.1.

Contractors:
John Laing & Son Ltd.
London, N.W.7.

Framing:
Messrs. Norstel & Templewood
Hawkesley Ltd., Slough.

Stewart & Gray Ltd. offer a specialised
service in the development,
manufacture and all technical
aspects of porcelain enamelled steel
in architecture. It is at the disposal
of all architects.



ESCOL PANELS

maintain their integrity; the
finish and colours are

PERMANENT



STEWART & GRAY LTD

SWALE 8055, LONDON E.V. 57 Tel: WILKINSON 1834 (7 lines)

BRANCHES AT THE LONDON COUNTY COUNCIL BUILDING, AND THE FOREIGN EXCHANGE OFFICE

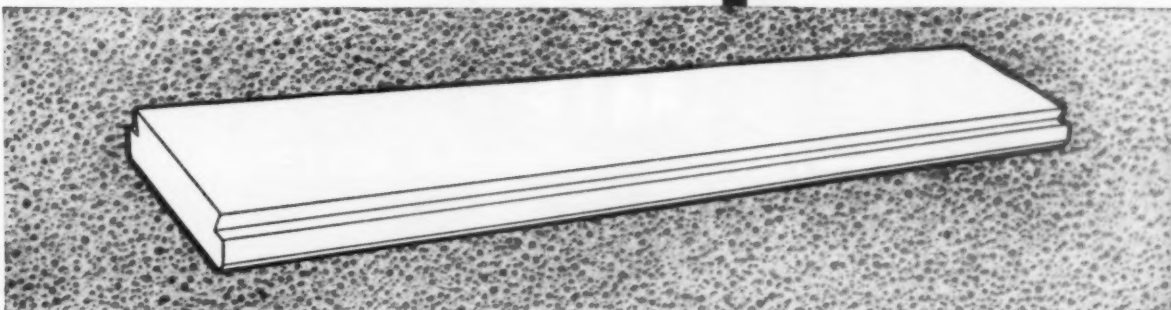
INDUSTRIAL ROOFING WELCOMES THE **SIPOREX** AGE

For over 25 years in widespread use in Northern Europe and many other parts of the world, SIPOREX, the lightweight cellular structural material *is now being manufactured here.*

Siporex revolutionises building techniques and offers architects and structural engineers many outstanding advantages.



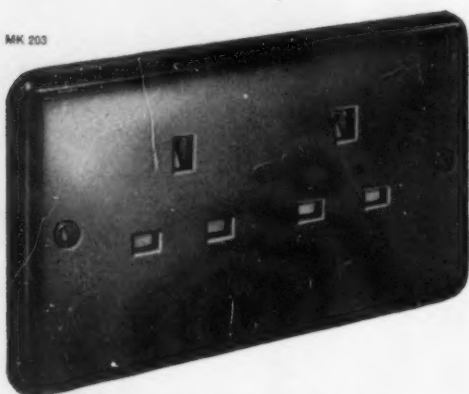
- ★ 25 years successful experience all over the world are behind Siporex.
- ★ Over 30 million sq. yds. of Siporex roofing have already been laid, from the equator to the arctic.
- ★ Siporex is simple and rapid to erect—reducing site labour costs.
- ★ Siporex has a thermal insulation ten times that of concrete and is completely incombustible.
- ★ Siporex is only a quarter the weight of an equivalent volume of concrete, reducing the cost of structural framework and foundations.
- ★ Siporex compares favourably in price with other building materials.



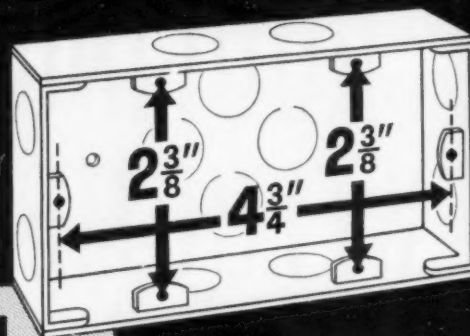
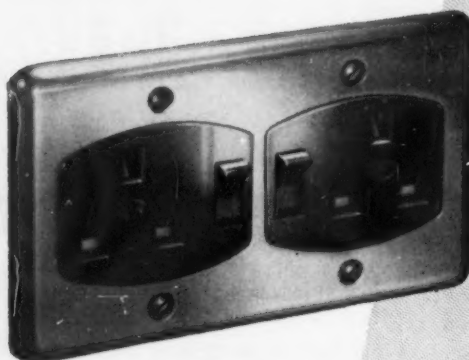
SIPOREX THE MODERN LIGHTWEIGHT CONSTRUCTION MATERIAL

Manufactured in Great Britain by: **COSTAIN CONCRETE COMPANY LIMITED** (A member of the Costain Group)
DUNCAN HOUSE, DOLPHIN SQUARE, LONDON, S.W.1. SIPOREX FACTORY, NEWARTHILL, LANARKSHIRE, SCOTLAND

MK 203



**TWO SOCKETS IN ONE...
FOR *DOUBLE* CONVENIENCE...**



List No. 886 MK Two gang
flush steel box.

(Top left) List No. 731—
Two gang socket-outlet with
moulded plate (Brown
or Ivory)

(Bottom left) List No. 2948—
Two gang switchsocket-
outlet with brass plate
(BMA or Matt Chrome)

SHUTTERED FOR SAFETY.....



THE NAME — FOR ELECTRIC WIRING ACCESSORIES

MK 13 amp. Rectangular pin socket and switch-
socket-outlets are made in two gang in the same
styling and variety and with the same electrical
safety features as MK single gang.
MK two gang outlets cost very little more to install

than single outlets yet give the user the benefits of
double service. MK flush two gang socket and
switchsocket-outlets have common dimensions to
suit the MK two gang flush box outlined above.
Surface patterns are also available.

M.K. ELECTRIC LIMITED SHRUBBERY ROAD EDMONTON LONDON N.9 EDMONTON 5151

NEW

Swedish - from Norrahammar

infinitely adaptable

SECTION BUILT

UEG BOILERS

From 720,000 to 8,000,000 BTU

oil fired from front
or top mounted burner

OR FOR USE WITH
SOLID FUEL

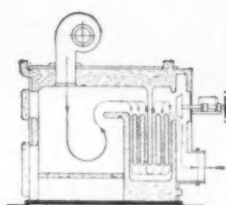
Natural or
induced draught

Utmost efficiency 90%

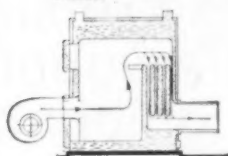
SECONDARY
HEAT EXCHANGER
FOR ECONOMY

No fire bricks
with top mounted burner

EARLY DELIVERY

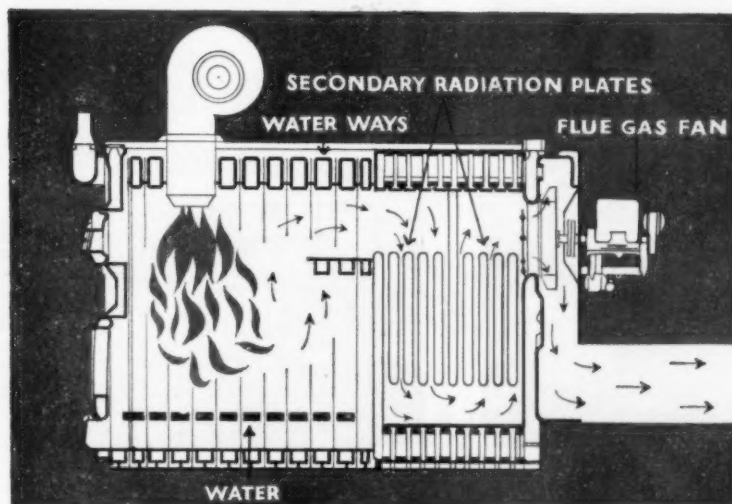


Top mounted burner
with induced draught
fan. High efficiency
boiler.



Front mounted burner;
standard convection
sections, normal
efficiency boiler.

HOW THE UEG WORKS

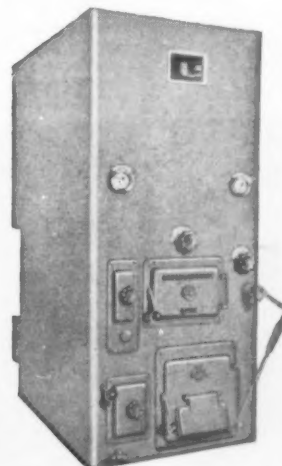


The Unit construction of the Swedish UEG boiler gives the heating engineer the opportunity to build up *precisely* the equipment required for any job in the boiler's range. Two possibilities are shown; but there are many, many more. And you can increase capacity any time by adding new sections.

SMALLER UNITS IN THE NORRAHAMMAR RANGE



The Norah 1500 — the package boiler for the world's finest small bore domestic central heating. 80,000 B.T.U. Trouble free pressure-jet oil firing or solid fuel. Burner, calorifier, mixing valve, boiler, pump — all in one neat package.



The Calfactor. 80,000 to 170,000 B.T.U. For the larger house or small hotel or office. Efficient and adaptable—oil or solid fuel — with either Swedish or British burners and accessories.

Write for details and leaflets to:
BECH NEALE & CO. LTD

Sole agents for the U.K.

72/78 Fleet Street,

London E.C.4

Telephone: FLEet Street 3386/9

THE ARCHITECTS' JOURNAL for April 27, 1961



RACKHAMS

An extensive contract comprising the complete interior shopfitting to the Ground and Third Floors was recently completed by our organisation at the new premises of this famous Birmingham store.

The scheme was carried out to the designs and under the direction of the architects, Copeland, Novak and Israel of New York.

OUR DESIGN AND TECHNICAL SERVICE IS READILY AVAILABLE TO ASSIST IN THE DEVELOPMENT OF ALL TYPES OF DECORATIVE SCHEMES.



Harris & Sheldon Limited

The organisation with a background of 75 years experience

BIRMINGHAM · LONDON · GLASGOW · TORONTO

WE ARE EXHIBITING AT
THE MANCHESTER
BUILDING CENTRE 115
PORTLAND STREET, MAN-
CHESTER 1.

Information CENTral 6933



Slate is now used widely in the Building Industry and needs careful handling and specialized knowledge when fixed on the job.

We are happy to announce that such expert work can be undertaken by our Company which has specialized in the fixing of slate of all types and section. Window surrounds, cills, copings, cladding, stallboards, thresholds and paving fabricated in slate are fixed efficiently and safely.

For a good sound job enquire at:

The Slate Fixing Co.,
28 Broughton Street,
London, S.W.8.

Telephone: MACaulay 2560

*There's nothing
as good as
Vermiculite for*

HOUSE INSULATION

- * Low cost to buy and to lay
— non-irritant
- * Highest efficiency,
all-enveloping, self-sealing
- * Indestructible, fire-proof,
vermin-proof
- * Clean, odourless, rot-proof,
non-conducting

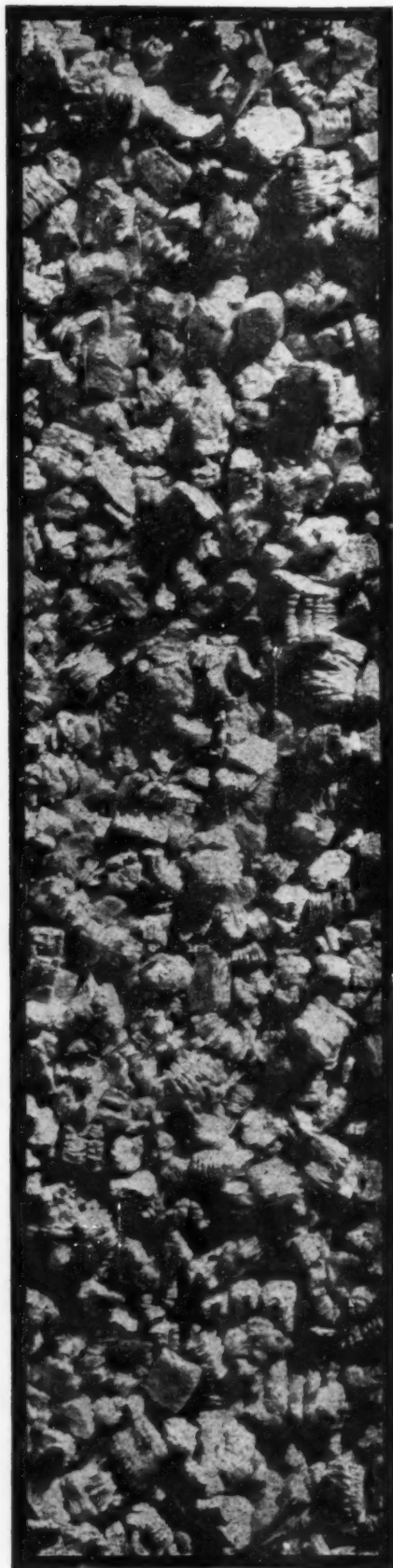
specify

VERMICULITE

FOR ROOF SCREEDS, FLOOR SCREEDS, PLASTERS AND LOOSE FILL



Send for full details:—
The Association of Vermiculite Exfoliators
59 Gresham Street, London, E.C.2 • Telephone: METropolitan 9101



DUCTAIR

central heating by fanned warm air

Ductair units heat air and keep it moving around the house. Ductair warmth is practically instantaneous and free from the stuffiness associated with other central heating systems. Warm air is fanned into the rooms through skirting level registers to provide whole-house or selective room heating.

The new gas-fired Ductair G.105/23

Designed for the 2/3 bedroom house or flat. The unit is so compact it can be fixed to the kitchen wall or installed in a cupboard. Like all Ductair models it is automatically controlled by a room thermostat usually sited in the main living room, and it can be used in open plan or traditional dwellings. A clothes drying cupboard is easily incorporated into the system.

THREE MODELS are available: for conventional flues, balanced flues, or connexion with a SE-duct.

PERFORMANCE With an output of 23,000 Btu/hr. it provides full heating in a living space of 4,000-5,000 cu. ft. Alternatively, it will supply full heating for smaller living space with background warmth for the bedrooms.

INSTALLED COST: £95 to £135 approx. (according to ducting).



Other Ductair Units

Type of Unit	Fuel	Space heating output	Intended for	Approximate capital cost for typical installation
DUCTAIR 22*	Solid (with Parkray S.55 boiler)	22,000 Btu/hr	Flats, Houses, etc., up to 1,200 sq. ft. floor area	£160/£180 installed, including boiler but excluding cylinder and plumbing
DUCTAIR 22*	Gas (with C.70 Circulyn)	ditto	ditto	£150/£180, ditto
DUCTAIR 22*	Oil (with Parkray 0.35 Boiler)	ditto	ditto	£190/£220, ditto, but excluding also oil tank and piping
OS.85 (Available for high level or low level warm air offtake)	Oil	85,000 Btu/hr	Houses of up to 2,750 sq. ft. floor area, and other buildings of up to about 25,000 cubic ft. capacity	£400/£550 excl. building work, depending upon whether installations are ducted or non-ducted
G.150 (Available for high level or low level warm air offtake)	Gas	150,000 Btu/hr	Houses up to 5,000 sq. ft. Commercial and industrial installations: one unit provides full heating for approx. 45,000 cu. ft. depending on insulation	£350/£500 excl. building work, depending upon whether installations are ducted or non-ducted

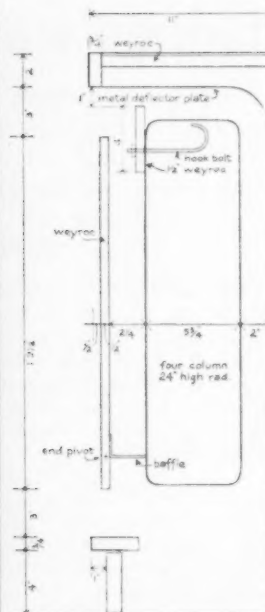
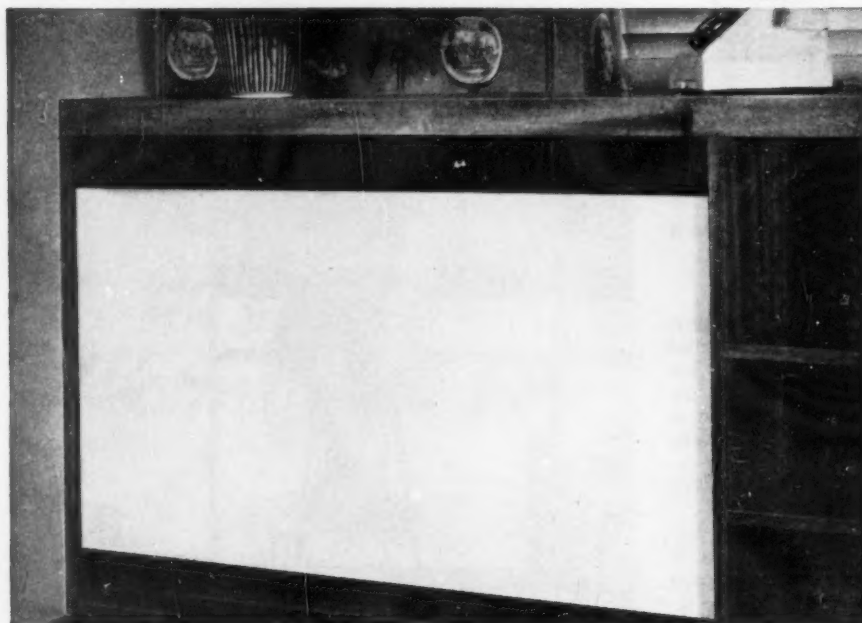
*Units marked with asterisk supply hot water as well

Ductair

WARM AIR CENTRAL HEATING
a Radiation product

See Ductair at the **Radiation Domestic Appliance Centre, 59/65 Baker Street, London, W.1**
or write to the Head Office, **RADIATION PARKRAY LIMITED, Dept. AJ/3 Radiation House, North Circular Road, London, N.W.10**

RADIATOR FASCIA PANELLING IN **Weyroc**



LOCATION: Modern Office Block, Holborn

ARCHITECTS: Drew & Salisbury

PROBLEM: To replace, by some practicable, solid material, all-over metal grille fascias which were restricting heat output from radiators. The required material had to ensure maximum heating efficiency, while remaining inert, and be easily and economically decorated.

WHY WEYROC WAS THE ANSWER: In choosing Weyroc for the job, the Architect was influenced by its stable characteristics which make it *resistant to heat* without shrinking, twisting or warping. Moreover, the quality of the Weyroc surface allowed for simple working and finishing (in this instance, with paint). Trade price of Weyroc ($\frac{3}{4}$ " nominal) is 1/6d. per sq. ft.—subject to the usual standard discounts.

8' x 4' boards of Weyroc were cut to required panel size and hinged to allow access to radiator.

Convection efficiency was achieved by leaving air intake and outlet spaces at bottom and top, and by fitting a curved cove behind the radiator.

NOTE FROM THE MANUFACTURERS OF WEYROC

Fascia Panelling is only one of many applications of this constructional 'sheet' material. Weyroc is also being used with great success for partitions, roof-cladding, built-in fittings, bath panels, doors, shelving, etc. We shall be glad to supply Architects with a detailed Weyroc specification sheet and board sample, on request to: Dept. A.J.19



THE AIRSCREW COMPANY & JICWOOD LIMITED • WEYBRIDGE • SURREY

W.P.S. 91

"It'll pay us
to use
**SUPER
SNOWCEM**"



• For nothing in this class of work comes close to Super Snowcem's price and ease of application. Customers know the name... yes, it will certainly pay to use it. Then if we do meet any on-the-job problems we can always turn to the special technical service which the Blue Circle people operate. •



SUPER SNOWCEM

is a waterproof cement paint made with a base of Snowcrete, the British white Portland Cement. It is supplied in powder form in free containers from 7 lb. to 112 lb. and requires only the addition of water to prepare it for use. When applied to suitable surfaces it provides a hard durable finish which resists the penetration of damp - will not rub, flake or peel off and may be washed.

Make use of our technical service. For all information please write to:

THE CEMENT MARKETING COMPANY LIMITED, PORTLAND HOUSE,
TOTHILL STREET, LONDON, SW1 • Telephone: TATe Gallery 3456
G. & T. EARLE LIMITED, HULL • Telephone: HULL 26121

Selling Organisations of The Associated Portland Cement Manufacturers Ltd

See **CMC** about Cement!



Talbot Hicks



THE PATENT GLAZING CONFERENCE is an old-established trade association representing the interests of specialist sub-contractors engaged in the design, manufacture and installation of Patent Glazing for the daylighting of industrial and other buildings. Its name and symbol is a guarantee that glazing will be carried out by highly skilled craftsmen using the finest of materials.



for abundant even light...
durability...
safety and economy...

GLASS

IN PATENT GLAZING

THE PATENT GLAZING CONFERENCE

BURWOOD HOUSE · CAXTON STREET · LONDON · SW1

Introducing



REYROLLE MOULDED-CASE CIRCUIT-BREAKERS



A new range of all-insulated, air-break circuit-breakers for the control of power circuits

SPECIFICATION

Voltage: Up to 550 volts A.C. and 250 volts D.C.

	Frame-Size	Current-Range (Amperes)	Breaking-Capacity
Range:	F	15-100	11 kA (RMS)
	JK	70-225	22 kA (RMS)
	JKL	70-400	22 kA (RMS)
	LM	125-800	22 kA (RMS)

Protective Features: Thermal Time-delay (Overcurrent)
Instantaneous Magnetic (Short-circuit)

Ask for pamphlet No. 1346

Reyrolle

A. REYROLLE & COMPANY LIMITED - HEBBURN - COUNTY DURHAM - ENGLAND



all eyes are on Ferodo non-slip stairtreads



Here's the kind of shapely design that brings a gleam to the eyes of students of modern staircase architecture. Good-looking Ferodo non-slip Stairtreads set new standards of safety . . . protect stairs from wear . . . last for years without maintenance or renovation.

- * 7 attractive colours.
- * Comprehensive range—29 treads with nosings, 3 flat treads.
- * Aluminium, silver bronze or manganese bronze channels.
- * Special orders can be manufactured.



FERODO non-slip stairtreads

Write to our Stairtread Department for full illustrated literature for your file.

FERODO LIMITED CHAPEL-EN-LE-FRITH

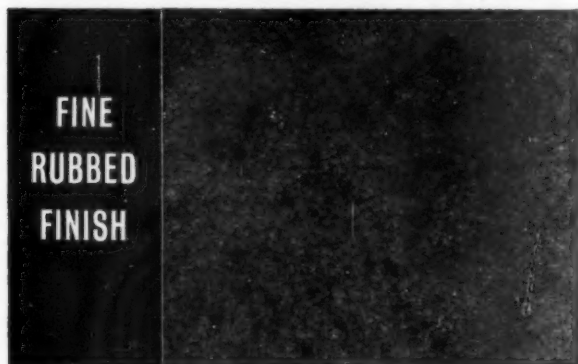
A Member of the Turner & Newall Organisation

7/53

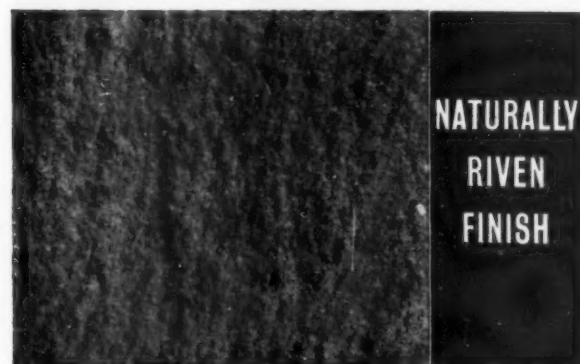
Lasting beauty



in Broughton Moor



Green Slate



Technical pamphlets showing typical methods of fixing are available on application:

1. Flooring 2. Facings. 3. Coping. 4. Cills
5. Riven Face Slabs.

In three distinct colours:
Light Sea Green, Olive
Green and Spoutcrag
(Light Green) Barred

Broughton Moor

GREEN SLATE QUARRIES LTD.

CONISTON, THE LAKE DISTRICT, LANCS. Tel: CONISTON 225/6



The Architects' Journal

No. 3445. Vol. 133. April 27, 1961

9-13 Queen Anne's Gate, London, S.W.1. Whitehall 0611

Subscription rates: post paid, inland £2 15s. 0d. per annum; abroad £3 10s. 0d. per annum. Single copies, 1s.; post paid, 1s. 6d. Special numbers are included in subscriptions; single copies, 2s.; post paid, 2s. 6d. 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 17s. 6d.; carriage 2s. extra.

NOT QUITE ARCHITECTURE

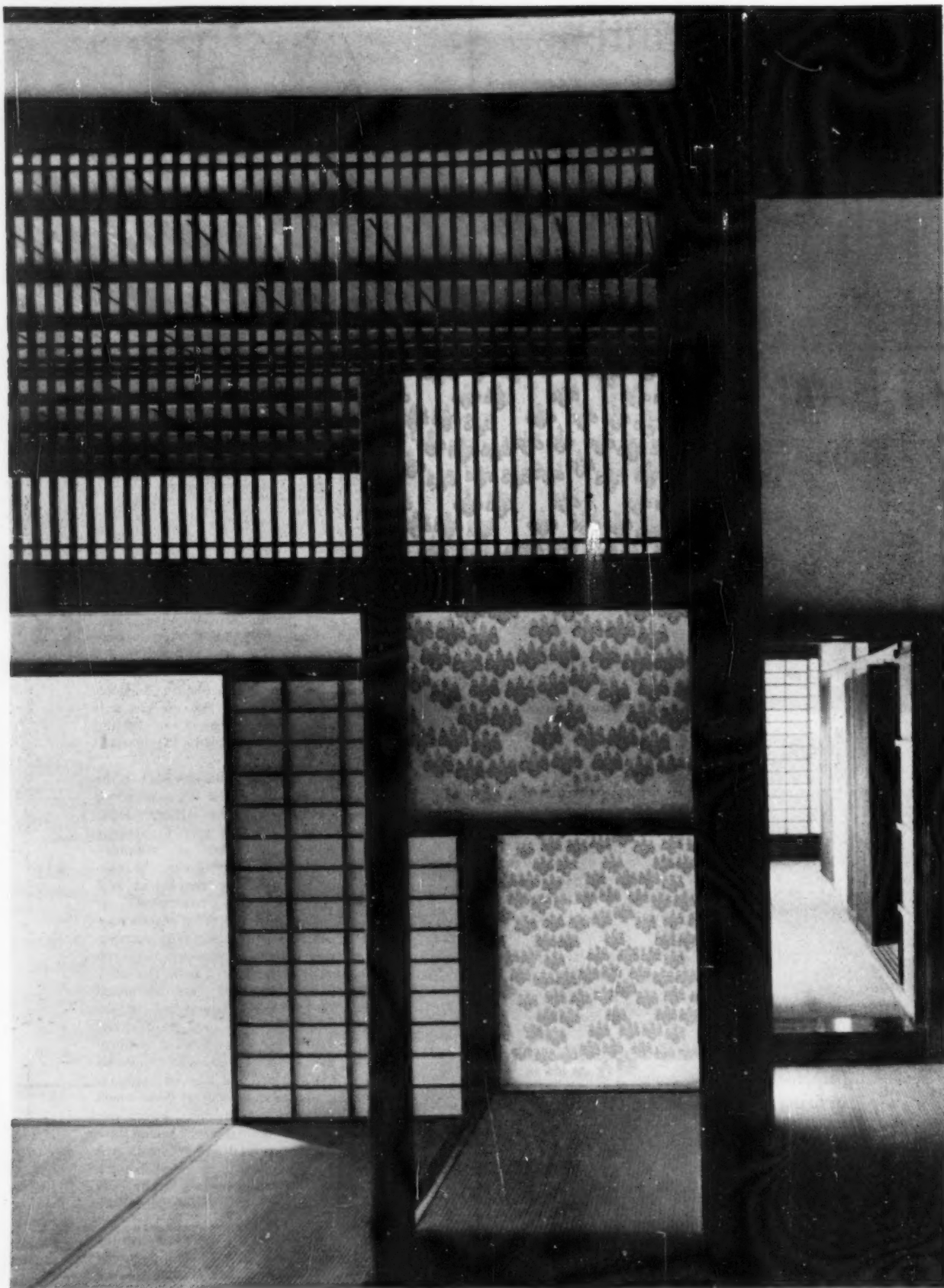
Katsurascapism

Monograph* on the Katsura Villa. Slight and rather egocentric introduction by Gropius and an essay by Kenzo Tange, useful perhaps to Ph.D. candidates or their examiners, but to the ordinary architect academic and irrelevant. For the rest it is illustrations—"a masterpiece of photography" says the blurb, and the blurb is right.

The Katsura Imperial Villa was built in the lifetime of Inigo Jones and two generations before Strawberry Hill. For architects today it appears to have much greater relevance than either Palladianism or Walpole's literary romanticism. A glance at the plan will reveal its immediate resemblance to a Hertfordshire school; a resemblance reinforced by the post and beam construction framing panels of wall or screen or opening, and by the modular dimensions based on the *tatami* or 6 ft. by 3 ft. mat. The unity of house and landscape, the determined asymmetry and the "naturalism" of the garden, bridge the gap across the centuries and the world. Yet where modern architecture has barely one generation of revolution behind it, Katsura is the fruit of traditions as ancient and slow-maturing as those which culminated in the Parthenon. Where our materialistic culture directs architecture towards largely practical aims, Katsura was conceived for aesthetic ceremonies like the Tea Ritual and Moon-viewing. Is its relevance to our own problems therefore illusory?

First, we must not be deceived by the apparent simplicity. In a modern economy the cost of obtaining and heaving around

* KATSURA: Tradition and Creation in Japanese Architecture by Kenzo Tange (Yale University Press/London: Oxford University Press, 120s.).



The Japanese Tradition

Linked living spaces of the Katsura Palace: a photograph from KATSURA. (See "Not Quite Architecture.")

the necessary boulders would give any borough treasurer apoplexy. The cultivation of the mosses and their subsequent maintenance would overtax the skill, if not the labour force, of a parks department. More than this, the forms themselves—water, rocks and trees—have deeper meaning than mere plays of contrasting textures, they symbolise the sea and mountains of an archipelago which for the Japanese is a link with his ancestral Eden, but which to the cosmopolitan westerner is largely alien. Failure to comprehend this vital psychological distinction leads to the sort of folly Jacques Tati exposed so unmercifully in *Mon Oncle*.

Next take the rooms themselves. Their enviable purity of form is achieved in no small measure by furnishings which, because the Japanese sit on the floor, can be kept low enough to remain disciplined by the architectural framework. With our bulky easy chairs, the best we can do is to arrange them like troops in a guard of honour, looking just as self-conscious and twice as ridiculous.

Thirdly—and these are only examples—the austerity of the Japanese 17th century tradition extended to the absence of any but the most rudimentary form of heating, to levels of comfort that would make an English boarding school seem a hedonistic paradise. The complete absence of sound insulation suggests that if the aesthetic interests were pursued in the silence we find necessary for them, household discipline must have been equally severe. The work of modern Japanese architects, closer than others, presumably, to the tradition, demonstrates the difficulties of maintaining it under the pressure of new technological requirements.

Perhaps the most direct gain to be made from a study of this lavish photographic coverage of Katsura is a deeper insight into the asymmetrical layout of garden paths and vistas. Despite the modern movement, all but a few western architects are still bound by the tyranny of axial planning, of parallels and right-angles. Katsura is pre-eminent in the opposite approach—in the subtle manipulation of changes of direction, in spatial *rubato*, the change of pace in the length of a path as one reaches a turning, or a flight of steps. The photographs and the accompanying description are comprehensive enough to enable the careful reader almost to reconstruct the garden in his mind and wander through it, seeing the moon's reflections, savouring the peaty scents of leaf and water, listening to footsteps as they move from stone to cobble, crunch on gravel, sink into moss. From time to time English architecture has benefited from a romantic infusion. It is the essence of romantic vision to be remote from practicality; it is also essential that it be received at second-hand so that the imagination may raise it to a perfection unattained by the reality. Where the landscapes of Claude and Poussin worked on the 18th-century mind, so perhaps this collection of photographs may influence our generation; and even at £6 it can be had for only a fraction of the cost.

GUY ODDIE

The Editors

CHANGING THE FEE SCALE

ARISE in the RIBA scale of fees has been an issue ever since the publication last year of the findings of the Commission which examined the pay of doctors and dentists. Superficially at least, it is one of the quickest and easiest ways by which the architect's position can be improved from the bottom of that famous table in the report, which gave the comparative earnings of various professions. The RIBA have yet to make any pronouncements about such a change, and in the meantime have dealt separately with the very parsimonious special scale for state-aided housing, as we announced last week.

A general rise in fees is tempting, particularly at this moment when the building industry is stretched to full capacity. Indeed, the climate for an increase is better now than it has ever been since the war. There are, however, two points which should be examined before taking such a step. First, we can expect the RIBA office survey team to gain a fairly clear picture of the general standard of efficiency in architects' offices throughout the country. At the same time they may quite well uncover various methods which, if generally adopted, could make a considerable difference to the profession's potential earnings. In other words, a rise in fees must be made only on the basis of a profession providing the public with a service which is not only of high quality but high efficiency. Second, the RIBA should consider how best it can tackle the question of cut fees, a practice which still apparently continues despite the building boom. Although it is obviously very difficult for the Institute to gain any factual information whatever about how widespread such commissions are, there would seem to be little purpose in changing the fee scale unless it is absolute and binding on all members.

THINK BIG—AND SHOUT LOUD!

The Royal Fine Art Commission, whose annual report we summarise this week, has unerringly pointed out the missing link in our planning procedure, when demonstrating (with the example of the mess of unrelated buildings now going up near Victoria Station) that planning cannot be adequately done with a town map showing zoning and traffic circulation, but requires the preparation of a three-dimensional model in sufficient detail over a sufficiently wide area, to which the planning authority can relate projects submitted for approval. "Unless this is done," the RFAC points out, "the development which is taking place today will be a patchwork and the total result will often be worse than what is being replaced." Worse, because larger, higher, visible from farther off, and more oppressive from close to.

The answer of the LCC, when pressed to provide such a three-dimensional scheme for Victoria Street, was that as they were not in a position to redevelop the area themselves, little

would be gained by preparing such a model. This is simply to lie down and accept a gap in our planning defences which will lose the battle of urban redevelopment.

It is for local authorities who are serious about the need to plan urban renewal—and none is more serious than the LCC—to think big about the areas of redevelopment, whether or not the development is done by the authority itself, and to insist on the preparation of three-dimensional area plans to which developers must conform.

If they have not the staff to do this work, and if Ministers do not back them up, and enable them to recruit the necessary staff, let them shout for help to the public, who are becoming increasingly conscious of how much good town planning can affect our lives. It was a very loud shout, remember, that saved Piccadilly Circus.



ARCHI-LOGY

Had it ever occurred to you that the archeologist of the Post-Atom Age will look upon the designers and architects of today as a tiny intrusive band of underpaid and underhonoured aliens? That is how Miss Jacquetta Hawkes thinks we shall appear to future historians. In making this prediction in the annual design oration to the Society of Industrial Artists she suggested three ways in which we might do a better job: (1) by enriching our architecture with the help of "men and women engaged in abstract art on easels"; (2) by stopping the mad pursuit of originality

and settling down to "a stylistic repertory" and (3) by being "strongly represented on all local authorities, on boards of directors and so forth."

*

If I follow Miss Hawkes's argument properly, this last method is one she has no faith in because it could happen only "if Britain would cease to ruin herself by straining to be a great power, and instead become a country of modest power abroad and great achievement at home." And surely the pursuit of originality needn't be a bad thing in architecture (goodness knows, there's little enough of it), though in industrial design the pursuit is often made by greedy manufacturers in search of sales-gimmicks rather than by good designers. There really isn't much wrong with originality if it is pursued by creative brains capable of *really* original thought.

*

What about Miss Hawkes's other suggestion—the need for artists to enrich architecture? The moment she said this I guessed she had in mind Victor Pasmore's contribution to the face-lifting of Peterlee New Town. With her next breath she did, in fact, say he was "perhaps one of the few leading the way to this new allegiance." Perhaps. Or then again, perhaps not. The Peterlee-Pasmore episode was a story of a happy fluke—the story of an artist so well-respected locally that he was able to push his ideas, and more particularly those of two bright young architects, past committees which might have been difficult. Artists with

similar power, please copy. Otherwise, for heavens sake keep your distance and do your architectural enrichment more conventionally—with murals, sculpture and such.

MOSAIC WHILE YOU PLAY

Incidentally, this form of enrichment seems to be coming along nicely nowadays—as I was reminded by seeing that the scaffolding has now been removed from Thorn House, in St. Martin's Lane, revealing the clinging wall sculpture looking rather like a brutal musical instrument (a Barbarous Hepsichord, as one wag said). And public buildings in new towns and elsewhere are positively groaning with adornment nowadays—particularly in the LCC area where the policy of spending £20,000 a year on art is at last becoming apparent.

*

Most of the LCC's art work embellishes new buildings, but I'm glad they have decided to have a go at older buildings too. If you are ever passing the 19th-century Holman Hunt primary school in New Kings Road, try to see Francis Carr's mosaic in vigorously active use. He has thrown into it everything but the kitchen stove—and its superb mixtures of texture and colour dominates a drab hall and gives its infant occupants a reason for going willingly to school. It is exciting to watch their art appreciation sessions, as they finger the projecting ingredients—coloured glass, pebbles, marbles, mirrors, shells, etc., and search among them for coins or stamps.

*

Mr. Carr, who believes that an artist should get accustomed to handling as many materials as possible—though not all at once as in this extravagant fantasy—hopes to do a number of works using, in turn, many of the materials incorporated in his mosaic. He is particularly interested in silk-screen printed tiles—used here for pictures and letters of the alphabet. Among his future plans are "the development of polychrome sculpture, the introduction of sculpture where the base is part of the whole thing and sculptural forms with backgrounds that are related to them in colour." That sounds almost rich enough for Miss Hawkes.

PROFESSOR EXPANDS TO KILL THE TIME AVAILABLE

"It is impossible to stray from the path where there is no path." This epigram comes from Professor C. Northcote Parkinson, the author of *Parkinson's Law*—that splendid attack on red tape establishments where work expands to fill the time available for it. The professor explains that the path of orthodoxy no longer exists for the architect or painter and cannot, therefore be strayed from by a rebel. Elsewhere in his diatribe against the creative mind (in the March issue of *Architectural Forum*) the professor shows that although he favours individuality he also wants to suppress it. "The ordinary designer and architect," he says, "are far happier when working within the framework of an accepted style. An architect has enough to do in applying a general tradition to a particular problem; we cannot expect him to evolve a different idiom for every structure he attempts to plan. . . . When all houses were Georgian . . . there was no lack of distinction in the work produced."

*

This—together with the professor's plea for "an agreement on broad principles"—suggests that he wants some sort of standardisation of building. But he can't have it both ways: he asks for individuality in one paragraph and deplores it in another. I don't suppose the professor will do much harm to the readers of *Architectural Forum*. I only mention his views here as an awful re-warning that the doctrine of the philistines turns up in the most unlikely places.

GRANTLESS GRADUATES

One day last week the "Bride of Denmark"—the private pub of the Architect Press—was choc-a-bloc with serious young architects from Canada, Malta, Hongkong, Belfast, the LCC and elsewhere. They were members of Percy Johnson-Marshall's post-graduate planning course at Edinburgh University, and he had brought them south to see the work of the LCC and Coventry's architects department. Astonishingly enough this post-graduate course—well booked up for next year already—is the

only one of its kind in Britain, and it exists without grants or any official encouragement other than that of the Edinburgh University school of architecture.

*

Some of the students from abroad, like Joseph Borg-Grech from Malta's school planning department, are common wealth scholars who have opted to take this town planning course; others have either given up jobs to attend or persuaded far-sighted local authorities to send them along and support them while they are over here.

All these students said they knew other young architects who would attend such a course if grants were available. But so far all trusts and government and local authorities approached for help have refused to acknowledge its importance. How far would medicine have got, one wonders, if post-graduate education had been similarly treated?

*

I was interested to hear that the students believe they gain a lot from being brought together in a town like Edinburgh—not simply because it is a majestic city, but because it is small enough for the class to have exceptional opportunities for close contact with various Ministries—contact that no Whitehall Ministry would dream of providing. Consequently the Johnson-Marshall planners have been able to undertake all sorts of planning exercises in close touch with real situations and problems, such as the redevelopment of Dunbar as well as communications in Edinburgh itself. They all claimed to be enjoying the work too much to bother about holidays. And that, it seems, goes for Percy Johnson-Marshall as well.

THANKING HUW

I was glad to see BBC's *Monitor* tackling architecture again on Sunday (only the second or third time in the history of the programme). And I was glad they made a good job of it by talking to Denys Lasdun about his work. He discussed three things principally: designing a building "to function and to respond to its neighbourhood"; the worthwhile qualities in modern architecture, and the need

for today's architect to work with committees.

*

On the first point Mr. Lasdun talked about his flats overlooking Green Park ("matching does not mean copying; it means giving the same quality, handling the details with the same love and cares as the older adjoining ones had") and his cluster block in Bethnal Green ("the backyards have been transferred to the top floor; the building mothers and encloses you"). On the second point—worthwhile qualities in building—he parried Huw Wheldon's suggestion that building should be "thrilling" ("it suggests false appeal that might be over in five years") or have "splendour" ("society cannot afford the grandiose scheme—splendour is there but does not assert itself—one can draw inspiration from buildings that grow slowly"). And on committees he quoted Paul Klee—"the first source of power in any artist is given by society." Although Frank Lloyd Wright had said good architecture never came out of a committee, this was because he was ahead of his time, said Mr. Lasdun. "Today people on committees accept modern work (lucky, lucky Lasdun!) and contribute to it." Thank you, Mr. Lasdun: and don't forget that the next *Monitor* is on Sunday week and the next architectural item is—well, when?

*

Congratulations to producer Nancy Thomas and to Huw Wheldon for being brave enough to do what was rather an esoteric piece. Could we have something a little more basic next time, with some good illustrations especially taken for the programme? (All right, I know there was some good film material in this, but I'm sure stills of architecture are more effective on the small screen.) Some very exciting things are happening nowadays that are worth putting over in a programme of this kind. Or is *Monitor* too far removed from really down-to-earth aspects of architecture, like pedestrian-precinct housing (Basildon is a gift for the camera), university development and the decorative treatments I mentioned earlier?

ASTRAGAL

LETTERS

Cynthia Wood,

A.R.I.B.A., A.M.T.P.I., A.I.Arb.

Malcolm MacEwen,

Chief Information Officer, RIBA

Paul Ritter

C. R. Whittaker, A.R.I.B.A.,

A.M.T.P.I., A.A.Dipl., S.P.Dipl.

Ernest F. Tew,

D.A., R.W.A., F.R.I.B.A.

President, Wessex Federal Society of Architects

and G. H. Lawrence,

T.D., A.R.I.B.A., A.M.T.P.I.

President, Edinburgh Architectural Association

Stevenage Architects

SIR: I am surprised to find that Astragal, in your issue of March 30, finds it necessary to praise the present chief architect at Stevenage by vilifying his predecessors. The "never mind who" so scathingly referred to is, of course, Donald Reay, whose ability as a designer has been recognised in America, and who was wholeheartedly in favour of a pedestrian shopping centre for Stevenage—a conception which was realised, incidentally, by popular demand forcing itself to be recognised by the Corporation. I am also surprised to find that the chief architect publicly derogates fellow members of his profession, by talking to journalists about the control of bad architects. This, not unnaturally, gives rise to speculation by interested parties. His staff wonder whether this is the reward of the anonymous hard work put in by them on the designs, working drawings and site supervision, which have made the New Town possible: or can it be that he disapproves of the Corporation's choice of consultants, or of the architects chosen by those who prefer not to avail themselves of the Corporation's architectural services.

CYNTHIA WOOD

Stevenage

Architecture on TV

SIR: Paul Ritter (ARCHITECTS' JOURNAL, April 6, 1961) implies that the RIBA ditched a possible TV programme by refusing to provide some photographs and plans of "the highest quality," when Associated Rediffusion was interested in his exhibition on traffic segregation. This really is a travesty of the facts.

The Public Relations Committee was asked by Mr. Ritter to exhibit a large and very rough collection of drawings and photographs on this subject at the RIBA. The Committee, having seen a sample of the exhibition, decided that although it contained some very valuable material, it was not good enough as an exhibition to be shown at the RIBA. Nor did the Committee think that its defects could be removed merely by better presentation. It is hopeful, however, that it will be possible to use some

of this material if an exhibition on "Building and Planning in the Motor Age" is arranged at the 1962 Architects' Conference in Coventry.

Mr. Ritter did say that Associated Rediffusion's "This Week" were interested in the idea of doing a programme if the exhibition were shown at the RIBA, but enquiries showed that the degree of the interest seemed to have been exaggerated considerably. It is certainly not true to imply that the programme fell through because the RIBA failed to provide any photographs or plans. If this is all that is standing in the way of such a programme the RIBA would, I am sure, be willing to help.

MALCOLM MACEWEN

66, Portland Place, London, W.1

Science and Dr. Banham

SIR: John Madge sees a muddle where others see clarity because he is obviously not familiar with my basic contentions. Of course I am not attacking the human sciences in general but the academic kind which reigns in a sterile and sophisticated fashion. After all I give examples of the alternative approach and say clearly "without the functional approach . . . the problem is intractable for the human sciences." We must have the right kind of science, I insist.

I know full well that scientists ought to have a creative imagination but I demonstrate the lack of it due to their approach and methods: I eagerly await John Madge's evidence to show the opposite: how the human sciences have given creative insights to, for example, city architects and planners. I think they mainly failed to do so. I flatly deny the wrongness of two of my seven examples which Mr. Madge asserts without evidence.

Perhaps I can make my attitude clear to Mr. Madge and others, seemingly unaware of the architect's long-standing search for a science worth having, if I quote from Plan 1949 (No. 6), written by a number of now famous architects.

"Biology, sociology, town-planning, industrial design, and civil engineering, are but a few of the disciplines which must be freed from the strait-jackets of professionalism and specialisation. When this is done people will be concerned with living in an ever-increasing fullness, and the manifold disciplines of work will enrich and develop the life of everyone. The first step in this direction is to relate all the isolated products of man's mind to his way of living. In November 1948, the magazine *Forum* produced an issue called 'Measure,' in which an attempt was made to relate isolated factors of environment to the human body: heating, lighting, sound, space, proportion—all the isolated factors which the architect vainly attempts to assimilate in their isolation. When the study of such factors is concerned not merely with the measurable quantities in the physical situation but also with their effects on human behaviour, the research immediately becomes more than a mere study of an isolated aspect of physical environment. It becomes a study of the

relationship between man and environment—a study of a living process rather than a static form. Consideration of quality is, therefore, the consideration of relationships—the study of man."

Those who pointed to the relationship between science and architecture, specifying what sort of science *beyond* the vague and fashionable term "human sciences" or "new biology," was required were far more informative than Dr. Banham's rodomontade, of shallow generalities simulating abstruseness.

PAUL RITTER

Nottingham

Last Shot

SIR: Is it too late to intercede for the Shot Tower? When the South Bank development is completed, it will have gone.

But the more one sees it against the shape of the Royal Festival Hall, the new offices and the nearby bridges, the more valuable a foil it is—from within the area, from the opposite Embankment or when crossing the bridges themselves.

In the important new assets which London is to gain on the site (AJ, March 30, 1961) it would still seem possible, from study of the plans, to allow the new terraces to be pierced by the old Shot Tower. And the proposed elevations, an uncompromising grouping of windowless horizontal elements, would even more be emphasised.

I fear that we shall be told that its condition . . . the foundations . . . much thought . . . this late stage. . . All the same, I and many others will be sorry if it goes. It looks taller than any tall building we are likely to see in London, and beyond its visual merits provides just that historical continuity amid new and unaccustomed buildings which makes living in a city, or visiting a foreign city, exciting and worthwhile.

London, N.6

C. R. WHITTAKER

Messing About

SIR: Ratty, Mr. Toad and Otter, that watery triumvirate of "The Wind in the Willows," were not alone in understanding the beguiling pleasures of "messing about in boats." Mole, too, their land-lubber, earth-bound, friend, shared their joys and tribulations.

So also are land architects, equally with their naval counterparts, boat-owners, boat-charterers and boat-borrowers—in short, sailing enthusiasts.

Has not the moment arrived when members of the RIBA should give expression to this enthusiasm and form their own sailing club—with or without their own boats; ranging from Ocean Racer to Cadet and Motor Cruiser to outboard propelled dinghy—Mariners all!

Already many members who have been personally approached have welcomed this idea and we suggest that all those who are interested should write to: "Sailing," c/o RIBA, 66, Portland Place, London, W.1.

E. F. TEW

G. H. LAWRENCE

66, Portland Place, W.1

NEWS

AT THE ZOO

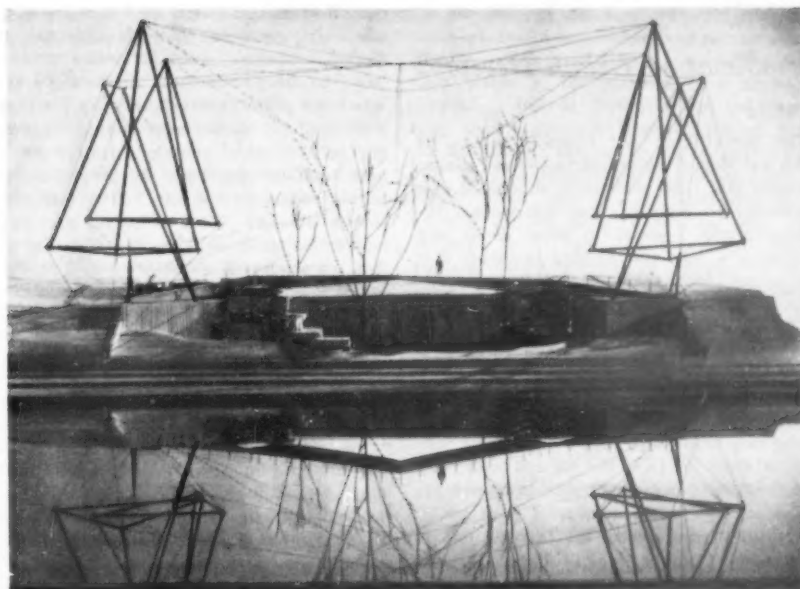
New Aviary is a Steel Cat's Cradle

Two double tetrahedrons of tubular steel, holding a cat's cradle of tension cables, form the basic structure of the Zoo's new aviary, to be sited to the west of Sir Hugh Casson's new bridge, now under construction—on the north bank of the Regent's Canal. The cables will support a 14-in. mesh covering. The design, the first of its kind in this country, is the work of Antony Armstrong-Jones, Cedric Price and Frank Newby, senior partner of Felix J. Samuely & Partners, who say that it provided the best answer to the Zoo's brief, which asked for a maximum volume of enclosed space on the available site, providing for the needs of a specified range of species, including waterfowl, and allowing visitors a good view from both outside and in, requiring minimum maintenance once erected, and combining a clear view of the birds from near at hand with a form of building "which would be forceful and of interest" from a distance.

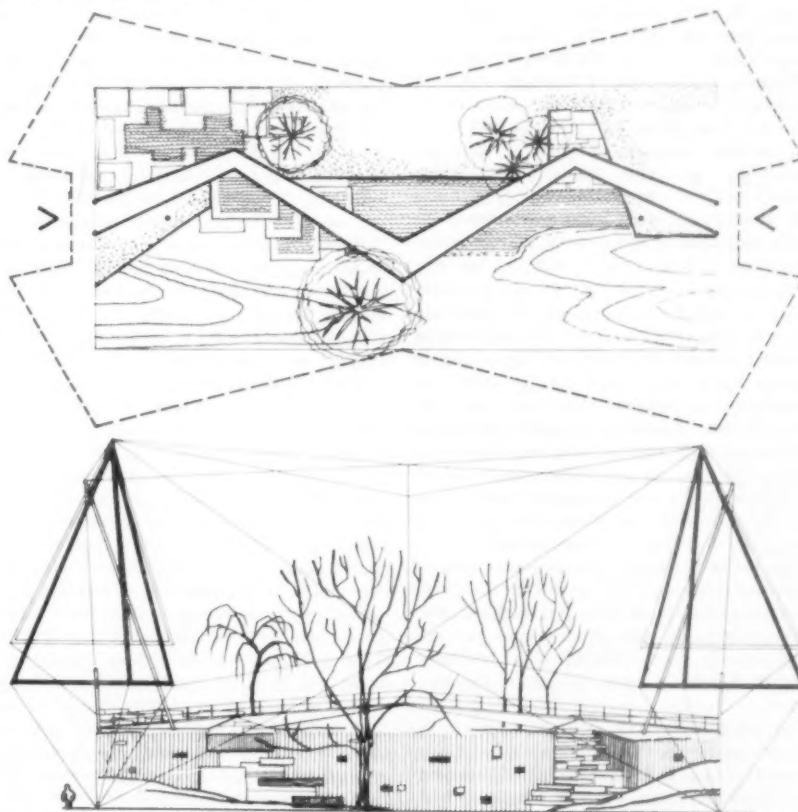
The aviary, which will measure 150 ft. by 63 ft., with a maximum height of 80 ft., takes advantage of the steep slope of the site down to the canal to provide the birds with an artificial cliff—concrete with nesting holes provided—and two waterfalls, one slow and shallow, one faster falling. The public will use an upper and lower walk round the cage, and will be able to walk right through on a prestressed concrete bridge which follows the "cliff-top." This walk will be enclosed at each end only by a bead curtain—the bird experts are seemingly quite confident that no bird will try to get out through this—which will be battened down at closing time.

The main structure will be of 9-in. to 12-in. diameter steel tubes, sandblasted and hot zinc sprayed to minimise maintenance, and, as the top photograph shows, will touch the ground at only two points. Between these will be stretched 1-in. high-tensile steel wires. It has not yet been decided what the mesh covering over this structure will be made of, as the comparative cost (including maintenance) of various materials, from stainless steel to nylon, is still being estimated.

The building—a pleasant change from the hen-run type of bird house—will form part of the new extension to the Zoo (published in the AJ of March 19, 1959, and October 20, 1960), planned by Sir Hugh Casson and Peter Shephard in association with the Zoological Society's architect, F. A. Stengelhofen, which looks like becoming the most exciting part of the London Zoo.



Above, the model of the Zoo's projected aviary of steel cables held in tension by four tubular steel tetrahedrons, photographed on a mirror by Antony Armstrong-Jones to show it reflected in the Regent's Canal. Centre, in plan, the extent of the cage marked with a broken line, showing zigzag walk-through for the public above the two waterfalls. Below, sketch elevation from the south, showing waterfalls and "cliff" with nesting holes. Only front wires are shown here.



NFBTE

Attack on Trade Union "Guide to Incentives"

A booklet called "Guide to Incentives," published by the Amalgamated Union of Building Trade Workers, has provoked the

National Federation of Building Trades Employers to repudiate any attempt to establish a national schedule of bonus targets for certain kinds of building work.

The NFBTE wants targets "fixed beforehand on each site, job, shop or factory, by the employer or his agent, and then agreed with the employees concerned."

RFAC

Problems of Urban Development

The Royal Fine Art Commission, in its Annual Report published last week, recommends that local authorities should be empowered to prepare three dimensional redevelopment schemes in some detail and covering a wide enough area to ensure that when rebuilding takes place it is in accordance with an acceptable plan.

To show the need for this, it quotes the lamentable example of the south-west end of Victoria Street, between Westminster Cathedral and Buckingham Palace, where three large-scale redevelopment schemes on adjoining sites have received planning approval from the LCC, but the end result will be the development of the area at excessively high density, with a number of high buildings interfering with the view of the Cathedral from St. James's Park.

"Although some improvements were made with the help of the Ministries of Housing and Local Government and of Works, we recommended that these schemes . . . should not proceed without the preparation of a three-dimensional model of the whole area, showing the general lines of future development. It was explained to us by the LCC that they could not do this. They were not in a position to initiate the three-dimensional planning of the area as a whole and little would be gained by preparing such a model." A town map, providing for zoning and traffic circulation, says the Report is really inadequate "to ensure that the three-dimensional effect of the development project will fit satisfactorily with what will happen on adjoining sites. It seems to us that an essential stage or link in the procedure is missing. "It may be that given their present resources there is nothing to be gained by suggesting that models should be prepared by Planning Authorities for the whole of their central urban areas. But unless this is done, the development which is taking place today will be a patchwork and the total result will often be worse than what is being replaced. This failure to plan in three dimensions and in sufficient detail over sufficiently wide areas seems to us to be one of the chief defects of our present planning arrangements."

This major problem, "the common ground between planning and architecture," overshadows all the smaller questions of the improvement of individual designs and the preservation of individual fine buildings which the RFAC has tackled in the past year.

The Report notes with satisfaction, however, successful instances of comprehensive planning at Tower Hill, at Piccadilly Circus and in the West Street area of Brighton, and goes on to try to formulate a policy to govern the placing of very high buildings in London.

While accepting the general rules which the LCC applies when considering each proposed high building "on its merits," the RFAC urges that there are certain areas where no very high building should be allowed, such as to the south of St. Paul's,

near Buckingham Palace or "in the middle of the areas occupied by the more important Georgian squares."

"On the other hand there are certain areas which are prima facie very suitable for high buildings . . . on the banks of the Thames and in some older suburban centres where high buildings can add to the general architectural effect and quality." The Commission would also like a policy of grouping high buildings in suitable places instead of their being dotted about all over London, as is the tendency at present.

TCPA

A Policy for South-East England

The first of the Town and Country Planning Association's policy statements on regional planning, devoted to the problems of the London Region and their probable influence on the whole of south-east England, has now been presented to the Ministry of Housing and Local Government for consideration, and it is a telling document, clearly written and loaded with facts which call for action by the Government.

The document—which is based on the TCPA Conference last month, reported in the AJ of March 30—starts from the fact that the increasing growth and dominance of the London Region is now the most urgent planning challenge to the country. Unless this challenge is accepted we are faced with the probability that in 20 years' time 27 per cent of the country's population and 45 per cent of new industry will be contained in this corner of the island.

"It should be an urgent objective of Government policy to bring about a better balance between the main regions," says the statement, and goes on to make the following proposals for doing so:—

1. Government and private employers must become less London-minded, and the development of communications—roads, airports and railways—should be planned deliberately to improve the power to compete of other major regions.

2. "Parliament, ministers and public corporations have not yet appreciated sufficiently the folly of adding to congestion in central London." The TCPA deplores the private office blocks going up—and also the decision to keep Covent Garden where it is instead of decentralising the market. It suggests some form of anti-congestion tax on those users which add to the congestion.

3. In the next 20 years another million people will need homes within 40 miles of central London: this should be concentrated round existing towns, where county councils should be encouraged to buy the land and lease it to developers.

In addition the TCPA suggests a number of possible New Towns, under the New Towns Act, as far afield as Bicester, Sudbury, Wellingborough and King's Lynn, all over 55 miles from London.

In East Anglia, the least populated part of south-east England, it is suggested that a Regional Development Corporation be set up to assist the local authorities in carrying

out a large number of expansion schemes.

4. Communications must encourage this trend: the document insists that the projected Norwich Radial route from London docks must be built before 1970 and related to new and expanding towns in East Anglia and Essex, and also the South Wales motorway and the first 50-mile stretch of the London-Exeter motorway.

5. Government machinery needs considerable adjustments to these needs, and the TCPA has already submitted a number of improvements that could be made in the Town Development Act's terms and administration.

The New Towns Act must be used to the full as the best instrument for larger expansions.

Because the siting of industry is vital to the whole plan, the Board of Trade must co-ordinate policy on industrial location with the Ministry of Transport and the MOHLG's broad planning objectives.

And the MOHLG should get the whole thing moving by calling for a new series of advisory plans for the principal urban regions of the country.

BOSTON HOSPITAL COMPETITION

Assessor's Report

The report by the assessor, S. E. T. Cusdin, O.B.E., F.R.I.B.A., A.A.Dip., of the competition for a New General Hospital at Boston, Lines., which we published fully last week has now been issued. It is set out at considerable length and discusses each of the six schemes which reached the second stage, and in many ways is a model of what an assessor's report should be. Mr. Cusdin is obviously disappointed by the general standard, but believes that the winning scheme is capable of being developed to reach a satisfactory standard. His general comments are as follows:—

"It was my duty to make an award and this I have done. This report gives me the opportunity to express my regret that the results of this competition are disappointing. I understood that the Board's intention in promoting this competition was to widen the field of participation, especially among younger architects in planning hospitals and to stimulate new ideas and forms in the planning of a New General Hospital.

"I do not believe that even the winning design will commend itself to your Board as being pre-eminently suitable or acceptable in its present form. The others were in various degree even less acceptable. No competitor submitted a scheme which resolved all the difficult problems of circulation of patients, staff and supplies in a modern hospital of this size, or left space for the extension of all the treatment and diagnostic departments in such a way that the work of the hospital could proceed without interruption.

"No radical, imaginative or dynamic scheme has emerged from this stimulating challenge to architects. I doubt whether any of the schemes will pave the way to pioneer fresh thoughts in hospital planning.

"The absence of one or more designs which

could have been recommended to the Board without qualification has made the choice of the winning design difficult. The final judgment was between designs Nos. 27 (Design Partnership) and 25 (Charles B. Pearson Son & Partners). They were entirely different in concept and though I had many reservations about the detailed planning of parts of No. 27 I concluded that it was the one which could be further developed into a workable plan to provide a pleasant hospital for the patients and the staff to work in.

"In making this award I am asking the Board to accept a plan which makes no distinction in the circulating areas of patients, staff, visitors, supplies or the disposal of waste, etc. All this traffic will flow through the same corridor. I know that this form of plan is approved in some quarters but I do not share that view myself. I believe that it can be done in small hospitals and the thesis is permissible on grounds of economy. What is open to question is the size of hospital that makes separate levels or other arrangements for the different categories of traffic desirable and economic. Certainly a hospital of 600-700 beds would qualify, so that I regard it as open to doubt whether the hospital of 474 beds should make this distinction.

"I have given the winning design, No. 27, the benefit of this doubt. I make this point because scheme No. 25 takes the opposite view and provided for the separation of the traffic of the patients, visitors, supplies and waste in a most commendable way.

"It has often been said that the winning design in a competition always contravenes the conditions in some way. This one is no exception. Design No. 25 provided eight 'standard' ward units in Phase I instead of seven. The authors of the scheme stated this change in the report. I have used my discretion in this instance as I do not think, if any other competitor had taken the same course, it would have materially altered the decision.

"The Board in their instructions to competitors and later in the detailed instructions to the finalists drew attention to certain factors to which they gave particular emphasis. No design appears to have taken all these points into account or their interpretation of these instructions differs considerably from my own.

"The planning of the individual departments was commendable in most schemes but the most consistent fault was linking of them together with the ward units which resulted in long lines of communication for patients, staff and supplies. The naming of a long corridor 'Hospital Street'—a popular current cliché—does nothing to reduce its length or the time taken by staff and patients to travel along it.

"No scheme appears to have taken notice of the trend to make more efficient the means and ways of distributing supplies or to make use of automation in this context. Neither did all the competitors make effective arrangements for the recovery of 'non-consumable' items or the disposal of waste and 'expendable items.'

"I venture to think that the 'scale' of the problem of the design of a hospital of 474

beds was not fully realised or appreciated, as the basic ideas in the planning of the schemes submitted would have been effective for a smaller project, say of 250 beds, but inadequate in many respects when the same notions were applied to the larger schemes."

In describing the winning entry the assessor remarks that it "is a variation on the plan for the Wrexham Park Hospital, Slough—architects Messrs. Powell & Moya—where the maximum advantage of this concept was achieved by having the ward units both sides of 'The Hospital Street,' and the ward units were all on one floor. In this scheme the ward units open off one side of two corridors, at ground and first-floor levels. These corridors are approximately 600 ft. and 530 ft. long at each level. The Slough scheme does not rely on lifts at all, whereas they are essential to this. The general concept seems to me to be the most suitable for the locality and makes good use of amenities of the site. It also takes full account of the difficulties of the site, namely the relatively high water table and sub-soil conditions.

"There might eventually be difficulty in having three entrances to the site from Spilsby Road, but the arrangement of a single entrance for the hospital and the staff residences is not insuperable. The large forecourt about which are situated all the entrances to the hospital is excellent.

"The elevational treatment and landscaping have provided a pleasing unity to the design and the choice of materials is consistent with the acceptable standards."

The assessor then makes certain adverse comments about the design which he does not believe to invalidate its merit, including the fact that extensions to many parts of the hospital would appear to be very difficult, that the Isolation Ward is not related to the treatment and diagnostic facilities, that the number of lifts may need further consideration, that natural lighting and ventilation to some rooms in ward blocks is bad, that the operating theatre suite, access for heavy fuel tankers, supplies of plant, height of boiler chimney and site for future ward unit require further examination.

"The total gross area of accommodation provided by this form of planning made it the most economical scheme submitted. The percentage of the circulation space was 30.31 per cent. The estimate of cost was well conceived and showed a realistic appreciation of the difference in costs between the various sections of the work. The estimate of cost of the accommodation for Engineering Services was considered to be low but this would not seriously affect the total cost."

The assessor says of the scheme he highly commended, by Charles B. Pearson Son & Partners, that it shared with the winner the distinction of being conceived as an entity and that many of the individual departments had excellent layouts. He notes that the provision of three staircases per ward unit is excessive, which steps up the gross area which was one of the highest submitted. He also says that the estimate of cost appears to be low.

"I am sorry I am not in a position to make an award to a scheme of greater distinction which would be a new and vital contribution to the planning of a general hospital. I believe, however, that the winning design shows a sensitive feeling for the subject and the report and estimates of cost, provide evidence of specialised knowledge. I trust and feel confident that the authors of this scheme will be able to develop their ideas further with the guidance of the officers and members of the Board and fulfil eventually the high hopes and inspiration which was in your minds in promoting this competition."

BUILDING EXHIBITION, 1961

Full-scale Introduction of Sfb Classification

This year's Building Exhibition at Olympia, from November 15 to 29, will provide the first opportunity for a full-scale introduction to the industry as a whole of Sfb Classification; hitherto, the organisers believe that the importance of good information on commercial products has been neglected.

A working party on trade literature has therefore been organised by the Building Exhibition, consisting of Egil Nickl¹ of Finland, chairman of the Sfb Committee; Ingvar Karlen of Sweden, and John Brunton, A.R.I.B.A., who has written technical papers on the subject. The three have been commissioned to co-ordinate the theme at the 1961 exhibition.

The working party has already met. It discussed the properties required of good trade technical literature—as distinct from prestige literature, and has analysed the differences between products and services and the similarities of needs of various users.

Twelve years' working experience of the various classification systems—about 50—which have been devised has convinced the Scandinavians that the Sfb system has clear advantages over all the others, and the working party endorsed the adoption of Sfb, and also the advantages of adopting A4 size paper (11½ in. by 8½ in., or 297 by 210 mm.) for all trade literature.

Representatives of the Ministry of Works, RICS, NFBTE, and other associations of the building trade, with Dargan Bullivant, who is producing the Sfb Filing Manual for the RIBA, met the working party for a one-day conference, and put forward the following agreed recommendations:—

After noting the data of all requirements compiled by the working party, they recommend that exhibitors, in preparing their trade literature, should conform as far as possible to these data; that A4 size paper should be used and that where pre-classification by exhibitors is employed (which is desirable), the Sfb system should be used. Literature presented in this way, it was pointed out, would be more acceptable overseas as well as in Britain, and would be a valuable help in the export of British materials and machinery.

MANCHESTER SCHEME

Property Owners Foregather with Architects

All the property and land owners in a seven-acre area of Manchester met at the town hall on April 12, to discuss a comprehensive redevelopment scheme for the area, which is bordered by Lower Moseley Street, Oxford Street and Chepstow Street.

One of the property owners, Donald Shearer & Co. Ltd., had commissioned Grenfell Baines & Hargreaves (now known as Design Partnership) to draw up a composite redevelopment plan, which was outlined to the meeting. A further meeting to continue discussion has been arranged for the near future.

This seems to be the first time that a number of private owners have met in this way to discuss a composite scheme.

COMPETITION

RIBA/Ideal Home Magazine Group Housing Design Competition

The Council of the RIBA have given approval to the launching of a competition jointly with Ideal Home Magazine with the object of encouraging developers, builders, and local authorities to make greater use of architects' services when designing group housing including layout of the whole area. Two sites have been offered for development in connection with the competition—one of 4½ acres at Harlow New Town and one of about 6 acres at Stockport. In both cases a mixed development is envisaged with houses, flats, and maisonettes of varying sizes being subsequently made available for sale.

The President of the RIBA has appointed as assessors for the competition: Sir Basil Spence, O.B.E., T.D., R.A., A.R.S.A., R.D.I., P.P.R.I.B.A.; D. E. E. Gibson, C.B.E., M.A., M.T.P.I., F.R.I.B.A.; G. Grenfell Baines, O.B.E., Dip. T.P., A.M.T.P.I., F.R.I.B.A.

Details of the competition will be announced in due course.

COSTS IN USE

BRS Economist Talks to RICS

Studies of the economics of various building designs, to arrive at their "cost in use" were described by P. A. Stone, of BRS, at a meeting of the Royal Institution of Chartered Surveyors in London on April 19.

"Value for money is the useful everyday concept by which people determine their purchases," he said, "but it will generally be agreed that buildings absorb far too great a part of our resources for such crude methods to be acceptable and a systematic approach is essential."

Using a method of reducing initial costs and running costs of a building to a single figure of annual cost, the BRS, he said, had made

studies of various building designs, of which he went on to give examples: in one, cladding which initially cost 20 per cent more than an alternative, had a "cost in use" of little more than half of the alternative.

Inclusion of running costs might at first appear to increase the difficulty of cost planning, said Mr. Stone, but in reality it only exposed difficulties and uncertainties which were already present.

ROADS

Effects on Existing Communities

A Public Inquiry was held last week which was regarded by the Minister of Housing as something of a test case: it was to consider whether the village of Catterick should be allowed to put signs on the Great North Road to attract drivers to use its hotels, cafés and filling stations, now that the village has been bypassed as part of the improvements to the A1.

The MOHLG inspector, L. V. Nash, who conducted the hearing, said that so many towns and villages were being bypassed that the question was no longer of purely local interest.

The Catterick traders pointed out that the name of the village had disappeared from many of the road signs on the A1. When the bypass was opened no fewer than 27 signs bearing its name had "Scotch Corner" substituted.

They asked whether communities, now bypassed, which had depended for their economic life on passing traffic, were now to be allowed to decay. Did the country believe it to be sound policy to stifle such areas out of existence, only to be forced to provide fresh facilities on the new roadways?

One garage owner reported a 60 per cent loss of business at peak periods. It was also pointed out that there was a serious drop in rateable value of some properties as a result. The inspector went back to London with the request from the Richmond RDC for a quick decision, in the hope that this loss of revenue to the council could be quickly recovered.

NEW CHURCHES

Architects Don't Know—and Nobody Tells Them

The Dean of Gloucester, the Very Rev. Seiriol J. A. Evans, expressed anxiety about new church building, at a conference of the Central Council for the Care of Churches at Cambridge this month, because "few architects are expert in church building and fewer still have any liturgical knowledge." At the same time very few vicars and church councils, "the people who eventually give the order for a new church," are able to give their architect detailed instructions.

For this reason, the Central Council has set up a panel to prepare a brief for an architect of a new church, which can be used by

any vicar or council. The Dean admitted that this was "quite a task," but the panel was now formed and had started its work.

It included authorities in different traditions of church planning, including the Liturgical Commission and the New Churches Research Group. Architects on the panel are J. S. Comper, S. E. Dykes-Bower, Dr. George Pace, and Robert Maguire.

TRAFFIC SEGREGATION

Exhibition for Sweden

The National Swedish Institute for Building Research is to show Paul Ritter's Traffic Segregation Research Exhibition at Stockholm and Gothenburg next month (May) and has invited Paul Ritter to lecture in both towns while the exhibition is on.

DIARY

South Bank Development Scheme: Exhibition of models, photographs and drawings at the Tea Centre, 22, Regent Street, London, S.W.1.

Until MAY 6

New Hospital for Boston, Linco: Exhibition of all designs submitted in the two-stage competition organised by Sheffield Regional Hospital Board, at the RIBA, 66, Portland Place, W.1. Weekdays, 10-7, Saturdays, 10-5.

APRIL 27 to MAY 13

Movement in the denser urban areas by C. D. Buchanan, TCPA Planning Forum, at the Planning Centre, 6.30 p.m.

MAY 1

Valuers, Quantity Surveyors and Architects—Combined Operation or Eternal Triangle? RICS, 12, Great George Street, London, S.W.1, at 5.45 p.m.

MAY 1

The Repair of Ancient Buildings: S.P.A.B. Annual Course. Details from the Secretary of the Society, 55, Great Ormond Street, London, W.C.1.

MAY 1 to MAY 6

Exhibition of Winning Designs in the Industrial Art Bursaries Competition: Royal Society of Arts, John Adam Street, Adelphi, London, W.C.2. Opening by Sir John Summerson at 3 p.m.

MAY 2 to MAY 19

"Buildings of England": Professor Nikolaus Pevsner on the compilation of this series, RIBA Library Group, 66, Portland Place at 6 p.m.

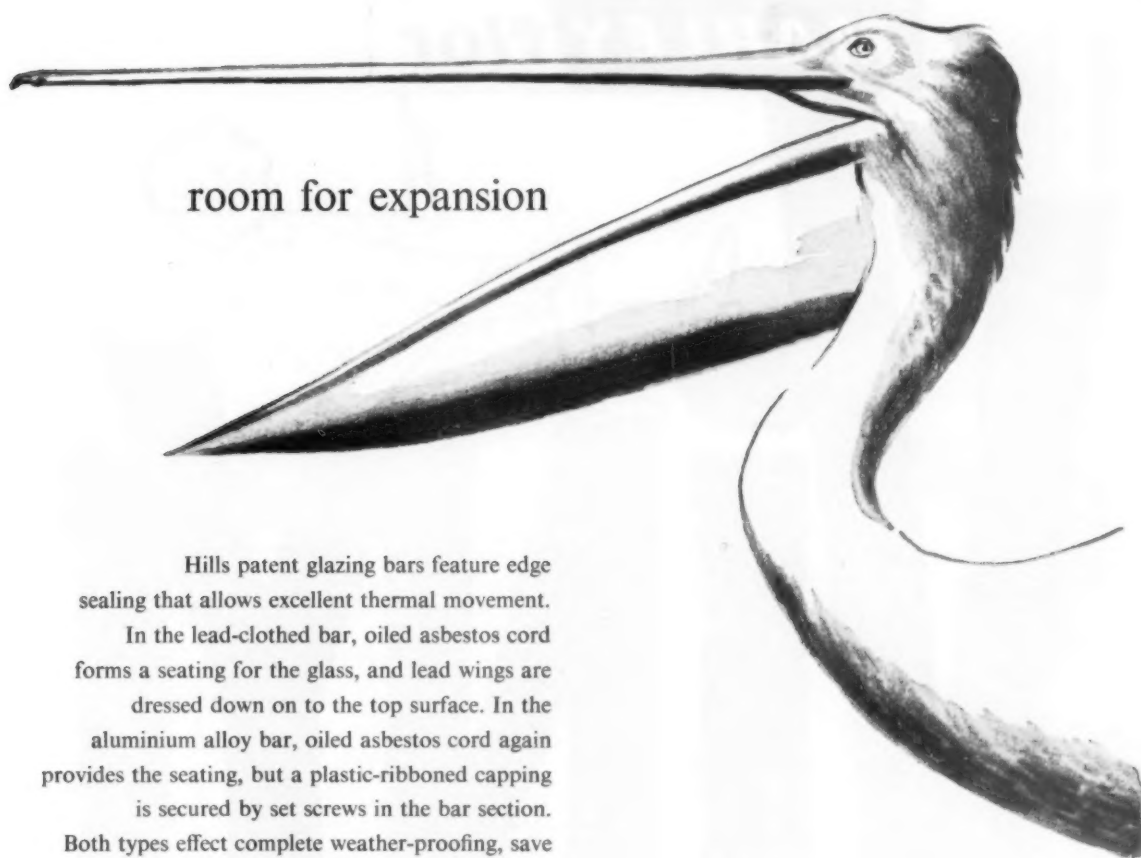
MAY 2

Building at the Zoo: Sir Hugh Casson and Peter Shepherd, the Meeting Hall, Zoological Gardens, Regents Park, 6.15. Tickets only. Organised by the Junior Liaison Committee of the Joint Advisory Committee on Training in the Building Industry.

MAY 4

Annual Dinner and Dance: Bristol Building Centre, at Ashton Court Country Club. Tickets, £1 per person, from Bristol Building Centre (Tel. 27002 & 22955).

MAY 8

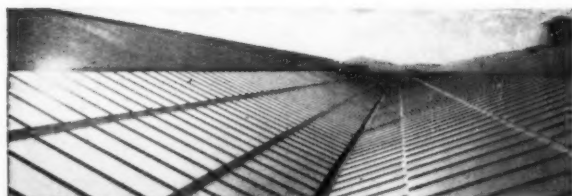


room for expansion

Hills patent glazing bars feature edge sealing that allows excellent thermal movement.

In the lead-clothed bar, oiled asbestos cord forms a seating for the glass, and lead wings are dressed down on to the top surface. In the aluminium alloy bar, oiled asbestos cord again provides the seating, but a plastic-ribboned capping is secured by set screws in the bar section. Both types effect complete weather-proofing, save time in fitting and cost in maintenance.

For full information on Hills patent glazing please contact our Technical Department.



The Lilleshall Co. Ltd., Oakengates, Shropshire.



Spondon Power Station.
Architects: Cecil Howitt and Partners, Nottingham.

HILLS (WEST BROMWICH) LIMITED



ALBION ROAD, WEST BROMWICH, STAFFS.
Telephone: West Bromwich 1811 (15 lines).

London: CHAPONE PLACE, DEAN STREET, W.1.
Telephone: GERrard 0526/9.
Branches at: Manchester, Bristol, Newcastle-on-Tyne, Glasgow.



Labour-saving flooring in many colours

For looks, for wear, for long term economy, choose Marleyflor.

Vinyl through and through. Rot proof. Crack proof. Stain proof. Resists oils, grease and household chemicals. So flexible it makes handling, laying and fitting a hundred times easier. So resilient it just smiles at the kind of wear that gives ordinary floor covering that tired look.

For commercial, industrial, institutional and domestic use, Marleyflor has colourful appeal — a hygienic surface — and properties that ensure long, trouble-free wear.

Specify MARLEYflor—it's best!

No matter what area you have to cover, Marleyflor 48" wide can be seam-welded to give a complete jointless surface. Marley also provide a supply and fitting service. Well worth looking into.

MARLEY Sevenoaks · Kent · Tel: Sevenoaks 55255

LONDON SHOWROOMS: 251 TOTTENHAM COURT ROAD · W1

THE INDUSTRY

This week Brian Grant describes a range of pumps, furnishing fabrics, tracing material, an imported desk and tiles which resist high heel loads

Pumps of All Kinds

A recent catalogue from Beresfords illustrates almost all kinds of pump, from the submersible type for drawing water from deep boreholes, and with outputs up to 100,000 gallons per hour and heads up to 1,200 feet. The firm also manufactures automatic pressure pumps to provide a constant pressure supply to houses or flats drawing water from wells, or for boosting mains pressure to reach the top of high buildings. Also produced are pressure washing units for garages or farm machinery, and a considerable range of cellar sump drainers. (*James Beresford & Son, Ltd., Ace Works, Kitts Green, Birmingham 33.*)

Badenia's desk of Norwegian design**Furnishing Fabrics**

Conran Fabrics are now importing fabrics from Sweden, Finland and Denmark, and have also started a design studio which includes a weaving and yarn dyeing section. The studio designs printed and woven textiles for curtains, upholstery and carpets. Since everything is under one roof it is possible for clients to give a direct brief to the designer, a sensible but all too infrequent arrangement. (*Conran Fabrics Ltd., 5 Hanway Place, London, W.1.*)

Material for Tracing

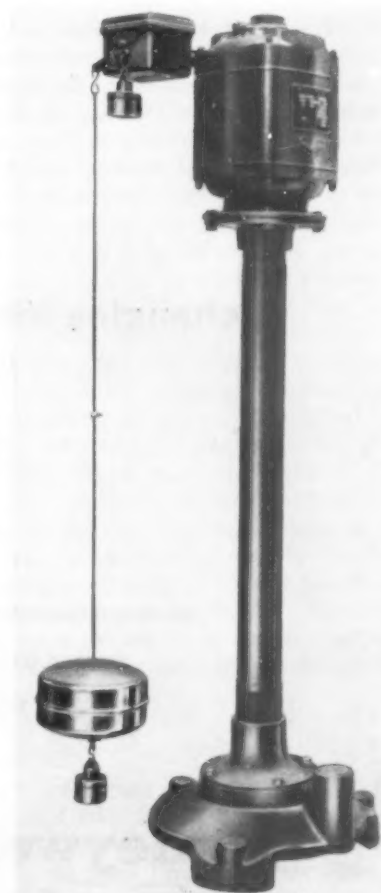
Duratrace is a plastic drawing material on a base of I.C.I. Melinex and has a fine uniform matt surface suitable for either pencil or ink. The sample received is very difficult to tear, and the makers claim that it will not yellow with age or deteriorate with constant photoprinting, and that it is dimensionally stable: erasure and correction are easy without any "ghosts" appearing on prints. Standard sheets are produced with any required printing, or the material is available in 20-yard rolls £7 5s. each 30 in. wide and £9 3s. 4d. for 40 inch. (*The Nig Manufacturing Co., Ltd., 3-9 Dane Street, High Holborn, London, W.C.1.*)

Getting on with the Homework

Specially designed fittings with a place for everything tend all too often to be somewhat over-designed, but a recent Norwegian effort, illustrated left, seems reasonably straightforward and not too complicated. Architects will still need space for a drawing board, but there is room for almost everything else, typewriters, files and reference books as well as stationery. Price is £65, but the whole job seems quite well made. (*Badenia Calculators Ltd., 72 Red Lion Street, London, W.C.1.*)

Floors for Heels

I believe that the fashion writers now maintain that stiletto heels will shortly be out, or perhaps it is no more than that toes are to be less pointed, but whichever it may be a Reading firm has now intro-



A Beresford cellar drainage pump

duced a 12 by 12 in. cork and nitrile rubber tile tough enough to stand up to the heel load. The tiles are claimed to be silent and to have a pleasant springy feel, and to adhere to any normal under surface. Standard tile adhesives can be used, and the underside of the tile is embossed to give greater sticking power. There are seven standard colours and the tiles are also suitable for commercial use as they have good oil resistance and are non slip. (*British Technical Cork Products Ltd., Caversham Mill, Mill Road, Caversham, Reading, Berks.*)



changing the climate of opinion

HEATING & AIR CONDITIONING CONTROLS

INDUSTRIAL INSTRUMENTATION

MICRO SWITCHES

Honeywell



First in Control

SINCE 1885

HONEYWELL CONTROLS LIMITED

Ruislip Road East
Greenford Middlesex
WAXlow 2333

... in the home and in industry. Today in many homes modern heating equipment and Honeywell thermostatic controls have replaced the coal fire ... are teamed to offer choice of room temperature ... perfect comfort; in many industries Honeywell instrumentation systems are measuring, recording and controlling variables, making processing automatic; in many products and on diverse plant, Honeywell micro switches ensure safe, dependable operation. And in factories and office buildings, Honeywell space temperature and humidity controls maintain fit-for-purpose indoor climates—at minimum cost.

Inventive minds, engineering and production knowledge and complete service facilities are available to all Honeywell users—from branch offices in ten U.K. cities and in every British export market.

I am interested in your controls for heating,
ventilating and air conditioning.
Please send me more information.

Name.....

Position.....

Address.....

AJ

technical section

SIB No. (94)

UDC No. 725.56

10 DESIGN : BUILDING TYPES**Some aspects of housing for old persons, 2**

This week Vere Hole, a social anthropologist working at BRS, concludes her report of an enquiry into the way in which the occupants of 61 old people's dwellings in Edinburgh used their homes and what they thought about them.

MAINTAINING THE HOME

In discussions of the housing needs of old people, it is often stressed that dwellings should be easy to clean and maintain so that, despite the physical impairment which comes with growing old, the old persons may remain independent as long as possible. When asked, 70 per cent of these tenants said they could get about easily and only 15 per cent admitted to having difficulties. As so many in the sample were still fairly active, they were able to cope with cooking and housework: 75 per cent of the households were entirely self-sufficient in this respect. Those who received outside help with their housework obtained it mainly for cleaning floors (20 per cent), and windows (25 per cent) and for household washing (20 per cent). In the majority of cases this assistance came from other family members, usually the daughter; in only three cases in the entire group did a neighbour give regular help with the housework and one household had regular visits from a home help. Almost all of the tenants found their homes easy to look after; one of the chief difficulties experienced was in cleaning windows which were situated over a sink, or where the gap between window and wall was insufficient to allow the housewife's arm through in comfort. Such complaints are already familiar in surveys conducted among younger housewives.

Provision for household washing was in the form of a tub and sink unit which is customary in Scottish local authority housing. When the suggestion of the Scottish Housing Advisory Committee¹¹ that one deep sink would be sufficient for elderly persons was discussed with the tenants most said they felt the need of both sink and tub, although 30 per cent, mostly single person households, said that one sink would be satisfactory. In almost all households some washing was done, and 55 per cent of housewives did their entire wash at home. Another group (25 per cent) sent large items to a commercial laundry and others,

already mentioned, relied on assistance which was primarily of a personal kind.¹² The fairly limited use made of commercial laundries is not entirely attributable to the restricted budgets of old persons, as resistance to the use of these services had been found in younger households both in Scotland and elsewhere. For drying and airing clothes, all dwellings were provided with outdoor greens, and heated cupboards; in addition Types B and D were provided with ceiling drying racks in the kitchen. Tenants appreciated drying greens situated immediately behind their dwellings, but on the demonstration scheme the position of the greens at each end of the terrace of bungalows was disliked, both for the extra walk it entailed and for the fact that the washing was not under the immediate surveillance of the housewife from within the dwelling. All of the tenants who had been provided with ceiling racks for indoor drying used them for this purpose and a few also used them for airing in preference to their heated cupboard. As might be expected, in those dwelling types without a ceiling rack, more extensive use was made of the heated cupboard for both drying and airing, but other means of drying were also employed; in five cases improvised clothes lines were used and in two out of seven cases a ceiling pulley was installed by the tenant in the sun porch, and clothes-horses were placed about the living room fire. The intention of the designers, in eliminating the ceiling rack and providing a large¹³ heated cupboard, had been to improve the general amenity of the dwelling by keeping all washing out of sight and reduce possible accident hazards. Although the tenants did not in fact use the equipment as intended, they were, nevertheless, satisfied with the arrangements which they had.

STORAGE

The amount of storage space provided in these dwellings ranged from 29 sq. ft. in the one person flats to 46 sq. ft. in the two person flats. It was only in the latter dwellings that an outside store was provided. Surveys carried out in dwellings occupied by families have revealed considerable demand for general storage space, particularly to accommodate items such as large toys, prams, bicycles and step-ladders. The absence of such possessions in the old persons' households may perhaps account for the lack of any specific storage demands, and their general satisfaction with whatever cupboards they had. It was only in the one group of dwellings where tenants had a

¹¹The Housing of Special Groups, p. 20.

¹²A survey carried out amongst persons in Edinburgh over the age of 60 showed that of the various domiciliary services, assistance with laundry was needed most. C. Gordon, J. G. Thomson and A. R. Emerson—*"Domiciliary services for over sixties," The Medical Officer*, vol. 98, July 12, p. 4.

¹³In Type C bungalows the heated cupboard was 5.8 sq. ft. in area, in Type A flats 5.6 sq. ft., in Type D bungalows it was 4.1 sq. ft., and in Type B flats 3.3 sq. ft.

technical section

private garden that a small proportion expressed a desire for general storage to accommodate large garden tools.

HEATING

As might be expected from other surveys of tenant experience, the improved open fires were generally regarded as a satisfactory form of heating. The two types of demonstration dwelling had in addition a radiator of 13 sq. ft. in the bathroom; these were liked by the tenants and used when bathing. When questioned, slightly under half of those tenants with no heating in their bathroom said that they thought it would have been useful. Tenants had in addition electric fires and paraffin heaters to use when their fire was not lit, or to boost the heat of the living room in cold weather. However, even in summer, over half of the tenants lit their fire every day. There were complaints of draughts, mainly from the front door, in dwelling Types A, B and C; the tenants in Types D and C dwellings were the most satisfied with the warmth of their houses.

ASPECT AND ORIENTATION

Considerable care had been exercised by the architects in orientating all these dwellings in the sample so that with the exception of a few in the Type B group, all living rooms faced south or south-west. This was appreciated by the tenants, who liked afternoon sun in the living rooms and morning sun in the kitchens; they also found the daylighting adequate in most rooms, with the exception of the version of Type D plan where the bedroom was situated at the front of the dwelling; this was found to be overshadowed by the porch, and therefore rather dark.¹⁴ The chief demands of tenants with regard to window design were that they should be easily accessible for cleaning, and that a small ventilating window should be provided in the living room; low sills in this room, enabling a good view of the outside, were appreciated.

Fig. 1. The maisonnettes for families on the same site may be seen in the background. Note the large amounts of curtaining in the glazed sun porches. The beginnings of a hedge in the foreground mark the private gardens of these tenants



Tenants' requirements concerning window size were not specific, but there were limits to the amount of glazing desired: some tenants in Type C bungalows thought that their living room had too much sun, and those in Type A flats complained of the excessive cost of curtaining the large splayed window there. It was usual for windows to be heavily curtained: one half or more of the area of living room windows was customarily obscured by curtains of opaque material, and in the sun porch of Type C bungalows the arrangement of thick curtains was similar, despite the blank wall provided on the eastern side of the sun porch to prevent overlooking from other bungalows in the terrace. Discussions with tenants about curtaining did not suggest that they were particularly concerned about privacy from the view of passers by, as they regarded the primary function of curtains as decorative. This attitude towards the arrangement of curtains over windows has been found in surveys of younger housewives also.

SITE LAYOUT

It is frequently suggested that dwellings for old people should be sited on the same scheme as those for families,¹⁵ so that older persons will not sever their contact with younger age groups, and will have a source of help in time of need. Following on this principle, the older people's dwellings on the demonstration scheme were grouped about a grassed courtyard, with maisonnettes for families on the opposite side (see Fig. 2). The other dwellings types (B and D) were both grouped in small schemes designed exclusively for old persons.

An outlook which provided a view of persons going by, and of road traffic, was valued by the old people; one scheme which was set back from the road, and where the only people to be seen from the windows were other old persons, was thought to be depressing for this reason. On the other hand, freedom from disturbance was also desired. On the scheme which combined families with old persons, the latter were often worried by the noise of children playing, and the fear of possible damage to windows and gardens from ball games. This annoyance arose from the siting of a children's playground in the courtyard opposite the old persons' bungalows, and a footpath which passed close to the kitchen windows of these bungalows and led to the street through a covered passage beneath the single person flats. This arrangement of access encouraged the riding of wheeled vehicles by children and other forms of noisy play near the old persons' dwellings. Although the occupants of houses for families also complained occasionally of noise from the playground, or of children playing too near the entrance of their dwelling, they were generally less susceptible to annoyance in this way than were the

¹⁴The daylight factor in this bedroom which is shadowed by the porch is 0.5 per cent, and therefore just meets the recommended (B.S.I.) value of daylight factor for bedrooms; in the other version of the plan, the daylight factor in the bedroom is 0.9 per cent.

¹⁵Housing for Special Purposes, p. 10.

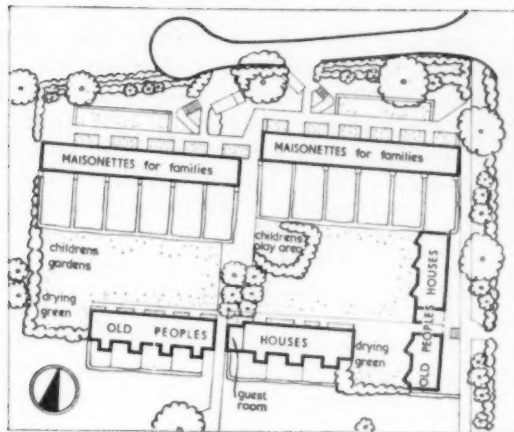


Fig. 2. Layout plan of site illustrated in Fig. 1

Fig. 3. Plan of old people's houses (type C) illustrated in foreground of Fig. 1 and shown in the layout plan above



old people. It is perhaps fair to add that at the time of the survey there was a shortage of equipped playgrounds in the area of the demonstration scheme, and that a number of children from outside the scheme added to the disturbance.

When the question of separate or mixed schemes for old persons was discussed with the tenants in all dwellings, the balance of opinion was slightly in favour of a separate scheme. However, since questions of access, outlook of dwelling, closeness to transport and shops and so on are equally important factors in the location of old persons' dwellings, planning decisions should perhaps be based not on the separation or combination of old persons and families, but on whether a possible site for old people's dwellings offers some protection from noise without seclusion from all activity, and whether, in the layout of the site, pedestrian access and play can be diverted from the immediate vicinity of the old people's dwellings.

GARDENS

The extent to which tenants really wish to cultivate the private gardens allotted to them is a controversial issue, and in the case of older persons there is the possibility that infirmity may render a garden a real

burden. Amongst the tenants in the present survey only one group (Type C bungalows) had small garden plots in front of their dwellings, although it was planned to make similar provision for tenants in the flats at a later date. On the site of the other bungalows the grounds had been grassed up to the dwellings themselves, and in order to facilitate maintenance by the local authority, no private garden plots were available for tenants. The question of whether or not private gardens were desired was discussed with the tenants. A number of them who had previously occupied houses with large gardens were glad to be relieved of the responsibility, and some women who were living alone were apprehensive of the heavy work that a garden might entail. The small plots, about 5 sq. yd., provided for one group satisfied all but the most enthusiastic gardeners but amongst those who had no garden at all there were a number of men who had been keen gardeners, and who felt that one of the few means of filling in their time on retirement had been denied them.

CONCLUSION

In the extensive literature dealing with older people, any discussion of housing tends to concentrate on provision for physical infirmities. Almost no attention has been paid to the broader and possibly more important question, "In what way do the housing needs of older people whose health is normal for their age differ from those of other small households drawn from younger age groups?" The present small survey, carried out in one area only, cannot provide a definite answer to this question. However, by comparing results from this survey with information obtained from other types of household, the special problems in designing housing for old people can be identified for more detailed attention.

A description¹⁶ of the demonstration scheme emphasises certain features intended to obviate accidents. Few comments can be made on these features on the basis of the present survey. Since the more seriously handicapped tenants are customarily housed in some type of home or hostel, and since only a year or so had elapsed since the tenants in the present survey had been rehoused, few of them were suffering from any serious disability. This may in part account for the difficulty in obtaining useful information from the tenants concerning the ease with which switches, socket outlets, gas meters and so on could be reached, as they clearly considered other aspects of house design and certain broader social issues of rehousing more important. Experience in other surveys has shown that housewives are often uncritical in small matters of house design until they have experienced some alternative arrangements which provide a basis for discrimination. Added to this, the old people seemed to feel a certain remoteness or indifference to the physical environment in comparison with other

¹⁶ "Demonstration housing at Muirhouse, Edinburgh," *Municipal Journal*, vol. 65, Jan.-June 1957, pp. 649-650.

technical section

issues with which they were concerned. It is perhaps as well that old persons should not be unduly accident conscious, but measures taken by the designer to prevent accidents are not always perceived as such by the user: for example the specially prepared non-slip floors in the demonstration houses were all covered with linoleum and rugs by the tenants.

On an assessment of general satisfaction, those tenants in Type D bungalows appeared to be the most satisfied of all; this was probably primarily because they had two separate rooms, but warmth and freedom from draughts, together with a quiet situation, were important contributory factors. The next most popular dwellings were the Type C demonstration bungalows and then the Type A flats. Hence a dwelling which was well designed on conventional lines proved to be the most acceptable.

Among this group of old persons some differences were noted in their use of the dwelling which may represent a difference in requirements between older and younger households of the same size. It was less customary for the old persons to eat meals in the kitchen than has been found in families occupying dwellings with a single living room. Storage requirements appeared to be less specific and less exacting than those for younger households. Restricted income may limit the number of visitors who may be entertained for even a light snack, as well as for staying overnight. However, there was also evidence of an unwillingness to make the extra effort necessary for entertaining. It is of interest that, in common with other studies¹⁷ of a more sociological nature, it was found in this survey that the wider family constituted the most important agent in giving assistance in household tasks which the old persons found onerous.

One of the most important features of the demonstration dwellings was the special equipment provided in the bathrooms. In view of the care and thought which went into their provision, it is disappointing to find this equipment was comparatively little used. However, the main reasons for failure do not appear to be connected with the design of these fixtures, but with their novelty. Particularly in the case of the showers the tenants were confronted with an installation which is rarely found in private homes in Great Britain, and had no clear idea of the reasons why showers were provided, and the dangers that they were intended to combat. Where new features of this type are introduced, it would seem well worth while to have a housing manager or welfare worker discuss them with the tenants, in order to encourage their use. It was clear from the difficulties experienced by some tenants in Type D bungalows in manipulating their flues that old persons require rather more help in mastering new equipment than is usually given to local authority tenants.

The layout of the site on the demonstration scheme brought favourable comment in the architectural press for the sense of enclosure provided by dwellings grouped about a sheltered court, with provision for

children's play and for old people to sit in an area free from traffic, and where careful planning had excluded drying greens from the general view. At the time of the survey the playground was a source of annoyance to the old persons (conversely mothers living on the scheme felt that their children were sometimes harassed by the old people), and the area intended for the old people to sit in was little used because the boundary for play and adult recreation was not clearly defined. Instead of viewing the open stretch of grass as an amenity, the old persons complained because washing lines were excluded from this area and located instead at the end of the terrace.

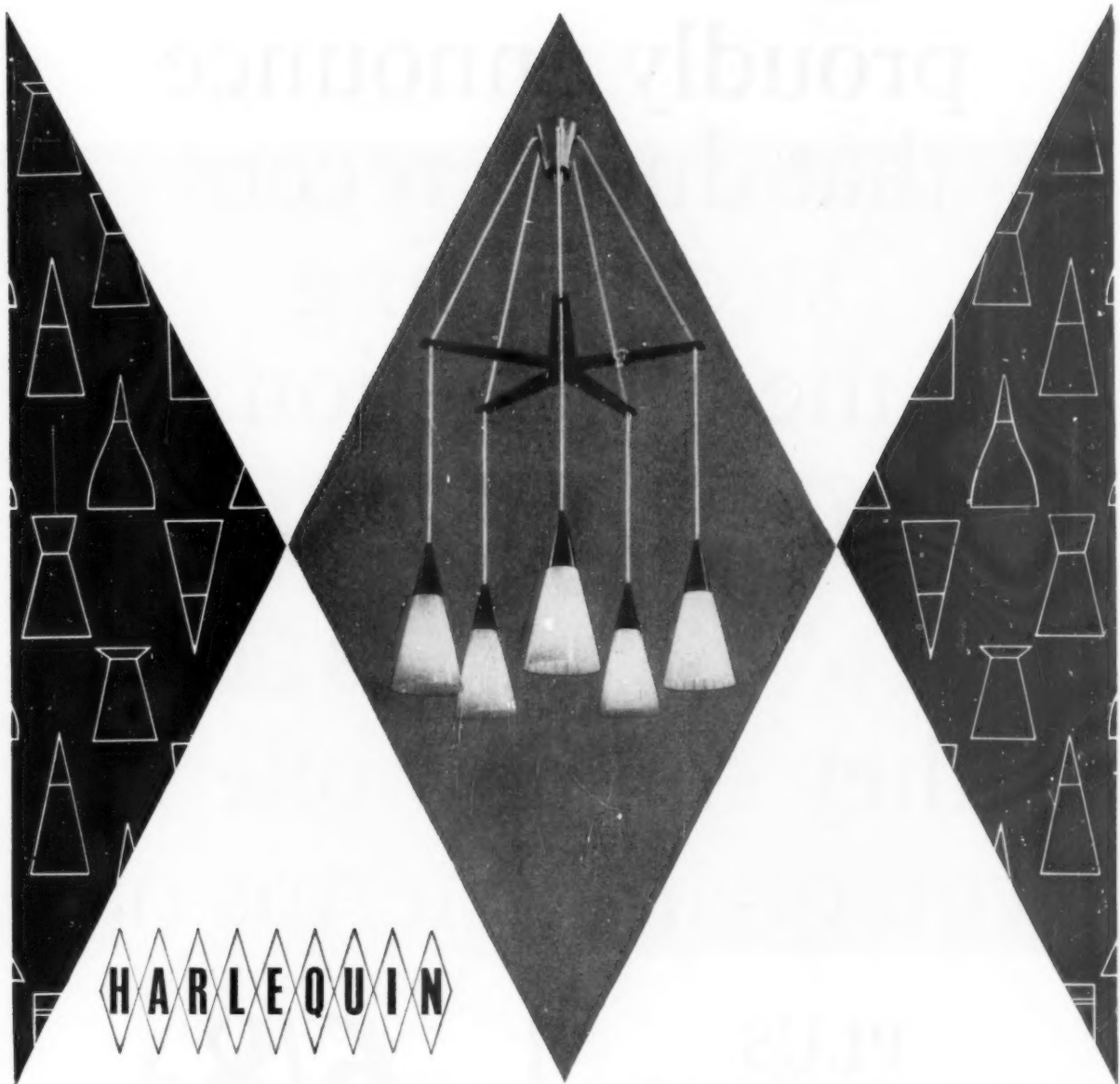
When, particularly in questions of architectural design, the point of view of the user contrasts so sharply with that of the architect it is sometimes felt that design and planning based on user opinion would result in unexceptional mediocrity. This criticism is hardly justified. The architect has often to proceed without adequate information concerning the real needs of the user; the user on the other hand rightly complains about innovations which are introduced purely for reasons of fashion or aesthetics. Surveys may contribute to an understanding of the way in which changes and improvements may be introduced so that they will be fully utilised by the tenant, as well as providing a useful brake on innovations which might be too far removed from the needs of the user. For example, the present survey has shown certain obstacles to an excellently conceived scheme for combating loneliness amongst old persons. The guest room had stood empty for a year, and the combinations of families and old persons on the one estate provoked complaints rather than amity. In discussions, the old persons tended to stress the negative aspects of living among families, and, despite the loneliness of which many of them complained, they appeared to withdraw from contact with neighbours, including other old persons. This phenomenon is not a peculiarity of old persons as such, but has been found amongst younger housewives on housing estates.¹⁸

The needs of older persons in relation to housing still require clearer definition, but it would seem that if the social welfare concepts of dwellings especially adapted to these needs are to be fully realised, well-designed dwellings are in themselves insufficient. Housing management policy will play an important part, and if the integration of old persons into the community is to be encouraged, social factors affecting or hindering the formation of new communities must be considered in addition to questions of site layout.

This study was undertaken as part of the research programme of the Building Research Board of the Department of Scientific and Industrial Research, and this paper is published by permission of the Director of Building Research.

¹⁷P. Townsend, *The Family Life of Old People* (London: Routledge and Kegan Paul, 1958).

¹⁸V. Hole, "Social Effects of Planned Rehousing," *Town Planning Review*, 1959, vol. 30 (2), July, pp. 161-173.



rings the changes!

A flexible range of fine fittings for decorative and display lighting. By ringing the changes on shade shapes in glass, or metal with four different colours (plus black and white) a large array of fittings can be built up, each

distinctive to the job in hand. They can be assembled as ceiling fitting, pendants, wall brackets or table lamps.

The Harlequin "at-a-glance" Reference Folder is worth your study. Write for a copy now to:

TROUGHTON & YOUNG

TROUGHTON & YOUNG (Lighting) LTD.,
The Lighting Centre, 143 Knightsbridge, London, S.W.1
Phone: KENSington 3444. And at Rodney St., Liverpool 1

FORMICA LIMITED
proudly announce
that due to recent
streamlining
of the production of
FORMICA^{REGD.}
beautyboard
they can now offer
you quantity terms of

PLUS

- * a new version with Formica surfaces on both sides — list price 10/4d. per sq.ft.
 - * three new sheet sizes 10ft. x 2½ ft. 8ft. x 3ft. and 7ft. x 3ft. as well as 9ft. x 4ft. and 8ft. x 4ft.
- With all the proved advantages Formica Beautyboard has over any other similar board.

- | | |
|------------------|----------------------|
| * Sheer flatness | * Formica surfaces |
| * Long life | * Machinability |
| * Lightness | * Uniform Dimensions |

6/8d.

per sq. ft. on large orders.
List Price 8/4d. per sq. ft.
with normal discount
for smaller orders

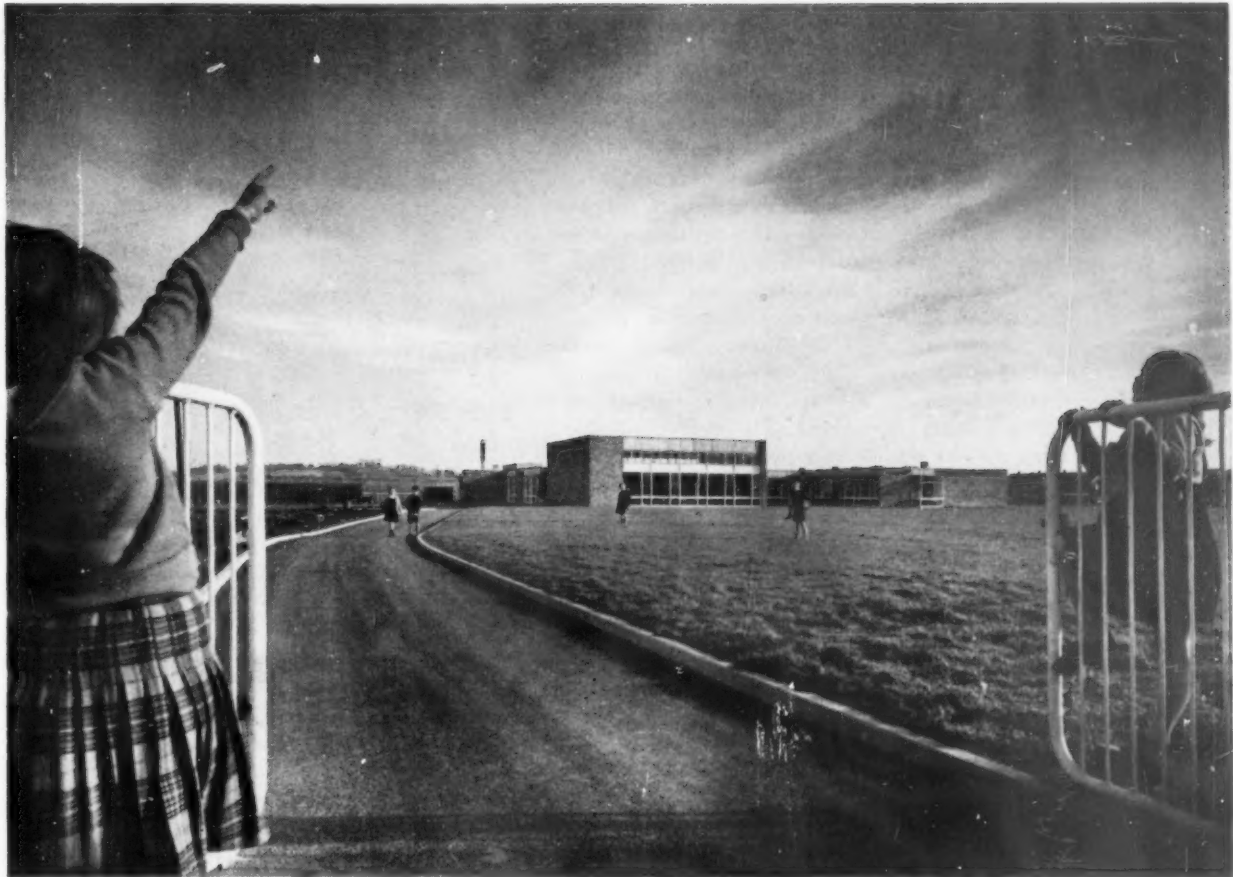


For full information on this and other Formica products write to:

Formica Limited, De La Rue House, 84-86 Regent Street, London W.1. Telephone: REgent 8020

SIS No. (97)

UDC No. 727-1

The approach to the school from the west

Junior School

at Cheshunt, Hertfordshire

This school should be regarded as a controlled experiment by Hertfordshire, to see whether the lessons from the prefabricated schools, forming the vast bulk of the county's programme, can be applied to conventional construction for use on small projects. It is of equal interest as a highly economical and workable solution from the point of view of the user.

for Hertfordshire County Council,
G. C. Fardell, County Architect
job architect V. H. Lee
quantity surveyors C. M. Nott, Principal Quantity
Surveyor, County Architect's
Department
D. L. A. Stracey, Chief Assistant

building study—2nd series

APPRAISAL: Cheshunt lies in the Lee River Valley, and is on the flat. The school site is bounded on one side by an extensive line of commercial greenhouses, which make an interesting backdrop to the school when seen from the west. The remaining sides of the site are bounded by indifferent speculative housing, and there are no existing trees to provide a relief from this man-made skyline.

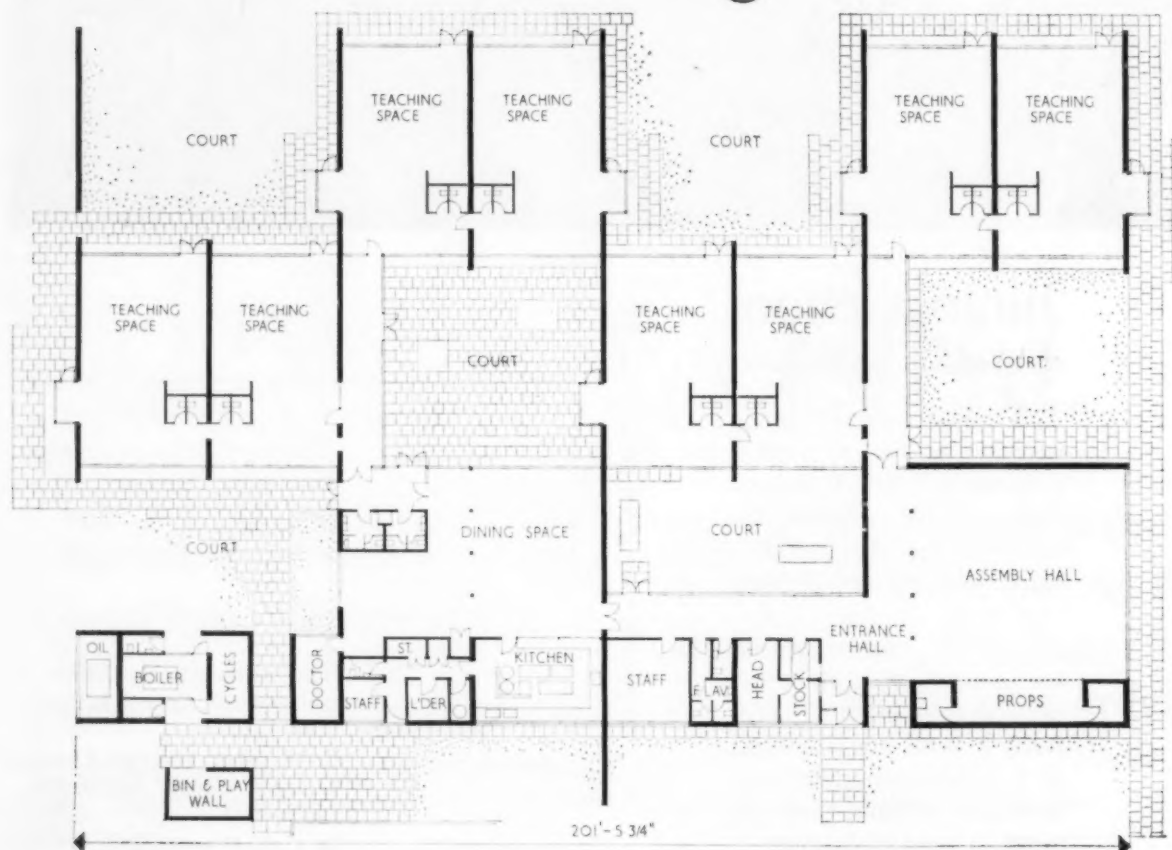
Close by, also in Cheshunt, is the first dry-constructed school of the Herts post-war programme. A review of the county's policy and progress would be out of place here, but questions about this particular school will inevitably arise. Above all, is this building a denial of previous work at Herts?

The key point in this respect is that some fifteen years ago there were very few bricks and no bricklayers, one of the prime factors in the decision to develop component prefabrication methods.

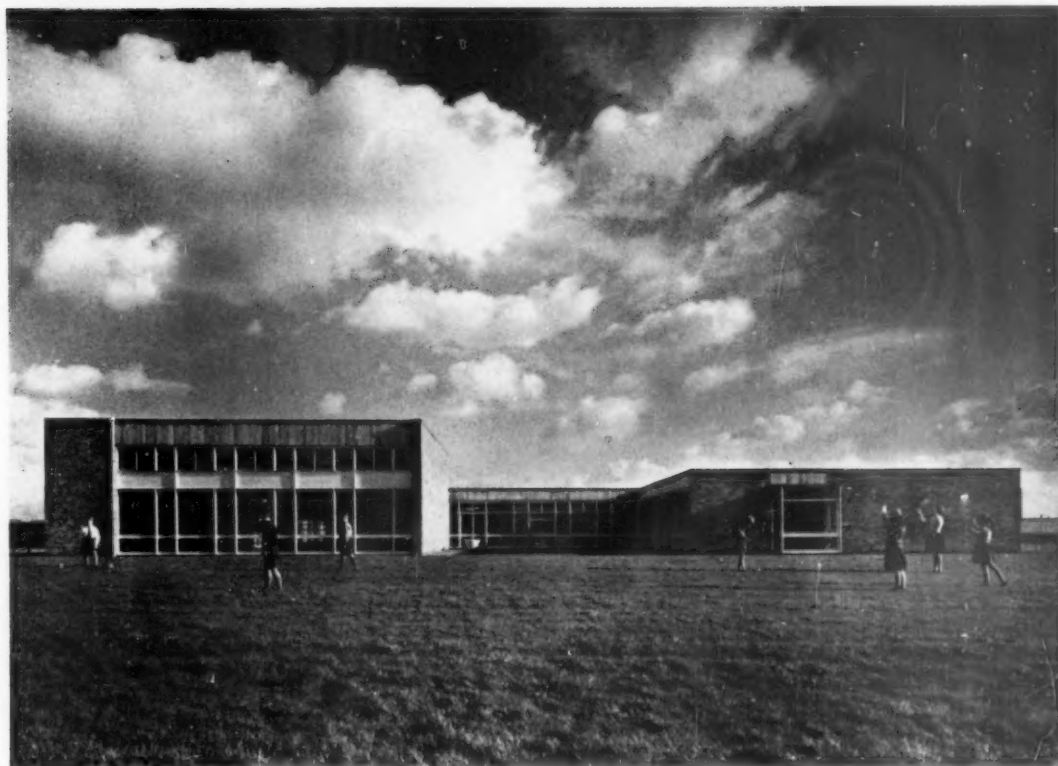
Now there are limited quantities of both available in the county. This project, to test out a rationalised version of conventional loadbearing construction, is therefore in line with previous thinking. Herts argue, for instance, that they have two advantages over most other counties with their schools building programme. One is this open-mindedness about the best solution of a given problem or group of problems. The other advantage comes from a combination of size and autonomy; in other words, they have a big enough programme to pursue experimental and other work without a direct need to set up a consortium to put it into effect.



Block plan [Scale: $\frac{1}{40}'' = 1' 0''$]



Ground floor plan [Scale: $\frac{1}{8}'' = 1' 0''$]



The west side of the school with the assembly hall on the left

This pilot project therefore has its place as a field experiment within the context of this open-minded and flexible attitude of the county. Its most important feature is the planning grid, which works like a Scotch plaid in one direction only. Eleven inch cavity walls, running north-south, carry a timber roof structure based on a four-foot square grid. The structural wall "zone" occupies twelve inches in one direction only, each zone being separated by three 4 ft. 0 in. modules. The assembly hall and boiler house structures are free to be dimensioned outside this mechanism because they are outside the main plan area.

Similarly, the structural walls themselves can be made either to comply where necessary with the intervening grid (such as at entrances to classrooms) or to disregard this limitation where doing so may give some architectural or planning advantage. Where open support is required for the roof structure, such as in the dining area, six-inch square timber columns comply with the 4 ft. 0 in. grid in one direction and are placed centrally in the 12-in. wall zone in the other. It is surprising that even this much obstruction was considered necessary or desirable.

The plan as a whole is pleasant and workable, following usual practice in the county and elsewhere of pairing classrooms, with the adjoining open service area being used as a passage. The inner courts are very successful; in contrast the outer ones are strictly utilitarian, at least for the moment. The roof structure consists in principle of plywood-web timber beams which have a slight pitch on the top chord which creates a 4-in. fall across the typical classroom span.

These specially designed and developed beams occur at four-foot centres, separated and laterally braced by timber noggings, which are also on module. The beams and noggings together provide fixings and support for the compressed straw panels carrying the roof finish, and equally for the ceiling finish in the plane of the bottom chord of the beams.

For the most part the detailing arises naturally out of the logical organisation of plan and structure, and quietly emphasises the way in which the various elements have been brought together. Examples of this are the stopped ends of the eleven-inch cavity walls and the junction between windows and fair-face brickwork. The solid angle eaves capping detail is also admirable. Slightly less successful are the short vertically boarded fascias and the panel decoration of the assembly hall ceiling. One cannot help observing that decoration, if it is to have its place in this type of "less is more" architecture, should attempt to emphasise the structural intention rather than obscure it.

The fenestration generally might perhaps have been further developed in its detailing. Bearing in mind that an important economic limitation with joinery windows is the number of different sections required, it seems here that this fact might have been made a virtue in arriving at a simpler and more robust solution, within very much the same terms. There is again a slight indecisiveness about the main classroom windows, where the central wall between each pair of classrooms is recessive, in contrast to the outer walls. But these points emerge only because of the general clarity and logic of the rest of the detailing.

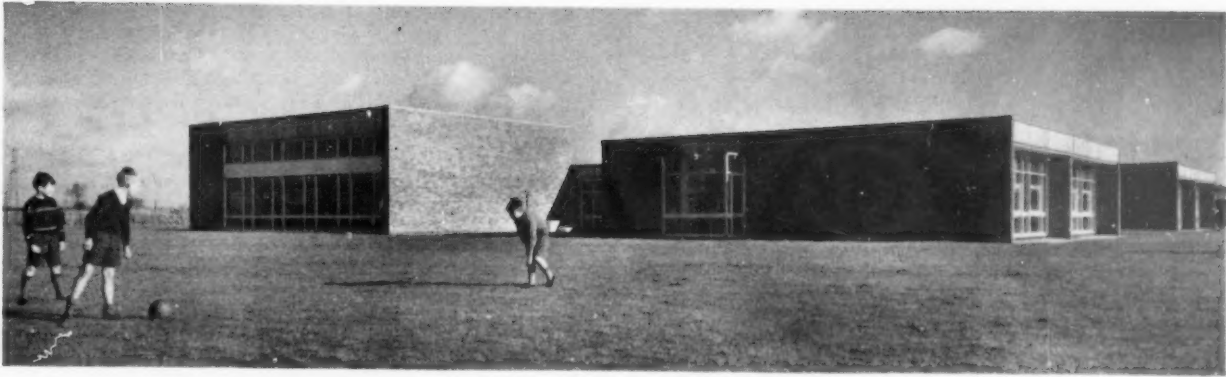
building study—2nd series



External court, with a pair of classrooms on the left, and the boiler house on the right

Both playgrounds are on the north side of the school, well away from the teaching areas

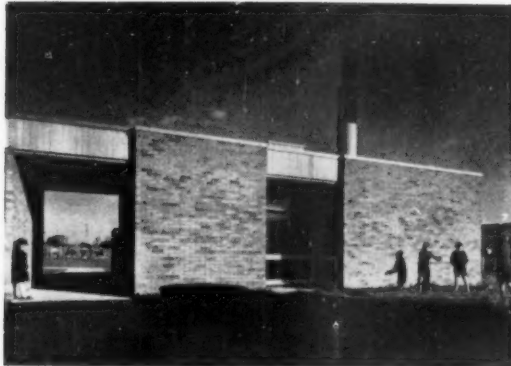




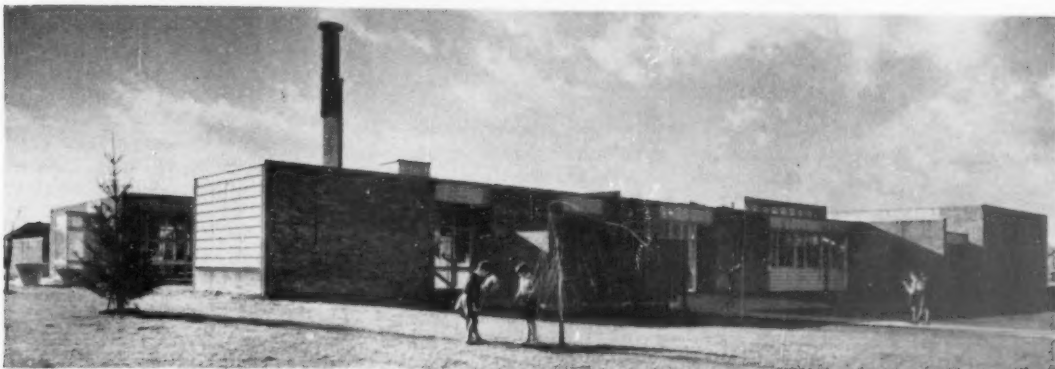
The school from the south-west



South side of the school



The boiler house projects out to form the north side of one of the external courts



The screen to the bins also forms a play wall

building study—2nd series

Much of the interest of this school is that it has been economically constructed despite a high standard of finishes and equipment, and that it is highly successful from the point of view of the user. It is most worthy of attention, however, as an example of a certain type of thinking, and as the precursor of a number of other small Herts buildings in which the methods used in this pilot experiment will be further developed.

PLANNING AIMS AND CONSTRUCTION

(a) In 1948, the first post-war primary school constructed on the basis of dimensionally related prefabricated components was opened at Blindman's Lane, Cheshunt. The majority of the 200 new schools which have been completed, or are now under construction in Hertfordshire since that date, have been built using methods developed systematically from the early Cheshunt prototype. This continues to be the main policy of the County Architect's Department. This approach to school construction, as later sponsored and developed by M.O.E., has played a very important role in the post-war school-building programmes. The development work subsequently undertaken by the C.L.A.S.P. group of local authority offices has now extended the method to serve an ever-widening field of education authorities.

Whilst pursuing their main policy of development, using mainly light steel frames for the structural element, the Herts architects have always been conscious of the desirability of pursuing parallel developments into other forms of rational structure. This has provided a readily available basis for cost and performance checks on the main programme and in the past has provided useful reserve methods when problems have arisen in the supply of key materials. Various alternative frame systems have been explored and developed, using concrete and timber, and for some years a small programme has been allocated to the investigation of the possibilities and limitations of the use of a rationalised form of load-bearing brick construction.

This development has been mainly confined to education minor works consisting of first instalments of new small schools, or extensions of older schools.

As this part of the county's building programme continues to expand and the general method has proved to be economic and suitable, it was decided in 1958 that a complete school should be allocated to test out the approach in a more comprehensive way. The terms of the brief included investigating the possibilities of relating the method of construction to the modular development which continues to be a main feature of the work of the office.

The success of the experiment can best be judged from detailed descriptions in the other sections of this article, but the general reactions of architects, teachers and educationists who have visited the school have been very favourable, and the building has so far proved to be successful in every way.

It is now intended that the methods used shall be further developed to deal with the increasing volume of work in clinics, occupation centres and similar small county buildings.

(b) The uninteresting site gave an indication towards an "inward looking" plan which would provide an opportunity for the classrooms to look into small and intimate courts as an alternative to the poor outward views. To achieve this a single-storey plan was adopted. The aim in designing this school was simplicity in plan and construction based on the use of brick cross walls in regular straight runs in relation to modular spaces based on multiples of 4 in.

The standard minimum classroom width of 24 ft. 0 in. was the governing factor in the spacing of the main structural cross walls, which run north and south. These walls built in

11 in. brickwork with a 2 in. cavity are in the centre of a 12 in. modular space, which continues throughout the building at 24 ft. 0 in. intervals. The 1 in. difference between the 11 in. wall and the 12 in. structural zone allows $\frac{1}{2}$ in. tolerance on either side of the wall, as well as providing for a $\frac{1}{2}$ in. wall finish where required. The clear room width of 24 ft. 0 in. divided into 8 ft. 0 in. bays, allows for standard ceiling panels of modular sizes (4 ft. \times 2 ft.).

The roof structure comprising glued plywood web-type beams at 4 ft. 0 in. centres (with the beam centre lines on the module line) has 2 in. square timber roof and ceiling noggings at 2 ft. 0 in. centres, 8 ft. \times 4 ft. \times 2 in. compressed strawboards are fixed on the top boom of the beams and the ceilings are of $\frac{1}{2}$ in. asbestos cement insulation board and Parana pine.

The overall depths of the beams vary from 17 in. to 21 in., giving a slope of 4 in. in the 24 ft. 0 in. length to provide ample fall for roof drainage. The classrooms are grouped in pairs to allow the roof falls to slope inwards to form a central gutter over the structural walls. The roof is finished with asphalt and white chippings.

Rooflight openings are made quite simply by lining the inner face of the spaces formed by the roof beams and noggings. Where 4 ft. 0 in. square rooflights have been used, one top and bottom noggin has been omitted and the openings are trimmed back to the module line.

In those parts of the building requiring a clear space in excess of 24 ft. 0 in. width (for example, in the dining room area) the 12 in. structural or neutral zone is occupied by a simple timber post and beam construction which replaces the 11 in. brick wall.

The infill panels between the cross walls are in all cases window units in standard 8 ft. 0 in. widths, the inside faces of which are on module line.

The floor to ceiling height in the classrooms is 8 ft. 8 in., the standard height in the majority of the Hertfordshire schools. This height also allows for the use of existing Herts standard drawings for such components as storey height internal door frames, classroom lavatory, storage and heater unit, etc.

The Assembly Hall is constructed in a similar way, with the exception of the walls which are 13 $\frac{1}{2}$ in. thick with beam spans of 40 ft. 0 in. The inner face of these walls is $\frac{1}{2}$ in. outside the planning module, and all the walls of this room are on the periphery of the modular spaces to provide the continuity of detail which prevails throughout the school.

CLIENT'S REQUIREMENTS

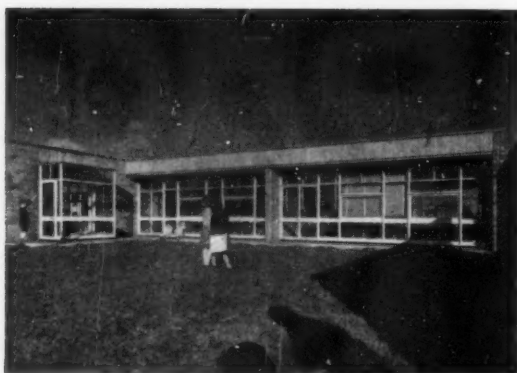
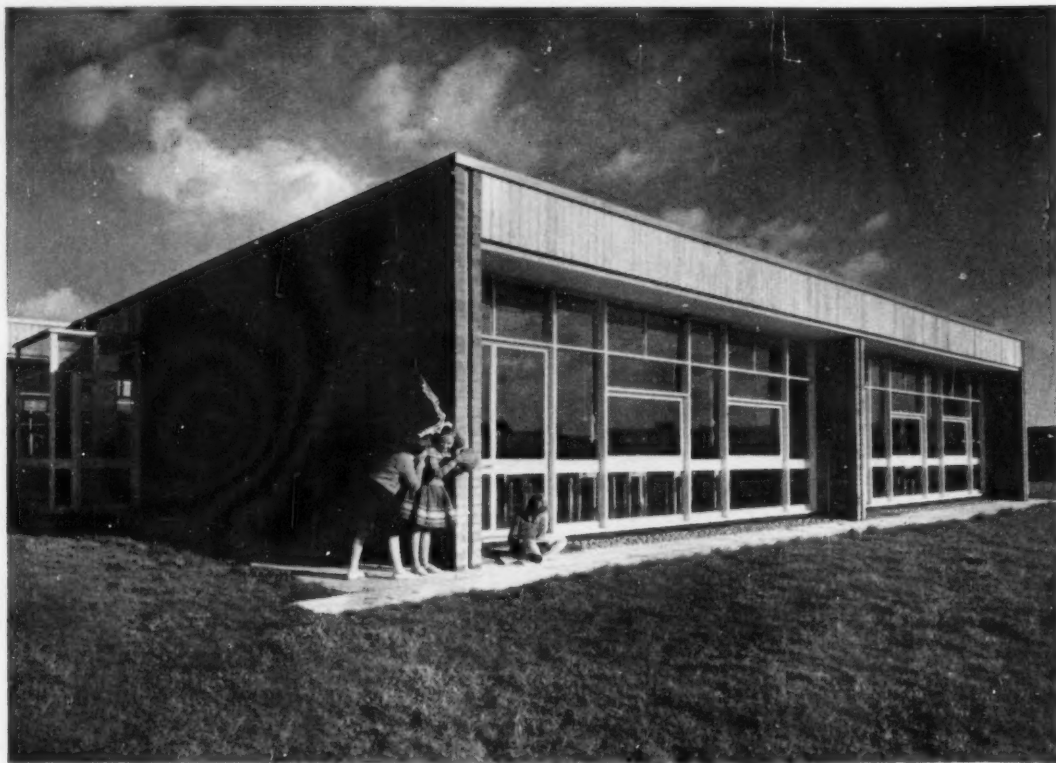
(a) A junior school comprising eight classrooms, each large enough for 40 children, a dining space which could be used as a temporary classroom, an assembly hall, head teacher and staff accommodation, library corner, doctor's room, ancillary accommodation, including kitchen, boiler house, stores, kiln room, lavatories and cloakrooms.

(b) There was a desire on behalf of the client to build a primary school using traditional materials but embodying all the successful features of the large number of primary schools built in framed construction in Hertfordshire over the past ten years.

(c) Although the M.O.E. cost per place stood at £154 at the time this school was designed, a limit of £150 per place was suggested as an exercise in economy without any reduction in the areas of rooms or quality of finish.

Access corridor past the administrative wing from the entrance area to dining space, opposite





Typical south elevation of the classroom pairs. The central division wall is slightly recessed, giving an inequality to the structural expression

One of the external courts on the south side of the school

Large internal court, with the dining space on the north side



building study—2nd series

SITE

The site of statutory M.O.E. acreage is flat, rectangular and uninteresting. It has no trees and was originally partially covered with large commercial greenhouses. On the eastern side they still exist beyond the boundary. On the southern and western boundaries, and to a certain extent on the north, the site is surrounded by housing development of mediocre design. Access to the site is across a relatively narrow open space between semi-detached dwellings. Water, gas and electricity connections are from the adjoining estate road off Cadmore Lane.

SUMMARY

Ground floor area: 14,722 sq. ft.
Total floor area: 14,722 sq. ft.
Type of contract: RIBA.
Tender date: April 1959.
Work began: May 1959.
Work completed: April 1960.
Tender price of foundations, superstructure, installation and finishes, including drainage to collecting manhole: £44,968 os. od.
Tender price of external works and ancillary buildings, including drainage beyond collecting manhole: £8,320 os. od.
Total: £53,288.

COST ANALYSIS

Based on tender. (AJ revised elemental breakdown in use from November 10, 1960.)

Preliminaries and insurances

0.3 per cent of remainder of contract.

Contingencies

Work below lowest floor finish

5-in. reinforced concrete site slab, partly on hardcore to make up levels.
Includes 2-in. preparatory bed of ashes and two coats damp-proof membrane.
Edge beam 8 in. × 13 in. under external windows.

STRUCTURAL ELEMENTS

Upper floors

Tank room: 1-in. softwood on joists; 33 sq. yds., 33s. od. per sq. yd.

Roof

17-in. deep patent plywood beams at 4-ft. centres, spanning up to 24 ft., and 2 ft. 5 in. deep spanning 40 ft., finished with two coats asphalt on 2 in. thick compressed straw panels.
Cost includes gutters, eaves, western red cedar fascias and 3-in. diameter aluminium rainwater downpipes; 1,610 sq. yds., 95s. 9d. per sq. yd.

Rooflights

32 rooflights with aluminium frames, opening and fixed, glass louvres, timber linings and curbs; 42 sq. yds., 66os. od. per sq. yd.

Ventilating rooflight over kitchen with adjustable glass louvres, timber linings and upstands; 21 sq. yds., 408s. 6d. per sq. yd.

External and internal structural walls

11-in. external walling, 4½-in. silver grey facings, 2-in. cavity, and inner leaf of 4½-in. commons; 605 sq. yds., 59s. 6d. per sq. yd.
Similar but with inner leaf of facings; 200 sq. yds., 75s. 11d. per sq. yd.
9-in. walling in commons; 321 sq. yds., 36s. 7d. per sq. yd.
9-in. walling in facings; 3 sq. yds., 61s. 10d. per sq. yd.
4½-in. walling in commons; 220 sq. yds., 18s. 2d. per sq. yd.

Windows

Timber frames with inset metal opening lights and doors, adjustable glass louvres; 5,769 sq. ft., 8s. 2½d. per sq. ft.
6 bay windows, each 8 ft. × 3 ft. × 9 ft. high, softwood framed including inset metal doors and adjustable glass louvres, chipboard roof finished in aluminium; 756 sq. ft., 30s. od. per sq. ft.

External doors

Doors to oil store: softwood boarding on mild steel angle; 132 sq. ft., 23s. 10d. per sq. ft.
(Remainder of external doors included in windows.)

Partitions

3-in. and 4½-in. lightweight concrete blocks; 324 sq. yds., 17s. 3d. per sq. yd.
Softwood glazed screens with inset metal doors and frames; 56 sq. yds., 82s. od. per sq. yd.
Softwood glazed screens to w.c.s, including flush doors; 58 sq. yds., 151s. 6d. per sq. yd.
Plywood w.c. partitions and doors; 84 sq. yds., 51s. 10d. per sq. yd.
Softwood lattice truss in assembly hall, faced with 1-in. boarding one side, 1-in. wallboard the other; 15 sq. yds., 126s. od. per sq. yd.
Softwood framed and glazed opening; 3 sq. yds., 126s. od. per sq. yd.

Internal doors

26 flush in softwood frames, including glazed laylights over to ceiling level; 208 sq. ft., 38s. 9d. per sq. ft.

Ironmongery

Anodised aluminium generally.

Total of structural elements: 28s 7½d

FINISHES AND FITTINGS

Wall finishes

Plaster; 888 sq. yds., 5s. 11d. per sq. yd.
Glazed wall tiling; 77 sq. yds., 53s. 3d. per sq. yd.

Floor finishes

2-in. precast concrete paving slabs; 8 sq. yds., 17s. 1d. per sq. yd.
2-in. granolithic; 29 sq. yds., 20s. 10d. per sq. yd.
6 in. × 6 in. × 7/8 in. blue quarry tiles; 164 sq. yds.,

Cost per
sq. ft.
s d

2

1 4½

5 3

4½

1

10 9

2 4

s d

5 0½

7 8½

2½

1 8

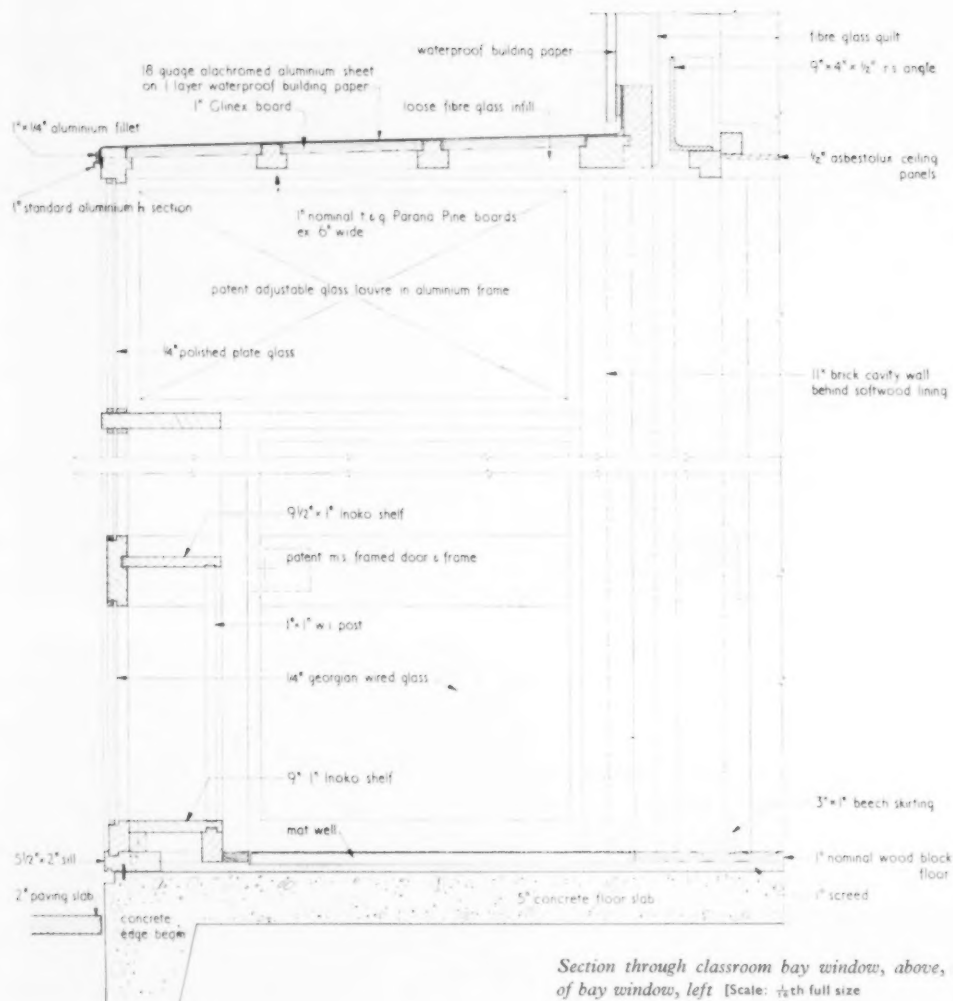
4½

5

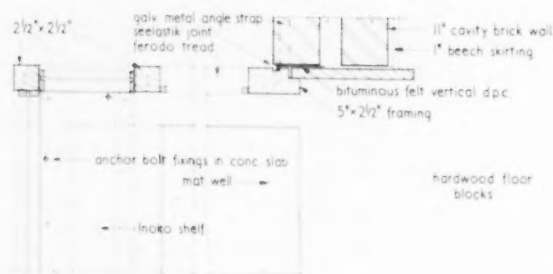
7½

5 2½

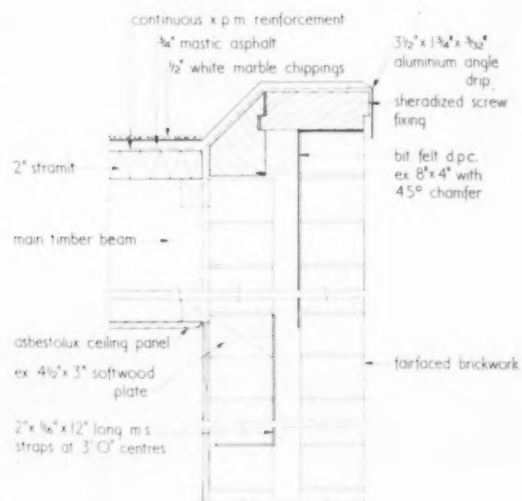
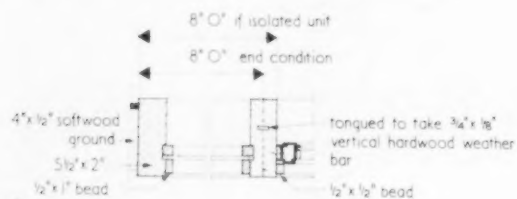
building study—2nd series

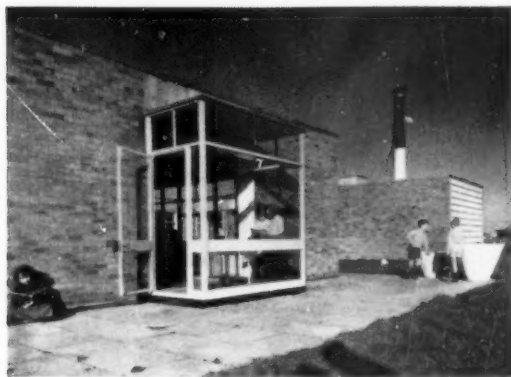


Section through classroom bay window, above, and part plan of bay window, left [Scale: $\frac{1}{16}$ th full size]

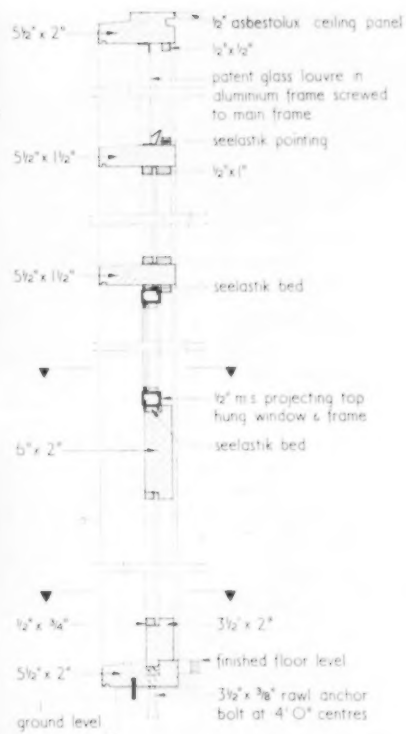


Part plan of typical window, below, and section through eaves, right [Scale: 1" = 1' 0"]





Each classroom is provided with a fully glazed bay window
Entrance hall, which overlooks a smaller internal court



Section through typical window [Scale: 1" = 1' 0"]

Assembly hall with its decoratively panelled ceiling



building study—2nd series

40s. 4d. per sq. yd.
 $\frac{3}{8}$ -in. rubber flooring; 181 sq. yds., 52s. 0d. per sq. yd.
 1-in. East African olive wood block; 827 sq. yds., 43s. 4d. per sq. yd.
 1-in. Rhodesian teak wood block; 378 sq. yds., 45s. 7d. per sq. yd.

Ceiling finishes

$\frac{1}{2}$ -in. insulation board on timber noggings on hangers; 984 sq. yds., 15s. 0d. per sq. yd.
 Asbestos cement panels on timber noggings on hangers; 200 sq. yds., 26s. 4d. per sq. yd.
 Parana pine tongued and grooved boarding, secret nailing; 385 sq. yds., 15s. 4d. per sq. yd.
 2-in. woodwool slabs; 96 sq. yds., 14s. 7d. per sq. yd.
 Fire-resistant plaster to concrete soffit; 22 sq. yds., 102s. 6d. per sq. yd.

Decorations

Gloss paint on softwood and metalwork, semi-gloss wall plaster, distemper on ceilings.

Fittings

8 classroom softwood cloakroom fittings on metal supports 1 $\frac{1}{2}$ d.
 Venetian blinds; 194 sq. yds., 46s. per sq. yd. 6 $\frac{1}{2}$ d.
 104-ft. run of curtain track; 16s. 7d. per ft. run 1 $\frac{1}{2}$ d.
 Pin-up board; 297 sq. yds., 16s. 2d. per sq. yd. 3 $\frac{1}{2}$ d.
 Kitchen servery counter and roller shutters 4d.
 Worktops and draining boards; 147 ft. run, 17s. 2 $\frac{1}{2}$ d. per ft. run 2d.
 11 cupboard door fronts 1 $\frac{1}{2}$ d.
 Shelving to kitchen and games stores; 267 ft. run, 5s. 1d. per ft. run 1 $\frac{1}{2}$ d.
 Shelving in classrooms; 250 sq. ft., 15s. 5d. per sq. ft. 3d.
 Hardwood dado rail in classrooms; 504 ft. run, 12s. 8d. per ft. run 4 $\frac{1}{2}$ d.
 Other items, including window shelves 0 $\frac{1}{2}$ d.
 Builder's work fixing equipment not in contract 2d.

Total of finishes and fittings: 12s 9 $\frac{1}{2}$ d

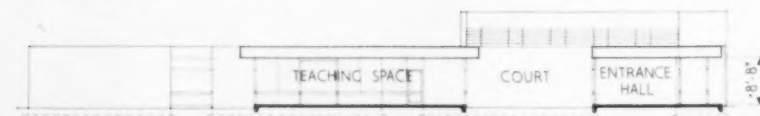
SERVICES**Sanitary fittings**

All fittings white glazed fireclay to Herts. design.

Type	No. of each type
Wash basins	25
Sinks	13
Drinking fountain	1
W.c.s	23
Urinal	1



Section through assembly hall, above, and section through school, looking west [Scale: $\frac{1}{8}$ " = 1' 0"]



s d

Waste, soil and overflow pipes
 Copper wastes and vent pipes

s d
2**Cold water services**

Galvanised iron and copper tubing.
 Two 800-gallon storage tanks.
 Includes builder's work, 2 $\frac{1}{2}$ d.

1 3 $\frac{1}{2}$ 2 0 $\frac{1}{2}$ **Heating and hot water services**

Gas boiler and 150-gallon indirect cylinder for summer supply of hot water to kitchen; 26,000 B.t.u.s per hour:

6 3 $\frac{1}{2}$

Oil-fired boiler supplying warm air units and indirect cylinders;
 826,000 B.t.u.s per hour:

2d.

Fuel for testing:

5s. 0 $\frac{1}{2}$ d.

17 heater cabinets and associated cupboards:

0 $\frac{1}{2}$ d.

Builder's work:

10 $\frac{1}{2}$ d.

2d.

2 2 $\frac{1}{2}$ 2 8 $\frac{1}{2}$ **Gas services**

Supply to 8 outlets in kitchen.
 Includes builder's work.

2 $\frac{1}{2}$ **Electrical services**

Lighting to 173 outlets:
 Light fittings:
 Power supply to 78 outlets:
 Power supply for hearing installation:
 2 water heaters:
 Builder's work:

8d.

6d.

6d.

3d.

0 $\frac{1}{2}$ d.2 $\frac{1}{2}$ d.2 2 $\frac{1}{2}$ **Drainage**

Separate system with surface water outfalls.
 Pitch fibre pipes and brick manholes.

1 10 $\frac{1}{2}$

Total of services: 12s 11d

External works

Playgrounds:
 Roads, paths and paved areas:
 Service connections:
 Site layout and planting:
 Fencing and gates:
 Preliminaries, insurances and contingencies:

2s. 5 $\frac{1}{2}$ d.

3s. 2d.

2s. 6d.

2s. 2 $\frac{1}{2}$ d.8 $\frac{1}{2}$ d.2 $\frac{1}{2}$ d.11 3 $\frac{1}{2}$ **Net cost per sq. ft. of floor area:**

£44,968 (net cost excluding all external works)

= 61 1 $\frac{1}{2}$

14,722 sq. ft. (measured inside external walls)

SUMMARY OF COSTS ON MOE BASIS

Number of cost places: 320

Floor area in sq. ft.: 14,722

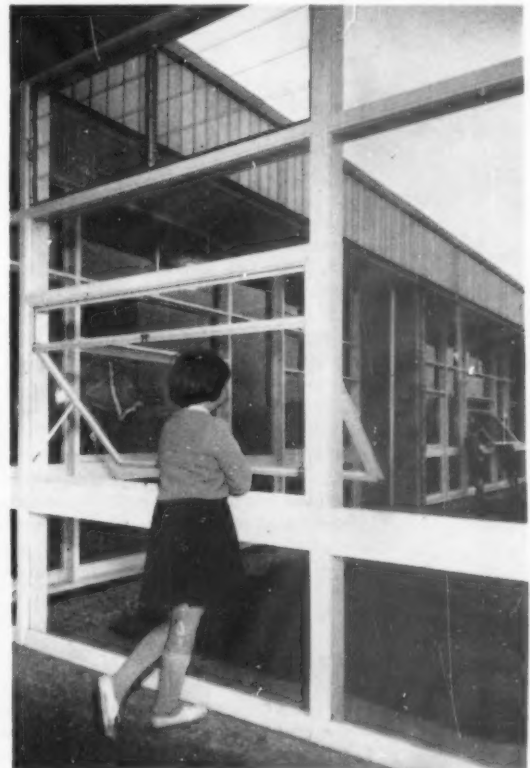


Following standard practice in Herts for primary schools, in each classroom the heating, plumbing and teacher's storage are grouped together into one compact unit between the main teaching space and the cloaks/practical area



Typical link circulation to a pair of classrooms

Detail of the fenestration used throughout the building



Teaching space, looking towards the practical area



building study—2nd series

Area per place in sq. ft: 46
 Net cost (including playgrounds): £46,779 os. od.
 Net cost per place: £144 3s. 2½d.
 Net cost per sq. ft: 63s. 6½d.
 Additional costs: £6,509 os. od.
 Gross cost: £53,288 os. od.

COST COMMENTS

Obviously it is an achievement to have been able to build a school in conventional construction and in the outer fringes of London at an MOE net cost of under 64 shillings a square foot. This would seem to be convincing evidence in favour of the use of some rationalised form of load-bearing construction such as this example for minor projects in the typical local authority programme. This may not, of course, always remain true, if in the future some structural system is specially developed for this type of building, such as a scaled-down CLASP.

Despite this low cost, the analysis reveals quite clearly that the building is in no sense a "cheap" school. The architect has, for instance, had the planning freedom to design a school with an external walling and window to floor area ratio of about 1:03. As another example, he has been able to spend over five shillings per square foot on floor finishes. In general, the analysis compares quite closely with the most recently published schools of a similar structure in this series, the two village schools designed by the MOE development group at Finmere, Oxfordshire, and Great Ponton, Lincs. (AJ, 30.6.1960.)

Group of elements	Finmere		Great Ponton		Cheshunt	
	s.	d.	s.	d.	s.	d.
Preliminaries, etc., work below ground floor level	8	0½	9	0½	6	9½
Structure	29	2½	24	4½	28	7½
Finishes and fittings	15	2	14	9½	12	9½
Services	13	7½	14	5½	12	11
Playgrounds	3	10	3	2½	2	5½

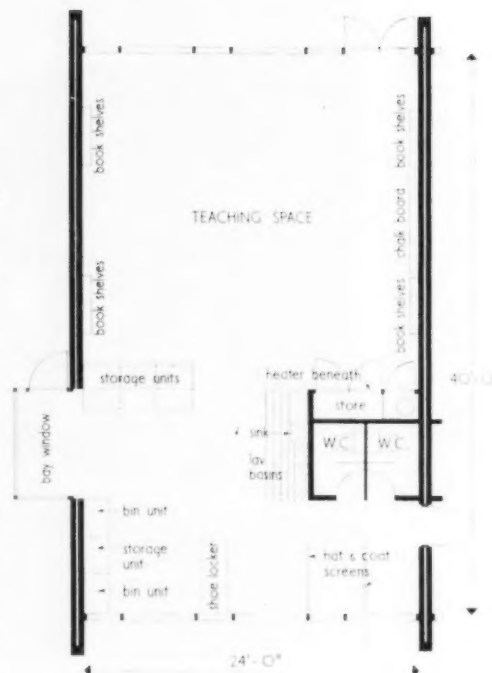
Total MOE net cost per square foot 69 10½ 65 10½ 63 6½
 The Herts school, because it is a considerably larger building than either of the two MOE examples, costs less in various respects. This is revealed not only in the playgrounds element, but also in a considerable saving on sanitary fittings, which cost 10½d. in comparison with nearly two shillings for each of the other two schools. Preliminaries and insurances are also smaller.

There is also a difference in finishes, the combined cost of wall finishes and decorations showing a saving of about two shillings, due apparently to the greater use of fairface brickwork internally.

One fact must be borne in mind in studying this analysis, that the school has benefited from the fact that it forms part of a large and continuous programme of building. The fittings, for instance, are largely supplied by bulk purchase on prices based on competitive tendering. In a slightly different way, to be able to carry out the electrics at 2s. 2½d. per square foot reflects the high level of expertise that has been built up through the years in the county in controlling the cost of this and other service elements.

CONTRACTORS

General: Townsend & Collins Ltd. Sub-contractors and suppliers—Hardwood flooring: Viger Bros. Ltd. Heating: C. S. Thompson Ltd. Electrical: H.F. Scrivens Ltd. Venetian



Plan of standard teaching space [Scale: 1/8" = 1' 0"]

blinds and roller shutters: Tidmarsh & Sons Ltd. Water-proofing compound: National Coal Board. Facing bricks: E. H. Smith (London) Ltd. Bituminous damp-proof course: Ruberoid Co. Ltd. Lead-cored damp-proof course: Engert & Rolfe Ltd. Pitch fibre drain pipes: Key Engineering Co. Ltd. Clinker blocks, manhole covers, gullies, connectors: Broad & Co. Ltd. Compressed straw slab: Stramit Board Ltd. Asphalt: Bennett Asphalters Ltd. Quarry tile pavings and skirtings: Wheatley & Co. Ltd. Floors and finished surfaces: Floor Treatments Ltd. Rubber flooring: S. Bennett & Son (Wood Flooring) Ltd. Glue and adhesives: Evode (Industrial Adhesives Division). Ironmongery: James Gibbons Ltd. Flush doors: Jayanbee Joinery Ltd. Insulation panels: Gliksten Building Materials. PVC signs: Compra Plastics Ltd. Ply roof beams: Robert H. Hall & Co. (Kent) Ltd. Ceiling panels: Bowaters Ltd., Cape Asbestos Ltd. Plastic sheets: Bakelite Ltd. Shelf brackets: Savage & Parsons Ltd. Curtain track: Silent Gliss Ltd. Window louvres: N. V. Appleton Pty. Ltd. Metal windows and doors: S. Warner & Son Ltd. Wall tiles: H. & R. Johnson Ltd. Sanitary fittings: Adamsez Ltd. Sanitary waste fittings: Econa Modern Products Ltd. Boiler and valves: Crane Boilers & Radiators Ltd. Oil burner: Nu-Way Heating Plants Ltd. Oil burner controls and thermostats: Rheostatic Co. Ltd. Fan convectors: Copperad Ltd. Heating accelerator: Turner Turbines Ltd. Hot water cylinders: Rother Boiler Co. Ltd. Thermostat mixing valves: Gummerts Ltd. Light fittings: F. Lomas Ltd. Electric control panel: Midland Electrical Co. Ltd. Switches and sockets: Crabtree. Clocks: Gents Ltd. Water heaters: Sadia. Glazing putty: Sealanco (St. Helens) Ltd. Paints, varnishes, distempers: Murray & Jones Ltd. Anti-condensation paint: British Lead Mills Ltd. Anti-rugine liquid: Charles Turner & Son Ltd. Bitumen macadam paving: Constable Hart & Co. Ltd. Door stops: Gardiner, Sons & Co. Ltd. Letter-box: G. A. Yorke & Son. Entrance gates: Hills (West Bromwich) Ltd. Concrete flower pots: Walter Lawrence & Son Ltd.

It pays you and your clients to put in *solid fuel* central heating



Lowest running costs. The big news in central heating these days is the amazing cheapness of the solid fuel systems. For example, the average weekly running cost for a two- or three-radiator system can be as little as 11/1d! Just compare that with oil, gas and electricity—see chart on right.

Lower installation costs. Compared with oil, solid fuel systems are much cheaper to buy and install. The new solid fuel boilers are really streamlined and require very little attention. They are thermostatically controlled and finished in gleaming vitreous enamel in a range of modern colours.

N.C.B. Housewarming Plan—offers a personal loan to cover the cost of a central heating installation. Low interest—five years to pay—tax relief.

Lowest maintenance costs. Solid fuel systems cost practically nothing to maintain. But with other fuels, skilled maintenance is necessary and this can cost from £5 to £15 per year—another 2/- to 6/- a week on the running cost.

Compare the costs. These are typical weekly costs, averaged over the year, for centrally heating a three-bedroomed house or bungalow—and hot water summer and winter. Look now much cheaper solid fuel is.

6 or 7 radiators and hot water ▼			
2 or 3 radiators and hot water ▼			
COKE In independent boiler	10/- per cwt	11/1d	16/8d
SMALL ANTHRACITE In gravity feed boiler	12/6d per cwt	—	14/8d
GAS	1/4d therm plus, say, 2 8d a week standing charge	16/1d	23/6d
ELECTRICITY	1d unit (No standing charge included)	18/2d	29/10d
OIL	1 5/4d gallon	*13/-	*23/-

* plus 2/- to 6/- a week maintenance cost.

Write for FREE booklet on Central Heating and list of other technical publications to the Coal Utilisation Council, 3 Upper Belgrave Street, London, SW1. Also available 'Central Heating for Houses', a complete 120-page illustrated survey of all the various systems available, from the open-fire-and-back-boiler to the small pipe system. Copies 2/6d each.

The cheapest central heating there is – SOLID FUEL



ISSUED BY THE COAL UTILISATION COUNCIL





Which
laminate
will give
me more
creative
scope?

FABLONITE

THE LIFETIME LAMINATE

FABLONITE is the new *top-quality* laminate that introduces over 70 new and exclusive stylings. There are 13 exceptionally realistic wood grains (their unique long 'repeats' defy detection!) . . . 18 pure plain colours . . . hosts of colourful patterns. The glorious 'Harmony' stylings (combining two or more effects in one distinctive panel) give individuality to built-ins and make interesting focal points. FABLONITE *costs less to use*—list price is only 3/9 per square foot in the standard range (including wood grains). *Planned nationwide distribution* ensures that you get the FABLONITE you want, *where and when you want it*. No costly hold-ups . . . no last-minute changes of plan!

The Fablon Building Division is ready to assist you with technical information. For details of prices, stylings and specifications, post the coupon today, to FABLON LTD., 49 PARK LANE, LONDON, W1

Fabulous New **Fablonite**

To: FABLON LIMITED · 49 Park Lane · London W1

Please supply details of FABLONITE prices, stylings and specifications. ☐

Please arrange for a FABLONITE consultant to call by appointment. ☐

(TICK WHERE APPLICABLE)

NAME _____

ADDRESS _____

A.J.7

Contract administration

adjoining owners

17

From the site analysis it should be evident what rights or easements an adjoining owner could justifiably claim to enjoy over your site or building. There is a legal obligation to respect these or otherwise come to terms with the adjoining owner in settlement of them. Consideration must therefore be given to the effect your building will have on the rights of light, air, access, support, drainage or other essential services to his building. Enquiries should be made of your client as to any restrictions over the land, but do not rely uncritically on information given by third parties and, if necessary, insist on written advice from your client's solicitor.

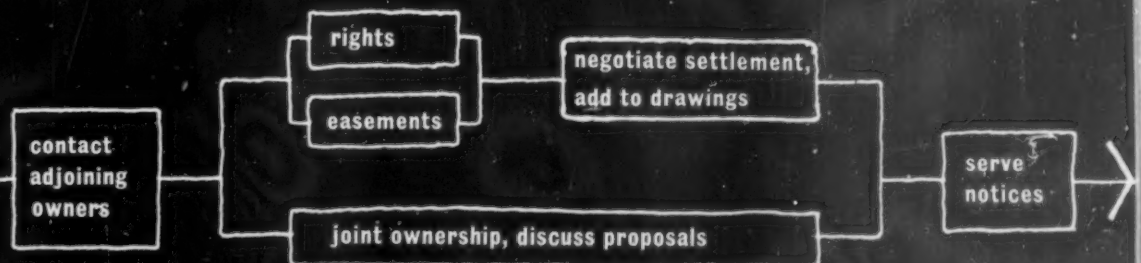
Bearing in mind that your client may wish to make use of similar rights which

have been established by a building which exists on or previously occupied his own site, each condition must be satisfied by mutual agreement or settlement at this stage, as oversight can be very expensive to rectify.

Where proposals include works to a wall, foundations, or parts of the structure which are jointly owned by the building owner and adjoining owner under the terms of the London Building Acts, the precise boundary should be established and the Acts complied with in respect of the service of notice of intention to carry out the works according to type of work.

The London Building Acts set out specifically by definition the appropriate categories of *party* or joint ownership, the rights enjoyed by each owner to

carry out works to the structure, the financial settlement or respective liabilities in each category, and the conditions under which notice must be served on an adjoining owner or owners. In any event, inform the adjoining owner of intended works even if notice is not required. Where minor works only are necessary such as insertion of a beam into the wall, these are very often settled by discussion or letter rather than formal notice. As works must always comply with the regulations governing construction related to party structures discuss proposals with the district surveyor or local authority before serving notices, or settling minor works with adjoining owners.



Contract administration

party structure notices

18

Works to a party structure require the service of formal notice to the adjoining owners under the terms of the London Building Acts, and drawings showing the proposed work should be prepared to accompany the notices.

The RIBA have formal notices dealing with each of the categories of works to jointly-owned property as follows:—
Form A—Party Structures.

B—Party Fence Walls.

C—Intention to build within ten feet and at a lower level than the bottom of the foundations of Adjoining Owner's Building.

D—Intention to build within twenty feet of the Adjoining Owner's independent building and to a depth as defined in Section 50 (1) (b).

E—Party Walls and Party Fence Walls on line of junction of adjoining lands.

F—Walls or Fence Walls on Building

Owner's land with footings and foundations projecting into Adjoining Owner's land.

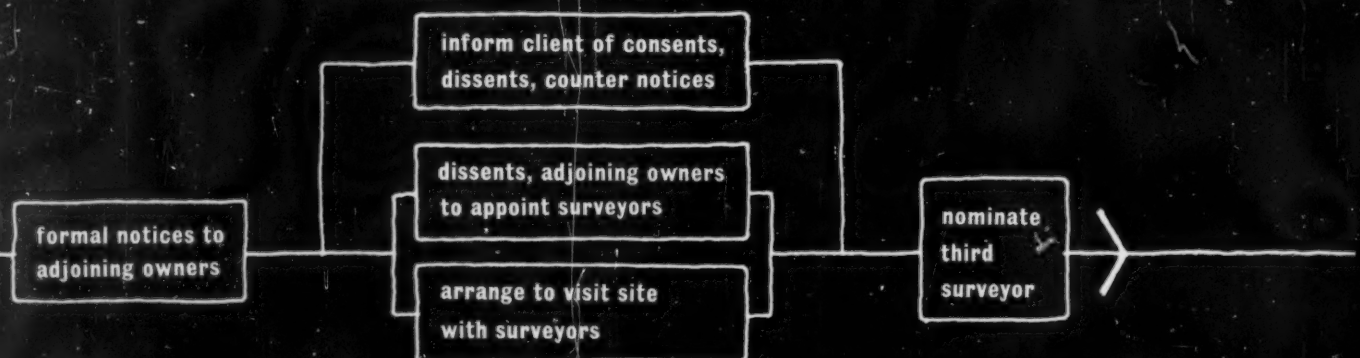
G—Selection of Third Surveyor.

Each form sets out the general terms and conditions of the relative parts of the Act for the information of the person on whom it is served. The sections of the act specifically relating to the works and a description of the works are to be entered on the form to suit the particular case.

Adjoining owners include all those with a lease of more than 12 months and each of these must independently have notice. These should be served in accordance with the Act and allowing the specified time before it is intended to start work—e.g., A Party Structure Notice should allow 2 months before work is to begin. On receipt of notice each adjoining owner has the right to:

- (a) serve a counter notice relating to his own requirements with full descriptions and drawings for which work he must pay. This must be served within the specified time and the building owner must comply unless the works requested are injurious or cause delay or he dissents by not replying within 14 days.
- (b) agree in writing within 14 days from the service of the Party Structure Notice.
- (c) dissent by not writing within 14 days from service of the Party Structure Notice after which a difference is established and he must appoint a surveyor to act for him.

The Party Structure Notice is not effective unless work to which it relates is started within 6 months from date of notice.



Contract administration

party structure settlement

19

Dissent to a Party Structure Notice is established by an adjoining owner not consenting in writing to the works described in the notice within 14 days. After that time the adjoining owner must either:—

(a) Agree to use the same surveyor as the building owner to settle the difference—known as the Agreed Surveyor.

(b) Nominate his own surveyor.

Where he nominates his own surveyor the two surveyors must nominate a third surveyor.

The following points are to be borne in mind during negotiations.

1. The adjoining owner has ten days after written request to appoint his

surveyor. Failure to do so gives the building owner's surveyor the right to proceed as an Agreed Surveyor.

2. Either surveyor must act within 10 days of written request to select a third surveyor or the superintending architect of the Council may act on application from the other surveyor in selecting the third surveyor.

3. If a third surveyor does not act within 10 days of written request another third surveyor may be selected by the other two.

4. All appointments must be made in writing.

5. The Agreed Surveyor, or any two surveyors shall settle by award any

dispute relative to the party structure notice.

6. The Third Surveyor makes the award if no two are able to agree within 14 days of a request to do so.

7. The award shall be conclusive and shall include the costs incurred for the works and the award as decided by the surveyor or surveyors.

The draft award of description of work and drawing are prepared by the building owner's surveyor and exchanged with the adjoining owner's surveyor until agreed, after which the final documents are exchanged and each deposited with the respective owners to become part of title. Keep your client informed.

prepare draft
awards and costs

submit to adjoining
owners' surveyors for
comment or approval

submit final
awards, exchange
and settle costs

agree periodical
inspection on site
and on completion

awards
to client,
add to
drawings

Contract administration

drawings programme

20

Drawings, from this point forward, are prepared for the sole purpose of conveying information to the people concerned with erecting the building. It is important, therefore, that you base them upon and relate them to accurate survey drawings; that you follow a well-pre-planned system of setting down the information and that the system you adopt will do everything to avoid ambiguity in interpretation.

In principle the drawings programme should follow a pattern which absorbs consultants' and other information at the right stage to avoid constant repetition and modification.

1. The design drawings should be

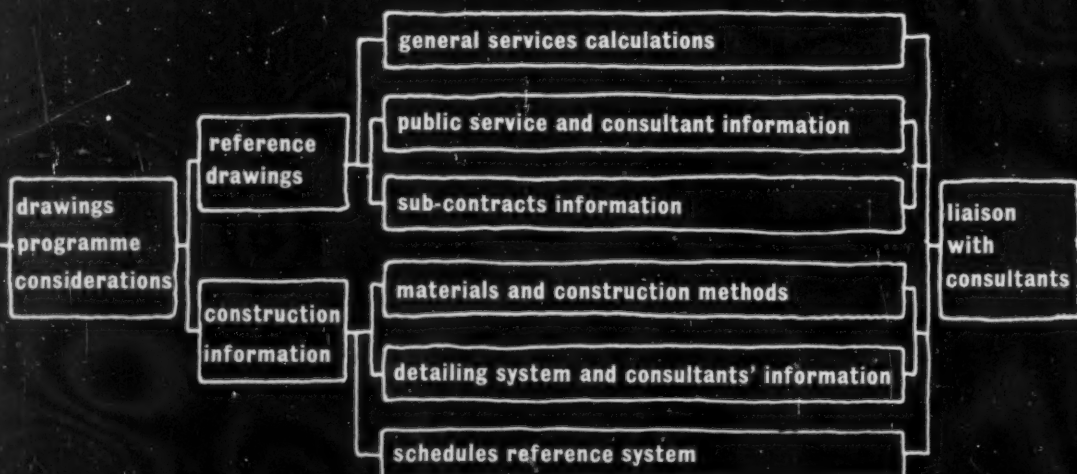
developed to a stage where they act as key or reference general layout drawings and carry only as much general information as is necessary to obtain all consents. It is in this stage that:—

- a. Calculations are made for thermal insulation, sound transmissions, acoustics and insulation, heating, ventilation and light
- b. They are exchanged with engineers and other consultants for layouts of respective requirements.
- c. They absorb from Public Service Departments information on existing and suggested new services.
- d. They form the basis of discussion with representatives for general

trade enquiries on sub-contract or suppliers' work.

2. The second stage which should run concurrently with the calculations, discussions and enquiries, is the preparation of draft details and schedules based on the analysis of incoming information and the materials and construction methods under consideration. You must work in constant liaison with your consultant on this.

3. The final stage is when all information is brought together to form one comprehensive set of "contract drawings" from which quantities will be taken and the work carried out on site.



working detail

STAIRCASES: 59

STAIRCASE: RESTAURANT NEAR ATHENS

P. A. Sakellarios, E. Vourekas and P. Vasiliades, architects (material supplied by G. Uregian)



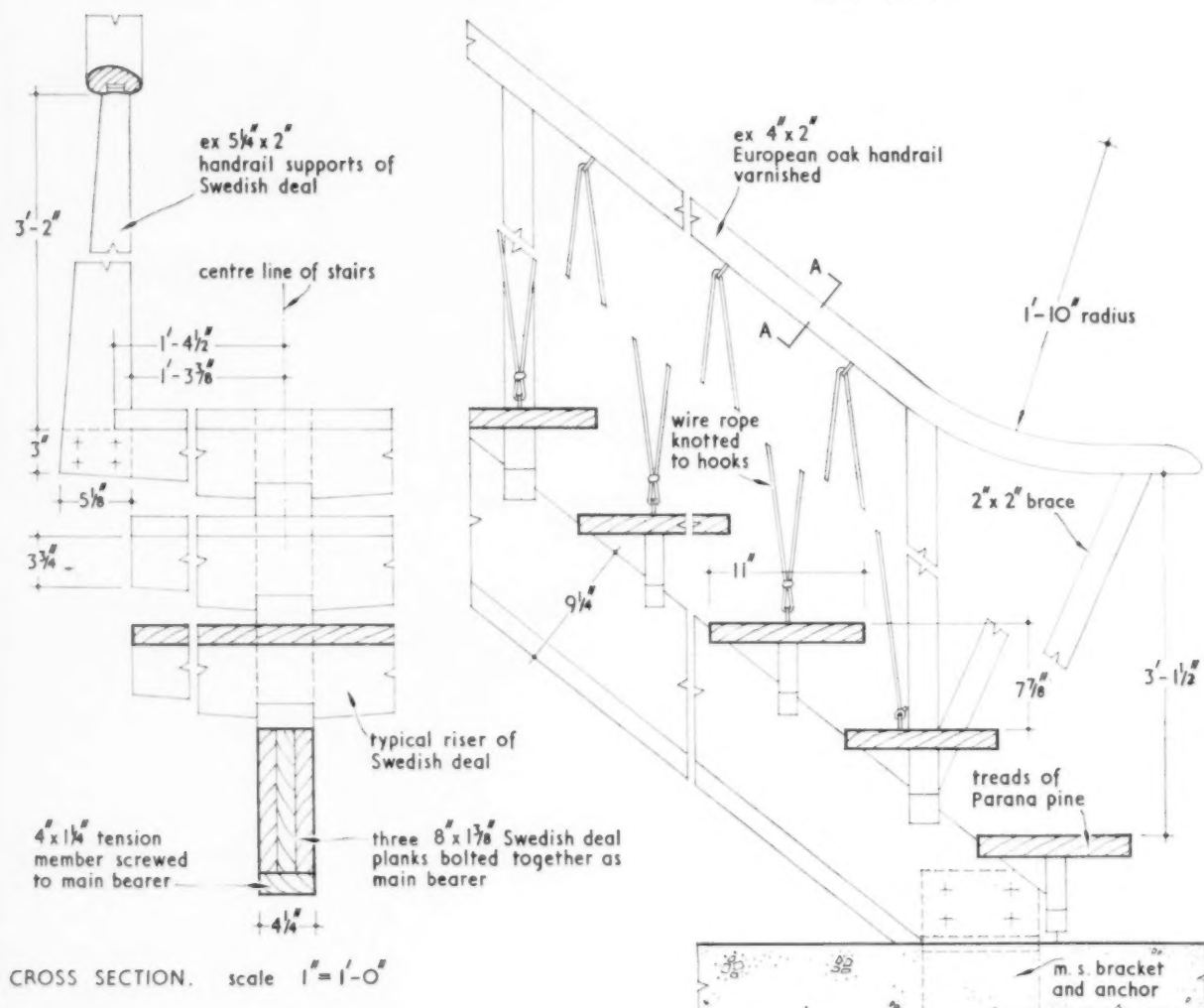
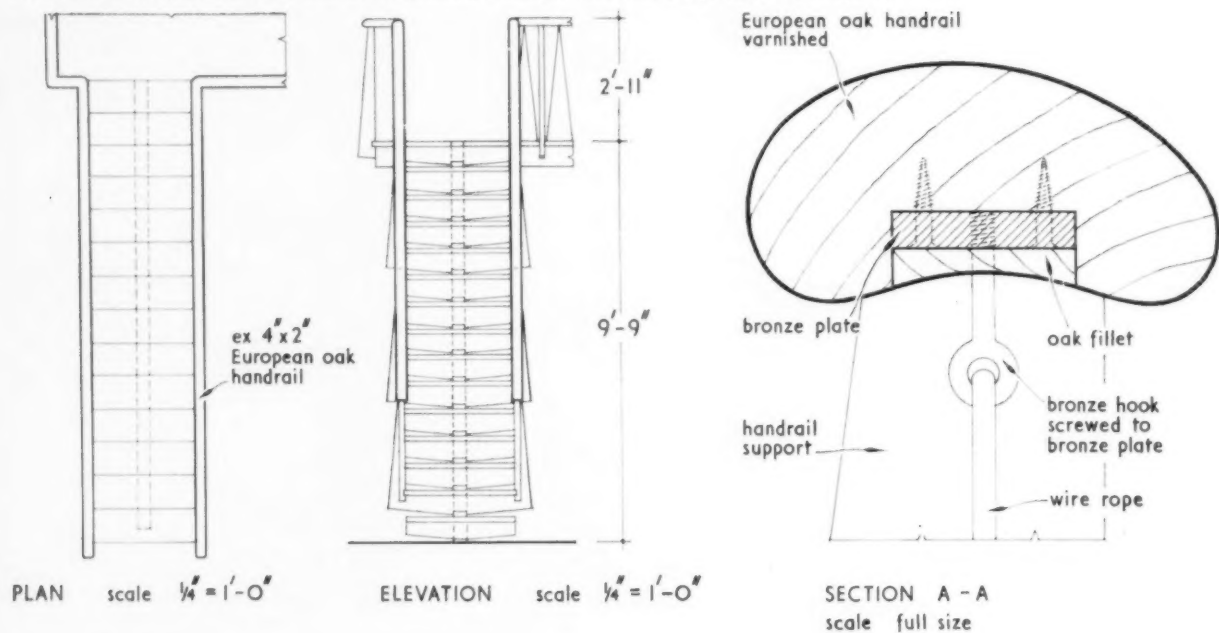
This timber staircase with central carriage shows exceedingly careful detailing. Note in particular the attachment of the bronze hooks holding the wire rope balustrading.

working detail

STAIRCASES: 59

STAIRCASE: RESTAURANT NEAR ATHENS

P. A. Sakellarios, E. Vourekas and P. Vasiliades, architects (material supplied by G. Urégian)



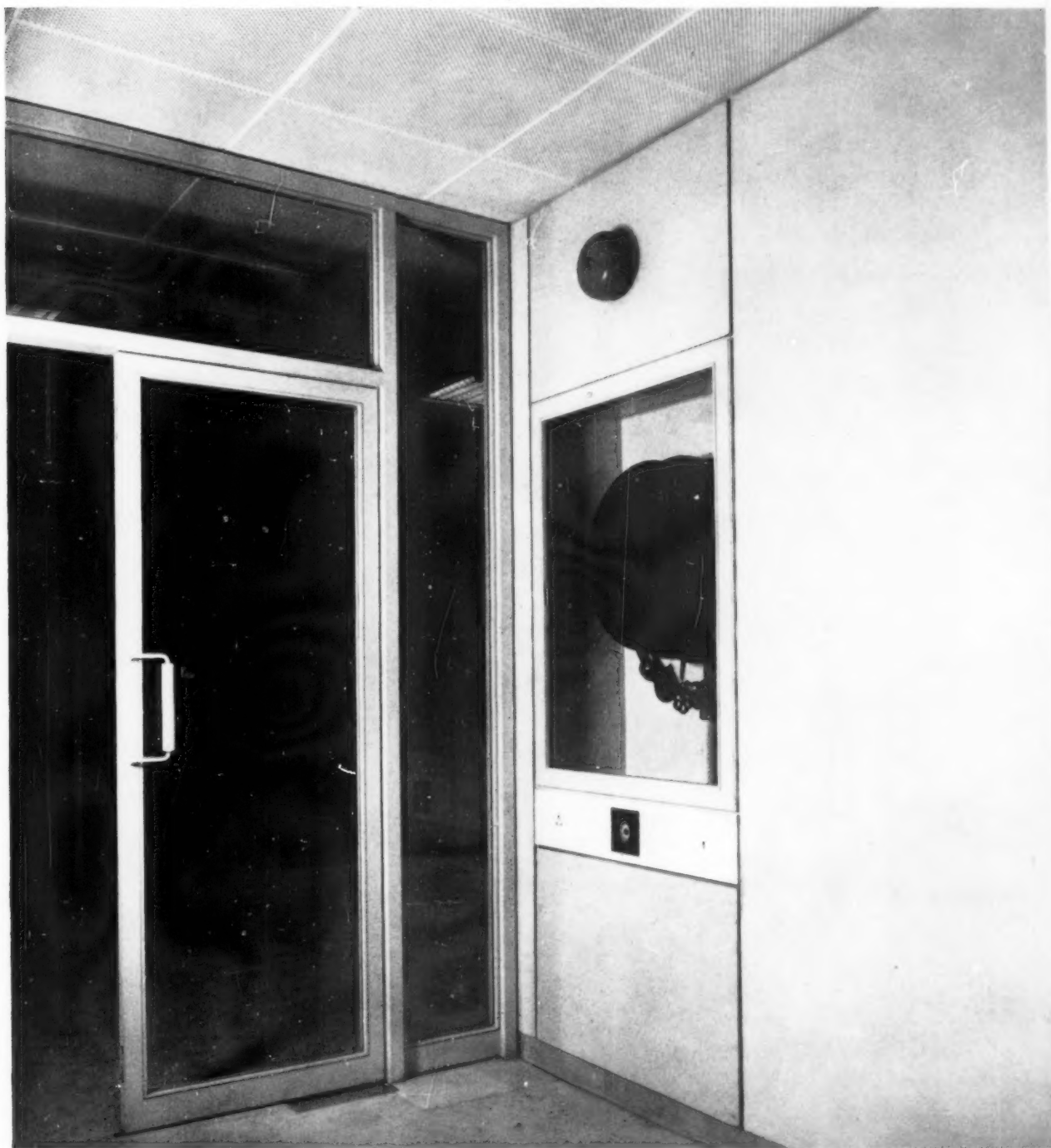
note: figured dimensions in feet and inches are approximate

working detail

FURNITURE AND FITTINGS: 107

HOSE-REEL RECESS: OFFICE BUILDING IN LONDON, W.1

Eero Saarinen and Associates in association with Yorke, Rosenberg and Mardall, architects.



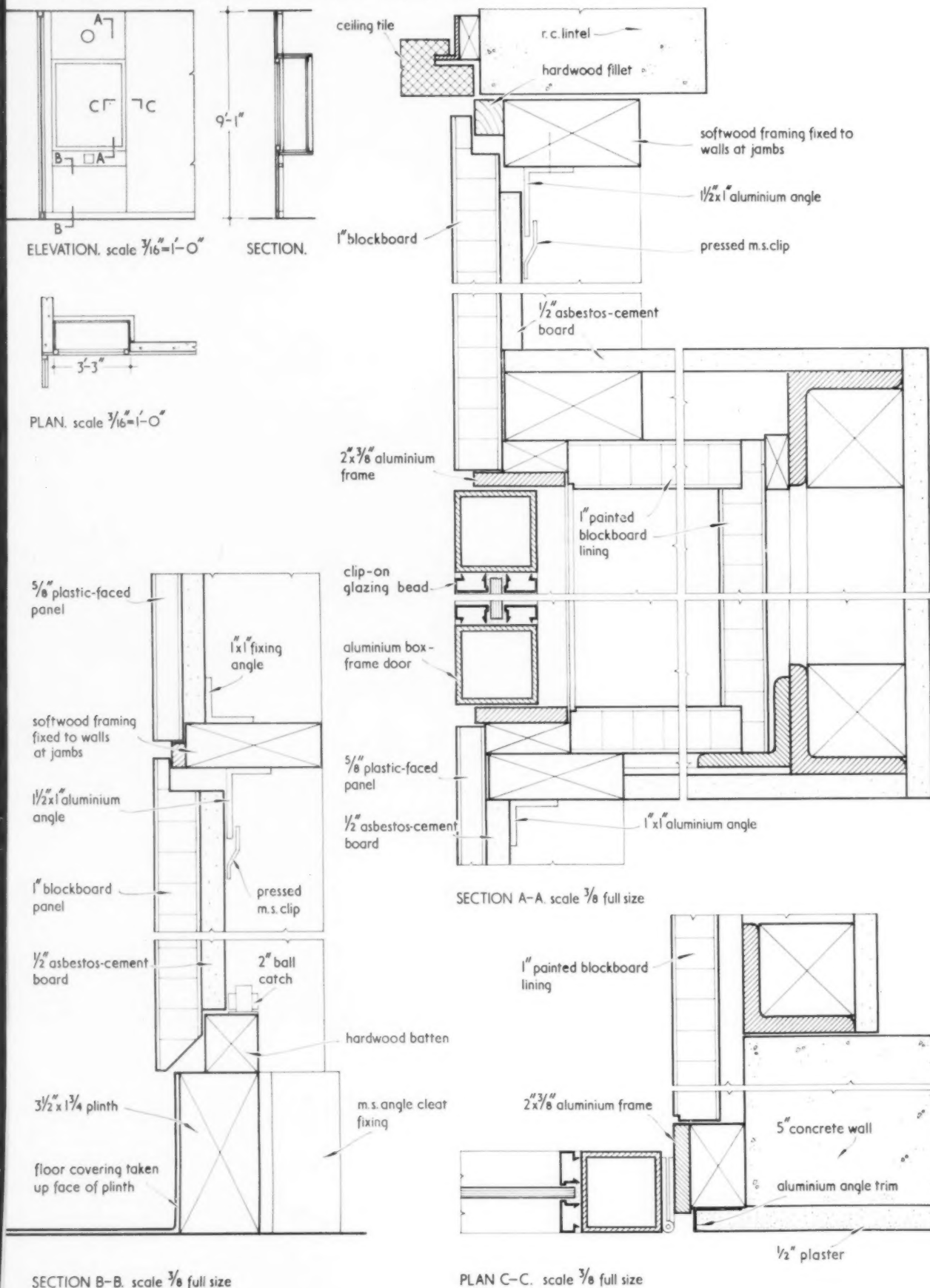
The narrow melamine-faced panel immediately below the aluminium window enclosing the recess contains the fire alarm push button (centre), a socket outlet (left) and a keyhole. The last two are both cut directly into the plastic panel with no cover plate.

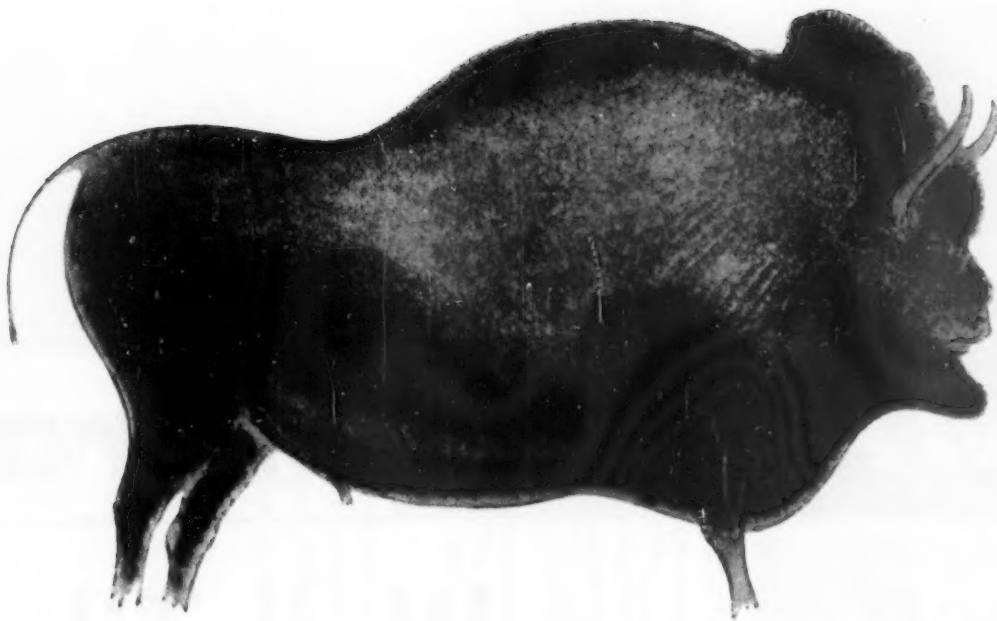
working detail

FURNITURE AND FITTINGS: 107

HOSE-REEL RECESS: OFFICE BUILDING IN LONDON, W.1

Eero Saarinen and Associates in association with Yorke, Rosenberg and Mardall, architects





*Reproduced by permission of the Institut
de Paléontologie Humaine, Paris*

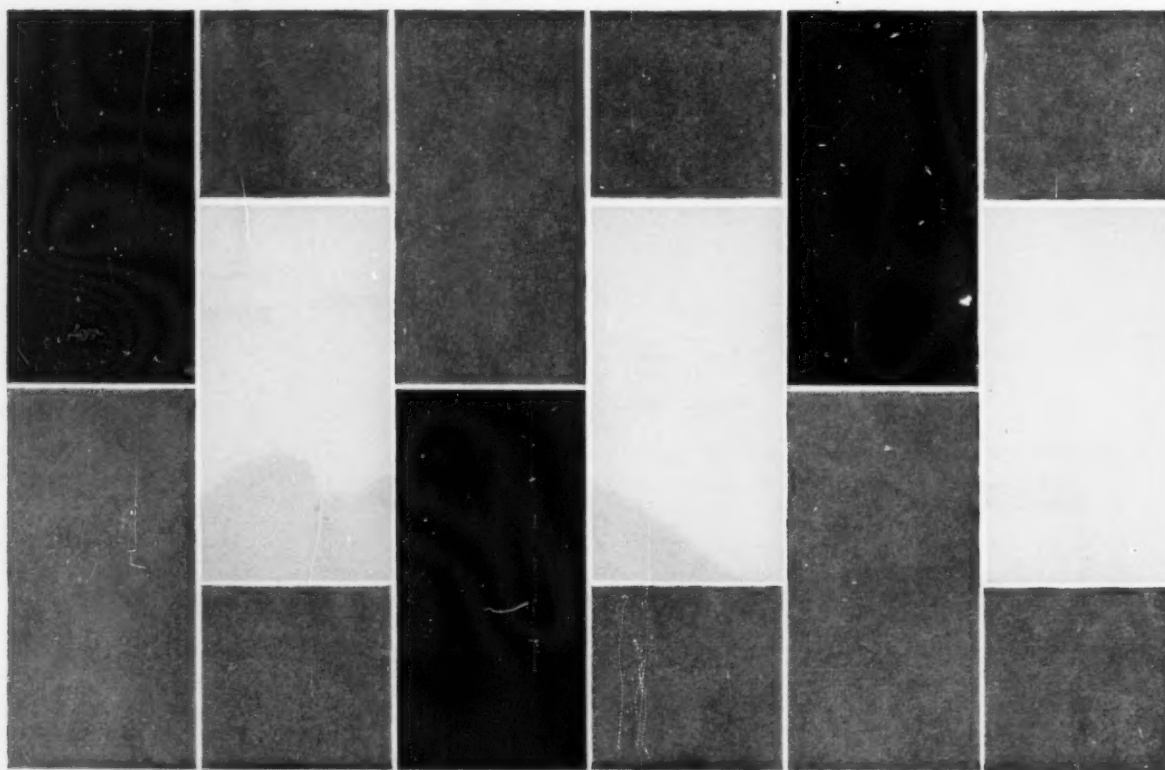
An engraved and painted red and brown Bison probably not less than 20,000 years old. It is to be found in the cave at Font-de-Gaume, Dordogne, France. This and other paintings were most beautifully copied by Abbe Breuil during the first few years of this century.



It is believed that in these decorated caves certain rites were performed by prehistoric man intended to aid him in his hunting.

The Bison is represented in cave art more than any other animal and must have been of special significance to prehistoric man as, indeed it was to the founders of Concrete Limited when they chose a Bison as a trade mark to represent the "speed" and "strength" of precast concrete. Concrete Limited today are the largest structural precast concrete specialists in the world. London *Whitehall* 5504 Birmingham *Midland* 0331 Leeds *Leeds* 73211 Glasgow *City* 3292

640



MARLEY*mura*

12x6 Vinyl Wall Tiles

Durable, easily maintained Marleymura Vinyl Wall Tiles in an interesting, all-through-colour range, gauge jointed in white, are impervious to atmospheric conditions. Particularly suitable for restaurants, canteens, cloak and reception rooms, staircases and shops: Marleymura Wall Tiles provide attractive relief for the monotony of large wall areas, and contribute years of decorative practical beauty.

Complete technical information is available on request from



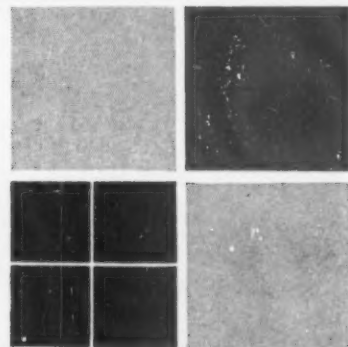
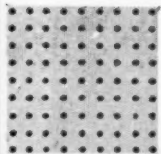
SEVENOAKS · KENT · Sevenoaks SS255 London Showrooms · 251 Tottenham Court Rd. · W1

Multi-Storey Car Park

When completed this multi-storey car park, which is now under construction at Lee Circle, Leicester, will accommodate 1,044 cars. It will consist of a double spiral ramp, arranged rather like the double thread of a screw, with 174 cars on each of six levels. In addition, the scheme will include car showrooms, workshops and a filling station. The structural engineers are G. C. Mander & Partners, and the consultant architects are Fitzroy Robinson & Partners.



go by THE BOARD



... and if the board is Unitex you can't go wrong. Unitex Enamel board is the ideal wall and ceiling surface where a ready decorated finish is required. With the minimum labour it provides a high gloss enamel finish for Kitchens, Bathrooms, Canteens, Food Stores, in fact where it is necessary to have a surface that can be easily wiped down. Unitex Enamel Board can also be supplied perforated for use in shops for displays, decoration, etc. Unitex board is available in a wide choice of colours, and can be with tiled, plain or perforated surfaces.

Save time, labour
and costs with



enamelled hardboard

Write or 'phone for further details to: **The MERCHANT TRADING COMPANY Limited**

ADRIENNE AVENUE, SOUTHALL, MIDDLESEX. WAXlow 6381 (7 lines)



Announcements

PROFESSIONAL

W. D. Campbell, A.R.I.B.A., and J. E. Arnott, A.R.I.B.A., have formed a joint partnership to be known as Campbell and Arnott. Their office address is Kinloch House, Market Street, Haddington, East Lothian.

Charles E. Pearson, F.R.I.B.A., and George R. Lovell, A.R.I.B.A., in practice as Charles B. Pearson & Son, have taken into partnership Peter P. Lund, Dipl.Arch., A.R.I.B.A., and C. Michael Pearson, B.A., A.R.I.B.A. The practice will continue at 18, Dalton Square, Lancaster, 24, Loxford Street, Manchester 15, and 71, Wimpole Street, London, W.1, under the style of Charles B. Pearson, Son and Partners.

Jack W. Stockings & Clarke, chartered quantity surveyors, have moved their Norwich office to Ferry Road, Riverside Road, Norwich. The telephone numbers, Norwich 28202/3, remain unchanged.

Taylor, Whalley & Spyra, consulting civil engineers, have taken into partnership E. C. Garner, A.M.I.Struct.E., and R. J. Gabrielczyk, A.M.I.Struct.E. Mr. Garner is at 103, Portland Street, Manchester 1, and Mr. Gabrielczyk at 24, Harley Street, London, W.1.

William C. McVeigh, A.R.I.B.A., Edwin S. Leighton, A.R.I.B.A., Donald A. Shanks, Dipl.Arch., F.R.I.B.A., Gerald R. Smith, A.R.I.B.A., John Neil, D.A.(Glas.), A.R.I.B.A., and H. A. Patton, D.A.(Edin.), A.R.I.B.A., A.M.T.P.I., have entered into partnership practising under the style of Ulster Architects Partnership at 39, University Road, Belfast 7. (Telephone: 21362.) The above architects will also continue to practise on their own account at their respective offices.

Malcolm C. Clayton, A.I.A.S., A.I.Q.S., is in practice at Brighton and Hove at 71, Church Road, Hove 3, Sussex. (Telephone: Hove 71483.)

John Stirling, Dipl.Arch., A.R.I.B.A., and Michael Sykes, Dipl.Arch., A.R.I.B.A., are in practice at Yorkshire Bank Chambers, Princes Street, Harrogate, Yorkshire, under the style of John Stirling & Partners. They will be pleased to receive trade literature.

Lam, Biel & Partners, architects, have moved to new offices at Union House, 1, Allsop Place, London, N.W.1. The telephone number is still WELbeck 8561-3. They will be pleased to receive trade catalogues at the new address.

TRADE

The head office telephone number of Hickson's Timber Impregnation Co. (G.B.) Ltd. is now Castleford 3841. Home Sales—

Extension No. 332, Export Sales—Extension No. 334. Callers are requested to state the extension number as this new 9-line exchange has 135 extensions.

The office of the group architect, Flowers Breweries Ltd., Luton, Bedfordshire, is engaged in reorganising its information library into the Sfb classifications and would be pleased to receive trade literature to A.4 size only.

Preservation Developments Ltd., have moved to Victory House (Fifth Floor), 99/101, Regent Street, London, W.1. (Telephone: REGent 3031.)

The technical design staff of Bernard Sunley & Sons Limited is now operating from Sunley Works, Maylands Avenue, Hemel Hempstead. Trade literature would be welcome.

CRICKET

The following are the fixtures of the Vitruvians (Technical Press) XI:

Wednesday, May 10 v. RIBA, Elstree (2 p.m.).

Wednesday, May 17 v. AA, Elstree (2 p.m.).

Thursday, June 8 v. NFBTE XI, Ealing (11.30 a.m.).

Wednesday, June 21 v. RICS, Ealing (11.30 a.m.).

RAWLINGS BROS

LIMITED

ENQUIRIES INVITED FOR

*Conversions. Decorations
Electrical Installations*

RAWLINGS BROS LTD.

85 GLOUCESTER ROAD, LONDON, S.W.7. Telephone: FRE 8161

ESTABLISHED 1887



Drum series. A range of 25
pendant, wall and ceiling units,
from 5" to 15" in diameter,
available in 6 colours.

Its salient feature is the translucent
opal precision moulded louvre.
Designed by Paul Boissevain.



Merchant Adventurers Limited

Feltham, Middlesex. Telephone FEL 3686
Full information is given in publication D4

Mellor Bromley

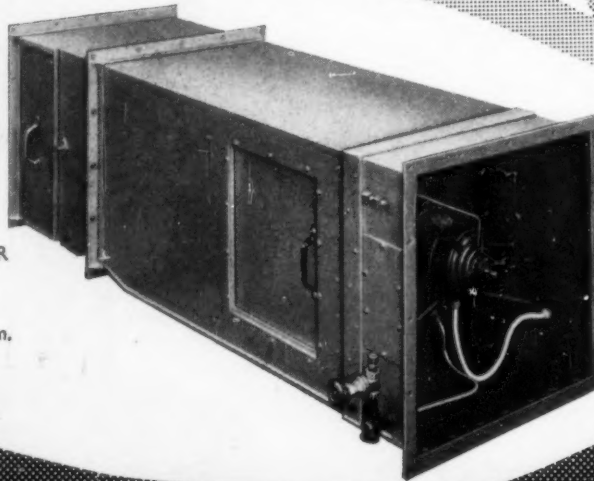
AIR CLEANER HUMIDIFIER

*for complete saturation and efficient
air cleaning—with no free moisture*

DATA

as illustrated
WEIGHT
approx. 2 cwt.
DIMENSIONS
1'9" x 1'9" x 5'0"
CAPACITY
800-1200 c.f.m.
1/7th H.P. MOTOR

Made in a variety
of sizes up to:-
10,000-15,000 c.f.m.,
absorbing a total
of 1.75 H.P.



A SELF CONTAINED UNIT easily
incorporated into existing ducting

COMPACT · ADAPTABLE · INEXPENSIVE TO INSTALL AND OPERATE

- Does not require pumps, water strainers or similar ancillary equipment.
- Water is taken direct from the mains at normal pressure.
- No plant house, foundations or floor space required.
- Incorporated easily into existing discharge ducting.
- Lightweight, small and compact.
- Range of sizes to meet individual requirements.
- Automatic control by either dew-point or humidistat.
- Can incorporate own fan, humidifier, air cleaner humidifier.
- Low capital and running costs.
- Can be duplicated in branch mains for individual room control.
- No tank or dirty water load necessary—operates continually with fresh water, thus avoiding possible build-up of bacteria.
- Supplied to hospital authorities.
- Eliminates maintenance of spray nozzles, tanks etc.

Member of the Bentley Group

MELLOR BROMLEY (AIR CONDITIONING) LTD · St. Saviours Road, Leicester

Telephone: Leicester 38161. Telegrams: **CONDITION LEICESTER**



Save stand-by battery space with the new **CHLORIDE** Stationary Cell

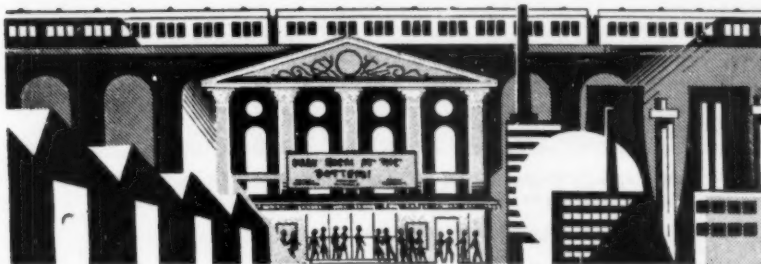
THIS LIGHT, robust cell, with its Planté positive and pasted negative plates, Porvic microporous separators and many other improvements in material and design, saves up to 50% of previously necessary battery space—yet performs its duties with greater efficiency and complete reliability. Specially designed for stand-by duties entailing discharge rates between, say, the 3-hour and the very high rates demanded for switch-closing purposes, it is ideal for trickle-charge operation and has all the remarkable length of life associated with the Planté type of construction.

The field in which the new cell is designed to replace current Planté types is a very wide one. Emergency lighting*, switch operation and emergency supply in hospitals, theatres, cinemas and other public buildings, nuclear and conventional power stations, all rely on trickle-charged batteries. In Great Britain today such batteries occupy millions of cubic feet of valuable space. The new Chloride cell could free almost half of it.

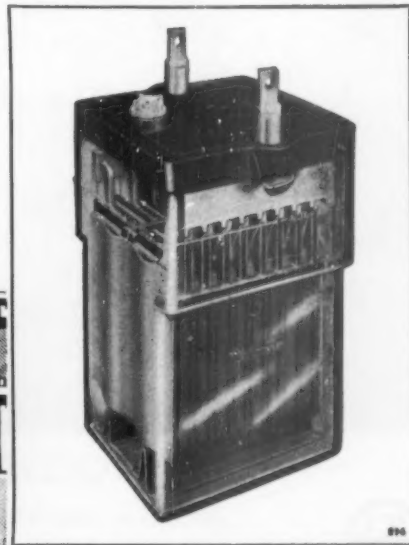
*The new cell will fit from now onwards be fitted in all Keaplite units—the Chloride Company's automatic emergency lighting system.

A PRODUCT OF CHLORIDE BATTERIES LIMITED
BACKED BY WORLD-WIDE SERVICE

Makers of Exide Batteries



Enquiries to: London Elgar 7991; Bristol 664086; West Bromwich 2361; Leeds 20248; Glasgow, Bridgeton 3734; Manchester Blackfriars 1158; Belfast 27953



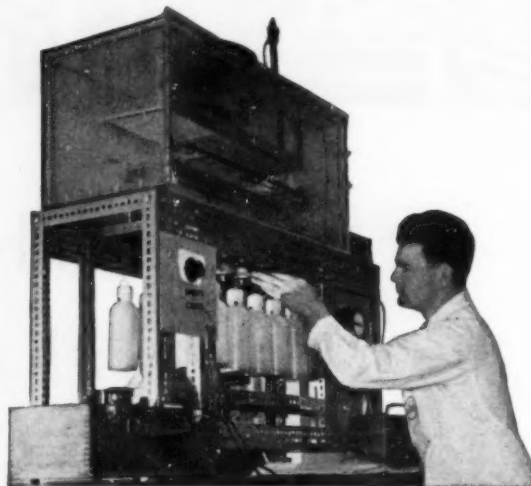
I.C.I. PLASTICS FOR MODERN LIGHTING

'Perspex' acrylic sheet for modular ceiling lighting fittings

Modular fittings with opal 'Perspex' diffusers meet the lighting requirements of modern office blocks with low ceiling heights. The diffusing covers of modular fittings are often large and must be designed so that they do not sag. Studies on the "creep" properties of 'Perspex' provide the necessary data to ensure trouble-free operation over very many years.

• PERSPEX •

*'Perspex' is the registered
trade mark for the acrylic sheet
manufactured by I.C.I.*



Equipment used at the T.S. & D. Department, I.C.I. Plastics Division, to measure the "creep" characteristics of 'Perspex' acrylic sheet.



Modular ceiling lighting fittings with opal 'Perspex' diffusing panels made by The General Electric Company Limited, installed in the Midland Bank Ltd., High Holborn.



IMPERIAL CHEMICAL INDUSTRIES LIMITED • LONDON • S.W.1

1971



Ulster Chipboard Factory,
Coleraine.

Architects: McCutcheon & Wilkinson L/ARIBA
Coleraine and Ballymena.

SPANBOARD



MANUFACTURED BY

**THE ULSTER CHIPBOARD
COMPANY LIMITED**

COLERAINE, NORTHERN IRELAND

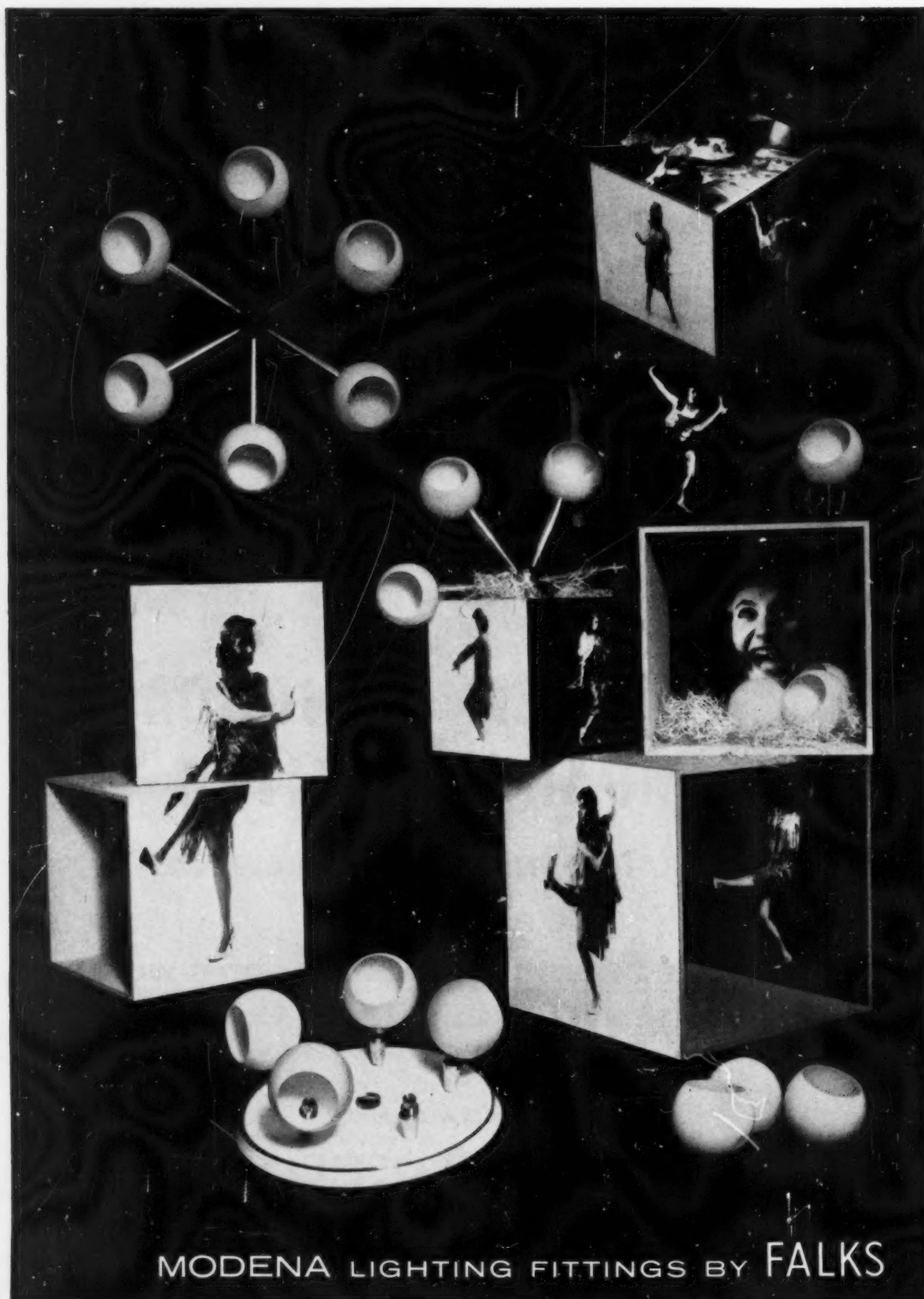
**THE ONLY HOMOGENEOUS GRADED - DENSITY WOOD
CHIPBOARD MANUFACTURED IN THE BRITISH ISLES**

FOR FULL DETAILS APPLY:

HARRISONS & CROSFIELD LTD.

1/4 GREAT TOWER STREET, LONDON, E.C.3

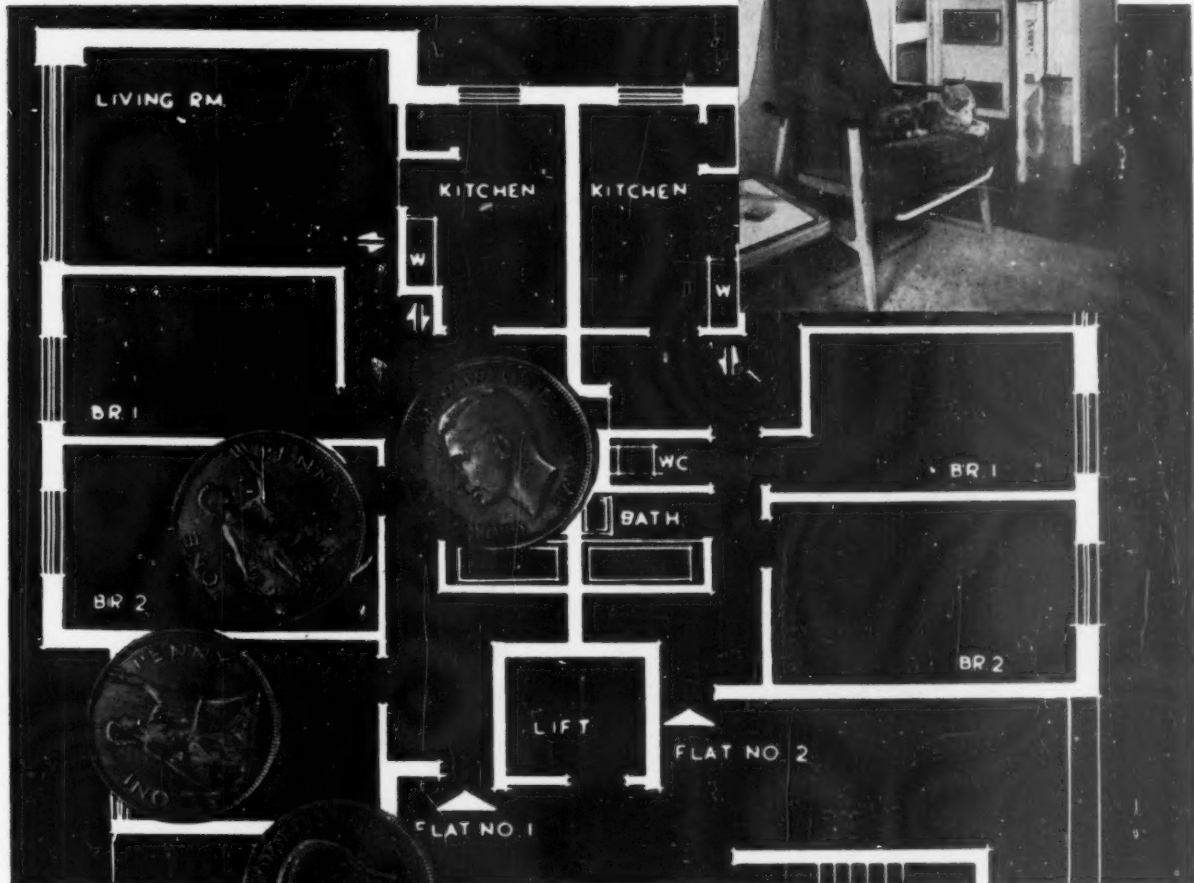
THE ULSTER TIMBER COMPANY, BELFAST, NORTHERN IRELAND.



MODENA LIGHTING FITTINGS BY FALKS

91 Farringdon Road, London, E.C.1. HOLborn 7654. London Showrooms: 20/22 Mount Street, Park Lane, W.1. MAYfair 5671/2

WEATHERFOIL METERED HEAT...



...heats an average flat
for as little as
ONE SHILLING A DAY
inclusive of capital costs

Now being installed in multi-storey flats
and maisonettes up and down the country.
Write for full details of

WEATHERFOIL Metered Heat

WEATHERFOIL LIMITED Head Office: 185 BATH ROAD • SLOUGH • BUCKINGHAMSHIRE • TELEPHONE: SLOUGH 23871

And Broadgate House • Coventry • Warwickshire • Telephone: Coventry 40116



WILLIAMS & WILLIAMS rustproofed
steel windows
welcome the traveller

Light, ventilation, ease of cleaning, sound control, a happy colour scheme—whatever the requirements for today's hotels, Williams & Williams rustproofed steel windows can be specially designed to meet them.

WILLIAMS & WILLIAMS

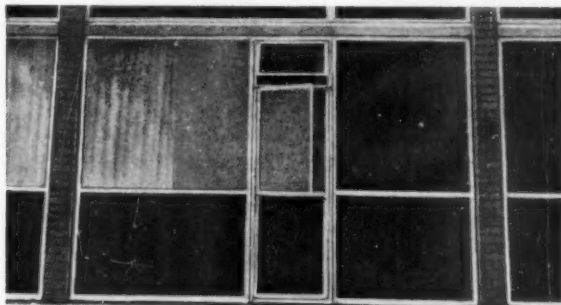
at Europe's largest air hotel



This view of the bedroom block and escape staircase illustrates the contrasting blue and white colour scheme chosen for Skyway. The blue Plyglass infilling panels are backed by Thermalite insulation blocks. With quarter inch glass throughout the building, this effectively reduces airport noise to a minimum.

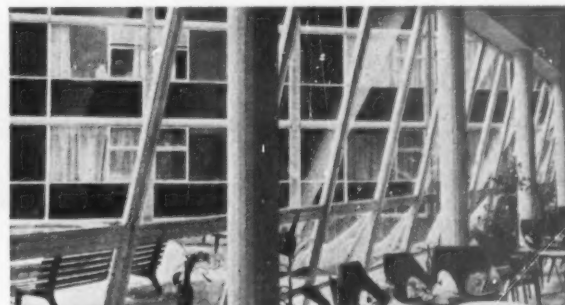
With years of experience in catering for the traveller, Skyway Hotels Ltd. had no doubt about the way they wanted to build at London Airport. A room for the night or a few hours, breakfast at mid-day, or a banquet at short notice for a party delayed by fog—these are a few of the things today's air passengers may need. And, of course, the right atmosphere must be part of the service. Williams & Williams purpose made steel windows were specified throughout this contract. Amongst

its requirements the brief called for maximum sound insulation and a creative use of exterior colour. In addition, the installation had to keep pace with an eight months building schedule. Skyway was handed over three weeks ahead of time—and has proved to be just what the traveller wanted. A new bedroom wing, commissioned soon after the hotel opened, has just been completed. Once again Williams & Williams purpose-made windows were used throughout.



For bedrooms at ground level a stall door was specially designed to give direct access to a car park outside. The clean, simple lines of the general design are preserved by installing the opening window and ventilator light in the upper half of the door.

*Architects: Fitzroy Robinson & Partners.
Contractors: Bernard Sunley & Sons Ltd.*



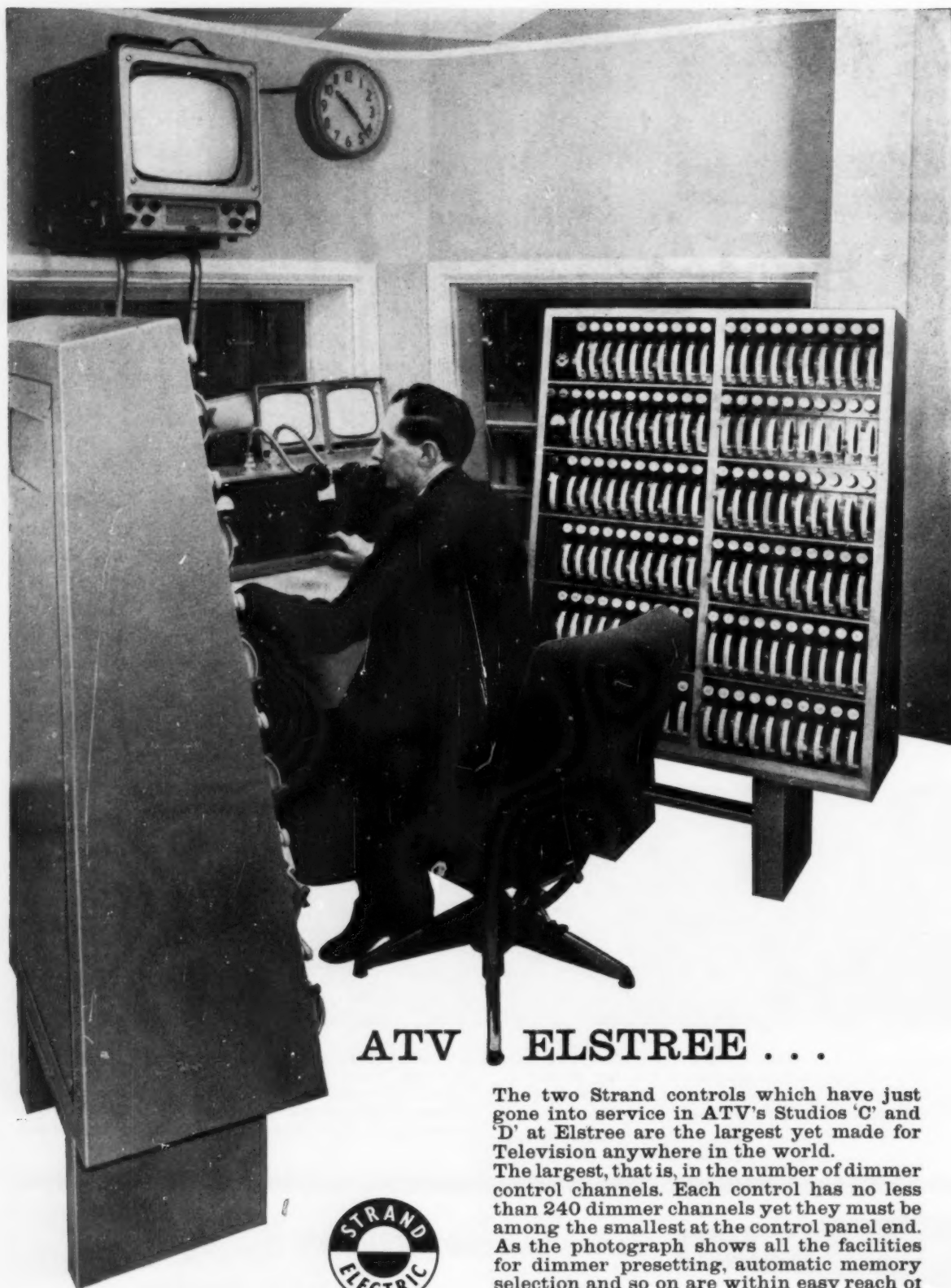
In the shopping arcade, passengers can make their purchases and then enjoy a few moments peace and quiet between flights. A feature of the arcade is the glazed front set at an angle. These Williams & Williams windows were specially designed to bring in the maximum amount of light and make room for the plant trough.

WILLIAMS & WILLIAMS

forward looking building products

Williams & Williams make RELIANCE steel windows of every description, ALOMEGA and other aluminium windows, ROFTEN movable steel partitioning, ALUMINEX patent glazing, WALLSPAN curtain walling and many other products, all of which can be seen at our permanent exhibition at 36, High Holborn, London, W.C.1.

WILLIAMS & WILLIAMS, RELIANCE WORKS, CHESTER · WILLIAMS HOUSE, 37-39 HIGH HOLBORN, W.C.1



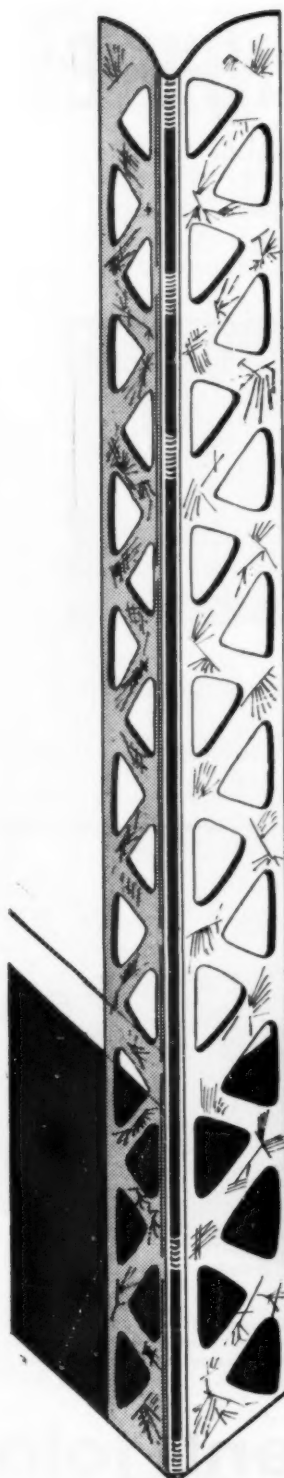
ATV ELSTREE . . .

The two Strand controls which have just gone into service in ATV's Studios 'C' and 'D' at Elstree are the largest yet made for Television anywhere in the world.

The largest, that is, in the number of dimmer control channels. Each control has no less than 240 dimmer channels yet they must be among the smallest at the control panel end. As the photograph shows all the facilities for dimmer presetting, automatic memory selection and so on are within easy reach of the operator.



THE STRAND ELECTRIC & ENGINEERING CO. LTD. 29 KING ST. COVENT GARDEN, LONDON W.C.2.



For the RIGHT plasterboard ANGLE ...Blakey

A NEW, tough tensile strength for plasterboard and brick corners . . . plus improved design offering twice the perforation area and virtually doubling the keying power by permitting plaster to be keyed right up to the edge . . . this is why the new Blakey Patent Galvanized Metal Angle Bead is being used more and more to protect all sorts of corners as well as to give increased integral structural strength.

Patent
Galvanized
Metal
Angle Bead

Blakey

For full details and free leaflet contact

Blakey Cabinet & Metal Works Ltd.

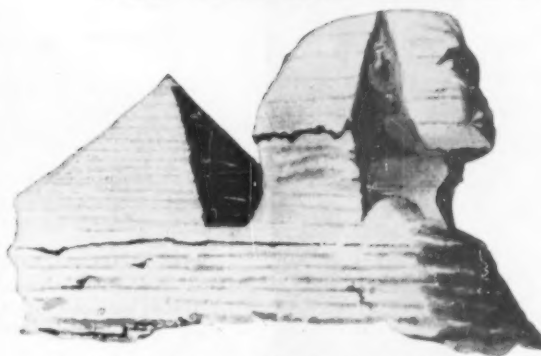
61, Scotland Road, Nelson, Lancs.

Telephone: Nelson 64941

Quick and easy to fix, Blakey Angle Bead cannot shrink, chip or corrode. As for costs—a saving of 5d. a ft. (i.e., £5 per house) has been reported by at least one well-known firm of plasterers.

Patent No. 797-887.

UP for centuries . . .



The Pyramid of Cheops and the Sphinx at Guizah Cairo

DOWN for centuries . . .



inherent endurance

Clay pipes have been discovered dating back for about 3,500 years.

Vitrified Pipes now made by Doulton are stronger than anything found in the past and so will meet all the needs of today and of the future.



**DOULTON VITRIFIED
PIPES LIMITED**

Dept. DF, Doulton House, Albert Embankment, London, S.E.1
B5373



Women will be quick
to notice—and appreciate—a **SANFIRE**
the sanitary incinerator by G.E.C.

- Safe, dependable, hygienic • Easy-to-clean enamel
- Simple to use • Long lasting—guaranteed 12 months

Finance for Re-equipment
Send for details of the new G.E.C. Extended Credit
Plan which earns profits while you pay.

◀ FOR LARGER PREMISES . . . SANFIRE
MAJOR Pedestal unit, with foot control,
suitable for 50–150 women. £49.15.0

FOR SMALL–MEDIUM SIZED PREMISES ▶
. . . SANFIRE MINOR Neat white and
black wall-mounted unit, suitable for
up to 50 women. £27.



Write for leaflets Nos. HO 1952 and HO 4283 to the Industrial Heating Division of
THE GENERAL ELECTRIC CO LTD MAGNET HOUSE KINGSWAY LONDON WC2



Bradford's new Police Transport Headquarters is one of the many fine buildings for which "Kingley" has been specified for hot and cold water services. By courtesy of W. C. Brown, Esq., Dip. Arch.; FRIBA; AMTPI, City Architect, City of Bradford.



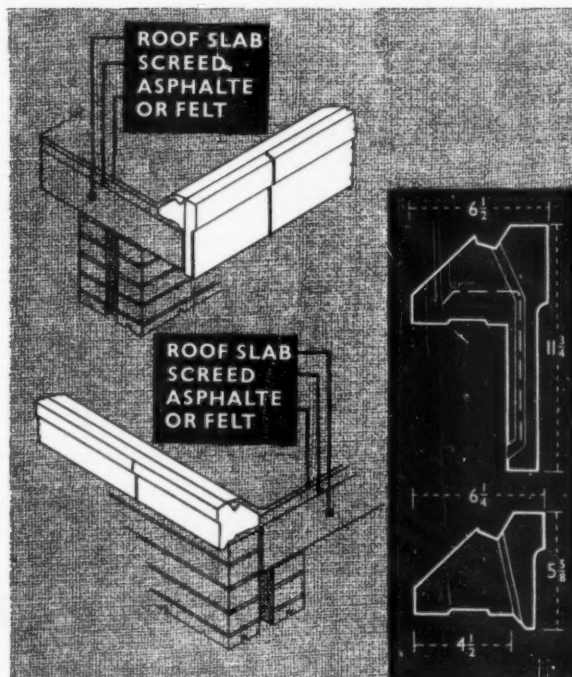
the 100% efficient joint

"KINGLEY" manipulative joints are used in conjunction with both copper and polythene tubing. These joints are being specified to an ever-increasing extent for major building projects all over the country. They have many advantages over other jointing methods, but the most important are:—(1) 100% SAFETY, (2) VERY QUICK ASSEMBLY AND (3) LOW INSTALLATION COSTS.

The 100% safety is ensured by means of a swage in the ends of the pipes on which the joints are made. This swage (which is made in seconds with a fool-proof tool) makes PULL-OFF impossible in heat or frost.

KINGS LANGLEY ENGINEERING CO. LTD., Kings Langley, Herts. Tel.: Kings Langley 4022

Flat roof fascia units



1 FOR OVERHANGING EAVES

The use of this unit enables a perfectly uniform edge to be provided for a roof slab. Site labour is reduced and costly form work eliminated. Standard units are 2 ft. in length. Closers supplied as necessary.

Prices: Natural Concrete finish: 5s. 11d. per ft. Delivered to site. Artificial Stone finish: 6s. 3d. per ft. Delivered to site.

2 FOR FLUSH EAVES

This unit replaces the conventional parapet and coping and makes possible a considerable cost saving. Standard units are 2 ft. in length. Closers supplied as necessary.

Prices: Natural Concrete finish: 4s. 0d. per ft. Delivered to site. Artificial Stone finish: 4s. 3d. per ft. Delivered to site.



Please mail further details of the Flat Roof Fascia Units to:-

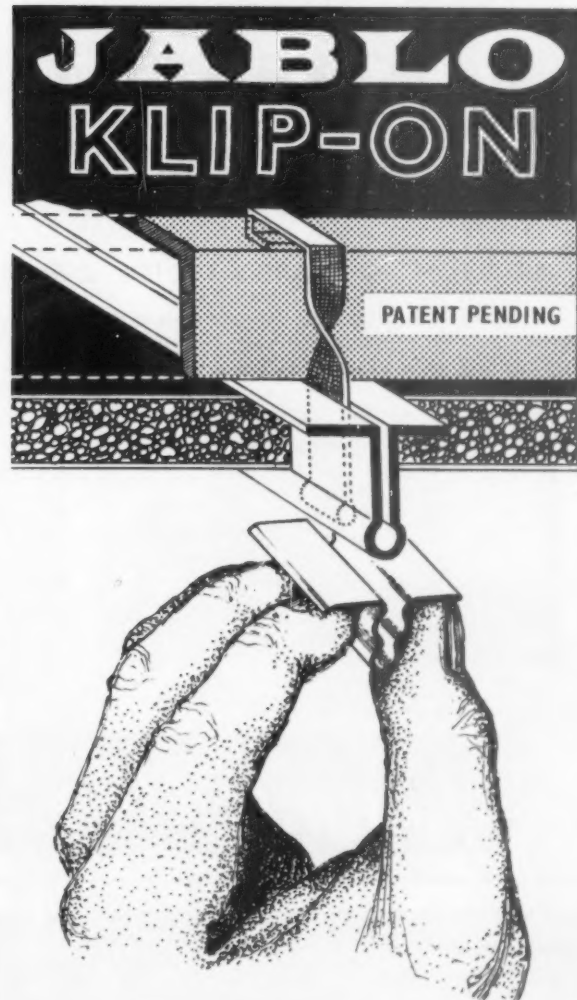
NAME _____
ADDRESS _____

A.J.

FINLOCK GUTTERS LIMITED

FINLOCK HOUSE, FRANT ROAD, TUNBRIDGE WELLS, KENT.

Telephone: Tun. Wells 3396/9.



FIXING SYSTEM FOR JABLITE INSULATION

★ SIMPLICITY

—THE JABLO (THE ORIGINAL) KLIP-ON FIXING SYSTEM is the easiest of all systems to erect. No special skills or tools required.

★ ADAPTABILITY

—JABLO KLIP-ON FIXING SYSTEM can be adapted to suit all types of new or existing buildings. Suitable for horizontal, vertical or inclined linings.

★ ACCESSIBILITY

—JABLO KLIP-ON FIXING SYSTEM allows removal and replacement without damage of insulation for access to roof cover, structure, lighting or other services.

★ ECONOMY

—JABLO KLIP-ON FIXING SYSTEM compares favourably in price with any other type—and saves in assembly time, too!

For Price Lists and Further Details of Jablo (the Original Klip-On System), write to Manufacturers:—

JABLO PLASTICS INDUSTRIES LIMITED JABLO WORKS WADDON CROYDON

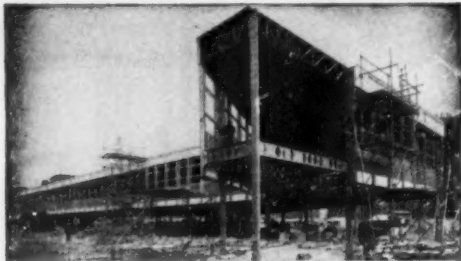
Telegrams: "JABLO, CROYDON"

Telephone: CROYDON 2201-3, 9876, 6529, 6922

structural steelwork

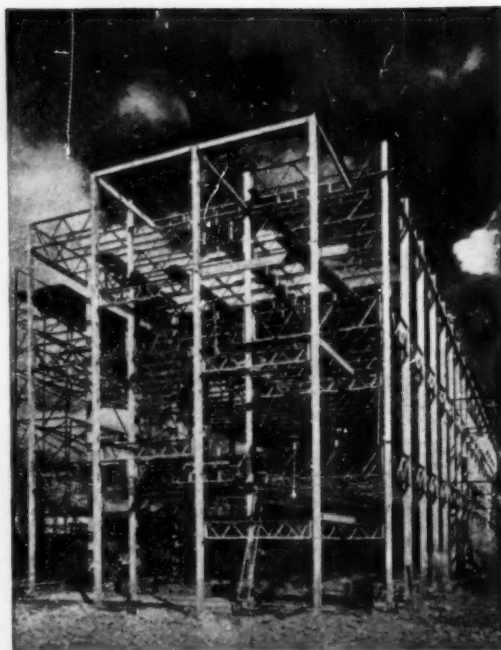
● DESIGN ● FABRICATION ● ERECTION

For this B.E.A. Building, speed was the essence of the contract. Sommerfelds designed the Steelwork and from unloading the first lorry on site to completion of a 250-ton steelwork erection, took three weeks.



New Air Terminus buildings in Kensington for B.E.A. Photograph taken 16 days after commencement of steel deliveries. Main Contractors: Messrs. Richard Costain Limited.

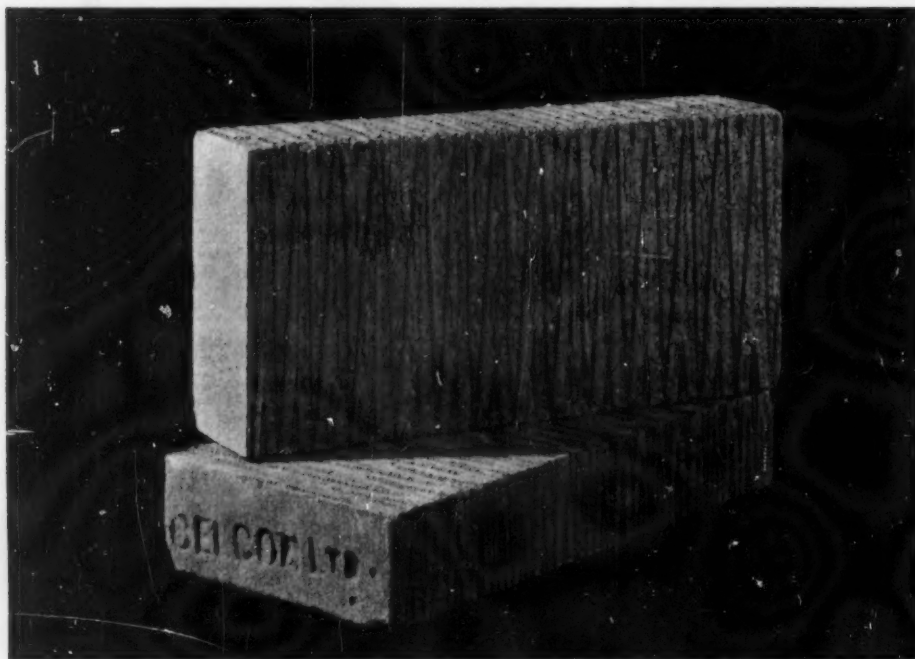
The Architects for the Bowater Paper Corporation Limited's new Office Blocks at both Northfleet and Mersey required Lattice Steelwork on a 3ft. 4in. module. This allowed complete flexibility of internal arrangements and all service lines are easily run between floor and ceiling.



Part of a new Office Block for The Bowater Paper Corporation Limited. Architects: Messrs. Farmer and Dark

Sommerfelds
LTD.

Head Office WELLINGTON SHROPSHIRE Tel: 1000
LONDON Office 167 VICTORIA ST. S.W.1. Tel: 8843 and 1000



for further information, samples and prices

CELCON LTD.

UNIVERSAL HOUSE,
60 BUCKINGHAM PALACE ROAD,
LONDON, S.W.1. Tel. SLOane 0324/7

BUILD WITHOUT BRICKS

in
LIGHTWEIGHT
LOADBEARING
CELLULAR
CONCRETE
BUILDING
BLOCKS

Density—50 lbs./cu. ft.

Crushing Strength—
600/800 lbs./sq. inch

Thermal Conductivity
"K"—1.2 BTU/sq.
ft./hr./°F./inch

Moisture Movement—.05%

Drying Shrinkage—.05%

Fire Resistance — Satisfies
B.S.476; Part 1 for 4 hours.

Bonds Permanently Perfectly

SELF-SEALING

ARBOMAST 500

the mastic that masters modern CURTAIN WALLING work.

Developed specifically for fixing double-glazing units, sealing-in panels and glass in conjunction with beading, ARBOMAST 500 adheres positively and permanently. It is self-sealing and withstands the rigours of expansion and contraction.



We should like to tell you
more about ARBOMAST 500
— please write to us for further details.

ADSHEAD RATCLIFFE

ADSHEAD RATCLIFFE & CO. LTD
BELPER : DERBY : Tel: Belper 891/2/3

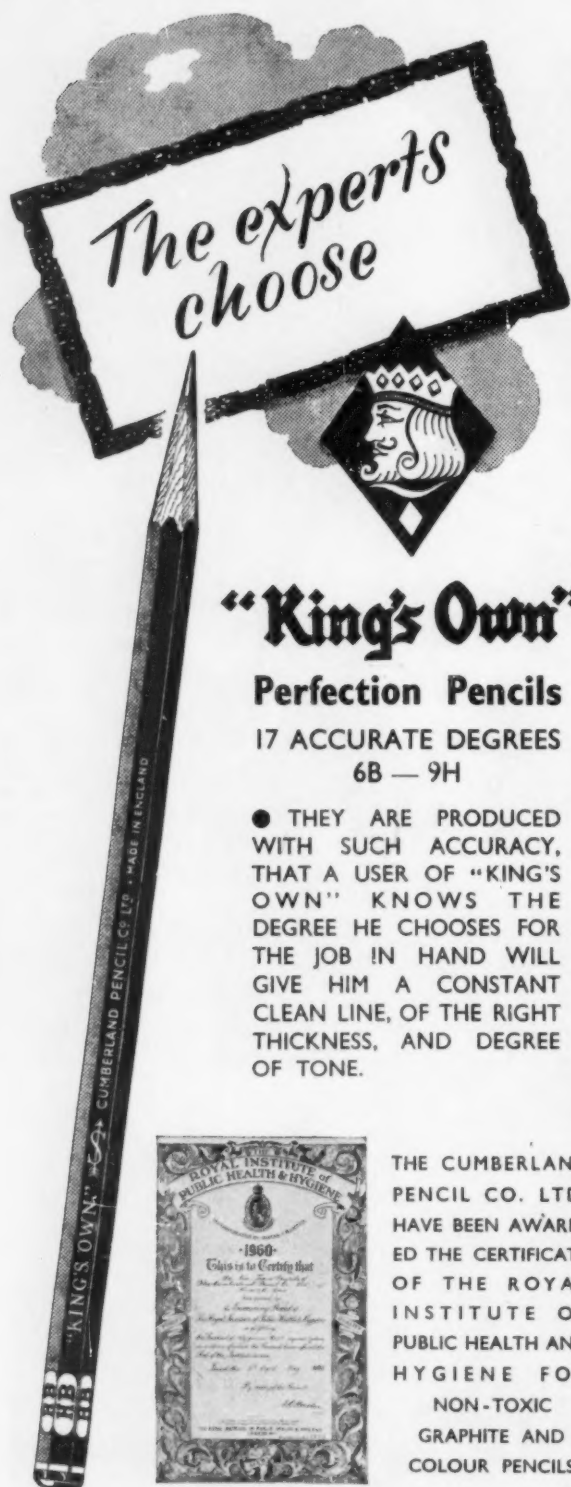


yesterday's craft
tomorrow's design

SCULPTURA

THE LILLESALL CO LTD
OAKENGATES SHROPSHIRE
Oakengates 120
or 121 VICTORIA STREET LONDON SW1
Victoria 9992

Lavatory basin and pedestal c1959
Marquess of Queensberry 1914
One of the Danaides Vatican c170

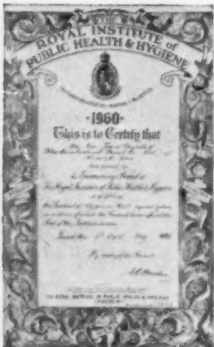


"King's Own"

Perfection Pencils

17 ACCURATE DEGREES
6B — 9H

● THEY ARE PRODUCED WITH SUCH ACCURACY, THAT A USER OF "KING'S OWN" KNOWS THE DEGREE HE CHOOSES FOR THE JOB IN HAND WILL GIVE HIM A CONSTANT CLEAN LINE, OF THE RIGHT THICKNESS, AND DEGREE OF TONE.



[Reduced Facsimile]

PROVE "KING'S OWN" FOR YOURSELF,
JUST DROP US A P.C. ASKING FOR SAMPLE
PLEASE SPECIFY THE DEGREE REQUIRED

THE CUMBERLAND PENCIL CO. LTD.
BEARWOOD ROAD, SMETHWICK, 41.

CUMBERLAND PENCILS ARE MADE AT KESWICK—
THE ORIGINAL HOME OF THE PENCIL INDUSTRY

PHOTOMURALS . . .



. . . ask AUTOTYPE

ARCHITECTS throughout the country are using AUTOTYPE photomurals with great success in reception halls, offices, showrooms, shops, schools, restaurants, cafés, ballrooms, private houses, etc.

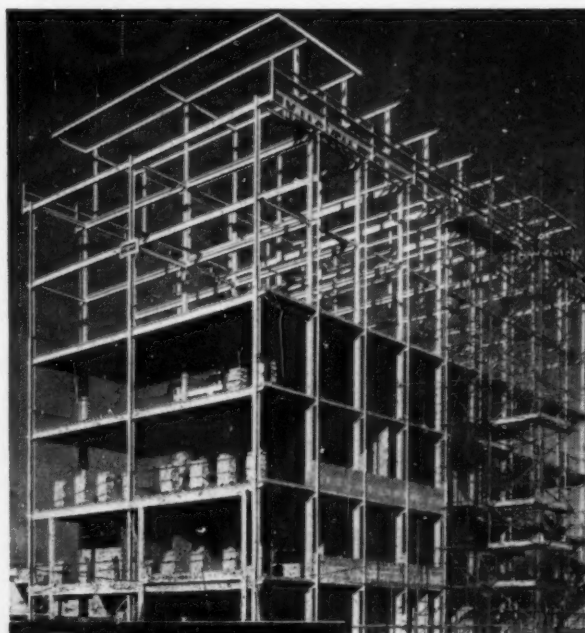
In full colours, or black-and-white, mounted on prefabricated panels for fixing on site, or black-and-white unmounted. Photographs, engravings, originals of all kinds available for selection.

Autotype are acknowledged the leading specialists in this growing development. The benefit of their long experience and advice is yours for the asking. Enquiries welcomed.

See our
photomurals on
exhibition
in the Building
Centres at London,
Manchester, Bristol
and Glasgow

AUTOTYPE

The Autotype Company Limited
Brownlow Road, West Ealing, London, W.13
Ealing 8861



Croggon STEEL
FRAMED
BUILDINGS

CROGGON & CO. LTD. • ESTABLISHED 1835

SLOUGH COLLEGE OF FURTHER EDUCATION
GENERAL CONTRACTOR Y. J. Lovell & Son Ltd.
BUCKS COUNTY ARCHITECT
F. B. Pooley, F.R.I.B.A., F.R.I.C.S., A.M.T.P.L.

POYLE STEELWORKS • COLNBROOK, Nr. SLOUGH • TELEPHONE COLNBROOK 2861
230 Upper Thames Street, London, E.C.4 CENTRAL 4381 also at Liverpool & Glasgow



NO MATTER HOW

LARGE

OR HOW SMALL

if you have a catering equipment problem Stotts of Oldham are at your service. No matter if your enquiry is for a complete scheme or just a single item, our experienced designing and installation staff will be made immediately available.

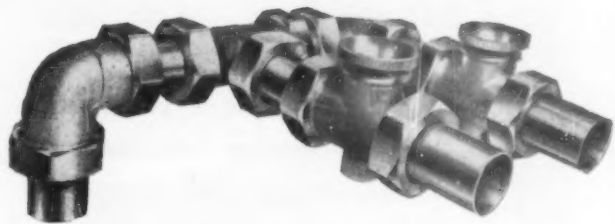
For further details of service & equipment please send this form.

NAME

ADDRESS

**"Stotts
of
Oldham"**
VERNON WORKS
OLDHAM · LANCS

NON-STANDARD



AND STANDARD TOO



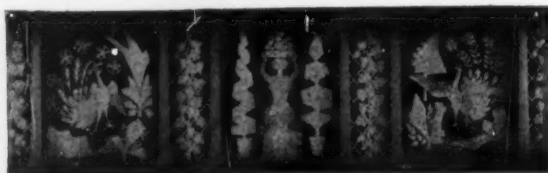
All high standard
pipe fittings from

KONTITE

Kontite's range of over 22,000 different types and sizes of fittings for copper tube, is the biggest in the business. Many of these can be supplied straight from stock. Specials take only a little longer. That's what makes Kontite service the *best* in the business. First class materials and the proved efficiency of Kontite Gunmetal fittings are your guarantee of complete reliability.



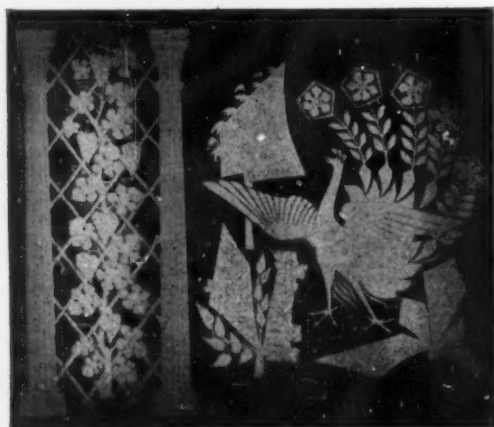
KAY & CO. (ENGINEERS) LTD.
BOLTON BRASS WORKS · BOLTON · LANCS.
TELEPHONE: BOLTON 21041/4



GLASS...the most versatile
decorative medium
*
BROUGHT TO LIFE BY
REED MILLICAN



Illuminated decorative glass panels for Messrs. A. Goldberg & Sons Ltd., Candleriggs, Glasgow, in their new Garden Restaurant. The designs, by Gillian R. Crowther Des.R.C.A., are deep sandblasted and jewel-chipped on 1/8" polished plate glass, with background painted an opaque colour.



REED MILLICAN & CO. LTD.
NEWCASTLE UPON TYNE AND GATESHEAD

Telephone: 78401 (6 lines)

Artists and Craftsmen in Glass since 1847

INTRODUCING



'U' RANGE ELECTRIC LOCKS

The new series of Sterdy Electric Locks embody important additional refinements never offered before. Most prominent among them are automatic locking and unlocking—advantages readily appreciated by architects, builders and occupants alike. They can also be operated by remote control, like all other Sterdy Electric Locks.

All these new locks are contained in robust, shell-moulded cases, with die-cast aluminium bronze latches and stainless steel transfer plungers. The mechanism is housed in a waterproof section of the casting, with cable entry through a screwed sealing gland. Heavy duty types are also produced. All locks are available for use on either 8-12v A.C. or 9-10½v D.C.

Where desired, synchronised switching facilities or alternative locking methods can be arranged.

Reduced dimensions facilitate fitting in narrower contemporary door frames.

Write for full particulars to

STERDY TELEPHONES LTD

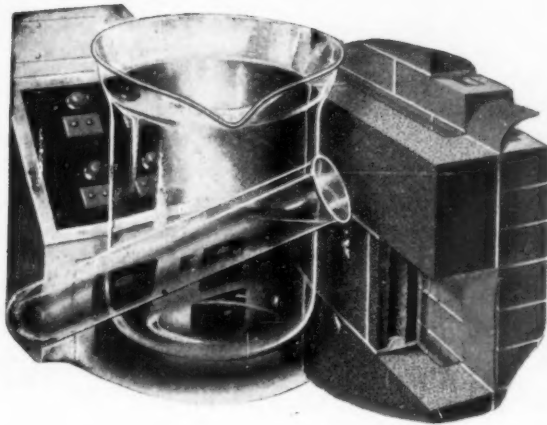
(Incorporating W. C. Davey & Co.)

Queen's House, 180-182 Tottenham Court Road, London, W.1.

Tel: MUSeum 4414, 4415 and 6388



Everything



a block should have . . .

- ★ High Quality
Laboratory control
- ★ Low Cost
Quicker building
- ★ Thermal Insulation
Built-in warmth
- ★ Loadbearing
of course
- ★ Reveal Blocks
and Coursing blocks too
- ★ Cutting Slots
for quick and easy cutting
- ★ Delivery
ex-stock

... the Broad - Acheson Block has .

*The new Technical Brochure is worth having—
a copy will be sent on request*



BROAD & CO., LTD.
4 SOUTH WHARF, PADDINGTON, LONDON W.2
Telephone: PADDington 7061(20 lines)

*For the widest standard range
of steel clothes lockers*

CONSULT BAWN

OVER 10 HELMSMAN TYPES!

**The VANGUARD—
a traditional styled
locker at low cost**

In use all over Britain because it's easily the finest full length locker of today. One size—with hat shelf and two coat hooks. This locker is of outstanding quality and has Hasp and Staple fitting or seven lever lock. Sold as a single unit, or in nests of 2, 3 or 4.

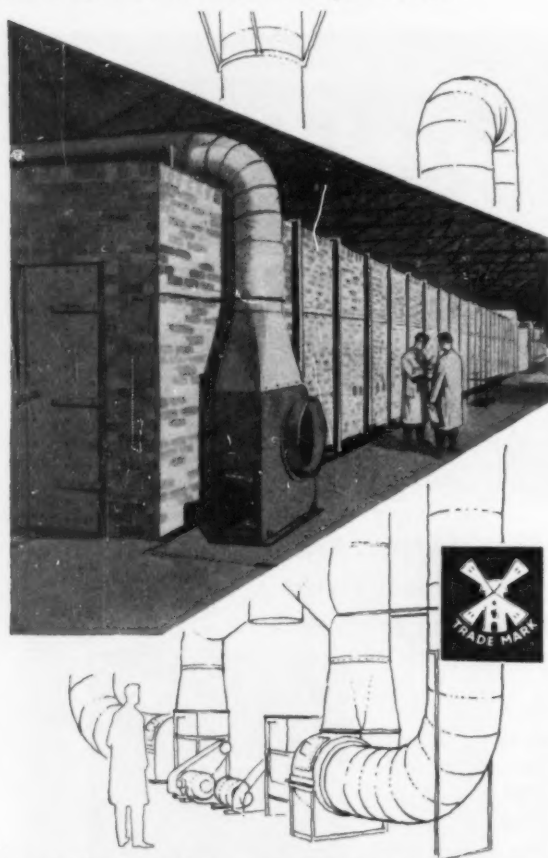


"Helmsman" Vanguard Steel Clothes Locker
SIZE: 72" x 12" wide x 12" deep. Prices: From £2.16s.9d.



W.B. BAWN
& COMPANY LIMITED

Byron Works, Blackhorse Lane,
London, E.17. LARKSwood 4411



Everything under control . . .

Nothing is left to chance in the production of Windmill Quarry Tiles. Their rich colour and uniformity of shade and size are kept constant by the most up-to-date production methods. Fired in a scientifically controlled tunnel kiln, the high standard ★ of Windmill Tiles can be accurately maintained at competitive prices—another good reason for specifying them wherever economy, reliable wearing qualities and hygiene govern the choice of flooring.

Standard sizes are available in Red, Brown Fleck, Red Mingle, Buff Mingle and Plain Buff. Also Ceramic Cills in above colours. Sizes 7½", 8", 9", 10" & 12" in only ⅝" thickness.

SAMPLES AND A BROCHURE WILL BE SENT ON REQUEST—or ask for a Representative to call.

★ B.S.1286/1945. Type A.

WINDMILL QUARRY TILES

ALLIED BRICK AND TILE WORKS LTD · 6/7 QUEEN STREET, LONDON, E.C.4 · CITY 2725

A large, stylized illustration of a laboratory fume extraction system. A large, dark, curved duct with the words "LABORATORY FUME EXTRACTION" written on it in white, bold, sans-serif capital letters, dominates the upper half of the advertisement. Below the duct, there is a photograph of a modern, multi-story research building with many windows. In the bottom left corner, there is a circular inset showing a close-up of a fan or motor component.

Complete laboratory fume extraction in these fine modern Research Buildings was carried out by TANKS & LININGS LTD., using Rigid P.V.C. thermoplastic for ducting and fans.

Photograph (left) reproduced by courtesy of May and Baker Ltd., Dagenham.

Photograph (above) reproduced by courtesy of Asburton Chemical Works Ltd., Trafford Park, Manchester.

Tanks & Linings Ltd

CORROSION ENGINEERS, 11 TOWN WHARF, DROITWICH, WORCS.
Telephone: Droitwich 2240, 2249 and 3306. Telegrams: Tanks, Droitwich.



Everyone loves a Terrace!

In fact, a terrace *makes* a property; and in the word 'Terrace' is included every kind of garden construction—drives, walls, copings, surrounds and paths. Marlite is a very 'natural' man-made paving imparting distinction, even to a site which might otherwise be insignificant. It is easy to lay, uniform in size and colour, non-slip and economical. The five mellow colours in a wide range of sizes—12 in all—give the architect almost unlimited scope.

MARLITE PAVING



MARLEY CONCRETE LIMITED Dept. T2/16

Peasmarsh, Guildford, Surrey. (Head Office) Guildford 001771
Shurdlington, Cheltenham, Glos. Shurdlington 33446
Waterloo, Poole, Dorset. Broadstone 91118
London Showrooms: 251 Tottenham Court Road, W.1.

IT'S HARDLY SURPRISING
that more and more Architects
and Builders are specifying the

BATLEY *Suparise* SPRING CONTROLLED UP & OVER DOOR GEAR

because they know that Suparise is exceptionally robust, reliable and easy to fit. Available for new installations, with a choice of Aluminium Alloy or selected Timber Doors; or for converting existing hinged doors to 'Up & Over' Doors. PRICE £11.10.0 (gear only).

Alternatively complete Batley Up and Over Doors can be supplied in ribbed Aluminium Alloy (£20) or exterior grade Mahogany Ply (£19), or Roller Shutter doors in selected timber laths.

Generous Trade Terms
available



Brochure from: **ERNEST BATLEY LTD**

63g, Colledge Road, Holbrooks, Coventry

Tel: 87253

Plan for greater throughput



CALL IN
KISMET
WEAVER
EARLY

Get more
efficiency
from every
square yard
of operative
floor area

If you are considering extensions or alterations to existing buildings or planning new premises, you will find our Layout and Planning Department at Bedford of considerable value. Its unrivalled experience can provide the practical economic solution to cope with almost any situation—to make every square foot pay its way. We will be happy to visit and co-operate with you in an advisory capacity and to prepare drawings and quotations—absolutely without obligation—but please call us in early—that is when we can be most useful. Write to our Planning Department NOW.

Increase your throughput; reduce your costs by incorporating

**KISMET—THE WORLD'S MOST TIME-
SAVING EQUIPMENT**

INSTALLATION

An efficient factory-trained organisation stands ready at strategic points throughout the country, to deal with the installation and servicing of Kismet Garage Equipment.



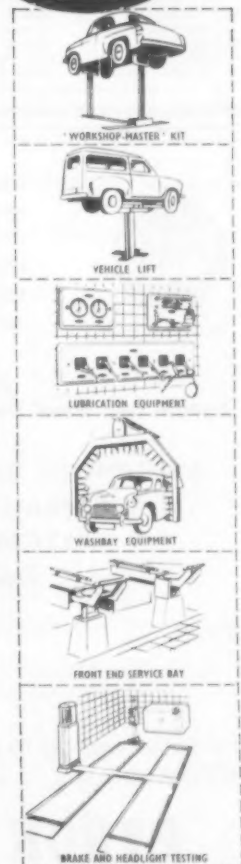
KISMET LIMITED

INCORPORATING WEAVER MANUFACTURING & ENGINEERING CO LTD

AND WILLIAM TURNER (KISMET) LTD

FENLAKE WORKS BEDFORD Phone BEDFORD 68871 (10 Lines)

SCOTTISH AGENTS: (Garage Equipment and Steam Cleaners) Gerard Wakeham Ltd 1 Clifton Street Glasgow C3 Phone: Douglas 4297.





Why Truflush Doors?
Why are BAILEY and WHITES proud
of their TRUFLUSH DOOR?
Because of its unique precision
construction. Because it has been
designed for economy.
Because it will give years of lasting
service at a really competitive price.
Truflush Doors are made from
Kiln-dried Timber throughout, and
knot-free lipping. The interior is
honeycombed and a mortice
centrally placed is supplied.

Manufactured solely by

BAILEY and WHITES Ltd.

★ Write for the illustrated leaflet—today!

Bailey & Whites Ltd.
455-7, Commercial Road,
Portsmouth
Tel.: 24461.
Grams: Baileys, Portsmouth.

Easthamstead Road,
Bracknell, Berks. Tel.: 680/476.
Queen's Drive, Nottingham.
Tel.: 82138.
Diglis Dock, Worcester. Tel.: 27277
and from leading Merchant Stockists.



Regd. Trade Mark

for FIRE PROTECTION
SOUND ABSORPTION
THERMAL INSULATION
EXTERNAL PROTECTION
COLOUR DECORATION and
ANTI-CONDENSATION TREATMENTS

Pyrok has been used successfully in

**SWIMMING BATHS
BREWERIES
KITCHENS
DAIRIES
SCHOOLS
FACTORIES etc.**

*For further details of the treatment and of the properties
of Pyrok apply to:*

PYROK LIMITED

401-404 Montrose Avenue,
Slough

Tel.: Slough 24601

2-5 Old Bond Street, W.1

Tel.: HYD 1491

A tip worth having!

**Lingfield 1961
COXDOMES
the favourite**



*Some of the 94" x 70" Mark II Coxdomes installed over the Weighing-in
Room at Lingfield Racecourse, Surrey, for the Racecourse Betting Control
Board. Main Contractors, Messrs. Hoad and Taylor Ltd.*

COXDOMES

**FOR
ADDED
LIGHT**

Leading the field (as usual) the Mark II
Coxdome was an automatic choice for the
new Weighing-in Room at Lingfield
Racecourse.
Virtually unbreakable, the Mark II Coxdome,
which has a unique constant angle of slope
on all sides for ease of installation,
is available in rectangular or square shapes
in either clear "Perspex" (which has a light
transmission of 92%) or in diffused opal for
privacy and anti-glare.
The new Coxdome Mark II brochure is
now ready. Architects, building contractors
and anyone else interested are invited to send
for their copy.

William J. COX (SALES) Ltd.

"PERSPEX" FABRICATORS, SHAPERS AND STOCKISTS

(Approved D.G.I. Aviation No. 10643)

LONDON ROAD, TRING, HERTS. TEL.: TRING 3286/7/8

Edited by D. A. C. A. Boyne
and Lance Wright A.R.I.B.A.

Architects Working Details

Volume VII ENGLISH EXAMPLES

Size 12×8½ ins. 160 pages. 148 half-tone
and line illustrations. 25s. net, postage 1s. 9d.

The Architectural Press
9-13 Queen Anne's Gate, London, S.W.1

Applied Lettering



Variety of alphabets and
materials for internal or
external use, Illuminated
Letters and Box Signs.
Send for lettering sheets
and brochures.

WARD & CO. (Letters) LTD.,
6-12 WILDER ST., BRISTOL 2 TEL. 21536

Contracts are safe with

Benbow

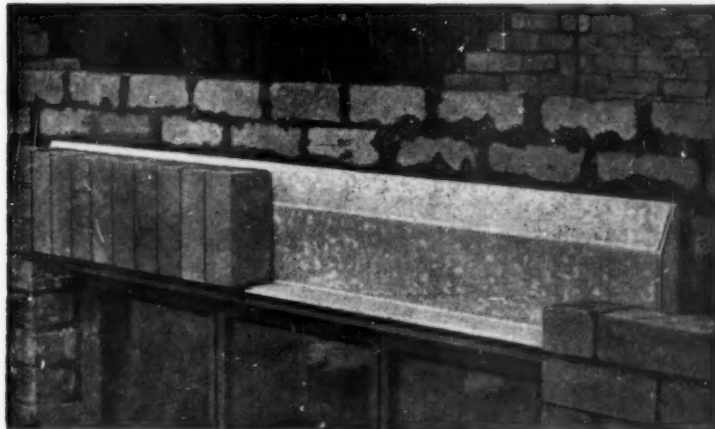
OF TORQUAY

Shopfitters and Bar fitters

Head Office Petitor Road Torquay

Telephone 89234/5

REGULAR CONTRACTORS IN DEVON CORNWALL SOMERSET GLOUCESTERSHIRE WILTSHIRE DORSET HAMPSHIRE SOUTH WALES



THE DORMAN LONG LINTEL

*Combined Angle Arch
Support & Dampcourse Tray*

IN HOT-DIP GALVANIZED STEEL, FOR
USE AT THE HEADS OF OPENINGS
IN EXTERNAL CAVITY WALLS

Comes on site to required length ready to fix. Large saving in site labour costs.
Cannot be damaged in cavity cleaning. The Dorman Long Lintel has only to
be placed into position over the head of the opening and without delay the
work carries on.

Prices and details from:
DORMAN LONG (Steel) LTD., Sheet Dept., Middlesbrough
or from district offices at London, Birmingham, Manchester,
Newcastle, Belfast, Glasgow.

DORMAN LONG



MIPOLAM

thermoplastic handrail covering

Applied with heat, it takes the true line to bends and angles down to 2" internal radius. It is shaped to a natural handgrip, and can be installed with matt or gloss finish in two sizes and seven colours. For further details apply to main distributors;

WIGGINS-SANKEY LIMITED

Wyfold Road, London SW6. tel: FULham 1250

PEEL'S

sectional buildings quickest up! longest up!



- * Extensive range of Standard designs
- * Individually designed if required
- * Free delivery within 200 miles radius
- * Easy to erect
- * New timber throughout

Send for PEEL'S comprehensive catalogue and price list, or ask for representative to call.

H. PEEL LTD.

Dept. AJ Mearclough Works, Wakefield Road,
Sowerby Bridge, Yorkshire. Tel: Halifax 81211

GENERAL CHEMICALS DIVISION



Architects

The Architects Section of the Division Engineering Department, Runcorn, Cheshire, require assistants of both Final and Intermediate standard.

The jobs offer opportunities for valuable design experience in industrial architecture involving close collaboration with other specialists.

The Department occupies a modern office building in pleasant surroundings.

Salaries will be dependent upon age and experience and there are Pension Fund and Profit-Sharing Schemes. Where necessary, married men will receive a refund of reasonable removal (including travel) expenses, and a temporary lodging allowance is payable whilst maintaining two homes.

Applicants should write (quoting A16) stating age, qualifications and experience to:—

STAFF MANAGER, IMPERIAL CHEMICAL INDUSTRIES LIMITED
GENERAL CHEMICALS DIVISION, CUNARD BUILDING,
LIVERPOOL 3.

HERTFORDSHIRE

COUNTY ARCHITECT: GEOFFREY FARDELL, M.B.E., A.R.I.B.A.

Due to increased building programmes there are now vacancies on the revised establishment offering scope for young Architects and Quantity Surveyors possessing energy and enthusiasm. There is a very full programme of work for the Education Committee, including new schools of all types, full remodelling and extension schemes, and a number of multi-storey Colleges of Further Education.

There is an increasing volume of work for both the Police and Fire and Ambulance Services, including new County Headquarters for each; also Health Centres and Clinics, Branch Libraries, Welfare Homes, and a variety of other work including a major extension to County Hall.

ARCHITECTS

(a) Architects A.P.T. IV/V £1,140 to £1,480

(b) Architects A.P.T. III/IV £960 to £1,310

Commencing salary depending on ability and experience.

The office is formed of seven Groups and Job Architects are given responsibility for individual projects. There are opportunities for all architects to take part in the continuous programme of technical development.

QUANTITY SURVEYORS

(c) Senior Assistants A.P.T. IV/V £1,140 to £1,480

(d) Assistants A.P.T. III £960 to £1,140

(e) Junior Assistants G.D./A.P.T. I ... £260 to £815

The Quantity Surveyors' Group, under the direction of Clifford Nott, F.R.I.C.S., offers the opportunity to work on development and progressive methods of quantity surveying; there is a good training scheme for junior staff.

Forms of application for all posts may be obtained from County Architect, County Hall, Hertford, Herts. Applicants for the Quantity Surveyor posts may obtain additional information from the Principal Quantity Surveyor (Tel. Hertford 4242, Extension 322).



Mobil Oil Company invite applications for the following vacancies at their London Head Office:

ASSISTANT ARCHITECT

Applicants must be either A.R.I.B.A. or Final Standard, have experience in contemporary design and be capable of working independently. They will be responsible for handling jobs through all stages of development. Must have a current Driving Licence. Five day week, three weeks holiday after one year's service. Luncheon vouchers, sickness benefit, etc.

ASSISTANT BUILDING SURVEYOR

Applicants must be capable draughtsmen, have some experience in supervision of site works and be capable of working under limited supervision. Must hold current Driving Licence. Luncheon Vouchers, good employment benefits.

Write giving details of age, experience and salary required to

Employment Adviser, Mobil Oil Co. Ltd., Caxton House, S.W.1.

DESIGNING FOR LONDON

Festival Hall Extension, South Bank Development, Crystal Palace Sports Stadium and new houses, flats, maisonettes, schools, town development schemes (including houses and factories), hostels, youth centres, out county housing, club rooms, shops, supply depots, homes for old people, fire stations, drill towers, pumping stations and sewage works, ambulance stations, maternity and child welfare clinics, health hostels, health training centres, children's homes, reception centres, approved schools, road improvements, and associated architectural works.

Adaptations, modernisation, rehabilitation, improvements.

Have you thought of joining the L.C.C.?

- * Unique opportunity to produce buildings for the public service with the highest possible standards of design.
- * Wide range of buildings enables individuals to be used according to their special abilities.
- * Contact with the latest developments and techniques through central materials and development section.
- * Promotion strictly on merit.
- * Design opportunities in accordance with ability.
- * Flexible salary reviews within grades.
- * Permanency after probationary service.
- * Recognition grants for outstanding work.

Starting salaries for Architects up to £1,500 according to quality and experience.

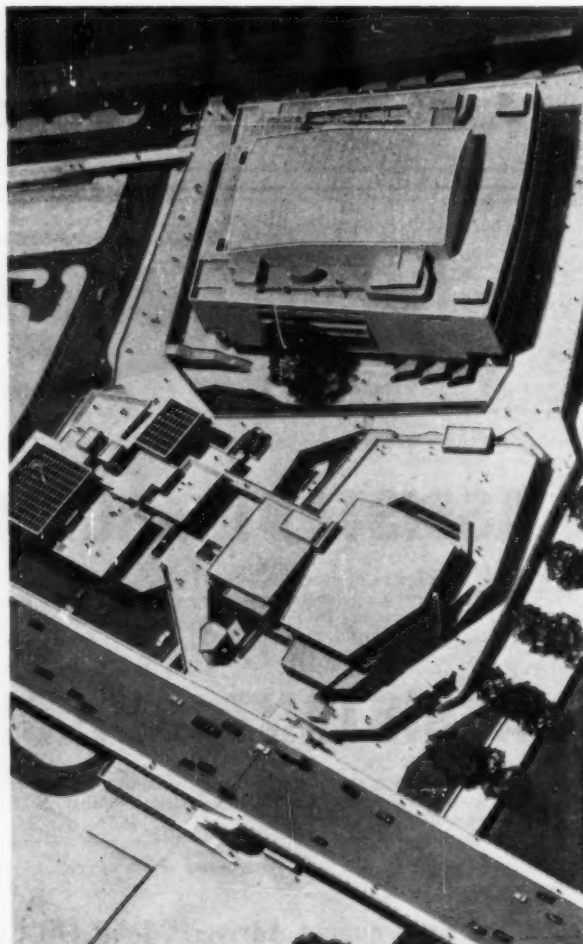
Whatever changes may result from the Royal Commission Report the enormous programme of work will have to be done and service now with the L.C.C. provides the best training ground for opportunities in the future.

And there is room for a few part-time architects.

Application forms and further particulars from Hubert Bennett, F.R.I.B.A., Architect to the London County Council, County Hall, S.E.1, quoting reference EK/925/4.

"... evidence that the L.C.C. is not content to rest on the Architectural laurels it has already earned, but is capable of leading in new directions when the opportunity offers."

Architectural correspondent, "The Times", March 24, 1961



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.

AIR-MAIL SERVICE available on request. In response to requests from a number of Overseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appointments Vacant, we have been pleased to arrange that cuttings of all such classified advertisements appearing in the A.J., shall be despatched by air-mail on Wednesday of each week (one day prior to A.J. publication date). The cost of this special service to Overseas subscribers will be 5s. for four weeks (1s. 3d. for each additional week) and prepayment should be sent by subscribers wishing to take advantage of this service. The charge we are making represents only the actual cost of the postage involved.

Public and Official Announcements

36s. per inch; each additional line 3s.

CITY OF GLASGOW

ASSISTANT ARCHITECTS

The Architectural and Planning Department has a number of vacancies for qualified Assistant Architects.

The Department has in hand a large, varied and interesting programme of work, including Comprehensive Redevelopment, Multi-storey Flats, Schools and Civic Buildings. The work will provide scope for personal initiative in the preparation of designs and details of schemes upon which construction work will follow.

The salary scale for these assistantships is up to £1,500 with placing according to experience. A five-day week is in operation.

Advances up to 100 per cent. of valuation will be made available, where needed, for the purchase of suitable houses in or near Glasgow, by successful applicants.

Form of application may be obtained from the Principal Administrative Officer, 20, Tron-gate, Glasgow, C.1.

A. G. JURY,

City Architect and Director of Planning.
6318

AYCLIFFE DEVELOPMENT CORPORATION
(NEW TOWN OF NEWTON AYCLIFFE)
ASSISTANT ARCHITECTS
AND
ARCHITECTURAL ASSISTANTS

Applications are invited for the above appointments at salaries within the range of Grades A.P.T. IV and VI of the Whitley Council for New Towns Staff salary scales, i.e. £1,140-£1,555 p.a. The commencing salary and grade will be fixed according to the qualifications and experience of the successful applicant.

The principal work for the successful applicants will be in connection with the development of the Town Centre of the new town. Appointments subject to N.J.C. Conditions, superannuation, medical examination and to one month's notice, in writing, on either side.

Housing accommodation available, if required. Applications, stating age, qualifications and experience, together with the names of two referees, to be sent to the undersigned.

A. V. WILLIAMS,
General Manager.

Churchill House,
Newton Aycliffe,
Nr. Darlington. 6672

LANCASHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
SENIOR ASSISTANT ARCHITECTS
(N.J.C. Scale "B," £1,505-£1,670)

Applications are invited from experienced Architects for posts on the permanent staff. The County Council has a large and extremely varied Building Programme, and posts will be filled by men of initiative, imagination and a flair for sensitive design.

Applicants are expected to be Registered Architects, as well as Associates of the Royal Institute of British Architects and, if appointed, will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and conditions of appointment are obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by the 5th May, 1961. 6942

OXFORDSHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited from suitably qualified engineers for the post of HEATING AND VENTILATING ENGINEER, salary J.N.C. Scale "B" (£1,410-£1,670). This is a new appointment to advise on this aspect of the department's work. A knowledge of electrical installations would be an advantage.

The appointment is superannuable and subject to medical examination. Application forms and further particulars to be obtained from the undersigned to be returned by the 8th May, 1961.

ALBERT R. SMITH,
County Architect.

Park End Street Offices,
Oxford. 6973

CITY AND COUNTY OF NEWCASTLE UPON TYNE

CITY ARCHITECT'S DEPARTMENT

A unique opportunity exists in this office for competent Architects to take part in one of the most ambitious programmes of varied building works in the country, and vacancies in the establishment occur for ARCHITECTS who will be considered on their ability in design, experience, and architectural outlook, in the following grades:-

J.N.C. "C": £1,560-£1,825 per annum.

J.N.C. "B": £1,410-£1,670 per annum.

A.P.T. V: £1,310-£1,480 per annum.

A.P.T. IV: £1,140-£1,310 per annum.

A.P.T. III: £960-£1,140 per annum.

A.P.T. II: £815-£960 per annum.

A.P.T. I: £645-£815 per annum.

The Department is engaged upon a wide and varied programme of major redevelopment schemes embracing multi-storey flats, shopping precincts and associated community buildings, one of which schemes is the Scotswood Road Redevelopment Area to rehouse approximately 5,000 people, and which is expected to cost in the region of £12 million.

Planning work has now commenced on the new Education Precinct in the central area, comprising Colleges of Further Education, Art and Industrial Design, Drama, Commerce and Multi-storey Hostels, which will be the largest development of its kind in the country.

Further projects include: Airport Terminal; Abattoir and Fatstock Market; Vegetable Markets; Central Library; and Divisional Police Headquarters, etc., and a varied programme of normal housing development of a stimulating character.

The department is also engaged on the New Town Hall, where an exceptional opportunity is presented for working on a building of some £4 million in value, and being executed in materials of the highest quality.

Architects wishing to take part in one of Britain's most stimulating programmes should apply immediately for further details and forms of application to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle upon Tyne, 1, indicating the grade for which they wish to apply.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1
20th February, 1961. 6084

OXFORDSHIRE COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

Applications are invited from qualified quantity surveyors for the post of CHIEF QUANTITY SURVEYOR, salary J.N.C. Scale "B" (£1,410-£1,670). This is a new appointment to take charge of and develop the quantity surveying section which is small at present.

The appointment is superannuable and subject to medical examination. Application forms and further particulars to be obtained from the undersigned to be returned by the 8th May, 1961.

ALBERT E. SMITH,
County Architect.

Park End Street Offices,
Oxford. 6977

CITY OF BIRMINGHAM

CITY ARCHITECT'S DEPARTMENT

Opportunities are offered to enthusiastic and imaginative ARCHITECTS to take a responsible part in a large and interesting programme of work for the City of Birmingham.

The work in hand includes a large Exhibition building, multi-storey Office Blocks, and a new Central Library, as well as Schools, Colleges and Housing (including multi-storey flats), and many other important buildings.

Appointments within either A.P.T. V (£1,310-£1,480) or A.P.T. IV (£1,140-£1,310) for fully-qualified Architects.

Candidates who have passed Parts I and II of the Final R.I.B.A. Examination or hold equivalent qualifications will be eligible for A.P.T. IV (£1,140-£1,310) appointments.

Commencing salaries within the scales will be according to capabilities and experience. Pension scheme. Five-day week. Medical examination.

Applications to the undersigned stating age, present position and salary, qualifications, experience and names of two referees.

A. G. SHEPPARD FIDLER,
City Architect.

Baskerville House,
Civic Centre,
Birmingham, 1. 7048

STEVENAGE DEVELOPMENT CORPORATION

Applications are invited for appointment as ASSISTANT ARCHITECT in the Chief Architect's Department on New Towns' Salary Grade A.P.T. III, £960-£1,140—starting salary according to qualifications and experience. Applicants should be Associates of the Royal Institute of British Architects and have experience in design and construction of modern buildings. Candidates who are taking final examinations shortly may be appointed in Grade A.P.T. II—£815-£960 and on qualifying be transferred to a higher vacancy.

Living accommodation will be available in an appropriate case. Local Government superannuation; five-day week.

Applications giving details of experience and the names of two referees should be sent to the Chief Administrative Officer, Daveshill House, Danestrete, Stevenage, Herts, not later than 8th May, 1961. 7194

ADMINISTRATIVE COUNTY OF LEICESTER

(a) PRINCIPAL ASSISTANT ARCHITECT.

£1,410-£1,565.

(b) CHIEF ASSISTANT ARCHITECTS, £1,310-£1,480.

(c) SENIOR ASSISTANT ARCHITECTS, £1,140-£1,310.

(d) ARCHITECTURAL ASSISTANT, £815-£1,140 (according to qualifications).

Candidates for (a) must be members of the R.I.B.A., have had sound experience and be capable of acting as Group Leaders on an extensive programme of education buildings. Candidates for (b) must be members of the R.I.B.A., have had considerable office experience and be capable of taking charge of contracts from inception to completion. For (c), should be members of the R.I.B.A., have had office experience and be capable of taking charge of small contracts. For (d), should have Intermediate or Final qualifications of the R.I.B.A. and be capable of executing working drawings. Lodging allowance and removal expenses may be paid to a married man. Apply on form obtainable from County Architect, 125 London Road, Leicester. 7039

EAST ANGLIAN REGIONAL HOSPITAL BOARD

Vacancies in ARCHITECTS' DEPARTMENTS, to assist in carrying out boards' expanding hospital building programme.

ASSISTANT ARCHITECTS. Salary £905-£1,310. Qualification: Registered Architect by examination.

ARCHITECTURAL ASSISTANTS. Salary £625-£900. Qualification: Intermediate R.I.B.A. or exemption.

ARCHITECTURAL DRAUGHTSMEN. Salary £475-£685. Candidates should have had three years' experience in architectural drawing.

Commencing salaries may be fixed above minimum on account of experience.

The work offers excellent opportunity for gaining experience in whole field of hospital architecture, ranging from adaptation schemes to new major development projects, including all types of medical ancillary departments and domestic buildings.

Applications stating age, qualifications, experience and details of present position with names of three referees to Secretary of Board, 117 Chesterton Road, Cambridge, by 8th May, 1961. 7037

OXFORDSHIRE COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

1. ASSISTANT ARCHITECTS, A.P.T. V (£1,310-£1,480) (starting salary according to experience).

2. ASSISTANT ARCHITECTS, A.P.T. IV (£1,140-£1,310) (starting salary according to experience).

Applications are invited from Qualified Architects to work on an interesting and varied building programme.

The appointments are superannuable and subject to medical examination. Applications on forms to be obtained from the undersigned to be returned by the 8th May, 1961.

ALBERT E. SMITH,
County Architect.

Park End Street Offices,
Oxford. 6975

SURREY COUNTY COUNCIL

Applications invited for appointment of ASSISTANT ARCHITECTS on Grade V (£1,310-£1,480 p.a. plus £45 p.a. London Allowance). Must be A.R.I.B.A. and capable of leading a small team dealing with medium and large-scale contracts.

Candidates will be appointed at the appropriate point within the scale according to age and ability.

Approved removal expenses will be paid to successful candidates.

Full details, present salary and three copy testimonials, preferably one from present employer, to County Architect, County Hall, Kingston, as soon as possible. 7064

SURREY COUNTY COUNCIL

Applications invited for following appointments:-

1. Salary range £960-£1,310 p.a. plus £45 p.a. London Allowance. Successful candidates will be paid according to age and experience and will receive approved removal expenses. Applicants should state salary they expect to receive.

ARCHITECTS. Must be A.R.I.B.A. and have had experience in preparation of drawings and specifications, and be capable of assuming responsibility for medium to large-scale contracts.

2. GRADE II (£815-£960 p.a. plus up to £40 p.a. London Allowance).

ARCHITECTURAL ASSISTANTS. Must be of good general training, preference given those who have passed Inter. R.I.B.A.

Candidates will be appointed at the appropriate point within the scale according to age and ability.

Full details, present salary and three copy testimonials, preferably one from present employer, to County Architect, County Hall, Kingston, as soon as possible. 7063

HAMPSTEAD BOROUGH COUNCIL

Require in the Housing Architect's Department TWO QUALIFIED ASSISTANT ARCHITECTS

for new development including multi-storey blocks of flats. Salary A.P.T. Grade IV (£1,140-£1,310 basic) plus £45 London Weighting. Group system of working. Advances for house purchase up to 100 per cent. of valuation will be considered in suitable cases. Applications with names of two referees to Town Clerk, Town Hall, N.W.3, by 5th May, 1961. 7056

FLINTSHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
 Applications are invited for the post of **CHIEF ASSISTANT ARCHITECT** within Grade A.P.T. V (£1,310-£1,480), plus an allowance as an essential car user. Candidates must be Associates of the R.I.B.A. with a minimum of four years' practical experience in the design of public buildings of all classes, and in the handling of contracts and technical administration. Further particulars and form of application obtainable from the Clerk of the County Council, County Buildings (P.O. Box No. 1), Mold. Closing date 8th May, 1961. 7047

COUNTY BOROUGH OF SOUTHEND-ON-SEA
EDUCATION COMMITTEE
MUNICIPAL COLLEGE
 Principal: T. L. MORGAN, M.Sc., A.M.I.C.E., A.M.I.STRUCT.

Applications are invited for the following post: **STUDIO MASTER (Assistant Grade B)** in the School of Architecture. Duties to commence 1st September, 1961. Teaching experience is desirable but not essential. Salary Scale: £700 x £27.10s.-£1,150.

Further particulars and forms of application may be obtained from the undersigned on receipt of a stamped addressed foolscap envelope.

Completed forms should be returned to the Principal, Municipal College, Victoria Circus, Southend-on-Sea, within 14 days of the appearance of this advertisement.

D. B. BARTLETT,
 Chief Education Officer.

Education Office,
 Warrior Square,
 Southend-on-Sea. 7112

BOROUGH OF LEYTON
 Applications invited for appointment to established post of **SENIOR PLANNING ASSISTANT** in Borough Engineer's Department. Salary within Grade A.P.T. III of National Joint Council's Scheme, viz. £960/£1,140 per annum, plus London weighting. Housing accommodation will be made available to successful applicant and the appointment carries an "Essential User" Car Allowance for vehicle not exceeding 10 h.p. or 1,199 c.c.

N.J.C. Conditions of Service. Five-day week. Staff Canteen available.

Apply by letter with details of age, experience and names, etc., of two referees, to reach the Borough Engineer, Town Hall, Leyton, E.10, not later than 5th May, 1961.

D. J. OSBORNE,
 Town Clerk.

Town Hall,
 Leyton, E.10. 7122

COUNTY BOROUGH OF WOLVERHAMPTON
BOROUGH ENGINEER'S DEPARTMENT
 Applications are invited for the following Architectural appointments:-

- (a) **PRINCIPAL ASSISTANT ARCHITECTS** (2). Salary Grade A.P.T. V (£1,310-£1,480).
- (b) **ASSISTANT ARCHITECTS**-several vacancies at salaries within the range A.P.T. I to IV (£645-£1,310) according to qualifications and experience.

Appointments subject to National Scheme of Conditions of Service, Local Government Officers' Superannuation Acts, and medical examination.

Housing accommodation and car allowances may be made available in respect of (a) and certain A.P.T. IV posts, and the successful (married) candidates will be paid removal expenses. Five-day week.

Applications, with the names and addresses of two referees, should be sent to the Borough Engineer, Town Hall, Wolverhampton, by Wednesday, 10th May, 1961. 7120

HOLLAND COUNTY COUNCIL (Lincolnshire)
 invite applications for the following appointments:-

- (a) **SENIOR ASSISTANT ARCHITECT**, Grade A.P.T. IV, £1,140 to £1,310 per annum.
- (b) **ARCHITECTURAL ASSISTANT**, Grade A.P.T. III, £960 to £1,140 per annum.
- (c) **SENIOR ASSISTANT QUANTITY SURVEYOR**, Grade A.P.T. IV, £1,140 to £1,310 per annum.
- (d) **QUANTITY SURVEYING ASSISTANT**, Grade A.P.T. II, £815 to £960 per annum.
- (e) **JUNIOR QUANTITY SURVEYING ASSISTANT**, Grade A.P.T. I, £645 to £815 per annum.
- (f) **HEATING AND VENTILATING ENGINEERING ASSISTANT**, Grade A.P.T. II, £815 to £960 per annum.

The N.J.C. Scheme of Conditions of Service, the provisions of the Local Government Superannuation Acts, and a medical examination will apply.

The County Council would be prepared to make a contribution towards the cost of removals. Forms, obtainable from the County Architect, should be returned to the Clerk of the County Council, County Hall, Boston, Lincs., by 12th May, 1961. 7119

BOROUGH OF FAIRING
ARCHITECTURAL ASSISTANT within scale A.P.T. IV, according to experience (£1,185-£1,355 inclusive). Must have recognised architectural qualifications.

JUNIOR ARCHITECTURAL ASSISTANT, A.P.T. I (£645-£815) plus London weighting.

Full particulars and forms of application from Borough Engineer, Town Hall, Faring, W.5.

E. J. COPE BROWN,
 Town Clerk.

7012

COUNTY BOROUGH OF WIGAN
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the appointment of **PRINCIPAL ARCHITECTURAL ASSISTANTS**, on the established staff of the Borough Engineer and Surveyor, at a salary in accordance with Grade A.P.T. IV/V (£1,140-£1,480).

There is an interesting and varied programme of work in the Department.

Housing accommodation can be offered for the successful married applicants.

The point of entry to the salary Grade will be determined by qualifications and experience.

Applications, giving name, address, age, present appointment and salary, previous appointments, and also the names of two persons to whom reference may be made, should be sent to the Borough Engineer and Surveyor, Municipal Buildings, Wigan, to be received by him by no later than 15th May, 1961.

ALLAN ROYLE,
 Town Clerk.

Municipal Buildings,
 Wigan. 7186

WAR OFFICE require **CIVIL ENGINEER or MAINTENANCE SURVEYOR** (basic grade) at Royal Ordnance Factory, Bishopstoke, near Glasgow. Duties: Control, under Main Grade Officer, section of engineering department concerned with provision and maintenance of industrial buildings housing chemical plant. Preparation of estimates, bills of quantities, specifications and supervision of direct and contract labour. *Quals. and Exp.*: Should be corporate members of the Institution of Civil Engineers or R.I.C.S. or have passed examinations necessary for attaining such membership. Knowledge of danger building regulations and construction as applicable to explosives manufacture desirable. Salary: £911 at age 25 to £1,228 at age 34 rising to £1,430. Opportunities later for promotion and non-sessional appointment. Forms from War Office, C5(W)(1), Leatherhead Road, Chessington, Surrey. Closing date 13th May, 1961. 7152

BOROUGH OF STOCKTON-ON-TEES
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:-

1. **ASSISTANT ARCHITECT**-Salary A.P.T. II (£815-£960).
2. **ASSISTANT QUANTITY SURVEYOR**-Salary A.P.T. IV (£1,140-£1,310).
3. **ASSISTANT QUANTITY SURVEYOR**-Salary A.P.T. II (£815-£960).
4. **ASSISTANT QUANTITY SURVEYOR**-Salary A.P.T. I (£645-£815).

Housing accommodation will be provided for married applicants for appointments 1, 2 and 3. Applications, giving details of age, education, qualifications, past and present appointments and experience, together with the names of two referees, must be sent to the Borough Architect, 28, The Square, Stockton-on-Tees, to reach him by the 15th May, 1961.

JOHN E. HAWORTH,
 Town Clerk.

Municipal Buildings,
 Stockton-on-Tees. 7168

DOWN COUNTY COUNCIL
PLANNING DEPARTMENT
SENIOR ASSISTANT ARCHITECT, GRADES IV AND V, £1,140 TO £1,480

A senior assistant architect is required for the above department which has an interesting and varied programme of work. The successful applicant will have the opportunity to practice with Town Planning and Architecture. This programme includes Redevelopment Schemes, Old People's Homes, Clinics, a County Library, Branch Libraries and Offices.

Applicants must be Associates of the Royal Institute of British Architects and preference will be given to candidates who are also Associate Members of the Town Planning Institute or hold a diploma in Town Planning.

The successful candidate will be required to live in or near Downpatrick. The appointment will be subject to the County Council's conditions of service and to the provisions of the Local Government (Superannuation) Act (N.I.), 1950.

Preference will be given to Ex-Service candidates having the necessary experience and qualifications.

Applications giving details of training, qualifications and experience, together with three testimonials (or the names of three persons to whom reference may be made) should reach the undersigned not later than Tuesday, 16th May, 1961.

A five-day week is in operation.

J. H. HARVEY.

Secretary to the County Council.

Courthouse, Downpatrick. 7213

BOROUGH OF BRENTFORD AND CHISWICK
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment at a salary in accordance with Grade A.P.T. II, £815 to £960 plus London weighting allowance, commencing salary dependent upon experience. The post offers excellent opportunities for gaining architectural training and practical experience. Application forms returnable within two weeks after this advertisement appears, may be obtained from Borough Engineer & Surveyor.

W. F. J. CHURCH,
 Town Clerk.

Town Hall,
 Chiswick, W.4. 7185

BOROUGH OF ROYAL TUNBRIDGE WELLS
ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of Architectural Assistant at a salary in accordance with Grade A.P.T. II (£815/£960 p.a.).

The applicants must be good draughtsmen of R.I.B.A. Intermediate examination standard.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, the National Scheme of Conditions of Service and the passing of a medical examination.

Housing accommodation will be provided if requested.

Applications, giving details of experience and qualifications, together with the names and addresses of two persons to whom reference may be made, are to be submitted to the Borough Surveyor & Waterworks Engineer, not later than noon on Monday, 8th May, 1961.

M. J. H. GIRLING,
 Town Clerk.

7208

HEMEL HEMPSTEAD BOROUGH COUNCIL
SENIOR ARCHITECTURAL ASSISTANT

A.P.T. GRADE IV, (£1,140-£1,310)

Applications are invited for the appointment of a Senior Architectural Assistant in the Borough Engineer's Department from candidates possessing the Final of the Royal Institute of British Architects or similar qualification. Salary within Grade IV (£1,140-£1,310) of the National Joint Council's Scales.

Housing accommodation will be made available to the successful applicant. The appointment will be subject to the Local Government Superannuation Acts, to the National Conditions of Service from time to time in force, and to the passing of a medical examination and will be terminable by one month's notice in writing on either side.

Applications stating age, education, qualifications and experience, together with the names of two referees, should be sent to A. H. Turner, A.M.I.C.E., Borough Engineer, High Street, Hemel Hempstead, Herts., not later than Monday, 15th May, 1961.

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

C. W. G. T. KIRK,
 Town Clerk.

Town Hall,
 Hemel Hempstead, Herts. 7207

20th April, 1961.

SOUTH WEST METROPOLITAN REGIONAL
HOSPITAL BOARD

ASSISTANT REGIONAL ARCHITECT
 An Architect of outstanding ability is required to assist the planning team implementing the Board's building programme. His duties will be:-

- (1) To assist in the formulation and establishment of consistent design standards of a high order.
- (2) To realise major hospital development plans which can incorporate the evolving medical patterns. This necessitates sustained research and the design and promotion of pilot schemes.

The work embraces a wide range of recreational therapeutic and residential buildings besides hospitals.

Applicants must be Associates of the Royal Institute of British Architects. Hospital experience is desirable but not essential.

Salary: £1,375 rising to £2,225 p.a. Applications including age, salary, present and previous appointments and the names of three referees should be addressed to the undersigned at the Board's Headquarters at 40, Eastbourne Terrace, London W.2 and should be received by not later than 6th May.

E. G. BRAITHWAITE,
 Secretary.

7209

AIR MINISTRY require **SENIOR TAKERS OFF** in Quantities Division, London. Must have wide experience of all classes of work and preferably be A.R.I.C.S. (Sub-Division III Quantities). Salaries (inner London scale) from £1,448 to £2,015. Commencing salary A.Q.E. Non-negotiable but long term with prospects of establishment and/or promotion. Five-day week. 22 days paid leave. Applicants must be natural born British subjects. Forms from Ministry of Labour, Technical and Scientific Register (K), 26, King Street, London, S.W.1. Quoting J.340/OA.

6315

WARWICKSHIRE COUNTY COUNCIL
ARCHITECT'S DEPARTMENT
ASSISTANT ARCHITECTS

Recently qualified Architects are required for appointment on Grade A.P.T. III-IV (£960-£1,310). The persons appointed will work in groups on large projects and an opportunity will be given to men with enthusiasm and ability to design and carry out projects under a group architect.

The commencing salary can be within the grade according to ability and experience. Five-day week worked. The Council have schemes for the payment of removal expenses and a lodging allowance to married officers. Application forms and full conditions applicable to the appointment can be obtained from Eric Davies, R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
 Clerk of the Council.

Shire Hall,
 Warwick.

April, 1961. 7199

**GLOUCESTERSHIRE COUNTY COUNCIL
COUNTY ARCHITECTS' DEPARTMENT**
Applications are invited for the following appointments:—

- (a) **ASSISTANT ARCHITECTS**—"CAREER CLASS," commencing in A.P.T. IV (£1,140-£1,310 p.a.) progressing to A.P.T. V (£1,310-£1,480 p.a.) subject to satisfactory report on reaching appropriate incremental point in Grade. Applicants must be Registered Architects and Associate Members of the R.I.B.A.
- (b) **ARCHITECTURAL ASSISTANTS**—"QUALIFYING CLASS." Vacancies exist in the following Grades:—
A.P.T. I: Salary £645-£815 p.a.
A.P.T. II: Salary £815-£960 p.a.
A.P.T. III: Salary £960-£1,140 p.a.
A.P.T. IV: Salary £1,140-£1,310 p.a.
- Applicants for posts in Grades I and II should have passed the Intermediate Examination of the R.I.B.A., and for Grades III and IV the full R.I.B.A. Final Examination.
- N.J.C. Conditions of Service; superannuation; medical examination.
- Applications, stating age, present position and salary, details of previous appointments, together with the names and addresses of two persons for reference, must reach the County Architect, Shire Hall, Gloucester, by 13th May, 1961.
- GUY H. DAVIS,**
Clerk of the County Council.
7192

**BOROUGH OF FINCHLEY
HOUSING DEPARTMENT**
TEMPORARY ARCHITECTURAL ASSISTANT
Salary within Grades A.P.T. III/IV (£960-£1,310 p.a.) for a Qualified Architect. London weighting additional.

Subject to satisfactory service, anticipated duration of the post will be approximately one year.

Candidates must have had at least five years' practical office experience.

The National Scheme of Conditions of Service and the Local Government Superannuation Acts apply and medical examination required.

Applications, stating age and full particulars of qualifications and experience, with the names of two referees, to the Borough Housing Officer, The Avenue, Finchley, N.3, by first post on May 9th, 1961.

R. M. FRANKLIN,
Town Clerk.
Municipal Offices,
N.3.
7102

**CITY OF CHICHESTER
ARCHITECTURAL ASSISTANT**
Applications are invited for the above appointment at a salary in accordance with A.P.T. Grade II (£815-£960).

The person appointed should have a good knowledge of building construction, design and draughtsmanship.

The appointment will be in accordance with the National Conditions of Service and terminable by one month's notice on either side.

Housing accommodation will be provided, if required.

Applications, stating age, education, qualifications, training and experience, present and previous appointments, together with the names of two referees, should reach the City Surveyor, Greyfriars, North Street, Chichester, by 11th May, 1961.

ERIC BANKS,
Town Clerk.
Greyfriars,
North Street,
Chichester.
7202

**KINGSTON UPON HULL EDUCATION
COMMITTEE**
Appointment of Resident Engineer for the erection of the David Lister High School, Kingston upon Hull.

Applications are invited from suitably qualified men for the post of **RESIDENT ENGINEER** for the erection of the David Lister High School, Kingston upon Hull. This new comprehensive school, which will provide accommodation for 1,440 pupils and is estimated to cost about £517,000, is being designed by Messrs. Lyons, Israel and Ellis, Chartered Architects of London, with Messrs. F. J. Samuels & Partners, of London, as Consulting Engineers. The commencing salary will be at the rate of £1,100 per annum and a site allowance of £150 per annum for a single man or of £200-£250 per annum for a married man depending on the particular circumstances, will be payable to a successful candidate living away from home. The appointment is for a period of about two and a half years commencing in about July, 1961.

Application form and further particulars may be obtained from the undersigned to whom completed forms should be returned not later than the 20th May, 1961.

S. W. HOBSON,
Chief Education Officer.
Guildhall,
Kingston upon Hull,
Yorkshire.
7097

**COUNTY BOROUGH OF SOUTHAMPTON
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT**
Applications are invited for the following appointment:
ASSISTANT ARCHITECT, Grade A.P.T. V (£1,310/£1,480), for duties in connection with an extensive and varied programme of housing development including multi-storey flats. Applicants must hold the qualification A.R.I.B.A. with wide experience in the design and administration of major building works.

The appointment is subject to N.J.C. conditions of service.

Housing accommodation available in approved cases and approved removal expenses reimbursable up to a maximum of £50.

Apply on application forms obtainable from the Borough Engineer and Surveyor, Civic Centre, Southampton, returnable by Monday, 8th May, 1961.
7095

**BOROUGH OF EDMONTON
BOROUGH ARCHITECT'S DEPARTMENT**
The under-mentioned staff are required for the Borough Architect's Department of a progressive Borough. Programme of works includes multi-storey flats, Town Centre redevelopment, industrial buildings and offices. The Council are prepared to grant loans up to 100 per cent. of valuation to facilitate house purchase.

(a) **SENIOR ASSISTANT ARCHITECT**—Grade A.P.T. IV—£1,185 to £1,355 inclusive of London weighting.

(b) **ASSISTANT QUANTITY SURVEYOR**—Grade A.P.T. III—£1,005 to £1,185 inclusive of London weighting.

Commencing salaries will be in accordance with qualifications and experience.

Applications on forms obtainable from the Town Clerk, Town Hall, Edmonton, N.9, to be delivered by the 6th May, 1961.

H. BACKHOUSE,
Town Clerk.
ES.EM. 13.4.61.
7077

**GLENROTHES DEVELOPMENT
CORPORATION**
ARCHITECT (A.R.I.B.A.) required for a variety of work including Housing, Industrial, Shopping and Commercial Buildings.

The vacancy offers an excellent opportunity to an Architect with imagination and enthusiasm.

Salary up to £1,480 per annum according to experience.

House to rent available.

Applications to Secretary and Legal Adviser, Glenrothes Development Corporation, Glenrothes, Fife, by 1st May, 1961.
7169

COSTAIN

Architectural Draughtsman

required to work in our London office on housing schemes and commercial buildings to be developed in the Middle East and Mediterranean areas. Applicants should have had at least five years previous experience in an Architectural Drawing office. Opportunity for overseas service at a later date if desired.

Please write or telephone (WATERloo 4977) to

PERSONNEL MANAGER, RICHARD COSTAIN LTD.

111 WESTMINSTER BRIDGE ROAD, S.E.1.

For further details write direct to the Chief Architect, telling him all about yourself: **H. STANLEY SMITH, A.R.I.B.A.**

ARCHITECTS

Borough of Tottenham — Middlesex — Population 116,000

Applications are invited from architects who wish to be engaged on extensive schemes of urban renewal including layouts for housing estates and shopping precincts, the design and construction of multi-storey flats and other domestic buildings, public buildings and school work.

- (a) **Senior Assistant Architect:**
A.P.T. Grade V—£1,310 to £1,480 per annum.
- (b) **Senior Assistant Architects:**—two posts vacant
A.P.T. Grade IV—£1,140 to £1,310 per annum.
- (c) **Assistant Architect:**
A.P.T. Grade III/IV—£960 to £1,310 per annum.
- (d) **Architectural Assistants:**—two posts vacant.
A.P.T. Grade II—£815 to £960 per annum.
- (e) **Architectural Draughtsman:**
A.P.T. Grade I—£645 to £815 per annum.

All appointments will be to the established staff and London Weighting (£15 to £45) is payable in addition and commencing salaries will be according to experience and ability.

Applicants for posts—

- (a), (b) and (c) must hold a final professional qualification;
(d) must have passed R.I.B.A. Intermediate Examination or equivalent;
(e) should have had good drawing office experience.

Five-day week; part removal expenses reimbursed; staff restaurant facilities.

Application Form, obtainable from the Borough Engineer and Surveyor (AJ), Town Hall, N.15, should be returned to him not later than 10th May, 1961.

**ARCHITECTURAL STAFF
SENIOR AND INTERMEDIATE
ASSISTANTS AND DRAUGHTSMEN**

required by

F. W. WOOLWORTH & CO. LTD.

Five day week. Pension scheme. Dining facilities.
Modern office building. Good salaries according
to experience and qualifications. Apply giving
details of salary required, age and experience to:—

District Architect,

F. W. Woolworth & Co. Ltd.

1264 London Road,
Norbury, S.W.16

LAING

LAING DEVELOPMENT COMPANY LIMITED

requires

ARCHITECTS

who are

Skilled in design, for
work involving redevelopment of city centres

also

**EXPERIENCED
PERSPECTIVE
ARTIST**

Apply, giving brief details, to Group Personnel
Manager (TH.1) John Laing and Son Limited,
London, N.W.7

WIMPEY

SENIOR ASSISTANT

required for COLOUR DESIGN SECTION
in Architect's Department.

Applicants should be experienced in Interior
Design and Exhibition Display work and
have a knowledge of building construction.
Permanent appointment, with good scope
for the right man.

Five day week; three weeks' annual holiday;
Pension Fund.

*Applicants should write, giving brief
particulars, to:*

**Chief Architect,
GEORGE WIMPEY & CO. LTD.,
27 Hammersmith Grove, London, W.6.**

ARCHITECTS

An established partnership of school trained
assistants with considerable office
experience, who have handled a variety of
projects for Architects—ranging from
small flat development to half-million-pound
store—over the past five years, offer
their assistance in design and preparation
of working drawings, schedules and details.
From experience we know that Architects
are unwilling to let their work be handled
outside their own office—however, the
assumed difficulties that could arise can be
easily overcome by regular visits.

If you would like to have particulars of our
service, please write to Box No. 7134.

BRECONSHIRE COUNTY COUNCIL

Applications are invited for the following posts in the Planning Department:—

(1) **NATIONAL PARK ASSISTANT, A.P.T. Grade II** (£815-£960). This is a new post, mainly for work in the Brecon Beacons National Park, though the person appointed may be required to do work of a similar nature outside the Park. The post offers scope for a man with initiative and appreciation of the countryside. Candidates should possess a qualification or have had considerable experience in landscape architecture and forestry. Work will be required in the sphere of public relations and will involve organisation of the Authority's National Park Exhibitions. A Land-Rover will be provided.

(2) **PLANNING ASSISTANT, A.P.T. Grade II** (£815-£960). Principal duties will be preparation of Town Maps, review of the County Development Plan and general statistical and research work. Applicants should have passed the Intermediate Examination of the T.P.I. or have a university degree in an appropriate subject or have extensive experience of this type of work. Both posts will be subject to the National Scheme of Conditions of Service, the Local Government Superannuation Acts, the passing of a medical examination and one month's written notice on either side.

Candidates must state whether to their knowledge they are related to any member or senior officer of the Council.

Further particulars and application forms from County Planning Officer, 6, Glamorgan Street, Brecon, and completed applications to be returned to the undersigned not later than 23rd May, 1961.

C. M. S. WELLS,
Clerk of the County Council.

County Hall,
Brecon.

7096

ROYAL BURGH OF DUMFRIES

DEPUTY BURGH ARCHITECT

Applications are invited from qualified Architects, preferably with experience in Redevelopment Work.

The appointment, within the Salary Scale £1,280-£1,430 (by three increments of £50), will be subject to the Town Council's Superannuation Scheme and N.J.I.C. Conditions of Service, and the successful applicant will require to pass a medical examination.

If required, the tenancy of a Council house will be given to the successful applicant.

Applications, stating age, qualifications and experience, and the names of two referees, should be lodged with the undersigned not later than 12th May, 1961.

GEORGE D. GRANT,
Town Clerk.

Municipal Chambers,
Dumfries.

15th April, 1961.

7095

SENIOR ASSISTANT ARCHITECTS
BRITISH TRANSPORT COMMISSION
(ARCHITECT'S OFFICE)

Vacancies exist for SENIOR ASSISTANT ARCHITECTS to work on current major projects. Salary range: £1,350-£1,560 p.a.

R.I.R.A. qualification and imaginative approach to design, coupled with practical knowledge and the ability to apply it, essential.

Superannuation scheme; certain travel facilities; medical examination.

Write stating age, qualifications and experience, to Director of Establishment, British Transport Commission (Dept. AJ), 222, Marylebone Road, London, N.W.1, within 14 days.

7098

THE UNIVERSITY OF SHEFFIELD

Applications are invited for a post of LECTURER IN ARCHITECTURE to begin duties on 1st October, 1961. Applicants must have had not less than three years' practical experience. Initial salary according to qualifications and experience on the scale £1,050 × £50-£1,400 × £75-£1,850, with F.S.S.U. provision and family allowance. A grant towards removal expenses will be made. Further particulars may be obtained from the Registrar to whom applications (three copies) with the names and addresses of two referees should be sent by 31st May, 1961.

7092

BRITISH RAILWAYS—EASTERN REGION

Applications are invited for the post of ASSISTANT ARCHITECT in the Office of the Architect, Eastern Region, British Railways, at King's Cross Station. The office is engaged on a wide range of interesting buildings and gives responsibility for design, administration and site supervision to those with ability. Applicants should be qualified or have passed the Intermediate Examination with some years' practical experience. Salary range: £945-£1,020 per annum. Modern working conditions—five-day week. Rail travel concessions. Apply in writing to the Architect, Eastern Region, British Railways, King's Cross Station, London, N.1.

7088

LONDON COUNTY COUNCIL

ARCHITECT'S DEPARTMENT

Grade II (£1,250-£1,500) and Grade III (£830-£1,250) vacancies for RESEARCH ASSISTANTS in Town Development Division with experience and/or qualifications of Demographic, Social and Economic studies in connection with planning and designing of Town Expansion projects. Also in the same Grades vacancies for ASSISTANTS for planning and analysis of traffic studies.

Forms (returnable by 13th May, 1961) and particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/A/1052/4), County Hall, S.E.1.

7182

EXETER CITY COUNCIL

CITY ARCHITECT'S DEPARTMENT

THREE SENIOR ASSISTANT ARCHITECTS required on the established staff to work on an interesting and varied programme of local authority works.

Salary within A.P.T. Grade IV (£1,140 to £1,310), entry point on the grade depending on experience. Provision of housing accommodation will be considered and removal expenses will be paid.

Applicants must be Associate members of the R.I.B.A. N.J.C. Conditions of Service. Successful candidates will be required to pass a medical examination.

Applications, stating age, experience and qualifications, should be received by the City Architect, Municipal Offices, Exeter, not later than 12th May, 1961.

7136

WYCOMBE RURAL DISTRICT COUNCIL
APPOINTMENT OF ARCHITECTURAL
DRAUGHTSMAN

Applications are invited for the appointment of an Architectural Draughtsman in the Engineer and Surveyor's Department at a salary in accordance with Miscellaneous Grades V and VI (£685-£825 per annum).

The appointment is temporary but it is anticipated that the current programme of work will provide employment for at least three years.

The successful applicant will be engaged principally on work connected with housing schemes for aged persons with opportunities for survey work and a variety of general duties.

Applicants should be neat and accurate draughtsmen with experience in the preparation of working drawings and detailing from sketches and must have a good knowledge of building construction.

The Council will be prepared to assist with housing accommodation if required.

Applications endorsed "Architectural Draughtsman," should be addressed to K. E. M. Daniels, A.M.I.C.E., M.I.Mun.E., A.R.I.C.S., Engineer and Surveyor, 8/9, Easton Street, High Wycombe, and should reach him not later than 24th May, 1961.

L. C. RYSDALE,
Clerk of the Council.

17, High Street,
High Wycombe.

7187

COUNTY OF ESSEX

COUNTY PLANNING DEPARTMENT

Applications are invited for the following:—
(1) Vacant existing posts which have been upgraded in a recent review of the Department's establishment:—

(a) SENIOR PLANNING ASSISTANTS, A.P.T. V (£1,310-£1,480), respectively at Colchester and Romford Area Offices, in charge of Development Control Sections, and at Wanstead Area Office on Development Plan and Control work.

(b) SENIOR PLANNING ASSISTANT, A.P.T. III/IV (£960-£1,310), at Romford, in Central Areas Redevelopment Section, and at Wanstead on Development Plan work.

(c) PLANNING ASSISTANTS, A.P.T. I/II (£645-£960), at Braintree, Colchester, Epping and Romford Area Offices in Development Plan and Development Control Sections, and at Romford in Central Areas Redevelopment Section.

(2) NEWLY CREATED POSTS:—

(d) SENIOR PLANNING ASSISTANTS, A.P.T. V, in charge of Development Control Section at Braintree, in charge of Development Plan Section at Romford, and in Development Plan and Control Section at Wanstead.

(e) SENIOR PLANNING ASSISTANT, A.P.T. III/IV, on Rural Policy and Village Plan work at Braintree.

(f) PLANNING ASSISTANT, A.P.T. I/II, in Development Plan Section at Epping Area Office.

(g) PLANNING ASSISTANT, A.P.T. I (£645-£815), on Detailed Planning and Design work at Headquarters.

Applicants for posts (a) and (d) must be corporate members of the Town Planning Institute, and applicants for posts (b) and (e) should likewise be corporate members of the Town Planning Institute, or possess an appropriate qualification; all must have had good experience of work in an active Local Planning Authority.

Applicants for posts (c), (f) and (g) should have commenced studying for an appropriate professional qualification and successful candidates will be given facilities and financial assistance to continue such studies; consideration will be given to university graduates with suitable degrees (e.g. Geography, Economics).

The Department's six area Offices have a large share in the current review of the County Development Plan, which will include 26 Town Maps and some 24 Comprehensive Development Areas, Rural Policy Maps and Village Plans for all principal villages are in hand, together with a large extension of the London Green Belt.

An active partnership operates between Area Offices and District Councils in dealing with some 14,000 development applications per annum.

The appointed candidates are accordingly assured of good experience and an active share in the Department's work. A five-day week is in operation, and all posts are superannuable.

Appointments are subject to medical examination. Applications, with names of three referees, to County Planning Adviser, Broomfield Place, Broomfield, Essex, by 8th May.

7139

CITY OF BELFAST

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

CITY ARCHITECT'S DEPARTMENT

(a) PRINCIPAL HOUSING ARCHITECT

(b) PRINCIPAL GENERAL ARCHITECT

Salary—£1,915 × £55 (3) × £60 (1)—£2,140 per annum.

Applicants must be Fellows or Associates of the Royal Institute of British Architects and Registered Architects, or Registered Architects by examination.

Both posts carry considerable responsibility and applicants, in addition to administrative ability, should have wide experience, for (a) in the planning, preparation and carrying out of large scale housing and slum clearance schemes, multi-storey flats, shopping precincts, etc., and for (b) in the planning, preparation and carrying out of general public buildings, swimming baths, clinics, libraries, abattoirs, etc.

(c) ASSISTANT PRINCIPAL EDUCATION ARCHITECT

(d) ASSISTANT PRINCIPAL HOUSING ARCHITECT

(e) ASSISTANT PRINCIPAL GENERAL ARCHITECT

Salary—£1,700 × £50-£1,760 per annum.

Applicants must be Fellows or Associates of the Royal Institute of British Architects and Registered Architects, or Registered Architects by examination, and should have wide experience in the design and execution of large projects for educational, housing or general public buildings respectively, of the type normally carried out by a large local authority.

(f) CHIEF ENGINEER

Salary—£1,690 × £55 (3) × £60 (1)—£1,915 per annum.

Applicants must be Corporate Members of the Institution of Civil Engineers, or of the Institution of Municipal Engineers, and, in addition to administrative ability, should have wide experience in the planning, preparation and carrying out of the civil, structural, heating, mechanical and electrical engineering work required for educational, housing and general building projects normally carried out by a large local authority.

CITY SURVEYOR'S DEPARTMENT

(g) MECHANICAL ENGINEER

Salary Scale—£1,205 × 3/£55 × 5/£50-£1,620 per annum.

Applicants must be Corporate Members of the Institution of Mechanical Engineers.

(h) ENGINEER, CLASS I (Unestablished). Weekly wages equivalent to £1,205 × 3/£55 × 5/£50-£1,620 per annum.

Applicants must be Corporate Members of the Institution of Civil Engineers or the Institution of Municipal Engineers.

(i) ENGINEER, CLASS II (Unestablished). Weekly wages equivalent to £930 × 6/£40 × £45-£1,215 per annum.

Applicants must have a Degree in Civil Engineering or have passed Sections A and B of the examination of the Institution of Civil Engineers or equivalent.

Commencing remuneration determined in each case according to qualifications and experience. Superannuation contributions of approximately 6 per cent. of remuneration payable. Reciprocal pension arrangements exist with certain Public Authorities.

Canvassing will disqualify.

Application forms, etc., may be obtained from the City Architect's Department, 40, Academy Street, Belfast, 1, for posts (a), (b), (c), (d), (e) and (f); and from the City Surveyor's Department, Room 39, City Hall, Belfast, 1, for posts (g), (h) and (i).

Completed applications must reach the undersigned by 12th May, 1961.

JOHN DUNLOP,
Town Clerk.

City Hall,
Belfast, 1,
P.O. Box 234.

7127

ROYAL BOROUGH OF KINGSTON-UPON-THAMES

BOROUGH SURVEYOR'S DEPARTMENT

PLANNING ASSISTANT, A.P.T. GRADE III

(£960-£1,140 per annum plus London weighting)

Applications are invited for the above-mentioned appointment. Details and application forms obtainable from Borough Surveyor, Guildhall, Kingston-upon-Thames, and returnable by 12th May, 1961.

L. V. POWELL,
Town Clerk.

Guildhall,
Kingston-upon-Thames.
20th April, 1961.

7203

BOROUGH OF ILFORD

BOROUGH ENGINEER'S DEPARTMENT

APPOINTMENT OF ARCHITECTURAL

DRAUGHTSMAN

GRADE MISC. IV (MALE OR FEMALE)

Applications are invited for this appointment. Salary £525-£685 (plus London weighting, depending on age, and amounting to £49 p.a. if 25 or over). Commencing salary according to qualifications and experience. Maximum paid to suitable applicant. Five-day week. Candidates should be competent draughtsmen and be capable of preparing working drawings under supervision. Appointment permanent, superannuable and subject to medical examination.

Form of application obtainable from Borough Engineer, Town Hall, Ilford. Closing date 15th May, 1961.

7209

**COUNTY BOROUGH OF CROYDON
ARCHITECTURAL AND QUANTITY
SURVEYING STAFF**
Applications are invited for these appointments on the Corporation's housing and general architectural work which includes a considerable variety of large interesting projects.

- (a) ASSISTANT ARCHITECTS (Team Leaders), R.I.B.A. Final required. A.P.T. V (£1,355 to £1,525 including London weighting).
(b) ARCHITECTURAL ASSISTANTS, and
(c) QUANTITY SURVEYING ASSISTANTS, A.P.T. I/II/III/IV (£660 to £1,355 including "London weighting").
"Essential user" car allowances payable for appointments (a); similar allowances for appointments (b) and (c) when graded in A.P.T. IV with R.I.B.A. or R.I.C.S. Final.
Pensionable posts; commencing salaries according to qualifications and experience. Five-day week (38 hours).

Housing—Assistance with rented housing accommodation will be considered. Advances up to 100 per cent. of Borough Valuer's valuation will be made available where needed for the purchase of suitable houses in Croydon by successful applicants.

Further particulars and application forms from the Borough Engineer, Town Hall, Croydon. Closing date 10th May, 1961. 7132

CITY OF SALFORD
Applications are invited from appropriately qualified persons for the following posts in the Department of the City Engineer and Surveyor (G. Alexander McWilliam, B.Sc., A.M.I.C.E., A.R.I.C.S., M.I.Mun.E.).

- (a) PRINCIPAL PLANNING ASSISTANT, J.N.C.C.O. "A" (£1,400—£1,565 p.a.).
(b) SENIOR TOWN PLANNING ASSISTANTS (2), A.P.T. Grade V (£1,310—£1,480 p.a.).
(c) TOWN PLANNING ASSISTANT, A.P.T. Grade IV (£1,140—£1,310 p.a.).

The Department is undertaking programmes of redevelopment and urban renewal and the posts will afford a wide variety of interesting experience. The commencing salary will be dependent upon qualifications and experience.

Housing accommodation may be provided in approved cases.

A five-day week is in operation.
Applications, stating age, education, qualifications and details of experience, together with the names of two referees, should be sent to the City Engineer and Surveyor, Town Hall, Salford, 3, Lancs., to arrive by Monday, 8th May, 1961. Applications should also indicate post applied for. 7130

**MINISTRY OF HOUSING AND LOCAL
GOVERNMENT—CHIEF PLANNER**
Applications are invited for this pensionable post. The person appointed will be responsible for the organisation, direction and supervision of the Ministry's technical planning, advisory and research service, whose work in reviewing the objects of planning, particularly in relation to urban development and redevelopment, is to be expanded.

The post demands considerable organising ability and qualities of leadership, and provides the opportunity to make an important contribution to the development of new ideas and techniques. Applicants must therefore have wide knowledge and experience in the field of planning.

Salary £4,400.
Write: Civil Service Commission, Portington Gardens, London, W.1 for application form and further particulars, quoting 5301/61. Closing date 18th May 1961. 7116

**COUNTY BOROUGH OF HALIFAX
BOROUGH ENGINEER'S DEPARTMENT**
Applications are invited for the appointment of ARCHITECTURAL ASSISTANT. Miscellaneous Grade III (£555 to £625).

Applications stating age, education, training, together with the names and addresses of two referees, to whom reference can be made should be forwarded to the Borough Engineer, Crossley Street, Halifax, not later than 5th May, 1961. 7121

**COUNTY BOROUGH OF DARLINGTON
BOROUGH ARCHITECT'S DEPARTMENT**
Applications are invited for the following appointments:—

- ONE SENIOR ASSISTANT ARCHITECT (Group Leader), Salary in accordance with Grade V of N.J.C. Scales (£1,310—£1,480).
THREE SENIOR ASSISTANT ARCHITECTS, Salary in accordance with Grade IV of N.J.C. Scales (£1,140—£1,310).
ONE DRAUGHTSMAN, Salary in accordance with General Division of N.J.C. Scales (£455, aged 22, to £630).
ONE JUNIOR QUANTITY SURVEYOR, Salary in accordance with Grade I of N.J.C. Scales (£645—£815).

The department has a large programme including Secondary and Primary Schools, Welfare Schemes, Housing, Municipal Offices, Markets and Central Redevelopment. Preference will be given to candidates experienced in this class of work and who are, in the case of architects, members of the R.I.B.A.

Applicants for the post of Junior Quantity Surveyor should be experienced in the preparation of Bills of Quantities, interim valuations, and the settling up of final accounts.

Applications, stating post and giving full particulars of age, qualifications, present appointment with salary, previous appointments with dates, and name and address of three referees, to be received by E. A. Tornbohm, A.R.I.B.A., A.M.T.P.I., Borough Architect, Central Buildings, Darlington, not later than 8th May, 1961.

Consideration will be given to provision of housing accommodation, if required. 7177

**WESTERN REGIONAL HOSPITAL BOARD
ARCHITECTURAL DEPARTMENT**

The following staff are required in the Architect's Department for the Board's expanding building programme:

- SENIOR ASSISTANT ARCHITECTS—£1,300 × £60 (5)—£1,600.
ASSISTANT ARCHITECTS—£905 × £35 (1) × £45 (6) × £50 (2)—£1,310.

Applicants must be Registered Architects. The posts offer excellent opportunity for gaining experience in a varied and interesting field of Hospital Building.

Details of training, qualifications, experience, present salary, with the names of three referees, should be submitted to the Secretary of the Board, 351, Sauchiehall Street, Glasgow, C.2, not later than 29th May, 1961. 7133

CITY OF OXFORD

CITY ARCHITECT AND PLANNING OFFICER
Applications invited for this appointment. Salary within scale £2,695—£3,070 a year. Car allowance.

Further particulars and application forms (to be returned by May 20th, 1961) can be obtained from me.

HARRY PLOWMAN,
Town Clerk. 7198

BOROUGH OF OLDBURY

Applicants are invited for the appointment on the staff of the Borough Surveyor's Department of CHIEF ARCHITECTURAL ASSISTANT. Salary A.P.T. Grade V, £1,310—£1,480.

Candidates for the post must be Associates of the R.I.B.A. and should have high ability in design and be capable of preparing schemes and supervising contracts in connection with General Housing including Multi-storey Flats, Public Buildings, School Buildings and Minor Improvements and Maintenance Works.

The appointment will be superannuable subject to the National Conditions of Service and to the selected candidate passing a medical examination.

Applications on forms to be obtained from and completed and delivered to the undersigned not later than 10th May, 1961. Canvassing will disqualify.

KENNETH PEARCE,
Town Clerk. 7189

Municipal Buildings,
Oldbury.
April, 1961.

**THE UNITED NEWCASTLE UPON TYNE
HOSPITALS
THE ROYAL VICTORIA INFIRMARY,
NEWCASTLE UPON TYNE**

Applications are invited for the following posts:—

- (a) ASSISTANT ARCHITECT, Salary Scale: £905 × £35 (1) × £45 (6) × £50 (2)—£1,310. Applicants should have passed the R.I.B.A. Final Examination. For Registered Architects increments can be given above the bottom of the grade, in accordance with practical experience. Qualified but unregistered architects can enter the Architectural Assistant Scale at a salary point of £865 per annum.

- (b) ARCHITECTURAL ASSISTANTS, Salary Scale: £625 × £30 (8) × £35 (1)—£900. Intermediate R.I.B.A. required with some practical experience.

- (c) ARCHITECTURAL DRAUGHTSMEN, Salary Scale: £475 × £25 (6) × £30 (2)—£685. Three years' minimum experience in an Architect's Office required. Evening study facilities available at King's College, University of Durham (adjoining Infirmary). These appointments offer an opportunity to work with a small group of Architects engaged, in conjunction with several firms of Architects, on the development and modernisation of this Teaching Hospital.

Applications, stating qualifications, training, experience, present salary, etc., with names of three referees, two of whom should be Architects, to be sent to the House Governor & Secretary, Royal Victoria Infirmary, Newcastle upon Tyne, 1, before 20th May, 1961. 7129

**ROYAL BURGH OF INVERNESS
BURGH ARCHITECTS AND TOWN
PLANNING DEPARTMENT**

**APPOINTMENT OF CHIEF ASSISTANT
ARCHITECT**

Applications are invited for the above appointment. Salary scale Admin. Div. Grade "B," £975/£1,055, with placing according to experience. Applicants should be A.R.I.B.A. with a flair for modern design. The post offers a valuable opportunity of obtaining experience in Housing, Town Planning and all allied Local Authority work. Housing accommodation will be provided. The post is superannuated. Medical examination.

Applications, together with the names of two referees, to be lodged with the Burgh Architect, 11, High Street, Inverness, within ten days of the publication of this advertisement.

JAMES CAMERON,
Town Clerk. 7148
Town House,
Inverness.
18th April, 1961.

**BOROUGH OF HORNSEY
APPOINTMENT OF ARCHITECTURAL
ASSISTANT**

GRADE A.P.T. I/II
Applications are invited for the above appointment in the Architects' Section of the Borough Engineer & Surveyor's Department. Salary according to experience within Grades A.P.T. I/II (£645 to £960 plus London weighting).

Details and application form from the Borough Engineer & Surveyor, Town Hall, The Broadway, Crouch End, London, N.8, to be returned by Wednesday, the 17th May, 1961. 7201

**BOROUGH OF ENFIELD
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT**

Applications are invited for the following permanent appointments (five-day week):—

- ENGINEERING ASSISTANT—A.P.T. I
ENGINEERING ASSISTANT—A.P.T. II/II
ARCHITECTURAL ASSISTANTS—A.P.T. III, and A.P.T. IV
SENIOR PLANNING ASSISTANT—A.P.T. III

Details of appointments and application forms obtainable from the Borough Engineer & Surveyor, 7, Little Park Gardens, Enfield.

CYRIL E. C. R. PLATTEN,
Town Clerk. 7124
Civic Centre,
Enfield.

COURTAULDS ARCHITECTS AND STRUCTURAL ENGINEERS

COURTAULDS has vacancies for Architects and Structural Engineers in its expanding Architects' Department at Coventry.

ARCHITECTS (Reference No. B.66a/2)

Applications are invited from men and women under 40 years of age to fill vacancies for both recently qualified or more experienced Architects.

Candidates should write for detailed form of application to the Director of Personnel, Courtaulds Limited, 16, St. Martins-le-Grand, London, E.C.1, quoting the appropriate reference number.

STRUCTURAL ENGINEERS

(Reference No. B.66b/2)

Applications are invited from men capable of using initiative and skill in the design of a wide variety of plant and building structures. Preference will be given to applicants who are experienced in reinforced concrete design.

CITY OF SHEFFIELD CITY ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited from suitably qualified persons for the following appointments on the staff of the City Engineer and Surveyor and Town Planning Officer (Mr. C. R. Warman, B.Sc., M.I.C.E., M.I.Mun.E., M.T.P.I.).

(a) AREA PLANNING OFFICER—Grade B (£1,480—£1,670 p.a.).

(b) CHIEF ASSISTANT (Special Works)—Grade B (£1,480—£1,670 p.a.). The person appointed to this post will be required to take charge of the Special Works Section which deals with redevelopment units, landscaping, wayside gardens and features, and generally assist all other Sections of the City Engineer's Department where matters of design in association with amenity are involved.

(c) SENIOR PLANNING ASSISTANT—Grade A.P.T. IV (£1,140—£1,310 p.a.). Candidates for posts (a) and (b) should have a Town Planning qualification and an architectural or other suitable additional qualification would be an advantage.

The commencing salary for each of the above posts will be in accordance with experience and qualifications.

Consideration will be given if required to assistance with housing accommodation and removal expenses in suitable cases.

Superannuable posts, N.J.C. Conditions of Service, Medical Examination.

Applications, stating age, education and training, qualifications, experience, present and past appointments (with dates and salaries) and quoting the names of two referees, should be submitted to the undersigned by the 15th May next.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield, L. 7158

LONDON COUNTY COUNCIL QUALIFYING EXAMINATION FOR THE OFFICE OF DISTRICT SURVEYOR

An examination for the certificate of proficiency to perform the duties of district surveyor will be conducted in London in the week commencing 9th October, 1961. The minimum age limit for candidates is 25.

Possession of this certificate is necessary for appointment to positions as District Surveyor (salary scales £1,925 to £3,700 a year) or as Assistant District Surveyor (present salary scale £1,500 to £1,700 a year, plus £61 10s. a year).

Apply to the Architect to the Council (ED/A/1045/4), County Hall, Westminster Bridge, S.E.1, for application forms and further particulars. Completed applications to be submitted before 1st September, 1961. 7181

EDINBURGH CORPORATION

Applications invited for TWO PLANNING ASSISTANTS, salary scale £850—£1,150 per annum. Applicants desirably should have passed the Final Examination of the Town Planning Institute or equivalent and have had good general experience in town planning. The posts are pensionable and subject to a medical examination.

Apply by letter, giving full particulars, together with copies of two recent testimonials, to the Town Planning Officer, City Chambers, Edinburgh, not later than 20th May, 1961. 7206

LANCASHIRE COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT
ASSISTANT ARCHITECTS, A.P.T. IV (£1,140—£1,310). (Starting salary according to experience.)

Applications are invited from qualified ARCHITECTS of initiative, keen on design and modern constructional methods, to work on a large and varied programme.

If appointed, applicants will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and details of appointment obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by 12th May. 7108

COUNTY BOROUGH OF SOUTHEAST-ON-SEA BOROUGH ARCHITECT'S DEPARTMENT APPOINTMENT OF CHIEF ASSISTANT ARCHITECT

Applications are invited for the above appointment, salary Lettered Scale C, £1,560—£1,825 per annum. There is a car mileage allowance.

Applicants should have had a wide experience in an office known for its enthusiasm for modern practice and be able to demonstrate ability to work with senior staff engaged on major projects including a new civic centre.

The appointment will be subject to the provisions of the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service so far as adopted by the Council. Medical examination will be available and removal expenses paid to the successful candidate.

Applications, giving full details, to be sent to the Borough Architect not later than Monday, 22nd May, 1961.

Canvassing will disqualify. Any candidate who is related to member or officer of the Council is required to disclose the fact.

ARCHIBALD GLEN,
Town Clerk. 7155

COUNTY OF ESSEX COUNTY PLANNING DEPARTMENT MINERALS, LANDSCAPE AND AMENITIES OFFICER, SCALE A (£1,380—£1,565)

Applications invited from qualified Planners, Architects or Landscape Architects for the above post. This is a new senior appointment at Headquarters Office with important responsibilities for control of mineral workings (mainly sand and gravel, but also chalk) and for positive action in securing restoration of and appropriate after-use of worked-out pits. The Officer will be directly concerned in landscaping and tree planting schemes in these worked-out areas as well as advising generally in landscaping for active pits and other planting that the County Council is carrying out under the National Parks and Access to the Countryside Act. He will also have charge of a small H.Q. section dealing with Landscape & Amenities throughout the County, especially overhead power lines, tree preservation and planting schemes, advertisement control, caravans, chalet and other types of holiday development, footpaths and listed buildings of architectural and historic interest, and will report to and generally advise the Landscape & Amenities Sub-Committee and Caravan Sub-Committee of the County Planning Committee.

The extent to which the officer appointed would be personally responsible for each of the above types of work would depend on his particular experience and qualifications.

A five-day week is in operation and this post is superannuable. Appointment is subject to medical examination.

Applications, with names of three referees, to County Planning Adviser, Broomfield Place, Broomfield, Essex, by 8th May, 1961. 7136

BOROUGH OF ROWLEY REGIS BUILDING DEPARTMENT

Applications are invited for the post of ARCHITECTURAL ASSISTANT, salary A.P.T. Grade III (£960—£1,140).

Candidates should be trained and experienced in the design and preparation of schemes and supervising contracts in connection with housing, including multi-storey flats.

The appointment will be superannuable and subject to the National Conditions of Service and to the selected candidate passing a medical examination.

Consideration will be given to the provision of housing accommodation, if required.

Applications, stating age, qualifications and experience, together with two recent testimonials, should be sent to the undersigned not later than Monday, the 15th May, 1961.

G. C. COOKSON,
Town Clerk.

Municipal Buildings,
Old Hill,
Staffs. 7126

COUNTY BOROUGH OF SMETHWICK BOROUGH ENGINEER & SURVEYOR'S DEPARTMENT

APPOINTMENT OF SENIOR ASSISTANT
ARCHITECT

Applications are invited for the above appointment—salary A.P.T. IV-V (£1,140—£1,480) per annum. The commencing salary will be according to the qualifications and experience of the successful applicant.

The post is subject to the provisions of the National Scheme of Conditions of Service; the Local Government Superannuation Acts 1937-53; the passing of a medical examination and to termination by one month's notice on either side.

Form of application may be obtained from the Borough Engineer and Surveyor, Council House, Smethwick, and should be returned in an envelope suitably endorsed, to reach him not later than 12th May, 1961.

E. I. TWYECROSS,
Town Clerk.

Council House,
Smethwick.
April, 1961. 7107

LANCASHIRE COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT
ASSISTANT ARCHITECTS, A.P.T. V (£1,310—£1,480). (Starting salary according to experience.)

Applications are invited from qualified ARCHITECTS of initiative, keen on design and modern constructional methods, to work on a large and varied programme.

If appointed, applicants will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and details of appointment obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by 12th May. 7109

PADDINGTON BOROUGH COUNCIL

ASSISTANT ARCHITECT (£1,005—£1,355)

(starting salary according to experience)
A.R.I.B.A. Candidates should have experience in design and supervision of building works and knowledge of local authority requirements. Five-day week. Applications stating age, qualifications, experience, posts held and names of two referees, should reach me by 10th May, 1961 (quoting A.536).

W. H. BENTLEY,
Town Clerk.

Town Hall,
Paddington, W.2. 7147

CITY OF BRADFORD ARCHITECTURAL ASSISTANT—Post No. 204 A.P.T. IV/V (£1,140—£1,480)

Applications are invited for the above superannuable appointment in the City Engineer and Surveyor's Department.

Applicants should have had experience in the design of houses, flats and shops and the layout of housing estates, have sound design ability and be experienced in the preparation of working and detail drawings and be either A.R.I.B.A. or A.M.T.P.I.

Application forms obtainable from the City Engineer and Surveyor, Town Hall, Bradford, 1, with three testimonials, must be received by the undersigned by 12th May, 1961.

HENRY PATTEN,
Town Clerk.

Town Hall,
Bradford, 1. 7145

CITY OF BRADFORD SENIOR TOWN PLANNING ASSISTANT—Post No. 15 A.P.T. IV/V (£1,140—£1,480)

Applications are invited for the above superannuable appointment in the City Engineer and Surveyor's Department.

Candidates should have experience in dealing with applications for development for new housing, industrial and commercial building and advertisement control, and should be either A.M.T.P.I. and/or A.M.I.C.E. and/or A.M.I.C.E.

Application forms obtainable from the City Engineer and Surveyor, Town Hall, Bradford, 1, with three testimonials, must be received by the undersigned by 12th May, 1961.

HENRY PATTEN,
Town Clerk.

Town Hall,
Bradford, 1. 7146

BOROUGH OF RAWTENSTALL APPOINTMENT OF CHIEF ARCHITECT

Applications are invited for the above permanent appointment at a salary within A.P.T. IV (£1,140—£1,310 per annum). Applicants should be members of the R.I.B.A.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, the National Scheme of Conditions of Service and the termination by one month's notice by either side. Housing accommodation will be available.

Applications, including names and addresses of two referees, should reach the undersigned not later than Friday, the 12th May, 1961. Canvassing will disqualify. Any relationship to members of senior officers of the Council must be disclosed.

COLIN CAMPBELL,
Town Clerk.

Town Hall,
Rawtenstall,
Rossendale,
Lancs. 7141

BOROUGH OF RAWTENSTALL APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment on the permanent staff at a salary within A.P.T. III (£960—£1,140 per annum).

The appointment will be subject to the provisions of the Local Government Superannuation Acts, the National Scheme of Conditions of Service and the termination by one month's notice by either side. Housing accommodation will be available.

Applications, including names and addresses of two referees, should reach the undersigned not later than Friday, the 12th May, 1961. Canvassing will disqualify. Any relationship to members or senior officers of the Council must be disclosed.

COLIN CAMPBELL,
Town Clerk.

Town Hall,
Rawtenstall,
Rossendale,
Lancs. 7140

CITY OF LIVERPOOL ARCHITECTURAL AND HOUSING DEPARTMENT

Applications are invited for the following appointments. Salary in each case £1,860—£2,345 p.a. in accordance with Scale E/F.

(a) PRINCIPAL ARCHITECT (EDUCATION) to take charge of the section concerned with the City's Education Building Programme which includes Technical Colleges, Training Colleges, as well as Primary, Secondary and Special Schools.

(b) PRINCIPAL ARCHITECT (GENERAL) to take charge of the section dealing with the Architectural works of all Committees of the Corporation, except the Housing and Education Committees, involving a great variety of civic and public buildings.

Applicants must be Fellows or Associates of the Royal Institute of British Architects.

The appointments are superannuable and subject to the Standing Orders of the City Council. Canvassing disqualifies.

Applicants should state which appointment they wish to apply for. Application forms, from the City Architect and Director of Housing, Blackburn Chambers, Dale Street, Kingsway, Liverpool, 2, should be returned to him by 20th May, 1961.

THOMAS ALKER,
Town Clerk.

(J.6767) 7132

**COUNTY BOROUGH OF BOOTLE
SENIOR PLANNING ASSISTANT**

Applications are invited for the above appointment in the Planning Section of the Borough Engineer and Surveyor's Department. Candidates should have passed the Final Examination of the Town Planning or other appropriate Institution and possess experience in the Office of an Urban Planning Authority in the preparation of a Development Plan, Reconstruction and Redevelopment of Central Areas.

Commencing salary within the range of Grade A.P.T. IV/V, £1,149-£1,480, according to qualifications and experience.

Applications on forms obtainable from Mr. T. W. Crookdake, A.M.I.C.E., M.I.Mun.E., A.R.I.C.S., A.M.T.P.I., Borough Engineer and Surveyor, Town Hall, Bootle, 20, Lancs., should be returned to him not later than Monday, 15th May, 1961.

HAROLD PARTINGTON.

Town Clerk.

7153

Architectural Appointments Vacant

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

RONALD WARD AND PARTNERS invite applications from ARCHITECTS, Senior and Junior. Long-term prospects. Scope for initiative and responsibility in interesting commercial, industrial and civic projects in British Isles, West Africa and Australia. Salaries commensurate with ability. Non-contributory Pension and Life Insurance schemes. Five-day week. Pleasant offices. Apply 29, Chesham Place, Belgrave Square, London, S.W.1. Tel.: BELGRAVIA 3561. 2960

£950-£1,500. ARCHITECTURAL ASSISTANTS with imagination and designing ability required to assist with large and important new developments in the central London Area. Telephone or write: Trehearne & Norman, Preston & Partners, 83, Kingsway, W.C.2. HOLBORN 4071. 4934

EXPERIENCED and confident ARCHITECTS required to fill positions of responsibility in a growing and varied practice with industrial and commercial work throughout the southern half of the country. Applicants must have initiative as well as architectural ability to carry through contracts up to £100,000, working directly with Principals but with minimum supervision. Apply in writing to Thomas Mitchell & Partners, 20, Bedford Square, London, W.C.1. 5418

SENIOR ASSISTANTS required. Please apply to F. G. Frizzell, A.R.I.B.A., 80, Portland Place, W.1. LANGHAM 1732. 4943

ARCHITECTURAL ASSISTANTS of all grades, particularly Intermediate standard, required on varied and interesting projects. High salaries will be paid in accordance with skill or experience of applicant. Lewis Solomon, Kaye & Partners, City 8811. 5970

PLAYNE & LACEY require experienced and enthusiastic SENIOR ARCHITECTURAL ASSISTANT for work on University project. Salary range £1,200 to £1,500. Write 19, Queen Anne's Gate, Westminster, S.W.1, or ring WHI 2562 for interview. 5617

ARCHITECTURAL ASSISTANTS required in busy Bloomsbury office with varied practice. Good salary and prospects for suitable applicants. Five-day week. Write giving particulars of age, qualifications, experience, etc., to Box 918, c/o 7, Coptic Street, W.C.1. 5647

OPPORTUNITY for Intermediate or newly-qualified ASSISTANT with initiative and all-round ability, to join youthful expanding practice in Croydon. Apply to Donald Rowsell & Partners, 11/11a, George Street, Croydon, or telephone CROYDON 4080. 5723

SENIOR ASSISTANTS required for work on large Hospital programme, excellent opportunities for the right men, salary £1,000-£1,400. Luncheon Vouchers and five-day week. Write giving full particulars to W. H. Watkins, Gray and Partners, 57, Catherine Place, S.W.1. 5633

ARCHITECTURAL ASSISTANTS required for interesting work, including schools and hospitals, in Croydon office. Commencing salaries offered: £200-£1,150 for Associates, £500-£250 for students, according to age and experience. Five-day week and annual bonus. Write to George Lowe & Partner, 79, George Street, Croydon. 5197

ARCHITECTURAL ASSISTANTS required with practical experience. Varied practice including contemporary work. Salary £700-£1,100 (plus L.V.s), according to qualifications and experience. Please write, giving full particulars, to Sir Giles Scott, Son & Partner, 9, Gray's Inn Square, W.C.1. 5601

ERNO GOLDFINGER requires several qualified ASSISTANTS with at least 2 years' experience to take part in a growing programme of interesting work which includes large office buildings, central developments, Local Authority housing, schools and private houses. Good salaries and scope for men with sound knowledge of construction. Phone HYDE Park 5657. 5064

SENIOR AND INTERMEDIATE ASSISTANTS required, qualified or unqualified, provided application backed by good general office experience. Widely varied practice including Schools, Hospitals, Banks, Shops, Housing, Farm Buildings. Salaries according to experience supplemented by Bonus and Pension Schemes. F. J. Lenton & Partners, A.R.I.B.A., 16, Broad Street, Stamford, Lincs. 6702

YORKE, ROSENBERG AND MARDALL have some vacancies for experienced STAFF starting salary according to qualifications and experience, in the range £950-£1,200. Ring AMBASSADOR 4521 for appointment. 6200

ARCHITECTS' ASSISTANTS required, both Intermediate R.I.B.A. and Finals standard, with experience in this country. Good salary offered. Bernard Gold & Partners, 4/6, Savile Row, W.1. Regent 7551. 6170

INTERMEDIATE to Final ASSISTANTS required immediately. Salary according to ability and experience. Theo. H. Birks, 38, Portland Place, London, W.1. LAN. 7236. 9739

ARCHITECTS' ASSISTANTS required, Final and Intermediate standard, to work on large and interesting projects. Salary £850 to £1,000. Applicants must be good draughtsmen, with sound knowledge of detailing. Please write giving full particulars of experience, age, etc., to: F. W. Beech & E. Curnow Cooke, F.R.I.B.A., 15, Dix's Field, Exeter. 6945

CHALLEN AND FLOYD require an ASSISTANT of Intermediate to Final standard with a minimum of five years' experience. Work will be interesting, varied and responsible. Salary according to age and experience. Luncheon vouchers provided. Apply to 7, Cromwell Road, London, S.W.7. KENSINGTON 8334/8549. 6491

PLAYNE & LACEY require experienced and enthusiastic ARCHITECTURAL ASSISTANTS. Salary range £900-£1,050. Write 19, Queen Anne's Gate, Westminster, S.W.1, or ring WHI 2552 for interview. 6260

JOBS with scope and commensurate salaries offered to worthwhile ARCHITECTS, ASSISTANTS and POST-GRADUATES of ability, in expanding but personal practice of Armstrong and MacManus. Letters marked confidential to 28, Gloucester Place, W.1, or telephone WELBECK 2273 for appointment. 6792

ARCHITECTS, R.I.B.A. Final and Intermediate ASSISTANTS required to take responsible posts in expanding practice in York with work on Hospitals, Education, Railway and Commercial buildings. Salary by agreement. Pension scheme available. Box 6797.

ARCHITECTURAL ASSISTANT at Intermediate Standard required for West End Branch of Provincial Architects. Interesting and varied work. Five-day week, Luncheon Vouchers. Write full particulars of age, experience and salary required to Box 6925.

QUALIFIED ARCHITECTURAL ASSISTANT required immediately in Home Counties office. Considerable scope for work on industrial, commercial and housing schemes. Five-day week. Write full particulars of age, experience and salary required to Box 6926.

CHARLES PIKE & PARTNERS REQUIRE ASSISTANTS FOR A VARIETY OF JOBS INCLUDING TECHNICAL COLLEGES - SCHOOLS, ALL TYPES - TEACHERS TRAINING COLLEGES - HALLS OF RESIDENCE, ETC. WRITE DETAILS TO 14 LINCOLN'S INN FIELDS, W.C.2 (OFF KINGSWAY) OR PHONE HOL. 3532 FOR APPOINTMENT. 6912

WELL-KNOWN firm of City Architects with wide practice covering the whole country and Branch Offices in three of the Provinces, require JUNIOR ASSISTANTS. Five-day week. Good salaries. Luncheon vouchers. Box 6835.

COMPETENT ASSISTANTS required - large industrial buildings - London and Home Counties. Salary and bonus according to experience and ability, five-day week, excellent opportunities. Howard Kelly and Partners Chartered Architects, No. 11 Duke Street, W.1. WELBECK 3995. 6923

EXPERIENCED ASSISTANTS required for good class work of all types. Applicants should be capable of managing contracts from sketch plan to completion. Salary by arrangement. Telephone WELBECK 8863 for appointment. 6828

JOHN VOELCKER requires school-trained, recently qualified ASSISTANT ARCHITECTS. Write Staplehurst, Nr. Tonbridge, Kent, or phone Staplehurst 248. 6822

EXPERIENCED ASSISTANT required in old established office. General practice. Apply stating experience, salary etc. Apply: Manning & Steel, F.R.I.B.A., Architects & Surveyors, George Street West, Luton, Beds. 6876

SENIOR ARCHITECTURAL ASSISTANTS. Large Office has a limited number of vacancies for Senior Architectural Assistants, salary range £900-£1,500, to undertake work of a varied and interesting character. Reply with particulars of experience to Box 6875.

SENIOR ASSISTANT ARCHITECT required to take charge of interesting projects in the Staff Architect's Department of a large Multiple Organisation, with Head Office in Leeds. Permanent position with prospects. Good salary. Apply, with brief particulars, to D. Greenwood, B.Arch., A.R.I.B.A., Staff Architect, John Collier Tailoring Organisation, Architects Department, Cardigan Crescent, Leeds, 4. 6889

ASSISTANT ARCHITECTS required, recently qualified or Intermediate standard, to join design teams working on a variety of interesting projects throughout the country. Work involves design and site supervision. Good salary. Apply, with brief particulars, to D. Greenwood, B.Arch., A.R.I.B.A., Staff Architect, John Collier Tailoring Organisation, Architects Department, Cardigan Crescent, Leeds, 4. 6900

ASSISTANTS of various grades required in Architects Office. Salary according to experience. Write Nicholas & Dixon-Spain & Partners, 19 Hanover Square, W.1. 6909

ARCHITECTS. Experienced ASSISTANTS required for work on interesting major schemes, able to take initiative and responsibility. Bonus, Pension and Life Assurance Schemes. Salary according to experience and ability. Full particulars to Hadfield, Cawwell & Davidson, 17, Broomgrove Road, Sheffield 10. 6911

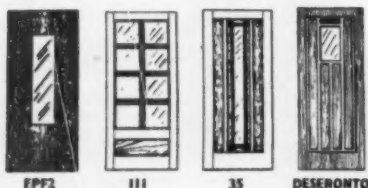
ARCHITECTURAL ASSISTANT required, R.I.B.A. Intermediate standard, with some office experience. Varied and interesting work. Five-day week. L.V.s. Good salary for keen and competent person. William Crabtree, F.R.I.B.A., 8 Robert Adam Street, W.1 (WELBECK 9909). 6776

R. D. RUSSELL & PARTNERS have vacancies for several ASSISTANTS, either qualified or Intermediate standard, with some office experience, salary £750 to £1,000, to work on interesting projects including an hotel, multi-storey office building, shops, interior and furniture design. Telephone: CHANCERY 3553. 6778

VACANCIES for Senior and Intermediate grades on varied and interesting work, good salary in accordance with experience. Five-day week. Fitzroy Robinson & Partners, CHANCERY 2111. Ref. G.W.J. 6784

MEDWAY BUILDINGS wish to appoint STAFF ARCHITECT to take charge of new Department dealing with planning and design of prefabricated timber buildings, schools, office blocks, pavilions, etc. Applicants should be experienced qualified Architects capable of both administration and design, and should be experienced and interested in modular timber construction. The success of this new Department will largely depend on the qualities and enthusiasm of the successful candidate. Salary by arrangement. Write giving full details to the Staff Manager, Medway Buildings, Rochester, Kent. 6786

SLOUGH ESTATES LTD. require an ARCHITECTURAL ASSISTANT with at least five years experience, chiefly for industrial work. Five day week, good working conditions, luncheon vouchers, pension scheme, etc. Please apply stating age, experience and salary to The Chief Architect, Slough Estates Ltd., Bedford Avenue, Trading Estate, Slough, Bucks. 6501



Bryce, White & Company Limited · Deseronto Wharf

FOR DOORS IN SCORES

BRYCE WHITE

Architects and Builders have over forty different styles of Bryce White doors to choose from, including Fire Check doors to B.S.S. 459, Part III, for every type of opening. In addition, Bryce White make doors to specific requirements. Either way, it's a prompt, personal service. Contact Bryce White for doors - write for our new illustrated literature.

Also at Southampton · Bristol · London

ARCHITECTURAL ASSISTANTS (Intermediate standard) required for the planning and design of modern one- and two-storey timber structures for wide variety of projects. Salary according to experience and ability. Write giving full details to the Staff Manager, Midway Buildings, Rochester, Kent. 6786

FREY, DREW & PARTNERS have vacancies for qualified and experienced ASSISTANTS on very interesting new work in U.K. including residential development and industrial headquarters. Salaries from £1,000 upward for suitable applicants. Apply 63, Gloucester Place, W.1 (WEL 3318). 6789

£2,000. A SALARY of up to £2,000 per annum, plus various benefits, will be paid to qualified ARCHITECT with adequate Hospital experience (North Midlands). Box 6804.

ROBERT MATTHEW & JOHNSON-MARSHALL have vacancies in their London office for ARCHITECTS at all levels of experience for a variety of interesting jobs. Apply to Robert Matthew & Johnson-Marshall, 24 Park Square East, N.W.1. 6547

SIR JOHN BURNETT, TAIT & PARTNERS have vacancies for ARCHITECTURAL ASSISTANTS of all grades. Salaries from £1,200 p.a. Luncheon vouchers, superannuation and medical schemes, non-contributory. Apply 10 Bedford Square, W.C.1. 6126

BASIL SPENCE & PARTNERS require qualified and experienced ARCHITECTS to fill positions of responsibility on a major building programme. Write to 1, Fitzroy Square, W.1, stating experience and salary required. 9824

£1,000 p.a. will be paid to experienced competent ARCHITECTS by a private practice in the City of London. The work will be primarily on the drawing board on new and interesting projects of magnitude. A high standard of design and detailing ability is required. Please apply in writing to Box 9360.

SENIOR ASSISTANTS required immediately. Salary by arrangement. Theo. H. Birks, 36, Portland Place, London, W.1. LAN 7236. 1486

BOOTH, LEDERER AND PINCKHEARD require ASSISTANTS in the salary range £750-£1,250. Apply 17-20, Mason's Yard, Duke Street, St. James's, S.W.1. Tel.: TRAFALGAR 1866. 3119

NORTH & PARTNERS, Chartered Architects, have vacancies for two ARCHITECTURAL ASSISTANTS for interesting works in various parts of the country. Opportunities for advancement in accordance with ability. Please state salary required and general experience. Broadway, Maidenhead. 6761

OPPORTUNITY for keen young ASSISTANT to gain valuable experience in a busy general practice at Sidcup. Intermediate/First standard with drawing and design ability. Excellent working conditions and generous salary to right person. Footscray 7008. 6963

GEORGE, TREW & DUNN. Interesting projects include new hospitals, university buildings and multi-storey flats.

Qualified ARCHITECTS are invited to apply to 50, Eastbourne Terrace, W.2. Tel. PAD 6611. 6403

ARCHITECTURAL ASSISTANT required for North Devon Office. Box 6673.

ARCHITECTURAL ASSISTANTS, Intermediate and Final standard, required immediately for a wide variety of work mainly commercial and industrial. Write giving experience and salary required: Howell, Freeman & Batten, Chartered Architects, Reading. 6477

NORTH LONDON ASSISTANTS required, about R.I.B.A. Intermediate standard. Wide variety of interesting work. Five-day week. Facilities for part-time day study. Apply C. E. Owen Ward, L.R.I.B.A., Midland Bank Chambers, Palmers Green, London, N.13. PAL 1186/7. 6588

F. W. WOOLWORTH & CO. LTD.

KENSINGTON OFFICE—ARCHITECT'S DEPT.

SENIOR AND JUNIOR ARCHITECTURAL ASSISTANTS AND DRAUGHTSMEN required.

Five-day week, superannuation, dining facilities. Good salary according to experience and qualifications.

Apply giving details of age, experience and salary required, to:—

Staff Architect, 26-40 Kensington High St., London, W.8. 6579

ROFF MARSH, F.R.I.B.A., M.T.P.I. requires qualified and experienced ARCHITECT, also ASSISTANT of Intermediate standard. Interesting large projects including shops, flats, offices and schools; working in an office in pleasant surroundings. Write, stating age, experience and salary required to 125/7, London Road, Chelmsford, Essex. 6618

SENIOR AND JUNIOR ASSISTANTS. Only those who prefer a small office and an interesting variety of work on both old and new buildings should apply to: L. H. Bond & R. W. Read, 44, Castlegate, Grantham. 6404

C. H. ELSOM & PARTNERS require two SENIOR ARCHITECTS with good technical experience and design ability for large scale projects. Pension scheme and luncheon vouchers, 10 Lower Grosvenor Place, S.W.1. VICTORIA 4304. 6733

LEICESTER, SENIOR ARCHITECTS AND ASSISTANTS required for general practice. Appropriate salary paid. Apply by telephone or in writing for an interview to Herbert, Son & Sawday, 18, Friar Lane, Leicester. Tel. 56476. 5307

BRYAN & NORMAN WESTWOOD & PARTNERS require ASSISTANT ARCHITECTS. Salaries up to £1,200. Apply to 21, Suffolk Street, S.W.1. TRAFALGAR 1106. 6736

RING KNIGHTSBRIDGE 3483 for congenial surroundings in a medium sized office in South Kensington. R. Mountford Pigott & Partners require JUNIOR and SENIOR ASSISTANTS with office experience to work on various modern schemes including multi-storey flats for private and L.C.C. development, Banks, Hospitals and a variety of interesting work. 6813

£850-£1,600. ARCHITECTURAL ASSISTANTS required. Long term prospects. Non-contributory pension and life assurance schemes. Five-day week. Telephone or write: Ronald Ward & Partners, 29, Chesham Place, Belgrave Square, S.W.1. BELGRAVIA 3361. 6105

ARCHITECTURAL ASSISTANT required small progressive practice. Intermediate or final standard. Please write to: A. Francis Bennett, 35, Queens Gate Mews, London, S.W.7. 6940

DESIGN GROUP require ARCHITECTURAL ASSISTANTS or ARCHITECTURAL DRAUGHTSMEN. Experience in housing and flats an advantage. Good quality interesting work, five-day week, luncheon vouchers. Write giving age and full details of experience to Dolphin Development Co., Ltd., Duncan House, Dolphin Square, London, S.W.1. 7013

SCOTT, BROWNKIGG & TURNER, Architects, require SENIOR and JUNIOR ARCHITECTURAL ASSISTANTS in their London, Guildford and Woking offices. Write with details to 32, London Road, Guildford. 6998

INTERMEDIATE ASSISTANTS for interesting and varied work. Good salaries and excellent prospects. Congenial conditions. Knappton Deane, Victoria 0053. 6993

SIR WILLIAM HALCROW AND PARTNERS require ARCHITECTS and ASSISTANTS to join design group in London developing a large overseas industrial project. Please write with particulars of qualifications and experience to:—

Sir William Halcrow & Partners, 47, Park Lane, London, W.1. 6990

ELIE MAYORCAS requires ARCHITECTURAL ASSISTANTS with a minimum of three years' office experience in this country. Write, giving brief particulars of architectural education and experience, and salary required, to: 13, David Mews, Baker Street, W.1. 7014

CHIEF ASSISTANT required, A.R.I.B.A. Design experience and administration ability required. Salary £1,300 to £1,500. Staff Pension Scheme. Opportunity in busy office, large variety of work. Write or 'phone for an appointment, evening interviews if required: George E. Clay & Partners, A/R.I.B.A., 198, Parrock Street, Gravesend, Kent. (Gravesend 1401/2). 7008

DOWTON & HURST require ARCHITECTURAL ASSISTANTS. Present work includes Hospitals, Shops, Schools and Commercial Buildings. Salary £700/£1,100 according to experience. L.V.s provided. 10, Portman Street, Portman Square, W.1. HYD. 1822. 7003

ARCHITECTURAL ASSISTANTS required immediately of Intermediate or higher standard. Definite prospects in small busy office. Apply giving age and experience to: Taylor, Knight & Co., Brookmoor House, Grove Road, Rotherham. 6985

ARCHITECT wanted by small but well-known Development Company, London Suburb: Flats, houses, etc. Must be qualified man and will be given full responsibility. Salary £1,400 per annum. Reply giving age and full details. Box 6978.

EXPERIENCED ASSISTANTS required for responsible positions in West End office. Salaries £1,000-£1,500. Apply Box 6371.

MANCHESTER-SENIOR ASSISTANT required, preferably qualified, capable of handling a wide variety of interesting contemporary schemes. Alternate Saturdays, three weeks' holiday. Salary £1,000-£1,250, or by arrangement, bonus scheme. Mather & Nutter, A/R.I.B.A., Canada House, 3, Chepstow Street, Manchester, 1. 6986

STEPHENSON, YOUNG & PARTNERS, 6, Bluecoat Chambers, Liverpool, need an able SENIOR ASSISTANT. Experience of departmental store work an advantage. Pension Scheme. £1,500-£1,800. 6980

BIRMINGHAM. We need a young ARCHITECT, either qualified or in training, with a good sense for clean and straightforward design. There is plenty of scope for the right man. Top salary according to experience. Apply: J. Alfred Harper & Son, 65, Temple Row, Birmingham. 6798

ARCHITECTURAL ASSISTANT for Architects' Department of Development Company with headquarters in Brighton. Salary range £800-£1,000. Apply Chief Architect, Bunting Estates Ltd., 73, Acre Lane, London, S.W.2. 7025

BOOTS-ASSISTANT ARCHITECTS, ARCHITECTURAL ASSISTANTS. During the coming years, in addition to the vast programme of rebuilding or extending our retail branches, new industrial projects will be commenced. The Architects Department, headed by Mr. C. St. C. Oakes, M.B.E., F.R.I.B.A., is responsible for the whole of this work which, besides retail premises, includes laboratories, office buildings, warehouses, chemical and other production units and ancillary buildings.

Vacancies exist with this Department for Assistant Architects and Architectural Assistants to work on industrial projects. These positions are permanent and pensionable and a five-day week is in operation. Applications should be sent, giving full details, to the Personnel Manager, Boots Pure Drug Co. Ltd., Station Street, Nottingham, quoting reference No. A.J.3 7069

S.E. LONDON
PRINCIPAL ASSISTANT salary £1,200 for qualified man with experience, high standard of draughtsmanship, in small intimate office. Oliver E. Steer, 19, Hatherley Road, Sidcup, Kent. FOO 3166. 6983

PERSPECTIVE DRAWING
W. S. ATKINS & PARTNERS require for their Architects' Department, an ARCHITECT primarily for the preparation of perspective drawings and illustrations for a wide variety of major architectural and Civil Engineering projects, including Steelworks and large Road Development Schemes. Please write giving full particulars to the Personnel Manager, W. S. Atkins & Partners, 158, Victoria Street, London, S.W.1. 6944

ARCHITECTURAL ASSISTANTS of all grades required in a busy provincial practice. Good salaries to right applicants. Pension Scheme. Accommodation. Apply with full details to: Ruddle & Wilkinson, F.L.A.R.I.B.A., Long Causeway Chambers, Peterborough. 6984

ARCHITECT required by expanding office in East Coast market town, to assist overburdened principal and staff of eight. Must be capable of standing up to ramification of domestic, industrial, commercial and farm work on own initiative. Appointment by salary in first instance with prospect of friendly partnership (H.P. if necessary) in a few years if mutually suited. State age, experience and salary required. Box 6982.

FREDERICK GIBBERD-ARCHITECTURAL ASSISTANTS. Final and Intermediate. Interesting work, excellent experience for anyone wishing to succeed in architecture. Salary according to ability. Five-day week. Pleasant and well organised office. Write giving full details: 8, Percy Street, W.1. 7023

TWO Intermediate or Senior ASSISTANTS required. Salaries from £1,000 to £1,250 per annum according to age and experience. Apply to Box 6546.

ARCHITECT has vacancy for experienced ASSISTANT for senior position in small busy office on Kent Coast. Good opportunity for advancement and to use initiative. CLERK OF WORKS with experience and drawing ability also required. Box 7024.

SMALL office needs ASSISTANT. £600-£750. Philip Jebb, 140 Sloane Street, S.W.1. SLO 6383. 6982

CLIFFORD CULPIN & PARTNERS offer two weeks' holiday this summer at time to suit applicants. One SENIOR and one LESS SENIOR post offered to really keen men with a sense of design wanting opportunities for responsibility. Very varied work including civic design. 39, Doughty Street, London, W.C.1. CHANCERY 5395. 7032

HEMEL HEMPSTEAD-Clifford Culpin & Partners, now established locally, want two more MEN who could avoid commuting and work in bright surroundings on exciting programme which includes the Town Hall, Town Centre Pavilion and Health Centre. Interview at 18, Marlowes, any Saturday morning by appointment. Two weeks' holiday this summer. Apply 39, Doughty Street, London, W.C.1. CHANCERY 5395. 7033

CLIFFORD CULPIN & PARTNERS offer opportunity for MAN about Intermediate standard to gain experience of site supervision working under a Senior. Two weeks' holiday this summer. 39, Doughty Street, London, W.C.1. CHANCERY 5395. 7034

ARCHITECT'S ASSISTANT required of about R.I.B.A. standard for varied work in and around the London area. Please write giving details of experience and salary required to Westmore & Partners, 121, Cheapside, London, W.C.2. 7046

MICHAEL LAIRD requires a keen, responsible MAN to handle interesting projects; £1,000-£1,400 per annum according to experience and aptitude for which there is scope in young, expanding practice. Industrial or office building experience especially appreciated. Please write (in confidence) to 22, Moray Place, Edinburgh. 7057

ROBERT ATKINSON & PARTNERS have vacancies for Qualified ASSISTANTS on important and interesting new works in U.K., at present in early stages and offering continuity and experience. Salary from £1,000 upwards to suitable applicants. Five-day week. Three weeks holiday. JUNIORS who have reached Intermediate standards also required. Apply, stating experience, to 13, Manchester Square, W.1. 7050

EDWARD D. MILLS & PARTNERS require additional qualified STAFF for a variety of new work including housing, schools, industrial and churches. Enthusiasm and initiative important. Five-day week. Write giving full details to 9/11, Richmond Buildings, Dean Street, London, W.1. 7051

INTELLIGENT SENIOR ASSISTANT ARCHITECT required immediately in small expanding private practice by Francis Pym, A.R.I.B.A., A.A./Dipl. WHI 0171. 7054

OSCAR GARRY AND PARTNERS require THREE or FOUR ASSISTANTS with at least two years' office experience, to work in a team on large interesting projects. Salaries from £900 depending upon ability and experience. Apply 66, Gloucester Place, W.1. or 'phone WELbeck 2507. 7055

ARCHITECTURAL ASSISTANTS OF ALL GRADES required to work in design/construction groups on comprehensive Town Centre planning, also flats, factories, interior designs, and shops and offices. Salaries up to £1,500 p.a. according to age and experience. Holiday in accordance with service, minimum two weeks. Luncheon vouchers. Five-day week, overtime paid extra. 7056

J. Seymour Harris & Partners, 3/4, Greenfield Crescent, Edgbaston, Birmingham, 15. 7030

WESTCLIFF-ON-SEA.—ASSISTANT required in small progressive practice to deal with variety of work. Must be neat and accurate draughtsman and competent to work on own initiative and to manage complete schemes, including supervision. Kenneth C. Cheeseman, A.R.I.B.A., 861b, London Road, Westcliff-on-Sea, Essex. 7021

LANDSCAPE ARCHITECT wanted to work in London architect's office. Opportunities for a great diversity of work and experiment. Box 6957. 7022

BREWERY Surveyor's Department, East London, requires competent DRAUGHTSMEN. Good salaries, congenial office, interesting and varied programme. Box 6954. 7023

KINGSTON-UPON-THAMES.—SENIOR and JUNIOR ASSISTANTS required, male or female, for interesting and varied work. Salary range up to £1,150 per annum offered to suitable applicants. Pleasant and congenial office conditions. Five-day week. Applications in writing, with essential particulars, will be treated in confidence. Donaldson & Co., Architects, 75, London Road, Kingston-upon-Thames. 6953

COMPLETE CONTROL of a million contract in Home Counties. Hyde Park Corner office. Qualified and experienced architect. Up to £1,400 salary. Appointments REL 6595. 6951

FRITH & TAYLOR, A/R.I.B.A., have vacancies for ARCHITECTURAL ASSISTANTS of both Intermediate and Final standard, in expanding country practice which offers varied and interesting work with scope for initiative; salaries in accordance with skill and experience of applicants who should write to 45 Carlton Road Workson, Notts., giving details. 7101

JUNIOR ARCHITECTURAL ASSISTANT required by a world-wide organisation with Head Office in London. Applicants must be probationers approaching Intermediate standard or students of the R.I.B.A., and have had at least two years' experience in the preparation of working drawings and details. Apply in writing giving full information to Staff Manager, Cable and Wireless Limited, Mercury House, Theobalds Road, London, W.C.1. 7100

POWELL AND MOYA need several enthusiastic ASSISTANTS to work on new major general hospitals. These large schemes offer many interesting opportunities. For Assistants of Intermediate standard, good general experience can be gained of buildings requiring a high standard of detailing and finish. For qualified Assistants and those of Final standard, there is the challenge of resolving complex and developing requirements into a humane architectural solution. If you are interested, please write to 36, Great Smith Street, London, S.W.1, or telephone ABBey 3156. 6949

DESIGN PARTNERSHIP (Grenfell Baines & Hargreaves) require ARCHITECTS for interesting and varied work including recent competition success. Salaries up to £1,500. Ring LAngham 2621 or write 4, Cavendish Place, W.1. 7073

ASSISTANTS required by ARCHITECTS' CO-OPERATIVE PARTNERSHIP for large laboratory projects in London. Specialist experience useful but not at all essential. Write 44, Charlotte Street, W.1. or ring LAngham 5791. 7074

BEARD, BENNETT, WILKINS AND PARTNERS need one or two more above average ASSISTANTS at above average salaries. We are looking for those recently qualified or of Final standard who will join in work on major projects and take responsibility at an early date. Write to 101 Baker Street, W.1. or phone HUN 1711, ref. KAM, for an appointment to see our office and work and to discuss joining us. We have Associateship and Pension Schemes besides other benefits and will give advancement, both financial and professional, to the right people. 7104

£1,250 PER ANNUM MINIMUM SALARY IN SALISBURY, WILTS. We are looking for a young qualified ARCHITECT who is anxious to accept responsibility. The work will be on notable projects and mainly negotiated Contracts involving close co-ordination between Architect and Builder. There are excellent prospects for the right man. Apply to: Wallace Smith and Ball, A/R.I.B.A., 84, Crane Street, Salisbury. Tel. No. Salisbury 6798. 7105

ARCHITECTS Department of Public Company, carrying out property development, require THREE ASSISTANTS of Intermediate standard for interesting and responsible work on varied commercial programme. Salary £950-£1,300. Apply in writing to: M. R. Day, A.R.I.B.A. Industrial & Investment Services Limited, City Wall House, Finsbury Pavement, London, E.C.2. 6950

ATOMIC contracting combine requires urgently two top-grade industrial and intelligent ARCHITECTURAL ASSISTANTS for short-term all-out effort on working drawings. Work in London office is of most challenging and complex nature. Those interested please write stating age, experience, and salary required to: N.C.C., 52 Canaby St., London, W.1, quoting ref. RY. 7093

ARCHITECTURAL ASSISTANTS. Well-known contractors in West End require Architectural Assistants, Intermediate or Finals standard. Permanent position, superannuation and bonus. Good prospects. Write in confidence stating age, experience and salary required to Box 7094. 7103

DENYS LASDUN & PARTNERS require qualified and experienced ARCHITECTS to fill positions of responsibility. Write to 3 Albany Terrace, N.W.1, or telephone Hunter 1822 for an appointment. 7103

UNILEVER ARCHITECT

UNILEVER LIMITED require an Architect and Architectural Assistants (qualified or approaching Finals) for their Head Office in London.

They will be engaged on a wide range of buildings in the commercial, industrial and domestic fields for both the U.K. and overseas.

These positions carry attractive salaries with prospects of advancement. Staff amenities include superannuation scheme, sports and social clubs, medical and welfare service and staff dining-rooms.

Applications including details of experience and qualifications, should be sent to Head Office Staff Department (Ref. WF/78), Unilever House Blackfriars, E.C.4. 7188

DESIGNERS. West End Architect requires two of at least Intermediate R.I.B.A. standard, for interiors and exhibitions. Good wages and opportunities for applicants of drive and imagination. Apply Box 7100.

YOUNG ARCHITECTS interested in rebuilding and modernising licensed premises are invited to apply to fill vacancies for ASSISTANTS of Senior and Intermediate standards in the Architect's Department of a London Brewery Company. The applicants would be required to design, produce working drawings and specifications, supervise works through all stages to completion, carry out surveys of existing buildings, check builder's accounts, etc. Superannuation scheme. Write stating age, qualifications, of any experience, salary required. Box 7184.

ASSISTANT ARCHITECTS AND ARCHITECTURAL ASSISTANTS

THE Architectural Department of John T. Bell & Sons Ltd. requires Qualified Assistant Architects, salary range £1,250 and upwards; also Architectural Assistants of Intermediate standard, salary range £800-£1,100 and up to Intermediate standard, salary range £450-£800, commencing salary according to experience, with annual increments dependent on proficiency. Good prospects of promotion in a rapidly expanding department dealing with a wide and varied programme of development.

Write for forms of application to:—Robt. W. Graydon, A.R.I.B.A., Staff Architect, John T. Bell & Sons Ltd., Market Chambers, Market Street, Newcastle upon Tyne 1. 7175

ARCHITECTS recently qualified or at Finals stage are required immediately for working as a team, in pleasant surroundings, on interesting projects from sketch stage to completion of contract. Bonus and pension schemes can be discussed at interview. An 18 months engagement at £90 per month would be considered. Apply to:—

Anthony R. Dannatt, F.R.I.B.A., A. R. Dannatt & Son, 654, Duke Street, Chelmsford. Telephone 58121. 7179

ARCHITECTURAL ASSISTANT required in a practice in London, W.1. engaged on schools and other modern buildings. Intermediate or higher standard, previous experience in a progressive office desirable. Write stating qualifications, age and salary. Box 7176.

ARCHITECTURAL ASSISTANTS required at A Poole or Bolton offices, salaries £650-£1,050 according to experience. W. Leslie Jones & Partners, 59 High Street, Great Missenden, Bucks. 7178

YATES, COOK AND DARBYSHIRE have vacancies for JUNIOR ARCHITECTURAL ASSISTANTS to work on a variety of interesting projects. The posts are long-term and offer good prospects with advancement for those with initiative and ability. Applications stating age and experience should be addressed to 43, Great Marlborough Street, Regent Street, W.1. 7180

£1,600-£1,450-£1,000. ARCHITECT and ASSISTANTS required in these grades by London private practice. Interesting work on jobs of all sizes and types, with opportunity to work with specialist groups on large projects. Non-contributory pension and Insurance scheme, and excellent new offices. Telephone Sullivan 6308 for appointment. 7197

ASSISTANT ARCHITECT with some practical experience required for young office in Baker Street to work on a wide variety of jobs. Write with full particulars and stating salary required to Roger Worboys, M.A., A.R.I.B.A., 50, Baker Street, W.1. 7191

EXPERIENCED ASSISTANTS AND JUNIORS required by City Architects to work on development schemes including office blocks and multi-storied buildings. Salary up to £1,250, according to experience and ability. Five-day week; luncheon vouchers. Box 7193.

SALARIES from £1,000 upwards are offered by Trust Houses Ltd. to suitable ARCHITECTURAL ASSISTANTS with good experience. Interesting and varied work on new and existing hotels, Pension and Life Assurance Schemes, five-day week, free lunches. Write full particulars of age, experience and salary required to Nelson Foley, Chief Architect, Trust Houses Ltd., 53 Short's Gardens, W.C.2. 7196

cladding

gills

copings

flooring

paving

fireplaces

surrounds

skirtings

stairtreads

shelves

**TODAY'S
SLATE
AND
TOMORROW'S
WINCILATE**

THE BOW SLATE & CHAMBER CO LTD

THE TOWN HALL BOW ROAD E1

QUARRIES AREBILLETT NORTH WALES

EXETER. ASSISTANT, Intermediate standard, required. John Radford, A.R.I.B.A., 14, Southernhay West, Exeter. Telephone 59237/8. 7190

EXPERIENCED ASSISTANTS required, Intermediate and Final standard, in small office, busy general practice; use own initiative and run own jobs. Holiday arrangements respected. Lush & Lester, Craven House, 121 Kingsway, W.C.2. HOLborn 5101. 7204

ASSISTANTS required by small but expanding firm of Architects now moving into modern office next to Baker Street Station. Opportunity to participate in all aspects of the business, which includes hotels, housing, flats, commercial premises and other interesting work. The following vacancies occur: An experienced ASSISTANT to work on sketch schemes, details, specifications. A DRAUGHTSMAN with several years' drawing office experience. A BUILDING SURVEYOR capable of writing specifications, supervising work, some draughtsmanship essential. Salary according to experience. Five-day week. Apply to Box 7172.

JOHN MOWLEM & CO. LTD.

ARCHITECTURAL ASSISTANTS

IMMEDIATE vacancies for Qualified and Intermediate standard Assistants.

Interesting Domestic and Commercial work.

Permanent positions for suitable men. Salary according to ability and experience. Five-day week. Pension Scheme.

Apply in writing to:

G. P. Nodex, A.R.I.B.A.,
JOHN MOWLEM & CO. LTD.,
Architects' Dept.,
123, Victoria Street,
London, S.W.1. 7174

ARCHITECT REQUIRED

BY... leading prefabricated timber building manufacturers

TO... design and develop building systems

WITH... originality and initiative

IN... friendly, congenial surroundings.

SALARY RANGE £1,100-£1,400 p.a.

PLUS... bonus, superannuation, five-day week.

Apply in writing, giving details of experience and salary required, to: Sales Director, Middlesex Prefabricated Buildings Ltd., Green Lane, Hounslow, Middlesex. 7171

CO-OPERATIVE WHOLESALE SOCIETY LTD.

ARCHITECT'S DEPARTMENT, LONDON

APPPLICATIONS are invited for the following appointments: (a) SENIOR ASSISTANT ARCHITECTS, Group 4, £1,030-£1,355. (b) ASSISTANT ARCHITECTS, Group 3, £755-£1,105. Commencing salaries according to qualifications and experience. There is a superannuation scheme subject to medical examination. Five-day week. Applications, stating age, qualifications, training and experience, to R. C. Steel, A.R.I.B.A., Chief Architect, C.W.S. Ltd., 99, Leman Street, London, E.1. 5812

EXPERIENCED SENIOR ASSISTANT (about R.I.B.A. Finals standard) required in small general practice. Interesting variety of work including restoration of buildings of architectural interest. Salary by arrangement. Phone Bevil Greenfield, A.R.I.B.A., Dorking 4208. 7002

A MODERN development company requires ASSISTANTS with a flair for work in connection with private houses, flats, supermarkets, offices, motels, etc. Facilities given to students attending day or evening classes. Please telephone or write to: The Architect, Fitzpatrick & Nicholson Ltd., 455, Old Ford Road, London, E.5. Tel. ADV 2991. 7160

EPPING. ASSISTANT required, Intermediate standard in small busy practice. Details in writing to R. G. Sperry, A.R.I.B.A., 169, High Street, Epping, Essex. 7161

SENIOR AND JUNIOR ASSISTANTS URGENTLY REQUIRED IN SMALL PROGRESSIVE PRACTICE IN WEST END. SALARIES UP TO £1,000 ACCORDING TO ABILITY. GER 0994. 7163

£1,200-£1,700. ARCHITECTS required by leading development company, for work on some of the country's most interesting redevelopment schemes. For further information and interview, write giving brief details to Box 7170.

MORRIS DE METZ, F.R.I.B.A., now requires several ASSISTANTS of Intermediate standard with some office experience. Interesting work on offices, luxury flats, hospitals, multi-storey garages, etc. High salaries and pension scheme. Please telephone HUNter 2591 or write to 29 Gloucester Place, Portman Square, London, W.1. 7166

Small practice requires small assistant, maximum effort for minimum return, qualified man (or A.R.I.B.A.) preferred, no sundays, ger 0904 or telephone. 7164

ANDREWS EMMERSON & SHERLOCK require responsible SENIOR and JUNIOR ASSISTANTS for work on a variety of domestic and commercial projects. Salaries by arrangement. 63, Dean Street, W.1. Tel.: GERard 5721. 7173

DEPUTY TO COMPANY ARCHITECT

The above vacancy occurs in an industrial Company which has a number of modern establishments in this country and a consistent record of growth.

The Company desires to appoint a Deputy to the present Architect who has full responsibility for the design and construction of new buildings, including the use of outside contractors, quantity surveyors and consultants. In keeping with its general policy of developing young executives, the Company desires to appoint a man not more than 28 years of age, who will develop sufficiently in the next five years to take over on the retirement of the present Architect. He should have a degree in Architecture, be registered and have experience in design and construction of industrial buildings.

After careful induction into Company activities the new member will carry responsibility for one or more projects from design through to complete construction. Such projects will be part of a long-term industrial and office building programme.

He will be expected to keep closely in touch with new developments in the architectural field, and active participation in R.I.B.A. and other institution affairs is encouraged. Strict confidence will be observed and arrangements made to meet suitable candidates where the position and conditions can be discussed in detail.

Please reply to Box 7078.

BIRMINGHAM. Experienced ASSISTANTS required. Good salary and bonuses. Three weeks holiday. Varied and interesting projects. Apply by phone or letter to: D. R. Harper, Esq., A.F.C., D.F.C., A.R.I.B.A., Messrs Francis W. R. Yorke, Harper & Harvey, 191 Corporation Street, Birmingham 4. Tel. CENTral 6901-2-3. 7115

FARNHAM, SURREY. Experienced SENIOR ASSISTANT required to handle all types of work from sketch design onwards. Salary range £800-£1,100. Write giving details to A. J. & L. R. Stedman, A.R.I.B.A., 36, South Street, Farnham, Surrey. 7080

ARCHITECTURAL ASSISTANT, Intermediate standard, required for varied and interesting work: five-day week, good salary. Antony Lamb, A.R.I.B.A., A.M.T.P.I., Ottery St. Mary, Devon. 7081

URGENTLY required, one or two SENIOR ASSISTANTS of Final standard, with about five years' experience. Capable of preparing sketch plans, and supervision of contracts. Write stating age, experience, and salary required to Box 7082, or telephone MAYfair 9556.

AN OPPORTUNITY exists for ASSISTANTS of Intermediate standard to work on large projects with the small, happy staff of a young firm in a new office. The rate of advancement will be dependent upon individual capabilities. There is a profit sharing scheme in operation and salaries will be by arrangement, up to £800. Please apply in writing to John Mathewson, A.R.I.B.A., 118-120 Westminster Bridge Road, S.E.1. 7084

LIVERPOOL. Architects require ASSISTANT for varied and interesting projects. Salary £800-£1,200 per annum. Five-day week. Previous holiday arrangements honoured. Applications stating age and experience to Box 7085.

£1,200-£2,000. SALARIES in this range will be paid to competent and experienced ARCHITECTS willing to take responsibility.

£850-£1,200 FOR Intermediate Grade ASSISTANTS. Midland Architects' Office with interesting Commercial and Industrial Projects. Pension Scheme, canteen facilities. Five-day week. Write stating age and experience to Box 7110.

DARTFORD. Two capable ASSISTANTS required for selected contracts. Full interest during all stages of design and construction. Good salary range for all applicants. Please write to: Bernard F. Moss & Partners, 10 Highfield Road, Dartford, Kent, or telephone Dartford 23028. 7118

ARCHITECTURAL ASSISTANTS required, preferably with experience. Superannuation. Five-day week. Salary according to experience. Cotton, Ballard & Blow, 5 Baker Street, London, W.1. Telephone Welbeck 3564. 7111

CAPABLE qualified ASSISTANT required to take charge of branch office of expanding practice in North West Surrey, with prospects of partnership. Pleasant office with a widely varied practice. Write with full particulars and salary to Broadway & Malvan, 34 Baker Street, Weybridge, Surrey. 7113

SENIOR and Intermediate ARCHITECTURAL ASSISTANTS required in Croydon office for large scale developments. Salary according to ability. Write giving full details of training and experience. Box 7114.

J. S. ALLEN, F.R.I.B.A., P.P.T.P.I. ARCHITECTURAL ASSISTANTS at various grades for practice which includes university and central area redevelopment, town and country planning and landscape. Good salary in accordance with qualifications and ability. Full summer holiday for new staff. Reply to 26 Jesmond Road, Newcastle upon Tyne, 2. 7079

ARCHITECT'S OFFICE IN CENTRAL LONDON HAS VACANCIES FOR STAFF PARTICULARLY INTERESTED IN DESIGN, AT SALARIES BETWEEN £850 AND £1,500, DEPENDENT UPON QUALIFICATIONS AND EXPERIENCE. PLEASE WRITE BOX 7123.

BERNARD F. MOSS & PARTNERS require two capable ARCHITECTURAL ASSISTANTS. Offices in Cannon Street and Dartford. The appointments advertised are preferably required for the Dartford office but a selected applicant could work from the London office if particularly wishing to do so. Salary by arrangement and at present day range for Senior and Junior staff. Please write to No. 10 Highfield Road, Dartford, Kent, or telephone Dartford 23028. 7117

ARCHITECTURAL ASSISTANT. An Assistant urgently required by Company Architect for interesting and varied work in a Company's Architectural Dept. in Bedford. Practical experience preferable to academic qualifications. Quick and accurate draughtsmanship essential. Five-day week, canteen facilities, non-contributory pension fund. Apply in writing giving full particulars and stating salary required to Box 7149.

LONDON CONSULTANTS have vacancies for Intermediate Standard ARCHITECTURAL ASSISTANTS AND DRAUGHTSMEN. Interesting and Varied Projects. Five-day week, good conditions. Luncheon Vouchers. Salaries range £800-£1,250 according to ability. Apply in writing to:

JAMES T. GORNALL & ASSOCIATES
3 Hobart Place, London, S.W.1. 7144

PARTNERSHIP calibre ARCHITECT needed for expanding practice in East Yorkshire. Alternative consideration could be merger with Architect having similar desperate staff problems. Box 7159.

ARCHITECTURAL ASSISTANT of about Intermediate standard required for interesting work in connection with industrial and commercial schemes. A superannuation scheme is available and some assistance with housing may be granted. Please write giving particulars of age, experience and salary to H. C. James Ltd., 183 High Town Road, Luton, Beds. 7137

ARCHITECTURAL AND ENGINEERING ASSISTANTS REQUIRED FOR INTERESTING PERMANENT WORK. EXCELLENT CONDITIONS AND PENSION SCHEME AT SOUTH COAST HEAD OFFICE OF NATIONAL FIRM GREGORY HOUSING LTD., 21, FARNCOMBE ROAD, WORTHING, SUSSEX. 7142

KATZ & VAUGHAN have vacancies for Senior and Intermediate ASSISTANTS. REG 5401. 208a Regent Street, W.1. 7143

ARCHITECTS required, Senior and Intermediate, for varied schemes: redevelopment, hotels, shopping centres, cinemas, theatres, flats, etc. Good salary offered and pension scheme in operation. Five-day week, holiday commitments honoured. Apply to James A. Roberts, A.R.I.B.A., Lichfield House, Smallbrook Ringway, Birmingham 5. 7150

FLAT available in South East London to suitable applicant for post as ARCHITECTURAL ASSISTANT in busy Kensington Office. Assistant above Intermediate standard is required. Salary by arrangement. Mayell, Hart & Partners, 118, Cromwell Road, London, S.W.7. Tel.: FREmantle 8596. 7151

ASSISTANT, Intermediate to Final standard, required to concentrate on contemporary housing design. Housing accommodation available. John H. Evans, A.R.I.B.A., Tredegar Chambers, Bridge Street, Newport, Mon. 7154

ESSEX OFFICE requires qualified ASSISTANTS interested in advanced design. Please write to Jan Farber and Bartholomew, Nevendon Hall, Basildon, Essex. 7157

BIRMINGHAM. F. Potter and Associate F.A.R.I.B.A. urgently require qualified ARCHITECTS and ASSISTANTS to run varied and interesting contracts. High salaries will be paid to suitable applicants with ability and initiative. Non-contributory private pension scheme operates. Apply: 3, Vicarage Road, Edgbaston, Birmingham 15. Tel.: EDGBaston 5771. 7156

ASSISTANT ARCHITECTS required by Multiple Company at Birmingham. Commencing salaries according to qualifications and experience. Applications, stating age, qualifications, training and experience to Staff Architect, Box 7128.

ARCHITECTS

NATIONAL COAL BOARD

The prosperous East Midlands Division, covering Nottinghamshire, Derbyshire and Leicestershire, has vacancies for first-class architects and architectural assistants.

Interesting, worthwhile work with the opportunity of acquiring wide experience on industrial and welfare buildings and the design of offices, laboratories, etc. Good conditions and new offices near Nottingham in pleasant surroundings. A Five-Day week is in operation and a Staff Restaurant is available.

Appointments are available in the following Grades at starting salaries appropriate to ability and experience:

Architects Grade II.

Salary £900 x £35—£1,250 per annum.

Architectural & Quantity Surveying Assistants

Salary £655—£25—£785 and then x £30—£935 per annum. The maximum in this Grade may be raised to £1,100 per annum for those with exceptional ability and experience.

Apply in writing to:—

Divisional Staff Officer,
National Coal Board,
Sherwood Lodge, Arnold, Nr. Nottingham.
quoting S.V.1116.

TAYLOR WOODROW CONSTRUCTION LIMITED



require

ARCHITECTS

Candidates should be qualified, or of final standard, with the ability to control contracts from client to completion, co-ordinating the work of heating, ventilating, electrical and structural designers.

ARCHITECTURAL ASSISTANTS

Candidates should have at least three years' training or experience and will work as members of design groups.

These are excellent opportunities to join a department working on major industrial and commercial projects and to gain practical experience through contact with site personnel and senior members of the building industry.

Interviews can be arranged at any time including early evenings and Saturday mornings with travelling expenses paid.

Write to:

PERSONNEL MANAGER
345 Ruislip Road, Southall, Middlesex
or Telephone WAXlow 2366

CITY OF MANCHESTER

ASSISTANT

CITY PLANNING OFFICER

Applications are invited for this appointment in the City Surveyor and Engineer's Department at a salary within J.N.C. Scale 'G' (£2,240/£2,565). Candidates must be appropriately qualified by examination and must have had considerable experience in the Planning and Development work of a Local Authority.

The person appointed will be responsible to the City Surveyor for the control of the Planning and Development Section of the Department and the duties will include comprehensive redevelopment and new development work (including overspill). Housing accommodation and removal expenses.

Forms of application from the Town Clerk to be returned to him at the Town Hall, Manchester, 2, in an envelope endorsed "Assistant City Planning Officer" not later than 8th May, 1961.

CANADA

TOWN PLANNERS

Central Mortgage and Housing Corporation (the Government Agency concerned with Housing and Planning in Canada) requires Town Planners with creative and administrative abilities in its expanding activities in Ottawa and across the nation. The work includes physical planning and design of Public Housing and Redevelopment projects; research; town planning for other government agencies; and the review of private housing developments submitted for government financing. Openings are available at Head Office, Regional Offices and Branch Offices. Applicants should possess a professional qualification and membership in T.P.I. or R.I.B.A. Salary in accordance with qualifications and experience. Excellent opportunity for promotion. Applicants and Family Passage Paid. Health, Pension and Life Insurance Benefits. Applications are also invited from Scandinavia, the Low Countries and France. Apply in confidence by June 1st, giving age, marital status, qualifications and experience with names of three references to:

Mr. G. M. Morrison,
National Employment Service of Canada,
61 Green Street, London, W.1.

The Corporation's Chief Architect and Planner, Mr. Ian MacLennan, will interview applicants in London, in early June by appointment.

VIVIAN PILLEY REQUIRES SENIOR ARCHITECT'S ASSISTANT WITH AT LEAST FIVE YEARS' OFFICE EXPERIENCE (NOT NECESSARILY QUALIFIED). DELIGHTFUL GARDEN STUDIO IN ST. JOHN'S WOOD. PERMANENT POSITION. GOOD SALARY BY ARRANGEMENT. RING CUNNINGHAM 3384. 7125

SENIOR AND INTERMEDIATE ARCHITECTURAL ASSISTANTS required for Development Office, Wembley Area. Excellent opportunities. Salary between £1,000 and £1,500 per annum. Apply Box 7131.

ARCHITECTS REQUIRED TO WORK IN PLEASANT OFFICES AT EPSOM ON INTERESTING MAJOR PROJECTS AND COMPETITION WORK. ARCHITECTS WHO WISH TO OBTAIN EXPERIENCE IN A PROGRESSIVE ORGANISATION WITH ATTACHED MECHANICAL AND Q.S. SECTIONS AND WHO ARE PREPARED TO MAKE DETAILED STUDY IN MODEL FORM OF PRINCIPAL ELEMENTS AS A PART OF DESIGN PROCESS ARE INVITED TO FORWARD DETAILS OF THEIR CAREER AND EXPERIENCE TO R. S. WILLCOX, BOISEVAIN & OSMOND, KING'S SHADE WALK, EPSOM, SURREY. 6600

ARCHITECTS with busy practice in Brighton require **ASSISTANTS** with practical experience for varied work. Salary up to £750 per annum. Five-day week, pension scheme, etc. Box 5848.

ARCHITECTS in Watford and London require capable **ASSISTANTS** with at least three years' office experience for work on interesting commercial and industrial projects. Salary range £800-£1,200 per annum. Non-contributory pension scheme. Apply Box 5148.

ARCHITECTURAL ASSISTANTS required by J. Douglas Mathews & Partners. Salary range £700 to £1,000. Group system operated, giving opportunity for taking part in all aspects of work. Graded salary system. Annual bonuses. Pension Scheme. Luncheon Vouchers. Written applications to 3, Ebury Street, London, S.W.1. 6627

ARCHITECTS' ASSISTANTS required for well-known NEW ZEALAND practice. Experience and ability more important than qualifications. Good prospects for the right experience. Permanent appointments with good progressive salaries with bonuses for five-day week, working on a wide and varied range of interesting projects. Two weeks yearly sick leave on full pay, two weeks annual leave and all statutory holidays. Interviews will be arranged with applicants in London in June. Apply in first instance by Air Mail to J. G. Collins and Son, Registered Architects, G.P.O. Box 1372, Christchurch, New Zealand. 6614

ASSISTANT age 22-35, required for Premises Department. Must be able to prepare schemes, specifications, carry out surveys and be a good draughtsman. Good commencing salary, with additional Bonus. Pension Plan. Please write giving fullest details of age, experience, etc., to Personnel Manager, THE NATIONAL CASH REGISTER CO. LTD., 206-216 Marylebone Road, London, N.W.1. 7206

AN APPOINTMENT IN THE SUN. Qualified Assistant Architect required for interesting and varied work in JERSEY, to work with minimum supervision. Interviews in London. Expenses paid. Salary about £1,100. Apply D. V. Hewitt, Dipl.Arch., U.C.L., A.R.I.B.A., 5 Esplanade, St. Helier, Jersey, C.I. 7212

PROGRESSIVE Architect's Office urgently requires

ARCHITECTURAL ASSISTANTS

Varied practice with very good prospects. Intermediate to advanced assistants. Salary range £500-£1,250 according to experience.

Apply now to:-

H. OWEN LUDER, A.R.I.B.A.,
79 Regency Street,
London, S.W.1.

Tel: VICTORIA 2171. 7210

Architectural Appointments Wanted

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

AN ARCHITECT (Dip.Arch., Associate) of very wide experience in Britain and Overseas, with 10 years in responsible Senior and Managerial positions, seeks permanent appointment with private, industrial or commercial organization. Available interview early May. Box 7069.

YOUNG ARCHITECT of great achievement, brilliant town planner and creator of many significant buildings, wants work reflecting capabilities both in rewards and attribution. Box 7195.

ASSOCIATE (25), situated Manchester, willing to assist busy office on part-time basis. Please write to 16 Grasmere Road, Royton, Lancs. 7162

Other Appointments Vacant

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

BUSINESS VACANCIES BUREAU have vacancies for **DRAUGHTSMEN, ESTIMATORS, QUANTITY SURVEYORS**, etc. Permanent Position. (No fees.) Call: 28, Victoria Street, Victoria, S.W.1. ABBey 7200. 6699

QUANTITY SURVEYOR, approaching Final standard, capable of carrying out final accounts and all normal Quantity Surveyor's duties, required for West End Office. Salary according to age and experience. Please write giving full particulars to Box 4584.

DESIGNER required. For shopfitting, interior work and exhibitions. Permanent position. Pension scheme in operation. Apply: Frank W. Clifford Ltd., 29 Vauxhall Bridge Road, S.W.1. 6642

DRAUGHTSMAN of about Intermediate standard wanted, preferably with some office experience, for small office with varied work. Apply, stating salary required, and give details of experience to Miles and Willis, 18, Great George Street, Bristol, 1. 6686

THE ARCHITECTS' JOURNAL requires a good **DRAUGHTSMAN**, full time, for the preparation of Information Sheets and Working Details. An interest in compiling technical information is essential. Write to the Editor (Information Sheets), 9 Queen Anne's Gate, S.W.1, stating age, training and experience and salary required. 6938

THE ARCHITECTS' JOURNAL requires **FREELANCE DRAUGHTSMEN** resident or working in London for the preparation of Information Sheets and Working Details. These drawings are executed in ink on linen and require a high standard of draughtsmanship. Write to the Editor (Information Sheets), 9 Queen Anne's Gate, S.W.1. 6932

UNIQUE OPPORTUNITY FOR CIVIL ENGINEER required to take charge of Engineer group in large, established Architects' Office, engaged in varied industrial and commercial work. Early salaried partnership intended, after satisfactory probationary period. Applicants should be between 30 and 45 years of age and must have first class design and administrative ability. The fullest details of training and experience must be submitted. Communications will be treated in strict confidence and must reach this office by 4th May, 1961, latest, in envelope marked "Confidential - Civ. Engr." **FARMER AND DAVE, F.F.R.I.B.A., Chartered Architects, Romney House, Tufon Street, London, S.W.1. 7072**

THE ARCHITECTS' JOURNAL requires a **JUNIOR** for its drawing office. Experience is not necessary. What is required is someone with an aptitude for mechanical drawing and a real interest in architectural detailing and draughtsmanship. Successful applicant will be trained in the production of Information Sheets and Working Details. Write to the Editor (Information Sheets), 9 Queen Anne's Gate, S.W.1, stating age, and general education. 6937

DESIGNERS, preferably with Architectural training, required to specialise in Department Store design. Able to produce visual sketches and working drawings, and willing to travel to contracts throughout England. Box 7165.

REPRESENTATIVES. A leading Manchester company manufacturing products for the Building Industry has vacancies for representatives in various parts of England. Applications are invited from men between 25 and 40 years of age who are mobile and have a knowledge of the Building Industry. First class conditions of service are offered and a car will be provided. Apply giving full details of career and present salary to The Chief Personnel Manager, Box 7083.

Other Appointments Wanted

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

OFFICE MANAGER—Architects, Q.S.'s or Consultants—highly experienced fees, costing, finance, accountancy, secretarial, seeks change. Box 7016

SALES EXECUTIVE, 46, established connection local authorities, architects, housing developers, builders and allied trades throughout London and Home Counties, seeks appointment. Outstanding record. Experience all aspects of marketing. Box 6347.

Services Offered

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

"DON" ARCHITECTURAL MODEL MAKERS. We offer the highest grade work with speed and reliability. Please Phone Woolwich 1262 or write 6, Pelham Crescent, Hastings. 1673

SURVEYS. Large or small, drawn to large scales, accuracy guaranteed. Structural sewerage, sewage disposal, sanitary plumbing and drainage design. The Site Survey Company, London, S.E.3. Telephone LEE Green 7444. 6088

FULLY experienced in all Building and Architectural work, I am available to undertake: Designs, Working Drawings, Details, Surveys, Specifications, Models, etc. Just telephone Wallington 9883 (near Croydon) and I will call anywhere and take your instructions. Box 5548.

FREELANCE ARCHITECTURAL BUILDING DRAUGHTSMAN available, on fee or "quantum meruit" basis; designs, specifications, working drawings, etc. Will call for instructions. Box 7099.

ALL MODELS STUDIO. If it's a model you require we are the craftsmen to make it. Serving every industry and profession. Allmodels Studio, 2, Burlington Mews, London, W.3. Acorn 7655. 7097

DESIGN AND EDITORIAL SERVICES are offered by the publishers of "Number," who have experience in book, catalogue, brochure and pamphlet design, illustration, photography and production. They are not interested in advertising, but would do first-class work for publishing houses, illustrated books (instructional, children's, historical), official bodies, architects, promoters of good design, bookshops, etc. Write to "Number," 1 Jedburgh Street, London, S.W.11. 7091

ASSOCIATES, with small expanding office in London offer first class draughting service for all types of drawings. Phone TERminus 9594 or write Box 7211.

MODELS AND COLOUR PERSPECTIVES Charles Houthuesen offers work of the highest quality. 16, Thames Street, Sunbury-on-Thames, Middlesex. Sunbury 3728. 2339

"NAPIER Models." Specialists in Architectural work. Stanley Studios, S.W.10. FLAXman 2118. 3551

SURVEY OF SITES or buildings carried out for the Profession. Livingstone 1839. 5071

EXPERIENCED ARCHITECT, recently commenced own practice, is free to assist other Architects from his own address. Box 7043.

ARCHITECTURAL MODELS.—Thomas K. Bartlett and Partners specialise in this work. 5 King's Ave., W.5. Phone PERivale 6283. 6176

For Sale and Wanted

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

FOR SALE. Centenax Major Combined Printing and Developing machine in excellent condition complete with cabinet base 5 ft. 2 in. x 2 ft. £100 or near offer. Ring CHA 8201. 7185

WANTED. Continuous Plan Printer in good working order. Offers to buyer, Unit Construction Co., Abbey Wood, S.E.2. WOO 5283. 7089

Partnership and Financial

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

ARCHITECT with small but growing London practice, would like to meet Structural Engineer in similar position, with moderately progressive views and interest in reinforced concrete, to discuss possibility of collaboration on projects of around £50,000 to £100,000. Box 6946.

Premises To Let

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

BRISTOL. Berkeley Square. Approx. 1,500 sq. ft. ground, first and semi-basement floors, well lighted in desirable professional locality close city centre. 7s. per sq. ft. excl. J & H. Parker, 14, Phoenix Grove, Bristol 6. 7167

GLASGOW.—Spacious light rooms in detached building. Parking space. Apply Albion House, Hamilton Road, Glasgow, E.2. 7006

Miscellaneous

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

A. J. BINNS, LTD. Specialists in the supply and fixing of all types of Fencing, Gates and Cloakroom Equipment.—Harrold Works. 96/107, St. Pauls Road, N.1. Canonbury 3961. 3093

CROGGON & CO., LTD.—Chain Link Fencing and all types of Wrought Iron Fencing supplied and erected.—230, Upper Thames Street, London, E.C.4. CENTral 4382. 9429

HANDMADE CLAY TILES available in many beautiful colours. The perfect roofing material with the longest life. Particulars, samples and brochure from G. Tucker & Son Ltd., Loughborough, Leicestershire. Phone: Loughborough 2446/7. 1669

IMPORTERS solicit enquiries from Builders Merchants and users for wired and similar glass, also special quality glass of all types and designs. Write Box 6877.

The unique beauty of Broughton Moor Green slate

remains unimpaired through centuries of climatic extremes and atmospheric pollution. That is why growing numbers of contemporary architects turn to this natural material for external and internal facings, flooring, coping and cills. It is available naturally given, frame sawn or fine rubbed in three distinct colours: Light Sea Green, Olive Green, Pale Green Barred. Send for leaflet and details of easy fixing.

Broughton Moor

GREEN SLATE QUARRIES LTD

Coniston, The Lake District, Lancs.
Tel: Coniston 225/6

We never do as we are told...

... unless we are satisfied that our customer will be happy with the completed product.

We are specialists in building tailored in wood. We can supply our own designs. But also we manufacture to order and are then anxious to interpret any suggestions from architects in the best possible way, both as regards cut and price.

Then, after full discussion and agreement, we do exactly as we are told.

Full details and brochures on request.

GREGORY OF HEDGERLEY
HEDGERLEY BUCKS
Telephone: Farnham Common 561

IS ART ANY USE? Architecture has developed a fine international style. Painting and sculpture have had a virtual renaissance. Yet recent attempts to use art as architectural decoration have not always been successful. The second issue of "Number," a bi-monthly magazine of art, design, graphics and architecture discusses this situation. Contributors include the secretary of Anti-Ugly Action and the Assistant Editor of "Graphic." Drawings and photographs from many countries. Get "Number" from 1, Jedburgh Street, London, S.W.11, or bookshops. Single copies 2s., subscription for six issues 14s. Future topics: Indifference, Obscenity, Advertising, Education. 7099

Educational Announcements

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

R.I.B.A. and T.P.I. EXAMS.—Stuart Stanley (Ex. Tutor Sch. of Arch. Lon. Univ.) and G. A. Crockett, M.A./D.A., F.R.I.B.A., M./A.M.T.P.I., prepare Students by correspondence. 10, Adelaide Street, Strand, W.C.2. TEM. 1603/4. 9953

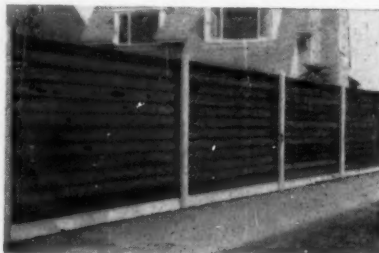
INTERIOR DESIGN AND DECORATION. The Rhodoc School offers a home study course in interior design and decoration. Course 1, for professional use. Course 2, for personal use about your home. Send 4d. stamp for free booklet to Dept. A.J. BCM/Rhodoc, London, W.C.1. 4989

FULL OR SUPPLEMENTARY TUITION

Provided by correspondence for R.I.B.A. examinations. Revision Courses also available in any subject. Descriptive brochure on application

ELLIS SCHOOL OF ARCHITECTURE

Principal: A. S. Waters, F.R.I.B.A., F.I.Arb.
103B, Old Brompton Rd, London, S.W.7
and at Albany House, Worcester.



No other type of fence is as strong and durable. The panels are pressure creosoted timber and posts of granite concrete.

ALL CONDITIONS PROVIDED FOR

T. G. FENCING, Elborow Street, RUGBY

MODELS

for Architects & Civil Engineers
by **John B. Thorp**

EST 1883
98 GRAY'S INN ROAD, LONDON
W.C.1 Tel: HOLborn 1011

HY-RIB

combined shuttering and reinforcement
long span metal lathing

HY-RIB DIVISION, TRUSCON LIMITED
85-41 Lower Marsh, London S.E.1. Telephone: WA1 6022

KIRKSTONE

GREEN SLATE FOR WALL
CLADDING, CILLS,
COPING, FLOORING PAV-
ING ETC.

The slate from our quarries has been used for these purposes for over 50 years. Our accumulated experience is offered to Architects in the services of our Technical Staff and illustrated literature.

Service in Slate
**KIRKSTONE GREEN
SLATE QUARRIES Ltd.**
Ambleside, Westmorland

Tel.: Amb. 3296-7

SEE TULLIS HOSPITAL
LAUNDRY EQUIPMENT ON
STAND No. D11

AT THE HOSPITAL EXHIBITION, OLYMPIA
D.&J. TULLIS MAY 15-19, 1961
LAUNDRY ENGINEERS
CLYDEBANK, SCOTLAND Tel: 1861/2/3/4/5
Branches also at Birmingham and Manchester

IT SAVES TIME & MONEY
to specify

FURSE

STAGE EQUIPMENT

A very comprehensive design and advisory service is available to Architects for Schools, Public Halls and the like.

W. J. FURSE & CO. LTD.
TRAFFIC ST, NOTTINGHAM — LONDON, MANCHESTER

More and more HATHERNWARE FAIENCE FOR NEW CITY SITES

HATHERNWARE

(Architects: C. Edmund Wilford & Son)

HATHERNWARE LTD · DEPT. AR · LOUGHBOROUGH · LEICS.

Specified for buildings in the City: BOW BELLS HOUSE, Cheap-
side, E.C.4. (Architects: Cotton, Ballard & Blow). TEMPLE
HOUSE, Cannon St., E.C.4. (Architects: Campbell Jones & Sons).
OFFICE BLOCK for ZIDPARK GARAGES,
Queen St. Place, Upper Thames St., E.C.4.

TELEPHONE: HATHERN 273
CHL. 99

CUT ALONG THIS LINE

FIRST FOLD HERE

AJ enquiry service

If you require catalogues and further information on building products and services referred to in the advertisements appearing in this issue of the Architects' Journal please mark with a tick the relevant names given in the index to advertisers overleaf. Then detach this page, write in block letters, or type, your name, profession or trade and address in the space overleaf, fold the page so that the post-paid address is on the outside and despatch. We will ensure that your request reaches the advertisers concerned.

Postage
will be paid
by
Licensee

FOLD HERE

No Postage Stamp
necessary
if posted
in Great Britain or
Northern Ireland

BUSINESS REPLY FOLDER
Licence No. S.W. 1761

THE ARCHITECTS' JOURNAL

9-13 Queen Anne's Gate

London, S.W.1.

FOLD HERE

TUCK IN THIS FOLD

Alphabetical index to advertisers

	PAGE	CODE
Acme Flooring & Paving Co. (1904) Ltd.	2	0004
Adshedd Ratcliffe & Co., Ltd.	113	0007
Airscrew Company & Jewood, Ltd.	82	0011
Allied Brick & Tile Works, Ltd.	118	1287
Architectural Press, Ltd.	121	0026
Association of Vermiculite Exfoliators	80	0144
Autotype Co., Ltd.	114	0043

B.I.P. Reinforced Products, Ltd.	36	0066
Bailey & Whites, Ltd.	119	1172
Barry, Ostlere & Shepherd, Ltd.	61	0050
Bawn, W. B., & Co., Ltd.	117	0053
Bech Neale & Co. Ltd.	77	1140
Benbow of Torquay, Ltd.	121	1262
Blakey Cabinet & Metal Works, Ltd.	109	0074
Bolton Gate Co., Ltd.	71	0078
Booth, Henry, & Son, Ltd.	15	0821
Bowater Sales Co., Ltd.	16, 17	0082
Bow Slate & Enamel Co., Ltd.	134	0083
Braby, Frederick, & Co., Ltd.	45	0092
Bratt Colbran, Ltd.	81	1138
British Aluminium Co., Ltd.	10	0090
British Plaster Board (Manufacturing), Ltd.	27	0102
Broad & Co., Ltd.	117	0111
Broughton Moor Green Slate Quarries, Ltd.	87, 138	0115
Bryce White & Co., Ltd.	132	0117

C.I.B.A. (A.R.L.), Ltd.	8	0736
Cape Building Products, Ltd.	46	0131
Celeon, Ltd.	112	0908
Cement Marketing Co., Ltd.	83	0136
Chloride Batteries, Ltd.	101	0141
Coal Utilisation Council	93	0147
Colt Ventilation, Ltd.	3	0152
Compactom, Ltd.	69	0153
Concrete, Ltd.	95	0154
Constructors, Ltd.	48	0157
Costain Concrete Co., Ltd.	75	1100
Cox, William J. (Sales), Ltd.	120	0792
Crogon & Co., Ltd.	114	0171
Crompton Parkinson, Ltd.	50	0172
Cumberland Pencil Co., Ltd.	114	0101

Danks, Edwin, & Co. (Oldbury), Ltd.	2	0175
Denton Edwards Paints, Ltd.	58	0181
Dexion, Ltd.	66	0179
Dinorwic Slate Quarries, Ltd.	48	1241
Dorman Long (Steel), Ltd.	121	0185
Doulton Vitrified Pipes, Ltd.	109	0186

Edgar Bros., Ltd.	62	1285
Ellis School of Architecture	138	0202
Engert & Rolfe, Ltd.	68	0204
English Clock Systems, Ltd.	39	0205
English Joinery Manfg. Assoc. (Inc.)	12	0788
Evode, Ltd.	5	0876
Expanded Metal Co., Ltd.	60	0211

F.E.B. (Great Britain), Ltd.	7, 9	0216
Fablon, Ltd.	94	0213
Falk, Stadelmann & Co., Ltd.	104	0214
Ferodo Ltd.	86	0218
Finlock Gutters, Ltd.	111	0222
Flexipipe, Ltd.	52, 53	0926
Flintkote Co., Ltd.	33	0229
Formica, Ltd.	92	0233
Furse, W. J., & Co., Ltd.	138	0241

Gas Council	18	0246
General Electric Co., Ltd.	22, 23	0250
General Electric Co., Ltd.	72, 73	0924
General Electric Co., Ltd.	110	0934
Gent & Co., Ltd.	20	0251
Greenwood Airvac Conduits, Ltd.	47	0262
Greenwood's & Airvac Ventilating Co., Ltd.	11	0263
Gregory (Hedgerley), Ltd.	138	1215
Gyproc Products, Ltd.	63	0266
Gypsum Plasterboard Development Association	67	0267

Haden, G. N., & Sons, Ltd.	57	0922
Halcrete Panels, Ltd.	64	1068
Harris & Sheldon, Ltd.	78	0279
Hathernware, Ltd.	138	0691
Hattersley (Ormskirk), Ltd.	21	0846
High Duty Alloys, Ltd.	51	0292
Hills (West Bromwich), Ltd.	88	0297
Holoplast, Ltd.	34, 35	0801
Honeywell Controls, Ltd.	90	0308
Hy-Rib Division, Truscon, Ltd.	138	0645

Imperial Chemical Industries, Ltd.	102	0319
------------------------------------	-----	------

Jablo Plastics Industries, Ltd.	111	0328
---------------------------------	-----	------

Kay & Co. (Engineers), Ltd.	115	0715
Kerner-Greenwood & Co., Ltd.	19	0339
King, Geo. W., Ltd.	49	0342
Kings Langley Engineering Co., Ltd.	110	0120
Kirkstone Green Slate Quarries, Ltd.	138	0739
Kismet, Ltd.	119	0993

Laing, John, & Son, Ltd.	141	0345
Lilleshall Co., Ltd.	113	0910
Linoleum Manufacturing Co., Ltd.	59	0798
London Brick Co., Ltd.	38	0366

M.K. Electric, Ltd.	76	0416
Marley Concrete, Ltd.	119	1135
Marley Tile Co., Ltd.	89	0870
Marley Tile Co., Ltd.	96	0871
Mellor Bromley (Air Conditioning), Ltd.	100	0405

Merchant Adventurers, Ltd.	99	0407
Merchant Trading Co., Ltd.	97	0408
Metal Sections, Ltd.	25	0403
Morris, Alfred, Furnishings, Ltd.	14	0423
Morris, M. A., Ltd.	65	0914

National Assn. of Master Asphalters	70	0428
Newton Chambers & Co., Ltd.	28, 29	0437

Olsson, Martin (Fibreboards), Ltd.	56	0445
------------------------------------	----	------

Patent Glazing Conference	84	1069
Peel, H., Ltd.	122	1160
Permoglaze, Ltd.	32	0459
Philips Electrical, Ltd.	42	0462
Pilkington Brothers, Ltd.	13	0475
Protim, Ltd.	49	0897
Pyrok, Ltd.	120	0741

Rawlings Bros., Ltd.	98	0499
Reed, Millican & Co., Ltd.	116	0502
Reynolds & Co., Ltd.	85	0696

Seaboard Lumber Sales Co., Ltd.	43	0542
Secomastic, Ltd.	41	0545
Semtex, Ltd.	37	0548
Shannon, Ltd.	141	0549
Shell Chemical Co., Ltd.	30	0964
Sigwart Floor Co., Ltd.	4	0556
Slate Fixing Co., Ltd.	79	1289
Sommerfelds, Ltd.	112	0576
Sterdy Telephones, Ltd.	116	0763
Stewart & Gray, Ltd.	74	0690

Strand Electric & Engineering Co., Ltd.	108	0764
Stotts of Oldham	115	0602
Sutcliffe, Speakman & Co., Ltd.	6	0611

T.G. Fencing	138	1184
Tanks & Linings, Ltd.	118	0616
Temperature, Ltd.	40	0746
Tentest Co., Ltd.	31	0627
Thorp, John B.	138	0633
Troughton & Young (Lighting), Ltd.	91	0640
Tullis, D. & J., Ltd.	138	1164
Tunnel Portland Cement Co., Ltd.	26	0647

Ulster Chipboard Co., Ltd.	103	1136
United Africa Co., Ltd.	141	1288

Venesta Plywood, Ltd.	24	0810
-----------------------	----	------

Ward Brothers (Sherburn), Ltd.	55	1192
Ward & Co. (Letters), Ltd.	121	0676
Weatherfoil, Ltd.	105	0685
Wiggins-Sankey, Ltd.	122	1058
Williams & Williams	106, 107	0694

Yale & Towne Manufacturing Co.	44	0704
--------------------------------	----	------

Zinc Development Association	54	0267
------------------------------	----	------

Write in block letters, or type, your name, profession, and address below, and fold so that the post-paid address is on the outside.

NAME

PROFESSION

ADDRESS

OFFICE PLANNING AND ARCHITECTURAL DESIGN



Inseparable when designing new office buildings

Throughout the cities of Britain new office blocks are springing up. They embody the best qualities of modern design. But how many architects, looking back to the planning stage, can say there were no long, and sometimes stormy, conferences with the client. The client is concerned, first and foremost, with the function of the building. The architect seeks to express that function in design. Misunderstandings occur. They are bound to, since the client is not normally experienced in planning an office, nor designing a building. And the marriage of function and design is not only important, it is essential to the smooth running of a business.

What is needed is an expert, and it is at this point that a planning service is of immense benefit to architect and client alike. For a definite layout of the interior leaves the architect free, and certain, to design the building. Naturally such planning must be done by experts, and the consultants of our advisory service have the experience to justify the title.

The basic principles of Office Planning are explained, and the need for such a service underlined in a new booklet, "A New Concept of Office Planning."

To send for this free booklet just attach the coupon to your letterheading and a copy will be sent by return. In it you will find more about our service and how we feel we can help you.

THE SHANNON LTD.

70 Shannon Corner, New Malden, Surrey

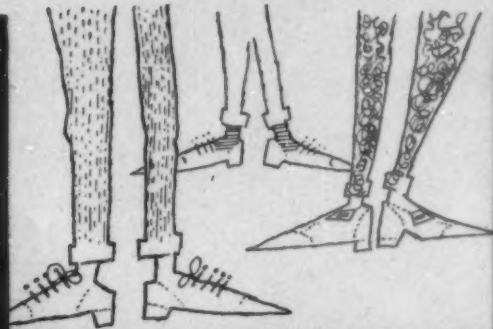
Please send me a free copy of "A New Concept in Office Planning."

Mark for the attention of.....



Shannon Systems

O & M TO BRITISH BUSINESS



Going up in West Africa?

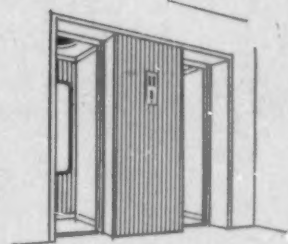
Sabiem lifts are now available in West Africa. Sabiem of Bologna, Italy, manufacture a complete range of lifts, including office lifts, car lifts

for garages, cargo lifts for warehouses and lifts suitable for hospitals and private houses.

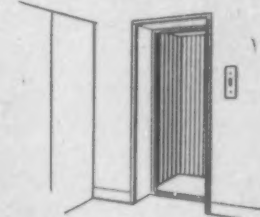
The United Africa Company Ltd., the sole agents for Sabiem lifts in West Africa, have a complete lift advisory service, staffed with qualified engineers.

If you require any information on installation, costing or local conditions write to

The United Africa Company, Ltd. at the address below.



Duplex lifts for offices and apartment buildings



Single lifts for hotels



Small single lifts for private houses.

Sabiem

SABIEM LIFTS OF BOLOGNA, ITALY

Enquiries in Nigeria to:

U.A.C (TECHNICAL) LIMITED

in Ghana to:

GHANA CONSOLIDATED MACHINERY & TRADING CO. LTD).

or in the United Kingdom to:

THE UNITED AFRICA COMPANY LIMITED
UNITED AFRICA HOUSE, BLACKFRIARS ROAD,
LONDON, S.E.1

Alphabetical index to advertisers

	PAGE	CODE
Acme Flooring & Paving Co. (1994) Ltd.	2	0004
Adshedd Ratcliffe & Co., Ltd.	113	0007
Airscrew Company & Jicwood, Ltd.	82	0011
Allied Brick & Tile Works, Ltd.	118	1287
Architectural Press, Ltd.	121	0026
Association of Vermiculite Exfoliators	80	0144
Autotype Co., Ltd.	114	0043

B.I.P. Reinforced Products, Ltd.	36	0066
Bailey & Whites, Ltd.	119	1172
Barry, Ostlere & Shepherd, Ltd.	61	0050
Bawn, W. B., & Co., Ltd.	117	0053
Bech Neale & Co. Ltd.	77	1140
Benbow of Torquay, Ltd.	121	1262
Blakey Cabinet & Metal Works, Ltd.	109	0074
Bolton Gate Co., Ltd.	71	0078
Boot, Henry, & Son, Ltd.	15	0821
Bowater Sales Co., Ltd.	16, 17	0082
Row Slate & Enamel Co., Ltd.	134	0083
Braby, Frederick, & Co., Ltd.	45	0092
Bratt Colbran, Ltd.	81	1138
British Aluminium Co., Ltd.	10	0090
British Plaster Board (Manufacturing), Ltd.	27	0102
Broad & Co., Ltd.	117	0111
Broughton Moor Green Slate Quarries, Ltd.	87, 138	0115
Bryce White & Co., Ltd.	132	0117

C.I.B.A. (A.R.L.), Ltd.	8	0736
Cape Building Products, Ltd.	46	0131
Celcon, Ltd.	112	0908
Cement Marketing Co., Ltd.	83	0136
Chloride Batteries, Ltd.	101	0141
Coal Utilisation Council	93	0147
Colt Ventilation, Ltd.	3	0152
Compactom, Ltd.	69	0153
Concrete, Ltd.	95	0154
Constructors, Ltd.	48	0157
Costain Concrete Co., Ltd.	75	1100
Cox, William J. (Sales), Ltd.	120	0792
Croggon & Co., Ltd.	114	0171
Crompton Parkinson, Ltd.	50	0172
Cumberland Pencil Co., Ltd.	114	0101

Danks, Edwin, & Co. (Oldbury), Ltd.	2	0175
Denton Edwards Paints, Ltd.	58	0181
Dexion, Ltd.	66	0179
Dinorwic Slate Quarries, Ltd.	48	1241
Dorman Long (Steel), Ltd.	121	0185
Doulton Vitrified Pipes, Ltd.	109	0186

Edgar Bros., Ltd.	62	1285
Ellis School of Architecture	138	0202
Engert & Rolfe, Ltd.	68	0204
English Clock Systems, Ltd.	39	0205
English Joinery Manfg. Assoc. (Inc.)	12	0788
Evode, Ltd.	5	0876
Expanded Metal Co., Ltd.	60	0211

F.E.B. (Great Britain), Ltd.	7, 9	0216
Fablon, Ltd.	94	0213
Falk, Stadelmann & Co., Ltd.	104	0214
Ferodo Ltd.	86	0218
Finlock Gutters, Ltd.	111	0222
Flexipipe, Ltd.	52, 53	0926
Flintkote Co., Ltd.	33	0229
Formica, Ltd.	92	0233
Furse, W. J., & Co., Ltd.	138	0241

Gas Council	18	0246
General Electric Co., Ltd.	22, 23	0250
General Electric Co., Ltd.	72, 73	0924
General Electric Co., Ltd.	110	0934
Gent & Co., Ltd.	20	0251
Greenwood Airvac Conduits, Ltd.	47	0262
Greenwood's & Airvac Ventilating Co., Ltd.	11	0263
Gregory (Hedgerley), Ltd.	38	1215
Gyproc Products, Ltd.	63	0266
Gypsum Plasterboard Development Association	67	0267

Haden, G. N., & Sons, Ltd.	57	0922
Halcrete Panels, Ltd.	64	1068
Harris & Sheldon, Ltd.	78	0279
Hatherware, Ltd.	138	0691
Hattersley (Ormskirk), Ltd.	21	0816
High Duty Alloys, Ltd.	51	0292
Hills (West Bromwich), Ltd.	88	0297
Holoplast, Ltd.	34, 35	0801
Honeywell Controls, Ltd.	90	0308
Hy-Rib Division, Trusecon, Ltd.	138	0645

Imperial Chemical Industries, Ltd.	102	0319
------------------------------------	-----	------

Jablo Plastics Industries, Ltd.	111	0328
---------------------------------	-----	------

Kay & Co. (Engineers), Ltd.	115	0715
Kerner-Greenwood & Co., Ltd.	19	0339
King, Geo. W., Ltd.	49	0342
Kings Langley Engineering Co., Ltd.	110	0120
Kirkstone Green Slate Quarries, Ltd.	138	0739
Kismet, Ltd.	119	0993

Laing, John, & Son, Ltd.	141	0345
Lilleshall Co., Ltd.	113	0910
Linoleum Manufacturing Co., Ltd.	59	0798
London Brick Co., Ltd.	38	0366

M.K. Electric, Ltd.	76	0416
Marley Concrete, Ltd.	119	1135
Marley Tile Co., Ltd.	89	0870
Marley Tile Co., Ltd.	96	0871
Mellor Bromley (Air Conditioning), Ltd.	100	0405

Merchant Adventurers, Ltd.	99	0407
Merchant Trading Co., Ltd.	97	0408
Metal Sections, Ltd.	25	0403
Morris, Alfred, Furnishings, Ltd.	14	0423
Morris, M. A., Ltd.	65	0914

National Assn. of Master Asphalters	70	0428
Newton Chambers & Co., Ltd.	28, 29	0437

Olsson, Martin (Fibreboards), Ltd.	56	0445
------------------------------------	----	------

Patent Glazing Conference	84	1069
Peel, H., Ltd.	122	1160
Permoglaze, Ltd.	32	0459
Philips Electrical, Ltd.	42	0462
Pilkington Brothers, Ltd.	13	0475
Protin, Ltd.	49	0897
Pyrok, Ltd.	120	0741

Rawlings Bros., Ltd.	98	0499
Reed, Millican & Co., Ltd.	116	0502
Reynolds & Co., Ltd.	85	0696

Seaboard Lumber Sales Co., Ltd.	43	0542
Secomastic, Ltd.	41	0545
Semtex, Ltd.	37	0548
Shannon, Ltd.	141	0549
Shell Chemical Co., Ltd.	30	0964
Sigwart Floor Co., Ltd.	4	0556
Slate Fixing Co., Ltd.	79	1289
Sommerfelds, Ltd.	112	0576
Sterdy Telephones, Ltd.	116	0763
Stewart & Gray, Ltd.	74	0600
Strand Electric & Engineering Co., Ltd.	108	0764
Stotts of Oldham	115	0602
Sutcliffe, Speakman & Co., Ltd.	6	0611

T.G. Fencing	138	1184
Tanks & Linings, Ltd.	118	0616
Temperature, Ltd.	40	0746
Tentest Co., Ltd.	31	0627
Thorp, John B.	138	0633
Troughton & Young (Lighting), Ltd.	91	0640
Tullis, D. & J., Ltd.	138	1164
Tunnel Portland Cement Co., Ltd.	26	0647

Ulster Chipboard Co., Ltd.	103	1136
United Africa Co., Ltd.	141	1288

Venesta Plywood, Ltd.	24	0810
-----------------------	----	------

Ward Brothers (Sherburn), Ltd.	55	1192
Ward & Co. (Letters), Ltd.	121	0676
Weatherfoil, Ltd.	105	0685
Wiggins-Sankey, Ltd.	122	1058
Williams & Williams	106, 107	0694

Yale & Towne Manufacturing Co.	44	0704
--------------------------------	----	------

Zinc Development Association	54	0207
------------------------------	----	------

Write in block letters, or type, your name, profession, and address below, and fold so that the post-paid address is on the outside.

NAME _____

PROFESSION _____

ADDRESS _____

OFFICE PLANNING AND ARCHITECTURAL DESIGN



Inseparable when designing new office buildings

Throughout the cities of Britain new office blocks are springing up. They embody the best qualities of modern design. But how many architects, looking back to the planning stage, can say there were no long, and sometimes stormy, conferences with the client. The client is concerned, first and foremost, with the function of the building. The architect seeks to express that function in design. Misunderstandings occur. They are bound to, since the client is not normally experienced in planning an office, nor designing a building. And the marriage of function and design is not only important, it is essential to the smooth running of a business.

What is needed is an expert, and it is at this point that a planning service is of immense benefit to architect and client alike. For a definite layout of the interior leaves the architect free, and certain, to design the building. Naturally such planning must be done by experts, and the consultants of our advisory service have the experience to justify the title.

The basic principles of Office Planning are explained, and the need for such a service underlined in a new booklet, "A New Concept of Office Planning."

To send for this free booklet just attach the coupon to your letterheading and a copy will be sent by return. In it you will find more about our service and how we feel we can help you.

THE SHANNON LTD.

70 Shannon Corner, New Malden, Surrey

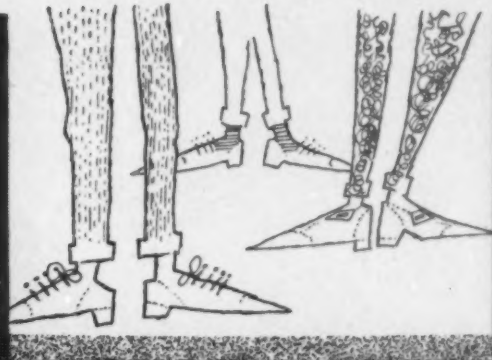
Please send me a free copy of "A New Concept in Office Planning."

Mark for the attention of.....



Shannon Systems

O & M TO BRITISH BUSINESS



Going up in West Africa?

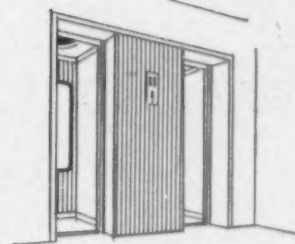
Sabiem lifts are now available in West Africa. Sabiem of Bologna, Italy, manufacture a complete range of lifts, including office lifts, car lifts

for garages, cargo lifts for warehouses and lifts suitable for hospitals and private houses.

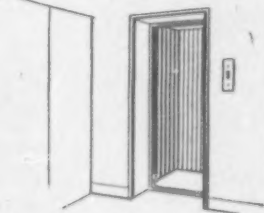
The United Africa Company Ltd., the sole agents for Sabiem lifts in West Africa, have a complete lift advisory service, staffed with qualified engineers.

If you require any information on installation, costing or local conditions write to

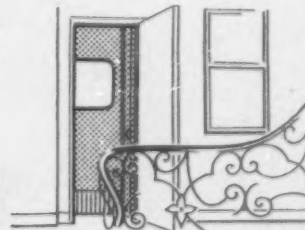
The United Africa Company, Ltd. at the address below.



Duplex lifts for offices and apartment buildings



Single lifts for hotels



Small single lifts for private houses

Sabiem

SABIEM LIFTS OF BOLOGNA, ITALY

Enquiries in Nigeria to:

U.A.C. (TECHNICAL) LIMITED

in Ghana to:

GHANA CONSOLIDATED MACHINERY & TRADING CO. LTD.

or in the United Kingdom to:

THE UNITED AFRICA COMPANY LIMITED
UNITED AFRICA HOUSE, BLACKFRIARS ROAD,
LONDON, S.E.1

23-storey flats in the City of Westminster

High above the City of Westminster, London's tallest block of flats, the 23-storey, 212 ft. Hide Tower, Hide Place, Westminster, is due for completion in June.

Speed and economy of construction have been achieved by efficient design; the superstructure up to second floor level is of *in situ* reinforced concrete; above this, precast concrete frame units, lifted by tower crane, are anchored by precast reinforced concrete floor slabs to a central core which runs the full height of the building and contains the lift well, refuse chutes and central landing. The reinforced concrete cladding panels, which are faced with Norwegian quartz white crystal exposed aggregate, have been designed for fixing from within - dispensing with the need for scaffolding.

Hide Tower will accommodate 160 flats on 20 floors, above a double-storey height open ground floor, and surmounted by a single-storey laundry and club room. Two high-speed inter-connected lifts will serve all floors.



Director of Housing, City of Westminster,
E. J. Edwards, F.R.I.B.A., F.R.I.C.S., F.Inst.Hsg
Architects: Stillman and Eastwick-Field
Structural Engineers: Charles Weiss and Partners
Quantity Surveyors: Harry Trinick and Partners

LAING

John Laing and Son Limited Great Britain and Overseas

